

Plastic Mold Components

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Ejector pins & Ejector sleeves

Slide retainers series

Latch locks series

Pouring gate series

Date stamps & Air valves series

Hot runner series

Ejector series

Cooling elements series

Locating parts series

Springs series

Guide pins & Guide bush

Guide strips & Wear plate series

Electrodes & Chuck series

Mold accessories

Testing machines

Customerized standard parts



ENVIRONMENT





ERP & MES

▲ PDM, Cloud ERP, MES and Amiba management to keep good process



▲ bar code and touch screen

机台/人	2015/8/6	2015/8/7	2015/8/8	2015/8/9	2015/8/10
A组-周平 (加工中)	A1505462	A1505432	A1506412	A1507123	A1507412
A组-李林 (加工中)	A1505264	A1505254	A1506212	A1507139	A1507026
A组-李文军 (加工中)	A1505066	A1505076	A1506012	A1507155	A1506640
B组-刘朋 (加工中)	A1504868	A1504898	A1505812	A1507171	A1506254
B组-杜文 (加工中)	A1504670	A1504720	A1505612	A1507187	A1505868
C组-高升 (加工中)	A1504472	A1504542	A1505412	A1507203	A1505482
C组-吴华 (加工中)	A1504274	A1504364	A1505212	A1507219	A1505096

▲ KPI and kan ban control:



▲ Real-time control of product progress.

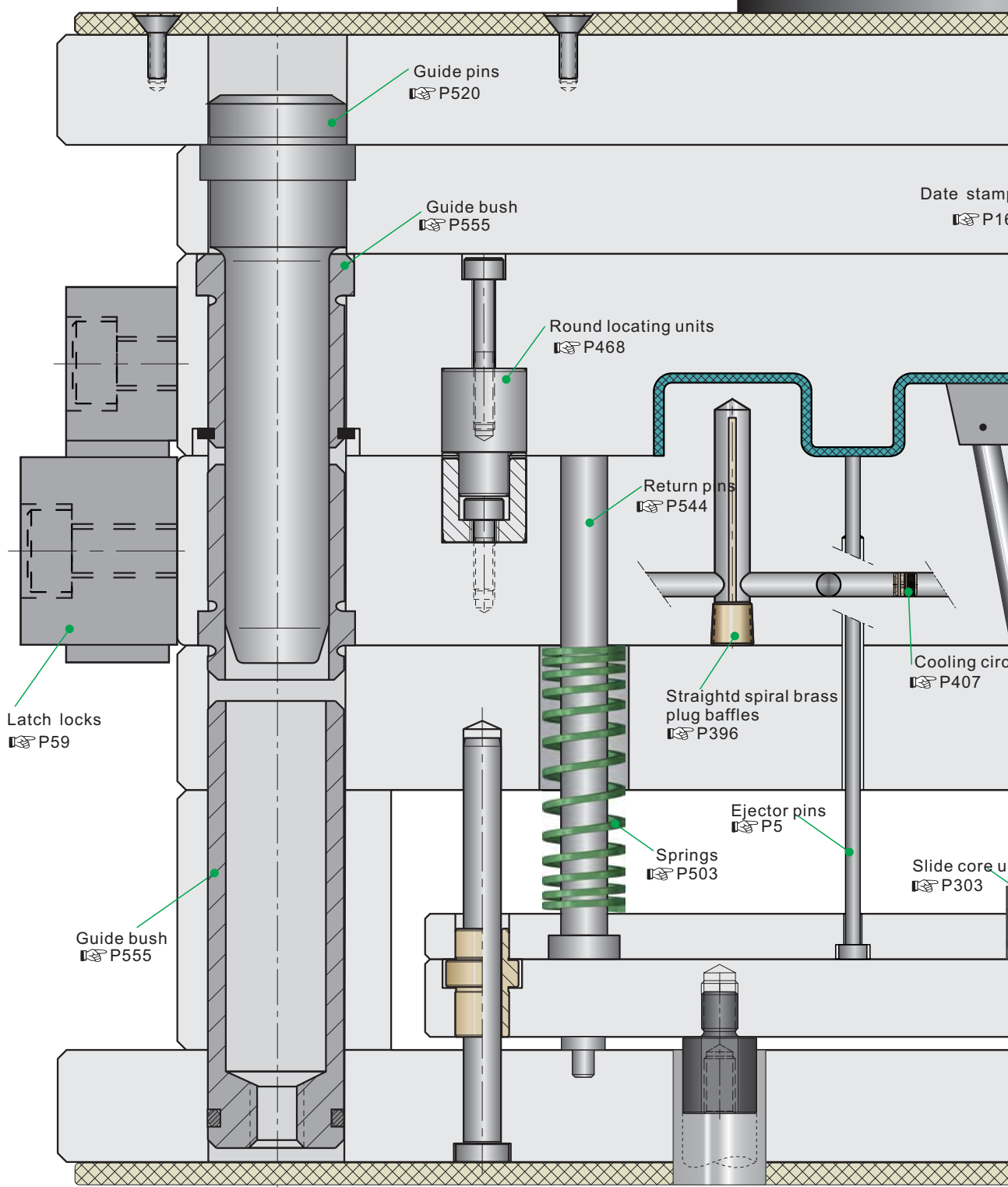


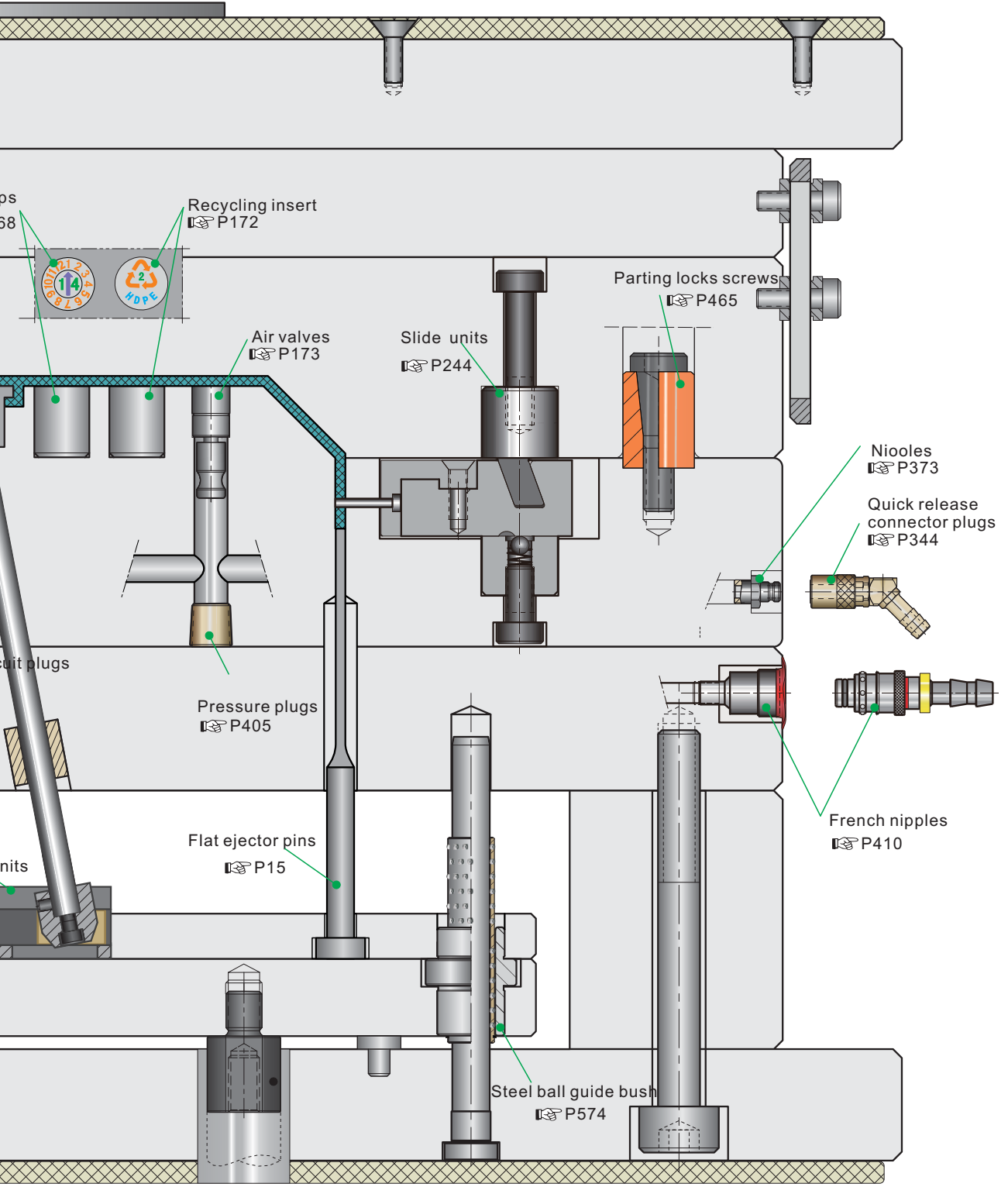
▲ Workshop real-time monitoring, visual process.



Some Global Partners





Recycling insert
P172

Parting locks screws
P465

Air valves
P173

Slide units
P244

Nicoles
P373

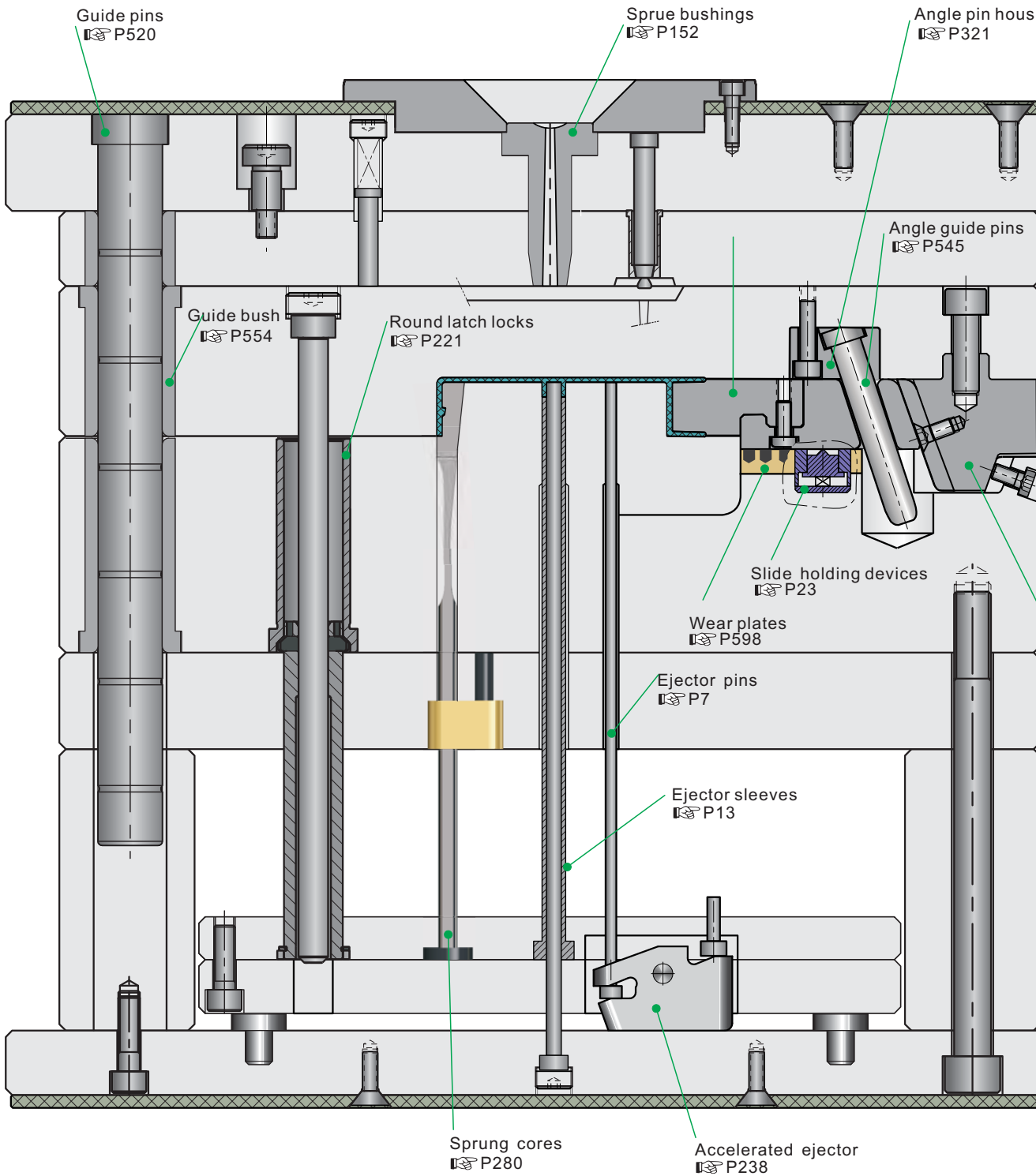
Quick release connector plugs
P344

Pressure plugs
P405

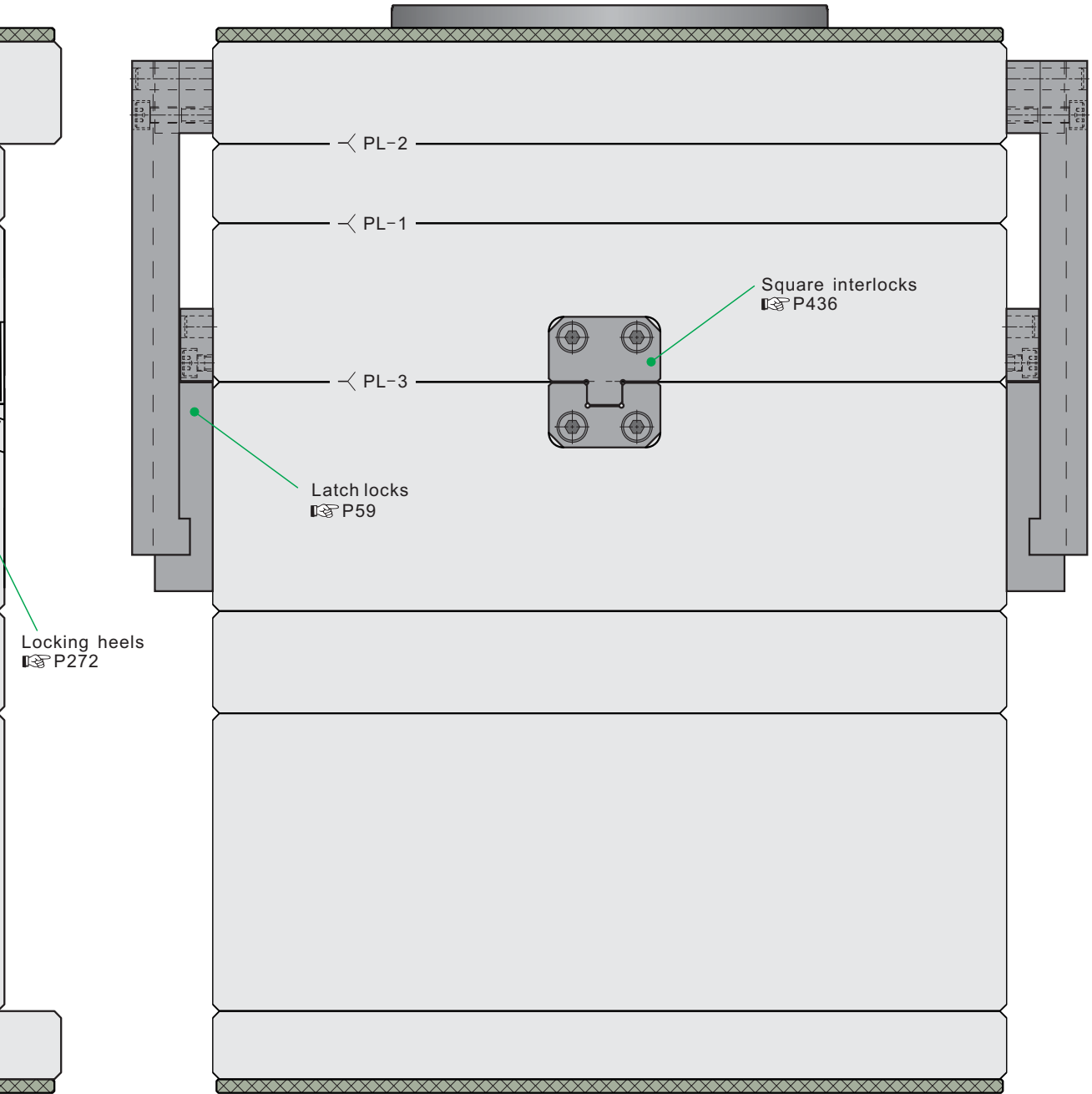
French nipples
P410

Flat ejector pins
P15

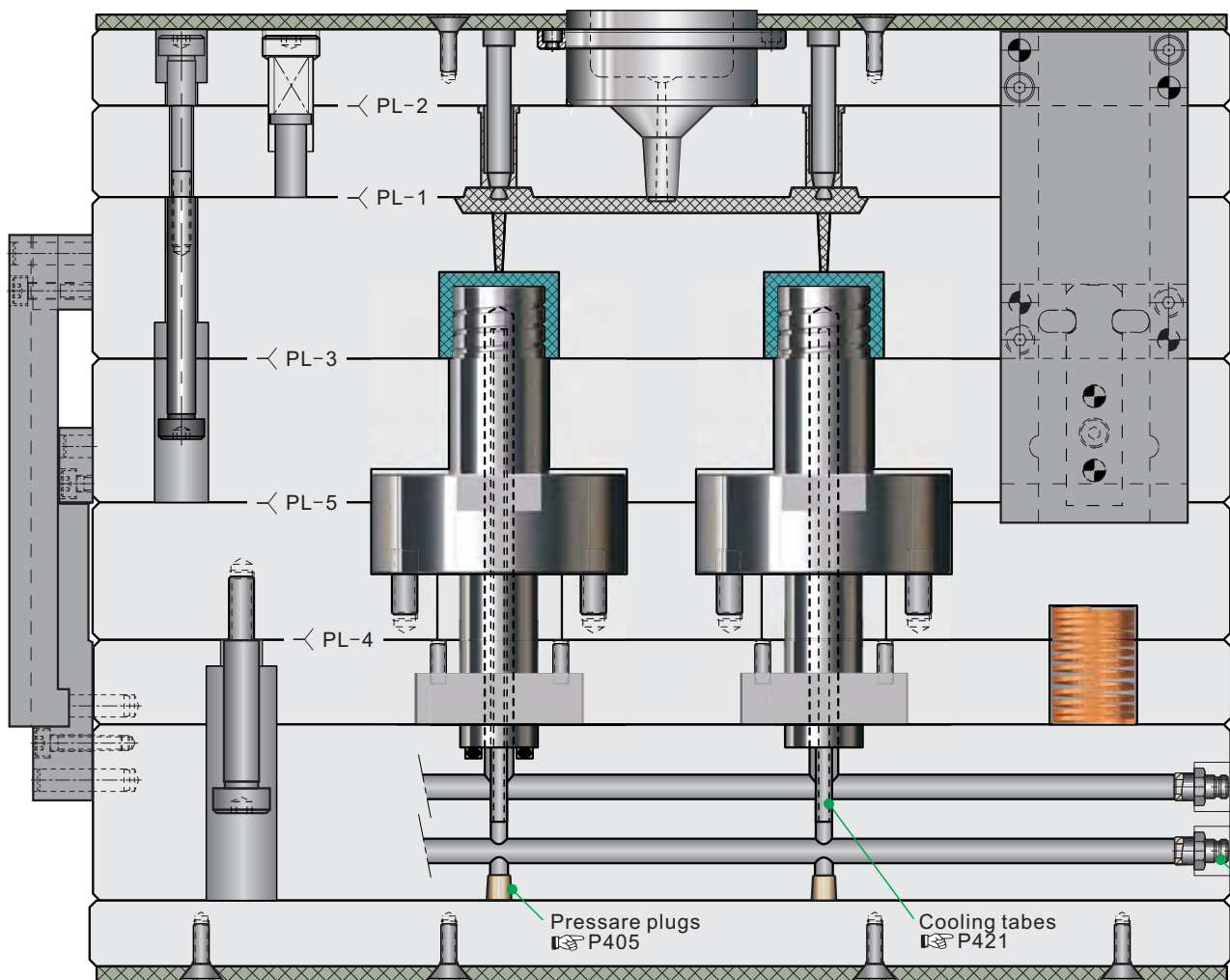
Steel ball guide bush
P574

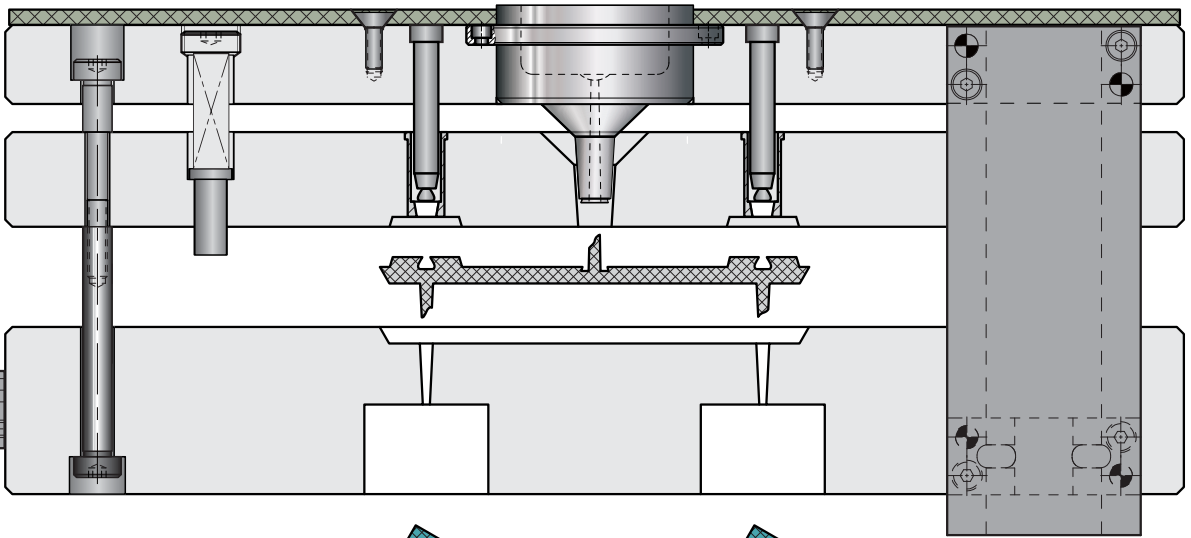


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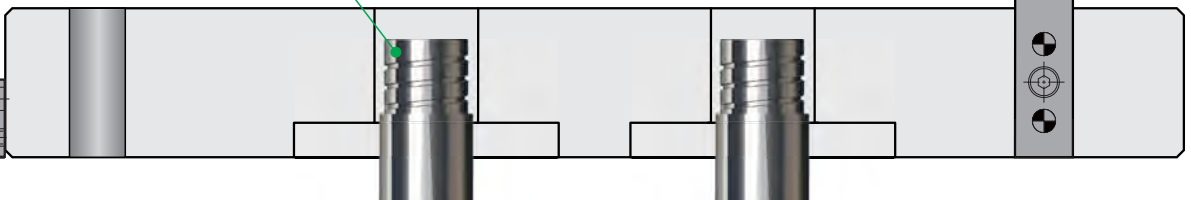


Latch locks
P60





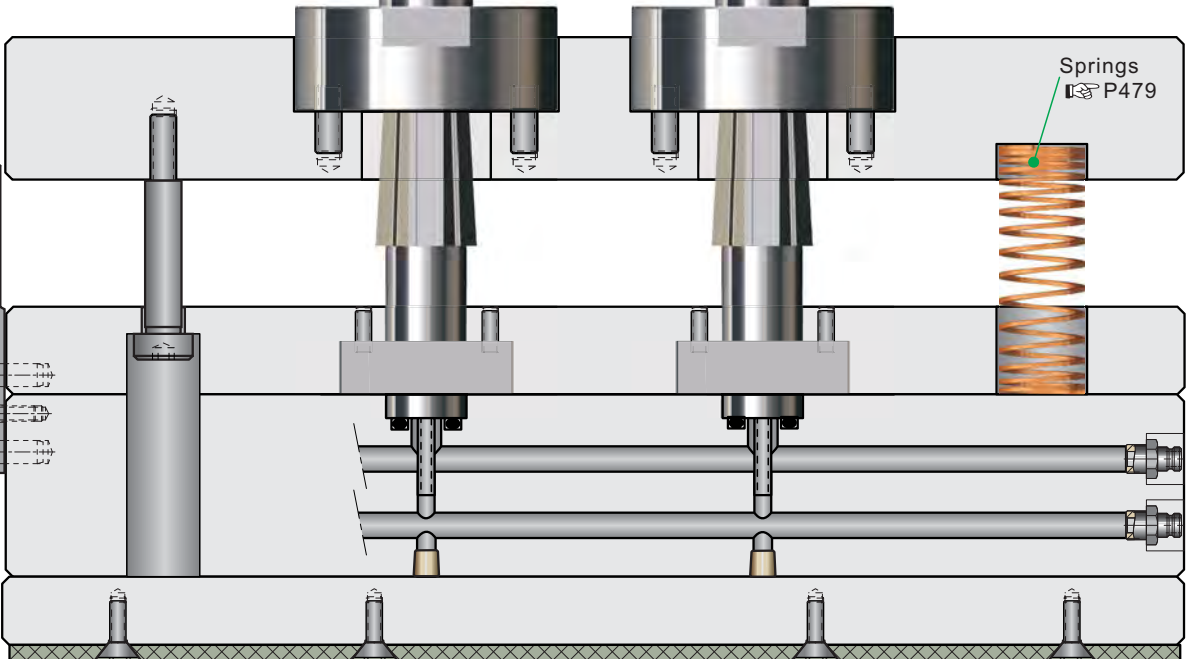
Collapsible core
P313

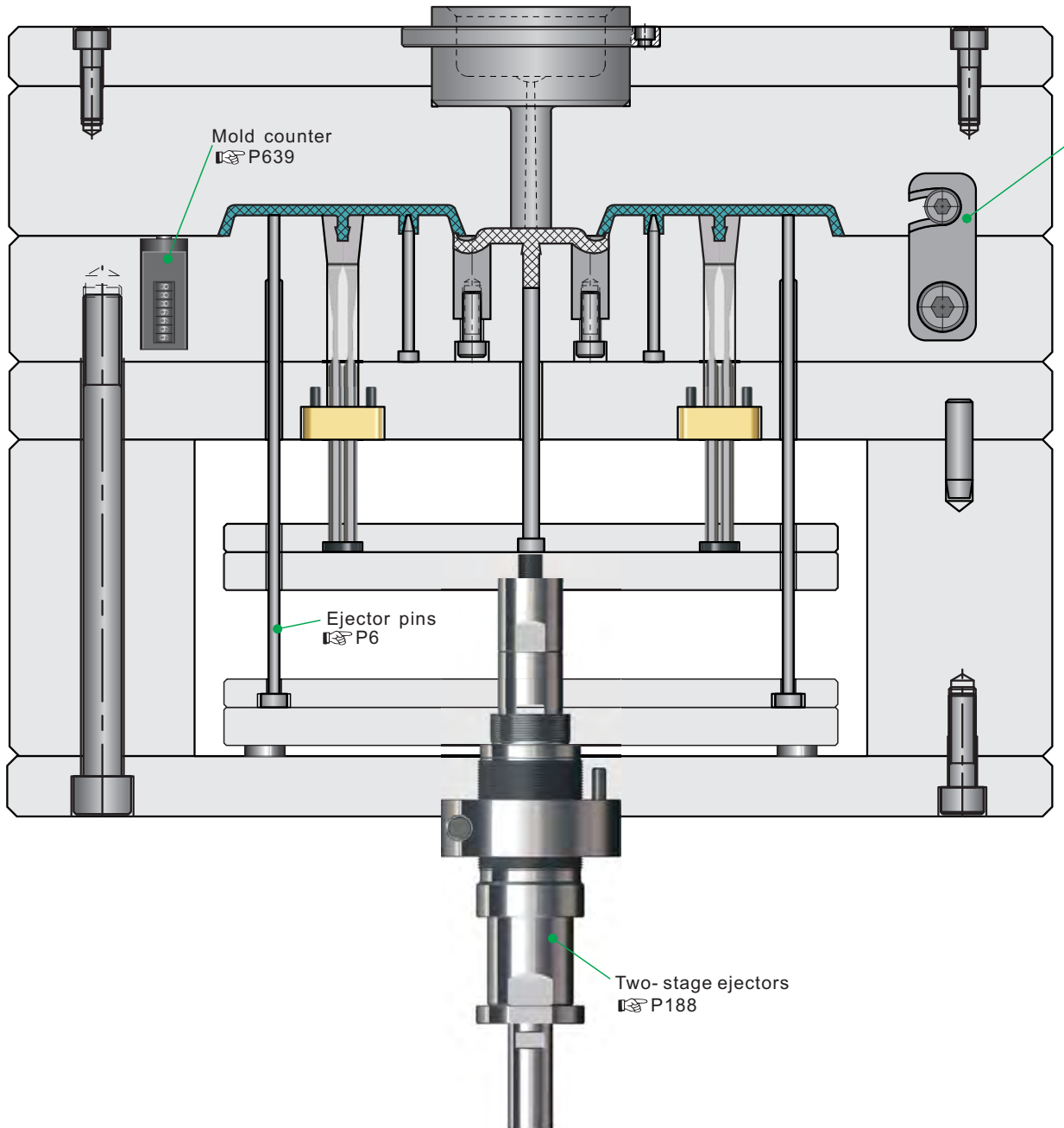


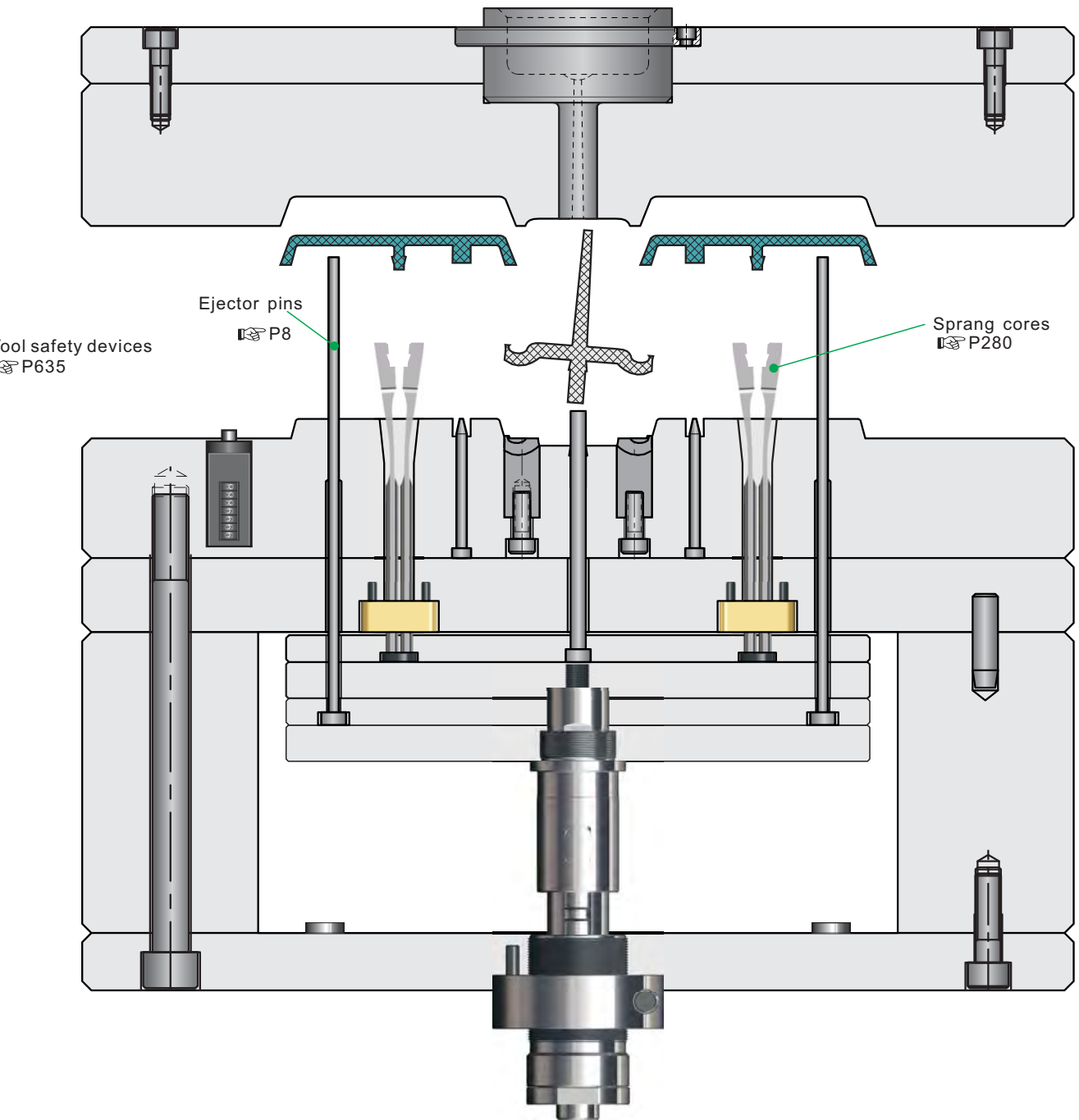
Springs
P479



ipples
P373







Ejector pins&Ejector sleeves



<i>Wmould</i>		<i>Wmould</i>		AISI		<i>Wmould</i>		AISI	
Ejector pins(DLC)		Ejector pins(Oxide)		Ejector pins		Ejector pins(BeCu)		Ejector pins(BeCu)	
DS-EEX	P4	B-EEX	P4	EEX	P5	PPCL	P6	PPCM	P6



AISI		JIS		JIS		DIN		DIN	
Ejector pins		Ejector pins		Ejector pins		Ejector pins		Ejector pins	
EEPH	P6	CCPH-M	P8	CCPD	P8	ZZ43	P8	ZZ40	P9



<i>Wmould</i>		<i>Wmould</i>		TAIWAN		TAIWAN		TAIWAN	
Ejector pins		Ejector pins(black)		Ejector pins		Ejector pins		Stepped ejector pins	
ZZ40S	P10	ZZ40B	P11	EPSS	P12	EPS	P12	ESS	P13



JIS		AISI		DIN		JIS		TAIWAN	
Stepped ejector pins		Stepped ejector pins		Stepped ejector pins		Stepped ejector pins		Flat ejector pins	
EEDSF	P13	EESH	P13	ZZ44	P14	EEJS	P14	ERPS	P15



JIS		TAIWAN		DIN	
Flat ejector pins		Ejector sleeves		Ejector sleeves	
EERPH	P15	ESV	P16	ZZ 45	P16

Slide retainers series



DIN	<i>Wmould</i>	DIN	DIN	<i>Wmould</i>
Slide holding devices	Slide holding devices	Slide holding devices	Slide holding devices	Slide holding devices
ZZ5130 P21	ZZ5130B P22	ZZ5134 P23	ZZ5140-0/1 P24	ZZ5140-0/1B P25



DIN	DIN	AISI	AISI	AISI
Slide holding devices	Slide holding devices	Slide holding devices	Slide holding devices	Slide holding devices
ZZ5140-2 P26	EE3044 P27	SSLK-8A P28	SSLK-8AB P29	SSLK-25A P30



AISI	AISI	(American) AISI	(Metric system) AISI	(American) AISI
Slide holding devices	Slide holding devices	Slide holding devices	Slide holding devices	Slide holding devices
SSLK-25AB P31	SSLK-50A P32	SSRT P33	SSRTM P33	PPSR P34



AISI	(Metric system) AISI	JIS	JIS	JIS
Slide holding devices	Slide holding devices	Slide holding devices	Slide holding devices	Slide holding devices
PPSR P35	PPSR P36	SLLK P37	BSJ P38	BPJ P38



JIS	DIN	DIN	DIN	<i>Wmould</i>
Slide Stoppers	Slide retainers	Slide retainers	Slide retainers	Slide retainers
SSLSP P37	RRC P39	RRM P40	ZZ189 P41	ZZ189 P42



DIN	DIN	AISI	<i>Wmould</i>	AISI
Slide retainers	Slide retainers	Slide retainers	Slide retainers	Slide retainers
ZZ5135 P43	ZZ5136 P43	PPSL P45	PPSL P46	PPSM P47



<i>Wmould</i>	AISI	<i>Wmould</i>
Slide retainers	Slide retainers	Slide retainers
PPSM P48	MMRT P49	MMRT P50

Latch locks series



JIS		DIN		JIS		JIS		DIN	
Parting locks screws		Parting locks screws		Latch locks		Latch locks		Latch locks	
PL	P58	ZZ172	P57	MMLKC	P59	MMLK	P60	RRPL-P	P61



TAIWAN		TAIWAN		TAIWAN		TAIWAN		TAIWAN	
Latch locks		Latch locks		Latch locks		Latch locks		Latch locks	
DTP-03	P62	DTP-04	P62	DTP-05	P63	DTP-06	P64	DTP-07	P64



TAIWAN		DIN		DIN		DIN		DIN	
Latch locks		Latch locks		Latch locks		Latch locks		Latch locks	
DTP-08	P65	ZZ170	P66	ZZ270	P69	ZZ171	P73	ZZ271	P75



DIN		JIS		JIS		JIS		JIS	
Latch locks		Latch locks		Latch locks		Latch locks		Latch locks	
GG5	P78	PPLSW	P80	PPLMZ	P82	PPLSZ	P82	PPLM/PPLL/PPLS 84	



JIS		DIN		DIN		Wmould		Wmould	
Latch locks		Latch locks		Latch locks		Latch locks		Latch locks	
LLL	P87	ZZ174	P89	ZZ4	P95	MLL	P109	SLL	P111



DIN		DIN		DIN		DIN		AIS1	
Latch locks		Latch locks		Latch locks		Latch locks		Latch locks	
ZZ5	P113	RREF-460	P120	RREF-461	P120	RREF-462	P120	KKL	P122



AIS1		DIN		DIN		AIS1		AIS1	
Latch locks		Latch locks		Latch locks		Latch locks		Latch locks	
KKU	P125	ZZ3	P129	ZZ173	P136	DDKL	P139	SSK-GHA	P142

Pouring gate series



DIN		DIN		DIN		TAIWAN		TAIWAN	
Sprue bushing		Locating rings		Locating rings		Sprue bushing		Sprue bushing	
ZZ511	P146	KK100	P148	KK500	P150	JAA	P152	JAB	P152

Date stamps Air valves series



DIN		DIN		DIN		DIN		DIN	
Date stamps		Date stamps		Date stamps		Date stamps		Date stamps	
ZZ48	P156	ZZ4861	P157	ZZ4800/ZZ48705	P158	FFA/IIA	P159	DDATI-1000	P160



DIN		DIN		DIN		DIN		DIN	
Date stamps		Date stamps		Date stamps		Date stamps		Date stamps	
DDATI-1200	P161	DDATI-1300	P162	DDATI-1800	P163	DDATI-2000	P164	DDATI-2200	P165



DIN		AISI		AISI		JIS		TAIWAN	
Date stamps		Date stamps		Date stamps		Date stamps		Date stamps	
FFD	P166	FFOB	P167	UUOB	P168	DDTN/DDTNX	P169	CO	P171



AISI		TAIWAN		DIN		DIN		AISI	
Recycling insert		Air valves		Air valves		Air valves		Air valves	
Recycling insert	P172	AJV	P173	VVA-C	P175	ZZ491	P174	VVA	P175



AISI		DIN	
Air valves		Double valves	
PPV	P175	VVD	P176

Ejector series



DIN		DIN		DIN		DIN		DIN	
Two-stage ejectors		Two-stage ejectors		Two-stage ejectors		Two-stage ejectors		Two-stage ejectors	
ZZ169	P186	ZZ1691	P188	ZZ1695	P191	ZZ5085	P195	ZZ1697	P195



DIN		DIN		DIN		DIN		DIN	
Two-stage ejectors		Two-stage ejectors		Two-stage ejectors		Two-stage ejectors		Two-stage ejectors	
ZZ1692	P198	EE1860	P201	LLR	P204	AAL	P204	DDX	P206



AISI		AISI		DIN		JIS		AISI	
Two-stage ejectors		Two-stage ejectors		Two-stage ejectors		Round latch locks		Round latch locks	
TTSTL	P208	TTSBL	P211	ZZ4	P214	EERST	P221	EER	P224



DIN		DIN		DIN		DIN		Wmould	
Round latch locks		Round latch locks		Push Locks		Push Locks		Ejector institutions	
Z Z163	P227	Z Z164	P227	ZZ6	P229	ZZ7	P231	DT12	P233



AISI		DIN		DIN		DIN		AISI	
Ejector institutions		Accelerated ejector		Accelerated ejector		Accelerated ejector		Accelerated ejector	
AAR-D	P235	ZZ141	P237	EEP	P238	AAE	P239	AAEB	P241



AISI		AISI		AISI		AISI		AISI	
Accelerated ejector		Accelerated ejector		Slide units		Slide units		Core pin	
AAEP	P241	AAKO	P243	CCA	P244	CCAMM	P244	CCAP1	P250



AISI		AISI		AISI		AISI		AISI	
Core pin		Core pin		Core pin		Core pin		Core pin	
CCAP1MM	P250	CCAP2	P250	CCAP2MM	P250	CCAP3	P250	CCAP3MM	P250

Ejector series



AISI		AISI		AISI		DIN		DIN	
Core pin		Core pin		Slide units		Slide units		Slide units	
CCSE2	P251	CCSE3	P251	CCBR	P251	ZZ4290	P252	ZZ4292	P254



DIN		DIN		DIN		DIN		DIN	
Slide units		Slide units		Slide units		Slide units		Slide units	
ZZ4293	P254	ZZ4294	P257	ZZ4295	P258	ZZ4296	P258	ZZ4298	P259



DIN		DIN		DIN		DIN		DIN	
Slide units		Slide units		Slide units		Slide construction kits		Slide units	
ZZ181	P260	ZZ1810	P261	ZZ1812	P262	ZZ1880	P263	ZZ1881	P264



DIN		DIN		DIN		DIN		DIN	
Slide units		Slide units		Slide construction kits		Slide casings		Slide units	
ZZ1801	P265	ZZ1802	P266	ZZ4200	P267	ZZ4205	P270	ZZ4210	P271



DIN		DIN		DIN		DIN		DIN	
Slide units		Locking heels		Locking heels		Wear plates		Slide units	
ZZ4211	P271	ZZ4220	P272	ZZ4222	P273	ZZ4230	P273	ZZ180	P274



DIN		JIS		JIS		JIS		JIS	
Locking heels		Slide units		Slide units		Slide units		Slide units	
ZZ1820	P275	MMSCSG	P276	MMSCSGM	P276	MMSCSB	P277	MMSCSBM	P277



DIN		DIN		DIN		DIN		DIN	
Sprung cores		Sprung cores		Sprung cores		Sprung cores		Sprung cores	
PPW	P280	EE3200	P282	EE3202	P283	PPF	P287	MMP	P287

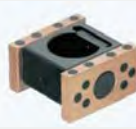
Ejector series



DIN		DIN		DIN		JIS		JIS	
Slide core units		Slide core units		Slide core units		Slide core units		Slide core units	
DDF	P288	BBD	P288	ZZ1811	P289	DTK	P290	SSCZN	P291



JIS		JIS		JIS		JIS		JIS	
Slide core units		Slide core units		Slide core units		Slide core units		Slide core units	
SSCZA	P292	KKOCUM	P293	KKOCUF	P293	RRCSUF	P294	RRCSUM	P298



JIS		JIS		JIS		JIS		JIS	
Slide core units		Slide core units		Slide core units		Slide core units		Slide core units	
KKPHF	P299	RRCPHF	P299	SSCZNP	P300	SSCZAP	P300	MMTGHL	P301



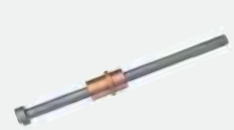
JIS		JIS		JIS		AISI		AISI	
Slide core units		Slide core units		Slide core units		Slide core units		Slide core units	
MMTGHR	P301	MMTGL	P302	MMTGR	P302	UULC	P303	UULG	P303



AISI		AISI		AISI		AISI		AISI	
Flatcore blades		Slide core units		Slide core units		Slide core units		Slide core units	
UULB	P304	VF/.../SS	P306	VF/.../JS	P306	VF/.../US	P306	VF/.../SB	P307



AISI		AISI		AISI		AISI		AISI	
Slide core units		Slide core units		Slide core units		Slide core units		Slide core units	
VF/.../JB	P308	VF/.../UB	P308	VF/.../GR	P308	VF/.../GP	P309	VF/.../HB	P309



DIN		DIN		<i>Wmould</i>		DIN		DIN	
Slide core units		Slide core units		Collapsible core		Helical spindle		Helical spindle	
SSD	P312	CCI	P312	DDT	P313	ZZ1500	P317	ZZ1520	P318

Ejector series



	DIN		DIN		JIS		JIS
	Angle pin housing		Angle pin housing		Angle pin housing		Angle pin housing
BBG	P320	GGR	P321	AAPRSS	P322	AAPRWS	P323

Cooling elements series



	DIN		DIN		DIN		DIN		DIN
	Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs
ZZ80	P334	ZZ80(45°)	P334	ZZ801	P335	ZZ801(45°)	P334	ZZ80(90°)	P338



	DIN		DIN		DIN		DIN		DIN
	Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs
ZZ80(90°)	P338	ZZ801(90°)	P338	ZZ803	P339	ZZ804	P339	ZZ805	P336



	DIN		DIN		DIN		DIN		DIN
	Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs
ZZ8051	P336	ZZ807	P337	ZZ80700	P337	ZZ807(45°)	P340	ZZ807(90°)	P340



	DIN		DIN		DIN		DIN		DIN
	Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs
ZZ80700(45°)	P341	ZZ80700(90°)	P341	ZZ80HT	P342	ZZ80HT(45°)	P342	ZZ80HT(90°)	P343



	DIN		DIN		DIN		DIN		DIN
	Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs
ZZ801HT	P343	ZZ801HT(45°)	P344	ZZ801HT(90°)	P344	ZZ807HT	P345	ZZ807HT(45°)	P345

Cooling elements series



DIN	DIN	DIN	DIN	DIN
Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs
ZZ807HT(90°) P346	ZZ80700HT P349	ZZ808HT P347	ZZ808HT(45°) P348	ZZ808HT(90°) P348



DIN	DIN	DIN	DIN	DIN
Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs
ZZ808 P348	ZZ802 P349	ZZ80700HT(45°) P349	ZZ80700HT(90°) P349	EE2232 P350



DIN	DIN	DIN	AISI	AISI
Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs
EE2222 P350	EE2234 P351	EE2224 P351	SSVK(45°) P352	SSVK P352



AISI	AISI	AISI	AISI	AISI
Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs
SSK(45°) P353	SSK-D P353	MMK10 P354	MMK12 P354	MMK15 P354



AISI	AISI	AISI	AISI	AISI
Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs
MMK10-...-PL P356	MMK15-...-PL P356	MMK100 P355	MMK120 P355	MMK150 P355



AISI	AISI	AISI	AISI	AISI
Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs
MMK100-...-PL P357	MMK150-...-PL P357	SST12 P357	SSK P358	SSK(90°) P358



AISI	AISI	AISI	AISI	AISI
Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs
SSVK P359	SSVK(90°) P358	FFSVK P360	FFSK P360	SSTN-PL P360

Cooling elements series



AISI	AISI	AISI	AISI	AISI
Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs
SSK-...-PL P361	SSK-...-PL(90°)P361	SSK-...-PL(45°)P362	SSVK-...-PL(45°)P363	SSVK-...-PL P363



AISI	AISI	AISI	AISI	AISI
Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs
SSVK-...-PL(90°)P363	JJS-...-M P364	JJS-...-MV P528	JJS P364	JJS-...-V P364



AISI	AISI	AISI	AISI	AISI
Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs
JJS-...-204 P365	JJS-...-204-V P365	JJS(90°) P365	JJS-...-V P366	JJS(45°) P366



AISI	AISI	AISI	AISI	AISI
Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs
JJS-...-V(45°) P366	JJS-...-SV P367	JJS-...-SV(90°) P367	JJS-...-SV(45°) P367	JJS-...-MSV P368



AISI	AISI	AISI	AISI	AISI
Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs
JJS-...-SV P368	JJSL P369	JJSL(45°) P369	JJSL(90°) P369	JJSL-...-V P370



AISI	AISI	AISI	AISI	AISI
Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs
JJSL-...-V(45°) P370	JJSL-...-V(90°) P370	JJSL-...-SV P371	JJSL-...-SV(45°) P371	JJSL-...-SV(90°) P371



DIN	DIN	DIN	DIN	DIN
Nipples	Nipples	Nipples	Nipples	Nipples
ZZ81 P372	ZZ81(90°) P372	ZZ811 P373	ZZ90 P373	ZZ811HT P374

Cooling elements series



DIN	DIN	DIN	DIN	DIN
Nipples	Nipples	Nipples	Nipples	Nipples
ZZ87 P374	ZZ88 P375	ZZ880 P375	ZZ881 P375	ZZ89 P376



DIN	DIN	DIN	DIN	DIN
Nipples	Nipples	Nipples	Nipples	Nipples
ZZ810 P376	ZZ812 P377	ZZ814 P377	ZZ905 P378	ZZ906 P378



DIN	DIN	DIN	AISI	AISI
Nipples	Nipples	Nipples	Nipples	Nipples
ZZ831 P378	ZZ830 P379	ZZ83 P379	SST11 P380	SST13 P381



AISI	AISI	AISI	AISI	AISI
Nipples	Nipples	Nipples	Nipples	Nipples
SST14 P371	SST15 P381	BBEP P382	SSTN P382	BBSS P383



AISI	AISI	AISI	AISI	AISI
Nipples	Nipples	Nipples	Nipples	Nipples
AATN P383	EEJP P384	FFN P384	NN P385	JJP P387



AISI	AISI	AISI	AISI	AISI
Nipples	Nipples	Nipples	Nipples	Nipples
JJPF P388	JJP-SV P388	JJPB P389	PPCS P389	JJTW P390



AISI	AISI	AISI	AISI	AISI
Nipples	Nipples	Nipples	Nipples	Nipples
JJTWS P390	HHX-JTW P391	JJTWF P391	JJEMM P392	JJEMMR P392

Cooling elements series



AISI		AISI		AISI		AISI		AISI	
Nipples		Nipples		Nipples		Nipples		Nipples	
JJEMF	P393	JJEMFR	P393	JJEFS	P394	JJEFSR	P394	JJELF	P394



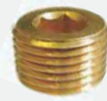
AISI		AISI		AISI		AISI		DIN	
Nipples		Nipples		Straight & spiral brass plug baffles		Straight & spiral brass plug baffles		Straight & spiral brass plug baffles	
JJEFL	P395	JJEFLR	P395	BBB	P396	BBBS	P397	EE2102	P399



DIN		JIS		JIS		JIS		JIS	
Straight & spiral brass plug baffles		Straight & spiral brass plug baffles		Straight & spiral brass plug baffles		Spiral plastic plug baffles		Spiral plastic plug baffles	
EE2108	P400	BBFPXR	P401	BFAPR	P401	WWRCAN	P402	WWRCTN	P402



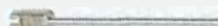
JIS		JIS		DIN		DIN		DIN	
Spiral plastic plug baffles		Spiral plastic plug baffles		Pressure plugs		Pressure plugs		Pressure plugs	
WWRCBN	P402	WWRCN	P402	ZZ94	P404	ZZ940	P405	ZZ941	P405



DIN		AISI		AISI		Wmould		Wmould	
Pressure plugs		Pressure plugs		Pressure plugs		Cooling tubes		Cooling tubes	
ZZ942	P405	BBP	P406	AAN	P406	BBTC	P406	BBTCM	P406



Wmould		Wmould		Wmould		Wmould		Wmould	
Cooling tubes		Cooling tubes		Cooling tubes		Cooling tubes		Cooling circuit plugs	
TPC	P406	BBTS	P406	BBTSM	P406	TPS	P406	DTW	P407



Wmould		DIN		TAIWAN		TAIWAN		TAIWAN	
Heat pipes		French nipples		Cooling tubes		Cooling tubes		Cooling tubes	
HTK	P408	RRPL	P410	WWCPFT	P420	WWCPF	P420	WJA	P421

Cooling elements series



TAIWAN		DIN	
Cooling tubes		Mold mounted manifolds	
WJB	P421	IIM	P422

Locating parts series



DIN		DIN		DIN		DIN		DIN	
Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks	
EE1304	P435	EE1306	P435	EE1308	P436	EE1320	P437	ZZ085-...-1	P440



DIN		DIN		DIN		DIN		DIN	
Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks	
ZZ085-...-2	P438	ZZ18	P441	ZZ19	P440	ZZ07	P439	ZZ17	P439



DIN		DIN		DIN		DIN		DIN	
Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks	
ZZ50	P442	ZZ51	P444	ZZ071-...-1	P446	ZZ072-...-2	P446	ZZ071-...-2	P447



DIN		DIN		DIN		DIN		DIN	
Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks	
ZZ072-...-1	P447	ZZ060	P448	ZZ08	P448	ZZ080	P449	ZZ48	P450

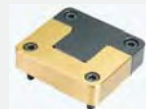


DIN		AISI		AISI		AISI		AISI	
Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks	
ZZ46-S	P450	MMTR	P451	FFTR	P451	RRSI	P451	TTL-P	P451

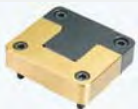
Locating parts series



AISI		AISI		AISI		AISI		AISI	
Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks	
FFW45	P452	PPLM	P452	PPLF	P452	GGL	P453	GGLM	P453



AISI		AISI		AISI		AISI		AISI	
Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks	
PPLL	P454	PPLF	P455	PPXM	P455	SSSI	P456	SSL	P456



AISI		AISI		AISI		AISI		AISI	
Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks	
SSLM	P456	TTL	P457	TTLM	P457	XXSI	P458	SSLX	P459



AISI		AISI		AISI		AISI		JIS	
Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks	
SSLS	P459	SSLMS	P459	BBGT	P460	BBGS	P460	TTSSB	P461



JIS		JIS		JIS		TAIWAN		TAIWAN	
Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks	
VVTSB	P462	TTBS	P463	TTBSF	P464	TTL-L	P465	PL	P465



TAIWAN		TAIWAN		JIS		JIS		JIS	
Square Interlocks		Square Interlocks		Round locating units		Round locating units		Round locating units	
KY	P466	LK	P466	TTPNF	P467	TTPNFC	P468	TTPN	P469



JIS		JIS		JIS		TAIWAN		AISI	
Round locating units		Round locating units		Round locating units		Round locating units		Round locating units	
TTPNV	P469	TTPNC	P470	TTPV	P470	TTP-T	P471	MMTM	P472

Locating parts series



AISI		AISI		AISI		AISI		AISI	
Round locating units		Shoulder Plates		Round locating units		Round locating units		Heel block	
FFTM	472	AAGS	P472	MMT	P473	FFT	P473	SSP	P473



DIN		DIN		DIN	
Round locating units		Round locating units		Round locating units	
ZZ05	P474	ZZ051	P474	ZZ06	P475

Springs Series



JIS		JIS		JIS		JIS		JIS	
Springs		Springs		Springs		Springs		Springs	
DSWR	P470	DSWS	P484	DSWF	P488	DSWL	P495	DSWM	P498



JIS		JIS	
Springs		Springs	
DSWH	P503	DSWB	P508

Guide Pins & Guide Bush Series



DIN		DIN		DIN		DIN		DIN	
Guide pins		Guide pins		Guide pins		Guide pins		Guide pins	
ZZ03	P520	ZZ04	P524	ZZ00	P527	ZZ012	P531	ZZ01	P532

Guide Pins & Guide Bush Series



DIN		DIN		DIN		DIN		DIN	
Guide pins		Guide pins		Guide pins		Guide pins		Guide pins	
ZZ013	P532	ZZ011	P533	ZZ144	P534	ZZ02	P535	EE1060	P536



DIN		DIN		JIS		JIS		JIS	
Guide pins		Guide pins		Guide pins		Guide pins		Guide pins	
EE1035	P537	EE1040	P537	SSPP	P538	SSPPZ	P784	SSPP-OC	P539



JIS		JIS		JIS		JIS		JIS	
Guide pins		Guide pins		Guide pins		Guide pins		Guide pins	
SSPPZ-OC	P538	GGPSL	P540	GGPOL	P540	GGPHL	P541	EEGH	P542



JIS		JIS		JIS		TAIWAN		TAIWAN	
Guide pins		Guide pins		Guide pins		Guide pins		Return pins	
GGPHLSP	P543	GGPSOT	P543	GGPBL	P546	GGP	P547	EP	P544



TAIWAN		TAIWAN		DIN		DIN		DIN	
Angle guide pins		Angle guide pins		Angle guide pins		Angle guide pins		Angle guide pins	
AMP	P544	AAP	P544	GGI	P545	ZZ016	P545	ZZ010	P548



JIS		JIS		JIS		JIS		JIS	
Angle guide pins		Angle guide pins		Angle guide pins		Angle guide pins		Angle guide pins	
DAP	P550	DAPS	P550	AAPZS	P551	AAPU	P551	AAPHX	P551



JIS		JIS		JIS		JIS		JIS	
Angle guide pins		Angle guide pins		Angle guide pins		Angle guide pins		Angle guide pins	
AAPUS	P552	AAPHXS	P552	AAPX	P552	AAPXS	P552	AAPM	P553

Guide Pins & Guide Bush Series



JIS		AISI		AISI		JIS		JIS	
Angle guide pins		Guide pins		Guide bush		Guide bush		Guide bush	
AAPMS	P553	GLL	P554	GGBE	P554	GBB	P555	EEGBH	P555



JIS		JIS		JIS		JIS		JIS	
Guide bush		Guide bush		Guide bush		Guide bush		Guide bush	
GGBS	P556	GGBSE	P556	GGBHE	P557	GGBH	P557	EEGBZS	P558



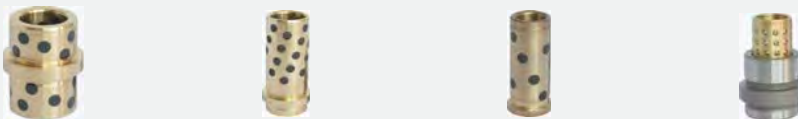
DIN		DIN		DIN		DIN		DIN	
Guide bush		Guide bush		Guide bush		Guide bush		Guide bush	
ZZ10	P559	ZZ4079	P560	ZZ4085	P560	ZZ75	P561	ZZ78	P562



DIN		DIN		DIN		DIN		DIN	
Guide bush		Guide bush		Guide bush		Guide bush		Guide bush	
EE1140	P562	ZZ4486	P563	ZZ81-S	P564	WW30	P565	ZZ76	P566



DIN		DIN		DIN		DIN		DIN	
Guide bush		Guide bush		Guide bush		Guide bush		Guide bush	
ZZ11	P567	EE1110	P568	ZZ11W	P569	ZZ10W	P570	ZZ13W	P571



DIN		DIN		DIN		DIN	
Guide bush		Guide bush		Guide bush		Steel ball guide bush	
ZZ14W	P571	ZZ1000W	P572	ZZ1100W	P573	ZZ12	P574

Guide strips & wear plate Series



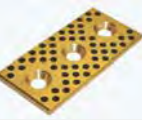
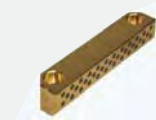
DIN	DIN	DIN	DIN	Wmould
Guide strips	Guide strips	Guide strips	Guide strips	Guide strips
ZZ4240 P579	ZZ4248 P580	ZZ4244 P580	ZZ4242 P582	DT1481 P583



Wmould	Wmould	Wmould	Wmould	Wmould
Guide strips	Guide strips	Guide strips	Guide strips	Guide strips
DT1482 P584	DT1483 P585	DT1484 P586	DT1485 P587	DT1486 P588



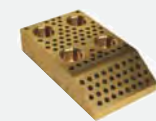
Wmould	Wmould	Wmould	Wmould	Wmould
Guide strips	Guide strips	Guide strips	Guide strips	Guide strips
DT1471 P589	DT1472 P590	DT1473 P591	DT1474 P592	DT1475 P593



Wmould	Wmould	Wmould	Wmould	Wmould
Guide strips	Guide strips	Guide strips	Guide strips	Wear plates
DT1461 P594	DT1462 P595	DT1463 P596	DT1464 P597	DT1451 P598



Wmould	DIN	DIN	JIS	JIS
Wear plates	Guide rail	Guide rail	Guide rail	Guide rail
DT1452 P599	SSN4185 P600	SSN4186 P600	CCBG P601	CCBP P601



JIS	JIS	JIS	JIS	JIS
Inclined wedge active block	Reset block	Inclined wedge active block	Inclined wedge active block	Inclined wedge active block
CCKF P602	CCKB P602	CCS30W P603	CCS30F P603	CCS15W P604



JIS	JIS	JIS	JIS	JIS
Inclined wedge active block	Wear plates	Wear plates	Guide strips	Guide strips
CCS15F P604	SSAS P605	SSASM P605	GGT5S P606	GGT8S P606

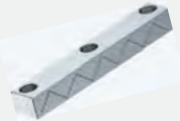
Guide strips & wear plate Series



JIS		JIS		JIS		JIS		JIS	
Guide strips		Guide strips		Guide strips		Guide strips		Guide strips	
GGT5SM	P607	GGT8SM	P607	GGRS	P608	GGRSM	P609	GGR5SC	P610



JIS		JIS		JIS		JIS		JIS	
Guide strips		Guide strips		Guide strips		Guide strips		Guide strips	
GGR5S	P610	GGR8S	P610	GGR15S	P610	GGR5SCM	P611	GGR5SM	P611

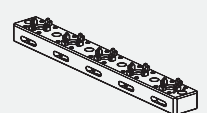
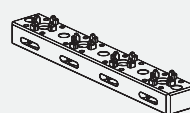
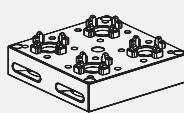
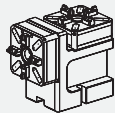


JIS		JIS	
Guide strips		Guide strips	
CCGSM	P612	CCGS	P612

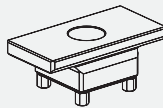
Chuck Series



Chuck		Chuck		Chuck		Chuck		Chuck	
AS-QK01-C1	P616	AS-QK01-C2	P616	AS-QK01-C3	P617	AS-QK01-C4	P617	AS-QK01-C6	P618

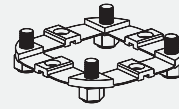


Chuck		Chuck		Chuck		Chuck		Chuck	
AS-QK01-E110	P619	AS-QK02-T2	P619	AS-SK04-H4-C	P619	AS-SK04-14	P620	AS-SK04-15	P620

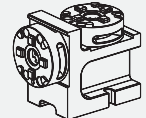
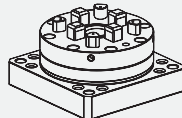
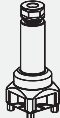


Chuck		Chuck		Chuck		Chuck		Chuck	
AS-SK04-J150	P621	AS-Q01	P621	AS-Q04	P622	AS-F01	P622	AS-F02	P622

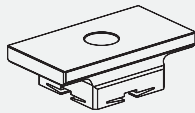
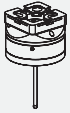
Chuck Series



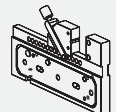
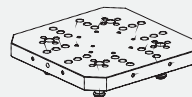
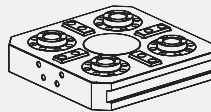
Chuck	Chuck	Chuck	Chuck	Chuck
AS-F10	P623	AS-F11	P623	AS-JP50
				P624
				P624
				P624



Chuck	Chuck	Chuck	Chuck	Chuck
AS-JU21	P625	AS-J-SK25-15	P625	AS3-QK100
				P626
				P626
				P627



Chuck	Chuck	Chuck	Chuck	Chuck
AS3-Q01	P627	AS3-Q04	P628	AS3-F-LG1
				P628
				P628
				P629



Chuck	Chuck	Chuck	Chuck	Chuck
AS3-JD21	P628	AS-JU31	P630	AS-U-MK
				P630
				P631
				P631

Mold accessories Series



<i>AISI</i>	<i>Would</i>	<i>DIN</i>	<i>Would</i>	<i>Would</i>
Limit switch	Screw driver	Tool safety devices	Tool safety devices	Tool safety devices
TSW2220	P634	MSD	P635	ZZ73
				P635
				P636
				P637



<i>JIS</i>	<i>JIS</i>	<i>AISI</i>	<i>Would</i>	<i>AISI</i>
Tool safety devices	Tool safety devices	Mold counter	Heat-resistant mould counter	Round mold counter
OOPS	P638	DDPS	P638	CPL/CPM
				P639
				P540
				P641

A

AAE	239
AAEB	241
AAEP	241
AAGS	472
AAKO	243
AAL	204
AAN	406
AAP	544
AAPHX	551
AAPHXS	552
AAPM	553
AAPMS	553
AAPRSS	322
AAPRWS	323
AAPU	551
AAPUS	552
AAPX	552
AAPXS	552
AAPZS	551
AAR-D	235
AATN	383
AJV	173
AMP	544
AS3-F-LG1	628
AS3-F-LG2	628
AS3-JD21	628
AS3-JP54	629
AS3-Q01	627
AS3-Q04	628
AS3-QK100	626
AS3-QK100-C6	626
AS3-SK80-T2	627
AS-F01	622
AS-F02	622
AS-F10	623
AS-F11	623
AS-JD21	624
AS-JP50	624
AS-JP90G	624
AS-J-SK25-15	625
AS-JU21	625
AS-JU31	630
AS-Q01	621
AS-Q04	622
AS-QK01-C1	616
AS-QK01-C2	616
AS-QK01-C3	617
AS-QK01-C4	617
AS-QK01-C6	618
AS-QK01-E110	619
AS-QK02-T2	619
AS-SK04-14	620
AS-SK04-15	620
AS-SK04-H4-C	619
AS-SK04-J150	621
AS-U-MK	630
AS-U-TL	631
AS-W10	631

B

BBB	396
BBBS	397
BBD	288
BBEP	382
BBFPXR	401

B

BBG	320
BBGS	460
BBGT	460
BBGT	460
BBP	406
BBSS	383
BBTC	406
BBTCM	406
BBTS	406
BBTSM	406
B-EEX	4
BFAPR	401
BPJ	38
BSJ	38

C

CCA	244
CCAMM	244
CCAP1	250
CCAP1MM	250
CCAP2	250
CCAP2MM	250
CCAP3	250
CCAP3MM	250
CCBG	601
CCBP	601
CCBR	251
CCGS	612
CCGSM	612
CCI	312
CCKB	602
CCKF	602
CCPD	8
CCPH-M	8
CCS15F	604
CCS15W	604
CCS30F	603
CCS30W	603
CCSE2	251
CCSE3	251
CO	171
CPH	640
CPL	639
CPM	639
CVR	641

D

DAP	550
DAPS	550
DDATI-1000	160
DDATI-1200	161
DDATI-1300	162
DDATI-1800	163
DDATI-2000	164
DDATI-2200	165
DDF	288
DDKL	139
DDPS	638
DDT	313
DDTN	169
DDTNX	170
DDX	206

D	
DS-EEX	4
DSWB	508
DSWF	488
DSWH	503
DSWL	495
DSWM	498
DSWR	480
DSWS	484
DT12	233
DT1451	598
DT1452	599
DT1461	594
DT1462	595
DT1463	596
DT1464	597
DT1471	589
DT1472	590
DT1473	591
DT1474	592
DT1475	593
DT1481	583
DT1482	584
DT1483	585
DT1484	586
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DTK	290
DTP-03	62
DTP-04	62
DTP-05	63
DTP-06	64
DTP-07	64
DTP-08	65
DTW	407

E	
EE1035	537
EE1040	537
EE1060	536
EE1110	568
EE1140	562
EE1304	435
EE1306	435
EE1308	436
EE1320	437
EE1860	201
EE2102	399
EE2108	400
EE2222	350
EE2224	351
EE2232	350
EE2234	351
EE3044	27
EE3200	282
EE3202	283
EEDSF	13
EEGBH	555
EEGBZS	558
EEGH	542
EEJP	384
EEJS	14
EEP	238
EEPH	6
EER	224

E	
EERPH	15
EERST	221
EESH	13
EEX	5
EP	544
EPS	12
EPSS	12
ERPS	15
ESS	13
ESV	16

F	
FFA/IIA	159
FFD	166
FFN	384
FFOB	167
FFSK	360
FFSVK	360
FFT	473
FFTM	472
FFTR	451
FFW45	452

G	
GBB	555
GGBE	554
GGBH	557
GGBHE	557
GGBS	556
GGBSE	556
GGI	545
GGL	453
GGLM	453
GGP	547
GGPBL	546
GGPHL	541
GGPHLSP	543
GGPOL	540
GGPSL	540
GGPSOT	543
GGR	321
GGR15S	610
GGR15SM	611
GGR5S	610
GGR5SC	610
GGR5SCM	611
GGR5SM	611
GGR8S	610
GGR8SM	611
GGRS	608
GGRSM	609
GGs	78
GGT5S	606
GGT5SM	607
GGT8S	606
GGT8SM	607
GLL	554

H	
HHX-JTW	391

H	
HTK	408

I	
IIM	422

J	
JAA	152
JAB	152
JJEFL	395
JJEFLR	395
JJEFS	394
JJEFSR	394
JJELF	394
JJEMF	393
JJEMFR	393
JJEMM	392
JJEMMR	392
JJP	387
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KK500	150
KKL	122
KKOCUF	294
KKOCUM	293
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MMTGHL	301
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PPLS	84
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SSASM	605
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SSCZAP	300
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SSK-GHA	142
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SSLK-25AB	31
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SSLK-8A	28
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SSLM	456
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SSLS	459
SSLSP	38
SSLX	459
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SSN4186	600
SSP	473
SSPP	538
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SSPPZ	539
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ZZ10W	570
ZZ11	567
ZZ1100W	573
ZZ11W	569
ZZ12	574
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ZZ141	237
ZZ144	534
ZZ14W	571
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ZZ164	227
ZZ169	186
ZZ1691	188
ZZ1692	198
ZZ1695	191
ZZ1697	195
ZZ17	439
ZZ170	66
ZZ171	73
ZZ172	57
ZZ173	136
ZZ174	89
ZZ18	441
ZZ180	274
ZZ1801	265
ZZ1802	266
ZZ181	260
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ZZ1811	289
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ZZ1820	275
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ZZ1881	264
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ZZ189-10B	42
ZZ19	440
ZZ270	69
ZZ271	75
ZZ3	129
ZZ4	95
ZZ4	214
ZZ40	9
ZZ4079	560
ZZ4085	560

ZZ40B	11
ZZ40S	10
ZZ4200	267
ZZ4205	270
ZZ4210	271
ZZ4211	271
ZZ4220	272
ZZ4222	273
ZZ4230	273
ZZ4240	579
ZZ4242	582
ZZ4244	580
ZZ4248	580
ZZ4290	252
ZZ4292	254
ZZ4293	254
ZZ4294	257
ZZ4295	258
ZZ4296	258
ZZ4298	259
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ZZ44	14
ZZ4486	563
ZZ45	16
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ZZ511	146
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ZZ5130B	22
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ZZ73B	637
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ZZ803	339
ZZ804	339
ZZ805	336
ZZ8051	336
ZZ807	337
ZZ807(45°)	340
ZZ807(90°)	340

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ZZ80700(45°)	341
ZZ80700(90°)	341
ZZ80700HT	346
ZZ80700HT(45°)	349
ZZ80700HT(90°)	349
ZZ807HT	345
ZZ807HT(45°)	345
ZZ807HT(90°)	346
ZZ808	348
ZZ808HT	347
ZZ808HT(45°)	347
ZZ808HT(90°)	348
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ZZ80HT(45°)	342
ZZ80HT(90°)	344
ZZ80HT(90°)	343
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ZZ88	375
ZZ880	375
ZZ881	375
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ZZ94	404
ZZ940	404
ZZ941	405
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ACHIEVEMENT

received

ISO9001:2008 certifications

Ejector pins & Ejector sleeves





<i>Wmould</i>		<i>Wmould</i>		AISI		<i>Wmould</i>		AISI	
Ejector pins(DLC)		Ejector pins(Black)		Ejector pins		Ejector pins(BeCu)		Ejector pins(BeCu)	
DS-EEX	P4	B-EEX	P4	EEX	P5	PPCL	P6	PPCM	P6



AISI		JIS		JIS		DIN		DIN	
Ejector pins		Ejector pins		Ejector pins		Ejector pins		Ejector pins	
EEPH	P6	CCPH-M	P8	CCPD	P8	ZZ43	P8	ZZ40	P9



<i>Wmould</i>		<i>Wmould</i>		TAIWAN		TAIWAN		TAIWAN	
Ejector pins		Ejector pins(black)		Ejector pins		Ejector pins		Stepped ejector pins	
ZZ40S	P10	ZZ40B	P11	EPSS	P12	EPS	P12	ESS	P13



JIS		AISI		DIN		JIS		TAIWAN	
Stepped ejector pins		Stepped ejector pins		Stepped ejector pins		Stepped ejector pins		Flat ejector pins	
EEDSF	P13	EESH	P13	ZZ44	P14	EEJS	P14	ERPS	P15



JIS		TAIWAN		DIN	
Flat ejector pins		Ejector sleeves		Ejector sleeves	
EERPH	P15	ESV	P16	ZZ 45	P16

Standard hole processing tolerance:



Products Summary

Product summary:

Ejector pin ,sleeve mainly used in plastic ,pressure casting mold ,The function of these parts is separated forming products from mould.

Common material SKD61 ,SKH51 ect ,when use it will make surface wear and tear due to long time friction , In order to meet special application ,surface of products will add DLC ,TiN coating ect ,coating application illustration refer to P4

Coating ejector pin recommend application situation:

- 1.Fast cycle forming or request long term for application life of mould
- 2.Can't apply to this mould with lubricating oil.
3. Usage this material of mould easy to produce air(engineering plastics ,including the fiberglass resin)
- 4.Ejector pin easy wear and tear to this mould ,(die-casting molds ,including the fiberglass resin)
- 5.Request this mould for high wear resistance ,release,corrosion resistance.

Trunnion tolerance selection method:

The tolerance of shaft diameter is decided this match tolerance by the front of ejector pin and core hole ,In order to reduce friction force,increase air removal efficiency in cavity .This tolerance of bar can adopt max lower deviation to guarantee this edge clearance between shaft diameter and core hole.

Note :

When use better fluidity resin or increase injection press to shaping processing ,crack position easy to produce burr ,so overall consideration this two side to choose this tolerance ,normal choose +0 -0.005 tolerance.

Product name	Product photos	Standard	Unit	Material	Product feature	Hardness	Code	Page
Standard type DLC coating Taper head type Surface black oxide BeCu material		AISI	Metric	BeCu	BeCu material	-	PPCM	P6
				SKD61	Standard	900HV~	EEX	P5
				BeCu	BeCu material	-	PPCL	P6
				SKD61	Taper head type	900HV~	ZZ43	P8
				SKH51	Standard	58-62HRC	ZZ40	P9
				SKH61	Standard	48-52HRC	CCPD	P8
		TAIWAN	Metric	SKD61	Standard	58-62HRC	EEPH	P15
					Standard	58-62HRC	CCPH-M	P8
					Standard	900HV~	EPS	P12
					Standard	48-52HRC	EPSS	P12
					DLC coating	900HV~	ZZ40B	P11
					Standard	48-52HRC	ZZ40S	P10
Flat ejector pins			Inch	SKD61	DLC coating	900HV~	DS-EEX	P4
				SKD61	The surface of the black	900HV~	B-EEX	P4
				SKD61	Standard	900HV~	ZZ44	P14
				SKD61	Standard	900HV~	EEJS	P14
				SKD61	Standard	48-52HRC	EEDSF	P13
				SKD61	Standard	58-62HRC	EESH	P13
Flat ejector pins	Standard type			SKH51	Standard	58-62HRC	EERPH	P15
				SKD61	Standard	900HV~	ERPS	P15
				SKD61	Standard	900HV~	ESV	P16

Ejector pin using the classification description:

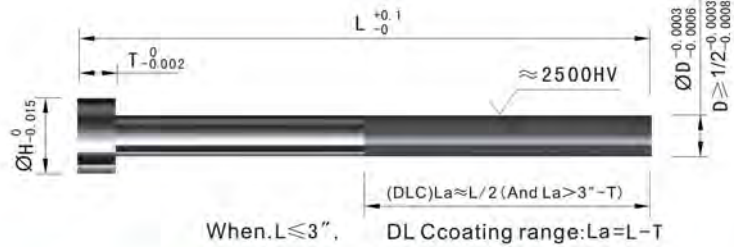
According to different request ,ejector pin series choose suggest have 4 classification.

- 1.Low output ,low request mould ,lower request mould lift 10million times. mould core is normal hardness steel, Suggest prior to choose Taiwan standard or surface nitrided ejector pin .
- 2.Middle output ,middle request mould :mould life 10 million -50 million ,suggest to choose harden & nitrided ejector pin .
- 3.High output ,high request mould: mould lift 50million -100million, suggest to choose harden +surface nitrided or SKH51 high -speed steel.
- 4.High precision, high request mould, life above 100million request high precision mould ,suggest to choose Harden+surface DLC coating ejector pin.



Ejector pins

DS-EEX



When $L \leq 3''$, DL Coating range: $La = L - T$

Order DS-EEX-D-L Material:SKD61 Hardness:48-52HRC Surface : DLC coating

D	H	T	@ ¥ /P L
1/8	1/4	1/8	L4"-20"
9/64	9/32	5/32	
5/32	11/32		
11/64	3/8	3/16	
3/16	13/32		
13/64			
7/32			
15/64			
1/4			
17/64	7/16		
9/32			
19/64	1/2		
5/16			
21/64	9/16		
11/32			
23/64			
3/8			
25/64			
13/32			
27/64	11/16		
7/16		1/4	
29/64			
15/32			
31/64	3/4		
1/2			
17/32			
9/16	13/16		
5/8	7/8		
11/16	15/16		
3/4	1"		
7/8	1-1/8		
1"	1-1/4		

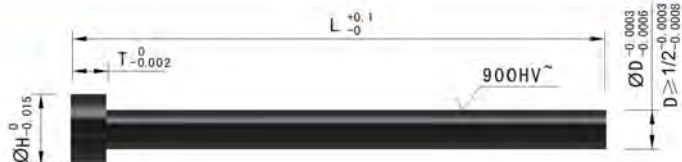
Coating ejector pin feature:

1. The advantage of DLC coating with high hardness ,small friction coefficient to help enhance productivity and products quality .
2. Improve corrosion resistance ,Such as engineering plastics when shaping to produce air ,DLC coating can prevent ejector pin from air corrosion resistance.

Recommend the use of occasions:

1. Fast cycle shaping or ask long service life mould
2. Can't apply to this mould with lubricating oil.
3. Usage this material of mould easy to produce air(engineering plastics ,including the fiberglass resin)
4. Ejector pin easy wear and tear to this mould .
5. Request this mould for high wear resistance,release,corrosion resistance.

B-EEX

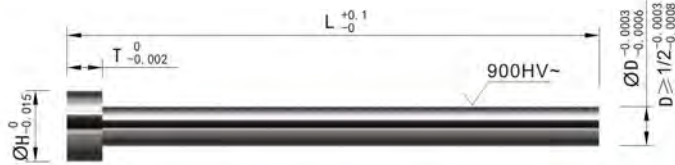




Ejector pins

Order B-EEX-D-L Material:SKD61 Core:38-42HRC Surface:900HV~ Surface treatment: Nitrided+Black oxide @ ¥/P

D	H	T	L4"	L6"	L8"	L10"	L12"	L14"	L16"	L18"	L20"
1/8		1/8									
9/64	1/4										
5/32	9/32	5/32									
11/64	11/32										
3/16	3/8										
13/64		3/16									
7/32	13/32										
15/64											
1/4											
17/64	7/16										
9/32											
19/64											
5/16	1/2										
21/64											
11/32	9/16										
23/64											
3/8	5/8										
25/64											
13/32											
27/64	11/16										
7/16		1/4									
29/64											
15/32											
31/64	3/4										
1/2											
17/32											
9/16	13/16										
5/8	7/8										
11/16	15/16										
3/4	1"										
7/8	1-1/8										
1"	1-1/4										



EEX

Order EEX-D-L Material:SKD61 Surface:900HV~ Core:38-42HRC @ ¥/P

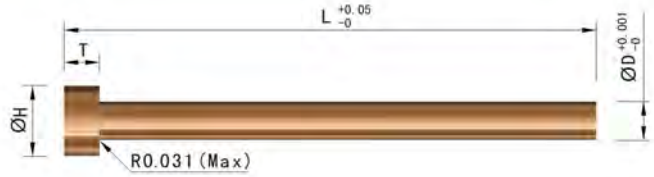
D	H	T	L4"	L6"	L8"	L10"	L12"	L14"	L16"	L18"	L20"
1/8		1/8									
9/64	1/4										
5/32	9/32	5/32									
11/64	11/32										
3/16	3/8										
13/64		3/16									
7/32	13/32										
15/64											
1/4											
17/64	7/16										
9/32											
19/64											
5/16	1/2										
21/64											
11/32	9/16										
23/64											
3/8	5/8										
25/64											
13/32											
27/64	11/16										
7/16		1/4									
29/64											
15/32											
31/64	3/4										
1/2											
17/32											
9/16	13/16										
5/8	7/8										
11/16	15/16										
3/4	1"										
7/8	1-1/8										
1"	1-1/4										

- Ejector pins
- Ejector sleeves
- Slide retainers series
- Latch locks series
- Pouring gates series
- Die stamps
- Air valves series
- Ejector series
- Cooling elements series
- Locating parts series
- Spring series
- Guide pins
- Guide bush
- Guide strips
- Wear plate series
- Chuck series
- Mold accessories

AISI

Ejector pins (BeCu)

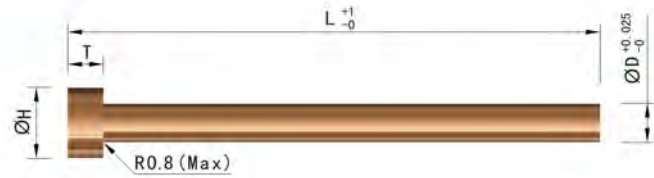
PPCL



Order PPCL-D-L Material: BeCu

D	H	T	@ ¥/P			
			L3	L6	L14	L20
3/32	0.25	0.125				-
1/ 8						
5/32						
11/64						
3/16	0.375	0.187			-	-
13/64						
7/32	0.406					
1/ 4	0.437					
9/32	0.5	0.25				-
5/16						
11/32						
3/ 8						
13/32	0.687	0.25				-
7/16						
1/ 2	0.75					
9/16	0.812					
5/ 8	0.875					
3/ 4	1					

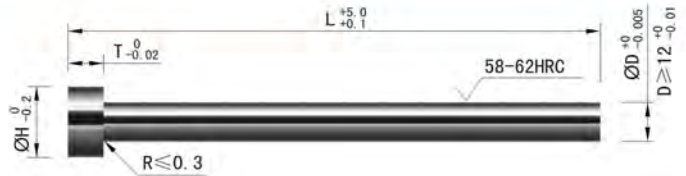
PPCM



Order PPCM-D-L Material: BeCu

D	H	T	@ ¥/P				
			L100	L160	L200	L250	L315
1.5	3	1.5					
2	4	2					
2.5	5						
3	6	3					
3.5	7						
4	8						
4.5							
5	10	5					
6	12						
7							
8	14						
10	16	7					
12	18						
14	22						
16							

EEPH



Order EEPH-D-L-T Material:SKH51 Hardness:58-62HRC

D	H	T	@ ¥ /P					
			L100	L150	L200	L250	L300	L350
1 -1.1	3	4						
1.2-1.4								
1.5								
1.6	4							
1.7-1.9								
2								
2.1	5							
2.2-2.4								
2.5								
2.6	6							
2.7-2.9								
3								
3.1	7	4/6						
3.2-3.4								
3.5								
3.6-3.9								
4								
4.1		9	4					
4.2	4/6							
4.3	4							
4.4	4/6							
4.5	4							
4.6	10		4.6					
4.7-4.9								
5								
5.1								
5.5	11							
5.6								
6								
6.1	13	4.8						
6.5								
6.6								
7								
7.1								
7.5								
7.6	14							
8								
8.1								
8.5-8.6	15							
9								
9.1								
9.5-9.6	16							
10								
10.1								
10.5-11.1	17							
11.5-11.6								
12								
12.1								

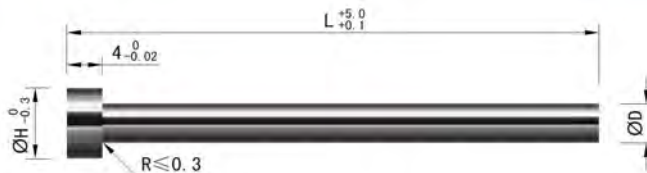
- Ejector pins
- Ejector sleeves
- Slide retainers series
- Latch locks series
- Pouring gates series
- Die stamps Air valves series
- Ejector series
- Cooling elements series
- Locating parts series
- Spring series
- Guide pins Guide bush
- Guide strips Wear plate series
- Chuck series
- Mold accessories



JIS

Ejector pins

CCPH-M
CCPD



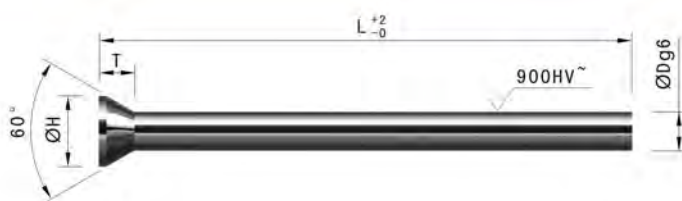
CCPH-M Tolerance : ØD $\begin{matrix} +0 \\ -0.005 \end{matrix}$ CCPD Tolerance : ØD $\begin{matrix} -0.01 \\ -0.02 \end{matrix}$

Order CCPH-M-D-L Material:SKH51 Hardness:58-62HRC

Order CCPD-D-L Material:SKD61 Hardness:48-52HRC

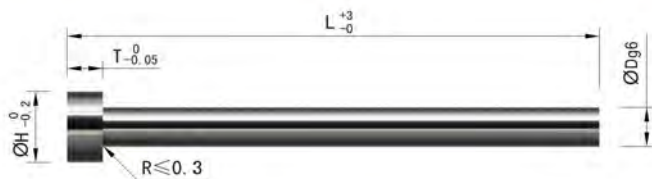
D	H	T	SKH51 @ ¥/P		SKD61 @ ¥/P	
			L40	L50	L40	L50
0.3-0.4	2	4				
0.5						
0.6						
0.7						
0.8-0.9	3					
1						
1.1						
1.2-1.6	4					
1.7-2						
2.1						
2.2-2.4	5					
2.5						
2.6						
2.7-2.9	6					
3						
3.1						
3.2-3.4	7					
3.5						
3.6-3.9						
4	9					
4.1						
4.2-4.4						
4.5	10					
4.6-4.9						
5						
5.1	11					
5.2-5.4						
5.5						
5.6-5.9	13					
6						
6.1						
6.5	14					
6.6						
7						
7.1	15					
7.5-7.6						
8						
8.1	16					
8.5-9						
9.5						
10	17					
11						
12						
13	18					
14						
16						

ZZ43



Order ZZ43-D-L Material:SKD61 Surface:900HV~ Core:38-42HRC

D	H	T	@ ¥/P					
			L100	L125	L160	L200	L250	L315
3	4.5	1.8					-	-
4	5.5						-	-
5	6.5						-	-
6	8	2.2					-	-
8	10						-	-
10	12	2.7	-					
12	14							



ZZ40

Order ZZ40-D-L Material:SKH51 Hardness:58-62HRC

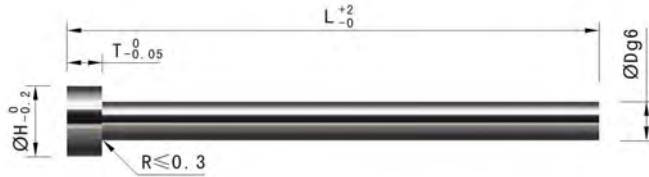
D	T	H	@ ¥/P													
			L40	L50	L63	L80	L100	L125	L160	L200	L250	L315	L400	L500		
0.8	1.2	2.5														
1																
1.1																
1.2																
1.3																
1.4																
1.5	1.5	3														
1.6																
1.7																
1.8																
1.9																
2																
2.2	2	4														
2.5																
3																
3.2																
3.5																
3.7																
4	3	6														
4.2																
4.5																
5																
5.2																
5.5																
6	5	10														
6.2																
6.5																
7																
7.5																
8																
8.2	7	14														
8.5																
9																
10																
10.2																
10.5																
12	8	16														
12.2																
12.5																
13																
14																
14.5																
16	10	18														
20																
25																

- Factor pins series
- Slide retainers series
- Latch locks series
- Pouring gates series
- Die stamps series
- Epider series
- Cooling elements series
- Locating parts series
- Spring series
- Guide pins series
- Guide pins series
- Chuck series
- Mold accessories series



Ejector pins

ZZ40S



Order ZZ40S-D-L Material:SKD61 Hardness:48-52HRC Surface treatment: hardened

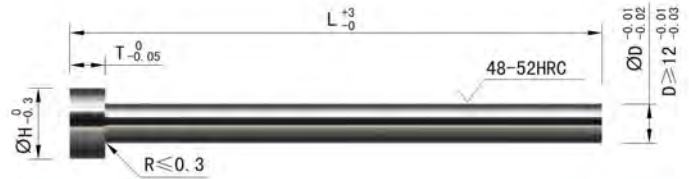
D	T	H	@ ¥ /P														
			L40	L50	L63	L80	L100	L125	L160	L200	L250	L315	L400	L500			
0.8	1.2	2.5															
1																	
1.1																	
1.2																	
1.3																	
1.4	1.5	3															
1.5																	
1.6																	
1.7																	
1.8																	
1.9	2	4															
2																	
2.2																	
2.5																	
3																	
3.2	3	6															
3.5																	
3.7																	
4																	
4.2																	
4.5	5	8															
5																	
5.2																	
5.5																	
6																	
6.2	7	10															
6.5																	
7																	
7.5																	
8																	
8.2	8	14															
8.5																	
9																	
10																	
10.2																	
10.5	9	16															
12																	
12.2																	
12.5																	
13																	
14	10	18															
14.5																	
16																	
20																	
25																	



TAIWAN

Ejector pins

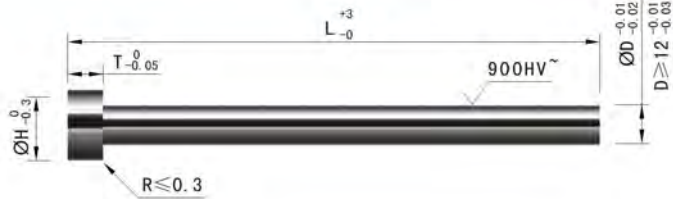
EPSS



Order EPSS-D-L Material:SKD61 Hardness: 48-52HRC

D	H	T	@ ¥/P								
			L100	L150	L200	L250	L300	L350	L400	L450	L500
1											
1.2	3(6)										
1.5											
1.6											
2		4									
2.5	6										
3											
3.5	7										
4											
4.5	8										
5											
5.5	9	6									
6											
6.5	10										
7	11										
8	13										
9	14										
10	15										
12	17	8									
13	18										
16	21										
20	25										
25	30										

EPS

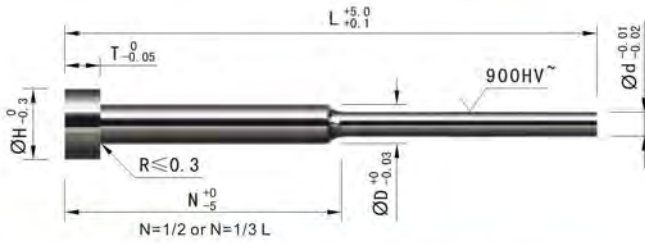


Order EPS-D-L Material:SKD61 Surface:900HV~ Core: 38-42HRC

D	H	T	@ ¥/P								
			L100	L150	L200	L250	L300	L350	L400	L450	L500
1											
1.2											
1.5											
1.6	6										
2		4									
2.5											
3											
3.5	7										
4											
4.5	8										
5											
5.5	9	6									
6											
6.5	10										
7	11										
8	13										
9	14										
10	15										
12	17	8									
13	18										
16	21										
20	25										
25	30										

Stepped ejector pins

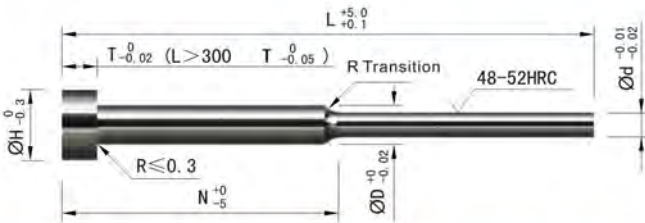
ESS



Order ESS-D-L-d-N1/2 Material:SKD61 Surface:900HV~ Core:38-42HRC

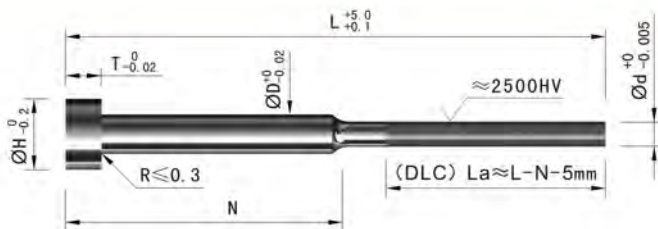
D	d	N	H	T	@ ¥ / P			
					L100	L150	L200	L250
2	0.8	N=1/2	6	4				
	1							
	1.2							
	1.5							
2.5	0.8	N=1/3	6	4				
	1							
	1.2							
3	1	N=1/3	6	4				
	1.2							
	1.5							
	2							

EEDSF



Order EEDSF-D-L-d-N15 Material:SKD61 Hardness:48-52HRC

D	d	N	H	T	@ ¥ / P						
					L50	L60	L100	L150	L200	L250	L300
1.5	0.6-1.6	N=15-40 N=50-120 N=125 N=150 N=180	3	4							
2	0.8-1.9		4								
2.5	0.8-2.4		5								
3	1-2.9		6								
3.5	1.5-3.4		7								
4	1.5-3.9		8								
4.5	2.5-4.4		9								
5	3-4.9		10								
5.5	3.5-5.4		11								
6	4-5.9		14								
6.5	4.5-6.4		15								
7	4.9-6.9		17								
8	5.9-7.9		18								
9	6.9-8.9										
10	7.9-9.9										
12	8.9-11.9										
13	9.9-12.9										



EESH

AISI

Stepped ejector pins

Order EESH-D-L-d-N15 Material:SKH51 Hardness:58-62HRC

D	d	N	H	T	@ ¥ /P							
					L50	L60	L100	L150	L200	L250		
1	0.3	N=15- 35 N=40-100 N= 105 N= 125	2	4								
	0.4											
	0.5-0.6											
	0.7-0.8											
1.5	0.3				3	6						
	0.4											
0.5												
0.6-1												
2	0.7-1.6				4							
2.5	0.8-2.1				5							
3	1 -2.3		6									
4	2.4-2.6		7									
4.5	2 2.5 3.5		9	6								
5	3											

ZZ44

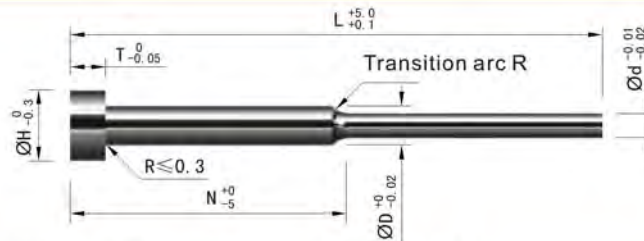
DIN



Order ZZ44-D-L-d-N35 Material:SKD61 Surface:900HV~ Core: 38-42HRC

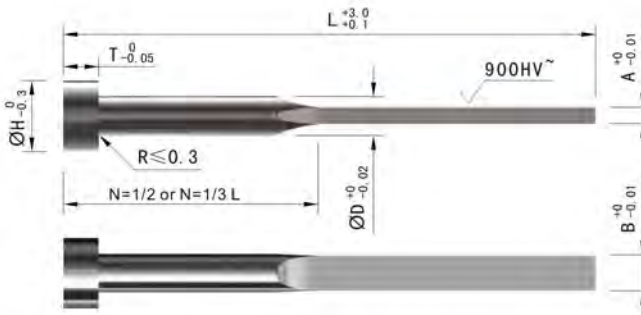
D	d	N	H	T	@ ¥ /P							
					L80	L100	L125	L160	L200	L250		
2	0.8	N= 35 N= 50 N= 75 N=100	4	2								
	0.9											
	1											
	1.1											
	1.2											
	1.3											
3	1.4				6	3						
	1.5											
	1.6											
	1.7											
	1.8											
	1.9											
	2											
2.2												
2.5												

EEJS



Order EEJS-D-L-D-N Material:SKD61 Surface:900HV~ Core: 38-42HRC

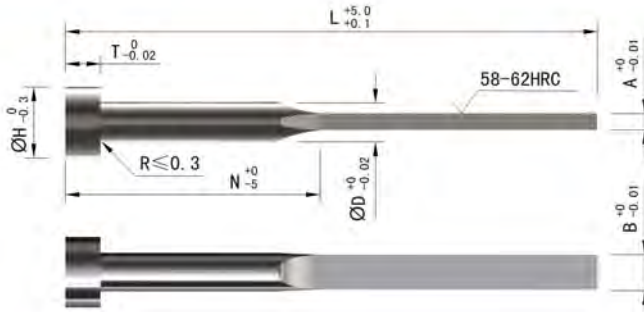
D	L	d	N	H	T	@ ¥ /P
4	100 -150	1.5-3	50	8	6	
	150.01-200		70 100			
	200.01-250		100 125			
5	100 -150	3 -4	50	9		
	150.01-200		70 100			
	100 -150		100 125			
6	150.01-200	4	50	10		
	200.01-250		70 100			
	150.01-200		100 125			



Attention: vacuum nitrided flat ejector pin, four sharp edges will have fillets that are within R0.1. If it's to mold high flow plastic material (PP PA66 etc), please use SKD61 vacuum heat treatment or SKH51 material model, and please tell us flat position requires maintaining sharp corner.

Order ERPS-D-L-B-A-N Material:SKD61 Surface:900HV~ Core:38-42HRC

D	A	B	N	H	T	@ ¥/P						
						L100	L150	L200	L250	L300		
2	0.5-1	1 -1.5	N=1/2L N=1/3L									
2.5	0.5-1.2	2				6	4					
3	0.5-1.5	2.5				7						
3.5	0.5-2	3				8						
4	0.6-2	3.5				9	6					
4.5	0.7-2	4				10						
5	2	4.5				11						
5.5	1 -2	5				13	8					
6		5.5				14						
6.5	1 -2	7.5				15						
7		9.5										
8												
9												
10												



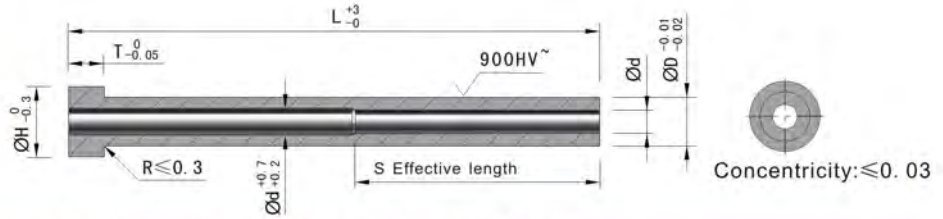
Order EERPH-D-L-A-B-N-T Material:SKH51 Hardness:58-62HRC

D	A&B	N	T	H	@ ¥/P						
					L100	L150	L200	L250			
2	0.5-1	N= 30- 50 N= 40- 90 N= 75-100 N=100-120									
2.5	0.5-2				4	5					
3	0.5-2.5				6	7					
3.5	0.5-3				4	9					
4	0.5-3.5						10				
4.5	0.5-4						11				
5	0.6-4.5				4	8	13				
5.5	0.6-5						14				
6	0.8-5.5				15						
6.5	0.8-6										
7	0.8-6.5										
8	0.8-7.5										
9	0.8-8.5										
10	0.8-9.5										

TAIWAN

Ejector sleeves

ESV

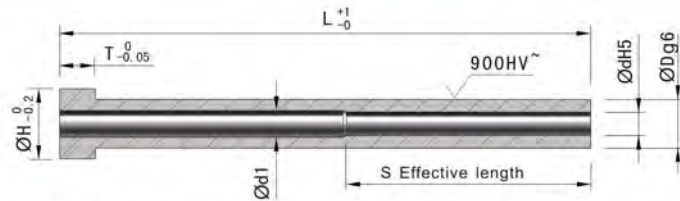


Order: **ESV-d-D-L** Material:SKD61 Surface:900HV~ Core: 38-42HRC

d	D	H	T	@ ¥ / P														
				L100	L125	L150	L175	L200	L225	L250	L275	L300	L350	L400				
3	5	9	6															
3.5	6	10																
4	6.5																	
3																		
3.5	7		11	6														
4																		
4.5																		
4																		
4.5	8	13	6															
5																		
5.5																		
5																		
5.5	10	15	8															
6																		
6.5																		
7																		

Diameter of pin	Effective length of sleeve	Cut effective length(sleeve)
2.0- 2.5mm	About 20mm	
2.5- 3.8mm	About 30mm	≤5mm
3.8- 6.2mm	About 40mm	≤8mm
6.2-10.0mm	About 60mm	

ZZ45



Order: **ZZ45-d-D-L** Material:SKD61 Surface:900HV~ Core: 38-42HRC

d	D	H	T	S	@ ¥ / P										
					L75	L100	L125	L150	L175	L200	L225	L250			
2	3.5	7	3	25											
2.5	4	8													
2.7	5	10													
3															
3.2	5.5		12	25											
3.5															
4															
3.5															
3.7	6	14	5	35											
4															
4.5															
5															
4.2	7	16	7	35											
5															
5.2															
5.5															
6	8	18	7	35											
6.2															
7															
8															
8.2	10	20	7	35											
9															

Slide Retainers Series





DIN	Wmould	DIN	DIN	Wmould
Slide holding devices	Slide holding devices	Slide holding devices	Slide holding devices	Slide holding devices
ZZ5130 P21	ZZ5130B P22	ZZ5134 P23	ZZ5140-0/1 P24	ZZ5140-0/1B P25



DIN	DIN	AISI	AISI	AISI
Slide holding devices	Slide holding devices	Slide holding devices	Slide holding devices	Slide holding devices
ZZ5140-2 P26	EE3044 P27	SSLK-8A P28	SSLK-8AB P29	SSLK-25A P30



AISI	AISI	(American) AISI	(Metric system) AISI	(American) AISI
Slide holding devices	Slide holding devices	Slide holding devices	Slide holding devices	Slide holding devices
SSLK-25AB P31	SSLK-50A P32	SSRT P33	SSRTM P33	PPSR P34



AISI	(Metric system) AISI	JIS	JIS	JIS
Slide holding devices	Slide holding devices	Slide holding devices	Slide holding devices	Slide holding devices
PPSR P35	PPSR P36	SSSLK P37	BSJ P38	BPJ P38



JIS	DIN	DIN	DIN	Wmould
Slide Stoppers	Slide retainers	Slide retainers	Slide retainers	Slide retainers
SSLSP P37	RRC P39	RRM P40	ZZ189 P41	ZZ189 P42



DIN	DIN	AISI	Wmould	AISI
Slide retainers	Slide retainers	Slide retainers	Slide retainers	Slide retainers
ZZ5135 P43	ZZ5136 P43	PPSL P45	PPSL P46	PPSM P47









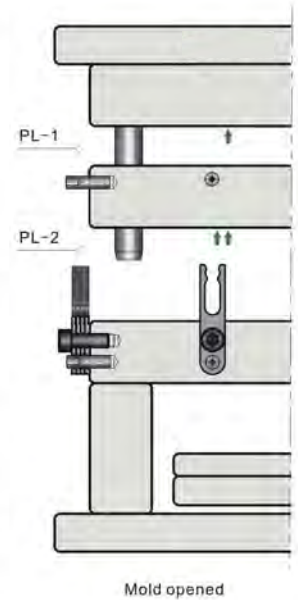
Wmould	AISI	Wmould
Slide retainers	Slide retainers	Slide retainers
PPSM P48	MMRT P49	MMRT P50

Products Summary

Picture	Parts name	Model	Type		Material	Page	Instruction	
			American/Metric system	Standard				
	Slide holding devices	ZZ5130-13 ZZ5130-18 ZZ5130-27	Metric system DIN	(Machine processing)	SKD61	P21	<p>1. Standard slide holding devices adopt alloy material to processing, firm and durable.</p> <p>2. Precision slide holding device adopt machining precision processing, fixed position much accuracy.</p>	
		ZZ5130-13B ZZ5130-18B	Metric system <i>Wmould</i>	Standard type (Precision casting)	SKD61	P22		
		ZZ5134	Metric system DIN	-	SKD61	P23		
		ZZ5140-0 ZZ5140-1	Metric system DIN	(Machine processing)	SKD11	P24		
		ZZ5140-0B ZZ5140-1B	Metric system <i>Wmould</i>	Standard type (Precision casting)	4118	P25		
		ZZ5140-2	Metric system DIN	(Machine processing)	SKD11	P26		
		EE3044	Metric system DIN	-	SKD11	P27		
		SSLK-8A	American AISI	(Machine processing)	SKD11	P28		
		SSLK-8AB	American AISI	Standard type (Precision casting)	4118	P29		
		SSLK-25A SSLK-50A	American AISI	(Machine processing)	SKD11	P30		
		SSLK-25AB	American AISI	Standard type (Precision casting)	4118	P31		
		SSRT	American AISI	Standard type (Precision casting)	FDAC	P33		
		SSRTM	Metric system AISI	-	FDAC	P33		
		PPSR			(Machine processing)	SKD11		P34
			American AISI	Standard type (Precision casting)	SCM435	P35		
			Metric system AISI	-	SKD11	P36		
		SSLLK	Metric system JIS	-	SKD11	P37		
		BSJ	Metric system JIS	-	S45C	P38		
	BPJ	Metric system JIS	-	SUS304	P38			

- Slide retainers series
- Latch locks series
- Pushing gates series
- Gate starters, Air valves series
- Ejector series
- Cooling elements series
- Locating parts series
- Springs series
- Guide parts (Guide bush)
- Guide sticks, V-shaped series
- Chuck series
- Mold accessories

Picture	Parts name	Model	Type		Material	Page	Instruction
			American/ Metric system	Standard			
	Slide holding devices	RRC	Metric system <i>DIN</i>	-	8047	P39	1. Standard slide holding devices adopt alloy material to processing, firm and durable. 2. Precision slide holding device adopt machining precision processing, fixed position much accuracy. 3. RRC, RRM, PPSL, PPSM slide retainer not only with limit function, but also with latch lock function when not request during closed mould sequence.
		RRM	Metric system <i>DIN</i>	-	8407	P40	
		ZZ189	Metric system <i>DIN</i>	(Machine processing)	SKD11	P41	
			Metric system <i>Wmould</i>	Standard type (Precision casting)	4118	P42	
		ZZ5135 ZZ5136	Metric system <i>DIN</i>	-	Cr12MoV	P43	
		PPSL	American <i>AISI</i>	(Made in Tai Wan.)	4118	P45	
			American <i>Wmould</i>	Standard type (Precision casting)	SCM435	P46	
		PPSM	Metric system <i>AISI</i>	(Made in Tai Wan.)	4118	P47	
			Metric system <i>Wmould</i>	Standard type (Precision casting)	SCM435	P48	
		MMRT	Metric system <i>AISI</i>	(Made in Tai Wan.)	4118	P49	
			Metric system <i>Wmould</i>	Standard type (Precision casting)	SCM435	P50	





Features:

- 1.ZZ5130 Slide holding devices with outside small shape and occupy the small space.
- 2.ZZ5130 Slide holding devices is the best convenient installment of the slide retainer series.
- 3.ZZ5130 Slide holding devices adopts precision machining to make location more accurate.

Order ZZ5130-13 Material :SKD61 Hardness:52±2 HRC Service environment:Max100°C

Code	D	L1	L2	L3	H	H1	T3	Mounting screws	(Kgf) Max. holding weight	@ ¥/P
ZZ5130-13	13	6.6	1.4	4.3	1	10	1.6	M2-16	3.5	
ZZ5130-18	18	9.6	2	6	1.8	14	2	M3-20	4.5	
ZZ5130-27	27	14.4	3	9	2.8	21	3	M4-25	9.5	

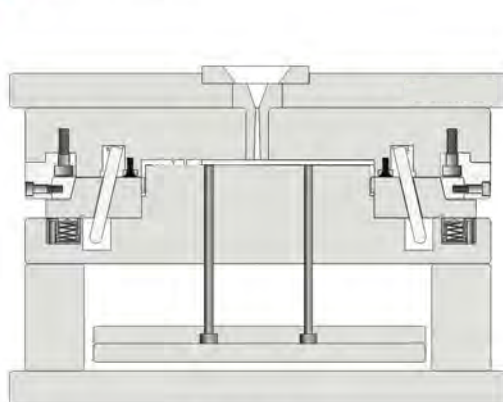


Installation Guidelines:

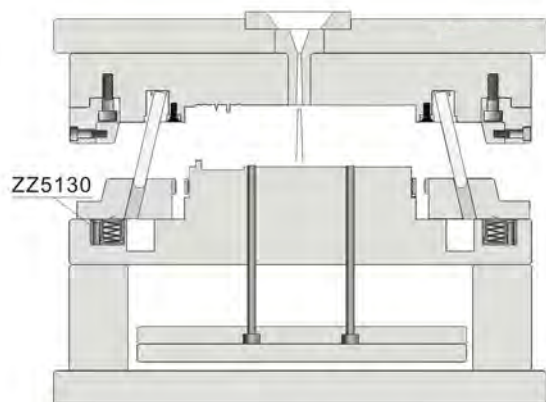
- Use this type mold must process the "∧" groove at the corresponding position on the slide.
- The processing installed hole in mold and "∧" groove must be 90 degree, to make the biggest function from the lock.



Functional chart:



Mold closed



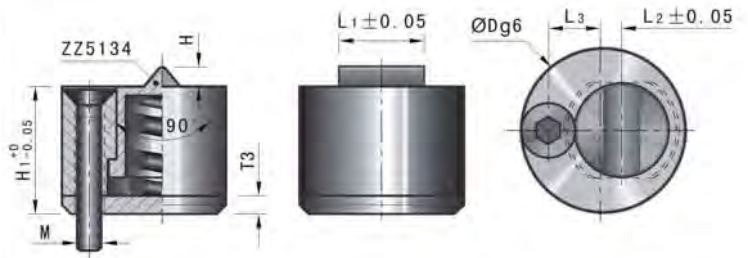
Mold opened

- Slider pins series
- Slide retainers series
- Latch lock series
- Pushing gate series
- Dome stamps Air valves series
- Expander series
- Cooling elements series
- Locating pins series
- Springs series
- Guide pins Guide bush series
- Guide pins Water plate series
- Chuck series
- Mold processors

DIN

Slide holding devices

ZZ5130B



Features:

- 1.ZZ5130 Slide holding devices with outside small shape and occupy the small space.
- 2.ZZ5130 Slide holding devices is the best convenient installment of the slide retainer series.
- 3.ZZ5130 Slide holding devices adopts precision machining to make location more accurate.

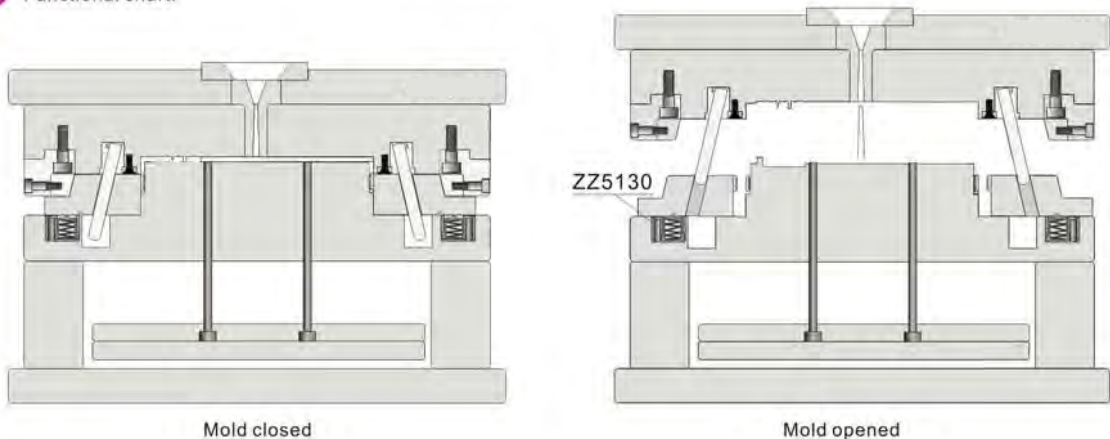
Order ZZ5130-13B Material :SKD61 Hardness:52±2 HRC Service environment:Max100°C

Code	D	L1	L2	L3	H	H1	T3	Mounting screws	(Kgf) Max. holding weight	@ ¥ /P
ZZ5130-13B	13	6.6	1.4	4.3	1	10	1.6	M2-16	3.5	
ZZ5130-18B	18	9.6	2	6	1.8	14	2	M3-20	4.5	

Installation Guidelines:

- Use this type mold must process the "∧"groove at the corresponding position on the slide.
- The processing installed hole in mold and "∧"groove must be 90 degree, to make the biggest function from the lock.

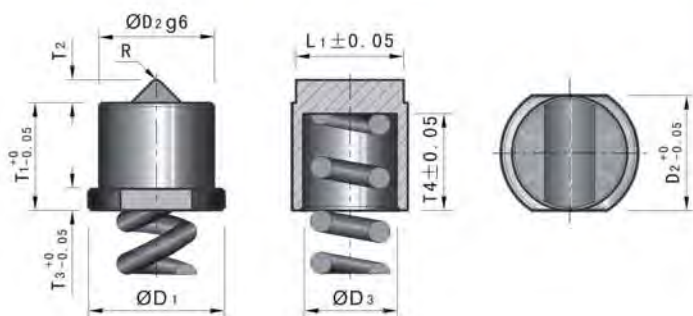
Functional chart:



Mold closed

Mold opened

ZZ5134



Features:

1. Simple structure, convenient installment.
2. Use widely, can be single installment for using, also can be used to match up with Slide retainer ZZ4200.



Installation Guidelines:

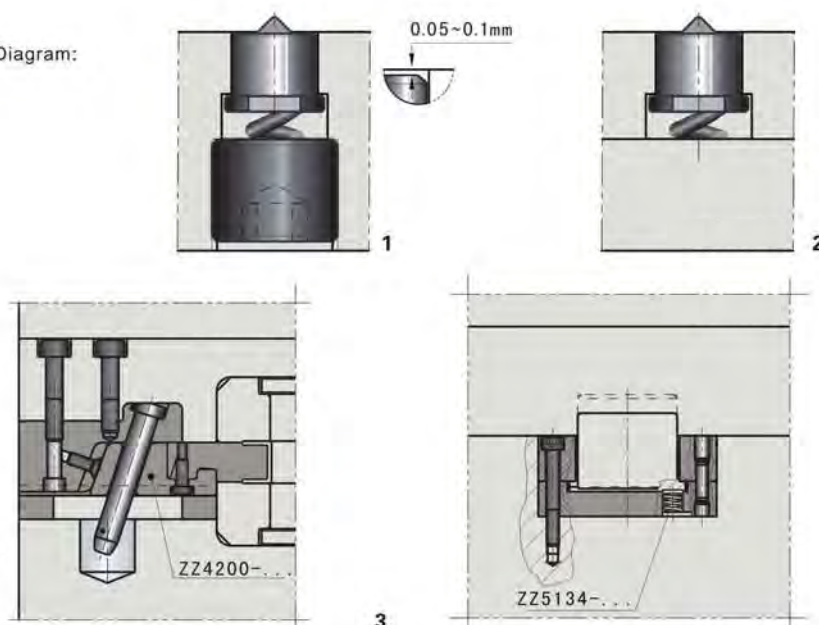
- Surface on the slide holding devices should be lower than surface of template installed or wear plate about for 0.05mm to 0.1mm.

Order ZZ5134-7 Material :SKD61 Hardness:52±2 HRC Service environment:Max100°C

Code	D2	L1	T1	T2	T3	T4	D1	D3	R	(Kgf) Max. holding weight	@ ¥/P
ZZ5134-7	7	6.6	7	1	1.4	6.3	8.4	5.3	0.35	3.5	
ZZ5134-10	10	9.6	10	1.8	2	9	12	8.3	0.50	4.5	
ZZ5134-15	15	14.4	15	2.8	3	13.5	18	12.4	0.75	9.5	



Installation Diagram:

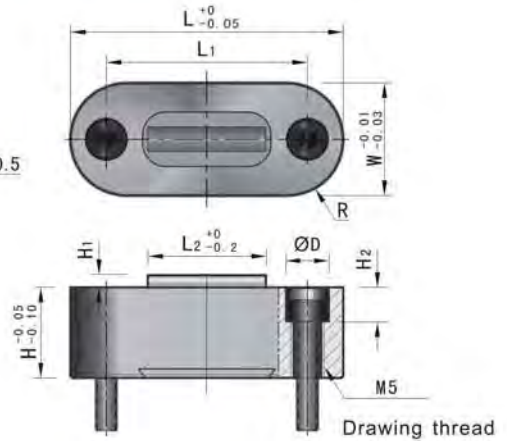
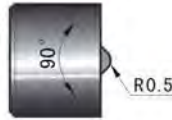


Ejector pins
 Ejector sleeves
 Side retainers
 Latch locks
 Pouring gates
 Air valves
 Delta stamps
 Ejector series
 Cooling elements
 Locating parts
 Springs series
 Guide pins
 Guide pins
 Wear plate series
 Chuck series
 Mold accessories

DIN

Slide holding devices

ZZ5140



Features:

1. Compared with SSLK series, Spring adopt built-in type, easy to installation.
2. The extended 90 ° degree V-groove shoulder ensure the lock more balanced and stable.

Order ZZ5140-0 Material :SKD11 Hardness:52-54HRC Service environment:Max100°C

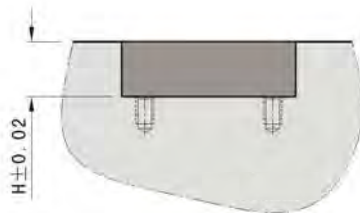
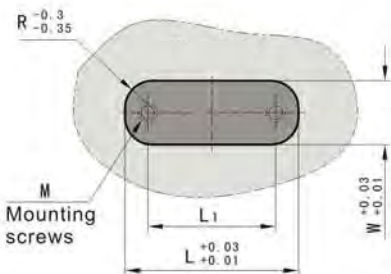
Code	D	R	L	L1	L2	W	H	H1	H2	Mounting screws	(Kgf) Max. holding weight	@ ¥ /P
ZZ5140-0	precision	6	38	28	16.5	14	12	1.8	4.5	M4-16	7	
ZZ5140-1		8	53	43	32	18	14			M4-25	12	



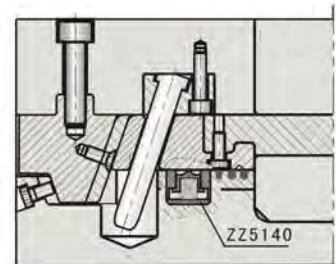
Installation Guidelines:

- As opened size diagram to process and install groove.
- When need to take out product , use one end of puller to connect with drawing thread to pull out.

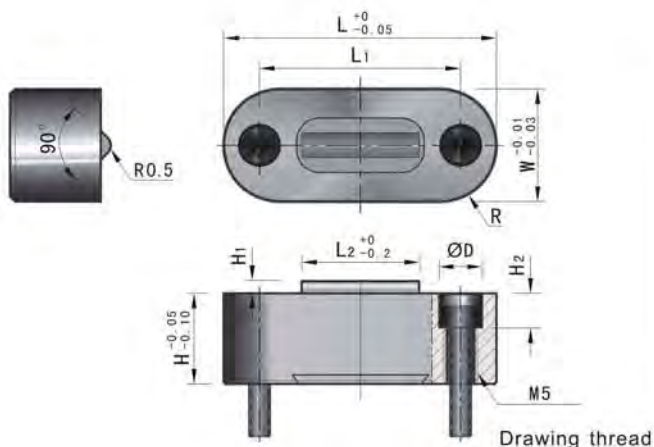
Dimension chart:



Installation Diagram:



ZZ5140



Features:

1. Precision alloy casting, Firm and durable.
2. Compared with SSLK series, Spring adopt built-in type, easy to installation.
3. The extended 90 degree slide shoulder ensure the lock more balanced and stable.

Order ZZ5140-0B Material :4118 Hardness:55-60HRC Service environment:Max100°C

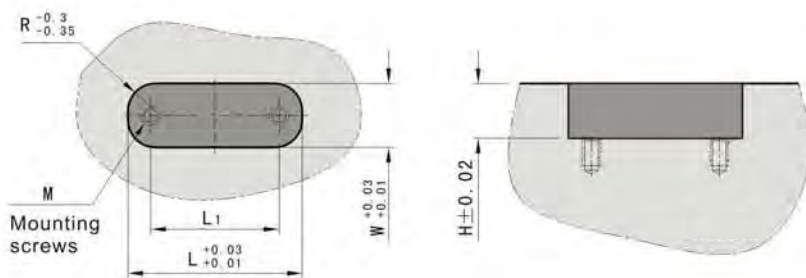
Code		D	R	L	L1	L2	W	H	H1	H2	Mounting screws	(Kgf) Max. holding weight	@ ¥ /P
ZZ5140-0B	standard	8	6	38	28	16.5	14	12	1.8	4.5	M4-16	7	
ZZ5140-1B		8	8	53	43	32	18	14			M4-25	12	



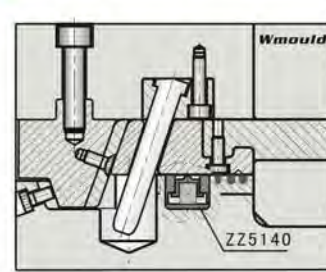
Installation Guidelines:

- As opened size diagram to process and install groove.
- When need to take out product , use one end of puller to connect with drawing thread to pull out.

Dimension chart:



Installation Diagram:

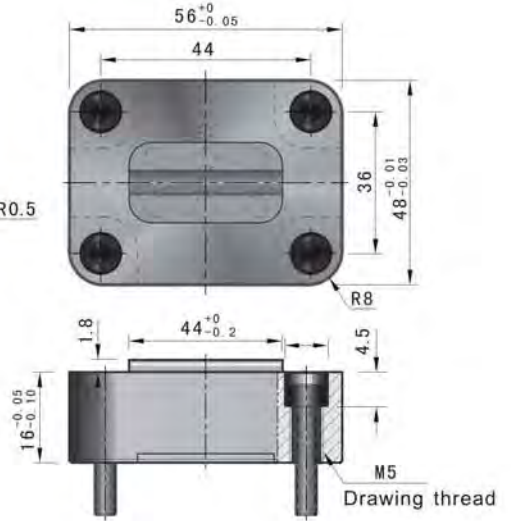


Electric gas
factor sleeves
Slide railers
Latch lock
Pouring gate
series
Dota stamps
Air valve series
Ejector series
Cooling elements
Locating parts
Springs series
Slide pins
Guide bush
Slide strips
Water plate series
Chuck series
Mold
accessories

DIN

Slide holding devices

ZZ5140



Order ZZ5140-2 Material :SKD11 Hardness:52-54HRC Service environment:Max100°C

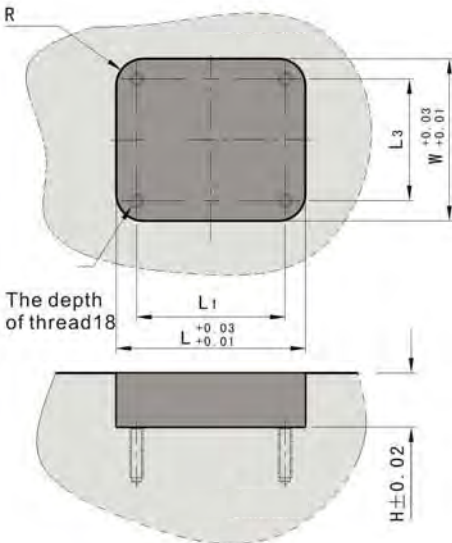
Code	Mounting screws	(Kgf) Max. holding weight	@ ¥ /P
ZZ5140-2	M4-25	25	



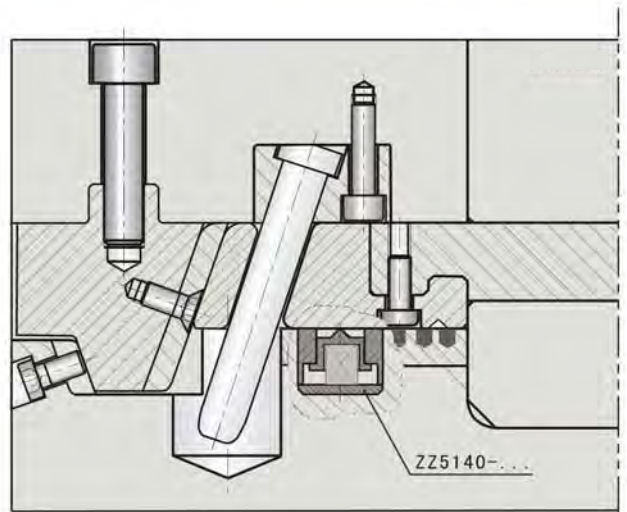
Installation Guidelines:

- As opened size diagram to process and install groove.
- When need to take out product , use one end of puller to connect with drawing thread to pull out.

Dimension chart:

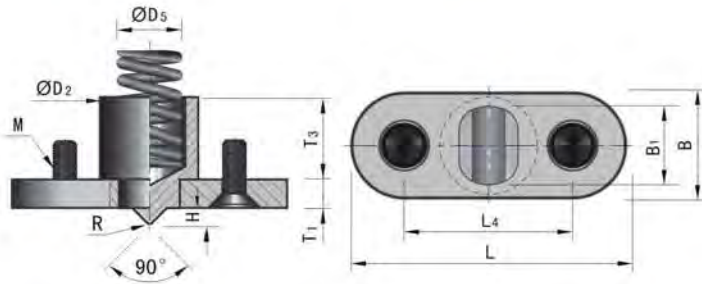


Installation Diagram:



DIN
Slide holding devices

EE3044



Features:

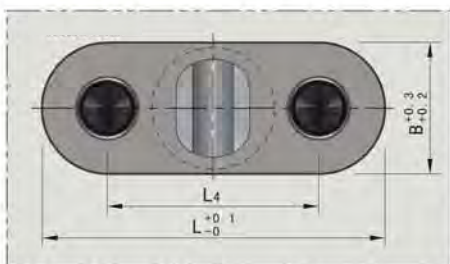
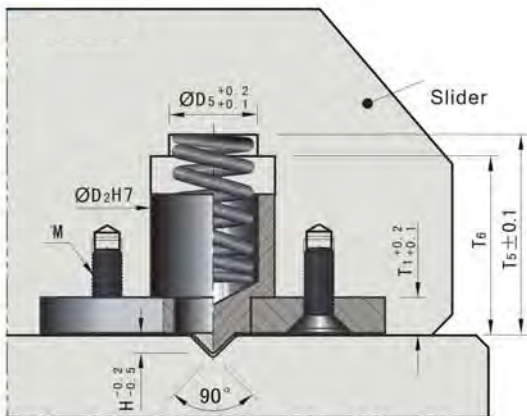
- 1.Unique structure Design, simple and convenient installment.
- 2.It is consist of spring, inner insert, baffle and screw.
- 3.The material is SKD11 for inner insert, which is prolonged and durable use.

Order EE3044-8

Code	D2	D5	B	B1	F(N)	L	L4	T1	T3	T5	T6	H	R	M	@ ¥/P
EE3044- 8	9	5	12	8	28	30	18	3	11	19	17	1.2	0.35	M4	
EE3044-12	13	8	16	12	38	38	22	4	14	24	22	2.2	0.5	M5	
EE3044-16	18	12	20	16		50	30	5	22	34	32	3.2	0.8	M5	



Installation Diagram:



Solid product chart:



② Inner insert: **Material :SKD11** **Hardness:55-60HRC**



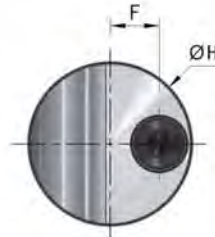
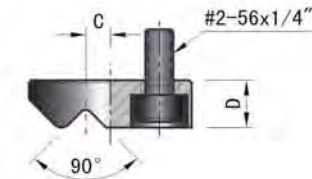
Installation Guidelines:

- The product can adopt flip chip in slider.
- "V" groove need be processed by yourself.
- Need to calculate the travel accurately before installment.

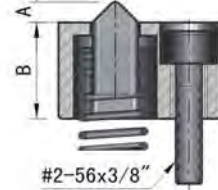
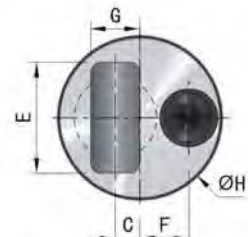
AISI

Slide holding devices

SSLK



cover



body

Notice: the standard type don't offer cover.

Order SSLK-8A Material :SKD11 Hardness:55-62HRC

Code	A	B	C	D	E	F	G	H	(Kgf) Max. holding weight	@ ¥ /F
SSLK-8A precision	1.57 (0.062)	7.49 (0.295)	1.9 (0.075)	3.68 (0.145)	8.64 (0.34)	3.81 (0.15)	3.81 (0.15)	12.65 (0.498)	3.5	



Features:

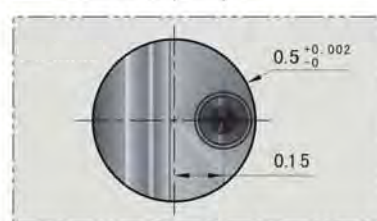
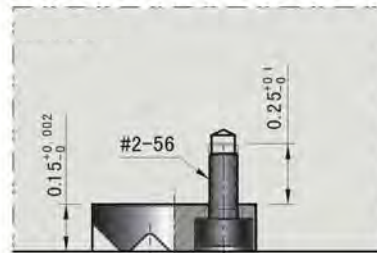
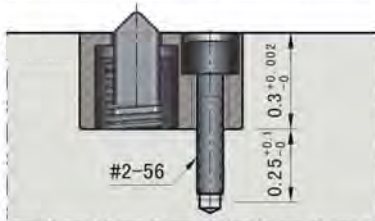
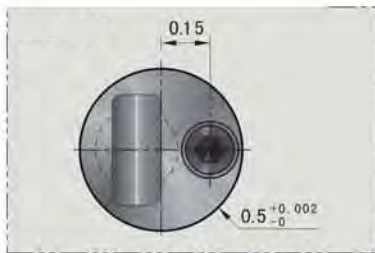
- 1.Ultra-compact design fits with the mold in very limited installation.
- 2.The slide devices can coordinate and hold more precise with their cover.
- 3.Prevent the slider become flexible.
- 4.High strength tool material construction provides durable production life.

Installation Guidelines:

- The cover need on the slide, body need on the module when install.
- The slide stroke need refined calculation before opened.



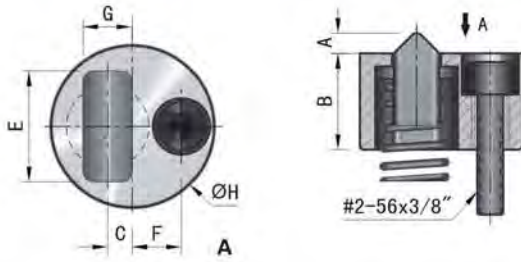
Installation Diagram:



AISI

Slide holding devices

SSLK



Notice: the standard type don't offer cover.

Features:

1. This product are smallest volume in all slide retainer can fully and reasonably to use of space. Adopt alloy material precision casting, firm and durable.
2. The slide devices can coordinate and hold more precise with their cover.

Order SSLK-8AB Material :4118 Hardness:55-60HRC

Code	A	B	C	D	E	F	G	H	(Kgf) Max. holding weight	@ ¥ / P
SSLK-8AB standard	1.57 (0.062)	7.49 (0.295)	1.9 (0.075)	3.68 (0.145)	8.64 (0.34)	3.81 (0.15)	3.81 (0.15)	12.65 (0.498)	3.5	

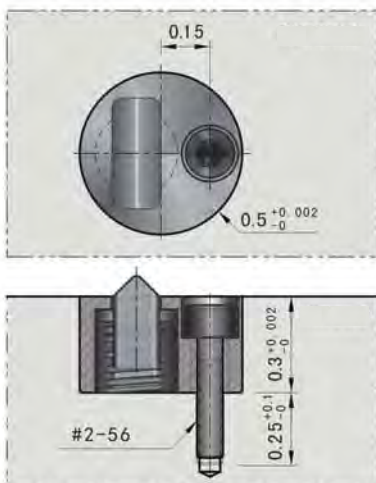


Installation Guidelines:

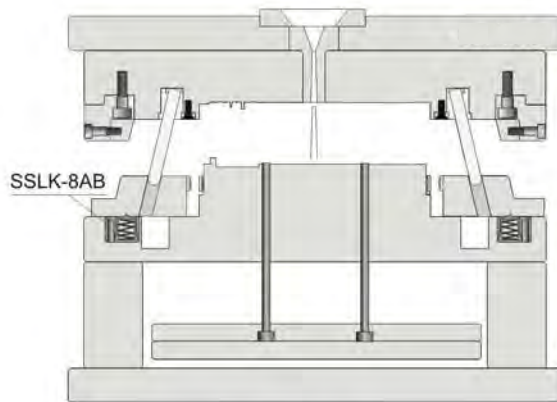
- SSLK-8AB don't offer cover, need customer own process " ^ -groove " on the slide when installation.
- The installed hole need be vertical with " ^ -groove " to make the biggest function from the lock.



Installation Diagram:



Functional chart:

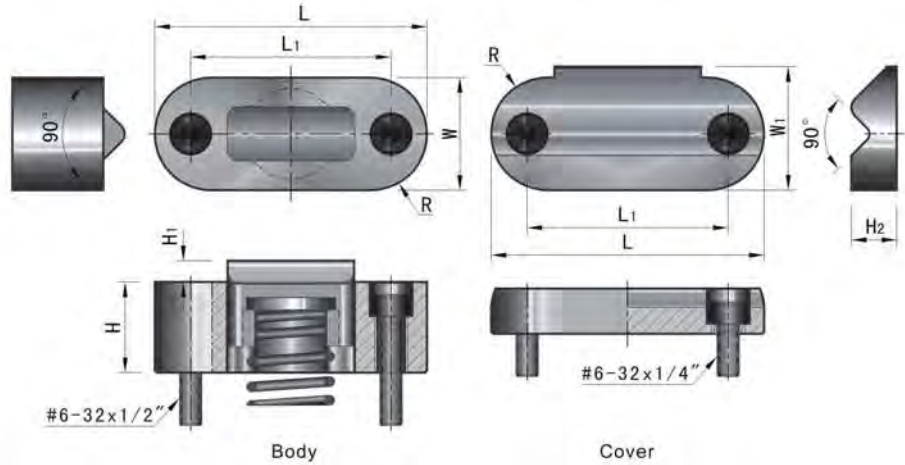


Mold opened

AISI

Slide holding devices

SSLK



Features:

1. Compared with SSLK-8A, SSLK-25A is oval with reasonable size to rate up holding more weight.
2. The extended 90 degree shoulder ensure the lock more balanced and stable.



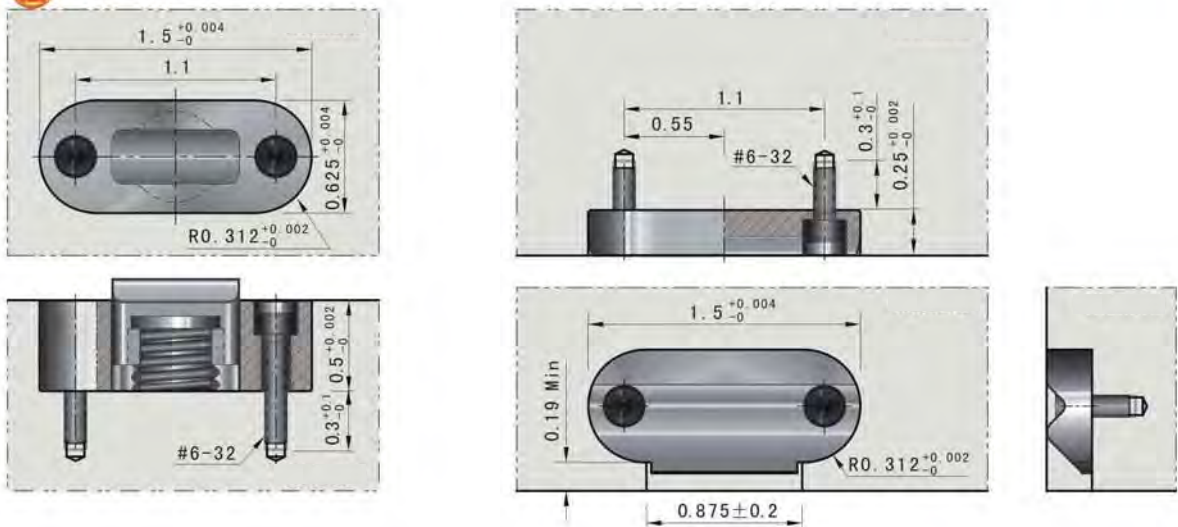
Installation Guidelines:

- The cover need on the slide, body install on mould board.
- The slide stroke need refined calculation before opened.

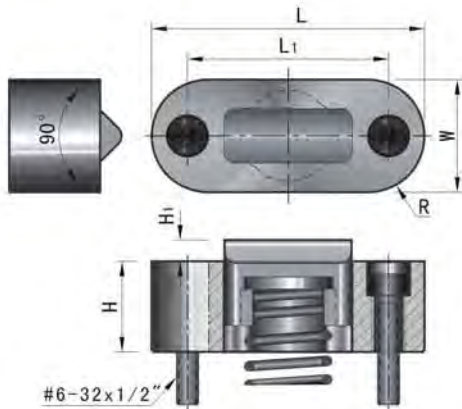
Order SSLK-25A Material :SKD11 Hardness:55-62HRC

Code	L	L1	H	H1	H2	W	W1	R	Mounting screws	(Kgf) Max. holding weight	@ ¥ /P	
SSLK-25A	precision	37.95 (1.494)	27.94 (1.1)	12.67 (0.499)	2.97 (0.117)	6.32 (0.249)	15.75 (0.62)	17.27 (0.68)	7.92 (0.312)	#6-32-1/2 #6-32-1/4	11.25	

Installation Diagram:



AISI
Slide holding devices



Notice: the standard type don't offer cover.

Features:

1. Compared with SSLK-8A, SSLK-25A is oval with reasonable size to rate up holding more weight.
2. The extended 90 degree shoulder ensure the lock more balanced and stable.
3. SSLK-25A adopts precision alloy, with strong, durable construction.



Installation Guidelines:

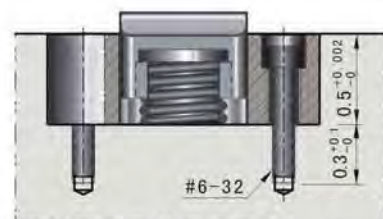
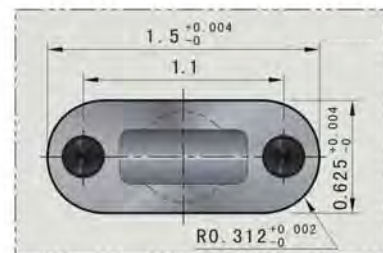
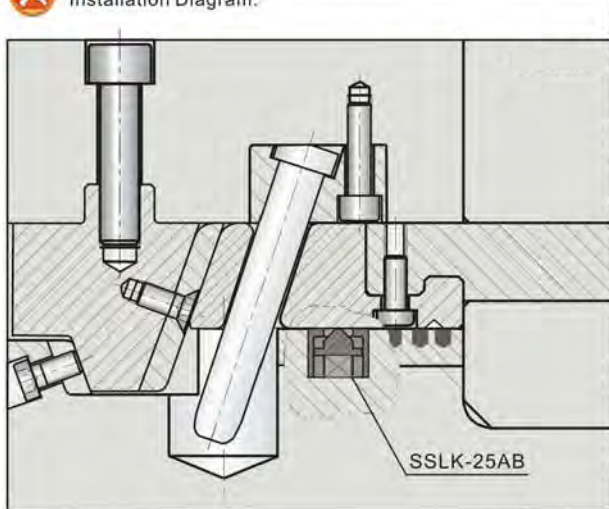
- SSLK-25A don't offer cover, need customer own process "Λ-groove" on the slide when installation.

Order SSLK-25AB Material :4118 Hardness:55-60HRC

Code	L	L1	H	H1	H2	W	W1	R	Mounting screws	(Kgf) Max. holding weight	@ ¥ /P
SSLK-25AB standard	37.95 (1.494)	27.94 (1.1)	12.67 (0.499)	2.97 (0.117)	6.32 (0.249)	15.75 (0.62)	17.27 (0.68)	7.92 (0.312)	#6-32-1/2 #6-32-1/4	11.25	



Installation Diagram:

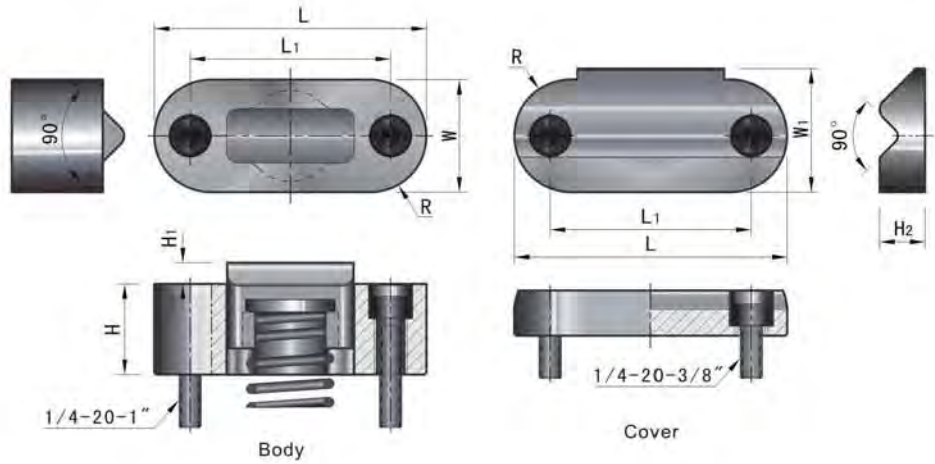


- Exhaust gas
- Exhaust valves
- Slide retainers series
- Latch lock
- Pushing gate
- Auto valves series
- Exhaust series
- Cooling elements
- Locating parts
- Spring series
- Slide pins
- Slide pins
- Water pump series
- Chuck series
- Mold accessories

AISI

Slide holding devices

SSLK



Order SSLK-50A Material:SKD11 Hardness:55-62HRC

Code	L	L1	H	H1	H2	W	W1	R	Mounting screws	Max. holding weight (Kgf)	@ ¥/P
SSLK-50A	58.22 (2.292)	41.91 (1.65)	21.84 (0.86)	4.34 (0.171)	9.78 (0.385)	25.3 (0.996)	26.87 (1.058)	12.7 (0.498)	1/4-20-1" 1/4-20-3/8"	22.5	

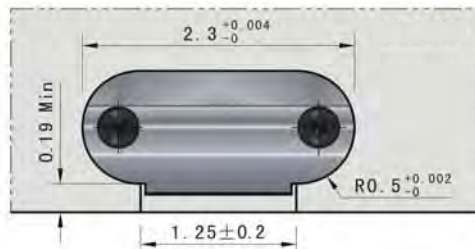
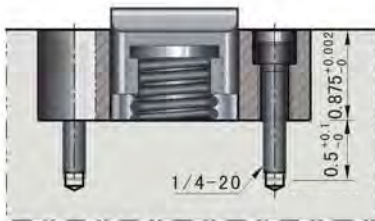
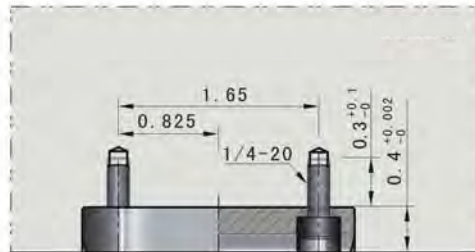
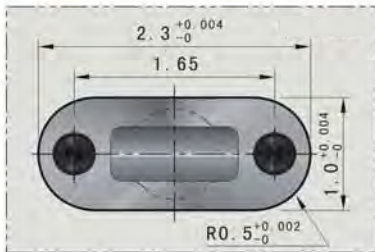


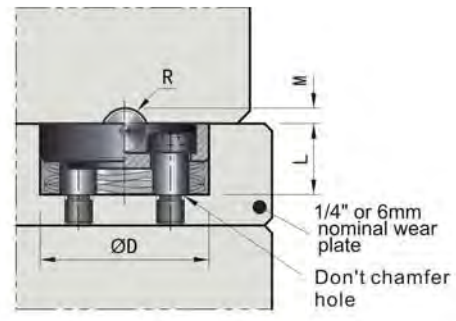
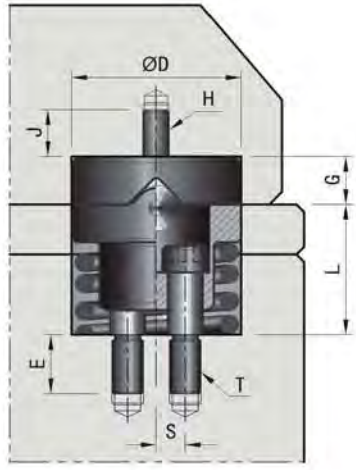
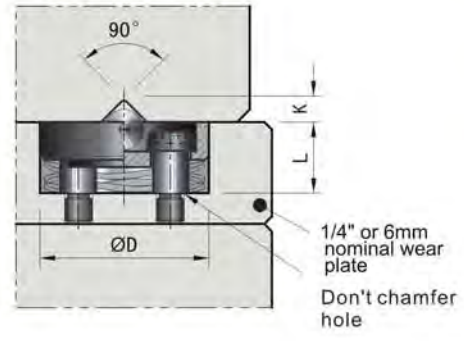
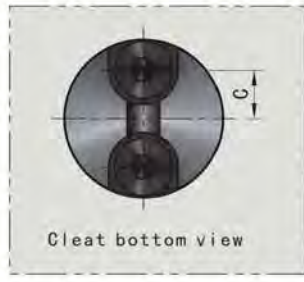
Installation Guidelines:

- The slide holding devices of SSLK-50A can hold weight 22.5kgf, be mainly used to Injection mould.
- Several slide retainers can be installed in mold, in order to bear more load.
- The cover is usually installed in slider, with oval shape design, easy to mold open and installment.



Installation Diagram:





Features:

1. Compared with other slide holding devices, can protect the retainer from damage.
2. The location parts is ball, can be friction reduced and slide smooth.
3. Don't chamfer hole when install, the screw will fall into hole if chamfer.

Order SSRT-30 Material:FDAC Hardness:900HV~

Code	D ₋₀ ^{+0.005}	L ±0.001	S ±0.002	T	E	(lbs) Max holding weight	@ ¥ /P	Cleat code	G ±0.001	C ±0.002	H	J	@ ¥ /P
SSRT-30	0.75	0.5	0.15	#8-32	0.19	30		SSRTC-30	0.25	0.25	#6-32	0.25	
SSRT-80	0.875	0.75			0.245	80		SSRTC-80		0.3			

Order SSRTM-04 Material:FDAC Hardness:900HV~

Code	D ₋₀ ^{+0.005}	L ±0.001	S ±0.002	T	E	(lbs) Max holding weight	@ ¥ /P	Cleat code	G ±0.001	C ±0.002	H	J	@ ¥ /P
SSRTM-13	19.1	12.7	3.8	M4	4.8	13.5		SSRTMC-13	6.35	6.35	M3	6.35	
SSRTM-36	22.3	19.05			6.2	36		SSRTMC-36		7.6			

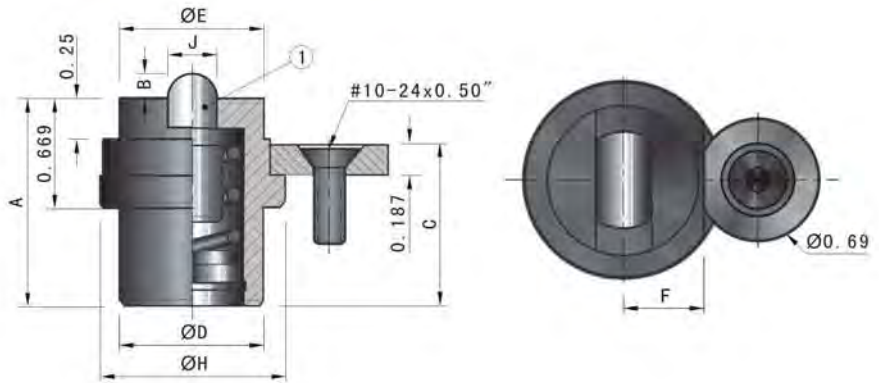
Code	V-Groove		Ball Cut		Code	V-Groove		Ball Cut	
	K	R	R	M		K	R	M	
SSRT-30					SSRTM-13				
SSRT-80	0.078		0.125	0.03	SSRTM-36	2mm	3mm		0.75mm

- Exciter gears
- Exciter sleeves
- Slide retainers series
- Launch tools
- Pouring gate series
- Die stamps
- Die valves series
- Exciter series
- Cooling elements series
- Locating parts series
- Spring series
- Slide pins
- Wear plate series
- Slide strips
- Chuck series
- Mold accessories

AISI

Slide holding devices

PPSR



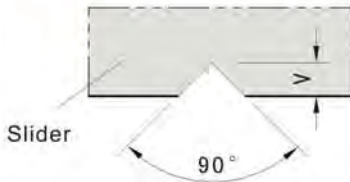
Order PPSR-1000 Material :SKD11 Hardness:58-62HRC

Code	A	B	C	D	E	F	H	J
PPSR-1000	1.08	0.072	0.795	0.62	0.63	0.375	0.866	0.188
PPSR-2000	1.32	0.121	1.035	0.74	0.748	0.42	0.984	0.250
PPSR-4000	1.26	0.149	0.975	0.87	0.866	0.468	1.102	0.312

Code	V	K	L	M	N	(Kgf) Max. holding weight	@ ¥ /P
PPSR-1000	0.091	0.625	0.869	0.94	0.67	4.5	
PPSR-2000	0.153	0.750	0.987	1.06	0.715	9	
PPSR-4000	0.194	0.875	1.105	1.19	0.763	18	



Installation Diagram:



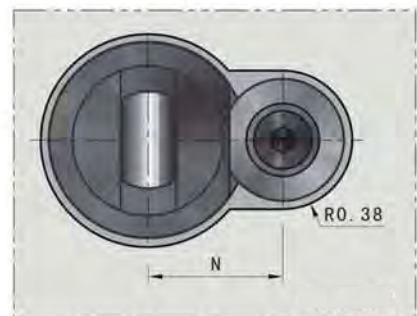
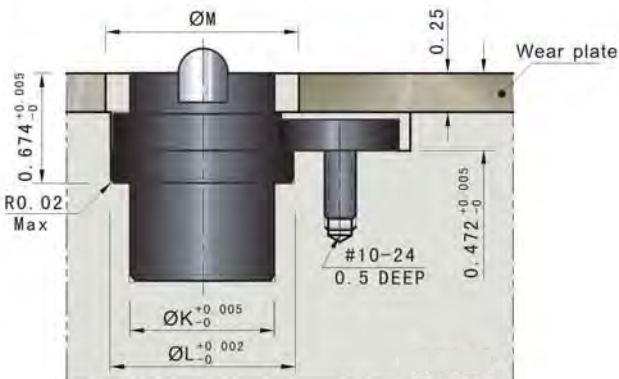
Features:

1. Self-contained design, integrative device.
2. Easy installation, and small in size.
3. Must process "V" groove in the mold to install PPSR.
4. Strong, durable construction. can be used to bear load by one or more to meet requirements.



Installation Guidelines:

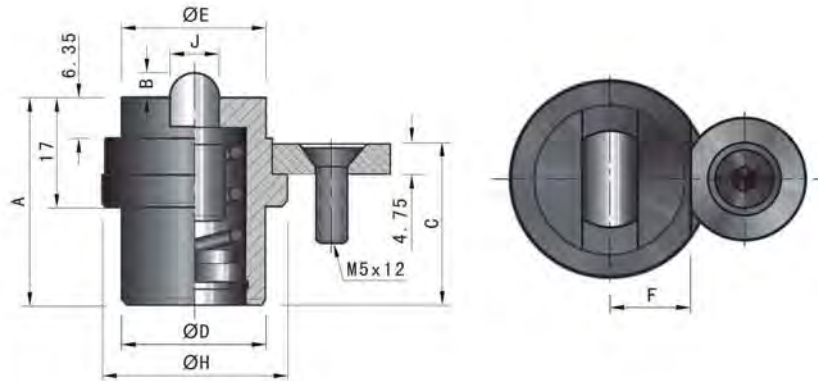
- Strict to process installment as opening size of installation.
- Can use several product to install for adding load.



AISI

Slide holding devices

PPSR



Features:

1. Self-contained design, integrative device.
2. Easy installation, and small in size.
3. Must process "V" groove in the mold to install PPSR.
4. Strong, durable construction, can be used to bear load by one or more to meet requirements.

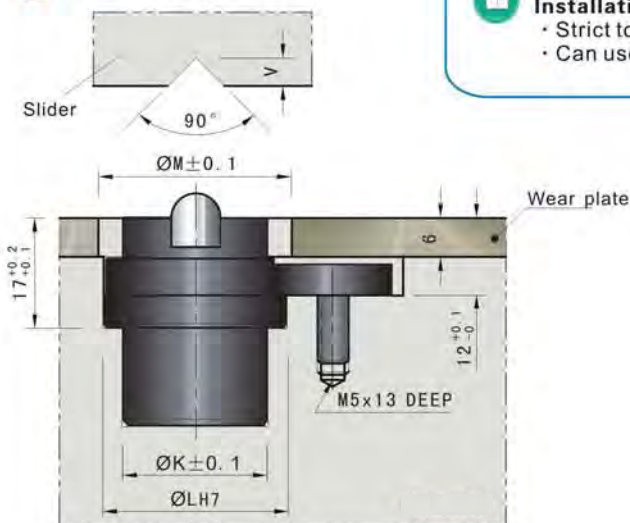
Order PPSR-100 Material :SKD11 Hardness:58-62HRC

Code	A	B	C	D	E	F	H	J
PPSR-100	27.43	1.83	20.2	15.75	16	9.52	22	4.78
PPSR-200	33.53	3.07	26.3	18.8	19	10.67	25	6.35
PPSR-400	32	3.78	24.76	22.1	22	11.86	28	7.92

Code	V	K	L	M	N	(Kgf) Max. holding weight	@ ¥ /P
PPSR-100	2.3	15.87	22	24	17	4.5	
PPSR-200	3.9	19.05	25	27	18.2	9	
PPSR-400	4.9	22.23	28	30	19.4	18	

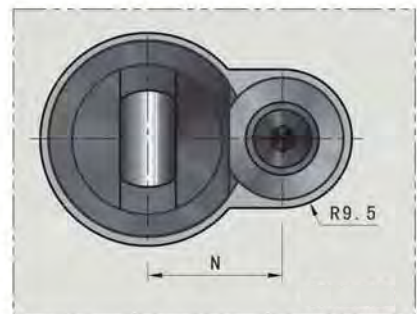


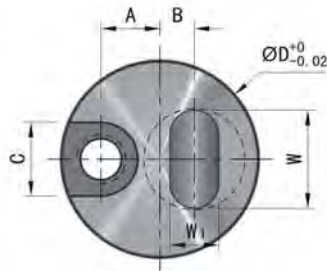
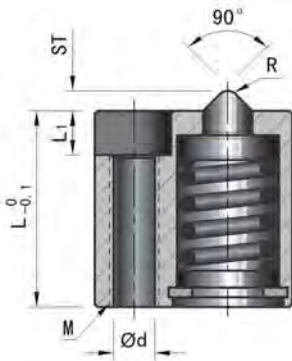
Installation Diagram:



Installation Guidelines:

- Strict to process installment as opening size of installation.
- Can use several product to install for adding load.





Order SLLK16-C Material :SKD11 Hardness:58-62HRC

Code	D	ST	L	L1	A	B	C	d	W	W1	R	Mounting screws	(Kgf.) Max. holding weight	@ ¥ /P
SLLK16-C	16	1.6	15	3.3	5	2.5	6	3.2	8	4	1	M3	28.6	
SLLK16-F													78.8	
SLLK20-F	20	2	20	4.5	6	3.5	7.5	4.3	10	5	1.1	M4	62.9	
SLLK20-L													110	

Features:

1. This type slide holding devices are mainly used in large-scale retainer construction.
2. Face to face design, to reduce the pressure of surface and be effective to protect retainer construction from damage.

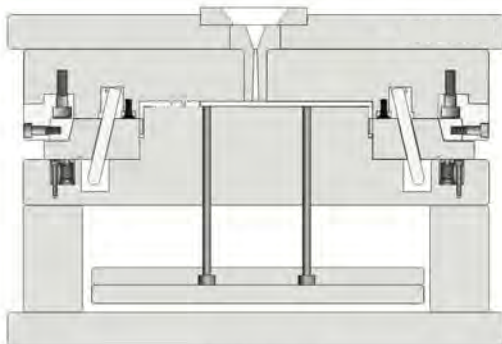


Installation Guidelines:

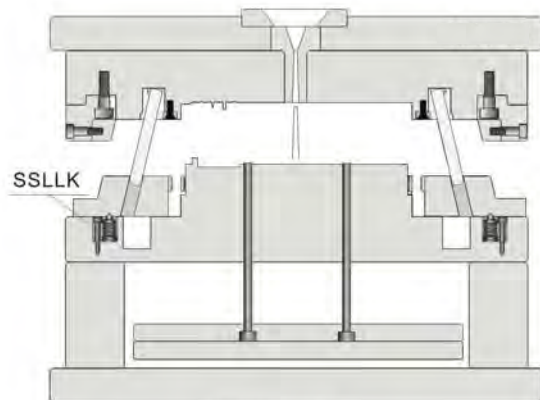
- The mold will use SLLK, need process "Λ-groove" on the corresponding location of the lock.
- The installed hole on the mold need be vertical with "Λ-groove" to make the biggest function from the lock.
- The heavy load may lead to the slider angle pin to sintering, Be better to reduce the hinder strength or use the underload slide holding devices .



Functional chart:



Mold closed



Mold opened

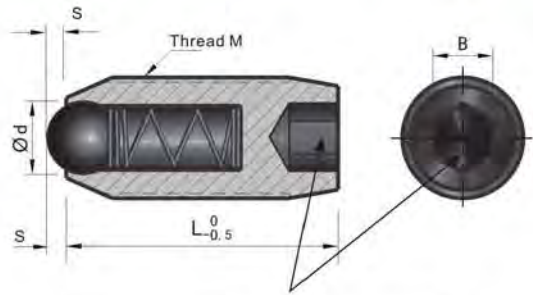
- Slider pins series
- Slide retainers series
- Latch lock series
- Pouring gate series
- Die stamps Air valve series
- Ejector series
- Cooling elements series
- Locating parts series
- Spring series
- Guide pins Guide bush series
- Guide strips Guide plate series
- Chuck series
- Mold accessories

JIS

Slide holding devices / Slide Stoppers

BSJ
BPJ

CRD
2D



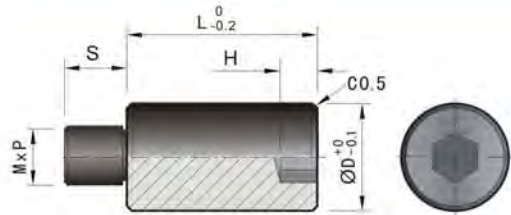
"-" slotted head screw is available

Order BSJ-M BSJ Material : S45C BPJ Material : SUS304

Code	M	d	L	B	S	min.	max.	@ ¥ /P
BSJ	4	2.5	9	2	0.7	3.9	9.8	
	5		12	2.5	0.9	4.9	19.6	
BPJ	6	3	13	3	1	9.8	29.4	
	8	4	15	4	1.5	12.7	39.2	
	10	5	16	5	2.0	18.6	49	
	12	7	20	6	2.5	19.6	58.8	
	16	9.5	25	8	3.5	29.4	98	

SSLSP

CRD
2D

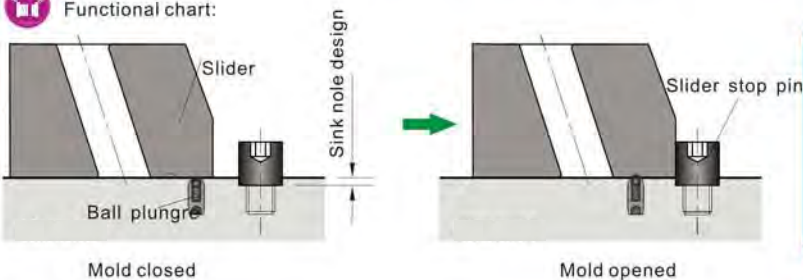


Order SSLSP-D Material : S45C Hardness:33-38HRC Surface treatment:Blacking

D	M x P	SW	H	S	@ ¥ /P
10	M 6x1.0	5	4	10	L 15-40
16	M10x1.5	8	5	15	
20	M12x1.75	10	6	18	
25	M16x2.0	14	9	24	



Functional chart:



Installation Guidelines:

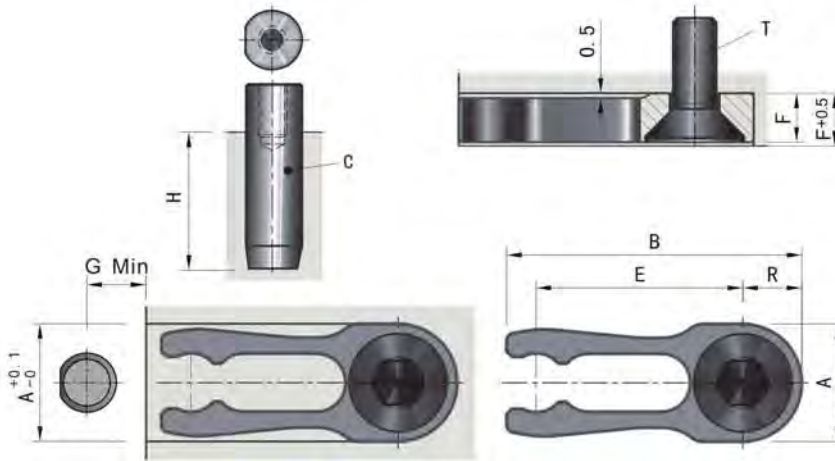
- Use inner hex wrench to lock stop pin.
- To improve strength, it is better to adopt countersink design.

DIN

Slide retainers

RRC

CAD 2D FL



Order RRC-123006 Material :8407 Hardness:40-45HRC

Code	A	B	C	E	F	G	H	K(kg)	R	T	@ ¥/P
RRC-123006	12	30	6×20	21	5	4	16	5	6	M 5×16	
RRC-164008	16	40	8×20	28	6	5	15	7	8	M 6×25	
RRC-205010	20	50	10×24	34	8	6	17	14	10	M 8×30	
RRC-246012	24	60	12×32	42	10	7	23	21	12	M10×40	
RRC-328012					12		27	28		M12×50	
RRC-328016	32	80	16×40	56	16	9	25	38	16		

Installation Guidelines:

- The product usually to be installed on the bottom of slide retainer.
- Dowel pin installed and the opening of slide retainer must be in the same direction.
- Retainer travel need accurate calculation before installment to protect the product from damage.

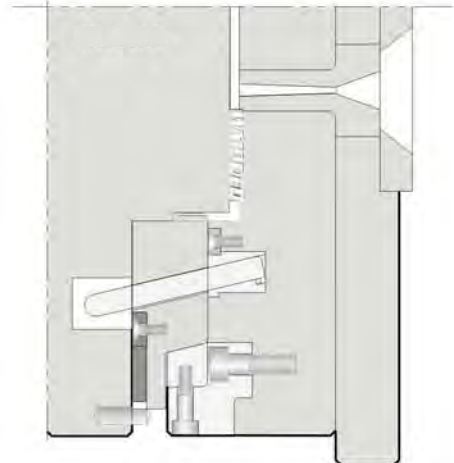
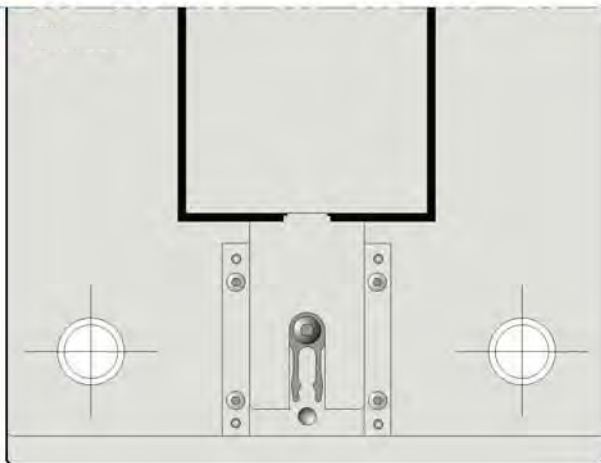


Features:

- 1.Simple structure and practical using, occupy small space for installment and fixation.



Installation Diagram:

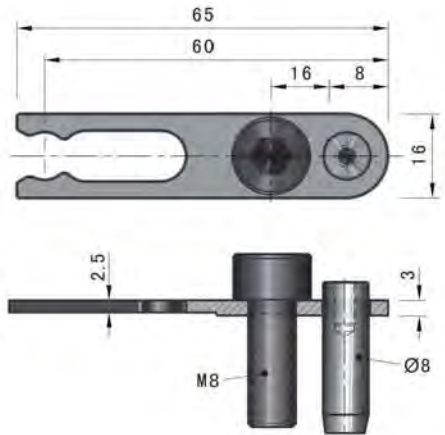


- Escator pins series
- Slide retainers series
- Latch tools series
- Pouring gate series
- Dowel stamps / Air valves series
- Escator series
- Cooling elements series
- Locating parts series
- Springs series
- Slide pins / Guide bush
- Slide strips / Water plate series
- Chuck series
- Mold accessories



Slide retainers

RRM

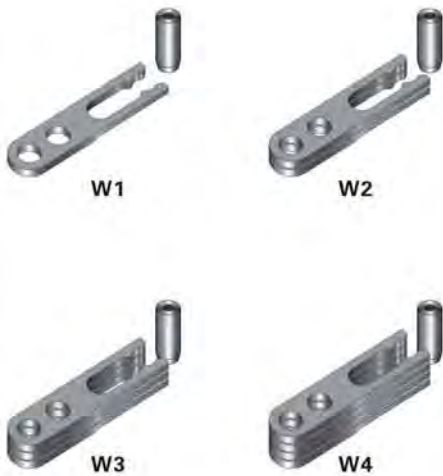


Features:

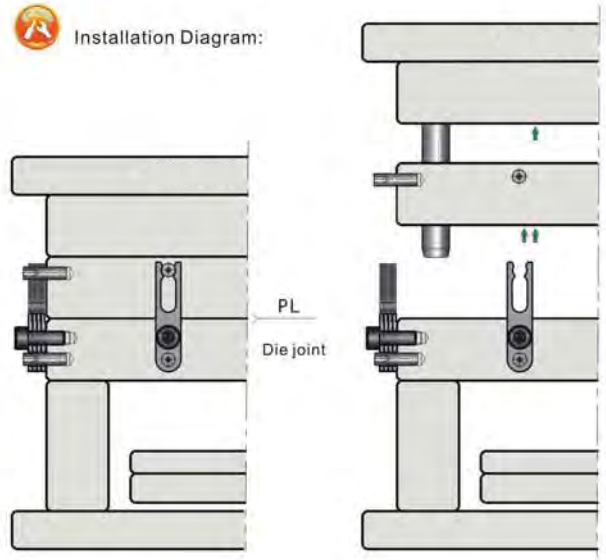
The RRM retainer is,useful for moulds that require delayed opening of parting line . Standard holding weight is 7.5kgf,Can be increased by adding clips. can be easy installation and operate.

Order RRM-651608 Material :8047 Hardness:40-45HRC

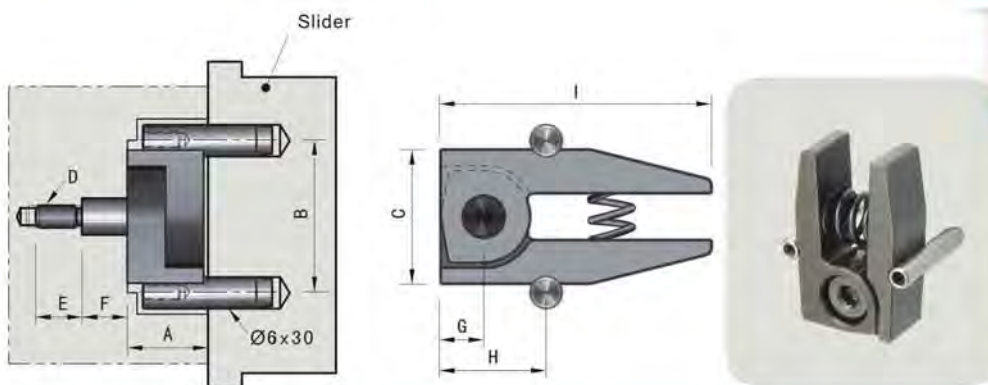
Code	(Kgf) Max. holding weight				@ ¥ /P
	W1	W2	W3	W4	
RRM-651608	7.5	15	22.5	30	



Installation Diagram:



ZZ189



Features:

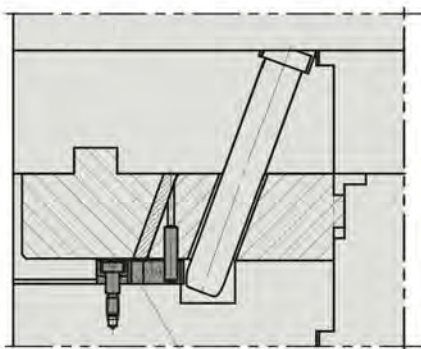
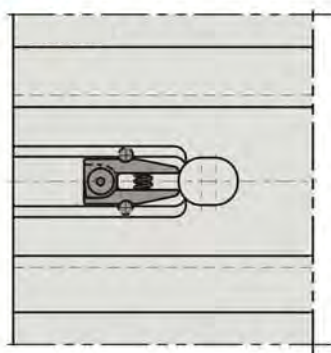
1. ZZ189 slide retainer is mainly used to large-scale slide construction.
2. Simple installation, Adopt double dowel pin to fixed position, make much force balance.

Order ZZ189-10 Material :SKD11 Hardness:55-62HRC

Code	A	B	C	E	F	G	H	I	D	Max. holding weight	Dowel pin	@ ¥ /P
ZZ189-10	10	21.5	18	9.5	5.1	7	17.5	40	M5	Ø6-30	10	
ZZ189-12	12	25.5	22	11	6.1	7.5	18	43	M6		15	
ZZ189-16	16	31.5	28		3.1	9.5	20.5	50			25	



Installation Diagram:



ZZ189-...

Product space chart:



Installation Guidelines:

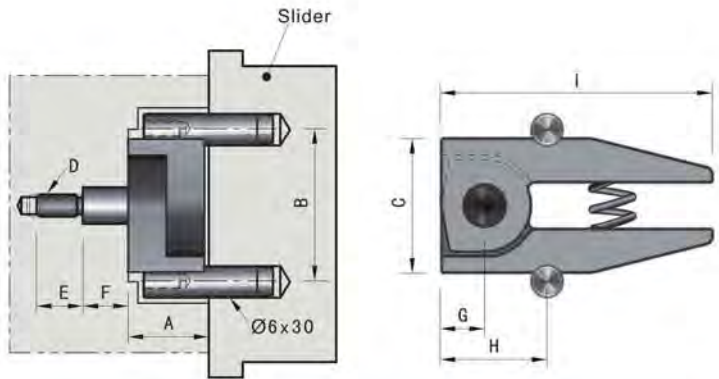
- The installed hole of slide screw(F) can not be too deep, must work smoothly to match with body after lock.
- The dowel pin is on the slider, the body is fixed on the template, and need calculate the distance of slider accurately.

- Slider pins series
- Slide retainers series
- Latch lock series
- Pushing gate series
- Dowel stamps for valves series
- Escrow series
- Cooling elements series
- Locating parts series
- Spring series
- Slide pins Guide bush series
- Slide strips Water plate series
- Chuck series
- Mold accessories



Slide retainers

ZZ189



Features:

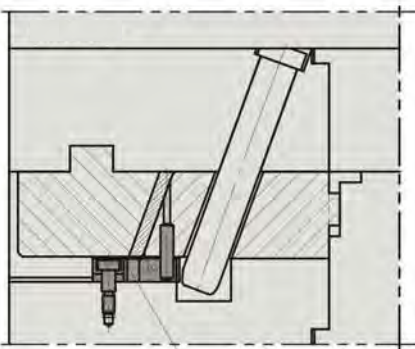
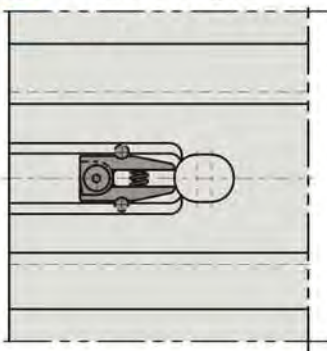
1. ZZ189 slide retainer adopts precision alloy to mould , which is with Strong ,durable construction.
2. Simple installation, ZZ189 slide retainer with two dowel pins to locate , which will lock more balanced.

Order ZZ189-10B Material :4118 Hardness:55-60HRC

Code	A	B	C	E	F	G	H	I	D	Max. holding weight	Dowel pin	@ ¥ /P
ZZ189-10B standard	10	21.5	18	9.5	5.1	7	17.5	40	M5	Ø6-30	10	
ZZ189-12B	12	25.5	22	11	6.1	7.5	18	43	M6		15	



Installation Diagram:



ZZ189-...

Product space chart:

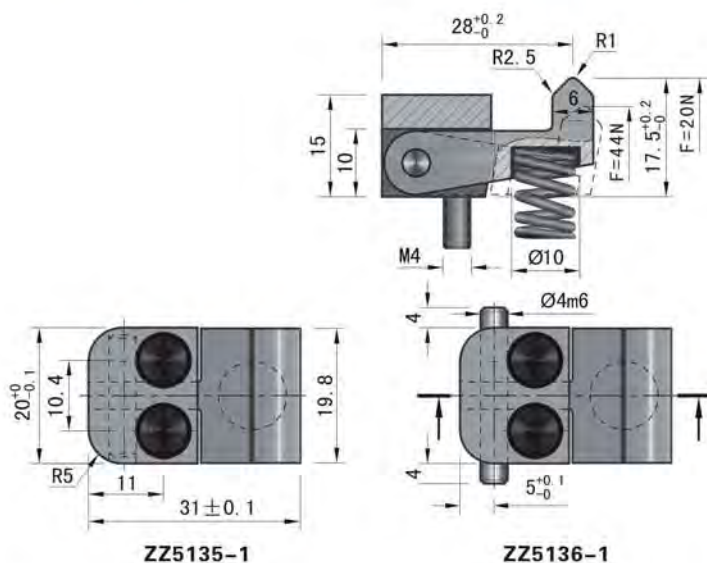


Installation Guidelines:

- The installed hole of slide screw(F) can not be too deep, must work smoothly to match with body after lock.
- The dowel pin is on the slider,the body is fixed on the template, and need calculate the distance of slider accurately.

DIN
Slide retainers

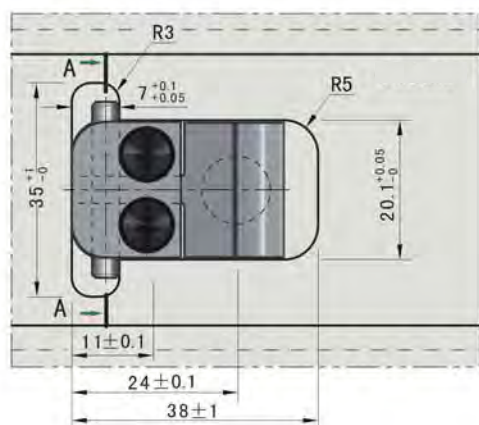
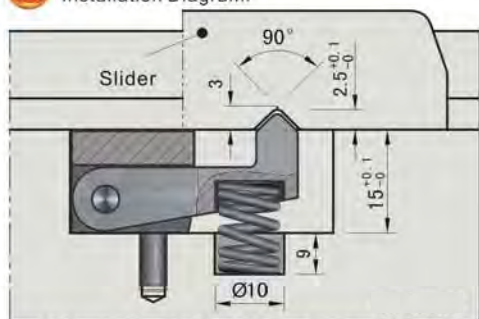
ZZ5135
ZZ5136



Order ZZ5135-1 Material :Cr12MoV Hardness:58-62HRC

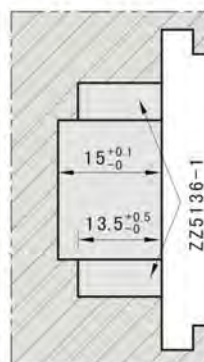
Code	Mounting screws	(Kgf) Max. holding weight		@ ¥ /P
		min.	max.	
ZZ5135-1	M4×16	2	4.4	
ZZ5136-1				

Installation Diagram:



Installation Guidelines:

- Maximum working temperature: Max 100°C.
- The dowel pin for ZZ5136 is 4mm higher than that for ZZ5135, can be accurate positioning.
- Without 90° "V" groove on the slider, which need processed by yourself.



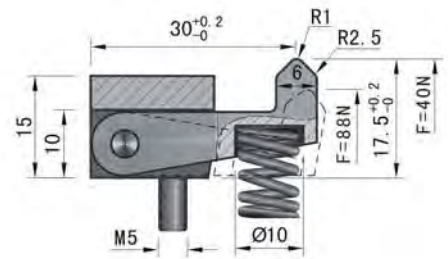
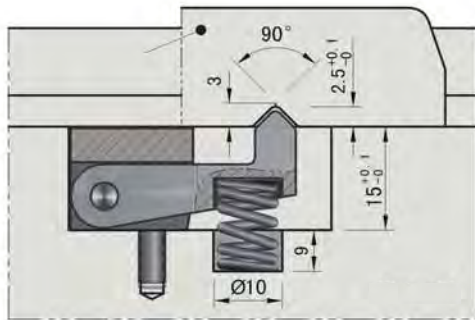
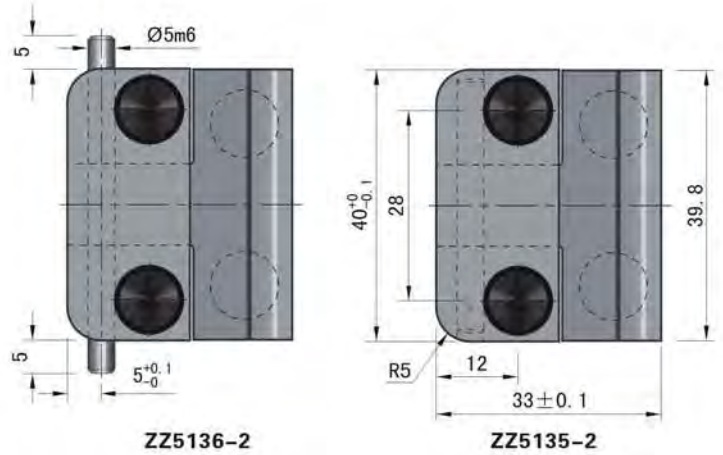
A-A

- Encoder gears series
- Slide retainers series
- Launch tools series
- Pouring gate series
- Dota stamps Air valves series
- Encoder series
- Cooling elements series
- Locating parts series
- Spring series
- Slide pins Guide bush series
- Slide strips Water plate series
- Chuck series
- Mold accessories

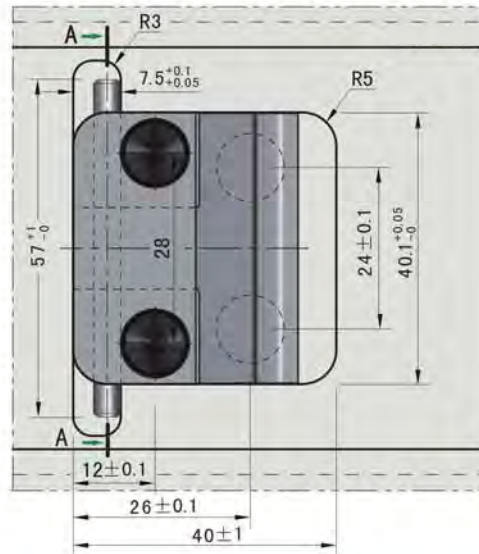
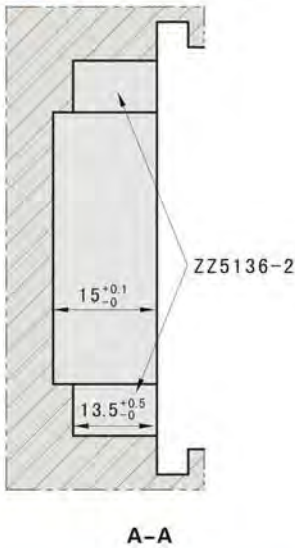
DIN

Slide retainers

ZZ5135
ZZ5136



Installation Diagram:



Order ZZ5135-2 Material :Cr12MoV Hardness:58-62HRC

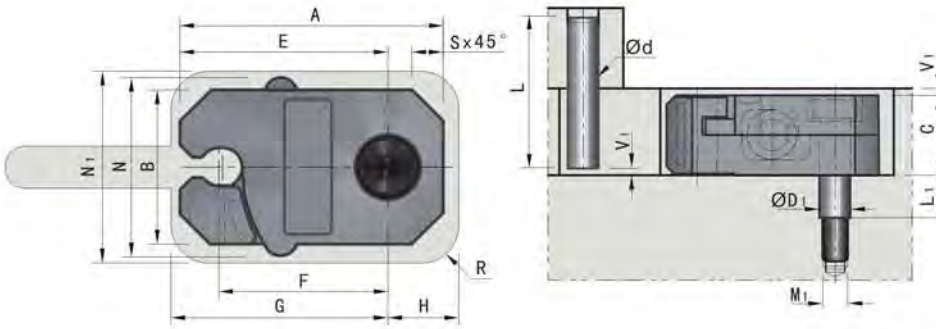
Code	Mounting screws	(Kgf) Max. holding weight		@ ¥ / P
		min.	max.	
ZZ5135-2	M5×16	4	8.8	
ZZ5136-2				

AISI

Slide retainers

PPSL

CAD 2D PL



Installation Guidelines:

- Dowel pin need to install with 90°.
- Dowel pin installed and the opening of slide retainer must be in the same direction.
- Retainer travel need accurate calculation.

Features:

- 1.Strong, durable construction.
- 2.PPSL series are inch, can meet various countries customer requirements.
- 3.It can be used as latch lock if there is no special request on the sequence of the mold closing.
- 4.Designed with over-travel, to avoid the damage by the inaccurate settle of the travel.

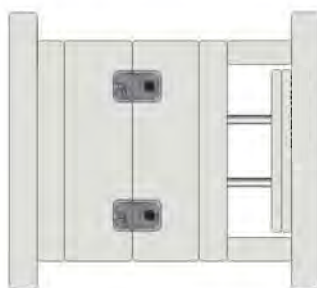
Order PPSL-0001 Material :4118 Hardness:55-62HRC

Code	A	B	C	E	F	N	S	d	L	G	H
PPSL-0001	1.5	0.76	0.63	1.23	0.98	0.94	0.14	0.25	1.25	1.35	0.39
PPSL-0002	2.13	1.26	0.79	1.69	1.375	1.44	0.25	0.312	1.5	1.81	0.56
PPSL-0003	3.38	1.76	1.18	2.63	2.125	1.94	0.38	0.375	2.25	2.75	0.88

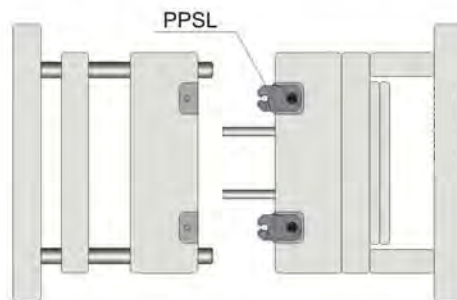
Code	N1	R	D1	L1	V1	M1	(Kgf) Max. slide weight	@ ¥ /P
PPSL-0001	1	0.31	0.249	0.31		# 10-24×0.5 DEEP	10	
PPSL-0002	1.5	0.37	0.3115	0.43	0.06	1/ 4-20×0.56DEEP	20	
PPSL-0003	2	0.5	0.374	0.58		5/16-18×0.62DEEP	40	



Functional chart:



Mold closed



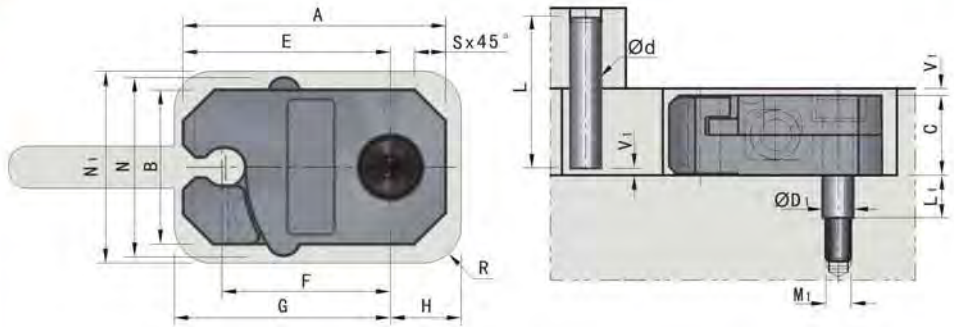
Mold opened

Ejector pins
 Ejector sleeves
 Slide retainers
 Latch lock
 Pouring gate
 Air valves
 Delta stamps
 Ejector series
 Cooling elements
 Locating parts
 Springs series
 Guide pins
 Guide bush
 Water plate series
 Chuck series
 Mold accessories



Slide retainers

PPSL



Installation Guidelines:

- Dowel pin need to install with 90°.
- Dowel pin installed and the opening of slide retainer must be in the same direction.
- Retainer travel need accurate calculation.

Features:

1. Strong, durable construction.
2. PPSL series are inch, can meet various countries customer requirements.
3. It can be used as latch lock if there is no special request on the sequence of the mold closing.
4. Designed with over-travel, to avoid the damage by the inaccurate settle of the travel.

Order PPSL-0001B Material :SCM435 Hardness:50-55HRC

Code	A	B	C	E	F	N	S	d	L	G	H
PPSL-0001B	1.5	0.76	0.63	1.23	0.98	0.94	0.14	0.25	1.25	1.35	0.39
PPSL-0002B	2.13	1.26	0.79	1.69	1.375	1.44	0.25	0.312	1.5	1.81	0.56

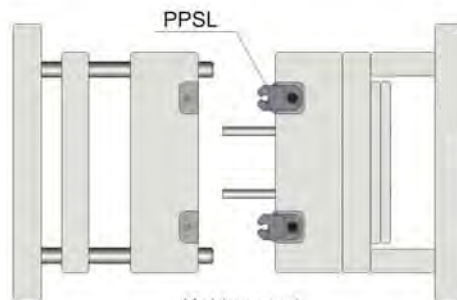
Code	N1	R	D1	L1	V1	M1	(Kgf) Max. slide weight	@ ¥/P
PPSL-0001B	1	0.31	0.249	0.31	0.06	# 10-24×0.5 DEEP	10	
PPSL-0002B	1.5	0.37	0.3115	0.43		1/ 4-20×0.56DEEP	20	



Functional chart:



Mold closed

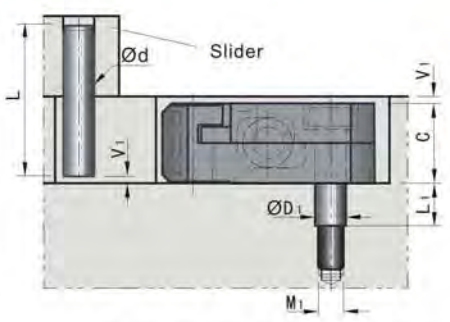
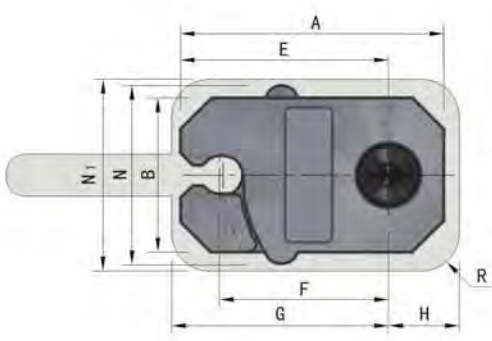


Mold opened



Slide retainers

PPSM



Retaining function installation diagram



Installation Guidelines:

- Dowel pin need to install with 90°.
- Dowel pin installed and the opening of slide retainer must be in the same direction.
- Retainer travel need accurate calculation.

Features:

- 1.Strong, durable construction.
- 2.PPSM series are metric, can meet various countries customer requirements.
- 3.It can be used as latch lock if there is no special request on the sequence of the mold closing.
- 4.Designed with over-travel, to avoid the damage by the inaccurate settle of the travel.

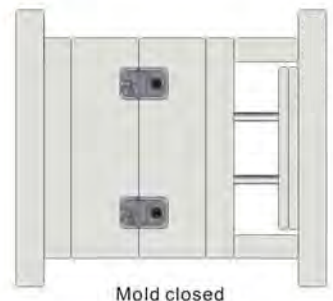
Order PPSM-0001 Material :4118 Hardness:55-62HRC

Code		A	B	C	E	F	N	G	H
PPSM-0001	precision	38	19	16	31.5	24.89	24	34.5	10
PPSM-0002		54	32	20	43	34.93	36.5	46	14.5
PPSM-0003		86	45	30	67	53.98	49.5	70	22.5

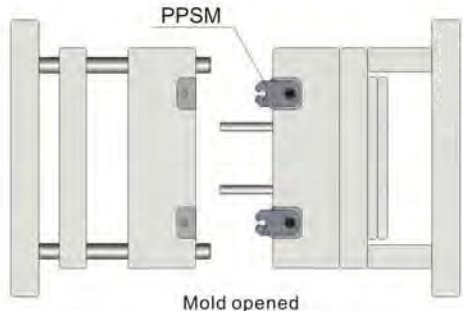
Code		N1	R	D1	L1	V1	M1	(Kgf) Max. slide weight	@ ¥ /P
PPSM-0001	precision	25.5	8	6	8.5		M5×11.5DEEP	10	
PPSM-0002		38	10	8	10.5	1.5	M6×14.5DEEP	20	
PPSM-0003		51	12	10	17		M8×18 DEEP	40	



Functional chart:



Mold closed



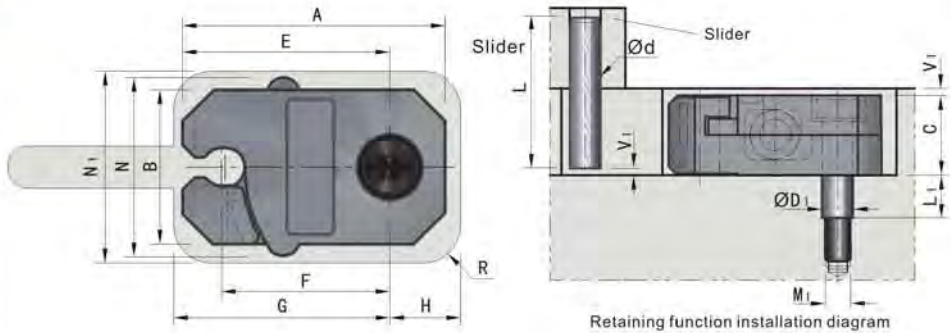
Mold opened

- Exhaust gate series
- Slide retainers series
- Latch lock series
- Pinning gate series
- Dowel stamps Air valves series
- Exhaust series
- Cooling elements series
- Locating parts series
- Spring series
- Slide pins Guide bush
- Slide strips Water plate series
- Chuck series
- Mold accessories



Slide retainers

PPSM



Installation Guidelines:

- Dowel pin need to install with 90°.
- Dowel pin installed and the opening of slide retainer must be in the same direction.
- Retainer travel need accurate calculation.

Features:

- 1.Strong, durable construction.
- 2.PPSM series are metric, can meet various countries customer requirements.
- 3.It can be used as latch lock if there is no special request on the sequence of the mold closing.
- 4.Designed with over-travel, to avoid the damage by the inaccurate settle of the travel.

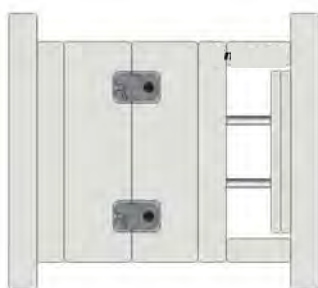
Order PPSM-0001B Material :SCM435 Hardness:50-55HRC

Code		A	B	C	E	F	N	G	H
PPSM-0001B	standard	38	19	16	31.5	24.89	24	34.5	10
PPSM-0002B		54	32	20	43	34.93	36.5	46	14.5

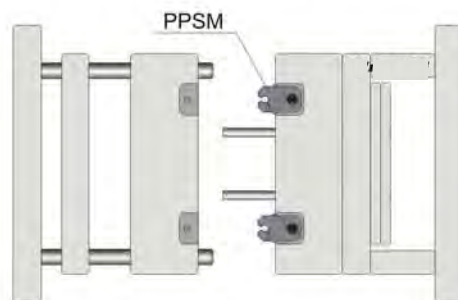
Code		N1	R	D1	L1	V1	M1	(Kgf) Max. slide weight	@ ¥/P
PPSM-0001B	standard	25.5	8	6	8.5	1.5	M5×11.5DEEP	10	
PPSM-0002B		38	10	8	10.5		M6×14.5DEEP	20	



Functional chart:



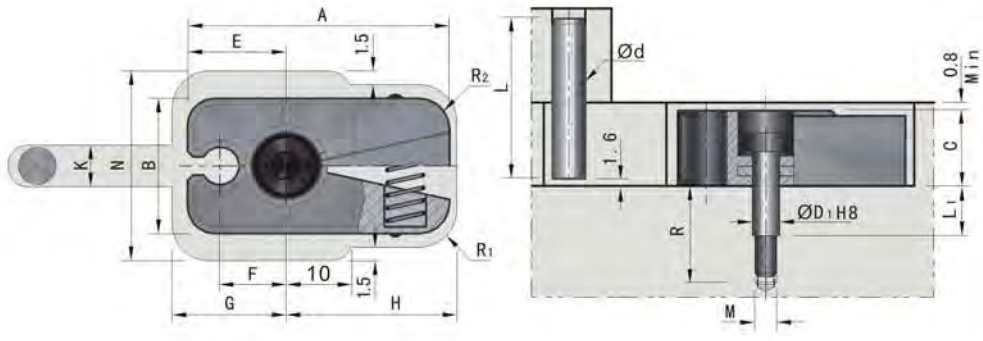
Mold closed



Mold opened

AISI

Slide retainers



Order MMRT-10M Material :4118 Hardness:55-62HRC

Code	A	B	C	E	F	G	H	N	K
MMRT-10M	38	19	16	16	9.1	19	26	25	8
MMRT-20M	54	32	20	21	12.7	24	36	36	10
MMRT-40M	86	45	30	53	20.3	36	56	56	12

Code	D1	L1	R	R1	R2	M	(Kgf) Max. slide weight	@ ¥/P
MMRT-10M	6	6	15.5	8	5	M5	10	
MMRT-20M	8	8.5	20.5	10	6	M6	20	
MMRT-40M	10	10	25	13	10	M8	40	

Features:

1. Same function as PPSL and PPSM, comparatively, the F of this slide retainer is shorter, and locked with more precision..

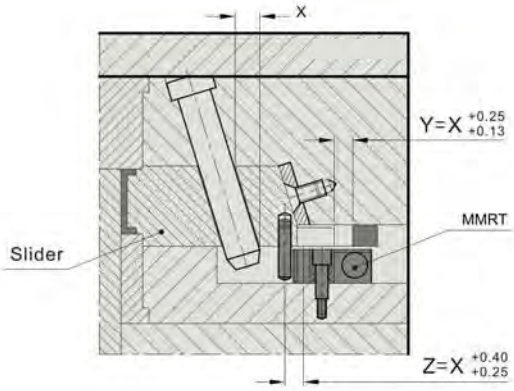


Installation Guidelines:

- The body can not be dead lock with retainer screws, need reserve some room to move unlimited.
- The distance from the center of the dowel pin to the center of the stripper bolt must be calculate available while stocks lasts.
- To avoid the mold be in danger of slipping, the code what you used should more loader than it need .



Installation Diagram:

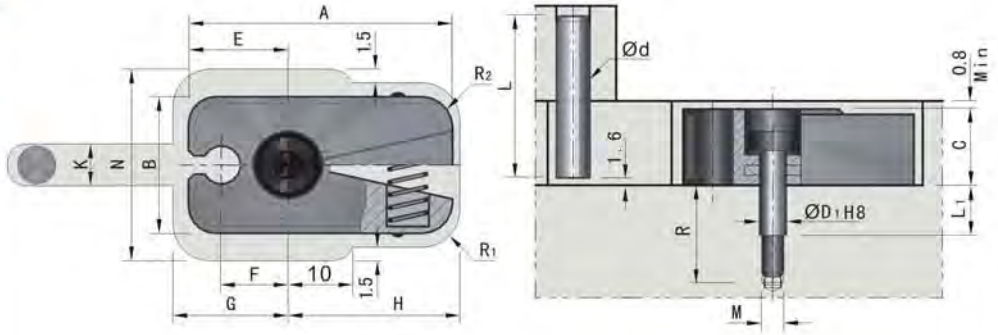


- Exhaust gas ejector sleeves
- Slide retainers series
- Latch tools
- Pouring gate series
- Deter stamps Air valves series
- Ejector series
- Cooling elements
- Locating parts
- Spring series
- Guide pins Guide bush
- Slide strips Water plate series
- Chuck series
- Mold accessories



Slide retainers

MMRT



Order MMRT-10MB Material :SCM435 Hardness:50-55HRC

Code	A	B	C	E	F	G	H	N	K
MMRT-10MB	38	19	16	16	9.1	19	26	25	8
MMRT-20MB	54	32	20	21	12.7	24	36	36	10

Code	D1	L1	R	R1	R2	M	(Kgf) Max. slide weight	@ ¥/P
MMRT-10MB	6	6	15.5	8	5	M5	10	
MMRT-20MB	8	8.5	20.5	10	6	M6	20	

Features:

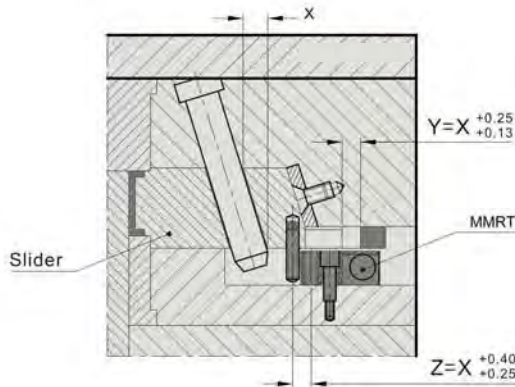
1. Same function as PPSL and PPSM, comparatively ,the F of this slide retainer is shorter, and locked with more precision..

Installation Guidelines:

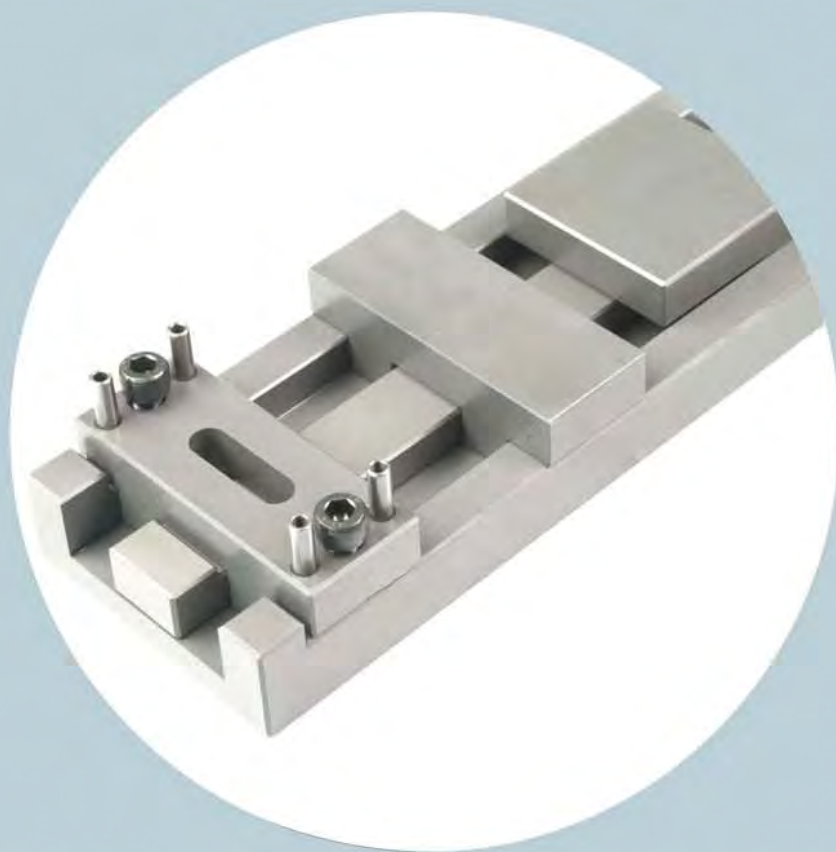
- The body can not be dead lock with retainer screws, need reserve some room to move unlimited.
- The distance from the center of the dowel pin to the center of the stripper bolt must be calculate available while stocks lasts.
- To avoid the mold be in danger of slipping, the code what you used should more loader than it need .



Installation Diagram:



Latch Locks Series





JIS		DIN		JIS		JIS		DIN	
Parting locks screws		Parting locks screws		Latch locks		Latch locks		Latch locks	
PL	P58	ZZ172	P57	MMLKC	P59	MMLK	P60	RRPL-P	P61



TAIWAN		TAIWAN		TAIWAN		TAIWAN		TAIWAN	
Latch locks		Latch locks		Latch locks		Latch locks		Latch locks	
DTP-03	P62	DTP-04	P62	DTP-05	P63	DTP-06	P64	DTP-07	P64



TAIWAN		DIN		DIN		DIN		DIN	
Latch locks		Latch locks		Latch locks		Latch locks		Latch locks	
DTP-08	P65	ZZ170	P66	ZZ270	P69	ZZ171	P73	ZZ271	P75



DIN		JIS		JIS		JIS		JIS	
Latch locks		Latch locks		Latch locks		Latch locks		Latch locks	
GGs	P78	PPLSW	P80	PPLMZ	P82	PPLSZ	P82	PPLM/PPLL/PPLS 84	



JIS		DIN		DIN		Wmould		Wmould	
Latch locks		Latch locks		Latch locks		Latch locks		Latch locks	
LLL	P87	ZZ174	P89	ZZ4	P95	MLL	P109	SLL	P111



DIN		DIN		DIN		DIN		AISI	
Latch locks		Latch locks		Latch locks		Latch locks		Latch locks	
ZZ5	P113	RREF-460	P120	RREF-461	P120	RREF-462	P120	KKL	P122



AISI		DIN		DIN		AISI		AISI	
Latch locks		Latch locks		Latch locks		Latch locks		Latch locks	
KKU	P125	ZZ3	P129	ZZ173	P136	DDKL	P139	SSK-GHA	P142

Product summary

Product summary:

- Latch lock was named switching ware or parting lock set, which was used for three-plate mold, its control mold plate's process sequence unit by the way of mechanical.
- This latch lock should be install inside the mold or the external side:
(Internal installation type) Internal latch lock: install inside the mold, avoid clashing with outside parts or the waterway, its save space and don't effect the beauty of the mould as a whole.
Prevents mold accidental collision damage in the process of transportation, for example 1.
- (External installation type) Latch lock: install external side, its safe and reliable, easy to installation and maintenance, and big latching strength, suitable for all kinds of large、 middle、 small mold for example 2.

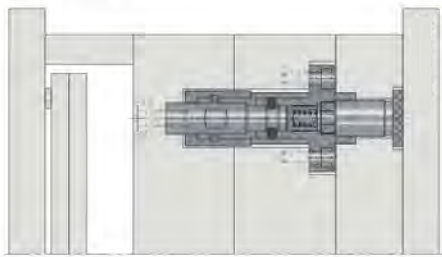
Note:

- A minimum of two sets latch lock are requested to be mounted symmetrically at least with the same specification in one mold.

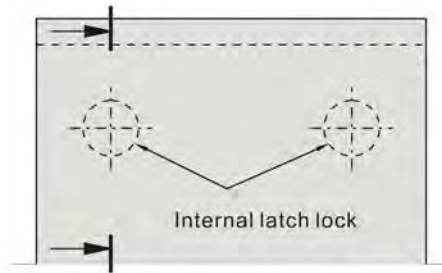


Installation for example:

For example 1:

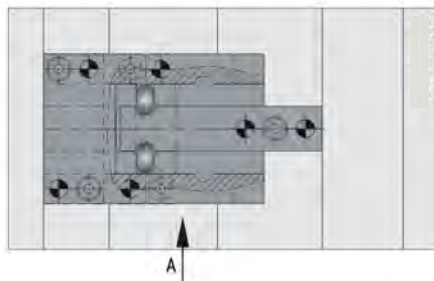


Internal installation

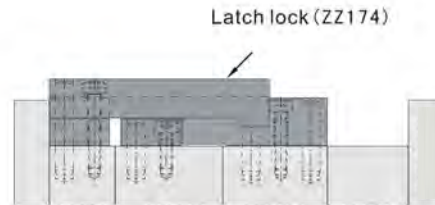


Internal latch lock

For example 2:



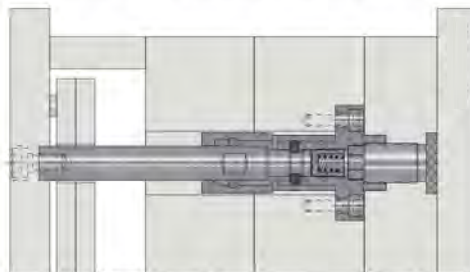
External installation



Latch lock (ZZ174)

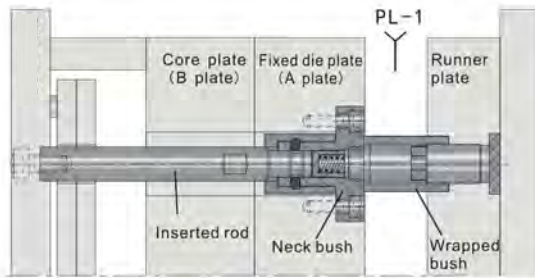
A side

Opened-closed mold sequence in three-plate mold for example:



Mold closed

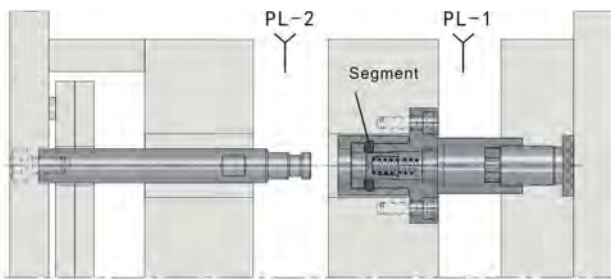
Product summary



The 1st mold opened

1. The 1st mold opened

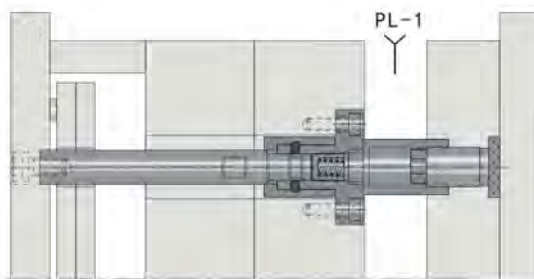
When mold opening, 1st parting line (PL-1) of "A" plate and runner pate will be opened first , due to "A" and "B" plate will be locked tightly with latch bar and inner bushing.



The 2nd mold opened

2. The 2nd mold opened

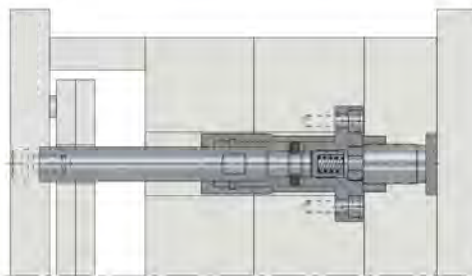
When mold opened completely for the first time, Positive stop of Internal latch lock will release latch bar, meanwhile inner bushing and outer bushing will be locked tightly, 2nd parting line (PL-2) of "A" and "B" plate will be opened. The 2nd mold opening process finished.



The 1st mold closed

3. The 1st mold closed

When mold closing, parting line of "A" and "B" plate will be closed first, because of inner bushing and outer bushing are locked for the 1st mold opened completely, the 1st mold closing process finished.



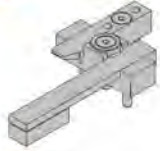
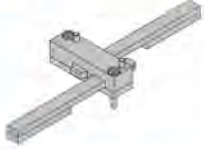
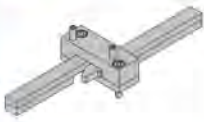
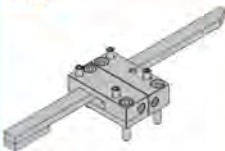
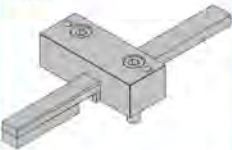


Mold closed



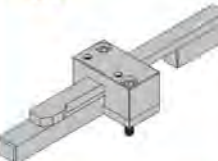


4. Mold closed

When we finished mold closed, Latch bar reinsert into inner bushing, then positive stop reset, and release inner bushing and outer bushing, "A" and runner plate will be closed, all process of mold closed would be finished.

Product summary

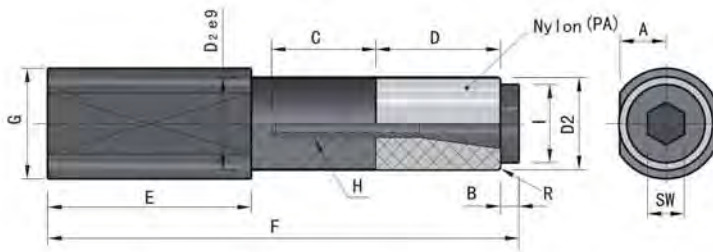
Diagram	Modle	Instruction	Installation	Page
DIN 	ZZ3	Allows control of the mold plate opening and closing sequence on mold bases. Suitable for mold plate opening and closing sequence are required.	Internal installation	P129
AISI 	DDKL	Allows control of the mold plate opening and closing sequence on mold bases. Suitable for mold plate opening and closing sequence are required.	Internal installation	P139
DIN 	GGG	Allows control of the mold plate opening and closing sequence on mold bases. Suitable for mold plate opening and closing sequence are required.	External installation	P78
DIN 	ZZ171	Allows control of the mold plate opening sequence on mold bases, but not control of mold plate closing sequence function. Only suitable for mold plate opening sequence are required.	External installation	P73
DIN 	ZZ170	Allows control of the mold plate opening and closing sequence on mold bases. Suitable for mold plate opening and closing sequence are required.	External installation	P66
JIS 	PPLS PPLM PPLL	Allows control of the mold plate opening sequence on mold bases, but not control of mold plate closing sequence function. Only suitable for mold plate opening sequence are required.	External installation	P84
AISI 	LLL	Allows control of the mold plate opening sequence on mold bases, but not control of mold plate closing sequence function. Only suitable for mold plate opening sequence are required.	External installation	P87

Product summary

Diagram	Modle	Instruction	Installation	Page
 <p>DIN</p>	ZZ174	Allows control of the mold plate opening and closing sequence on mold bases. Suitable for mold plate opening and closing sequence are required.	External installation	P89
	ZZ4			P95
 <p>AISI</p>	ZZ5	Allows control of the mold plate opening sequence on mold bases, but not control of mold plate closing sequence function. Only suitable for mold plate opening sequence are required.	External installation	P113
	KKL/KKU			P122 P125
	RREF460			P120
 <p>JIS</p>	PPLSW	Allows control of the mold plate opening sequence on mold bases, but not control of mold plate closing sequence function. Only suitable for mold plate opening sequence are required.	External installation	P80
 <p>JIS</p>	PPLSZ PPLMZ	Allows control of the mold plate opening and closing sequence on mold bases. Suitable for mold plate opening and closing sequence are required.	External installation	P82
 <p>JIS</p>	MMLK MMLKC	Magnet latch lock, using the attraction of the magnet for clamping function.	External installation	P170

JIS
Parting locks

ZZ172



No using oil!



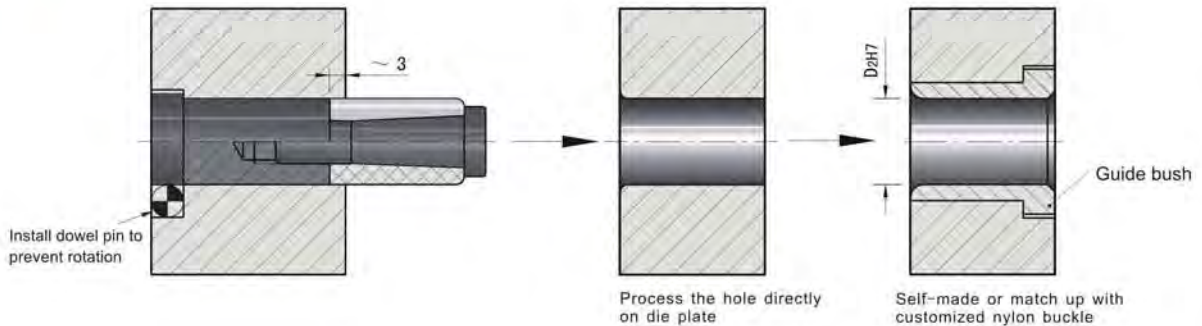
Order ZZ172-10

High grade Nylon+SCM435

Code	D2	R	A	B	C	D	E	F	G	I	SW	H	Max.°C	@ ¥/P
ZZ172-10	10	1	5	2	12	16	22	51	12	8.5	4	M5	80	
ZZ172-16	16	1.5	8	4	14	25	23	72	18	13	6	M8		



Installation Diagram:



Features:

1. Allows adjustment of friction between the mold plate and Nylon by tightening conical bolt.
2. With excellent wear resistance and heat resistance.



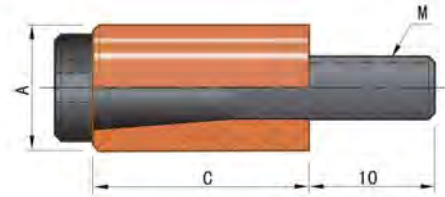
Installation Guidelines:

- The Nylon by itself has heat resistant temperature of 150°C. But use it at 80°C or less because the durability will reduce due to tightening stress by the conical bolt in the practically continuous use.
- Its can process the "R"angle for the hole to insert on the mold, and also by using a PLBS bushing that is specially designed.
- When you process the hole, the inlet edge will be made by R-chamfered edge, the parting locks will be damaged by the sharp edge, the parting lock's durability becomes lower with a C-chamfered edge.
- Do not lubricate this parting locks. Lubrication reduces its friction force and nullifies its function.



Parting locks

PL-J



No using oil!

Order PL-J-10

High grade Nylon+SCM435

Code	A	B	C	M	Heat resistant temperature	@ ¥/P
PL-J-10	10	4	18	M 5	80°C	
PL-J-12	12	5	20	M 6		
PL-J-13	13	6	25	M 8		
PL-J-16	16	6	30	M10		
PL-J-20	20	6				

Features:

1. Allows adjustment of friction between the mold plate and Nylon by tightening conical bolt.
2. With excellent wear resistance and heat resistance.

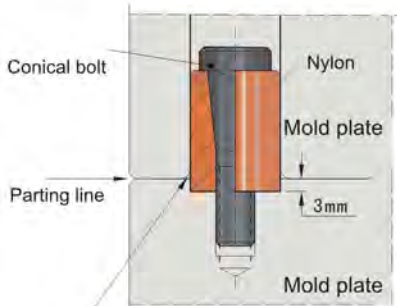


Installation Guidelines:

- The Nylon by itself has heat resistant temperature of 150°C. But use it at 80°C or less because the durability will reduce due to tightening stress by the conical bolt in the practically continuous use.
- Its can process the "R" angle for the hole to insert, and also by using a PLBS bushing that is specially designed.



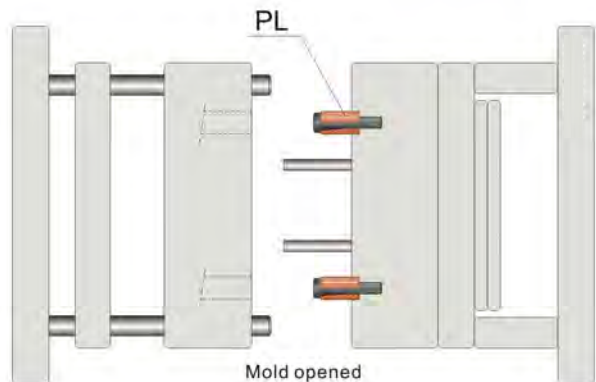
Installation Diagram:



Process the "R" angle for the hole to insert

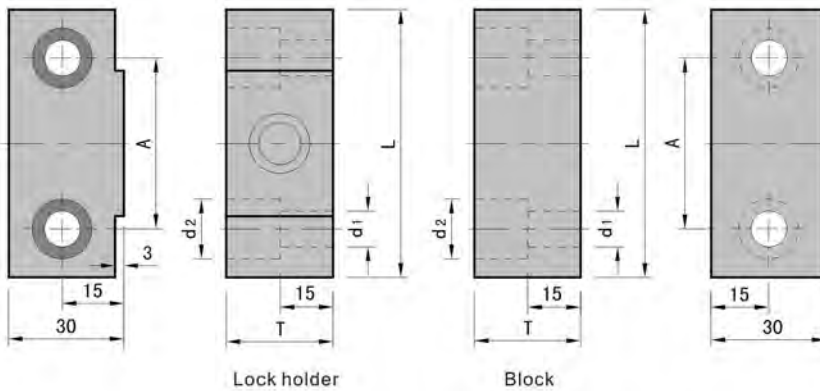


Functional chart:



DIN
Latch locks

MMLKC



Features:

1. Compared with MMLK, this MMLKC overall dimensions is reduced 50%-60%.
2. Compared with other latch lock sets, it is easier to installation, no need slow down when mold closing, and reduce the molding cycle.



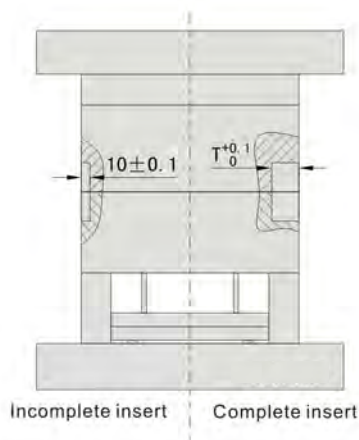
Installation Guidelines:

- Use Shoulder Bolts if bolt breakage is anticipated.
- Install the magnet lock sets with the mold closed. Place them onto the mold's center, and fasten with the supplied bolts.
- Heat resistance: up to 80°C or lower.

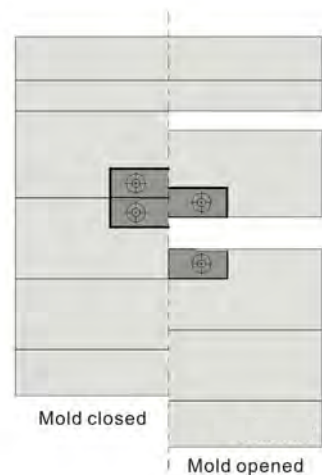
Order MMLKC-30

Code	A	L	T	d1	d2	Pulling force Max. F (kgf)	@ ¥/P
MMLKC-30	36	50	25	6.5	11	30	
MMLKC-75	52	70	40	9	14	75	

Dimension chart:



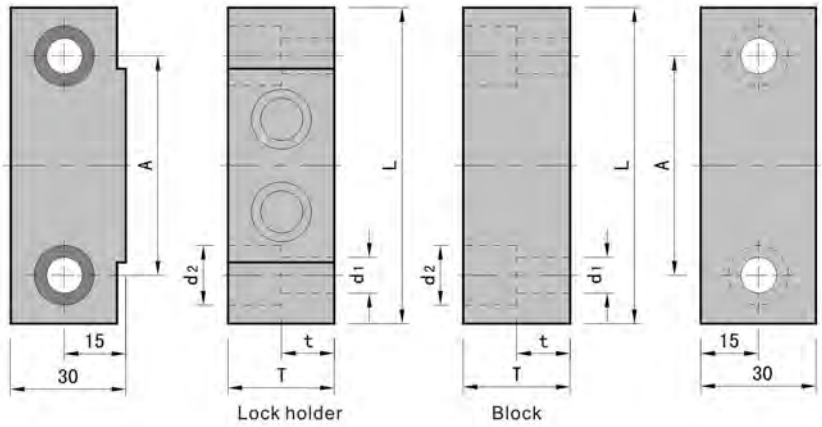
Functional chart:



JIS

Latch locks

MMLK



Order MMPLK-60

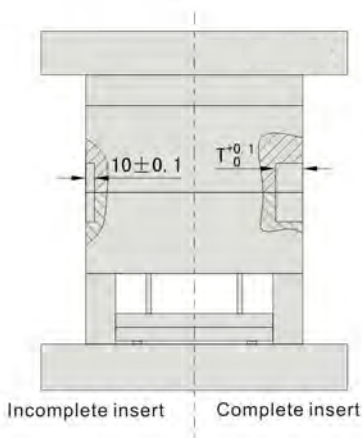
Code	A	L	T	t	d1	d2	Pulling force Max. F(kgf)	@ ¥ / P
MMLK- 60	63	80	25	12	9	14	60	
MMLK-150	100	126	40	15	11	18	150	



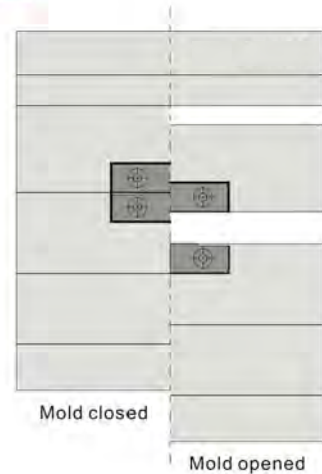
Installation Guidelines:

- Please install the latch locks symmetrically when mold closing, it will be selected according to mold base and pulling force by user.
- Install them so that the magnetic face is in parallel to the parting line.
- After installation, carry out a functional test, check whether the individual parts of the latch lock set are in right place.
- Heat resistance: up to 80°C or lower.

Dimension chart:

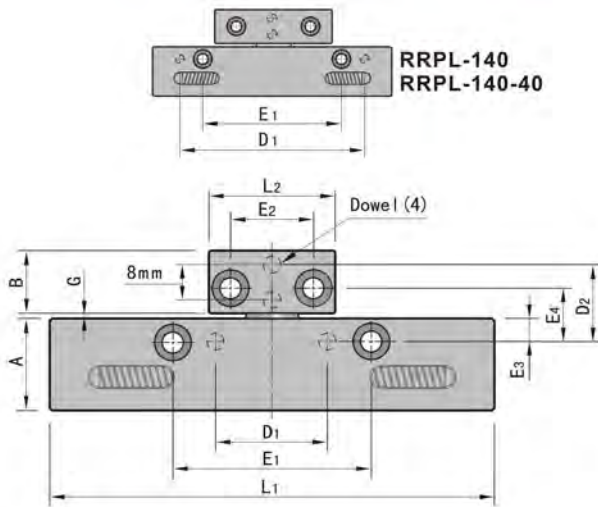
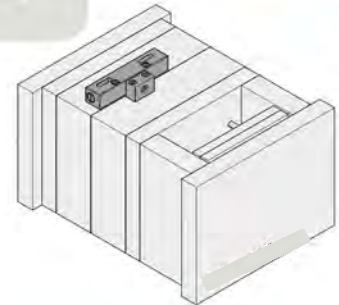


Functional chart:



DIN
Latch locks

RRPL-P



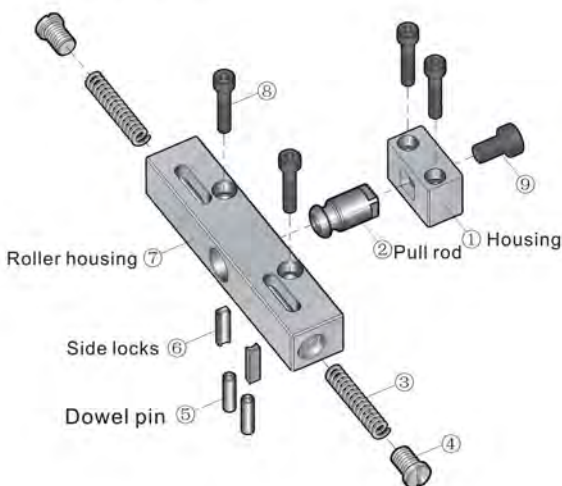
Order RRPL-P-135

Code	L1	L2	N1	N2	A	B	G	Dowel pin
RRPL-P-135	135	38	25		28	19	1	Ø5
RRPL-P-135-40				25			40	
RRPL-P-140	140	64	32		32	22	2	Ø6
RRPL-P-140-40							38	

Code	E1	E2	E3	E4	D1	D2	Mounting screws	Pulling force Max. F(kgf)	@ ¥/P
RRPL-P-135	60	25	7	15.6	30	22.1	M 6×25	100	
RRPL-P-135-40				54.6		61.1			
RRPL-P-140	70	35	10	23.1	100	28.1	M10×35	150	
RRPL-P-140-40				59.3		64.3			

Pos	Part name	Material	Hardness
01	Housing	P20	26-33HRC
02	Pull rod	SKD61	48-52HRC
07	Roller housing	P20	26-33HRC
05	Dowel pin	SUJ2	58-62HRC
06	Side locks	S45C	-

Product space chart:



Installation Guidelines:

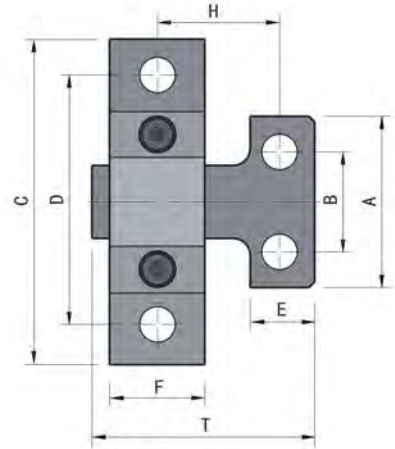
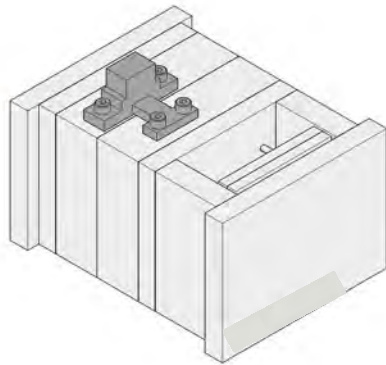
- Please install the roller lock symmetrically, otherwise, it would be fractured with the unbalanced force due to only one side of lock set be forced.
- This Roller lock is the precise standardized item, please do not apply together with other own customer machined parts.
- If mold need to maintain, please remove the roller locks first.

Escisor pins
Escisor sleeves
Slide rollers
Anvil
Latch locks
Rolling guide
Series
Dome stamps
Air valves series
Escisor series
Cooling elements
Locating parts
Series
Springs series
Guide pins
Guide bush
Guide parts
Water parts series
Chuck series
Mold accessories

TAIWAN

Latch locks

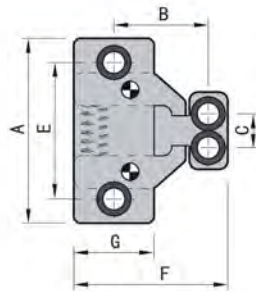
DTP-03



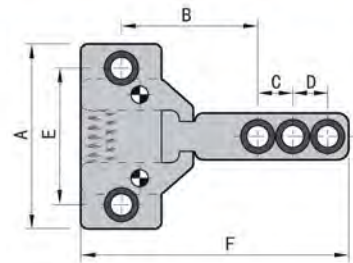
Order DTP-03A

Code	A	B	C	D	E	F	H	T	Mounting screws	Pulling force Max. F(kgf)	@ ¥ /P
DTP-03A	40	26	73	60	20	20	23	48	M 8	150	
DTP-03B	40	22					66	96			
DTP-03C							38	72	M10	250	
DTP-03D	50	30	113	90	22	30	79	114			
DTP-03E							38	75			
DTP-03F					25		103	139	M12	350	

DTP-04



DTP-04A



DTP-04B

Order DTP-04A

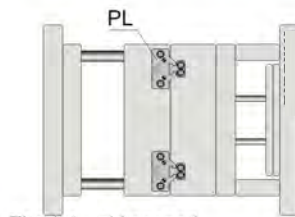
Code	A	B	C	D	E	F	G	Mounting screws	Pulling force Max. F(kgf)	@ ¥ /P
DTP-04A	78	40	15	-	60	68	38	5/16"	500	
DTP-04B		58		15		116				



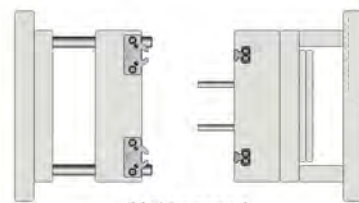
Functional chart:



Mold closed

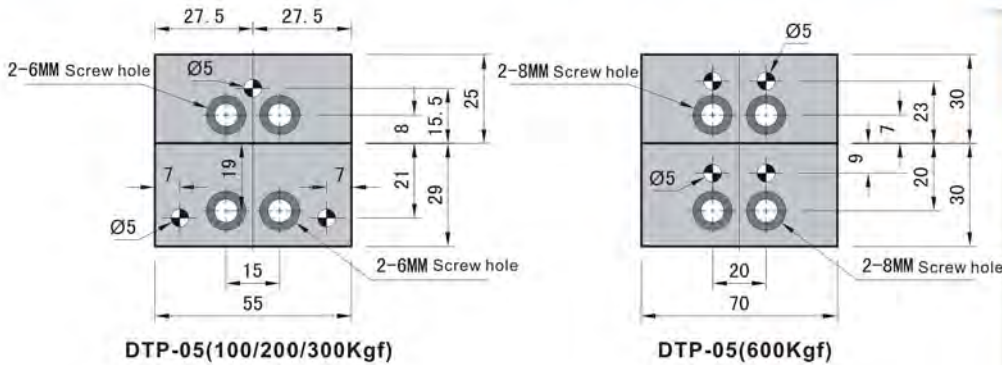


The 1st mold opened



Mold opened

DTP-05



DTP-05(100/200/300Kgf)

DTP-05(600Kgf)

Features:

1. This latch lock is made of casting, with high precision.
2. Its strong undercuts are made of alloy steel with heat treatment and grinding.
3. Opposite sides with the Heat-resistant springs, have thousands of lifespan.
4. Pulling force : 600kg, curve lead springs

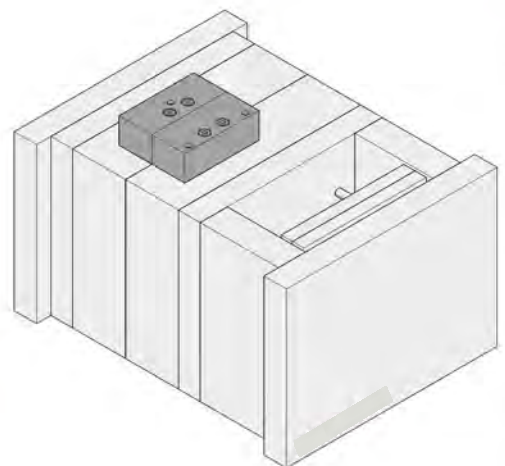
Order DTP-05

Code	Pulling force Max. F(kgs)	@ ¥ /P
DTP-05	100	
	200	
	300	
	600	



Installation instruction:

1. It is suitable for ejection mold of three plate mold, can snap the remnants and stripping at one single time.
2. The acting force is outward to avoid break the mold.
3. Mount symmetrically, ream the dowel pin with 5mm reamer, then fix it to increase fixity.

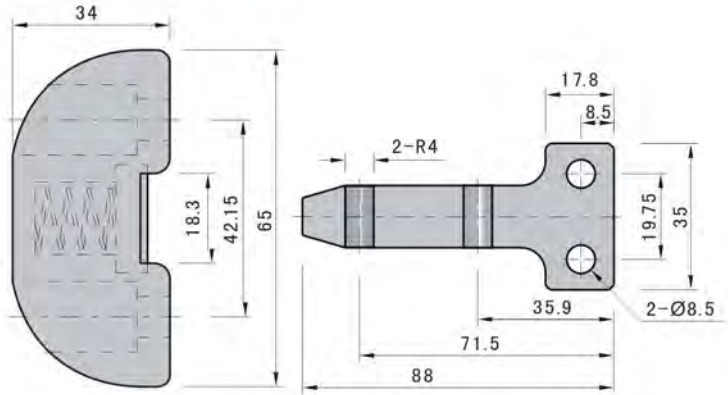
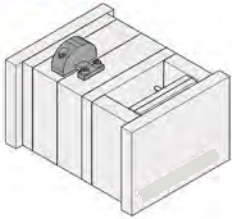


- Ejector pins
- Slide rail series
- Latch locks
- Pulling gate series
- Dome springs
- Pin valves series
- Ejector series
- Cooling assistants
- Locating pins series
- Springs series
- Guide pins
- Guide bush
- Guide strips
- Water pipe series
- Chuck series
- Mold accessories

TAIWAN

Latch locks

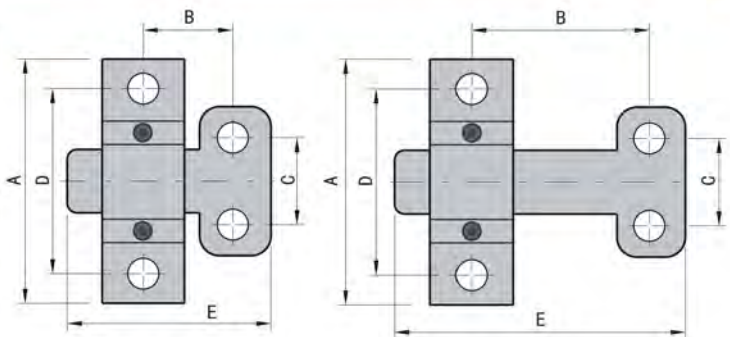
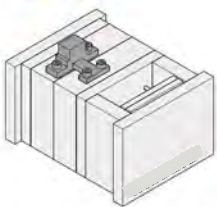
DTP-06



Order DTP-06

Code	@ ¥ / P
DTP-06	

DTP-07



DTP-07A

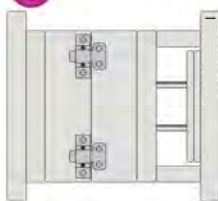
DTP-07B

Order DTP-07A

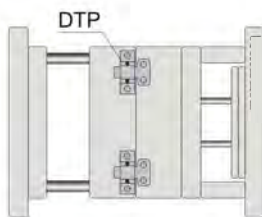
Code	A	B	C	D	E	Mounting screws	Pulling force Max. F(kgs)	@ ¥ / P
DTP-07A		28		45	54			
DTP-07B	62	62	20		88	5/16"	400	



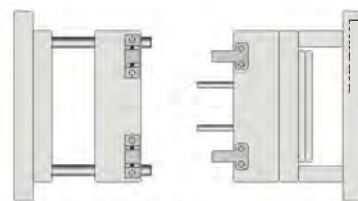
Functional chart:



Mold closed

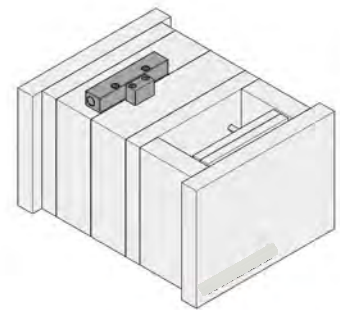
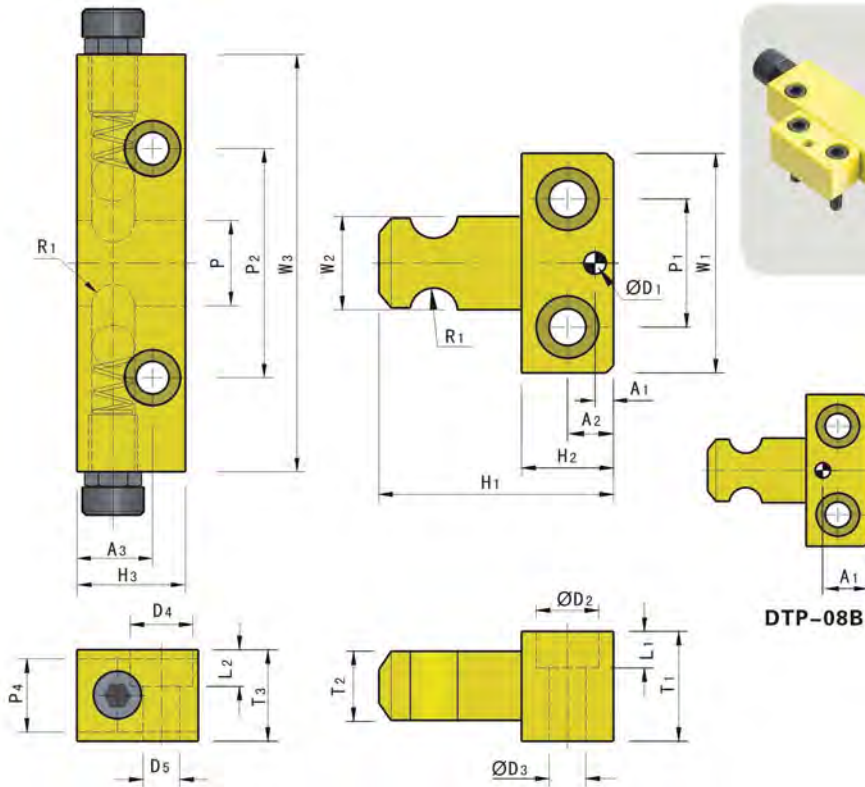


The 1st mold opened



Mold opened

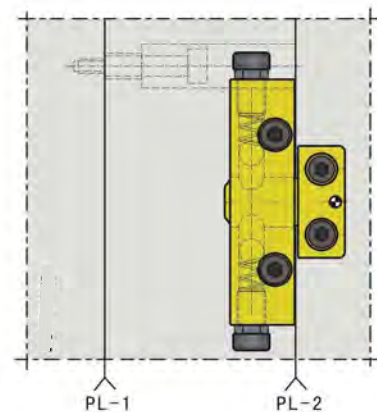
DTP-08



DTP-08A

A1	A2	A3	D1	D2	D3	D4	D5	H1	H2	H3	L1	L2
6	12	21	Ø5	Ø10.5	Ø6.5	Ø11	Ø6.5	48	20	28	6.5	6.5
20	12.5	23	Ø6	Ø17	Ø10	Ø17	Ø10	62.5	25	33	10	10

Code	P	P1	P2	P4	R1	T1	T2	T3	W1	W2	W3	@ ¥ / P
DTP-08A	18	25	60	12.5	R4.25	20.5	12	20.5	40	17.5	86	
DTP-08B	26	35	70	20	R6.5	30	19.5	25	60	25.5	127.5	



Installation Guidelines:

- Please install the latch lock symmetrically, otherwise, it would be fractured with the unbalanced force due to only one side of lock set be forced.
- This latch lock is the precise standardized item, please do not apply together with other own customer machined parts.
- If mold need to maintain, please remove the roller locks first.

- Extractor pins series
- Slide rail pins series
- Latch locks series
- Pouring gate series
- Done stamps Air valves series
- Extractor series
- Cooling elements series
- Locating parts series
- Springs series
- Guide pins Guide bush series
- Guide strips Wear plate series
- Chuck series
- Mold accessories

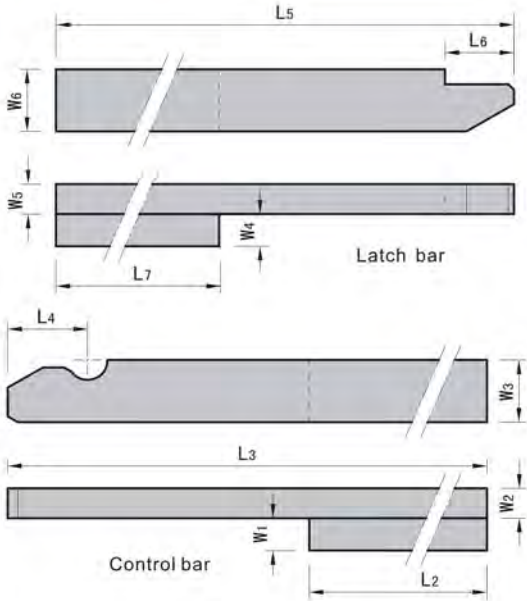
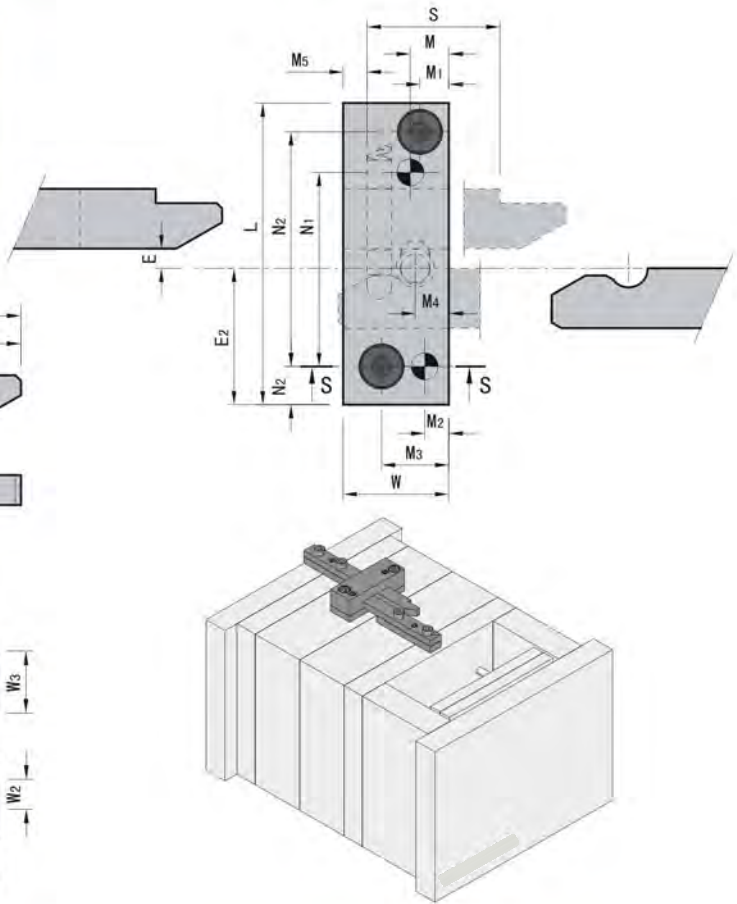
DIN

Latch locks

ZZ170



2D 3D FL



Features:

1. mechanical interlocking design ,safe and reliable.
2. Insert bar, end of pull rod adopt high frequency annealing treatment, so that easy to second time processing installed holes.
3. This latch parts not only control opening mold sequence, But also control closed open sequence.

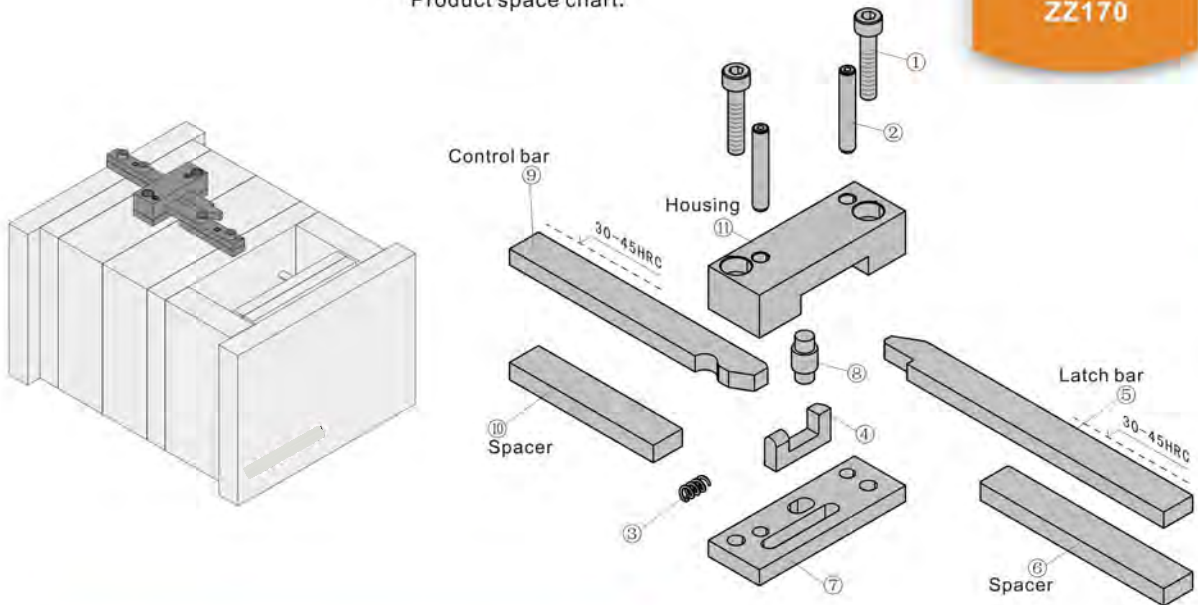
Order ZZ170-1

Code	L	L1	L2	L3	L4	L5	L6	L7	L8	E	E2	M3	N	N1	N2
ZZ170-1	63	22	63	100	16	125	13.8	80	6	4	28.5	14	49	40.5	8
ZZ170-2	90	32.5	100	140	22.5	160	17.7	125	7.5	6	45	24	69	62	13
ZZ170-3	110	44	200	200	25	250	17.6		12	7	55	31	80	80	15

Code	M	M1	M2	M3	M4	M5	W	W1	W2	W3	W4	W5	W6	A	B
ZZ170-1	8	6	5	14	7	5	22	6.5	6	12.5	6.5	6	12.5	Ø5	M5
ZZ170-2	18	8	8	24	16	5	34	8	12.5	20	8	12.5	16	Ø6	M6
ZZ170-3	22	9	9	31	20	7	42	12.5	16	25	12.5	16	20	Ø8	M8

Code	(min.) Stroke	(max.) Stroke	Pulling force F(= kgf)	@ ¥/P
ZZ170-1	5.5	80	800	
ZZ170-2	9.5	110	1400	
ZZ170-3	10.5	190	2400	

Product space chart:



Pos.	Part name	Material	Hardness
5	Latch bar	Cr12MoV	56± 3HRC
6	Spacer	S45C	-
9	Control bar	Cr12MoV	56± 3HRC
10	Spacer	S45C	-
11	Housing	SKD61	48-52HRC



Installation Guidelines:

- Please install the housing in parallel to the parting line first.
- Before install the control bar, please cut it to the necessary length, form the bolt hole. Please tighten the screw when mold closed. (Please note: Make sure in a fully position mold before fix the control bar, and eliminate the clearance between the control bar and locking roller).
- Please cut the latch bar to the necessary length, and installation in parallel to the parting line.
- Please install the latch lock symmetrically, otherwise, it would be fractured with the unbalanced force due to only one side of lock set be forced.
- This latch lock is the precise standardized item, please do not apply together with other own customer machined parts.
- If mold need to maintain, please remove the latch locks first.
- After installed, carry out a functional test, check whether the individual parts of the latch lock units moves smoothly, the stroke is applicable. Recommend testing on matched Molds machine or Injection machine, no Lifting Machine.

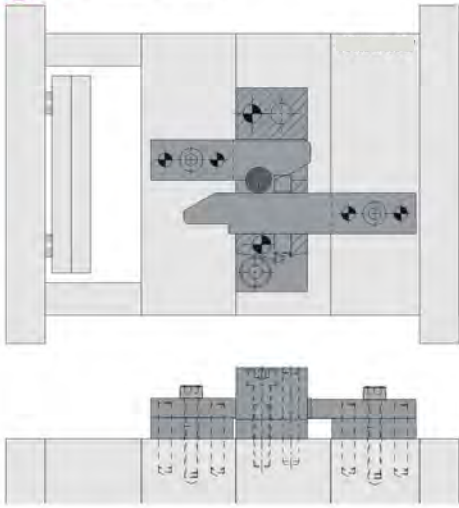
- Escape pins series
- Circle pin series
- Latch lock series
- Rolling gate series
- Die inserts series
- Escrow series
- Cooling inserts series
- Locking pins series
- Spring series
- Guide pins series
- Guide pins series
- Guide pins series
- Check series
- Mold accessories

DIN

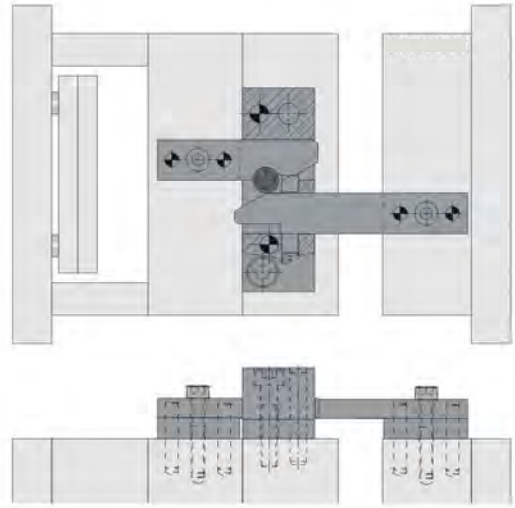
Latch locks



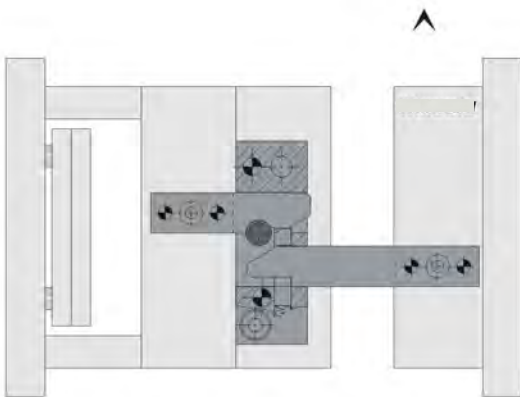
Functional chart:



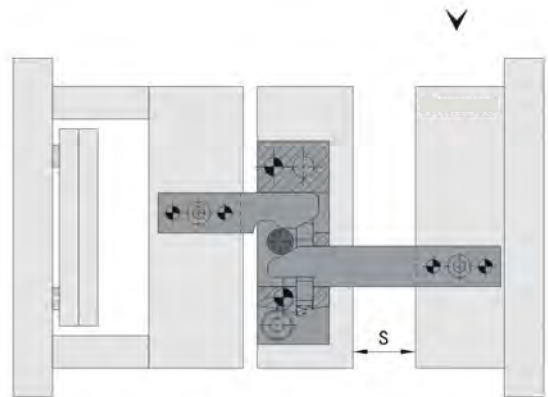
Mold closed



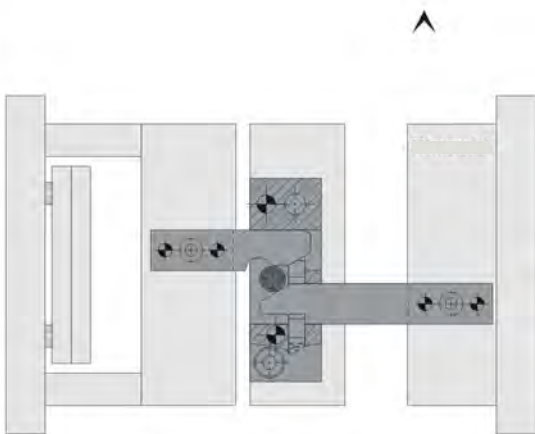
Mold opening



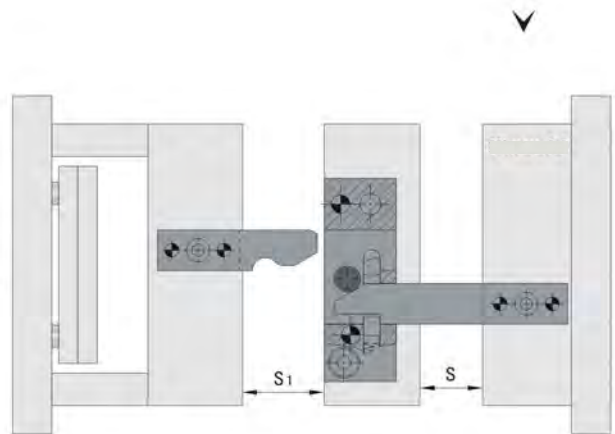
The 1st mold closed



The 1st mold opened



The 1st mold closing



The 2nd mold opened

Ejector pins
Ejector sleeves

Slide retainers
slaves

Latch locks
series

Pouring gates
series

Date stamps
Air valves series

Ejector series

Cooling elements
series

Locating parts
series

Springs series

Slide pins
Sliding bush

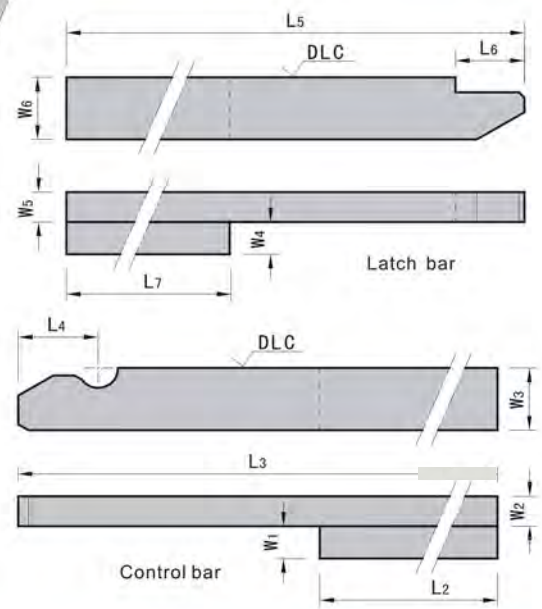
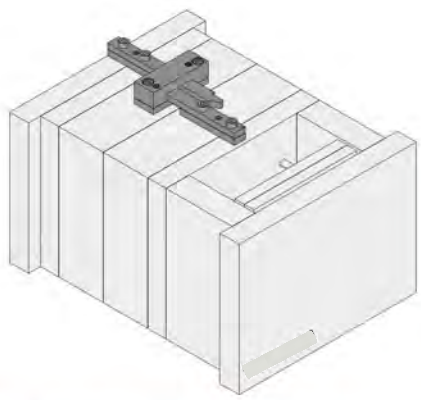
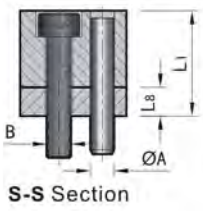
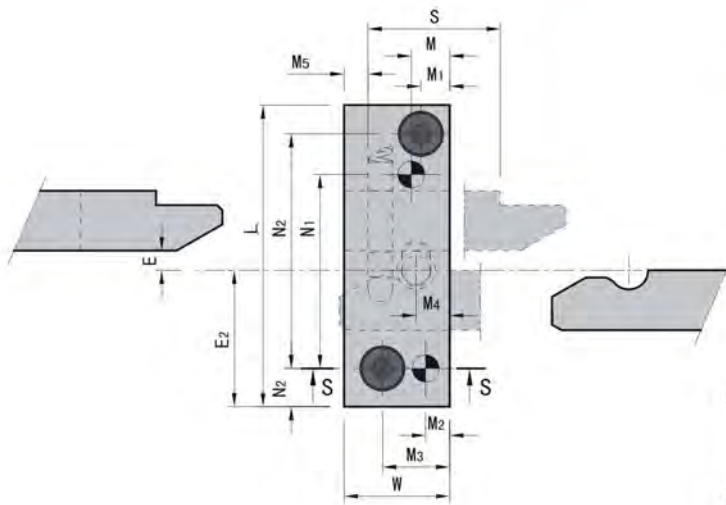
Guide strips
Wear plate series

Chuck series

Mold
accessories

DIN
Latch locks

ZZ270



Features:
 1. Mechanical interlocking design, safe and reliable.
 2. Insert bar, end of pull rod adopt high frequency annealing treatment, so that easy to second time processing installed holes.
 3. This latch parts not only control opening mold sequence, But also control closed open sequence.

Order ZZ270-1

Code	L	L1	L2	L3	L4	L5	L6	L7	L8	E	E2	M3	N	N1	N2
ZZ270-1	63	22	63	100	16	125	13.8	80	6	4	28.5	14	49	40.5	8
ZZ270-2	90	32.5	100	140	22.5	160	17.7	125	7.5	6	45	24	69	62	13
ZZ270-3	110	44	100	200	25	250	17.6	125	12	7	55	31	80	80	15

Code	M	M1	M2	M3	M4	M5	W	W1	W2	W3	W4	W5	W6	A	B
ZZ270-1	8	6	5	14	7	5	22	6.5	6	12.5	6.5	6	12.5	Ø5	M5
ZZ270-2	18	8	8	24	16	5	34	8	12.5	20	8	12.5	16	Ø6	M6
ZZ270-3	22	9	9	31	20	7	42	12.5	16	25	12.5	16	20	Ø8	M8

Code	(min.) Stroke	S(max.) Stroke	Pulling force F(≈kgf)	@ ¥/P
ZZ270-1	5.5	80	800	
ZZ270-2	9.5	110	1400	
ZZ270-3	10.5	190	2400	

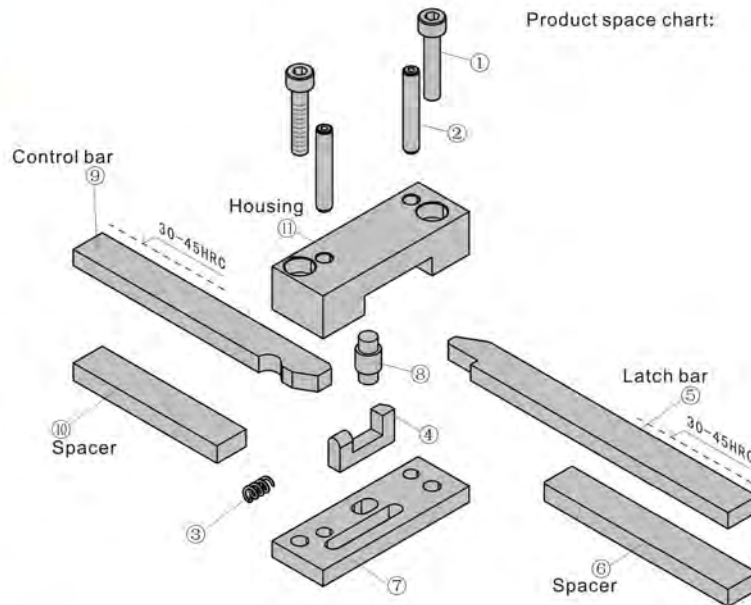
- Escisor pins series
- Slide rail series
- Latch locks series
- Rolling gate series
- Done stamp series
- Escisor series
- Cooling element series
- Locating parts series
- Spring series
- Guide pins series
- Guide pins series
- Church series
- Mold accessories

DIN

Latch locks

ZZ270

Product space chart:



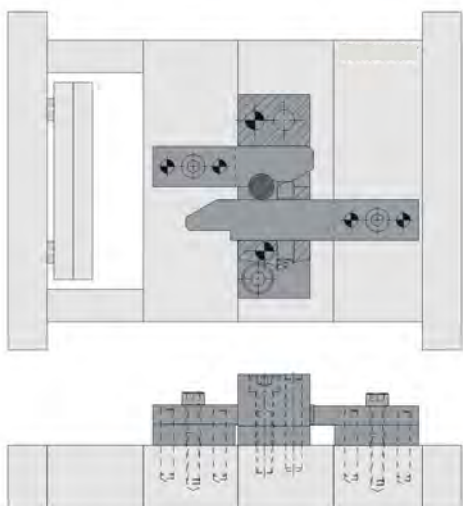
Pos	Part name	Material	Hardness
5	Latch bar	Cr12MoV	56± 3HRC
6	Spacer	S45C	-
9	Control bar	Cr12MoV	56± 3HRC
10	Spacer	S45C	-
11	Housing	SKD61	48-52HRC



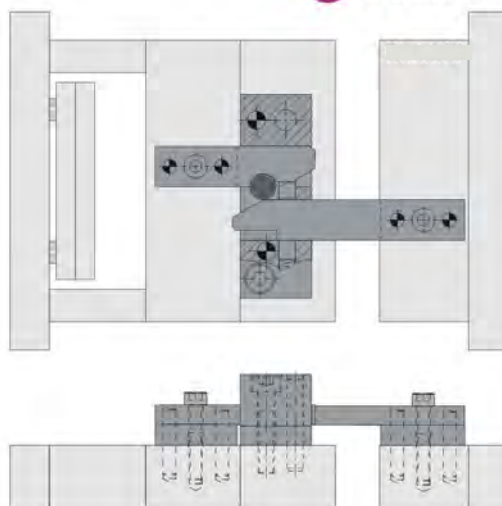
Installation Guidelines:

- Please install the housing in parallel to the parting line first.
- Before install the control bar, please cut it to the necessary length, form the bolt hole. Please tighten the screw when mold closed. (Please note: Make sure in a fully position mold before fix the control bar, and eliminate the clearance between the control bar and locking roller).
- Please cut the latch bar to the necessary length, and installation in parallel to the parting line.
- Please install the latch lock symmetrically, otherwise, it would be fractured with the unbalanced force due to only one side of lock set be forced.
- This latch lock is the precise standardized item, please do not apply together with other own customer machined parts.
- If mold need to maintain, please remove the latch locks first.
- After installed, carry out a functional test, check whether the individual parts of the latch lock units moves smoothly, the stroke is applicable. Recommend testing on matched Molds machine or Injection machine, no Lifting Machine.

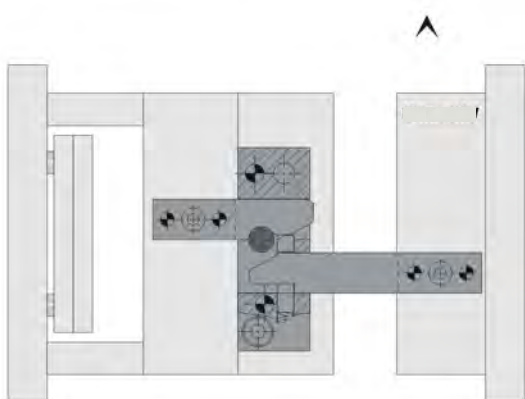
Ejector pins Ejector sleeves
Slide rail/liners series
Latch locks series
Pouring gate series
Done stamps Air valves series
Ejector series
Cooling elements series
Locating parts series
Springs series
Guide pins Guide bush
Guide strips Wear plate series
Chuck series
Mold processors



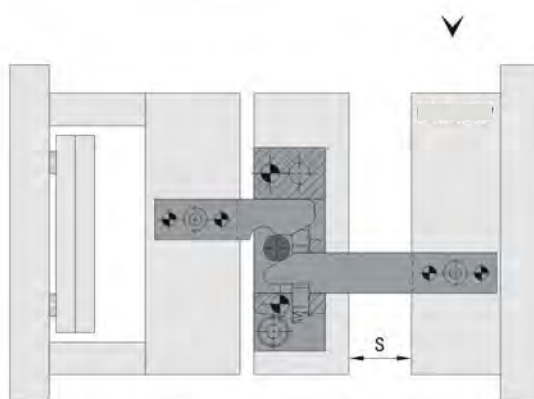
Mold closed



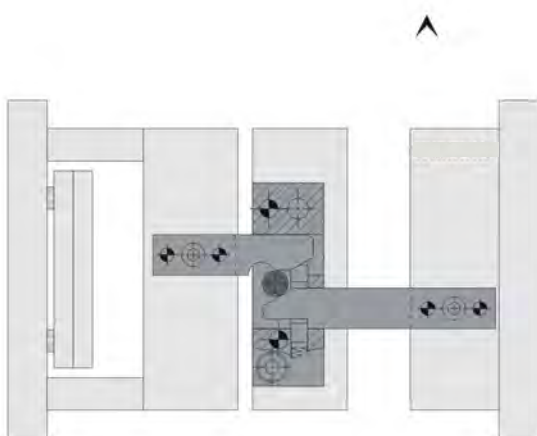
Mold opening



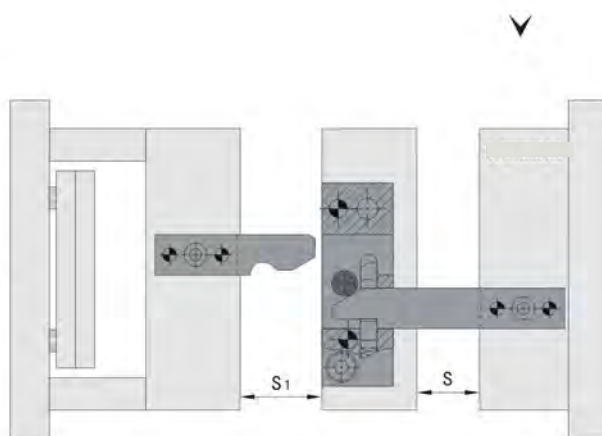
The 1st mold closed



The 1st mold opened



The 1st mold closing

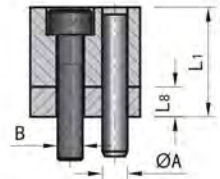
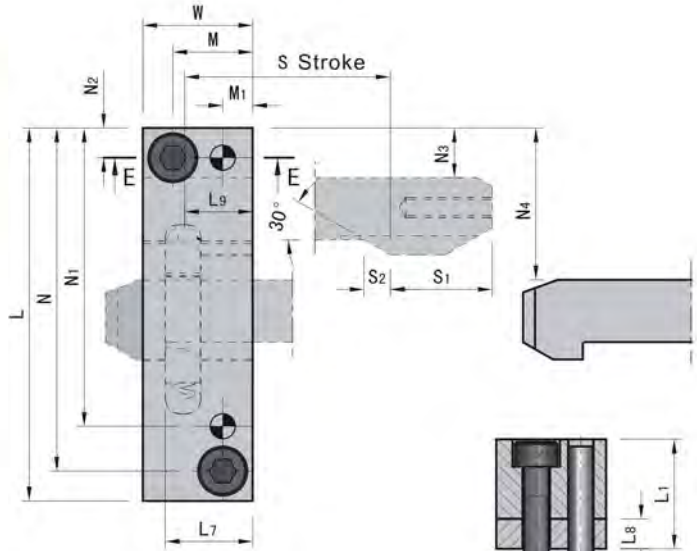
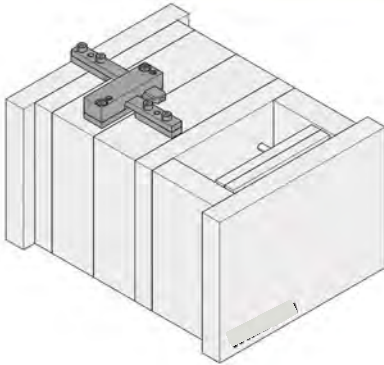


The 2nd mold opened

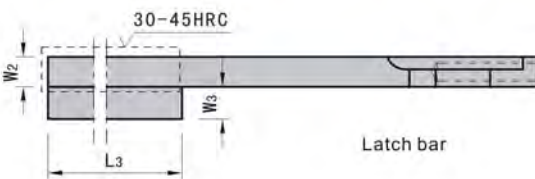
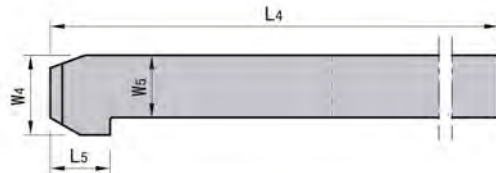
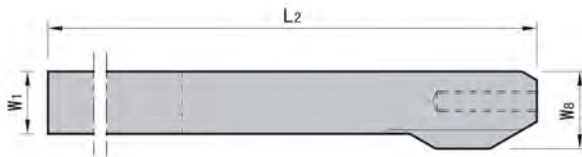
DIN

Latch locks

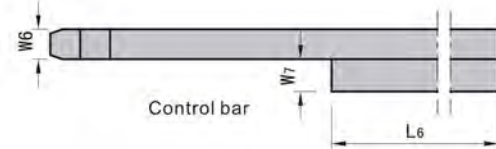
ZZ171



E-E Section



Latch bar



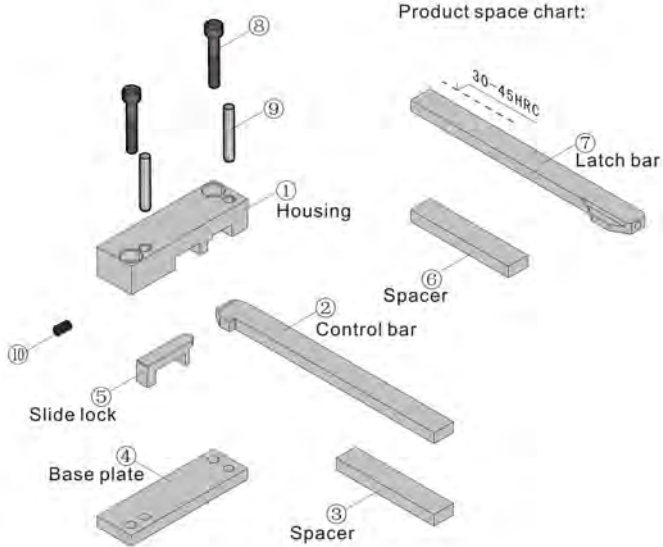
Control bar

Order ZZ171-1

Code	L	L1	L2	L3	L4	L5	L6	L7	L8	L9	N	N1	N2	N3	N4
ZZ171-1	75	22	140	63	140	12	63	17.5	6	13.5	69	60	6	10	30.5
ZZ171-2	90	32.5	180	100	180	16	100	25	7.5	19	83	73	7	12	38
ZZ171-3	112	43.5	250	125	250	20	125	32	12	25	103	88	9	16	48

Code	M	M1	W	W1	W2	W3	W4	W5	W6	W7	W8	S1	S2	A	B
ZZ171-1	16	6	22	12.5	6	6.5	16	12.5	6	6.5	15.5	20	14	Ø5	M5
ZZ171-2	24	8	31.5	16	12.5	8	20.5	16	12.5	8	20	27	6.95	Ø6	M6
ZZ171-3	30	10	40	20	16	12.5	25.5	20	16	12.5	25	36	8.7	Ø8	M8

Code	(min.) Stroke	(max.) Stroke	Pulling force F(≈ kgf)	@ ¥/P
ZZ171-1	5.5	80	650	
ZZ171-2	7	110	1550	
ZZ171-3	9	160	2200	



Features:

1. Due to double-sided locking system, safe and reliable.
2. High-frequency heat-treatment, easy to process mounting hole on the tail of latch bar and control bar.

Pos.	Part name	Material	Hardness
1	Housing	P20	26-33HRC
2	Control bar	718H	Surface nitrided
3	Spacer	S45C	-
4	Base plate	P20	26-33HRC
5	Slide lock	SKD61	48-52HRC
6	Spacer	S45C	-
7	Latch bar	Cr12MoV	56±3HRC



Installation Guidelines:

- Please install the housing in parallel to the parting line first.
- Before install the control bar, please cut it to the necessary length, form the bolt hole. Please tighten the screw when mold closed. (Please note: Make sure in a fully position mold before fix the control bar, and eliminate the clearance between the control bar and locking roller).
- Please cut the latch bar to the necessary length, and installation in parallel to the parting line.
- Please install the latch lock symmetrically, otherwise, it would be fractured with the unbalanced force due to only one side of lock set be forced.
- Allows control of the mold plate opening sequence on mold bases, but not control of mold plate closing sequence function.
Only suitable for mold plate opening sequence are required.
- This latch lock is the precise standardized item, please do not apply together with other own customer machined parts.
- If mold need to maintain, please remove the latch locks first.
- After installed, carry out a functional test, check whether the individual parts of the latch lock units moves smoothly, the stroke is applicable. Recommend testing on matched Molds machine or Injection machine, no Lifting Machine.

- Electric series
- Circle nut series
- Latch lock series
- Rolling gate series
- Door status Air valve series
- Electric series
- Cooling equipment series
- Locating parts series
- Spacers series
- Guide parts series
- Quick return series
- Chuck series
- Mold accessories

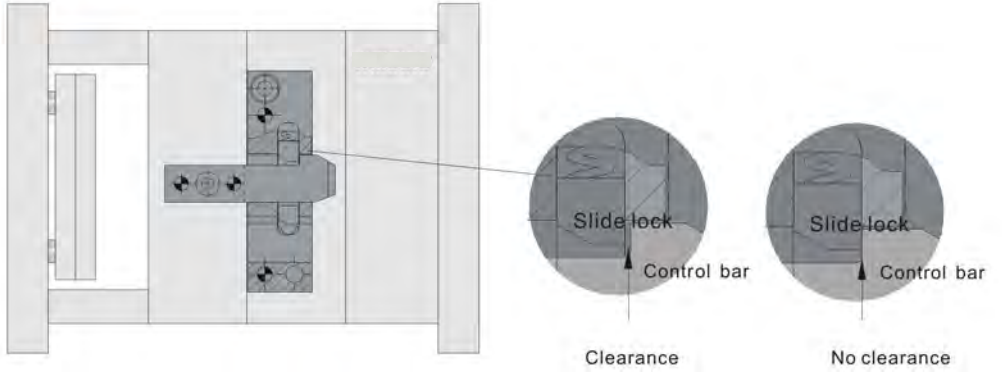
DIN

Latch locks

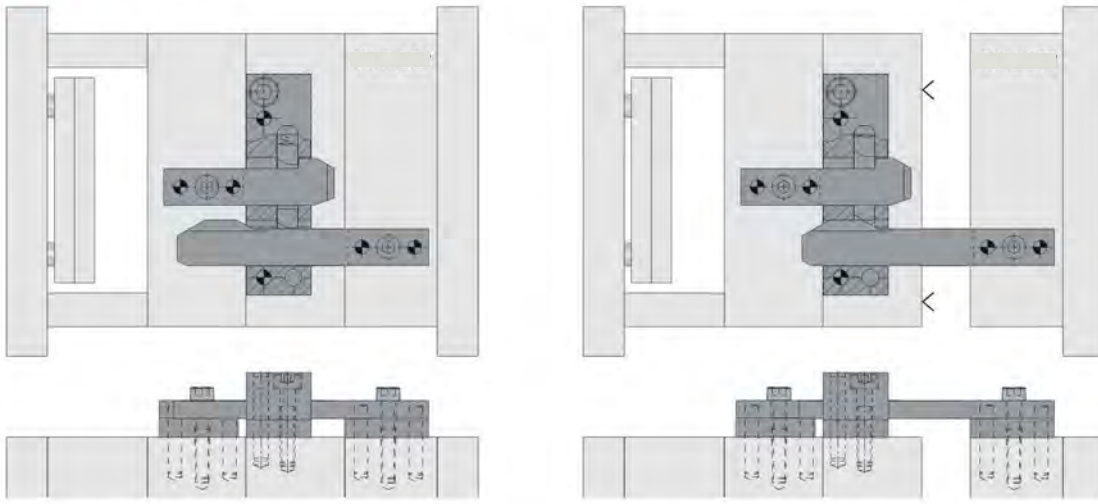
ZZ171



Installation Diagram:

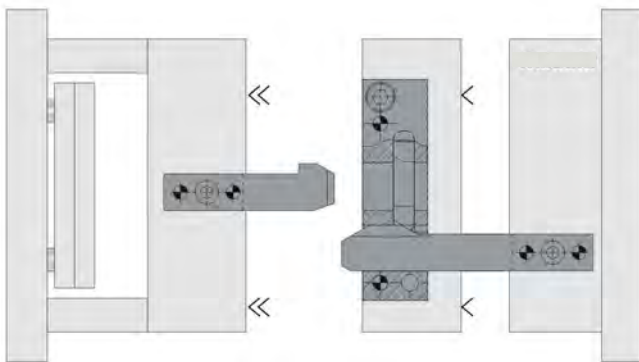


Functional chart:

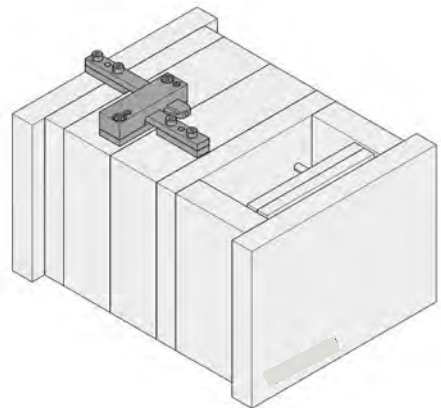


Mold closed

The 1st Mold opened

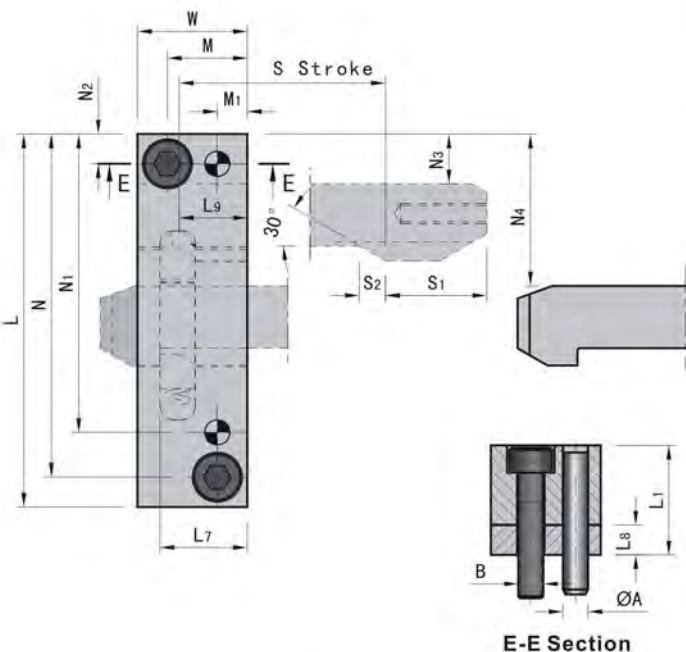


Complete mold opened

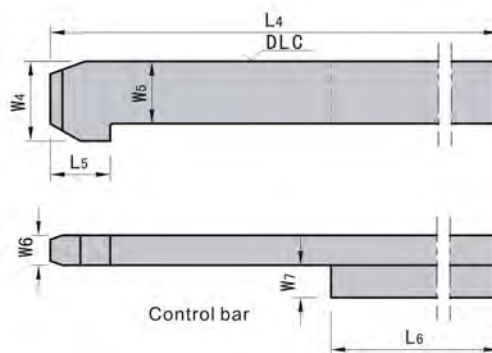
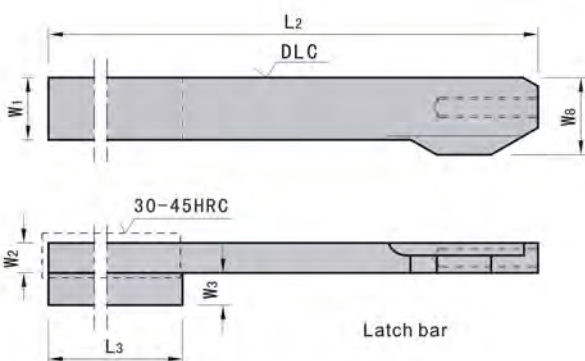
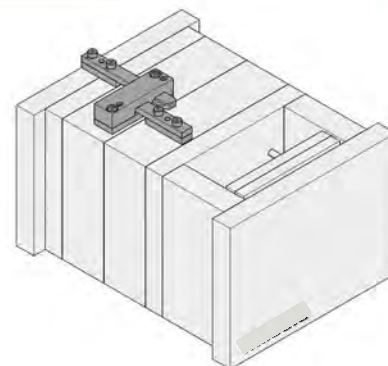


- Erictor pins
Erictor sleeves
- Slide retainers
staves
- Latch locks
series
- Pouring gates
series
- Date stamps
Air valves series
- Erictor series
- Cooling elements
series
- Locating parts
series
- Spring series
- Slide pins
Slide bush
- Guide strips
Wear plate series
- Chuck series
- Mold
accessories

DIN
Latch locks



ZZ271



Order ZZ271-1

Code	L	L1	L2	L3	L4	L5	L6	L7	L8	L9	N	N1	N2	N3	N4
ZZ271-1	75	22	140	63	140	12	63	17.5	6	13.5	69	60	6	10	30.5
ZZ271-2	90	32.5	180	100	180	16	100	25	7.5	19	83	73	7	12	38
ZZ271-3	112	43.5	250	125	250	20	125	32	12	25	103	88	9	16	48

Code	M	M1	W	W1	W2	W3	W4	W5	W6	W7	W8	S1	S2	A	B
ZZ271-1	16	6	22	12.5	6	6.5	16	12.5	6	6.5	15.5	20	14	Ø5	M5
ZZ271-2	24	8	31.5	16	12.5	8	20.5	16	12.5	8	20	27	6.95	Ø6	M6
ZZ271-3	30	10	40	20	16	12.5	25.5	20	16	12.5	25	36	8.7	Ø8	M8

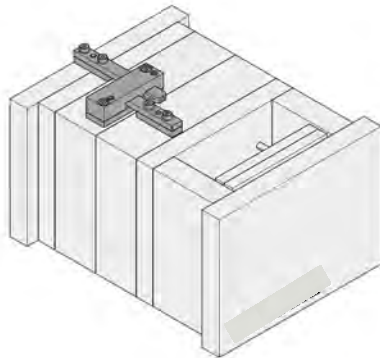
Code	(min.) Stroke	(max.) Stroke	Pulling force F(≈kgf)	@ ¥/P
ZZ271-1	5.5	80	650	
ZZ271-2	7	110	1550	
ZZ271-3	9	160	2200	

Extractor pins series
Slide railbars series
Latch locks series
Pulling gates series
Door stamps Air valves series
Escaper series
Cooling elements series
Locating parts series
Springs series
Guide pins Guide bush series
Guide strips V-belt parts series
Clutch series
Mold accessories

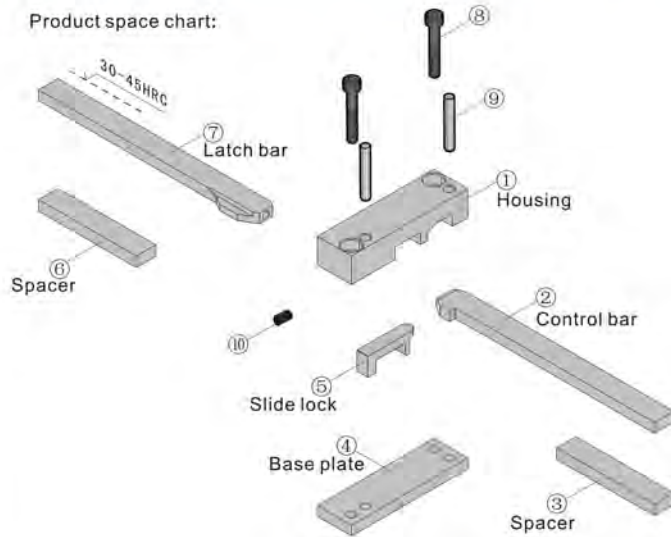
DIN

Latch locks

ZZ271



Product space chart:



Features:

1. Due to double-sided locking system, safe and reliable.
2. High-frequency heat-treatment, easy to process mounting hole on the tail of latch bar and control bar.

Pos.	Part name	Material	Hardness
1	Housing	P20	26-33HRC
2	Control bar	718H	
3	Spacer	S45C	-
4	Base plate	P20	26-33HRC
5	Slide lock	SKD61	48-52HRC
6	Spacer	S45C	-
7	Latch bar	Cr12MoV	56±3HRC




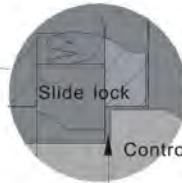
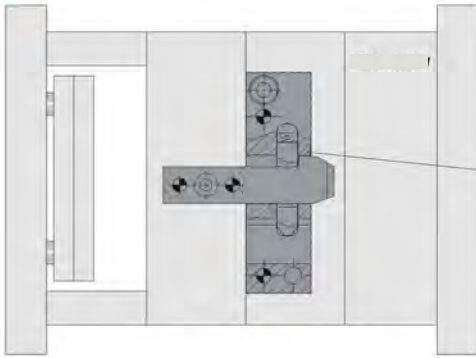
Installation Guidelines:

- Please install the housing in parallel to the parting line first.
- Before install the control bar, please cut it to the necessary length, form the bolt hole. Please tighten the screw when mold closed. (Please note: Make sure in a fully position mold before fix the control bar, and eliminate the clearance between the control bar and locking roller).
- Please cut the latch bar to the necessary length, and installation in parallel to the parting line.
- Please install the latch lock symmetrically, otherwise, it would be fractured with the unbalanced force due to only one side of lock set be forced.
- Allows control of the mold plate opening sequence on mold bases, but not control of mold plate closing sequence function.
- Only suitable for mold plate opening sequence are required.
- This latch lock is the precise standardized item, please do not apply together with other own customer machined parts.
- If mold need to maintain, please remove the latch locks first.
- After installed, carry out a functional test, check whether the individual parts of the latch lock units moves smoothly, the stroke is applicable. Recommend testing on matched Molds machine or Injection machine, no Lifting Machine.

DIN
Latch locks

ZZ271


 Installation Diagram:

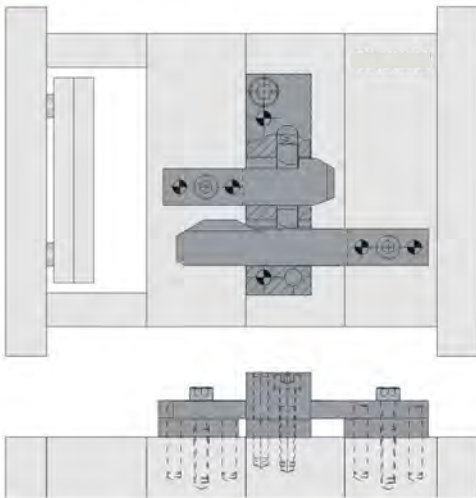


Clearance

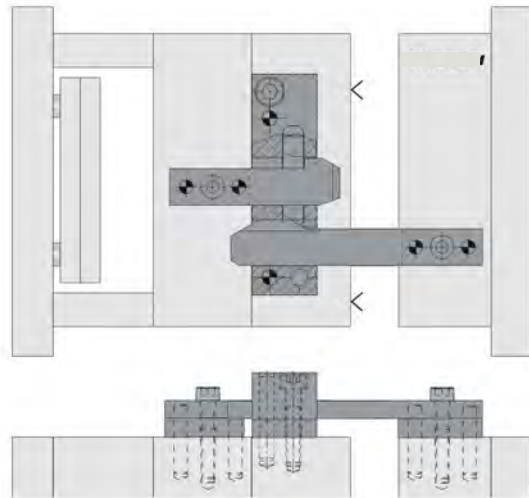


No clearance

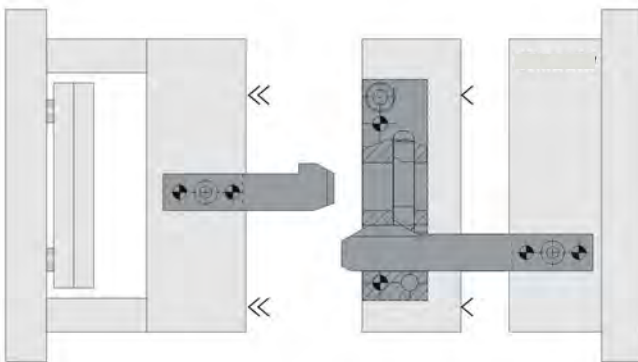
 Functional chart:



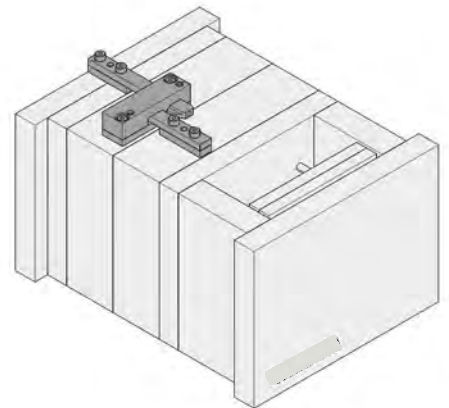
Mold closed



The 1st Mold opened



Complete mold opened

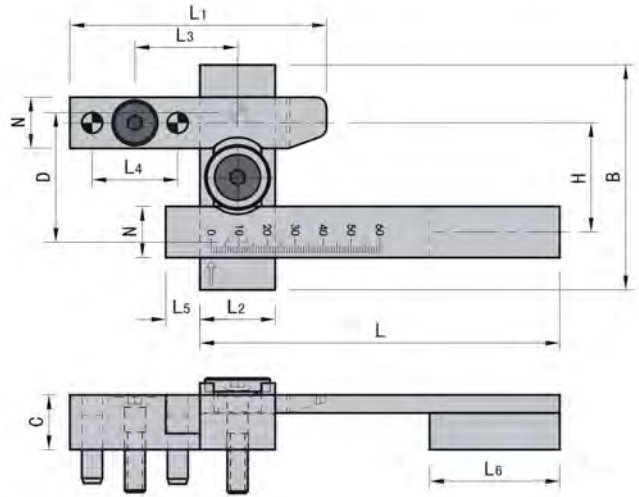
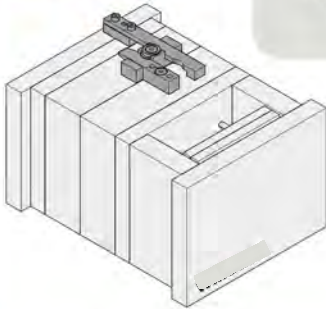


Ejector pins Ejector sleeves
Slide railers series
Latch locks
Pouring gate series
Done stamps Air valves series
Ejector series
Cooling elements series
Locating parts series
Springs series
Guide pins Guide bush
Guide strips Vibr. plate series
Chuck series
Mold processors

DIN

Latch locks

GGG

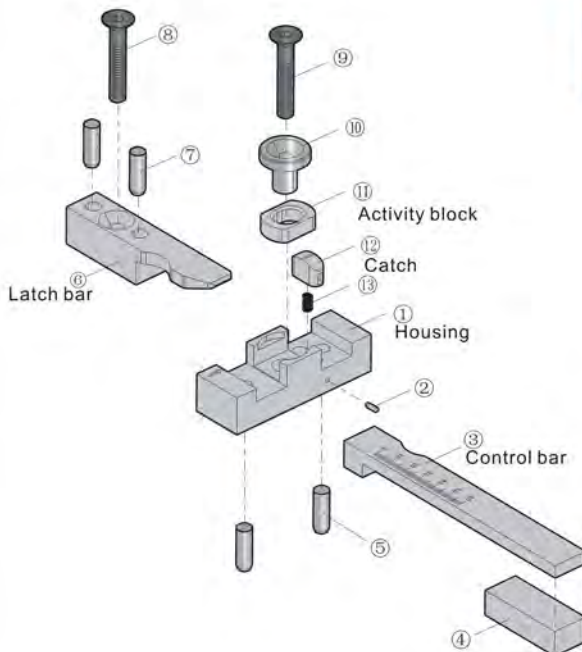


Order GGS-226616

Code	B	C	D	H	H1(min.)	L	L1	L2	L3
GGG-226616	66	16	38	32	10	105	75	22	30
GGG-368619	86	19	46	42.7	11.5	153	102	36	43
GGG-421024	106	24	56	50.2	14	190	124	42	51

Code	L4	L5	L6	N	Pos				@ ¥/P
					5	7	8	9	
GGG-226616	25	10	38	15	∅ 6×20	∅ 6×30	M 6×30	M 6×35	
GGG-368619	32	12	50	20	∅ 8×24	∅ 8×36	M 8×36	M 8×40	
GGG-421024	40	15	60	24.5	∅10×30	∅10×40	M10×40	M10×45	

Product space chart:



Pos	Part name	Material	Hardness
1	Housing	SKD11	55-62HRC
3	Control bar	Cr12MoV	55-58HRC
6	Latch bar		
11	Activity block	SKD61	52± 2HRC
12	Catch	SKD11	58-62HRC

Features:

1. Designed for two steps opening molds. The gradual scale allows selection of the first opening.
2. After selecting the required stroke, fix the scale lever with the spacer.

The working principle of products:

- After the 1st mold opened, the arrow of the housing (1) will point to 0 calibration of the control bar (3), the activity block is on moving, till insert into R groove of the control bar (3) completely.
- When the activity block on moving, the Latch bar (6) is opening till out of housing completely. The catch (12) are bouncing under the force of spring, and lock the activity block, this is the 2nd mold opened finish.
- The Latch bar insert into the housing again in the 1st mold closed, the latch bar press the catch, and release the activity block till the 2nd mold closed finish.

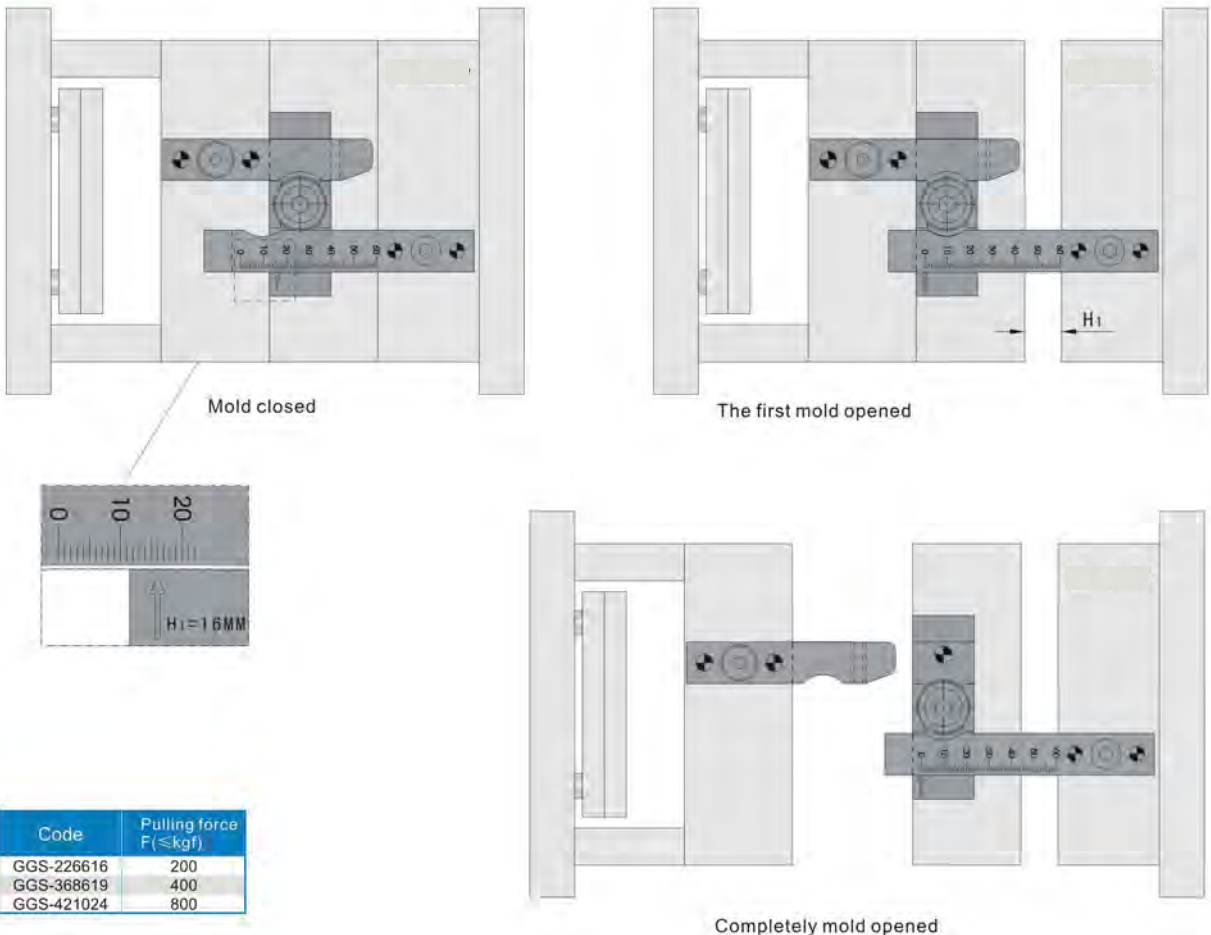
Installation information:

A minimum of two or more latch lock must be mounted symmetrically.

The latch lock control of the mold opening and closing sequence on mold bases.
 Mold opening sequence: View1 > View2 > View3
 Mold closing sequence: View3 > View2 > View1



Functional chart:



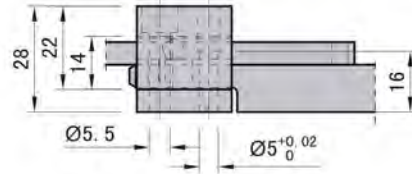
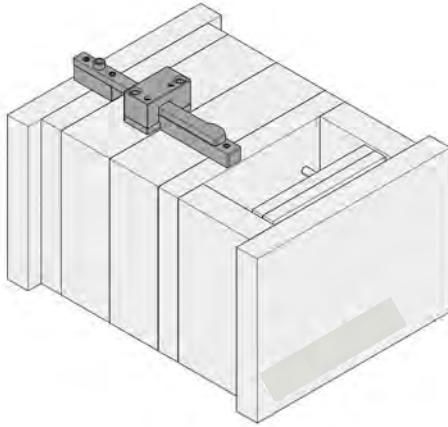
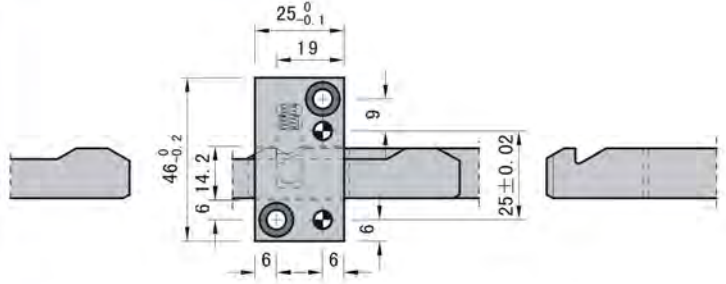
- Electric parts series
- Circle rollers series
- Latch locks
- Pulling gate series
- Drive stamps Air valves series
- Explosive series
- Cooling elements series
- Locating parts series
- Stamps series
- Guide pins Guide bush
- Guide strips Water plate series
- Chuck series
- Mold accessories

DIN

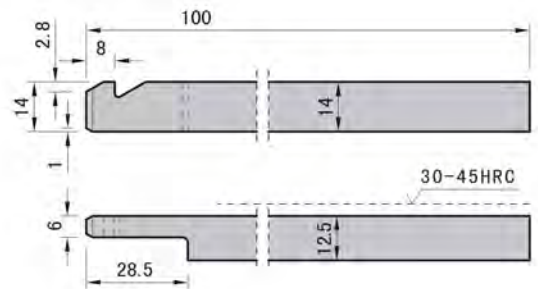
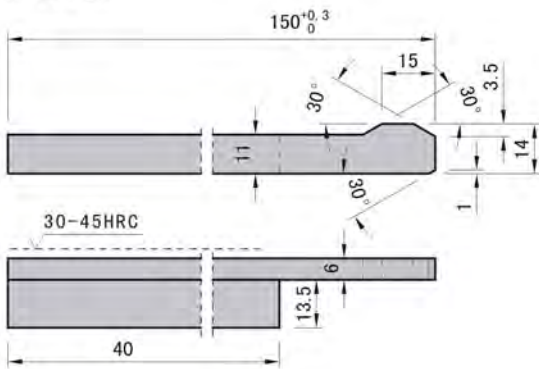
Latch locks

PPLSW

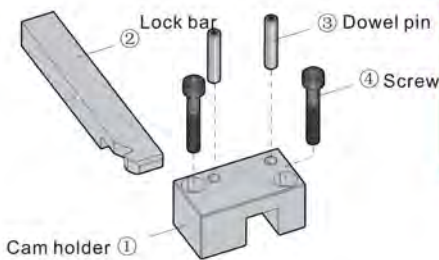
2D 3D FL



Order PPLSW



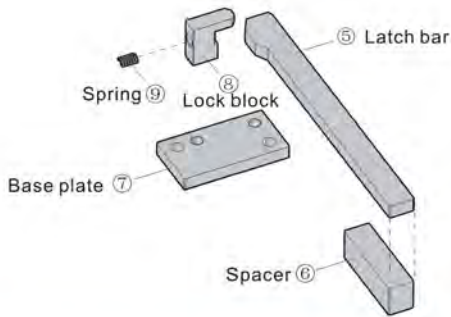
Product space chart:



Features:

1. Due to double-sided locking system, safe and reliable.
2. High-frequency heat-treatment, easy to process mounting hole on the tail of latch bar and control bar.

DIN
Latch locks



Pos	Part name	Material	Hardness	Specification	Q'ty
1	Cam holder	SKD61	50-55HRC	-	1
2	Control bar	SKS3	58-62HRC	-	1
3	Housing	-	-	Ø5×25	2
4	Screw	-	-	M5×30	2
5	Latch bar	SKS3	50-55HRC	-	1
6	Spacer	S45C	-	-	1
7	Base plate	SKS3	50-55HRC	-	1
8	Lock block	SKD11	58-62HRC	-	1
9	Spring	-	-	-	1

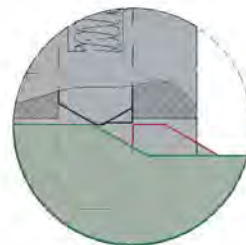
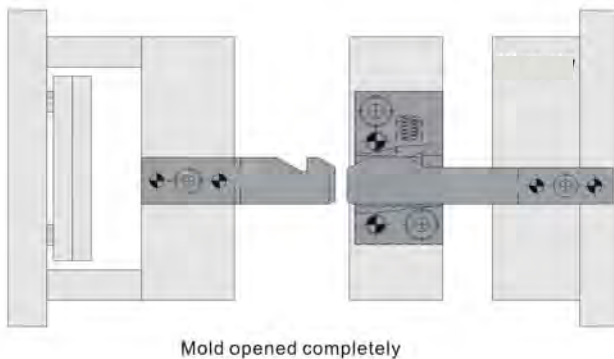
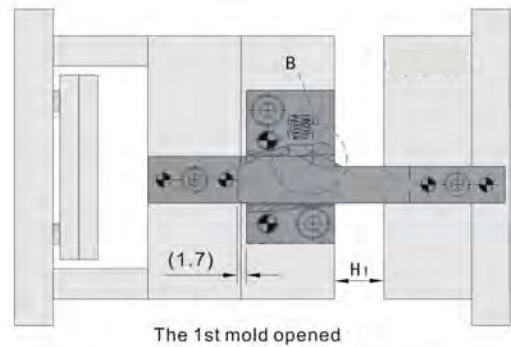
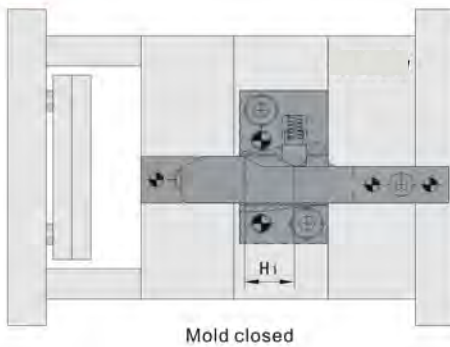


Installation Guidelines:

- Please install the cam holder in parallel to the parting line.
- Before install the Lock bar, please cut it to the necessary length, form the bolt hole. Please tighten the screw when mold closed. (Please note: Make sure in a fully position mold before fix the control bar, and eliminate the clearance between the lock bar and lock block).
- Please cut the release bar to the necessary length, and installation in parallel to the parting line.
- Please install the latch lock symmetrically at least two sets or more.
- This latch lock is the precise standardized item, please do not apply together with other own customer machined parts, we will not be responsible for the anomaly which caused by it.
- If mold need to maintain, please remove the latch locks first.
- After installed, carry out a functional test, check whether the individual parts of the latch lock units moves smoothly, the stroke is applicable. Recommend testing on matched Molds machine or Injection machine, no Lifting Machine.



Functional chart:

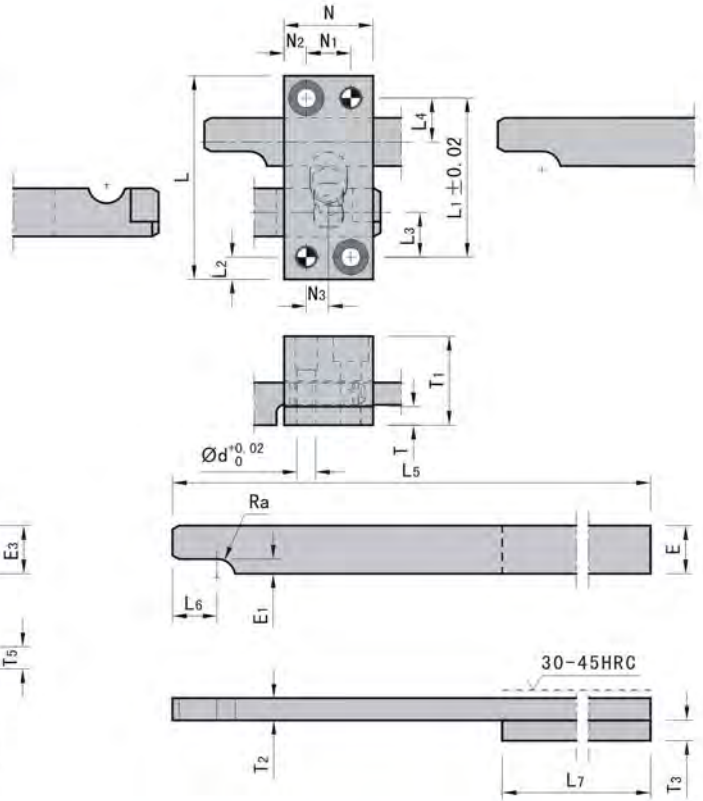
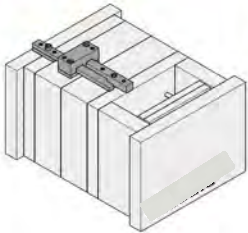


Electric chucks series
 Guide rail series
Latch locks series
 Pumping gate series
 Dome spruing series
 Ejector series
 Cooling elements series
 Locating parts series
 Springs series
 Guide pins / Guide bush series
 Guide bush / Water plate series
 Chuck series
 Mold accessories

DIN

Latch locks

PPLSZ
PPLMZ

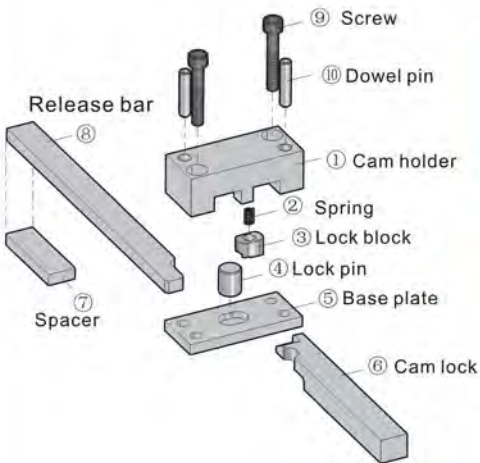


Order PPLSZ

Code	L	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	N	N1	N2	N3
PPLSZ	55	43	6	12	12	150	12	40	100	14	28	24	12	6	6
PPLMZ	67	53	7	15	14	200	16	50	150	18	36	32	16	8	8

Code	d	E	E1	E3	E4	R	Ra	T	T1	T2	T3	T4	T5	@ ¥/P
PPLSZ	5	13	4	13	4	5	5	5	24	6	5.5	11.5	6	
PPLMZ	6	16	5	18	5	6	6	6	32.5	10	6.5	16.5	10	

Product space chart:



Features:

1. Due to double-sided locking system, safe and reliable.
2. High-frequency heat-treatment, easy to process mounting hole on the tail of latch bar and control bar.

Pos	Part name	Material	Hardness	Specification		Q'ty
				PPLSZ	PPLMZ	
1	Cam holder	SKD61	50-55HRC			
2	Spring	-	-			
3	Lock block	-	-			
4	Lock pin	SKD11	58-62HRC			
5	Base plate	S45C	-			1
6	Cam lock	SKS3	58-62HRC			
7	Spacer	-	-			
8	Release bar	SKS3	58-62HRC			
9	Screw	-	-	M5×25	M6×35	
10	Dowel pin	-	-	Ø5×30	Ø6×35	2

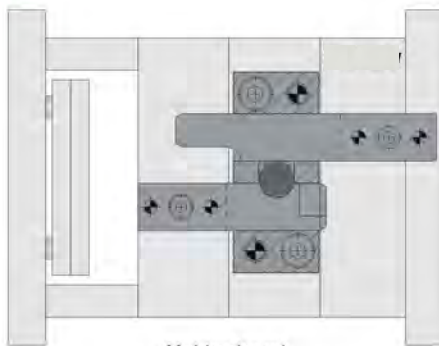


Installation Guidelines:

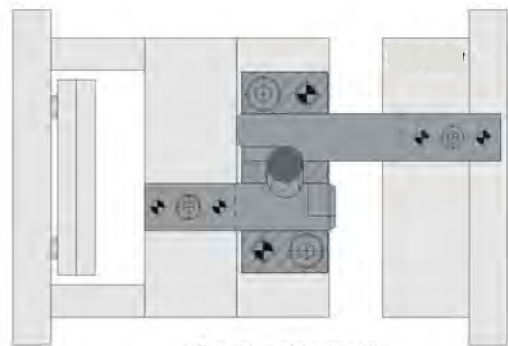
- Please install the cam holder in parallel to the parting line.
- Cut the cam lock to the necessary length, form the bolt holes and reamer pilot holes, tighten the cam lock with the bolts while pulling it, carry out position adjustment by matching with the actual part, form the dowel holes, and fix the cam lock.
- Please cut the release bar to the necessary length, and install it perpendicularly to the mold. Make sure overhang length L of each release bar the same in order to equalize the release points. (Maintain proper alignment of the release points to avoid uneven contact and resultant breakage.)
- Please install the latch lock symmetrically at least two sets or more.



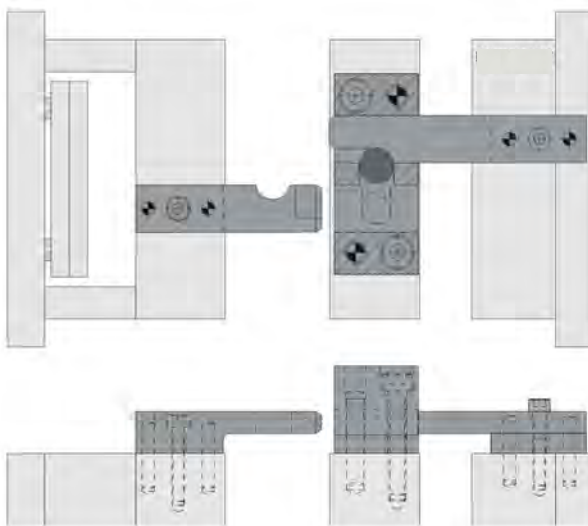
Functional chart:



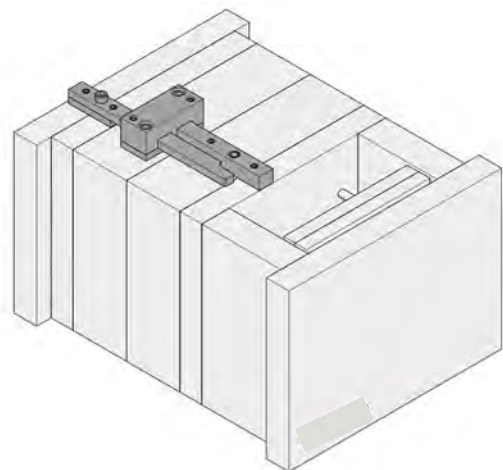
Mold closed



The 1st mold opened



Mold opened completely



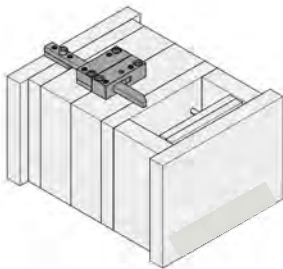
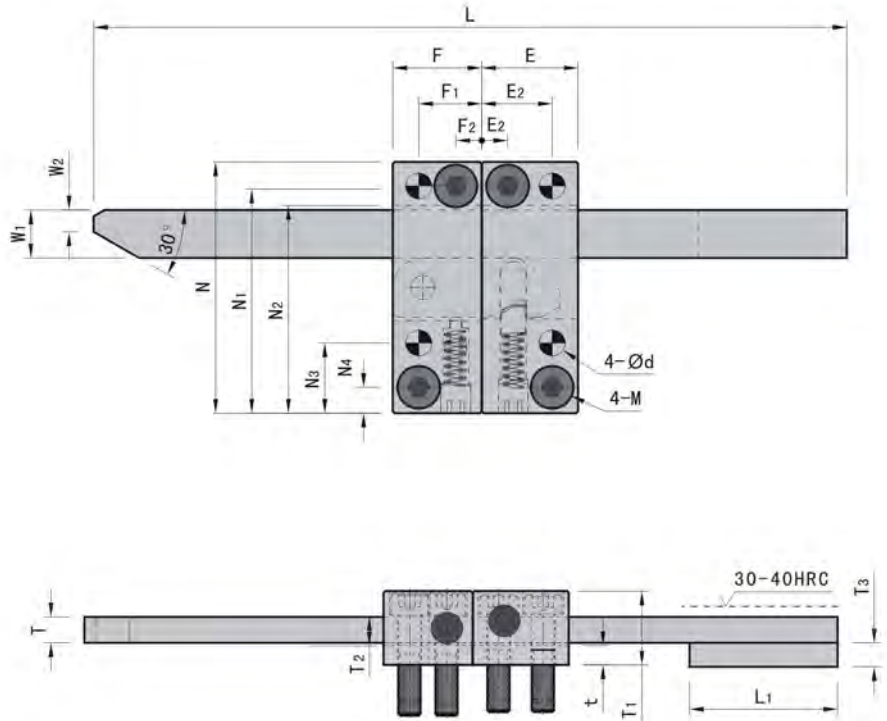
Escisor pins Escisor sleeves	Slide rail/liners series	Latch locks	Flanging gate series	Done stamps Air valves series	Escisor series	Cooling elements series	Locating parts series	Springs series	Guide pins Guide bush	Guide strips Water plate series	Clutch series	Mold processors
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JIS

Latch locks

PPLS
PPLM
PPLL

CRD 2D
100% 3D
100% FL



Features:

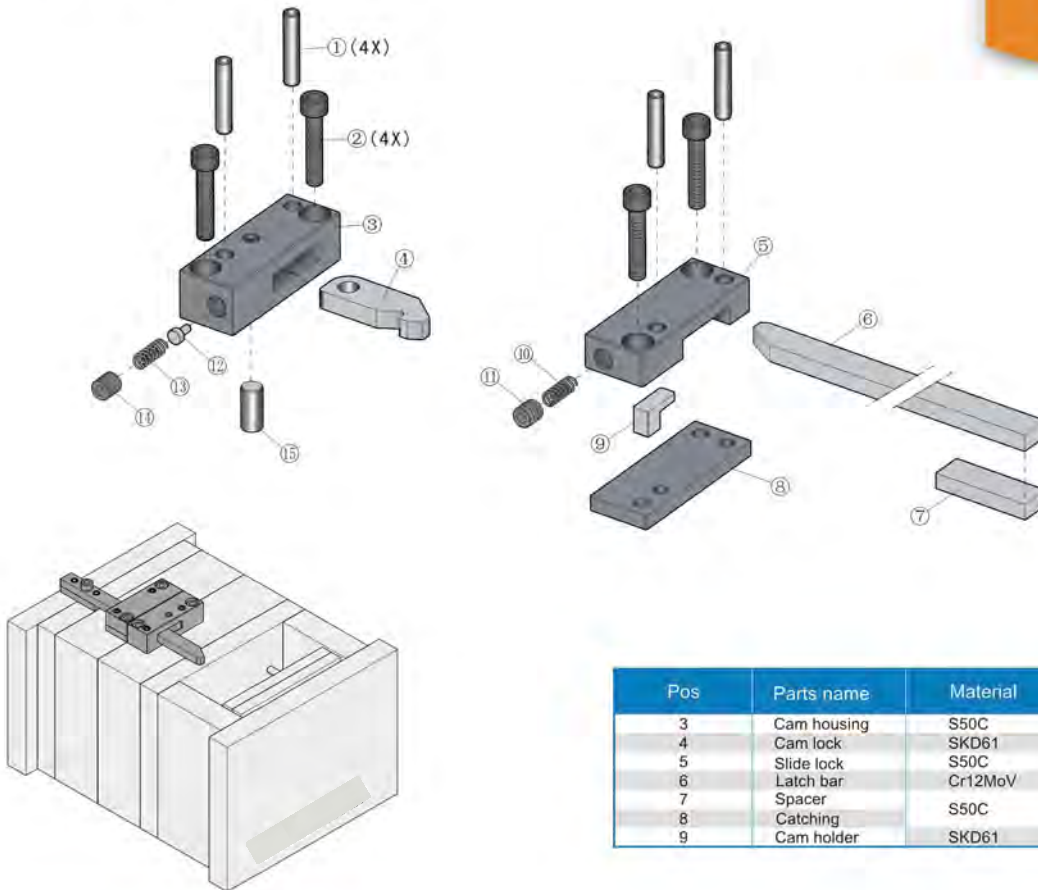
1. Compact structure, small installation space .
2. Mechanical mold locking design, safety and dependable, right opening mold, no reacting force.
3. No mold locking load, apply to low pressure mold locking shaping.
4. No auto-lock function of closed mould, no matter first or second joint closed mould, don't worry interference phenomenon.
5. The end of insert bar adopt high frequency annealing treatment ,Convenient second processing.

Order PPLS

Code	N	N1	N2	N3	N4	E	E1	E2	F	F1	F2	d	t
PPLS	68	61.5	55	19	7	26	19	7	24	17	7	Ø 6	6
PPLM	88	79	70	24	9	38	29	9	30	21	9	Ø 8	7
PPLL	104	93	82	27	11	48	37	11	38	27	11	Ø10	8

Code	T	T1	T2	T3	W1	W2	L	L1	Mounting screws	Dowel pin	@ ¥/P
PPLS	7	20	8	6.5	13	5.9	250	40	M 6×25	Ø 6×30	
PPLM	10	30	12	8	16	8	300	50	M 8×35	Ø 8×40	
PPLL	15.5	45	20	10.2	20	9.5	350	55	M10×50	Ø10×50	

Product space chart:



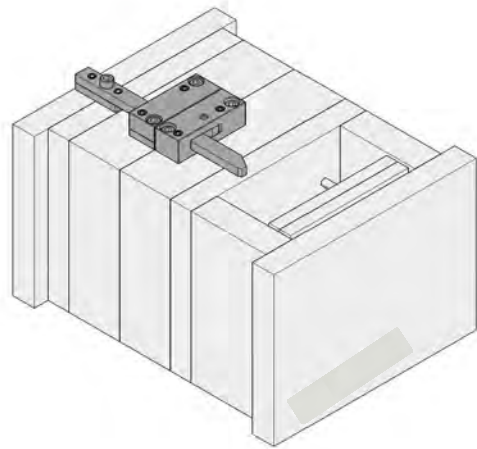
Installation Guidelines:

- Drawing 1: Install the cam holder on the movable mold.
- Drawing 2: Install the slide holder with the cam holder, it might cause a looseness between the cam lock and the slide lock.
- Drawing 3: In order to eliminate looseness between the cam lock and the slide lock, insert the release bar temporarily fix the slide holder while pulling it parallel to the cam holder, ream the holes and press-fit the dowel pins.
- Drawing 4: Install the die in the molding machine, cut the release bar to the necessary length, form the bolt holes and reamer pilot holes, temporarily fix the release bar, check the sliding operation for the parting lock, and then ream the holes and press-fit the dowel pins.
- Drawing 5: When the front of insert bar distance from locking base S position, first opening mould stroke will be completely open.
- Latch lock is precision device, please rely on real object to fixed position and symmetry install, choose corresponding quantity (2set above) and code according to different mould size and load. (reserve three code to choose)
- Guarantee all install insert bar of latch lock stroke can release from pull hook and lock base when opening mould .otherwise only rely on press will break latch lock.
- Coordinate function test, check these parts of latch lock structure whether smoothly and stroke coincide or not .
- First remove latch lock device to follow-up operation if need maintenance and change.

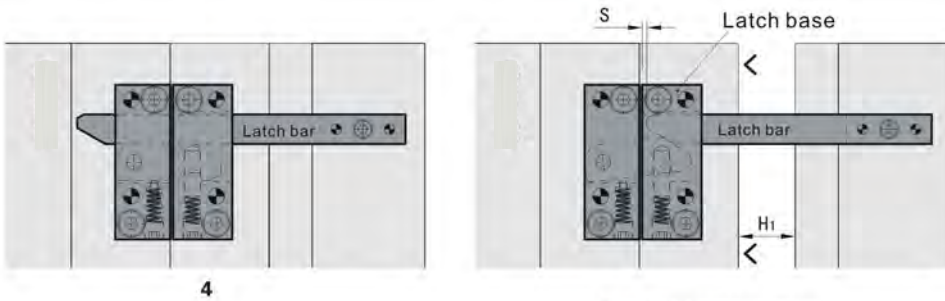
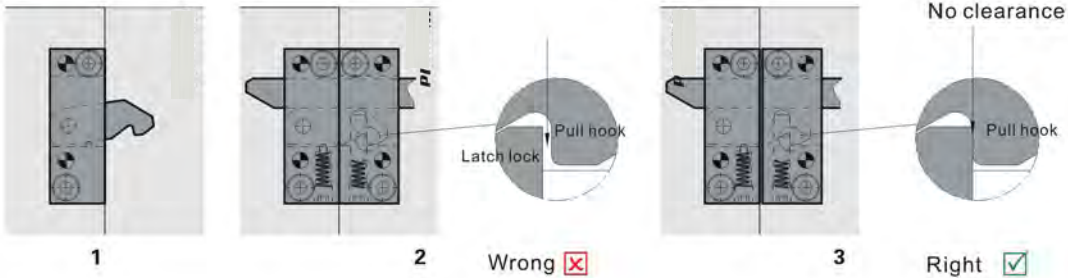


Latch locks

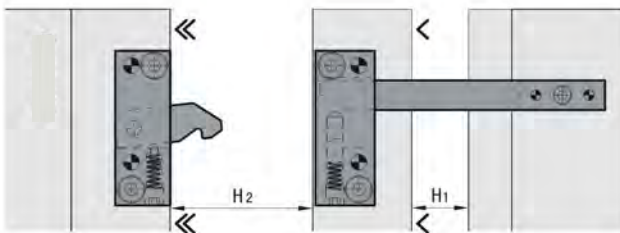
PPLS
PPLM
PPLL



Installation Diagram:



First finish opening mould

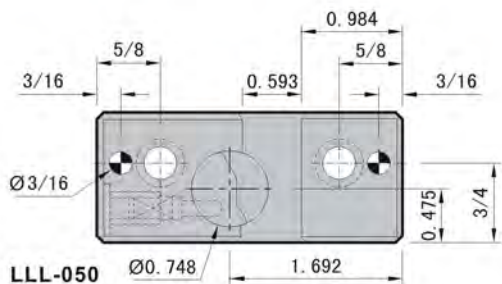


Second opening mould

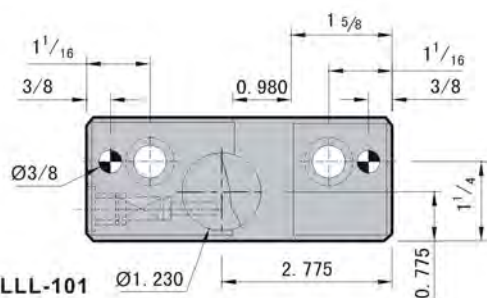
Code	S
PPLS	About 2mm
PPLM	About 11mm
PPLL	About 15mm

"S" size only for reference, please confirm opening mould according to real object.

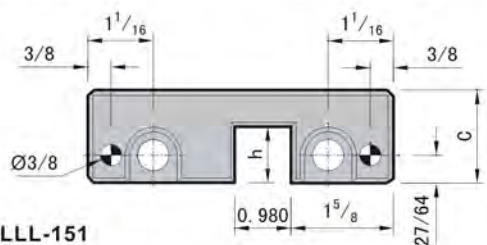
LLL



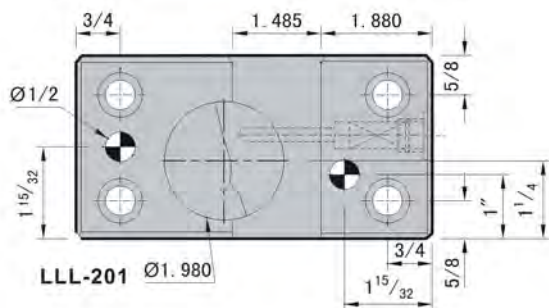
LLL-050



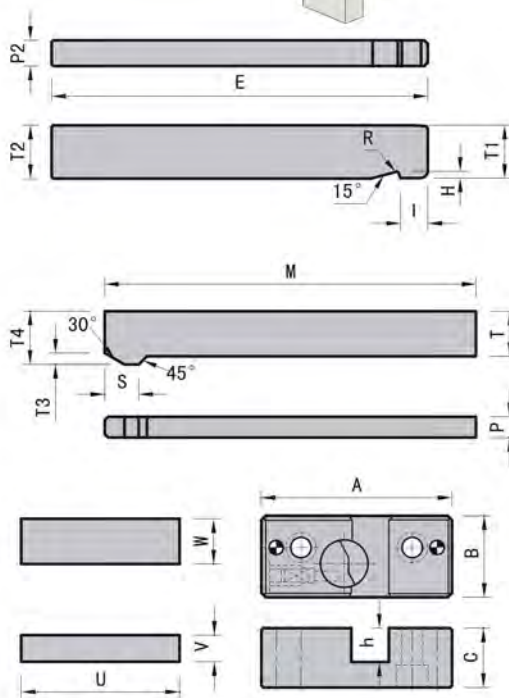
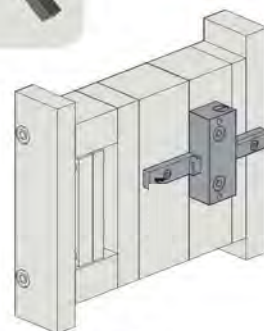
LLL-101



LLL-151



LLL-201



Order LLL-050

Code	A	B	C	h	H	E	I	P	P ₂	R	S
LLL-050	3	1 3/16	15/16	0.535	0.07	7	0.3	0.23	0.23	0.018	0.375
LLL-101	5	1 15/16	17/16	0.875	0.115	10	0.5	0.355	0.355	0.03	0.625
LLL-201	6	2 15/16	27/16	1.5	0.187	16	0.625	0.475	0.475	0.04	0.875

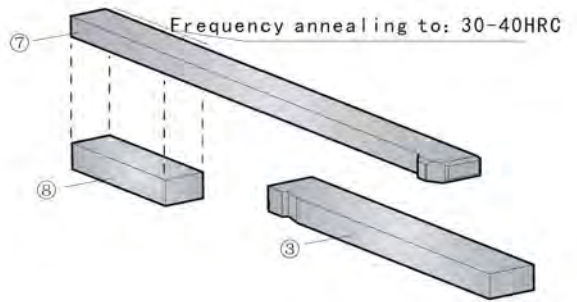
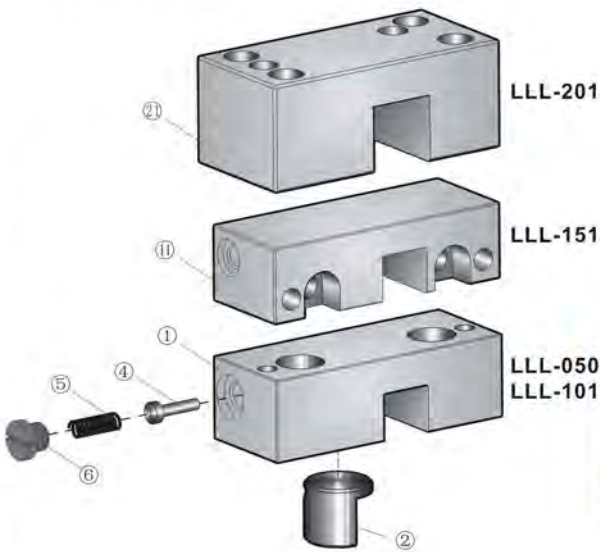
Code	T	T ₁	T ₂	T ₃	T ₄	U	V	W	M	Mounting screws	@ ¥ /P
LLL-050	0.5	0.585	0.59	0.125	0.59	1.75	0.295	0.5	7	5/16	
LLL-101	0.825	0.967	0.977	0.1875	0.977	3	0.488	0.875	10	0.5	
LLL-151	1.255	1.465	1.475	0.275	1.475	4.5	0.995	1.5	16		

- Electric pins
- Electric jaws
- Slide rail/liners
- Interlocks
- Latch locks
- Rolling gates
- Door stamps
- Air valves series
- Escisor series
- Cooling elements
- Locating parts
- Springs series
- Guide pins
- Guide bush
- Water plate series
- Chuck series
- Mold processors

AISI

Latch locks

Product space chart:



Pos	Parts name	Material	Hardness
1	Housing	718H	28-38HRC
11	Control Bracket	718H	28-38HRC
21			
2	Roller insert	SKD61	52± 2HRC
3	Control bar	718H	Surface nitrided
7	Latch bar	Cr12MoV	55-58HRC
8	Spacer	S45	-

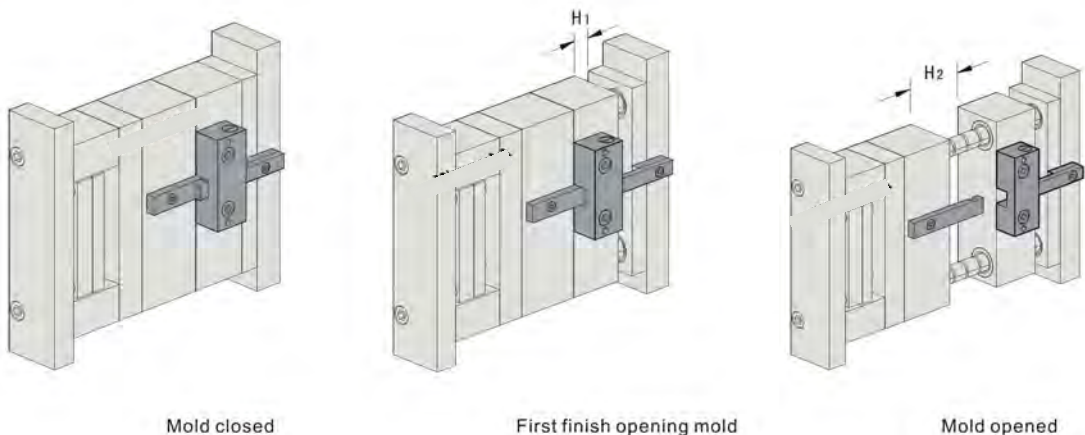


Installation Guidelines:

- Body parallel to joint face installed on fixed mould plate, bar vertical on joint face installed on removable mould plate, please notes when install this bar ensure mould in closed mould, at the same eliminate the space between bar and roller inserts.
- These parts of Latch lock have to symmetrical install on the mould ,According to stroke to confirm bar length, Guarantee various parts accurate installation and running, then to do bar and installed in dowel pin holes.
- Every mould suggest to symmetrical installed 4sets, please notes precision control make stroke same during opening mould, if no symmetrical install or different stroke will make single set latch lock get force, imbalance force will cause lath lock break.
- Coordinate function test, check these parts of latch lock structure whether smoothly and stroke coincide or not.
- First remove latch lock device to follow-up operation if need maintenance and change.



Functional chart:

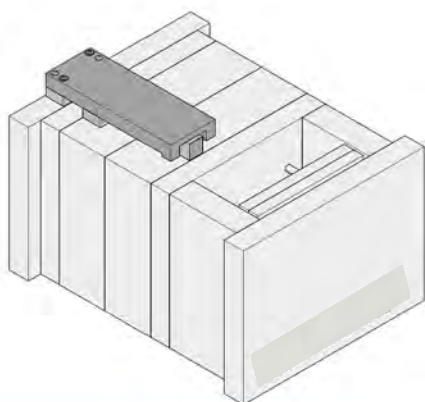
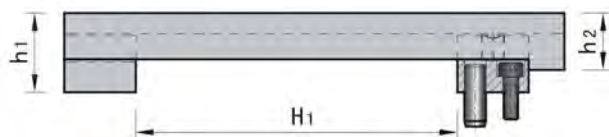
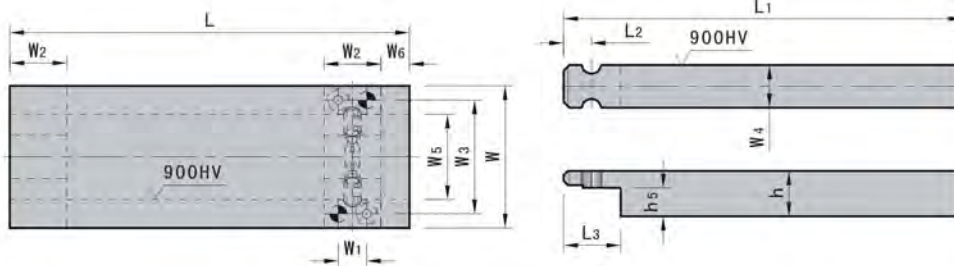


Mold closed

First finish opening mold

Mold opened

ZZ174



Features:

1. Due to double-sided locking system ,safe and reliable.
2. The key parts are made of SKD11,with high wearproof ,more durable.
3. With the extended HV stroke latch bar ,extensively usage.
4. Big locking force .choose corresponding quantity and code according to mould size and load.
(reserve three code to choose)

Order ZZ174-W-H1

W	H1		L	L1	L2	L3	Dowel pin	Pulling force Max. F (kgf)	Mounting screws
	max.	min.							
50	90	4	140	140	9.75	20	6×20	1600	M4×12
	130		180						
80	117	5.5	200	200	16.75	34	8×24	2700	M6×16
	167		250						
100	145	7	250	250	22.25	45	8×24	4800	M8×18
	195		300						

W1	W2	W3	W4	W5	h	h1	h2	h5	@ ¥ /P
10	20	40	15	30.05	16	22.3	16	10	
16	34	60	20	40.05	21	30.3	22	13	
22	45	80	25	60.05	27	37.5	27	16	

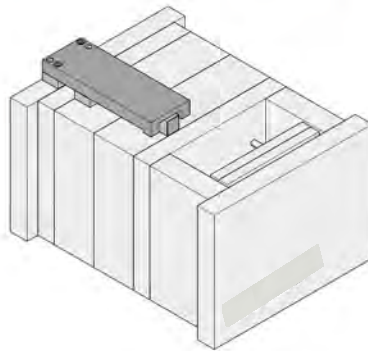
kgf=N × 0.101972

- Escisor pins series
- Slide rail series
- Latch locks series
- Pulling gate series
- Dome stamps /Air valves series
- Escisor series
- Cooling elements series
- Locating parts series
- Springs series
- Guide pins /Guide bush series
- Guide pins /Water plate series
- Chuck series
- Mold accessories

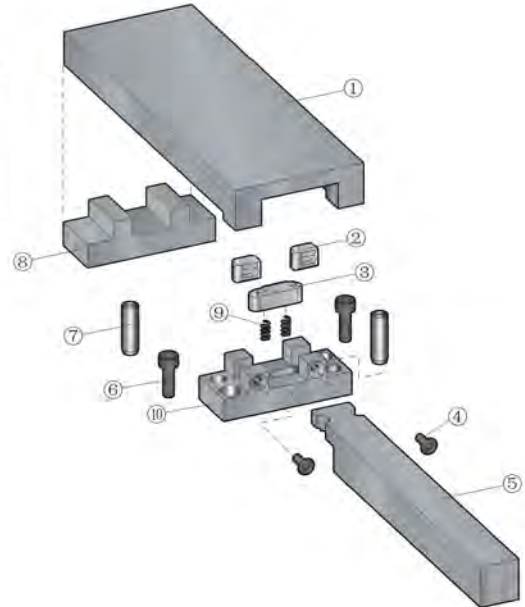
DIN

Latch locks

ZZ174



Product space chart:



Pos	Parts name	Material	Hardness
1	Control Bracket	718H	≈900HV
2	Catch	SKD11	58-62HRC
3	Stop		
5	Latch bar	718H	28-38HRC
8	Spacer	S45C	-
10	Catch housing	718H	28-38HRC



Installation Guidelines:

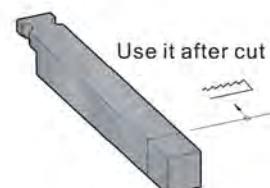
- Installed ball slide ,request parallel with joint face to install.
- Installed insert bar ,cut off insert bar length according to real demand .and processing screw holes . make sure mould completely closed mould before locking screw .at the same eliminate the space between insert bar and ball .then to do with dowel pin holes.
- Ball slide and insert bar symmetrical install on the mould ,According to stroke to confirm body length. Ensure various parts install correctly and normal running,then to do with body and install fixed position dowel pin holes.
- Every mould suggest to symmetrical installed 2sets or above 2sets ,please notes same stroke and symmetrical install during opening mould ,if no symmetrical install or different stroke will cause latch lock break.
- Coordinate function test ,check these parts of latch lock structure whether smoothly and stroke coincide or not.
- First remove latch lock device to follow-up operation if need maintenance and change.

Body cut off drawing:



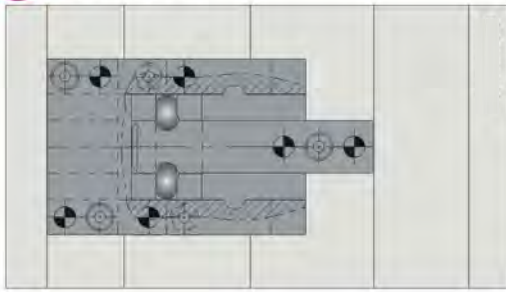
Use it after cut off this end

Insert bar cut off drawing:

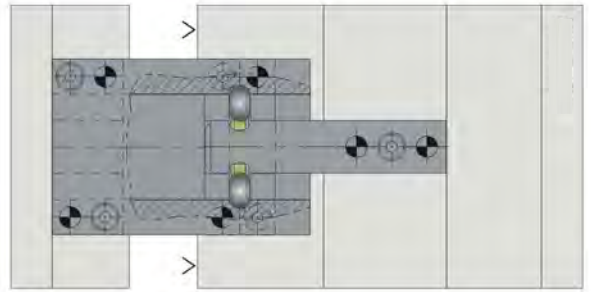


Use it after cut off this end

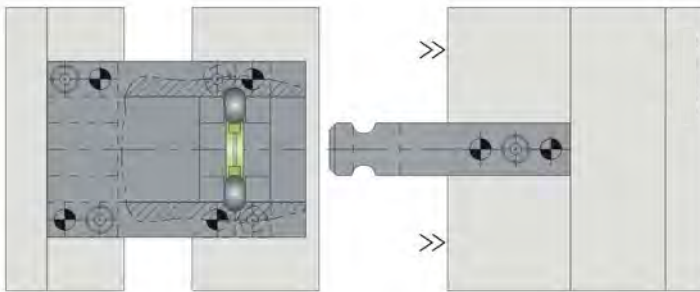
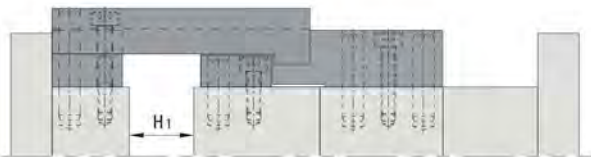
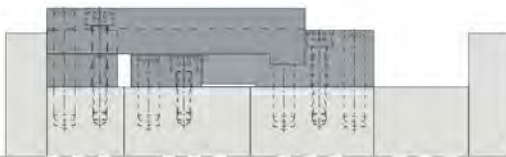
Functional chart:



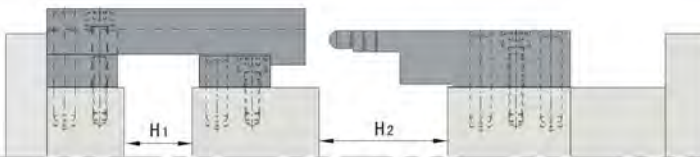
Mold closed



Drawing 2 first opening (closed) mould finished



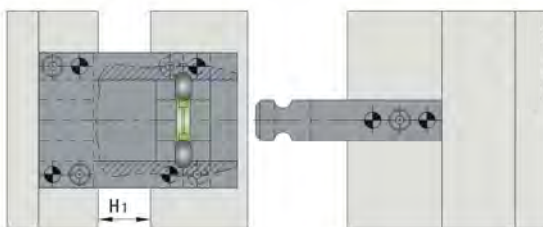
Second opening mould



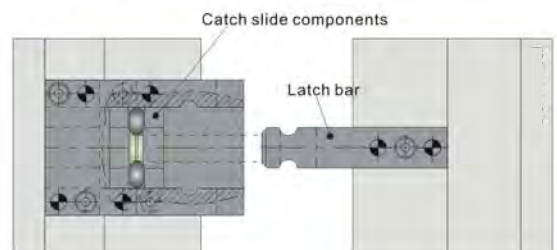
This latch lock with control opening and closed mould function opening mould sequence:
drawing 1>drawing 2>drawing 3
closed mould sequence :
drawing 3>drawing 2>drawing 1

Warning:

As below drawing show, when insert bar release ball slide parts, must be sure ball slide in this A drawing position, otherwise will cause insert bar can't insert into ball slide and break latch lock mechanism.



A Right



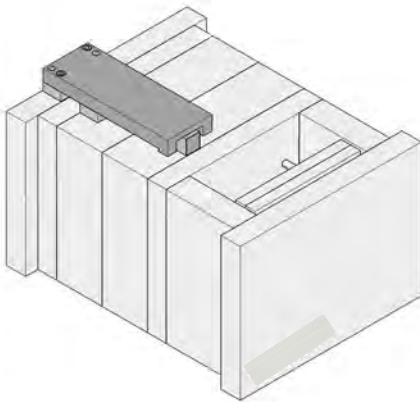
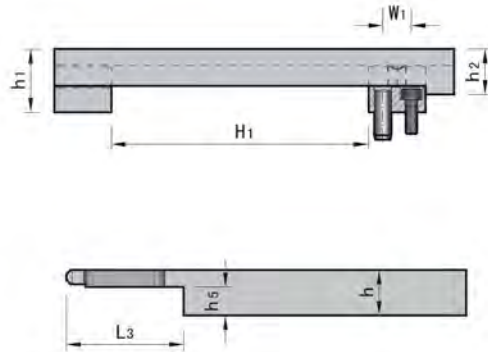
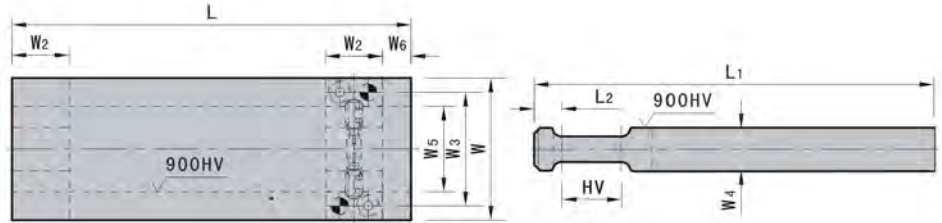
B Wrong

Extractor pins series
Slide rollers series
Latch locks series
Pouring gate series
Die stamps Air valves series
Extractor series
Cooling elements series
Locating parts series
Springs series
Guide pins Guide bush series
Guide strips Wear plate series
Chuck series
Mold accessories

DIN

Latch locks

ZZ174



Features:

- 1.1. Due to double-sided locking system, safe and reliable.
2. The key parts are made of SKD11, with high wearproof, more durable.
3. With the extended HV stroke latch bar, extensively usage.
4. Big locking force. choose corresponding quantity and code according to mould size and load. (reserve three code to choose)

Order ZZ174-W-H1-Hv

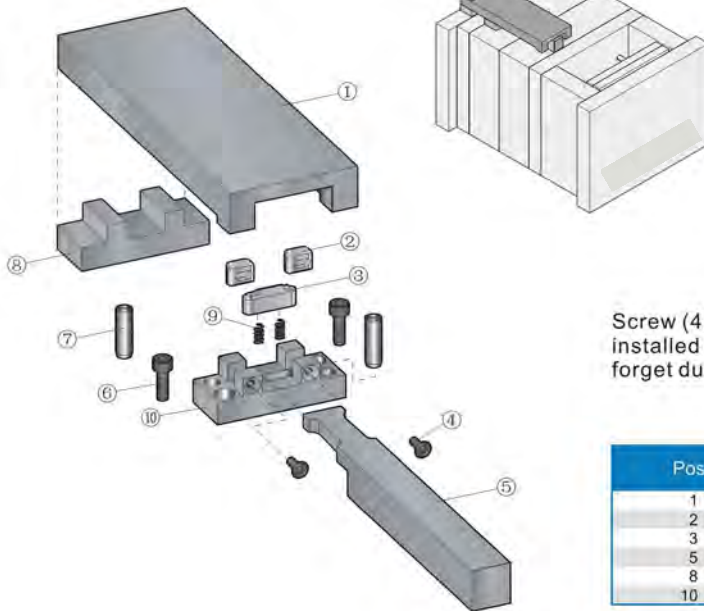
W	H1		Hv	L	L1	L2	L3	Dowel pin	Pulling force MaX. F(kgf)	Mounting screws
	max.	min.								
50	90	4	20	140	140	9.75	20	6×20	1600	M4×12
	130		50	180	180					
80	117	5.5	32	200	200	16.75	34	6×20	2700	M6×16
	167		75	250	250					
100	145	7	50	300	300	22.25	45	8×24	4800	M8×18
	195		80	300	300					

W1	W2	W3	W4	W5	h	h1	h2	h5	@ ¥ /P
10	20	40	15	30.05	16	22.3	16	10	
16	34	60	20	40.05	21	30.3	22	13	
22	45	80	25	60.05	27	37.5	27	16	

kgf=N × 0.101972

ZZ174

Product space chart:



Screw (4) no real application function, before latch lock installed on the mould, prevent ball side (2) drop out or forget during installing.

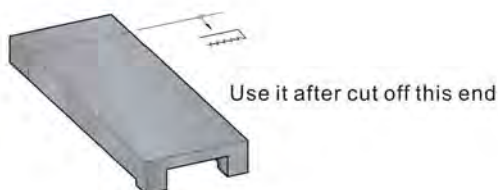
Pos	Parts name	Material	Hardness
1	Control Bracket	718H	≈900HV
2	Catch	SKD11	58-62HRC
3	Stop		
5	Latch bar	718H	28-38HRC
8	Spacer	S45C	-
10	Catch housing	718H	28-38HRC



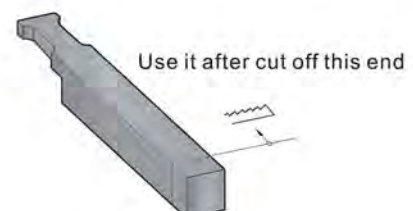
Installation Guidelines:

- Installed ball slide, request parallel with joint face to install.
- Installed insert bar, cut off insert bar length according to real demand and processing screw holes. mould HV stroke in completely opening condition. at the same eliminate the space between insert bar and ball then to do with dowel pin holes.
- Ball slide and insert bar symmetrical install on the mould, According to stroke to confirm body length. Ensure various parts install correctly and normal running, then to do with body and install fixed position dowel pin holes.
- Every mould suggest to symmetrical installed 2sets or above 2sets, please notes same stroke and symmetrical install during opening mould, if no symmetrical install or different stroke will cause latch lock break.
- Coordinate function test, check these parts of latch lock structure whether smoothly and stroke coincide or not.
- First remove latch lock device to follow-up operation if need maintenance and change.

Body cut off drawing:



Insert bar cut off drawing:

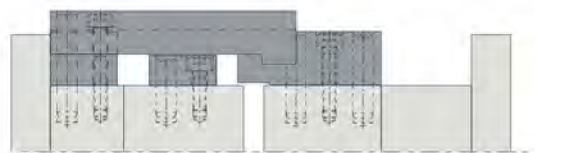
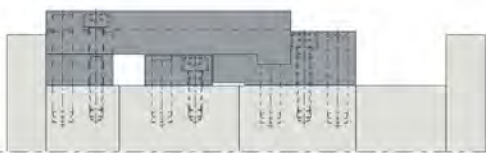
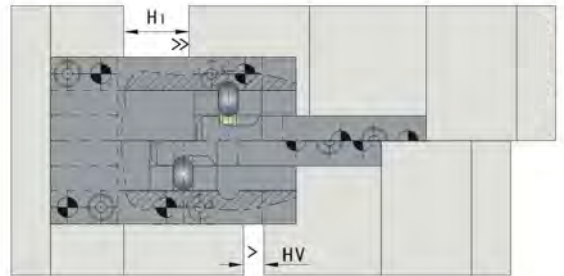
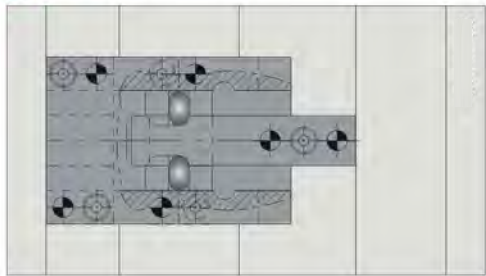


DIN

Latch locks

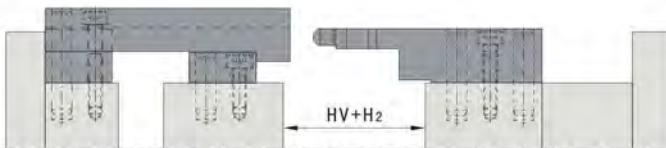
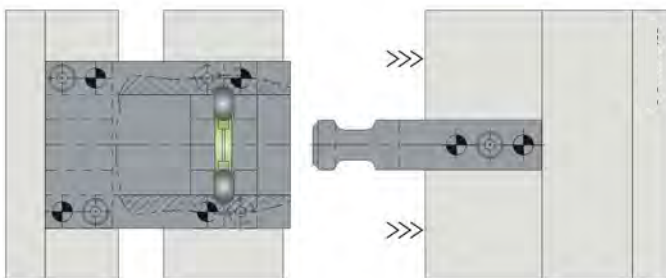


Functional chart(Hv):



Mold closing

Drawing 2 first opening (closed) mould finished

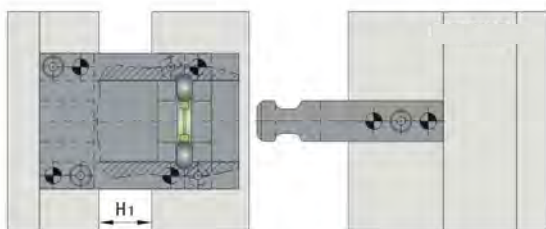


Second opening mould

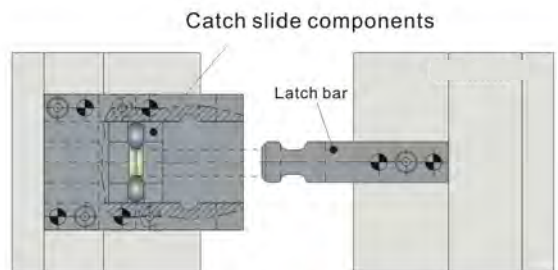
This latch lock with control opening and closed mould function:
 opening mould sequence:
 drawing 1>drawing 2>drawing 3
 closed mould sequence:
 drawing 3>drawing 2>drawing 1

Warning:

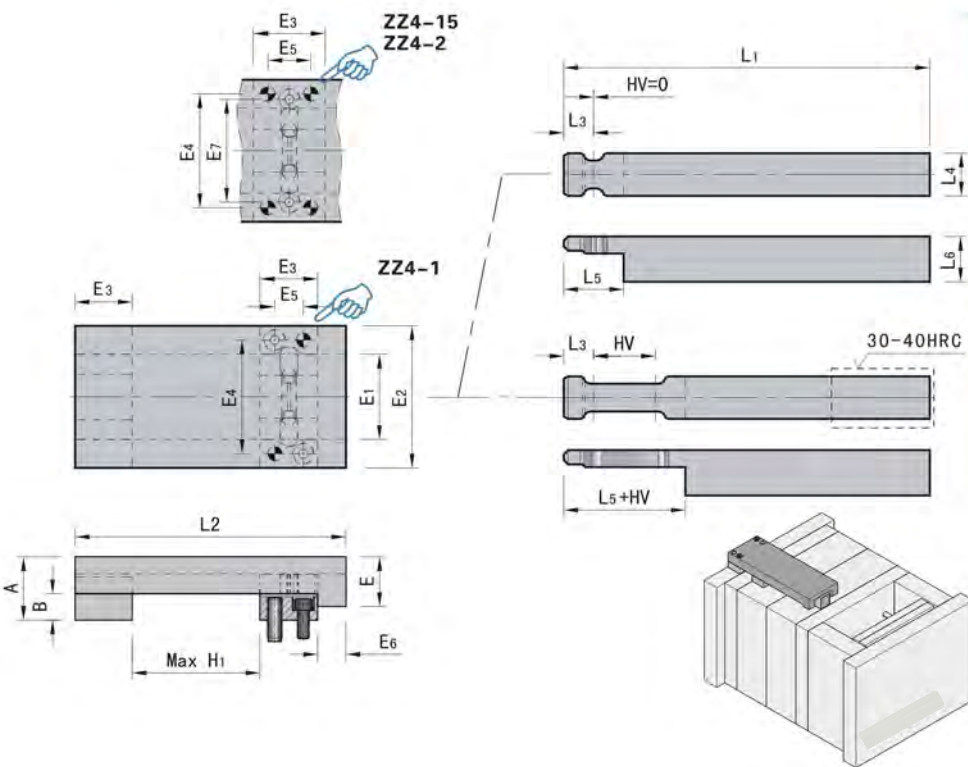
As below drawing show, when insert bar release ball slide parts. must be sure ball slide in this A drawing position, otherwise will cause insert bar can't insert into ball slide and break latch lock mechanism.



A Right



B Wrong



Features:

1. Due to double-sided locking system, safe and reliable .
2. The end of insert bar high frequency annealing treatment ,easy to install and processing.
3. With the extended HV stroke latch bar ,extensively usage.

Order ZZ4-1-0-0

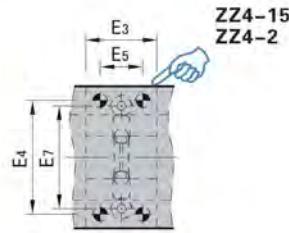
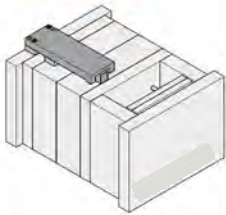
E2	Hv	A	B	H1	E	E1	E3	E4	E5	E6
50	0	22.3	9.3	96	17.5	30	20	40	10	10
	25									
	50									
	75									
75	0	30.3	12.3	121	23.5	45	30	65	20	15
	25									
	50									
	75									
90	0	37.5	15.5	159	29	60	36	74	25	
	25									
	50									
	75									

Code	E7	L1	L2	L3	L4	L5	L6	Dowel pin	Mounting screws	@ ¥ /P
ZZ4- 1- 0-0	-	146	146	10	15	21	16	Ø5×16	M4×12	
ZZ4- 1-25-0										
ZZ4- 1-50-0										
ZZ4- 1-75-0										
ZZ4-15- 0-0	56	196	196	15	20	31	21	Ø5×20	M8×16	
ZZ4-15-25-0										
ZZ4-15-50-0										
ZZ4-15-75-0										
ZZ4- 2- 0-0	74	246	246	18	25	38	27	Ø6×20	M8×20	
ZZ4- 2-25-0										
ZZ4- 2-50-0										
ZZ4- 2-75-0										

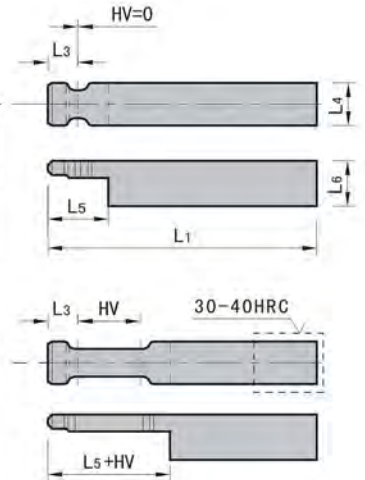
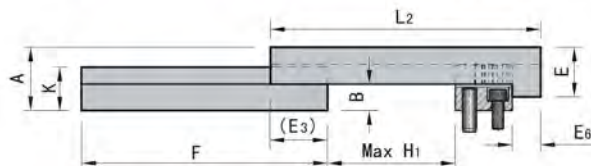
DIN

Latch locks

ZZ4



ZZ4-1



Features:

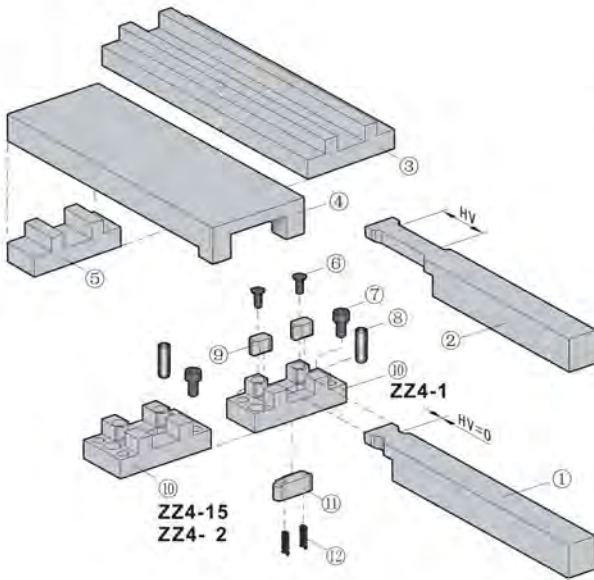
1. Due to double-sided locking system, safe and reliable.
2. The end of insert bar high frequency annealing treatment.easy to install and processing.
3. With the extended HV stroke latch bar, extensively usage.

Order ZZ4-1-0-41

E2	Hv	H1	A	B	F	E	E1	E3	E4	E5	E6	E7
50	0	96	22.3	9.3	146	17.5	30	20	40	10	10	-
	25											
	50											
	75											
75	0	121	30.3	12.3	196	23.5	45	30	65	20	15	56
	25											
	50											
	75											
90	0	159	37.5	15.5	246	29	60	36	74	25	15	74
	25											
	50											
	75											

Code	K	L1	L2	L3	L4	L5	L6	Dowel pin	Mounting screws	@ ¥/P
ZZ4- 1- 0-41	16	146	146	10	15	21	16	Ø5×16	M4×12	
ZZ4- 1-25-41										
ZZ4- 1-50-41										
ZZ4- 1-75-41										
ZZ4-15- 0-41	21	196	196	15	20	31	21	Ø5×20	M8×16	
ZZ4-15-25-41										
ZZ4-15-50-41										
ZZ4-15-75-41										
ZZ4- 2- 0-41	27	246	246	18	25	38	27	Ø6×20	M8×20	
ZZ4- 2-25-41										
ZZ4- 2-50-41										
ZZ4- 2-75-41										

Product space chart:



- 1.screw (6)no real application function, before latch lock installed on the mould , prevent ball slide (9)drop out or forget during installing.
- 2.ZZ4-15, ZZ4-2 compare with ZZ4-1 add 2pcs dowel pin.

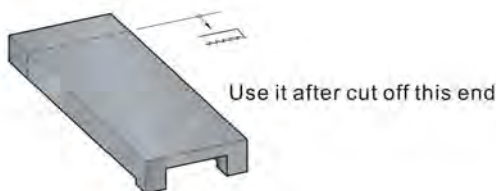
Pos	Parts name	Material	Hardness
1	Latch bar	Cr12MoV	55-58HRC
2	Spacer	S45C	-
3	Control Bracket	718H	≈900HV
4	Spacer	S45C	-
9	Catch	SKD11	58-62HRC
10	Catch housing	718H	28-38HRC
11	Stop	SKD11	58-62HRC



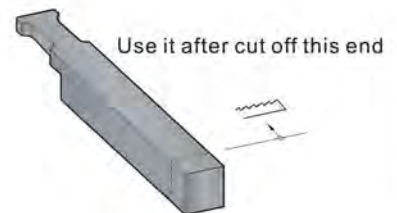
Installation Guidelines:

- Installed ball slide, request parallel with joint face to install.
- Installed insert bar, cut off insert bar length according to real demand.and processing screw holes. make sure mould is closed mould before locking tight the screw to do dowel pin holes.(Install insert bar with HV stroke, mould HV stroke shall be in completely opening condition. at the same eliminate the space between insert bar and ball .then to do with dowel pin holes.
- Ball slide and insert bar symmetrical install on the mould, According to stroke to confirm body length. Ensure various parts install correctly and normal running, then to do with body and install fixed dowel pin holes.
- Every mould suggest to symmetrical installed 2sets or above 2sets ,please notes same stroke and symmetrical install during opening mould ,if no symmetrical install or different stroke will cause lath lock break.
- Coordinate function test, check these parts of latch lock structure whether smoothly and stroke coincide or not.
- First remove latch lock device to follow-up operation if need maintenance and change.

Body cut off drawing:



Insert bar cut off drawing:



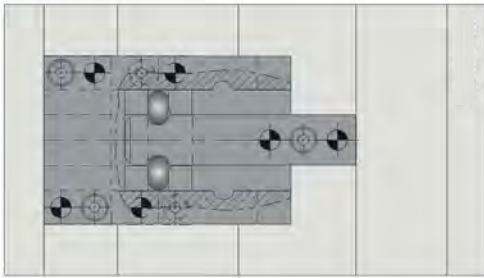
Electric parts series
Cylinder pin series
Latch locks series
Flanging gate series
Dome stamp series
Ejector series
Cooling inserts series
Locating pins series
Springs series
Guide pins series
Guide pins series
Water pipe series
Chuck series
Mold accessories

DIN

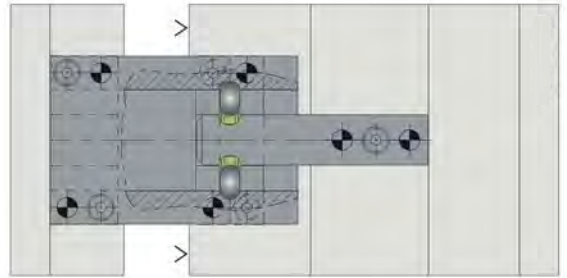
Latch locks



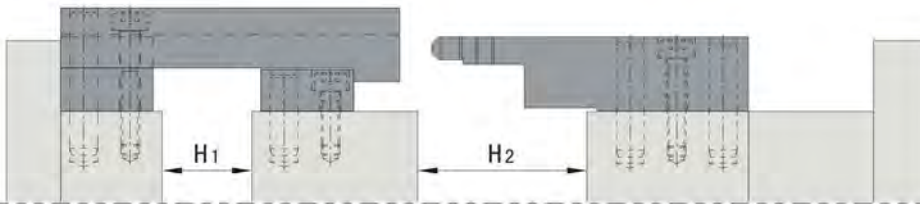
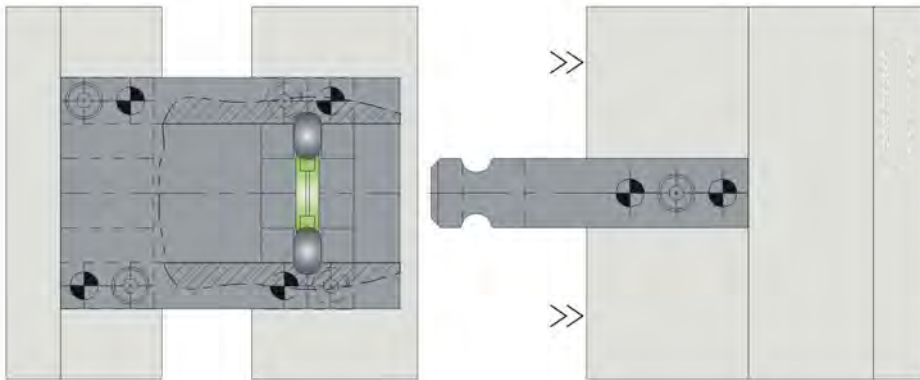
Functional chart(Hv=0):



Mold closed

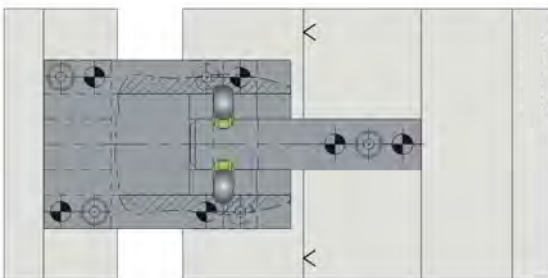


Second opening mould

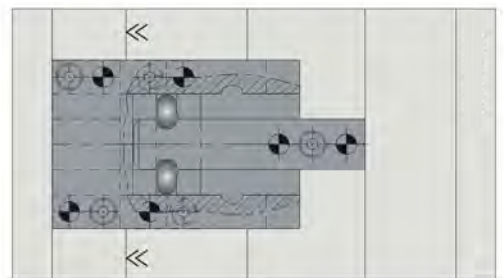


Second opening mould

This latch lock with control opening and closed mould function:
 opening mould
 sequence: drawing 1>drawing 2>drawing 3
 closed mould
 sequence: drawing 3>drawing 4>drawing 5



First closed mould finished



Closed mould

Functional chart(Hv):

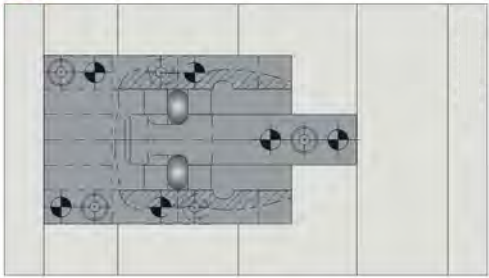


Diagram1 Mold closed

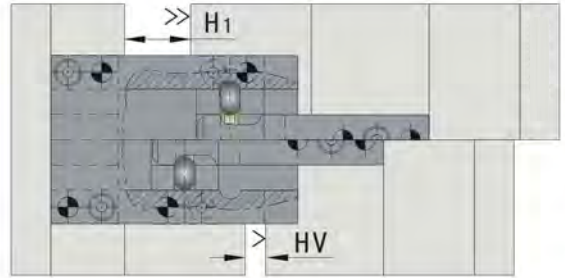


Diagram2: First finish opening(closed) mold

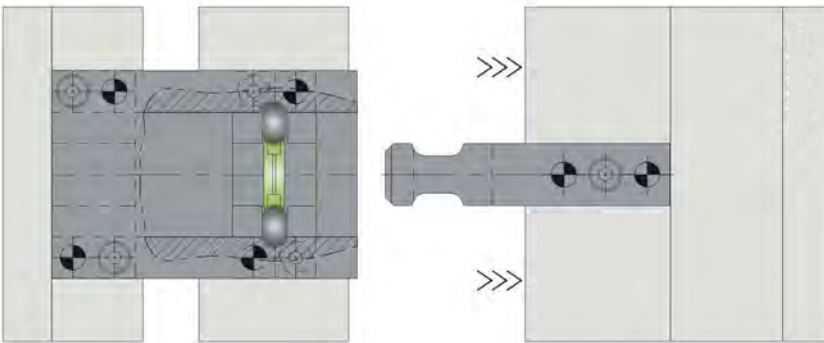
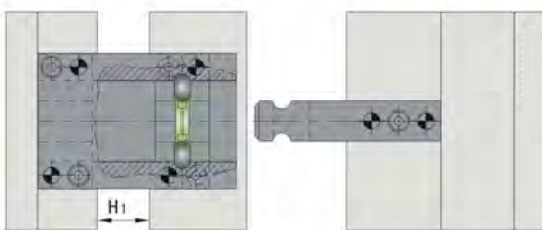


Diagram3: Second opening mould

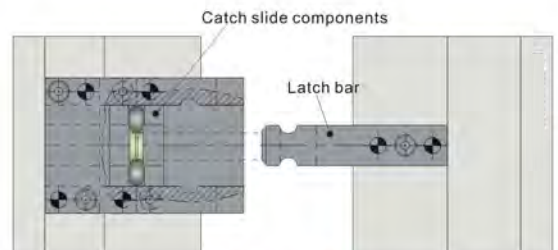
This latch lock with control opening and closed mould function:
 opening mould
 sequence: drawing 1>drawing 2>drawing 3
 closed mould
 sequence: drawing 3>drawing 2>drawing 1

Warning:

As below drawing show, when insert bar release ball slide parts must be sure ball slide in this A drawing position, otherwise will cause insert bar cant insert into ball slide and break latch lock mechanism.



A Right



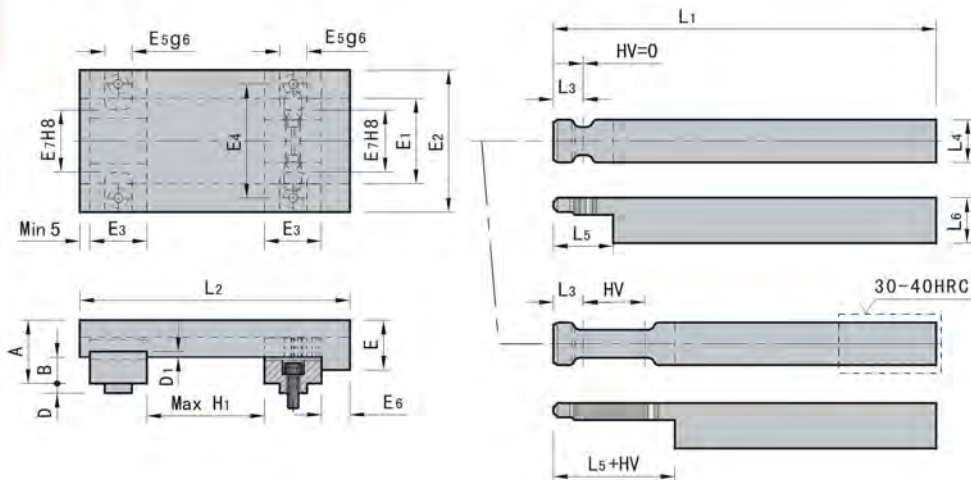
B Wrong

Extractor pins sleeves series
Slide railiners series
Latch locks series
Pouring gate series
Date stamps Av valves series
Extractor series
Cooling elements series
Locating parts series
Springs series
Guide pins Guide bush series
Guide strips Veebar plate series
Chuck series
Mold accessories

DIN

Latch locks

ZZ4



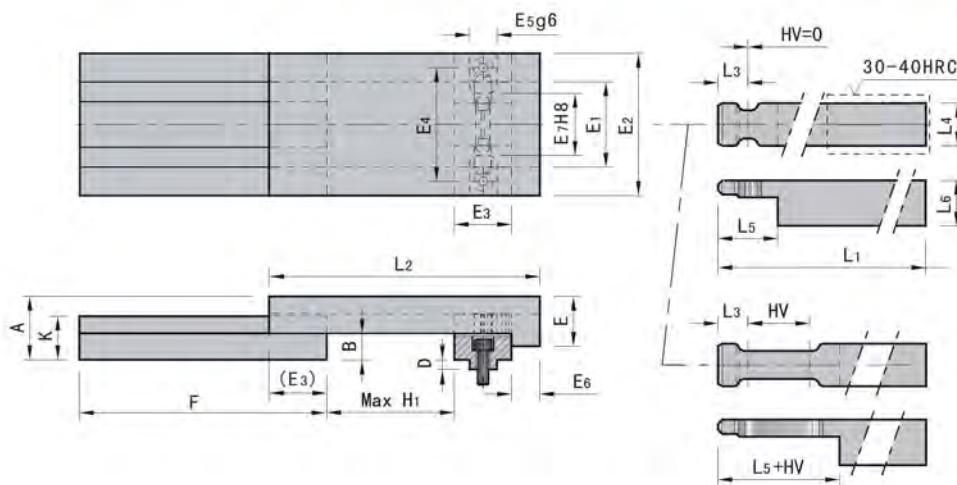
Features:

1. Due to double-sided locking system, safe and reliable.
2. The end of insert bar high frequency annealing treatment. easy to install and processing.
3. With the extended HV stroke latch bar, extensively usage.
4. Ball slide and the base of pad add a fixed position bulge, instead of traditional dowel pin to fixed position.

Order ZZ4-11-0-0

E2	Hv	H1	A	B	E	E1	E3	E4	E5	E6	E7
50	0	91	22.3	9.3	17.5	30	20	38	10	10	22
	25										
	50										
	75										
75	0	116	30.3	12.3	23.5	45	30	56	12	15	30
	25										
	50										
	75										
90	0	154	37.5	15.5	29	60	36	72	14	15	38
	25										
	50										
	75										

Code	D	D1	L1	L2	L3	L4	L5	L6	Mounting screws	@ ¥/P
ZZ4-11- 0-0	4	3	146	146	10	15	21	16	M 6×20	
ZZ4-11-25-0										
ZZ4-11-50-0										
ZZ4- 11-75-0										
ZZ4-16- 0-0	5	4.5	196	196	15	20	31	21	M 8×25	
ZZ4-16-25-0										
ZZ4-16-50-0										
ZZ4-16-75-0										
ZZ4-21- 0-0	6	6	246	246	18	25	38	27	M10×30	
ZZ4-21-25-0										
ZZ4-21-50-0										
ZZ4-21-75-0										



Features:

1. Due to double-sided locking system, safe and reliable.
2. The end of insert bar high frequency annealing treatment. easy to install and processing.
3. With the extended HV stroke latch bar, extensively usage.
4. Ball slide and the base of pad add a fixed position bulge, instead of traditional dowel pin to fixed position.

Order ZZ4-11-0-41

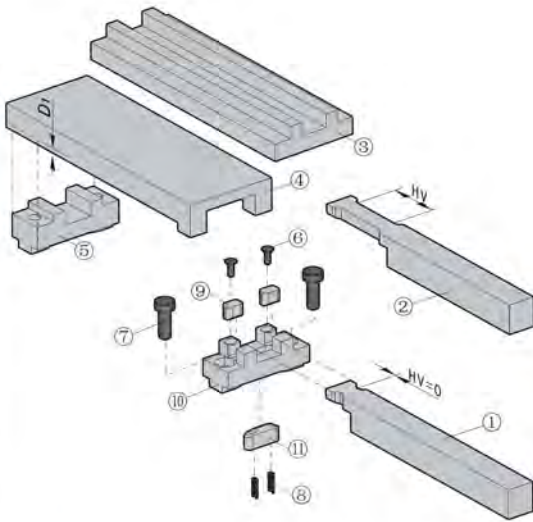
E2	Hv	H1	A	B	F	E	E1	E3	E4	E5	E6	E7
50	0	91	22.3	9.3	4	17.5	30	20	38	10	10	22
	25											
	50											
75	0	116	30.3	12.3	5	23.5	45	30	56	12	15	30
	25											
	50											
90	0	154	37.5	15.5	6	29	60	36	72	14	15	38
	25											
	50											
	75											

Code	K	L1	L2	L3	L4	L5	L6	D	Mounting screws	@ ¥/P
ZZ4-11- 0-41	16	146	146	10	15	21	16	4	M 6×20	
ZZ4-11-25-41										
ZZ4-11-50-41										
ZZ4-11-75-41	21	196	196	15	20	31	21	5	M 8×25	
ZZ4-16- 0-41										
ZZ4-16-25-41										
ZZ4-16-50-41	27	246	246	18	25	38	27	6	M10×30	
ZZ4-16-75-41										
ZZ4-21- 0-41										
ZZ4-21-25-41										
ZZ4-21-50-41										
ZZ4-21-75-41										



Latch locks

Product space chart:



Pos	Parts name	Material	Hardness
1	Latch bar	Cr12MoV	55-58HRC
2	Spacer	S45C	-
3	Control Bracket	718H	≈900HV
4	Spacer	S45C	-
5	Catch	SKD11	58-62HRC
9	Catch housing	718H	28-36HRC
10	Stop	SKD11	58-62HRC

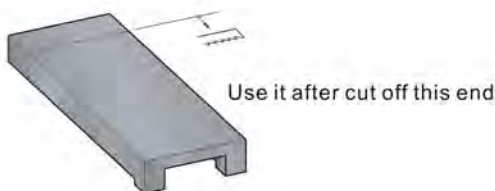
Screw (6) no real application function, before latch lock installed on the mould, prevent ball slide (9) drop out or forget during installing.



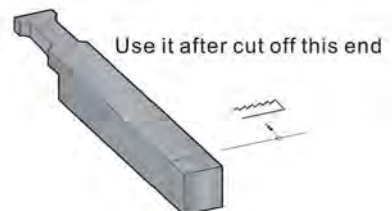
Installation Guidelines:

- Installed ball slide, request parallel with joint face to install.
- Installed insert bar, cut off insert bar length according to real demand. and processing screw holes. make sure mould is closed mould before locking tight the screw to do dowel pin holes. (Install insert bar with HV stroke, mould HV stroke shall be in completely opening condition. at the same eliminate the space between insert bar and ball. then to do with dowel pin holes.
- Ball slide and insert bar symmetrical install on the mould, According to stroke to confirm body length. Ensure various parts install correctly and normal running, then to do with body and install fixed dowel pin holes.
- Every mould suggest to symmetrical installed 2sets or above 2sets, please notes same stroke and symmetrical install during opening mould, if no symmetrical install or different stroke will cause latch lock break.
- Coordinate function test, check these parts of latch lock structure whether smoothly and stroke coincide or not.
- First remove latch lock device to follow-up operation if need maintenance and change.

Body cut off drawing:



Insert bar cut off drawing:



Functional chart(Hv=0):

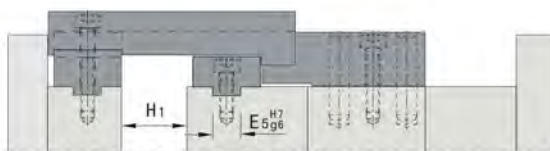
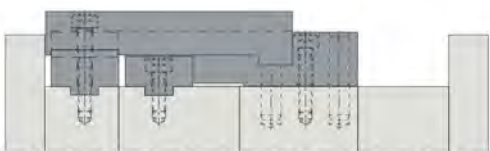
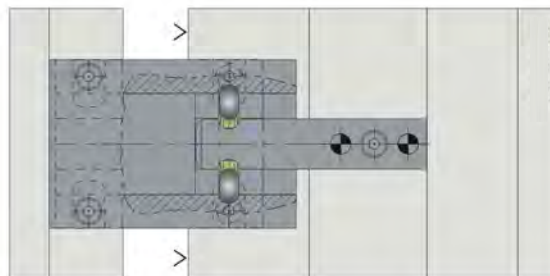
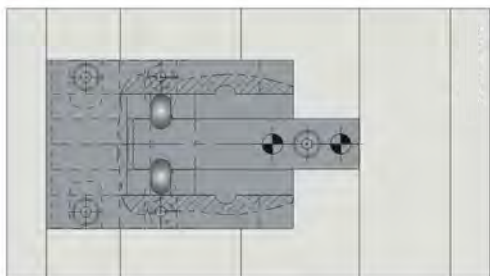


Diagram1: Mold closed

Diagram: First finish opening(closed) mold

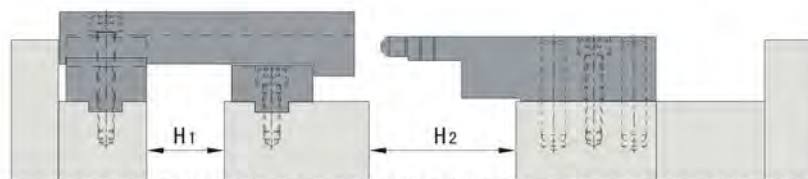
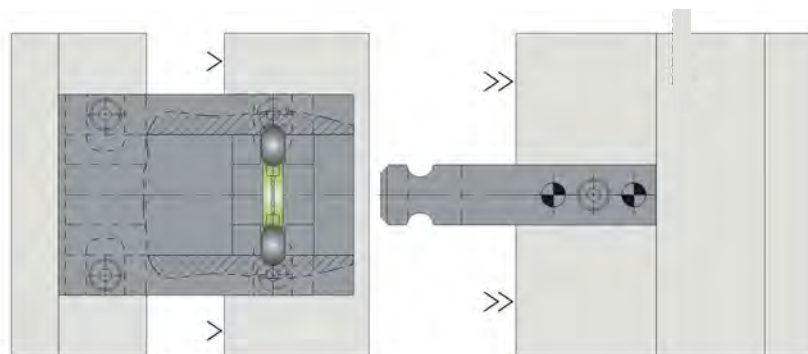
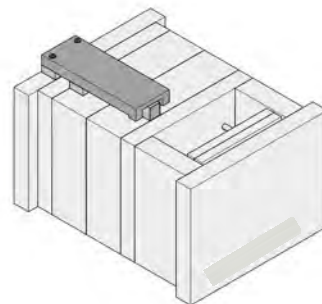


Diagram3: Second opening mould



This latch lock with control opening and closed mould function:
opening mould sequence: drawing 1>drawing 2>drawing 3
closed mould sequence: drawing 3>drawing 2>drawing 1

Ejector pins Ejector sleeves
Slide railers series
Latch locks series
Pouring gate series
Done stamps Air valves series
Ejector series
Cooling elements series
Locating parts series
Springs series
Guide pins Guide bush
Guide strips Wear plate series
Chuck series
Mold processors

DIN

Latch locks



Functional chart(Hv):

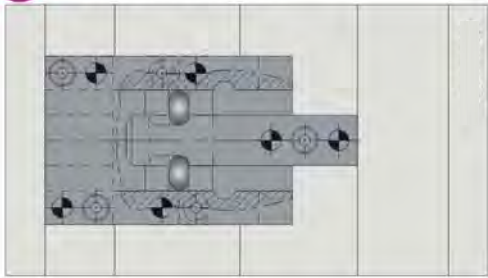


Diagram1: Mold closed

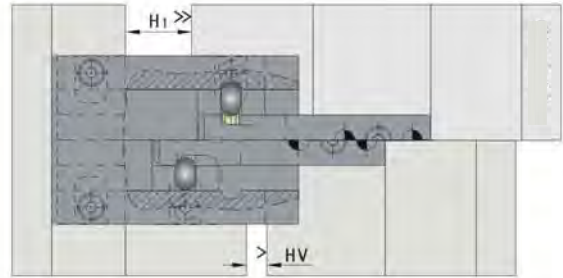


Diagram2: First finish opening(closed) mold

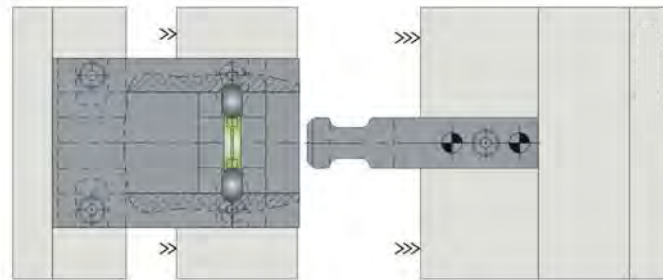
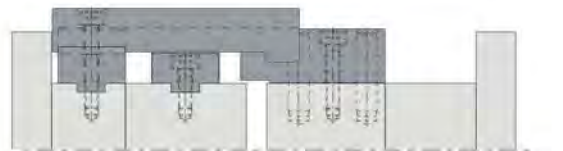
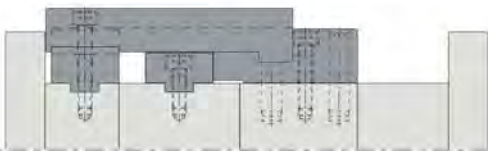
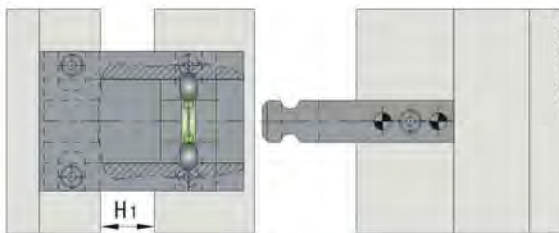


Diagram3: Second opening mould

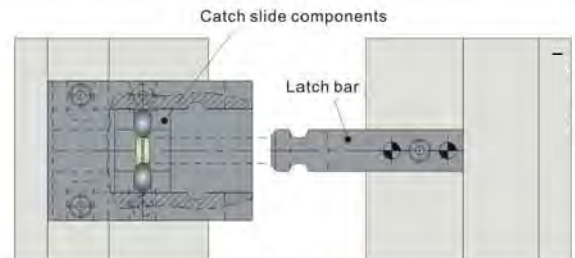
This latch lock with control opening and closed mould function:
 opening mould sequence:
 drawing 1>drawing 2>drawing 3
 closed mould sequence:
 drawing 3>drawing 2>drawing 1

Warning:

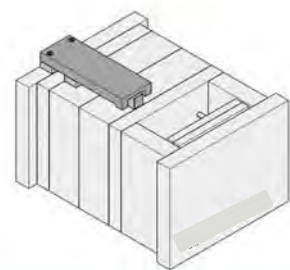
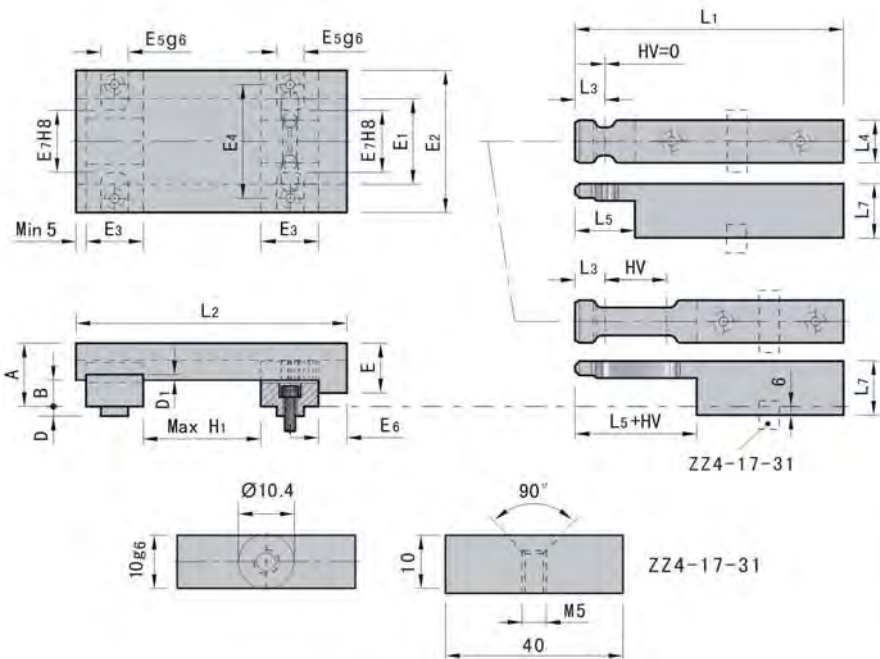
As below drawing show, when insert bar release ball slide parts must be sure ball slide in this A drawing position, otherwise will cause insert bar cant insert into ball slide and break latch lock mechanism.



A Right ✓



B Wrong ✗



Features:

1. Due to double-sided locking system, safe and reliable.
2. The end of insert bar high frequency annealing treatment, easy to install and processing.
3. With the extended HV stroke latch bar, extensively usage.

Order ZZ4-12-0-0

E2	Hv	H1	A	B	E	E1	E3	E4	E6	E6	E7
50	0	91	22.3	9.3	17.5	30	20	38	10	10	22
	25										
	50										
75	0	116	30.3	12.3	23.5	45	30	56	12	15	30
	25										
	50										
90	0	154	37.5	15.5	29	60	36	72	14	14	38
	25										
	50										
	75										

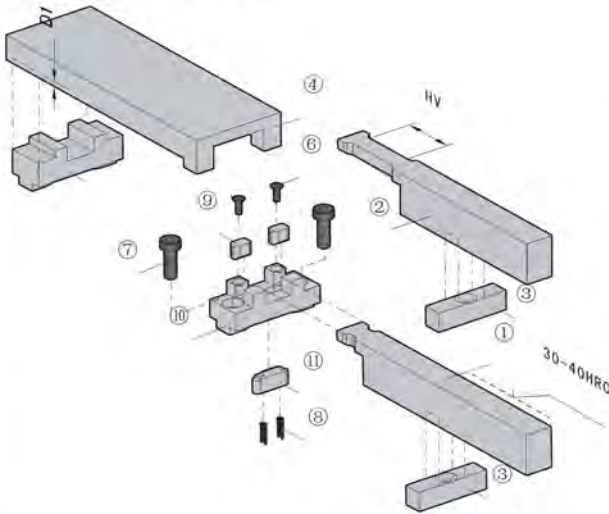
Code	D	D1	L1	L2	L3	L4	L5	L7	Mounting screws	@ ¥ / P
ZZ4-12- 0	4	3	146	146	10	15	21	22	M 6×20	
ZZ4-12-25										
ZZ4-12-50										
ZZ4-12-75	5	4.5	196	196	15	20	31	27	M 8×20	
ZZ4-17- 0										
ZZ4-17-25										
ZZ4-17-50	6	6	246	246	18	25	38	33	M10×30	
ZZ4-17-75										
ZZ4-22- 0										
ZZ4-22-25										
ZZ4-22-50										
ZZ4-22-75										

- Endor pins Endor series
- Slide rollers Series
- Latch locks Latch locks series
- Pouring gates Series
- Data stops Air valves series
- Endor series Endor series
- Locking elements Locking elements series
- Locking parts Locking parts series
- Springs series Springs series
- Guide pins Guide pins series
- Guide stops Wear plate series
- Chud-series Chud-series
- Mold accessories Mold accessories



Latch locks

Product space chart:



ZZ4-17-31

1. Screw (6) no real application function, before latch lock installed on the mould, prevent ball slide (9) drop out or forget during installing.
2. Use lock block can fixed position or self-processing dowel pin holes in insert bar.
3. The end of insert bar annealing treatment.

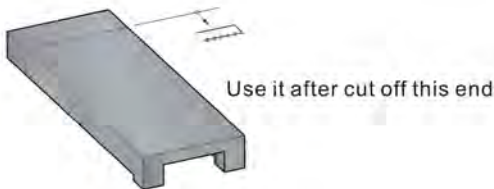
Pos	Parts name	Material	Hardness
1	Latch bar	Cr12MoV	55-58HRC
2	Parallel Key	S45C	-
3	Control Bracket	718H	=900HV
4	Control Bracket	718H	=900HV
5	Spacer	S45C	-
9	Catch	SKD11	58-62HRC
10	Catch housing	718H	28-38HRC
11	Stop	SKD11	58-62HRC



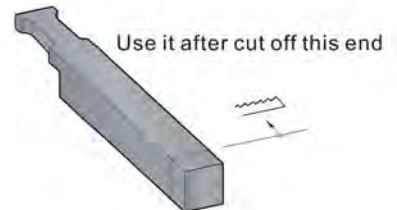
Installation Guidelines:

- Installed ball slide, request parallel with joint face to install.
- Installed insert bar, cut off insert bar length according to real demand, and processing screw holes. make sure mould is closed mould before locking tight the screw to do dowel pin holes. (Install insert bar with HV stroke, mould HV stroke shall be in completely opening condition. at the same eliminate the space between insert bar and ball. then to do with dowel pin holes.
- Ball slide and insert bar symmetrical install on the mould, According to stroke to confirm body length. Ensure various parts install correctly and normal running, then to do with body and install fixed dowel pin holes.
- Every mould suggest to symmetrical installed 2sets or above 2sets, please notes same stroke and symmetrical install during opening mould, if no symmetrical install or different stroke will cause latch lock break.
- Coordinate function test, check these parts of latch lock structure whether smoothly and stroke coincide or not.
- First remove latch lock device to follow-up operation if need maintenance and change.

Body cut off drawing:



Insert bar cut off drawing:



Functional chart:

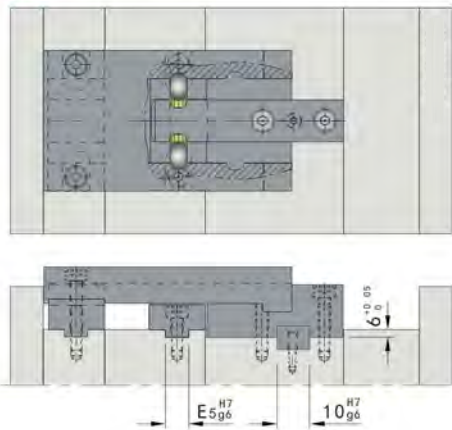


Diagram1: Mold closed

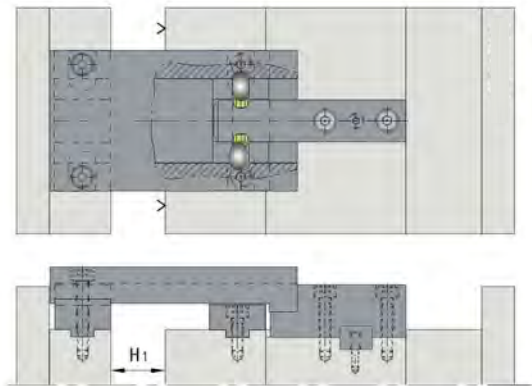


Diagram2: First finish opening mold

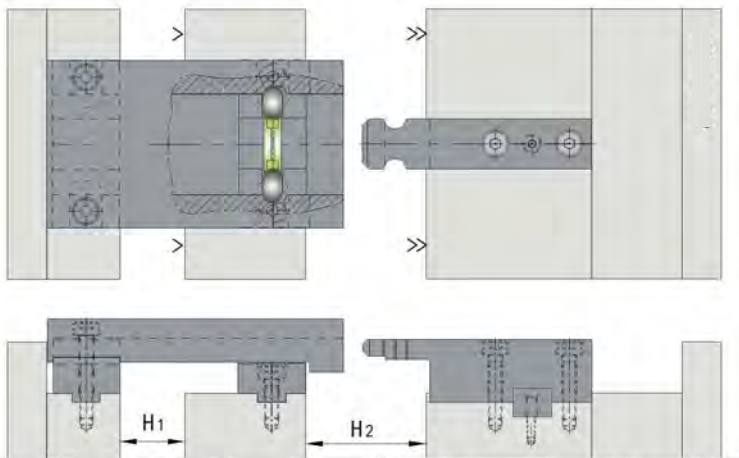
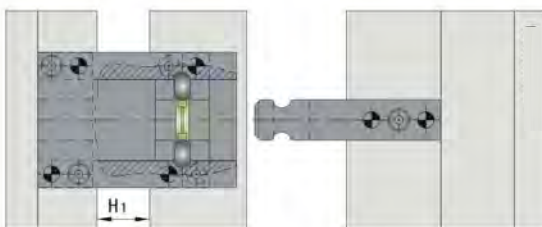


Diagram3: Second opening mould

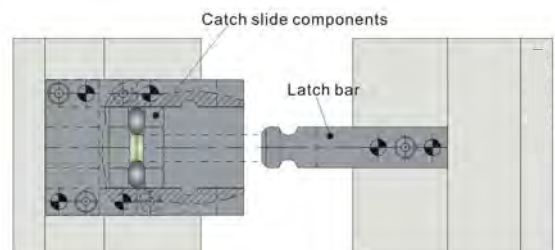
This latch lock with control opening and closed mould function:
opening mould sequence:
drawing 1>drawing 2>drawing 3
closed mould sequence:
drawing 3>drawing 2>drawing 1

Warning:

As below drawing show, when insert bar release ball slide parts must be sure ball slide in this A drawing position, otherwise will cause insert bar cant insert into ball slide and break latch lock mechanism.



A Right

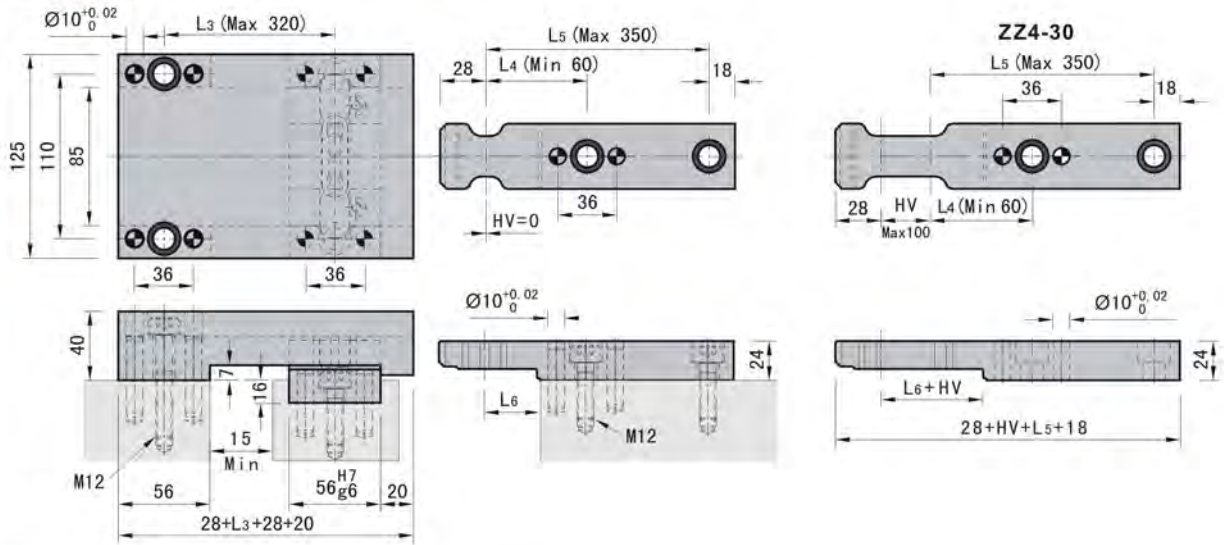


B Wrong

Extractor pins series
Slide rail/liners series
Latch locks series
Pouring gate series
Done stamps Air valves series
Extractor series
Cooling elements series
Locating parts series
Springs series
Guide pins Guide push series
Guide strips Water plate series
Chuck series
Mold accessories

DIN

Latch locks

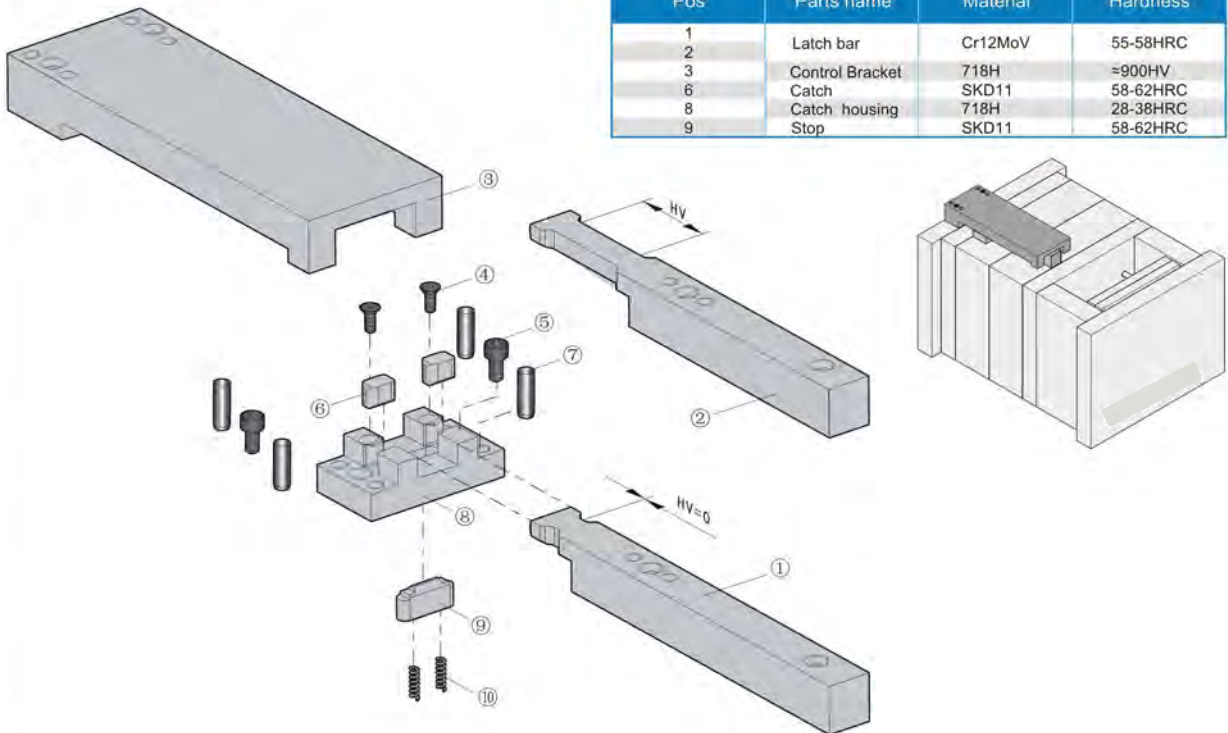


Order ZZ4-30-Hv-L3-L4-L5-L6

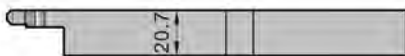
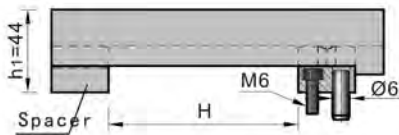
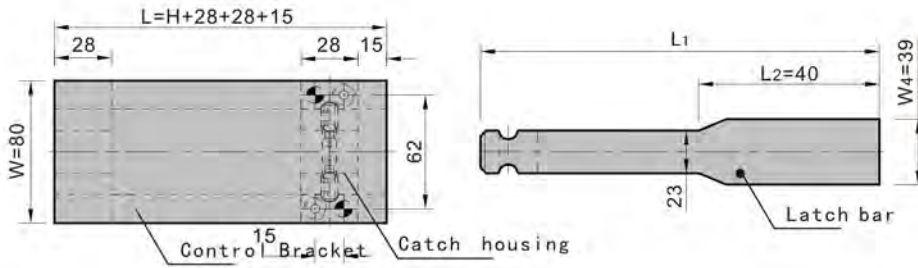
Features:

1. Due to double-sided locking system, safe and reliable.
2. This code is ZZ4 series enhanced latch lock, bigger locking force, apply to big mould.
3. With the extended HV stroke latch bar, extensively usage.

Product space chart:



Pos	Parts name	Material	Hardness
1			
2	Latch bar	Cr12MoV	55-58HRC
3	Control Bracket	718H	≈900HV
6	Catch	SKD11	58-62HRC
8	Catch housing	718H	28-38HRC
9	Stop	SKD11	58-62HRC



MLL



Order MLL-H-L1



Features:

1. MLL is enhanced latch lock for the ZZ174, The principle of design and application same as ZZ174.
2. Locking force is bigger than ZZ174 standard parts, apply to large household electrical, automobile mould ect.
3. Stroke "H" can custom made according request, Break through stroke limit compare with ZZ174 standard.

Installation Guidelines:

- Installed ball slide, request parallel with joint face to install.
- Installed insert bar, processing screw holes. make sure mould is closed mould before locking screw. at the same eliminate the space between insert bar and ball, then to do dowel pin holes.
- Ball slide and insert bar symmetrical install on the mould. Ensure various parts install correctly and normal running, then to do with body and install fixed dowel pin holes.
- Every mould suggest to symmetrical installed 2sets or above 2sets ,please notes same stroke and symmetrical install during opening mould ,if no symmetrical install or different stroke will cause lath lock break.
- Coordinate function test, check these parts of latch lock structure whether smoothly and stroke coincide or not.
- First remove latch lock device to follow-up operation if need maintenance and change.



Latch locks



Functional chart:

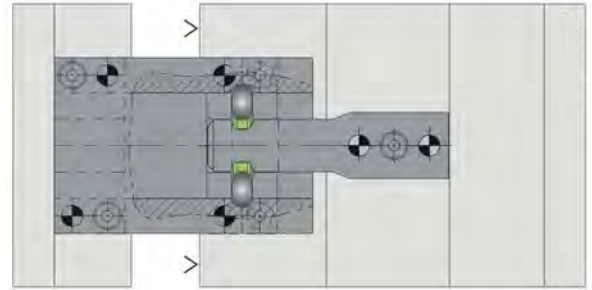
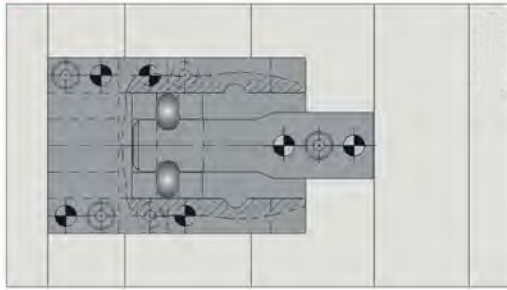


Diagram1: Mold closed

Diagram2: First finish opening (closed) mold

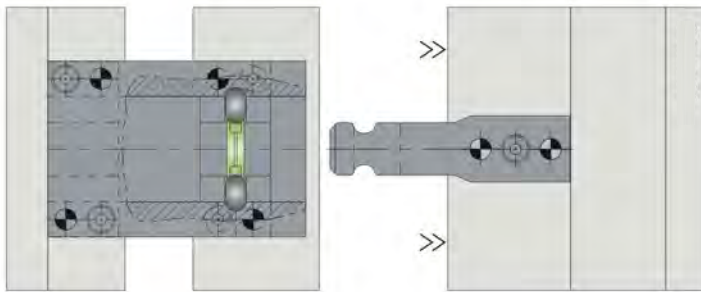
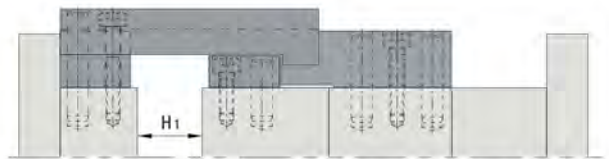
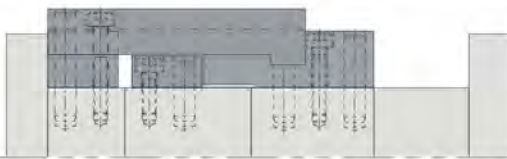
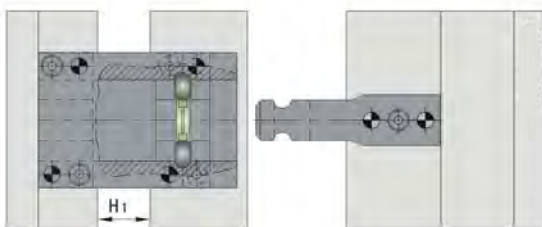


Diagram3: Second opening mould

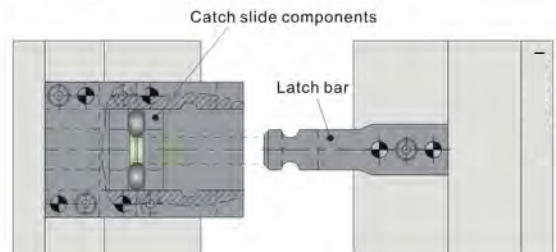
This latch lock with control opening and closed mould function:
 opening mould sequence:
 drawing 1>drawing 2>drawing 3
 closed mould sequence:
 drawing 3>drawing 2>drawing 1

Warning:

As below drawing show, when insert bar release ball slide parts, must be sure ball slide in this A drawing position, otherwise will cause insert bar cant insert into ball slide and break latch lock mechanism.

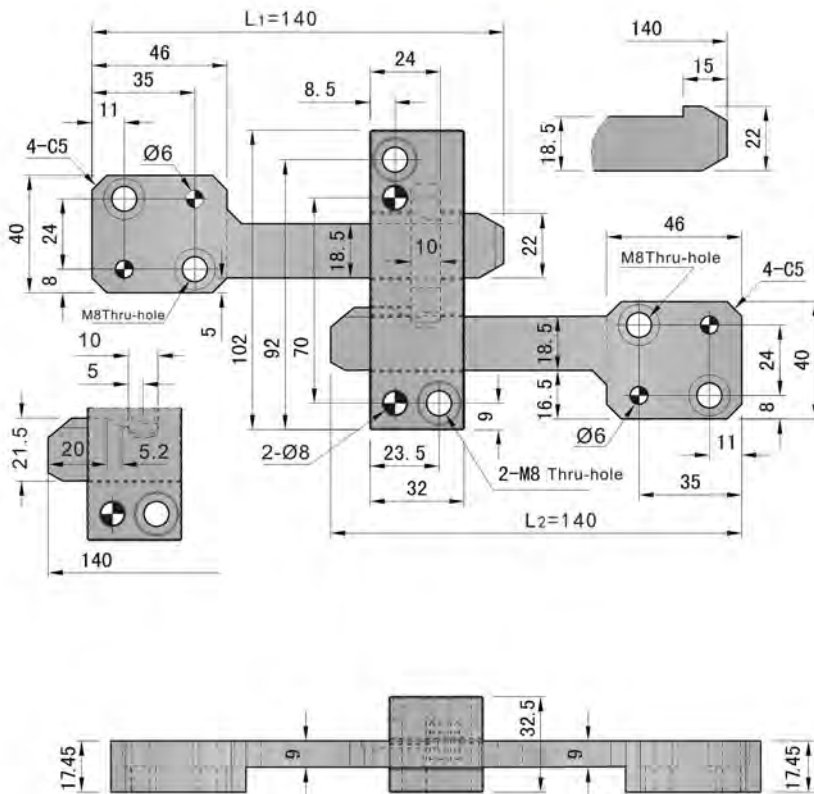


A Right

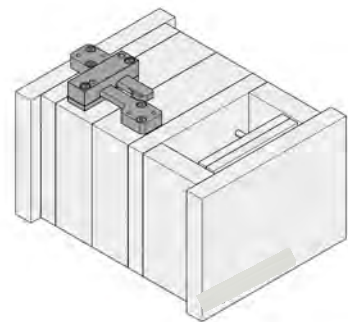


B Wrong

SLL



Order SLL-L1-L2



Features:

- 1.SLL is enhanced latch lock for the ZZ171, The principle of design and application same as ZZ171.
- 2.Locking force is bigger than ZZ171 standard parts, apply to large household electrical, automobile mould ect.
- 3.Stroke can custom made according request, Break through stroke limit compare with ZZ171 standard.

Installation Guidelines:

- First install body, request parallel with joint face to install .
- Installed insert bar, processing screw holes. Locking tight screw under mould is closed mould situation (notes: Make sure mould is closed mould situation before fixed bar. eliminate the space between bar and slide, then lock tight screw.
- Perpendicular to joint face to install bar.
- Every mould suggest to symmetrical installed 2sets or above 2sets, please notes same stroke and symmetrical install during opening mould ,if no symmetrical install or different stroke will cause lath lock break.
- This latch lock only apply to opening mould sequence request.
- First remove latch lock device to follow-up operation if need maintenance and change.
- After finish installed, please slowly to proceed opening or closed sequence test in closing device or injection machine to confirm right .(not suggest use hoist, because hoist easy lead to imbalance)



Latch locks

SLL



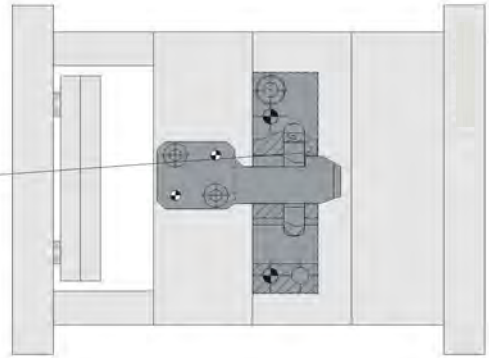
Installation Diagram:



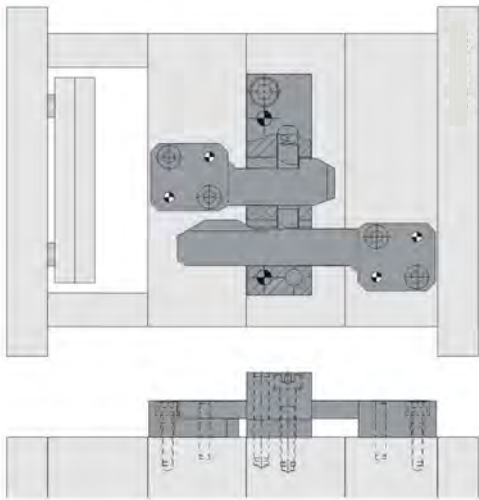
Space



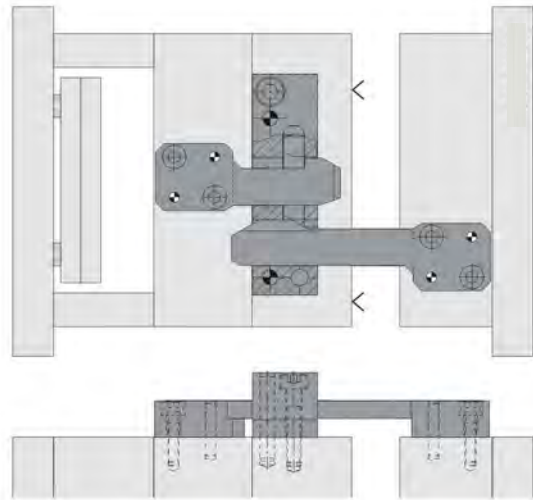
No space



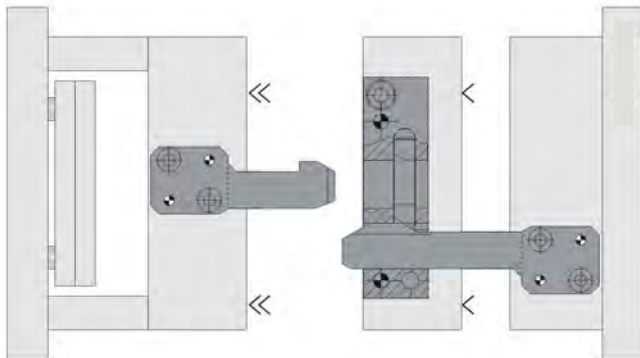
Functional chart:



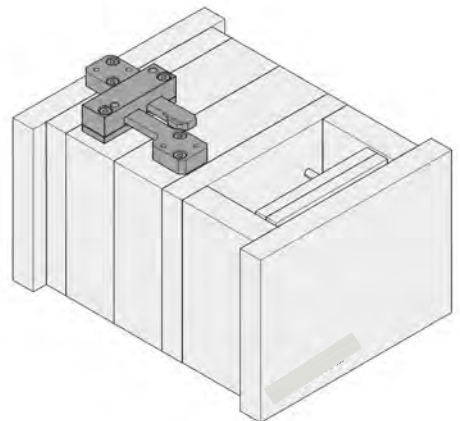
Mold closing



First finish opening mold

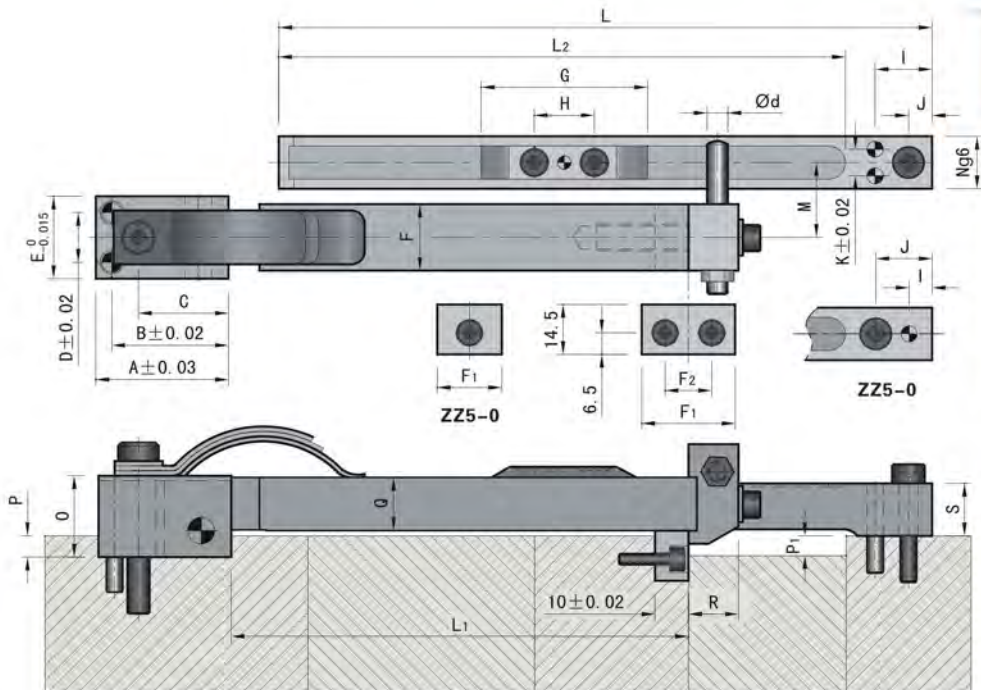


Mold opened



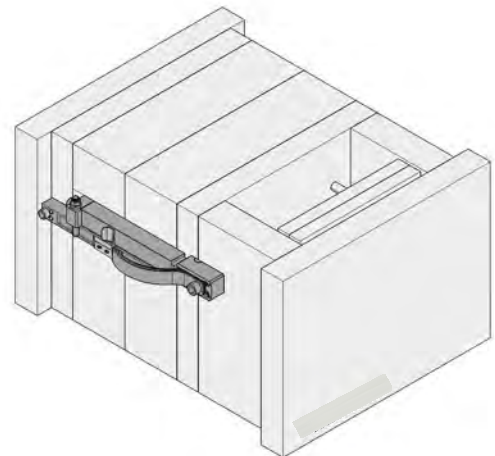
- Eractor pins, Eractor sleeves
- Slide retainers, sleeves
- Latch locks series**
- Pouring gates series
- Date stamps, Air valves series
- Ejector series
- Cooling elements series
- Locating parts series
- Spring series
- Slide pins, Guide bush
- Guide strips, Wear plate series
- Chuck series
- Mold accessories

ZZ5



Features:

- 1.Unique spring design , safe and reliable.
- 2.Large pull force for latch . Suitable big mould.
- 3.External installation , easy to install and maintenance.



Order ZZ5-0

Code	A	B	C	D	E	F	F1	F2	G	H	I	J	K
ZZ5-0	39.8	35	27	15	24.8	20	20	18	50	18	6	16	-
ZZ5-1	60	52	40	16	30	25	30.1	18	75	20	16.5	8	10
ZZ5-2	80	70	55	20	40	30	30	18	75	20	19.5	10	10

Code	L	L1	L2	d	S	M	N	O	P	P1	Q	R	@ ¥/P
ZZ5-0	196	137	170	6.2	15.8	21	15.8	24.5	7.5	5	16	15	
ZZ5-1	200	170	170	8.2	20	25.5	20	40	14.5	6	25	20	
ZZ5-2	396	256	356	10.2	30	31	30	56	14.5	8.5	40	27	

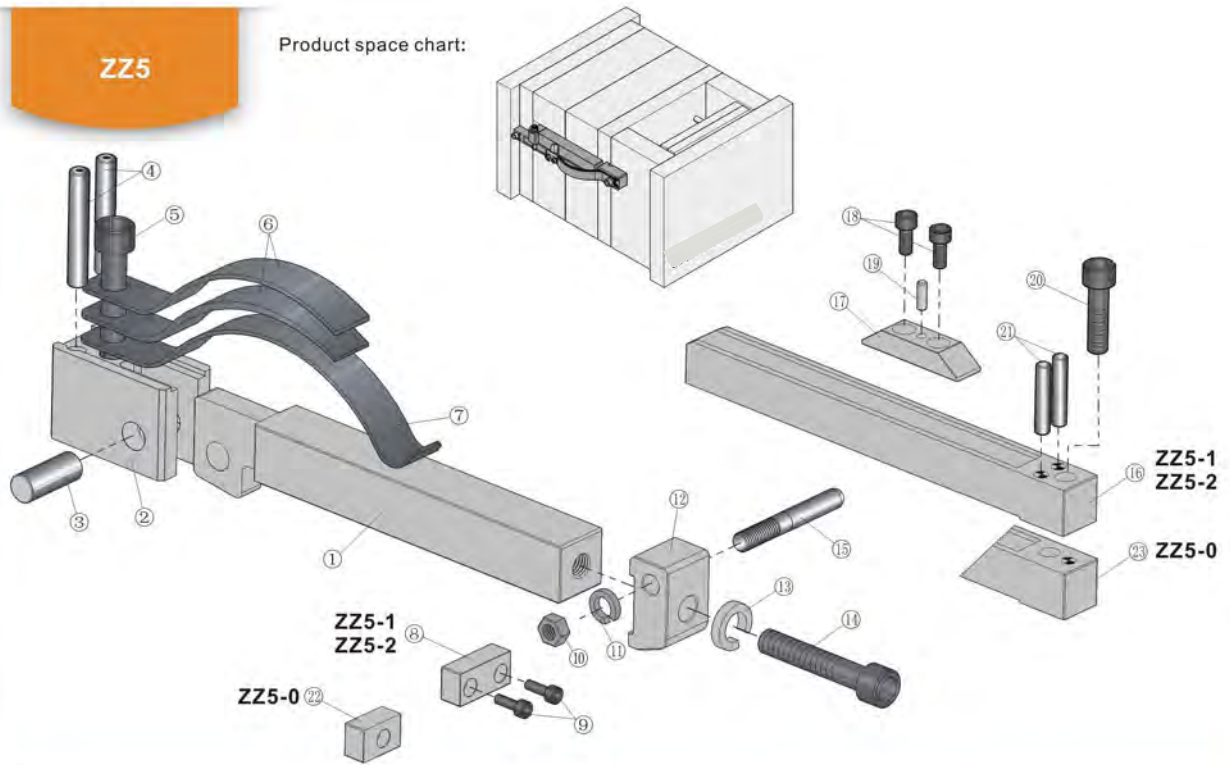
- Extractor pins series
- Slide railers series
- Latch locks series
- Pouring gates series
- Done stamps Air valves series
- Extractor series
- Cooling elements series
- Locating parts series
- Springs series
- Guide pins Guide bush
- Guide strips Guide plate series
- Chuck series
- Mold accessories



Latch locks

ZZ5

Product space chart:

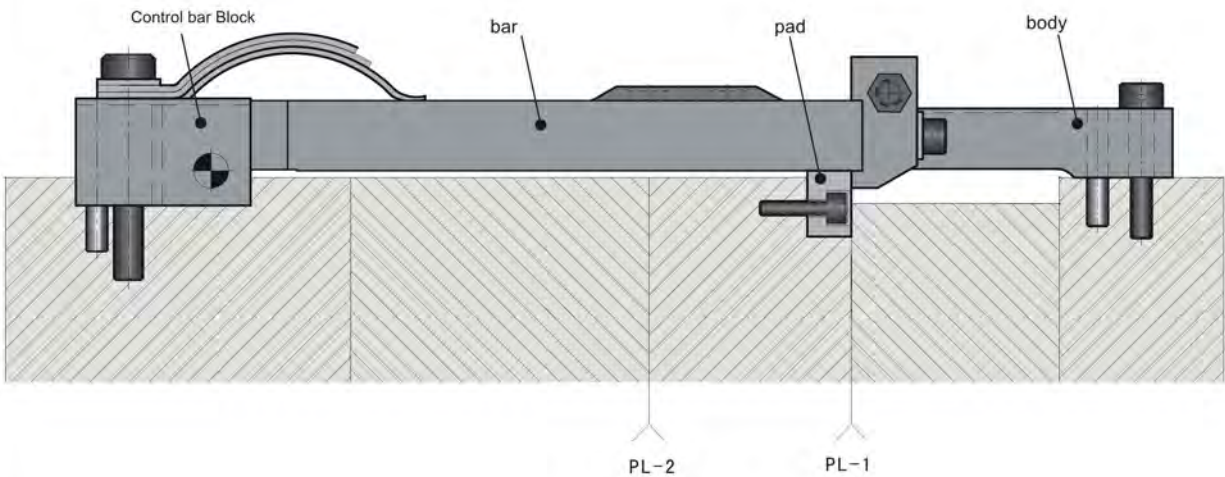


Code	Pos	4	5	9	14	18	19	20	21
ZZ5-0		Ø 6×32	M 8×40		M 8×25	M4×12			Ø6×24
ZZ5-1		Ø 8×40	M10×55	M4×12	M10×30	M5×12	M4×16	M8×30	Ø6×32
ZZ5-2		Ø10×60	M12×70		M16×50	M5×16		M8×40	Ø6×40

	Pos	1	2	3	8, 22	12	15	16, 23	17
Parts Name		Latch arm	Control bar Block	Dowel Pin	Spacer	Catch	Pin	Control bracket	Fixed block
Material		P20	P20	SUJ2	S45C	SKD61	SKD61	P20	Cr12MoV
Hardness		26-33HRC	26-33HRC	58-62HRC	40-45HRC	50-54HRC	45-50HRC	26-33HRC	50-58HRC



Installation Diagram:





Installation Guidelines

- Installed pad , pad parallel with joint face to install one mould plate by cup head screws.
- Installed bar fixing base , Use cup head screw make bar fixing base vertical with joint face , note eliminate the space between barb and pad .can cut off bar length to change bar fixed base installed position .
- Install body,by mean of body vertical joint face fixed on mould plate .
- Install stroke fixed block , lockings parts symmetrical install on the mould,make sure right install and normal running , then make dowel pin holes .
- Latch lock is precision device , please rely on real object to fixed position and symmetry install , Make sure same opening mould stroke , if no symmetrical install or different stroke will cause single set latch lock stress , lead to latch lock break due to imbalance force .
- Every mould suggest to installed 2sets or 4sets according to mould size to choose corresponding code.
- Notes the body of ZZ5-0 is fixed dowel pin holes , pad is a install screw holes.
- Coordinate function test , check these parts of latch lock structure whether smoothly and stroke coincide or not .
- First remove latch lock device to follow-up operation if need maintenance and change .



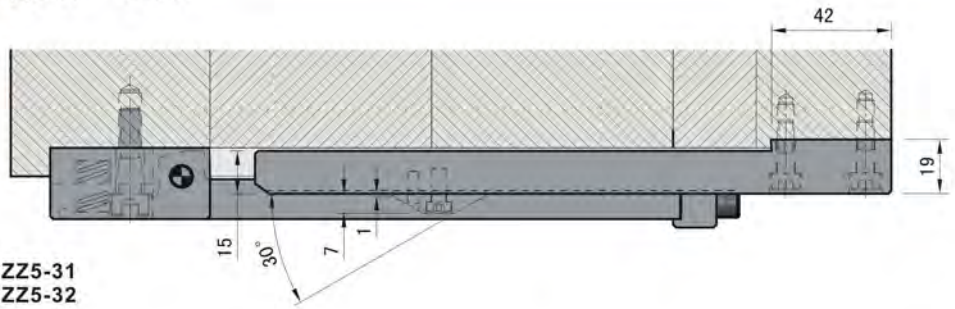
- Exactor pins series
- Slide railiners series
- Latch locks series**
- Pouring gate series
- Date stamps Air valves series
- Exactor series
- Cooling elements series
- Locating parts series
- Springs series
- Guide pins Guide bush
- Guide strips Viseer plate series
- Chuck series
- Mold accessories

DIN

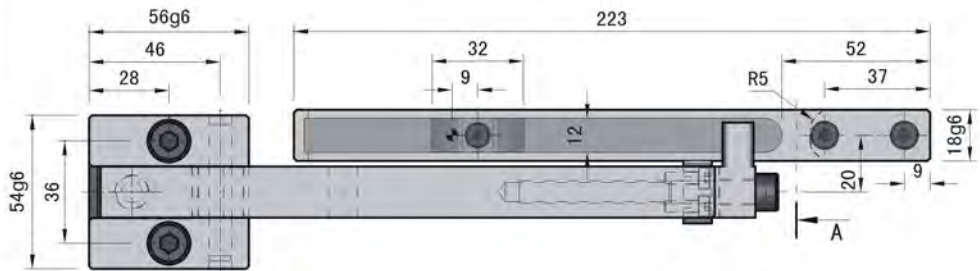
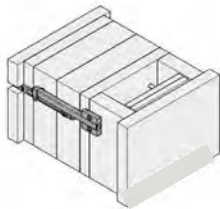
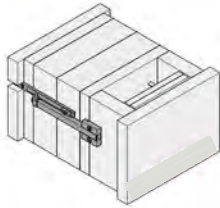
Latch locks

Order ZZ5-31

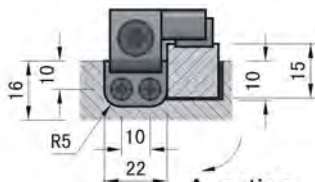
ZZ5



ZZ5-31
ZZ5-32

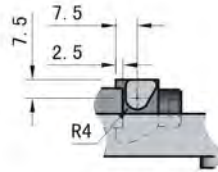


ZZ5-31
ZZ5-32

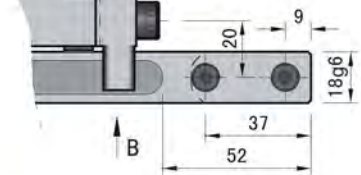


ZZ5-32

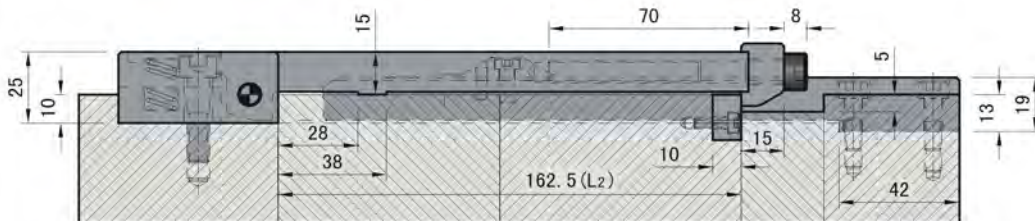
A section



B section



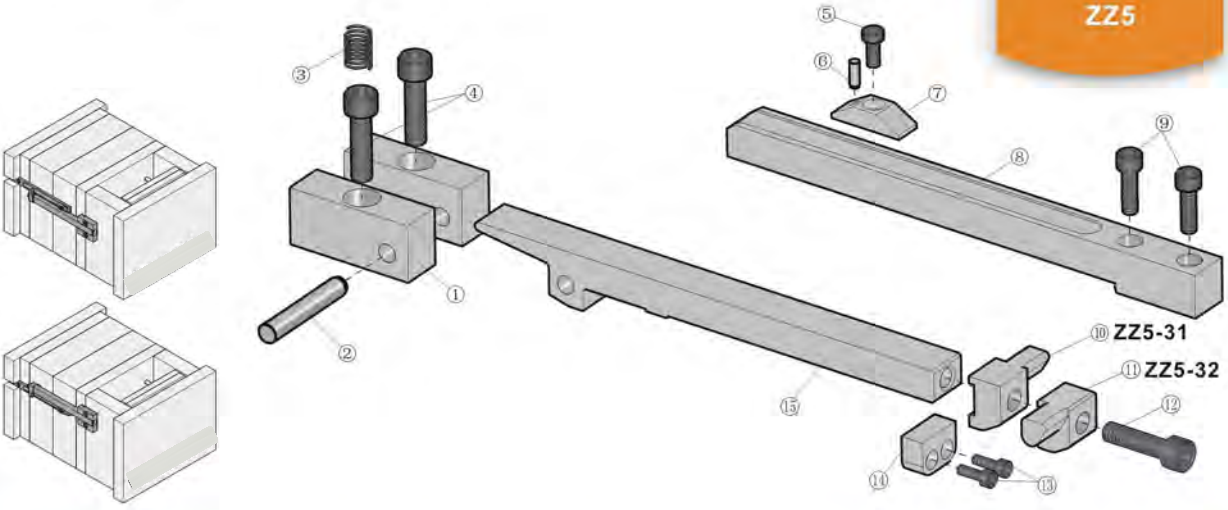
B



Features:

1. This latch lock has two codes ZZ5-31, ZZ5-32 for left and right mirror elements.
2. Large pull force for latch. Suitable for big moulds.
3. External installation, easy to install and maintain.

Product space chart:



Pos	2	4	5	6	9	12	13
Description	Ø8×50	M8×30	M5×12	M4×12	M6×20	M8×30	M4×12

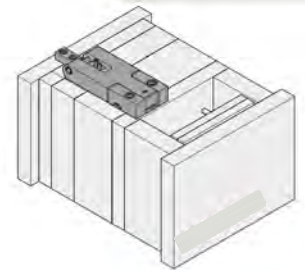
Pos	1	2	7	8	10, 11	14	15
Parts Name	Control bar Block	Dowel Pin	Fixed block	Control bracket	Catch	Spacer	Latch arm
Material	Cr12MoV	SUJ2	Cr12MoV	P20	SKD61	S45C	P20
Hardness	50-58HRC	58-62HRC	58-62HRC	26-33HRC	50-54HRC	40-45HRC	26-33HRC



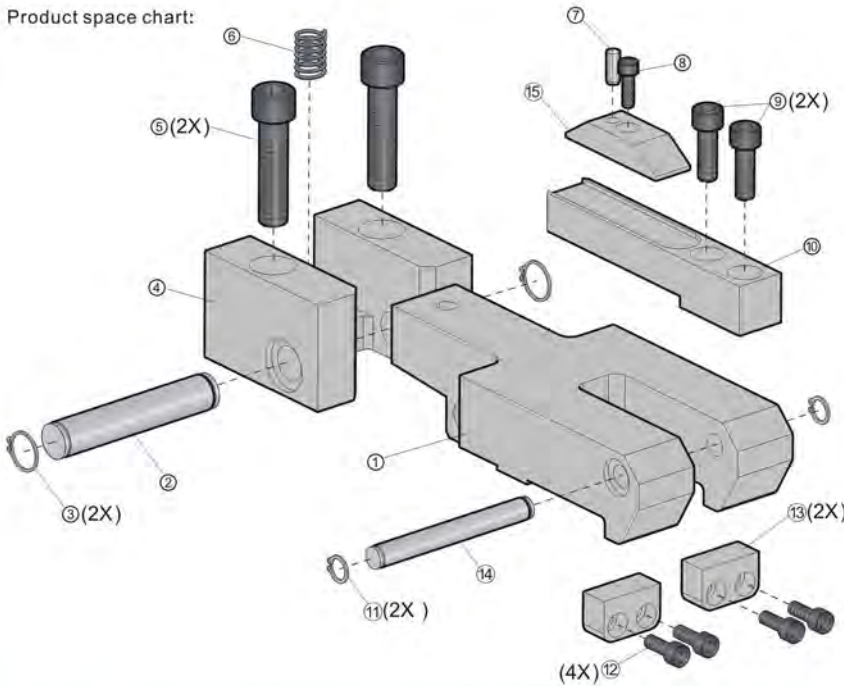
Installation Guidelines

- Latch lock is precision device, Each mould at least symmetry installed 2sets.
- More sets latch lock mechanism install must be sure same stroke , otherwise will cause single set latch lock stress , lead to latch lock break due to imbalance force.
- Coordinate function test , check these parts of latch lock structure whether smoothly and stroke coincide or not .
- First remove latch lock device to follow-up operation if need maintenance and change.
- Latch lock ZZ5-31 is mirror element with ZZ5-32, choose one set to installed when use these two sets.
- Suggest install latch lock on left and right two sides of mould , Due to weight problem of products , if install on top and low two sides will impact locking force.

ZZ5



Product space chart:



Pos	2	5	7	8	9	12	14
Description	16×85	M12×50	Ø6×16	M5×16	M8×25	M6×16	10×85

Pos	1	2	4	10	13	14	15
Parts Name	Latch arm	Control Bar1	Holder	Control bracket	Spacer	Control Bar2	Fixed block
Material	P20	SKD16	Cr12MoV	P20	S45C	SKD16	Cr12MoV
Hardness	26-33HRC	50-54HRC	50-58HRC	26-33HRC	40-45HRC	50-54HRC	50-58HRC



Installation Guidelines

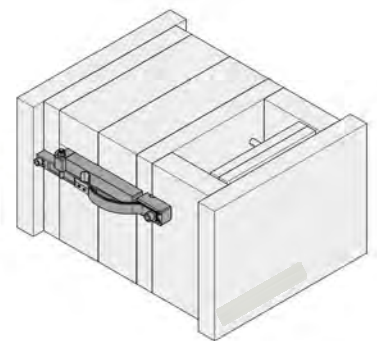
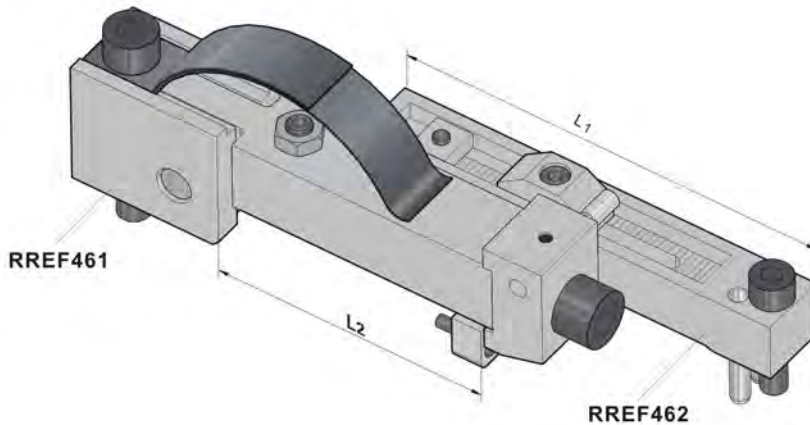
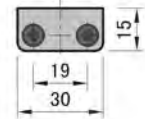
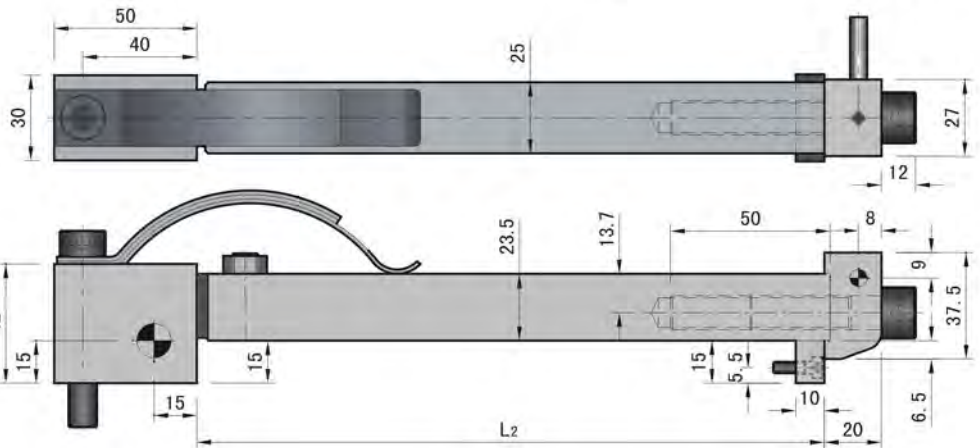
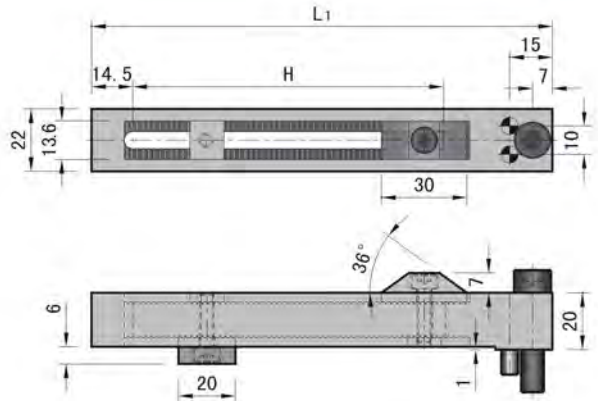
- Please calculate opening mould stroke before purchase , X1 is theoretical opening mould distance. specify length shall be meet below term: $L1_{Min}=X1+130$, $L2_{Min}=X1+100$
- Latch lock is precision device , Each mould at least use 2sets to symmetry installed according to mould size specify corresponding code.
- Suggest install latch lock on left and right two sides of mould , Due to weight problem of products , if install on top and low two sides will impact locking force.
- More sets latch lock mechanism install must be sure same stroke , otherwise will cause latch lock break due to imbalance force.
- When use it , frequently to check up various installed screw whether fastening or not, if need maintenance and change.
- Please first remove latch lock device to follow-up operation.

Escrow pins
 Escrow
 Single rail pins
 Escrow
 Latch locks
 Escrow
 Flanging gate
 Escrow
 Dome stamp
 Air valve series
 Escrow series
 Escrow
 Cooling element
 Escrow
 Locating pins
 Escrow
 Springs series
 Escrow
 Guide pins
 Guide bush
 Escrow
 Guide pins
 Water pipe series
 Escrow
 Chuck series
 Escrow
 Mold
 processors

DIN

Latch locks

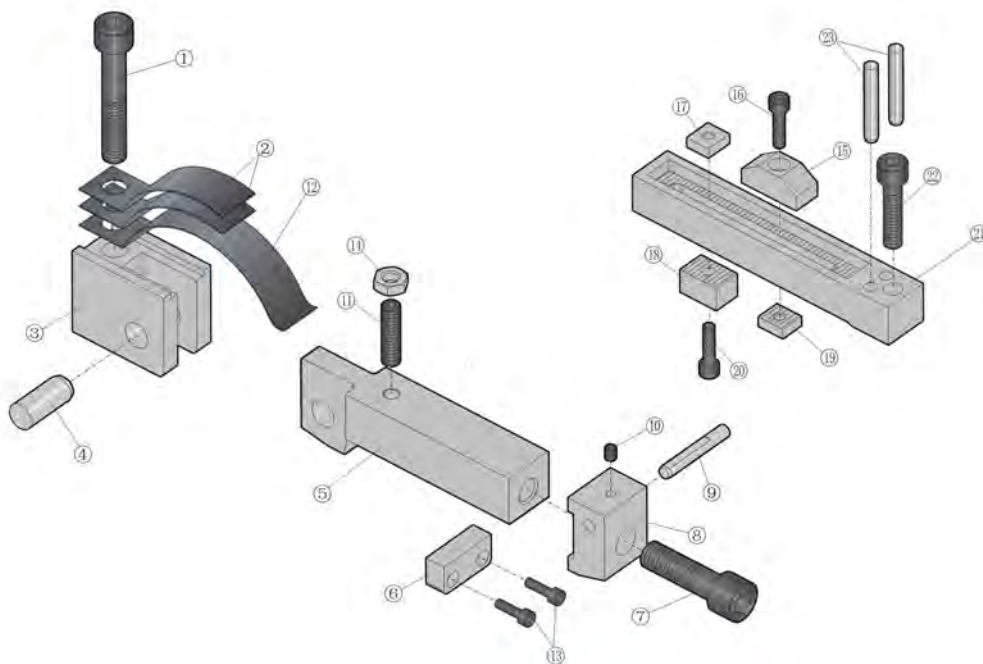
RREF



Order RREF460-140-90 Standard purchase =				Order RREF462-140 +				Flexible purchase Order RREF461-90		
Code	L1	H	L2	Code	L1	H	@ ¥/P	Code	L2	@ ¥/P
RREF460-140-90	140	83.5	90	RREF462-140	140	83.5		RREF461-90	90	
RREF460-204-170	204	152	170	RREF462-204	204	152		RREF461-170	170	
RREF460-254-220	254	194.5	220	RREF462-254	254	194.5		RREF461-220	220	

1. The part of stroke adjustable adopt dental saw design , save dowel pin holes process, at the same simplify stroke adjustable.
2. Unque shrapnel design , safety and reliable ,and easy to install .
3. Suggest install latch lock on left and right two sides of mould , Due to weight problem of products , if install on top and low two sides will impact locking force.
4. More sets latch lock mechanism install must be sure same stroke , otherwise will cause latch lock break due to imbalance force.
5. When use it , frequently to check up various installed screw whether fastening or not, if need maintenance and change. Please first remove latch lock device to follow-up operation.

Product space chart:



Pos	1	4	7	9	11	13	14	16	20	22	23
Description	M10×60	Ø12×30	M12×40	Ø12×40	M8	M4×14	M8	M5×20	M5×20	M8×35	Ø6×40

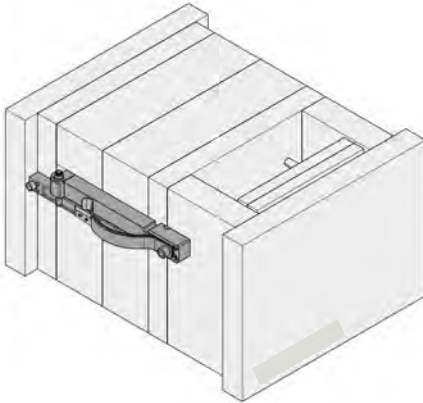
Pos	1	2	4	10	13	14
Parts Name	Control bar Block	Latch arm	Spacer	Catch	Dowel pin	Control bracket
Material	Cr12MoV	P20	Cr12MoV	SKD61	SKD11	P20
Hardness	58-62HRC	26-33HRC	55-58HRC	52±2HRC	55-58HRC	26-33HRC

Code	RREF460																						
	RREF461											RREF462											
Pos (Pcs)	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	1	2	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	2

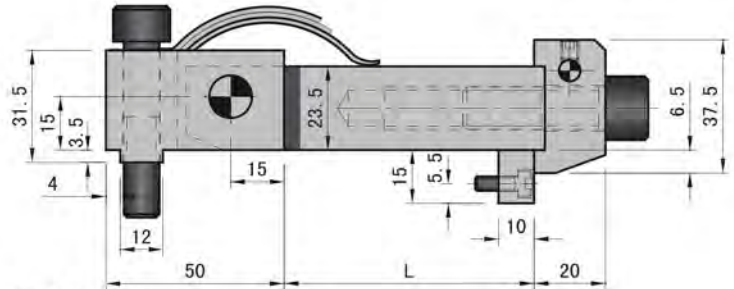
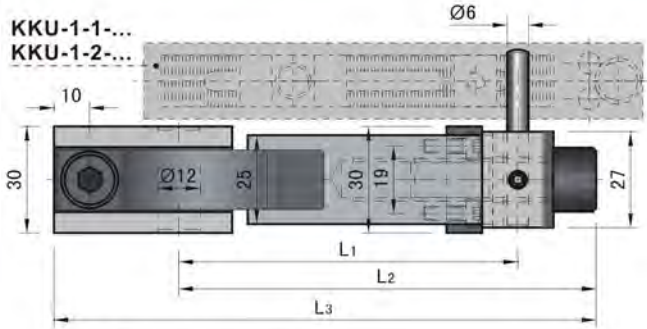
AISI

Latch locks

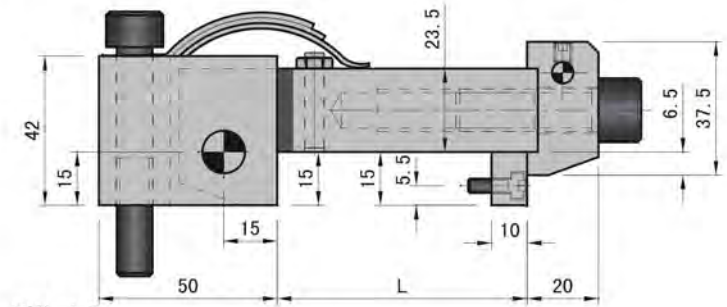
KKL



Code	F(Kgf) Max
KKL-1-2- 90	1600
KKL-1-2-170	
KKL-1-2-220	
KKL-1-2-270	
KKL-1-1- 70	



KKL-1-1-70



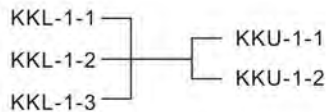
KKL-1-2-...

Order KKL-1-1-70

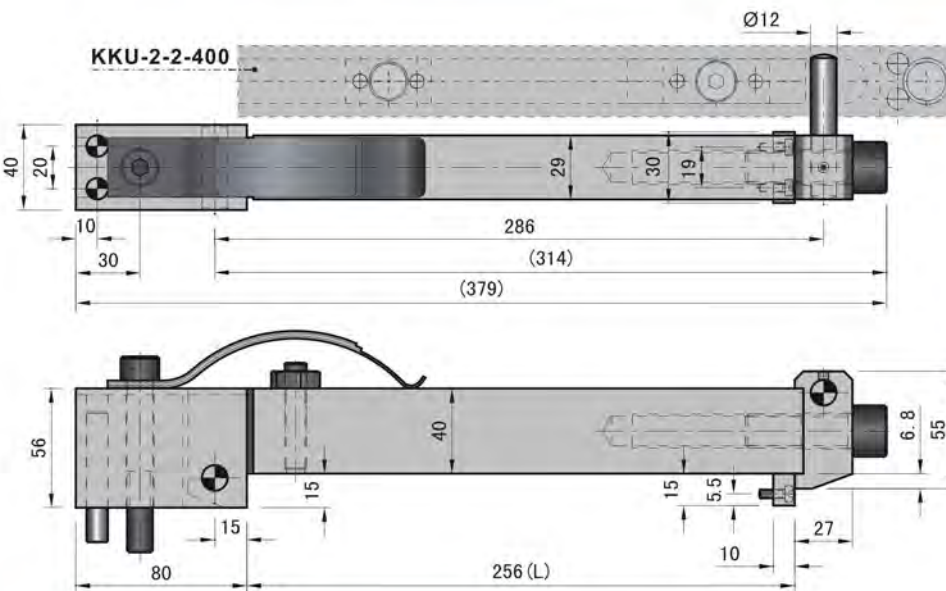
Code	L	L1	L2	L3	To be ordered separately	@ ¥ /P
KKL-1-2- 90	90	117	137	172	KU	
KKL-1-2-170	170	197	217	252		
KKL-1-2-220	220	247	267	302		
KKL-1-2-270	270	297	317	352		
KKL-1-1- 70	70	97	117	152		

Notes:

KKL Latch lock only one half of whole set parts , have to match to use with another half part KKU(KKU need alone purchase)



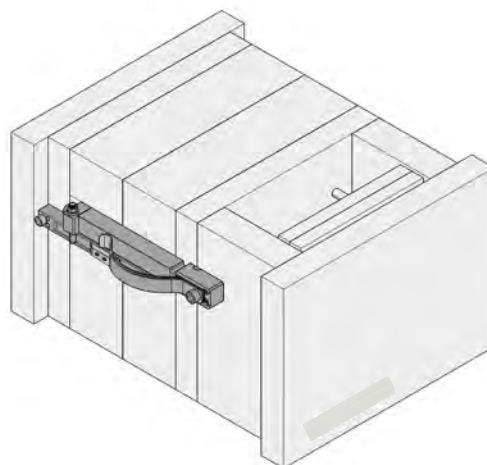
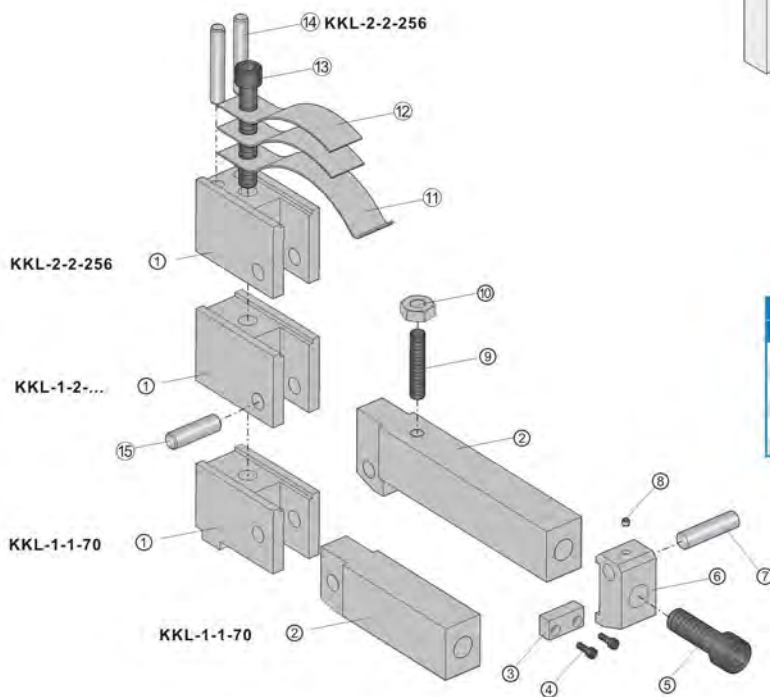
KKL-2-2 — KKL-2-2



Order KKL-1-1-70

Code	F(Kgf) Max	@ ¥/P
KKL-2-2-256	4000	

Product space chart:



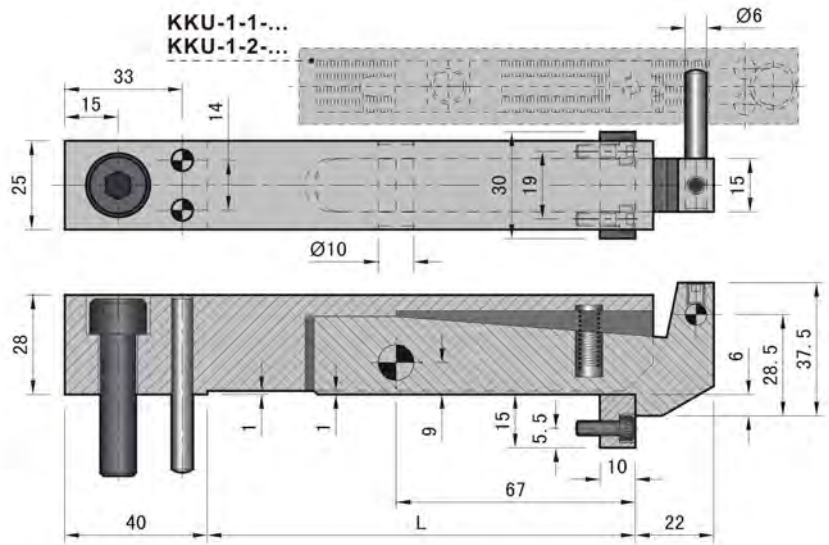
KKL-1-1-70		KKL-1-2-...		KKL-2-2-256	
Pos	Description	Pos	Description	Pos	Description
04	M4	04	M4	04	M4
05	M12×40	05	M12×40	05	M16×50
07	Ø6	07	Ø6	07	Ø12
13	M10×55	13	M10×56	13	M12×80
14	-	14	-	14	Ø10×80
15	Ø12	15	Ø12	15	Ø12

- Extractor pins series
- Slide rail/liners series
- Latch locks series
- Rolling gate series
- Door stamps Air valves series
- Extractor series
- Cooling elements series
- Locating parts series
- Springs series
- Guide pins Guide bush
- Guide strips Viter plate series
- Chuck series
- Modul processors

AISI

Latch locks

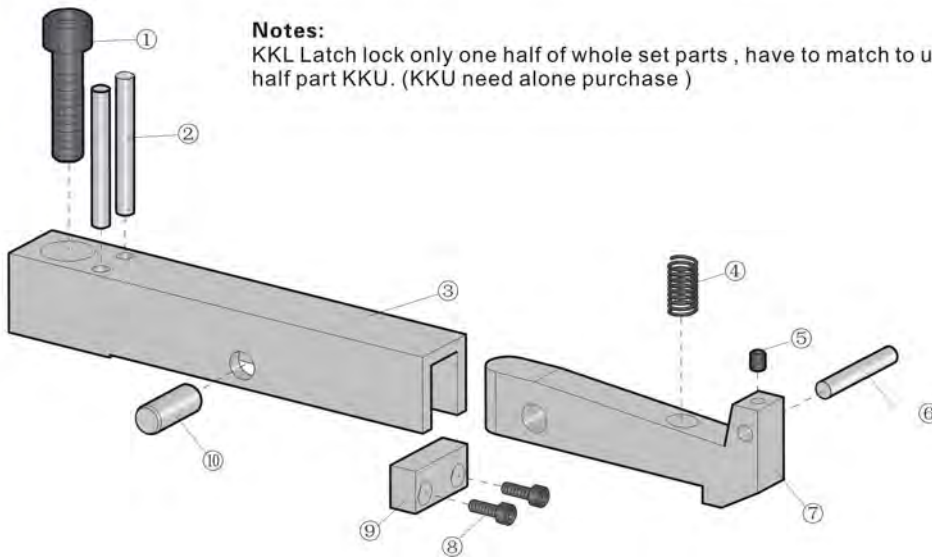
KKL



Order KKL-1-3-120

Code	L	L3	To be ordered separately	@ ¥ /P
KKL-1-3-120	120	182	KU	
KKL-1-3-170	170	232		
KKL-1-3-220	220	282		

Product space chart:

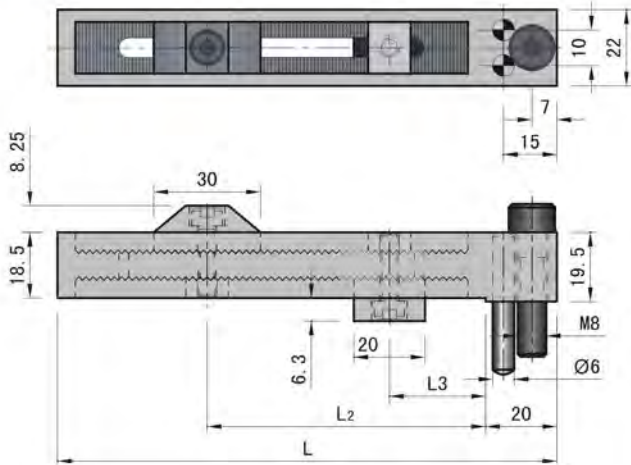


Notes:

KKL Latch lock only one half of whole set parts , have to match to use with another half part KKU. (KKU need alone purchase)

Pos	1	2	6	8	10
Description	M10×40	Ø6×50	Ø6	M4×20	Ø10×25

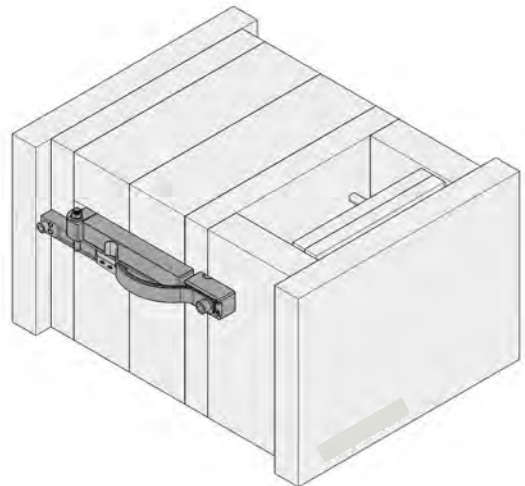
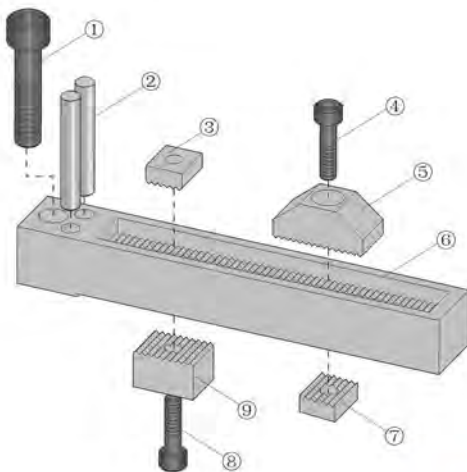
KKU



Order KKU-1-1-...

1. The part of stroke adjustable adopt dental saw design , save dowel pin holes process, at the same simplify stroke adjustable.
2. KKU Latch lock only one half of whole set parts , have to match to use with another half part KKL (KKL need alone purchase)

Product space chart:



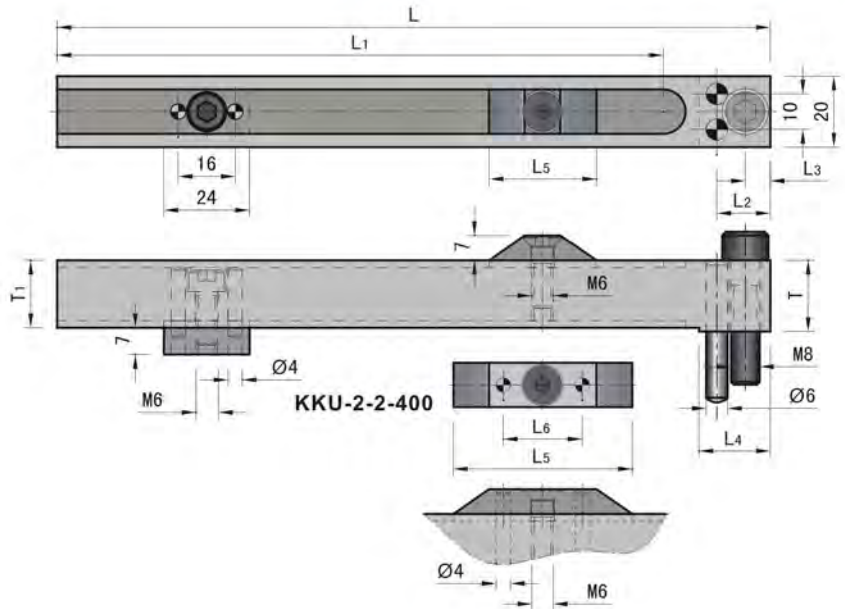
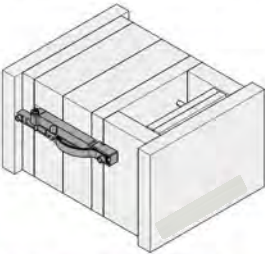
Pos	1	2	4	8
Description	M8×35	Ø6×40	M5×20	M5×20

- Encoder pins series
- Slide rollers series
- Latch locks series
- Flanging gate series
- Dome stamps Air valves series
- Encoder series
- Cooling elements series
- Locating parts series
- Springs series
- Guide pins Guide bush
- Guide strips Water plate series
- Chuck series
- Knob processors

AISI

Latch locks

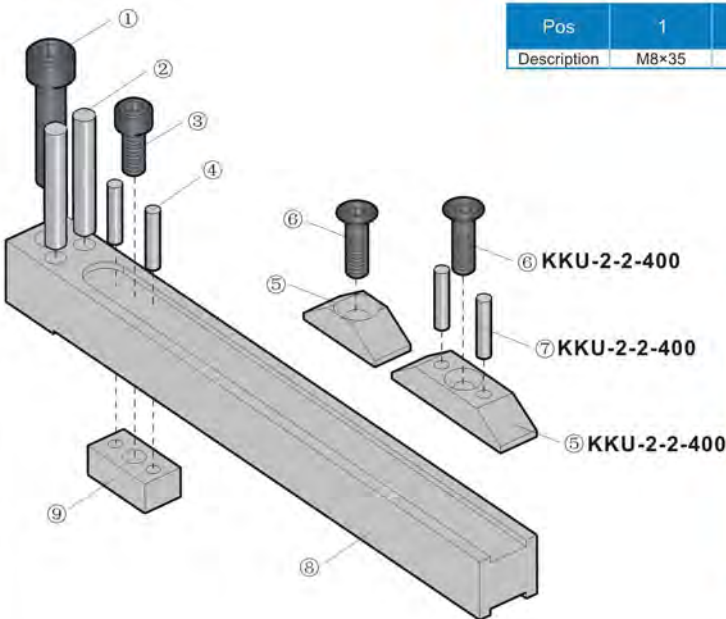
KKU



Order KKL-1-2-200

Code	L	L1	L2	L3	L4	L5	L6	T	T1	@ ¥/P
KKU-1-2-200	200	170								
KKU-1-2-250	250	220	15	7	20	30	-	20	19	
KKU-1-2-300	300	270								
KKU-2-2-400	400	360	19.5	10	25	50	22	30	29	

Product space chart:

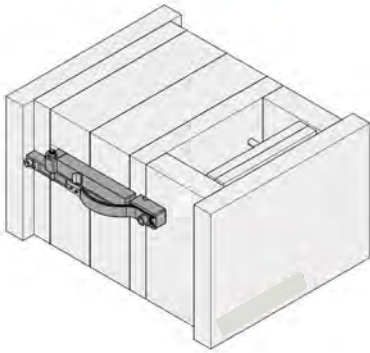


Pos	1	2	6	4	6	7
Description	M8×35	Ø6×40	M6×16	Ø4×20	M6×20	Ø4×20

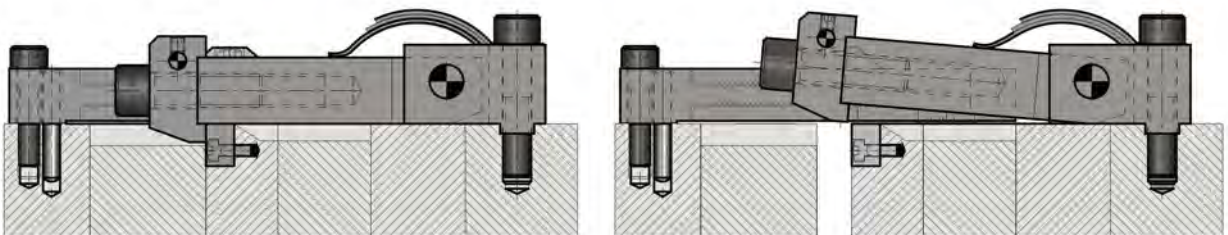
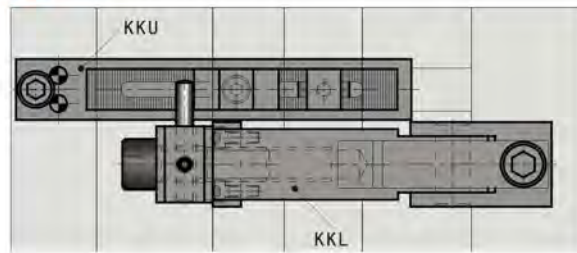
1. KKU Latch lock only one half of whole set parts , have to match to use with another half part KKL. (KKL need alone purchase)
 2. KKU-2-2-400 stroke compare with KKU-1-2 have 2pcs dowel pin holes .

Features:

- 1.Unique spring design , safe and reliable ,easy to install.
- 2.Precision symmetry installation , stroke have to calculate right , otherwise products will be breakdown.
- 3.Transfer big force , various code , apply to different mould (Multi plate mould)opening and closed mould request.

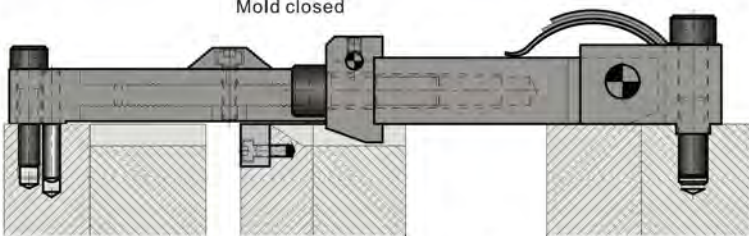


Installation Diagram:



Mold closed

First finish opening mold



Second opening mould



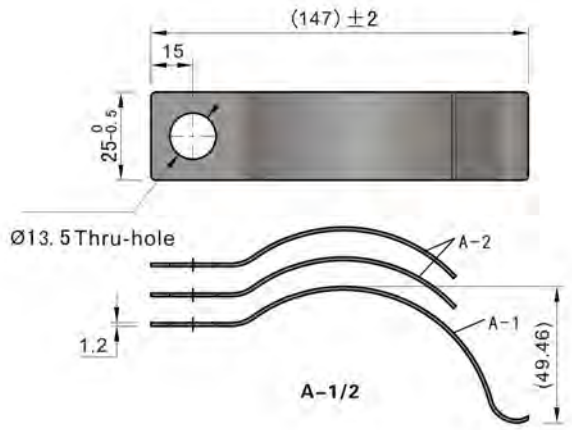
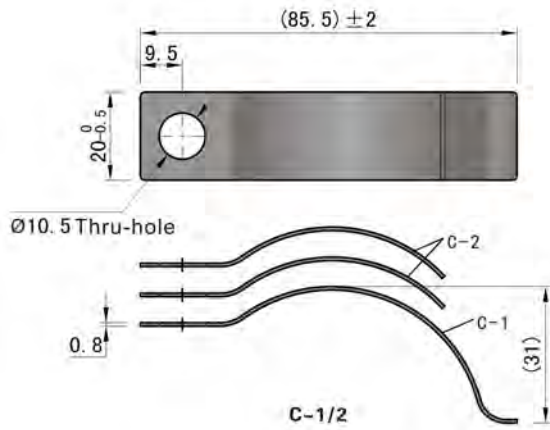
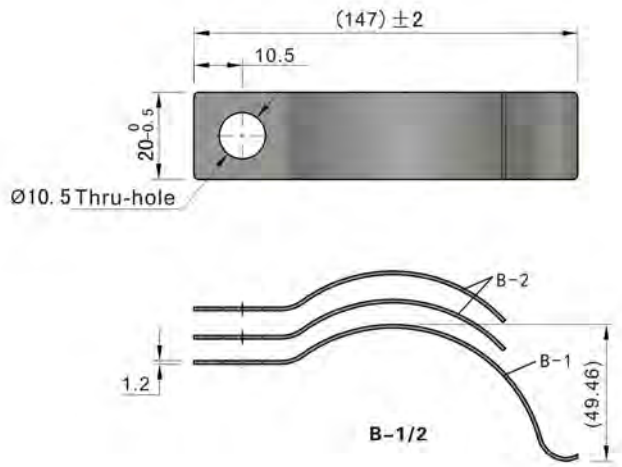
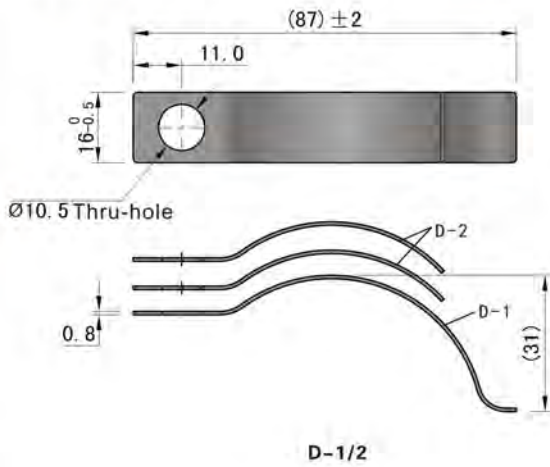
Installation Guidelines:

- Each mould at least use 2sets to symmetry installed according to mould size specify corresponding code .
- All latch lock installed in the mould must be calculate same stroke , whole mechanism installation at right angles with opening mould direction.
- When use it , frequently to check up various installed screw whether fastening or not, if need maintenance and change . Please first remove latch lock device to follow-up operation.

- Escisor pins
- Escisor sleeves
- Slide railseries
- Latch locks
- Pulling gate
- Dome stamps
- Air valves series
- Escisor series
- Cooling elements
- Locating parts
- Springs series
- Guide pins
- Guide bush
- Guide strips
- Water parts series
- Chuck series
- Mold accessories

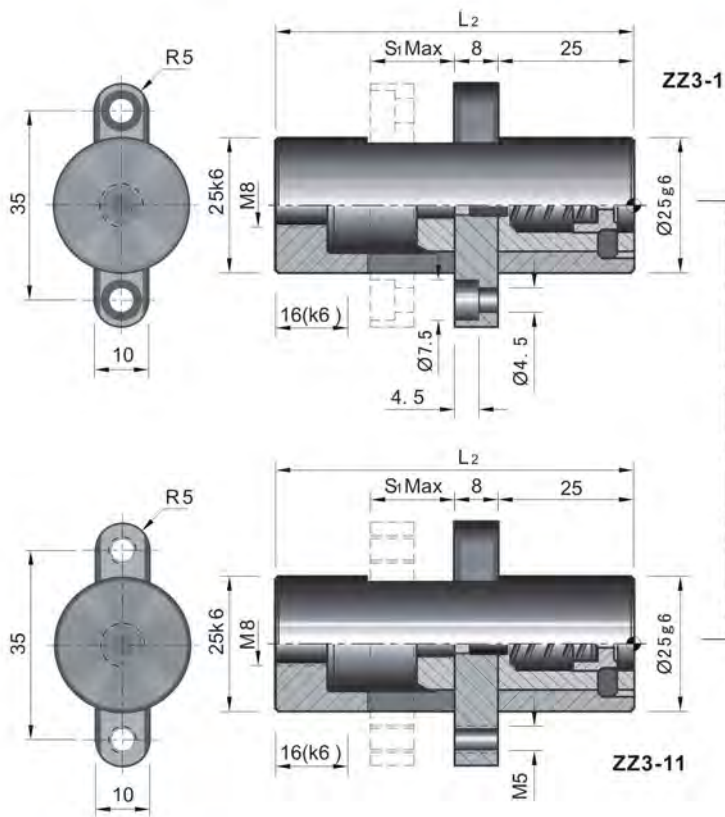


Latch locks

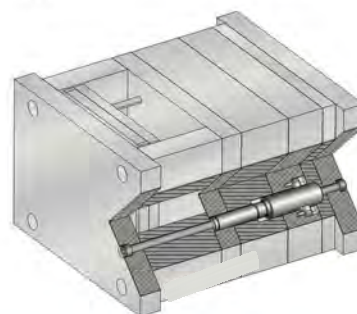
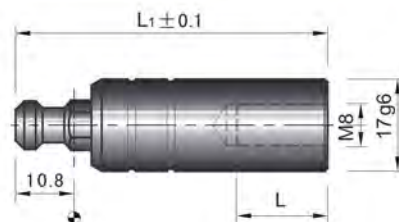


Order Material: 65Mn Hardness: 50-55HRC Surface treatment: Blacking

Code	Components		Applicable Type
	1Pcs	2Pcs	
A-1/2	A-1	A-2	KKL-2-2-256 ZZ5-2
B-1/2	B-1	B-2	KKL-1-2-170 , KKL-1-2-220 , KKL-1-2-270 RREF450-300-270 , RREF460-254-220 , RREF460-204-170 RREF470-220 , ZZ5-1
C-1/2	C-1	C-2	KKL-1-2-90, RREF460-14090
D-1/2	D-1	D-2	ZZ5-0

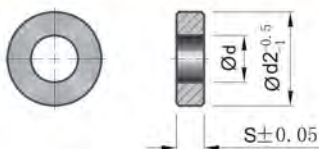


ZZ3



Order ZZ3-1-S1-L1

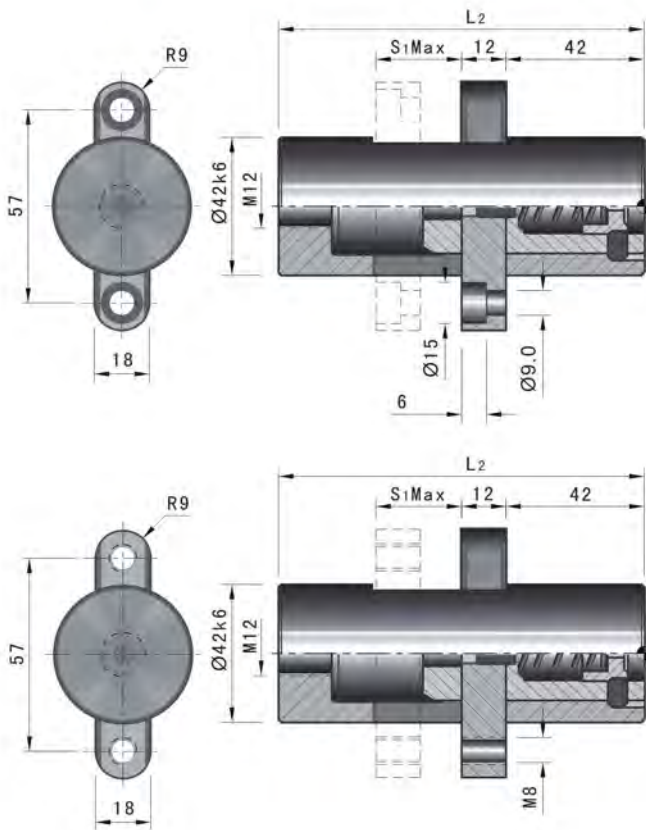
S1max	L	L1	L2	@ ¥ / P
16	20	45 70	66	
40	40	100	90	
60		125 150	110	



ZZ59

Order ZZ59-d2-S Material: S45C

d2	S	d	@ ¥ / P
17	5 10	8.5	
25	5 10		

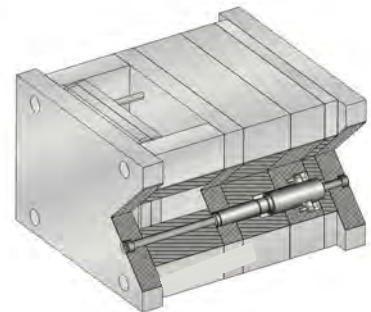
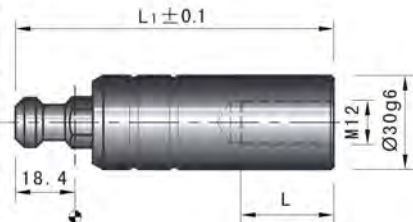


ZZ3-3

ZZ3-31



ZZ3



Features:

1. Internal installation avoids interferences with water line connectors and externally mounted components.
2. Can be used as early return unit, inter latch locks, Two-stage ejectors.
3. Some important parts are made of SKD61, Provide good lubricating while working, longer life.

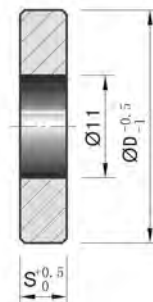
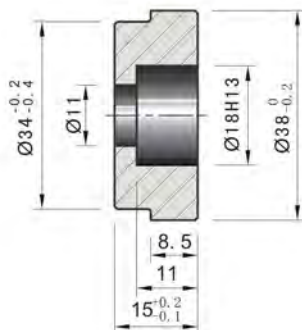
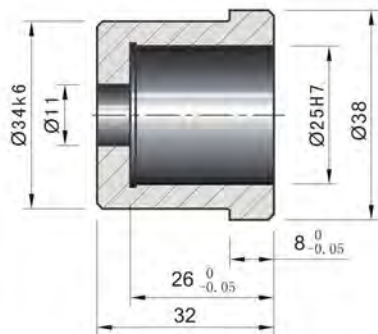
Order ZZ3-3-S1-L1

S1max.	L	L1	L2	@ ¥/P	
50	50	125	130		
		175			
		225			
75			175	155	
		225			
		175			
100			225	180	
		275			
		325			
125			275	205	
		325			
		275			
150		325	230		
	275				
	325				
175		275	255		
	325				



Latch locks

ZZ3

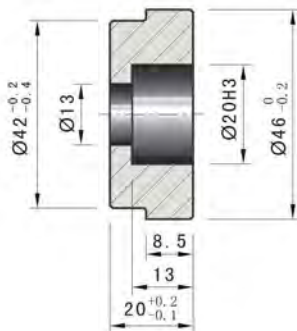
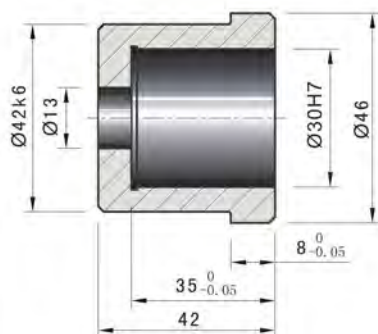


Order ZZ3-2 Material: S45C

Pos	@ ¥ / P
09	

Pos	@ ¥ / P
10	

Pos	S	D	@ ¥ / P
11	5 10	25	
12	5 10	34	



Order ZZ3-3 Material: S45C

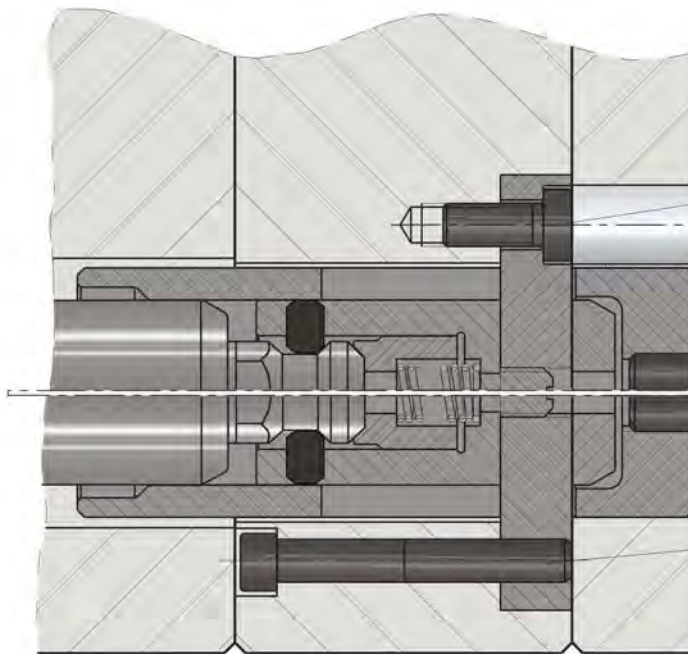
Pos	@ ¥ / P
09	

Pos	@ ¥ / P
10	

Pos	S	D	@ ¥ / P
11	5 10	30	
12	5 10	42	

Code	Pos	Parts Name	Parts Name	Hardness	Q'ty(Pcs)
ZZ3-1 ZZ3-2 ZZ3-3	1	Grub screw	-	-	1
	2	Control bracket	-	-	
	3	Piston	SKD61	48-52HRC	
	4	Safety bush	Cr12MoV	55-58HRC	2
	5	Catch	SKD11	58-62HRC	
	6	Stroke block	SKD61	52± 2HRC	1
	7	Pulling rod	SUJ2	55-62HRC	
	8	Compression spring	-	-	

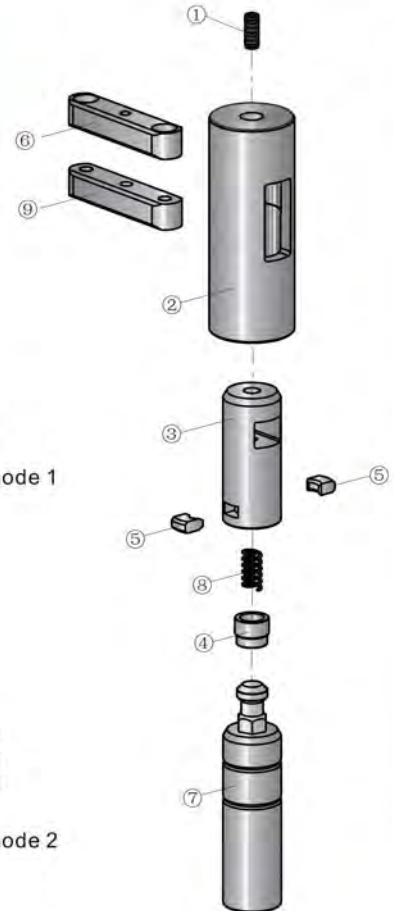
Code	Pos	Parts Name	Parts Name	Hardness	Q'ty(Pcs)
ZZ3-11 ZZ3-21 ZZ3-31	1	Grub screw	-	-	1
	2	Control bracket	-	-	
	3	Piston	SKD61	48-52HRC	
	4	Safety bush	Cr12MoV	55-58HRC	2
	5	Catch	SKD11	58-62HRC	
	7	Pulling rod	SUJ2	55-62HRC	1
	8	Compression spring	-	-	
	9	Stroke block	SKD61	52± 2HRC	



ZZ3-1
ZZ3-2
ZZ3-3
Fixed mode 1

ZZ3-11
ZZ3-21
ZZ3-31
Fixed mode 2

Product space chart:



ZZ3 series have two fixing method:

First :Install mould plate to tapping, pass through stroke block screw holes to install screw and fixed latch lock. (apply to ZZ3-1/2/3 series)

Second :Install mould plate to processing screw holes , use screw pass through mould plate to contact stroke block to screw thread fixed. (apply to ZZ3-11/21/31series)

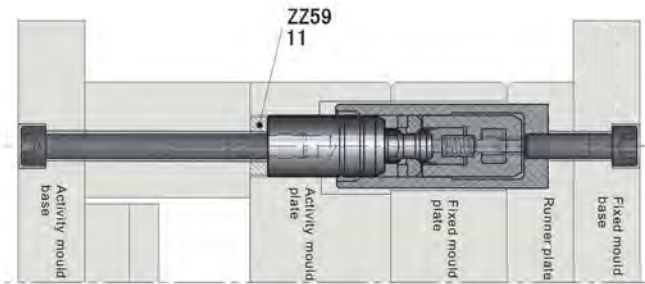
- Extractor pins series
- Slide rail series
- Latch locks series
- Pouring gate series
- Dome stamps Air valves series
- Extractor series
- Cooling elements series
- Locating parts series
- Springs series
- Guide pins Guide bush series
- Guide strips Wear plate series
- Chuck series
- Mold process series

DIN

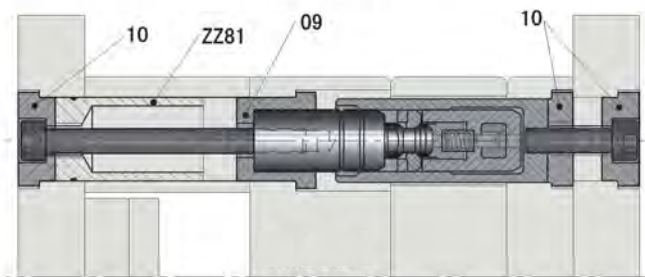
Latch locks



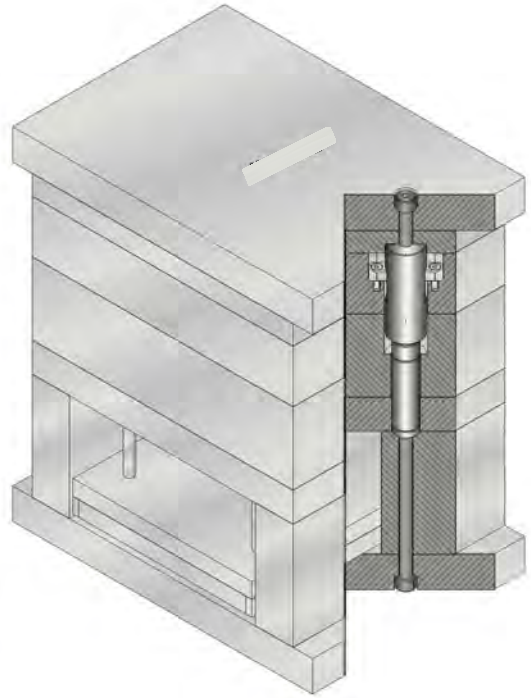
Installation Diagram:



Install 1



Install 2

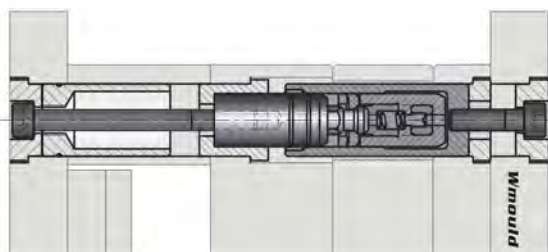


Installation Guidelines

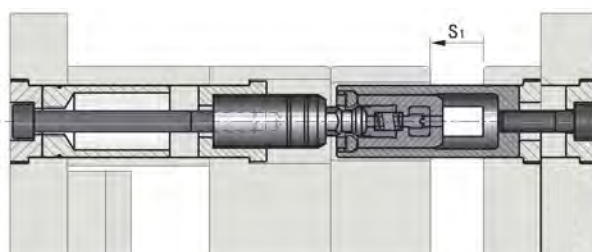
- Installed stroke block, Use cup head screw make stroke block vertical with joint face fixed mould plate. Need accurate calculate first opening mould stroke.
- Installed body, Use cup head screw make body vertical with joint face fixed runner plate, request same concentric plunger.
- Install bar, stroke block and body symmetrical install on the mould, make sure right install and normal running, then fixed bar.
- Latch lock is precision device, please rely on real object to fixed position and symmetry install, if no symmetrical install or different stroke will cause single set latch lock stress, lead to latch lock break due to imbalance force.
- Every mould suggest to installed 2sets or 4sets.
- Coordinate function test, check these parts of latch lock structure whether smoothly and stroke coincide or not.
- Precision parts, please don't use it with other auto-processing parts. thus make some abnormal your company self responsible.
- First remove latch lock device to follow-up operation if need maintenance and change.



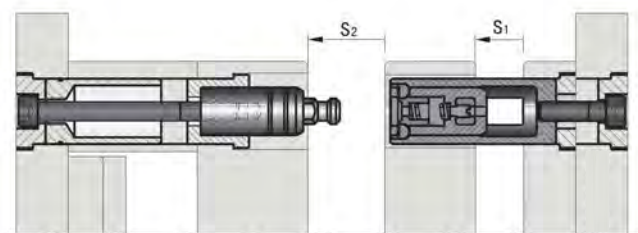
Functional chart:



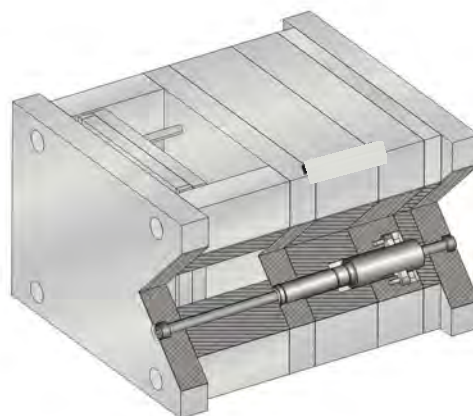
Mold closed



First finish opening mold

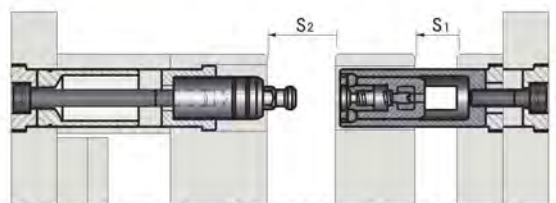


Second opening mould

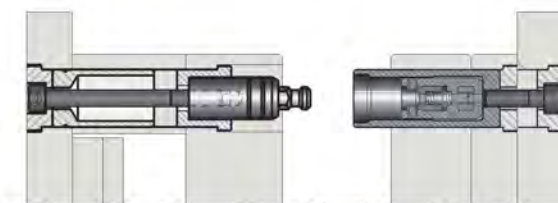


Warning:

As below drawing show, when insert bar release plunger (second time opening mould start to open or completely open. must be sure first opening mould stroke in opening condition, otherwise will cause insert bar can't insert into and break latch lock mechanism during closed mould.



B Right



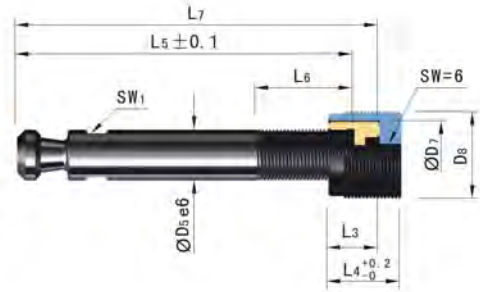
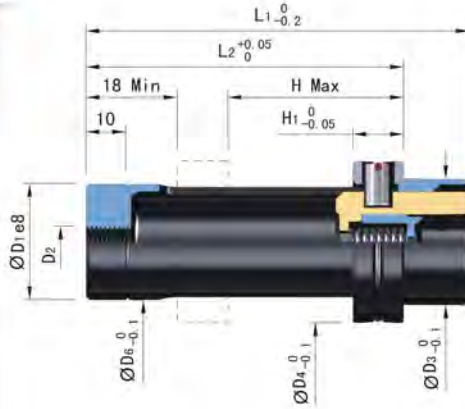
C Wrong

Extractor pins Extractor sleeves
Slide railliners sleeves
Latch locks
Pouring gate series
Done stamps Air valves series
Extractor series
Cooling elements series
Locating parts series
Springs series
Guide pins Guide bush
Guide strips Water plate series
Chuck series
Mold processors

DIN

Latch locks

ZZ173



Features:

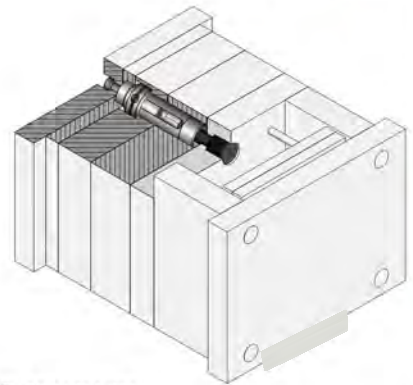
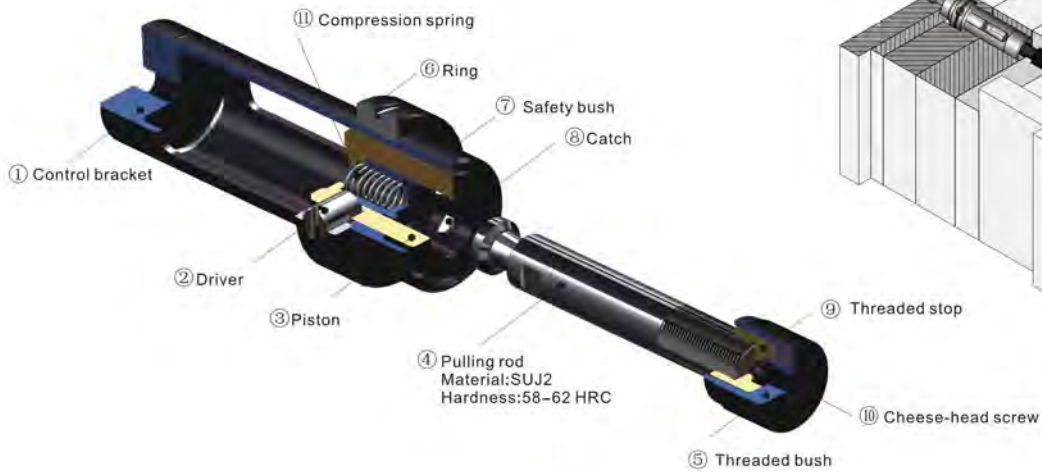
1. Internal installation avoids interferences with water line connectors and externally mounted components
2. Can be used as early return unit, inter latch locks, Two-stage ejectors.
3. Some important parts are made of SKD61, Provide good lubricating while working. longer life.

Order ZZ173-32×28×14×63 Material:SKD61 Hardness:52±2HRC

D1	H max.	D5	L7	D2	D3	D4	D6	D7	D8	D5
32	28	14	63	M10	34.8	44.8	32.2	18.5	M24×1	14
			80							
			100							
			125							
			63							
38	36	18	80	M12	40.8	51.8	38.2	23.5	M30×1.5	16
			100							
			125							
			140							
			80							
	71		100							
			125							
			140							
			80							
			100							

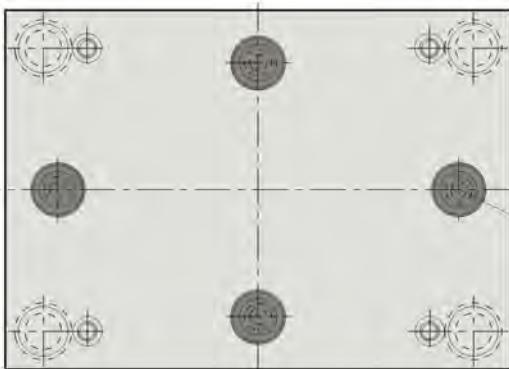
Code	L1	L2	L3	L4	L5	L6	Sw1	@ ¥/P
ZZ173-32×28×14× 63	78	60	14	20	56	20	12	
ZZ173-32×28×14× 80					73			
ZZ173-32×28×14×100					93			
ZZ173-32×28×14×125					118			
ZZ173-32×56×14× 63					73			
ZZ173-32×56×14× 80	106	88			93	25		
					118			
					133			
					56			
					73			
ZZ173-32×36×18× 80	90	70			56	20		
					73			
					93			
					118			
					73			
ZZ173-32×36×18×100					93			
					118			
					73			
					93			
					118			
ZZ173-32×71×18× 80	125	105	16	22	118	30	15	
					73			
					93			
					118			
					133			

Product space chart:

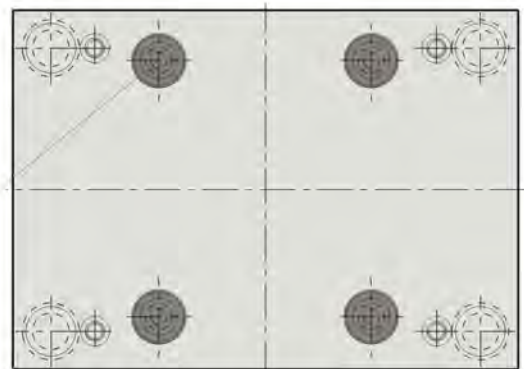


Installation Guidelines

- It is precision standard element. A minimum of two Round latch locking units must be mounted symmetrically. Quantit and size are subjected to the mold base and the pulling forces.
- If not be mounted symmetrically, the uneven force will caused the parts damaged.
- Make sure grub screw is screw down tightly when using.
- If the molds need to be maintained or changed, please remove the Round latch locking units first.
- After installation, carry out a functional test, check whether the individual parts work well, and the stroke is applicable.
- Working temperature :please use this product below 120°C.



ZZ173-...



Slider pins series
Slide rail series
Latch locks
Flanging gate series
Dome stamps Air valves series
Expander series
Cooling elements series
Locating parts series
Springs series
Guide pins Guide bush
Guide strips Wear plate series
Chuck series
Mold processors

DIN

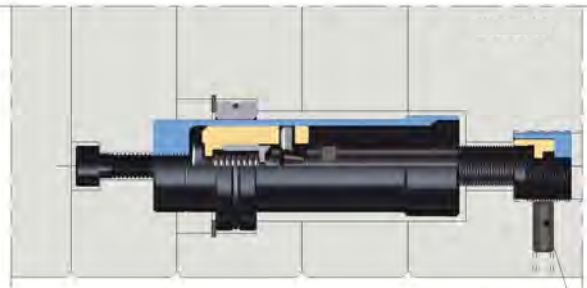
Latch locks

ZZ173



Functional chart:

Mold closed



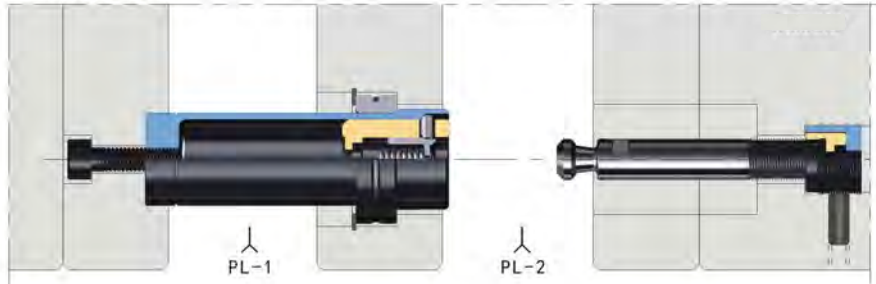
Grub screw

First finish - opening mold



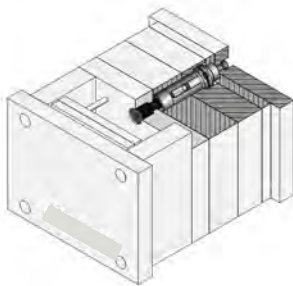
PL-1

Mold opened



PL-1

PL-2



operational principle:

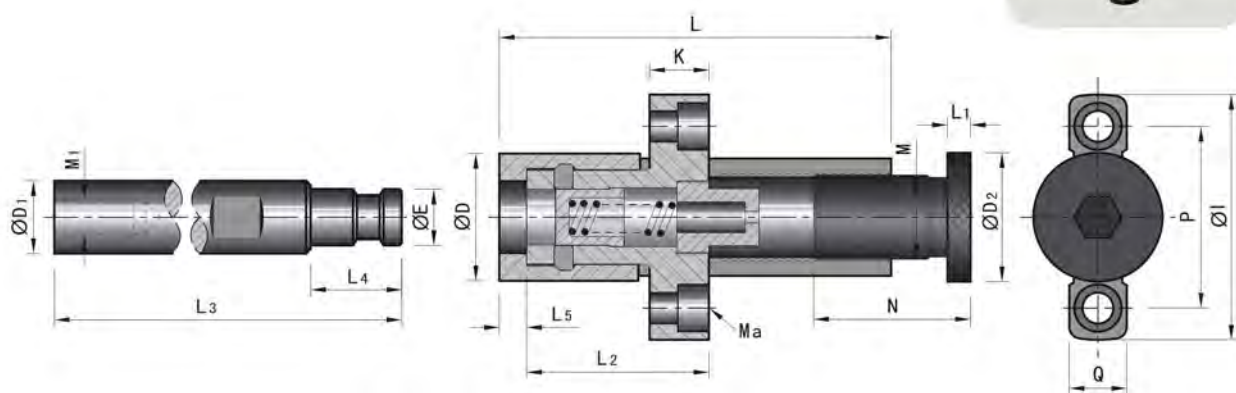
- Closed mould :mould completely closed condition.
- First opening mould :when mould start opening, stop block will make bar and body bush tightly locked , first joint face will start.
- Second opening mould :First opening mould finished , stop block release bar , at the same lock the body and body liner bushing , bar will pull off liner bush , Second joint face will be completely open.

DDKL



Features:

1. Internal installation avoids interferences with water line connectors and externally mounted components.
2. Can be used as early return unit, inter latch locks, Two-stage ejectors.



Order DDKL-2811

Code	D	D1	D2	L	L1	L2	L3	L4	L5
DDKL-2811	28	16	28	86	5	40	140	21	6
DDKL-2812							250		
DDKL-2821							140		
DDKL-2822	34	19	33	111	6	51	250	24	7
DDKL-3411							160		
DDKL-3412							280		
DDKL-3421							160		
DDKL-3422	45	26	42	152	10	68	280	31	10
DDKL-4511							200		
DDKL-4512							310		
DDKL-4521							200		
DDKL-4522				198			310		

I	K	N	E	P	Q	M	M1	Ma	@ ¥ / P
54	13	34	12.4	40	12.6	M22×1.25	M 8×1.25	M6	
60	15	46	14.5	46		M26×1.5	M10×1.5		
78	20	59	19.5	60	17	M34×1.5	M12×1.75	M8	

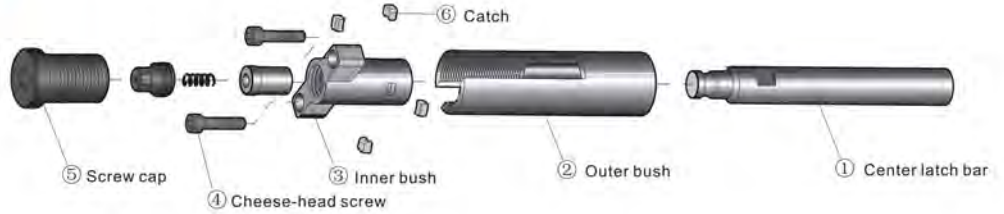
- Ejector pins series
- Slide railers series
- Latch locks series**
- Flanging gate series
- Dome slings series
- Ejector series
- Cooling elements series
- Locating parts series
- Springs series
- Guide pins series
- Guide strips series
- Chuck series
- Modi processor

AISI

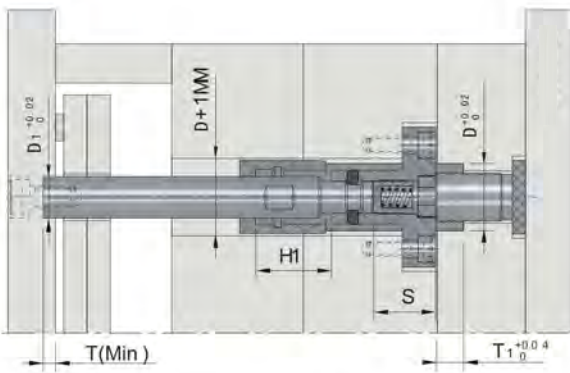
Latch locks

DDKL

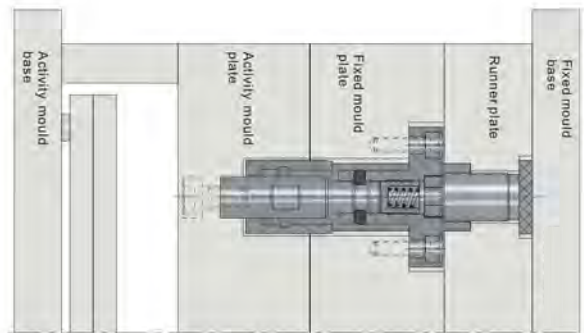
Product space chart:



Installation Diagram:



Install 1



Install 2

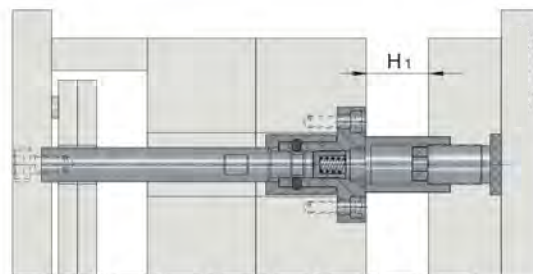
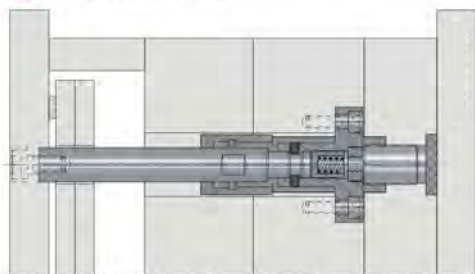


Installation Guidelines

- Installed inner liner bushing, Use cup head screw make liner bushing vertical with joint face fixed on mould plate . Need accurate calculate first opening mould stroke.
- Installed outside liner bushing, Use cup head screw make outside liner bushing vertical with joint face fixed runner plate, request same concentric with inner liner bushing.
- Install middle bar, outside liner bushing and inner liner bushing symmetrical install on the mould, make sure right install and normal running ,then fixed middle bar.
- Coordinate function test, check these parts of latch lock structure whether smoothly and stroke coincide or not.
- Latch lock is precision device, please rely on real object to fixed position and symmetry install.
- Every mould suggest to installed 4sets.
- Three diameter sizes to choose from -28mm, 34mm,and 45mm-depending on the size of the mold and the application , Two travel ranges and two center puller pin lengths to choose from each of the three sizes.
- First remove latch lock device to follow-up operation if need maintenance and change.

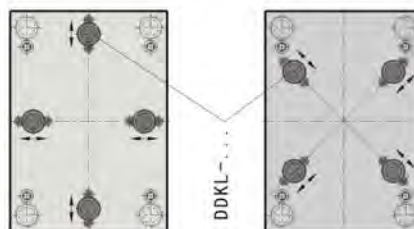
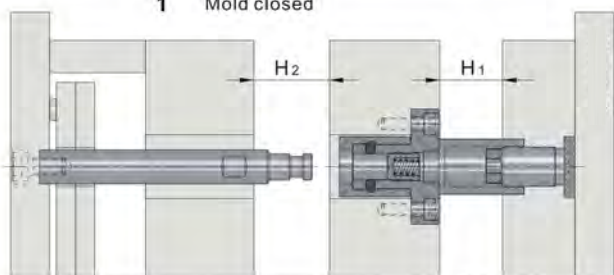


Functional chart:



1 Mold closed

First finish opening mold

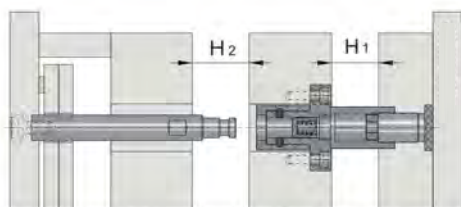


Mold opened

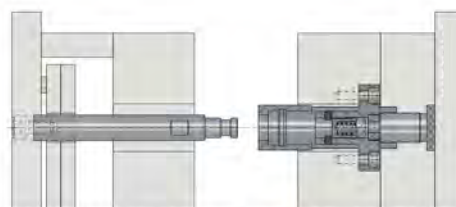
Code	Stroke(H1)		T	T1	S	(Load)
	min	max				
DDKL-2811	5	30	4	10	23	100kg
DDKL-2812						
DDKL-2821	30	55		12	32	200kg
DDKL-2822						
DDKL-3411	6	41		16	43	380kg
DDKL-3412						
DDKL-3421	41	76		16	43	380kg
DDKL-3422						
DDKL-4511	12	58		16	43	380kg
DDKL-4512						
DDKL-4521	58	104	16	43	380kg	
DDKL-4522						

Warning:

As below drawing show, when insert bar release plunger (second time opening mould start to open or completely open. must be sure first opening mould stroke in opening condition, otherwise will cause insert bar can't insert into and break latch lock mechanism during closed mould.



B Right



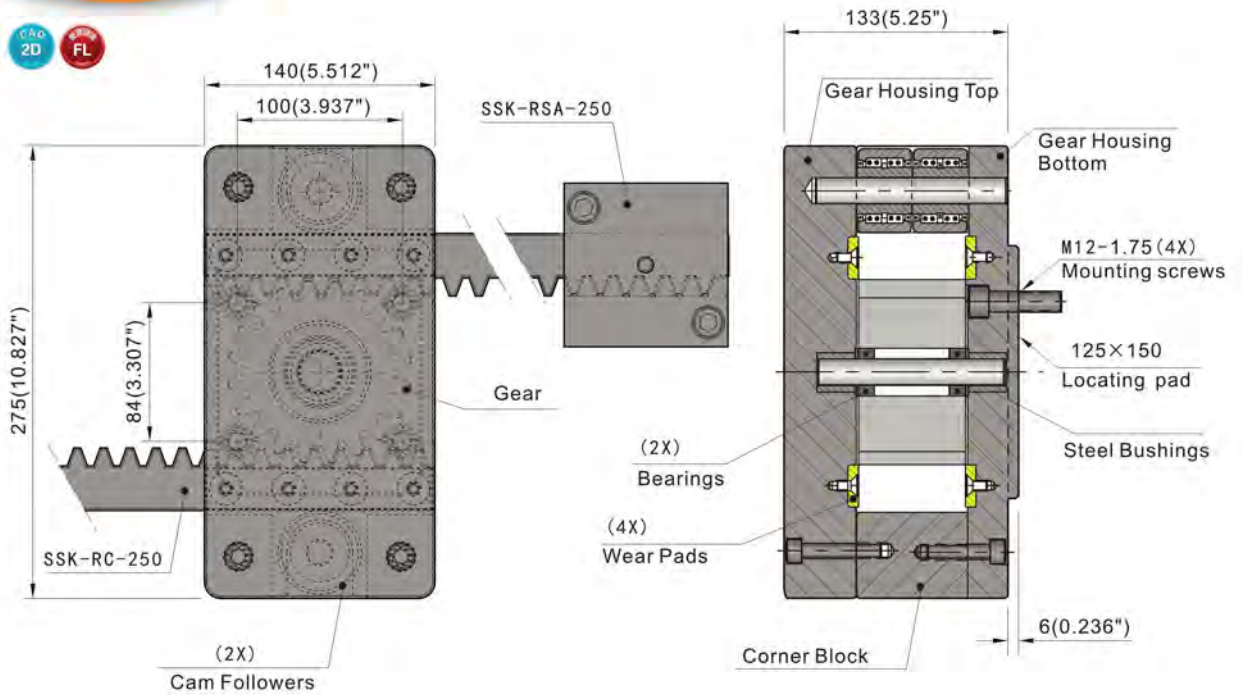
C Wrong

- Esicor pins series
- Slide rail/liners series
- Latch locks**
- Pouring gate series
- Done stamps / Air valves series
- Esicor series
- Cooling elements series
- Locating parts series
- Springs series
- Guide pins / Guide bush
- Guide strips / Water plate series
- Chuck series
- Mold processors

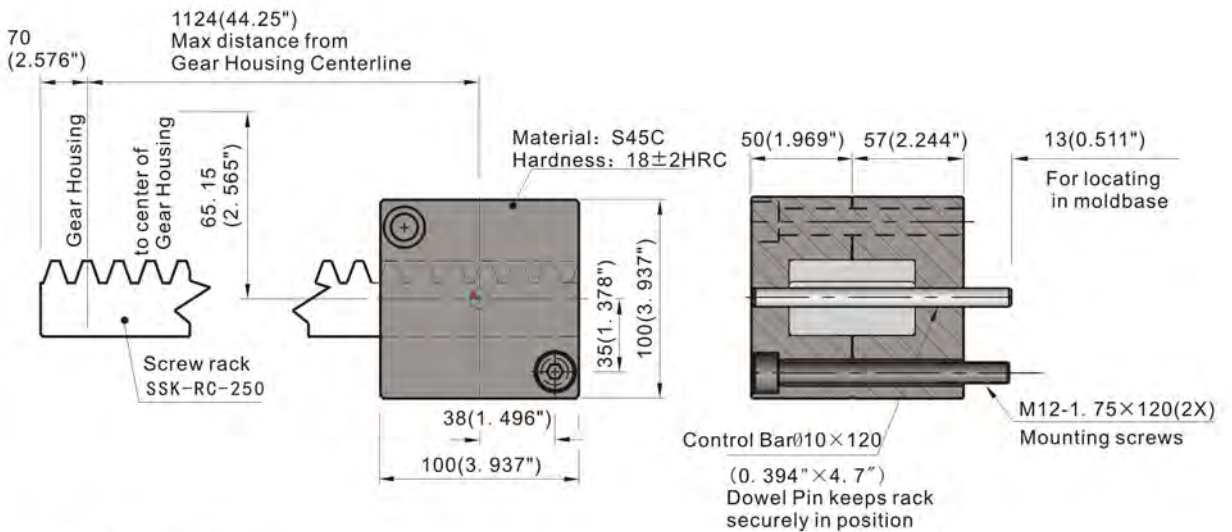
AISI

Latch locks

SSK-GHA

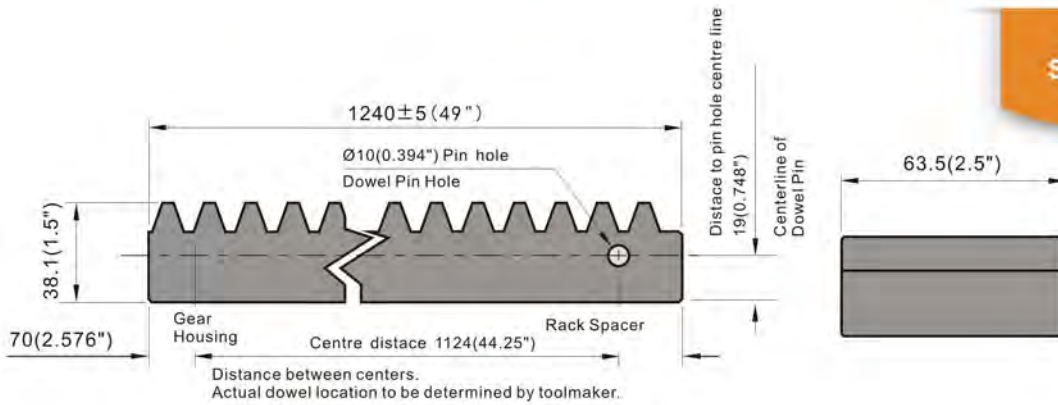


Order SSK-GHA-250



Order SSK-RSA-250

SSK-GHA



Order SSK-RC-250

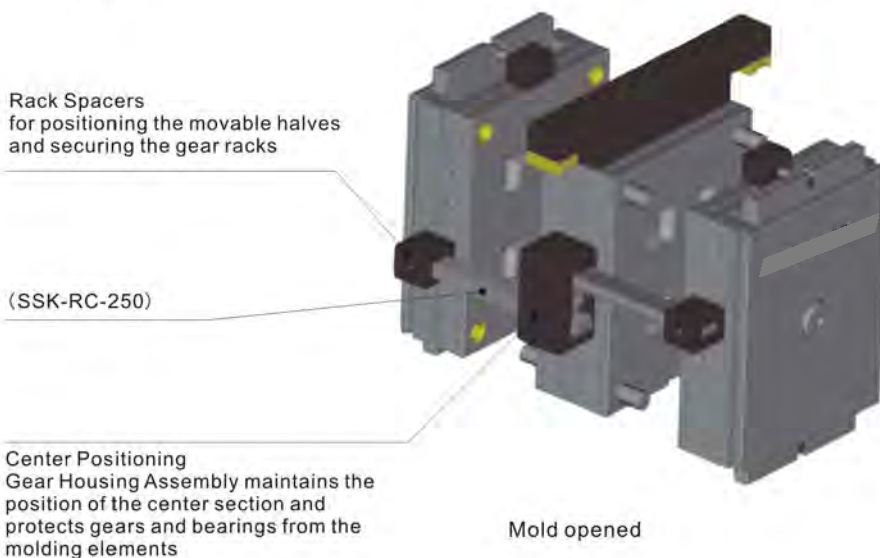


Installation Guidelines:

- Install gear case ,use cup hear screw to make gear case parallel install on mould plate .
- Install rack, by mean of pad to fix rack, count opening mould stroke before installation, under closed mould condition, make sure eliminate this space between gears and gear racks, Then locking pad to fixed screw.



Installation Diagram:



Slider pins
Slider rollers
Latch locks
Flanging gate
Dome stamps
Apr. valves series
Excluder series
Cooling elements
Locating parts
Springs series
Guide pins
Guide pins
Water plate series
Chuck series
Mold processors

Pouring Gate Series





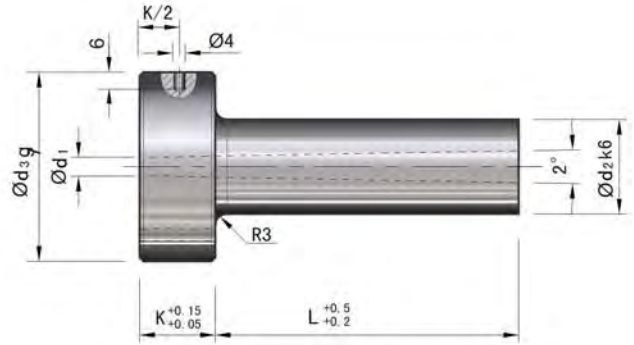
DIN		DIN		DIN		TAIWAN		TAIWAN	
Sprue bushing		Locating rings		Locating rings		Sprue bushing		Sprue bushing	
ZZ511	P146	KK100	P148	KK500	P150	JAA	P152	JAB	P152



DIN

Sprue bushing

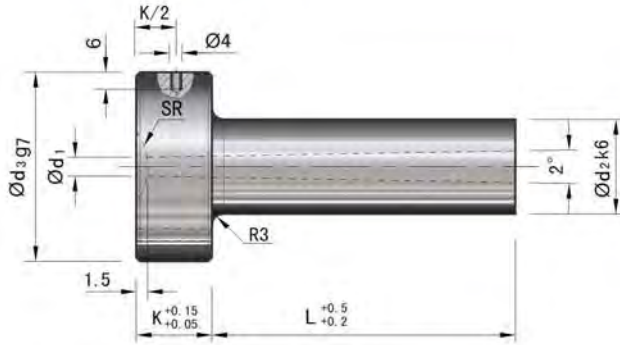
ZZ511



Order ZZ511-d2-L-d1 Material:SKD61 Hardness:48-52HRC

Code	d2	L	d1	d3	K	@ ¥/P
ZZ511-12× 22-2.5	12	22	2.5	28	13	
ZZ511-12× 27-2.5		27				
ZZ511-12× 36-2.5		36				
ZZ511-12× 46-2.5		46				
ZZ511-12× 22-3.5		22				
ZZ511-12× 27-3.5		27				
ZZ511-12× 36-3.5		36				
ZZ511-12× 46-3.5		46				
ZZ511-12× 56-3.5		56				
ZZ511-18× 27-3		18	27			
ZZ511-18× 36-3	36					
ZZ511-18× 46-3	46					
ZZ511-18× 56-3	56					
ZZ511-18× 66-3	66					
ZZ511-18× 76-3	76					
ZZ511-18× 86-3	86					
ZZ511-18× 96-3	96					
ZZ511-18×116-3	116					
ZZ511-18× 27-4	18		27	4	38	18
ZZ511-18× 36-4		36				
ZZ511-18× 46-4		46				
ZZ511-18× 56-4		56				
ZZ511-18× 66-4		66				
ZZ511-18× 76-4		76				
ZZ511-18× 86-4		86				
ZZ511-18× 96-4		86				
ZZ511-18×116-4		116				





Order ZZ511-d2-L-d1-SR Material:SKD61 Hardness:48-52HRC

Code	SR	Code	SR	d2	L	d1	d3	K	@ ¥ /P
ZZ511-12× 22-2.5-15.5	15.5	ZZ511-12× 22-2.5-40	40	12	22	2.5	28	13	
ZZ511-12× 27-2.5-15.5		ZZ511-12× 27-2.5-40			27				
ZZ511-12× 36-2.5-15.5		ZZ511-12× 36-2.5-40			36				
ZZ511-12× 46-2.5-15.5		ZZ511-12× 46-2.5-40			46				
ZZ511-12× 22-3.5-15.5		ZZ511-12× 22-3.5-40			22				
ZZ511-12× 27-3.5-15.5		ZZ511-12× 27-3.5-40			27				
ZZ511-12× 36-3.5-15.5		ZZ511-12× 36-3.5-40			36				
ZZ511-12× 46-3.5-15.5		ZZ511-12× 46-3.5-40			46				
ZZ511-12× 56-3.5-15.5		ZZ511-12× 56-3.5-40			56				
ZZ511-18× 27-3 -15.5		ZZ511-18× 27-3 -40			27				
ZZ511-18× 36-3 -15.5		ZZ511-18× 36-3 -40		36					
ZZ511-18× 46-3 -15.5		ZZ511-18× 46-3 -40		46					
ZZ511-18× 56-3 -15.5		ZZ511-18× 56-3 -40		56					
ZZ511-18× 66-3 -15.5		ZZ511-18× 66-3 -40		66					
ZZ511-18× 76-3 -15.5		ZZ511-18× 76-3 -40		76					
ZZ511-18× 86-3 -15.5		ZZ511-18× 86-3 -40		86					
ZZ511-18× 96-3 -15.5		ZZ511-18× 96-3 -40		96					
ZZ511-18×116-3 -15.5		ZZ511-18×116-3 -40		116					
ZZ511-18× 27-4 -15.5		ZZ511-18× 27-4 -40		27					
ZZ511-18× 36-4 -15.5		ZZ511-18× 36-4 -40		36					
ZZ511-18× 46-4 -15.5	ZZ511-18× 46-4 -40	46							
ZZ511-18× 56-4 -15.5	ZZ511-18× 56-4 -40	56							
ZZ511-18× 66-4 -15.5	ZZ511-18× 66-4 -40	66							
ZZ511-18× 76-4 -15.5	ZZ511-18× 76-4 -40	76							
ZZ511-18× 86-4 -15.5	ZZ511-18× 86-4 -40	86							
ZZ511-18× 96-4 -15.5	ZZ511-18× 96-4 -40	96							
ZZ511-18×116-4 -15.5	ZZ511-18×116-4 -40	116							

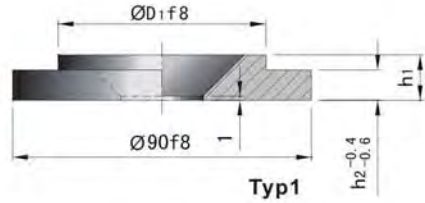


- Electro pins series
- Slide retainers series
- Latch locks series
- Packing guide series**
- Date stamps Air valves series
- Electro series
- Cooling elements series
- Locating pins series
- Spring series
- Guide pins Guide bush
- Guide strips Mirror plate series
- Chuck series
- Mold accessories

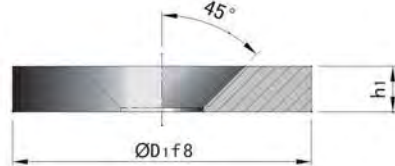
DIN

Locating rings

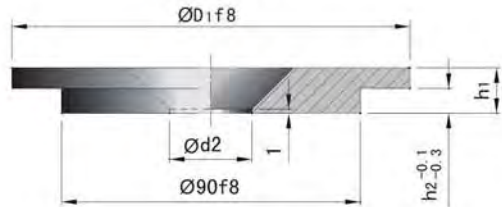
KK100



Typ1



Typ2



Typ3



Order KK100-D1-h1 Material:S45C

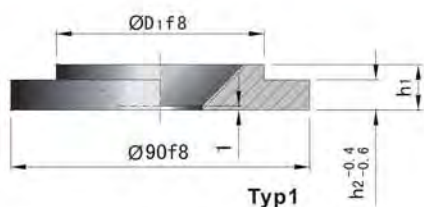
D1	h1	h2	D2	Typ	@ ¥/P		
60	8	4	36	1			
80		-		2			
90		-					
100		-					
110	12	4					
120	8						
125	12						
130	8						
140	12						
150	8						
160	12						
	8						
175	12						
180							
200							
250							



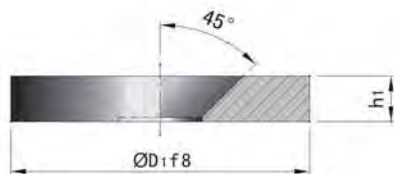
DIN

Locating rings

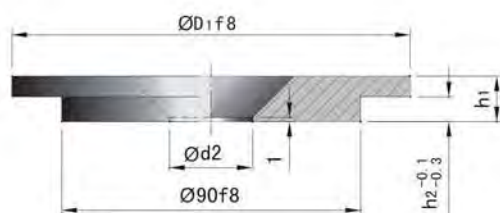
KK100



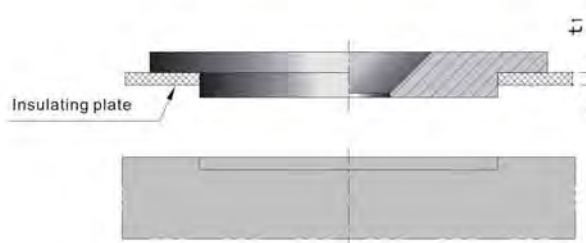
Typ1



Typ2



Typ3



Order KK100-D1-h1

Material:S45C

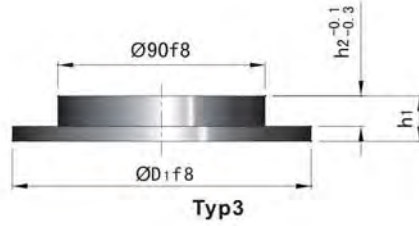
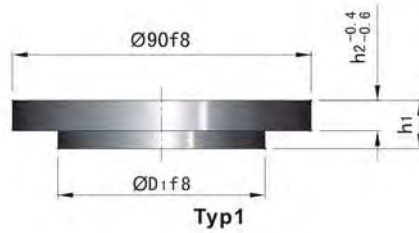
D1	h1	h2	D2	t1	Typ	@ ¥ /P
60	11	7	26	3	1	
	13	9		5		
	11	7		3		
80	13	9		5		
	11			3		
	13			5		
90	15	-		7	2	
	16.5			8.5		
	11	7		3		
100	13	9		5		
	15	11		7		
	16.5	12.5		8.5		
110	11	7		3		
	13	9		5		
	15	11		7		
120	16.5	12.5	36	8.5	3	
	11	7		3		
	13	9		5		
125	15	11		7		
	16.5	12.5		8.5		
	11	7		3		
160	13	9		5		
	15	11		7		
	16.5	12.5		8.5		
175	11	7		3		
	13	9		5		
	15	11		7		
	16.5	12.5		8.5		

- Electro pins series
- Slide railers series
- Latch locks series
- Pickup gate series
- Date stamps Air valves series
- Electro series
- Cooling elements series
- Locating pins series
- Spring series
- Guide pins Guide pins series
- Guide strips Mirror plate series
- Chuck series
- Mold accessories

DIN

Locating rings

KK500

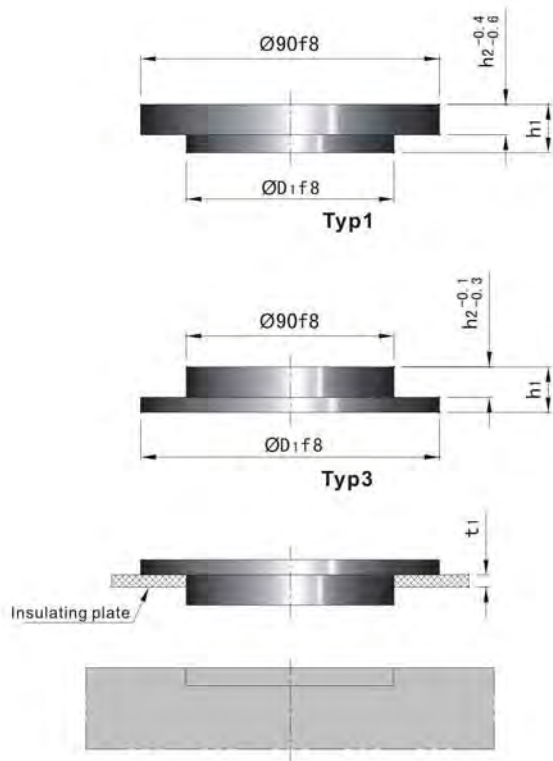


Order KK500-D1-h1 Material:S45C

D1	h1	h2	Typ	@ ¥ /P
60	8		1	
80				
100				
110				
120	12	4	3	
125	8			
140	12			
150	8			
160	12			
175	8			
200	12			
250				



KK500



Order KK500-D1-h1

Material: S45C

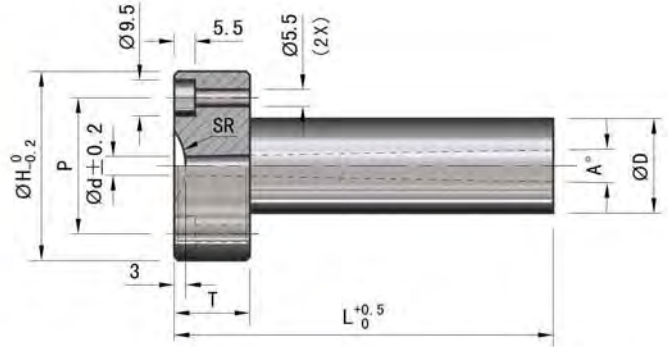
D1	h1	h2	t1	Typ	@ ¥ / P
60	11	7	3	1	
	13	9	5		
	11	7	3		
80	13	9	5		
	11	7	3		
	13	9	5		
100	15	11	7		
	16.5	12.5	8.5		
	11	7	3		
110	13	9	5		
	15	11	7		
	16.5	12.5	8.5		
120	11	7	3		
	13	9	5		
	15	11	7		
125	16.5	12.5	8.5		
	11	7	3		
	13	9	5		
160	15	11	7		
	16.5	12.5	8.5		
	11	7	3		
175	13	9	5		
	15	11	7		
	16.5	12.5	8.5		

- Electro pins series
- Slide retainers series
- Latch locks series
- Locating rings series**
- Date stamps Air valves series
- Electro series
- Cooling elements series
- Locating pins series
- Springs series
- Guide pins Guide pins
- Guide strips Mirror plate series
- Chuck series
- Mold accessories

TAIWAN

Sprue bushing

JAA

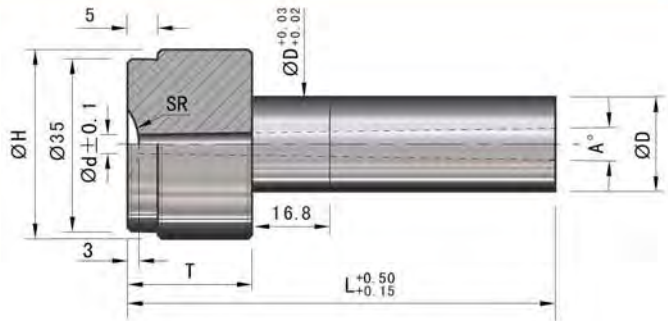


Order JAA-D-L-T-SR-d-A Material:S45C

ØD	ØH	ØP	T	SR	Ød	A
12	0	35	10	0 11 12 13	2 2.5 3 3.5	1° 2° 3°
16	-0.009		15			
16	0	50	10	0 11 12 13 16	4 4.5 5	1° 2° 3°
20	-0.011		15			
25	0		20			

@ ¥/P											
L40	L50	L60	L70	L80	L90	L100	L110	L120	L130	L140	L150

JAB



JAB-D-L-T-SR-d-A Material:S45C

ØD	ØH	T	SR	Ød	A
16	0	20	0 11 12 13	2 2.5 3 3.5	1° 2° 3°
		25			
		30			
20	0	20	16 19 21	4 4.5 5	1° 2° 3°
		25			
		30			

@ ¥/P											
L40	L50	L60	L70	L80	L90	L100	L110	L120	L130	L140	L150

Date stamps & Air valves Series





DIN		DIN		DIN		DIN		DIN	
Date stamps		Date stamps		Date stamps		Date stamps		Date stamps	
ZZ48	P156	ZZ4861	P157	ZZ4800/ZZ48705	P158	FFA/IIA	P159	DDATI-1000	P160



DIN		DIN		DIN		DIN		DIN	
Date stamps		Date stamps		Date stamps		Date stamps		Date stamps	
DDATI-1200	P161	DDATI-1300	P162	DDATI-1800	P163	DDATI-2000	P164	DDATI-2200	P165



DIN		AISI		AISI		JIS		TAIWAN	
Date stamps		Date stamps		Date stamps		Date stamps		Date stamps	
FFD	P166	FFOB	P167	UUOB	P168	DDTN/DDTNX	P169	CO	P171



AISI DIN		TAIWAN		DIN		DIN		AISI	
Recycling insert		Air valves		Air valves		Air valves		Air valves	
Recycling insert	P172	AJV	P173	VVA-C	P175	ZZ491	P174	VVA	P175



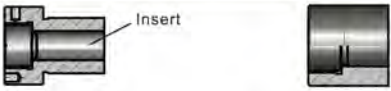







AISI		DIN	
Air valves		Double valves	
PPV	P175	VVD	P176

Products Summary

Date stamps summary:

Date stamps is a Identifies components which used in the plastic parts showed in Character .

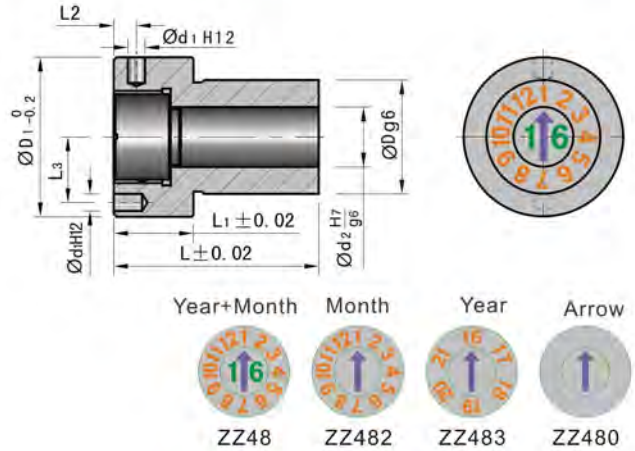
Date stamps inner structure have below kinds:catch structure.spring structure.switch core structure.No steps structure while using and so on.

Graphic	Sturcture	Code	Page	Instruction	
 <p>ZZ48</p> <p>DDTN</p>  <p>DDTNX</p> <p>UUOB</p>  <p>FFD(Double date stamp)</p> <p>CO</p>	Catch structure	ZZ48 <small>DIN</small>	P156	When adjust the insert wont have Bump phenomenon, after open the mold plate then can replace the insert.	
		DDTN <small>JIS</small>	P169		
		DDTNX <small>JIS</small>	P170	When adjust the insert wont have the bump phenomenon, no need to open the mold can just replace the insert through the Sub-surface.	
		UUOB <small>AISI</small>	P168		
		FFD <small>DIN</small>	P166	The insert not available to replaced, FFD type date stamps is combined with year and month, cansave the mold space.	
		CO <small>TAIWAN</small>	P171		
 <p>DDATI1300</p> <p>ZZ48705</p>  <p>DDATI1800</p> <p>FFOB</p>  <p>DDATI1000</p> <p>DDATI1200</p>  <p>DDATI2000</p> <p>ZZ4861</p>  <p>DDATI2200</p> <p>FFA</p>	Spring Structure	DDATI1300 <small>DIN</small>	P162	While adjust the insert will have the bump phenomenon. No need to open the mold , can replce the insert through the sub-surface.	
		ZZ48705 <small>DIN</small>	P156		
		FFOB <small>AISI</small>	P167		
		DDATI1800 <small>DIN</small>	P163		
		DDATI1000 <small>DIN</small>	P160		
		DDATI1200 <small>DIN</small>	P161		
		FFA <small>DIN</small>	P159	When adjust the insert wont have the bump phenomenon, no need to open the mold can just replace the insert through the Sub-surface	
		ZZ4861 <small>DIN</small>	P157		
		DDATI2200 <small>DIN</small>	P165		
		DDATI2000 <small>DIN</small>	P164		
		Recycling insert <small>DIN/AISI</small>	P172		Letters in the plastic products showed is Convex Letter.

DIN

Date Stamps

ZZ48



Features:

1. Inner insert are replaceable, cost reduction.
2. Insert and main body adopts unique Hang machine appearance Effectively solve the problems with date stamps fall off the mould when produce.
3. The dowel pin holes on the bottom and the sides are used to stop the date stamps.
4. Adjust the inner insert will have not bump phenomenon.
5. Position with inner ball bearing, arrows indicate exactly.

Order ZZ482-6 Material:S136 Hardness:50-55HRC

Year+Month	Months	Year	D	D1	L	L1	L2	L3	d1	Ød2	@ ¥/P
ZZ48- 6	ZZ482- 6	ZZ483- 6	6	10	14	5	0.9	5	1.5	3.5	
ZZ48- 8	ZZ482- 8	ZZ483- 8	8	12	17	6	0.9	6	1.5	4.5	
ZZ48-12	ZZ482-12	ZZ483-12	12	20	22	10	3.5	8	2	6.5	
ZZ48-16	ZZ482-16	ZZ483-16	16	23	27	11	3.5	9.25	2	9	
ZZ48-20	ZZ482-20	ZZ483-20	20	28	36	14	4	11.5	3	10.5	

Purchase year code date stamps, please mark which year you need on end code.



Inner insert to install and tear down:

Disassemble chart for inner insert :



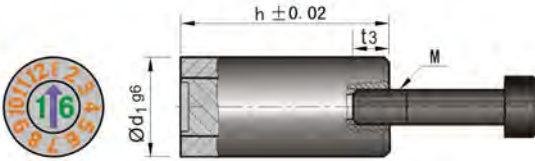
Install

Disassemble



Installation Guidelines:

- When inner insert to install and tear down (see the left picture), it is easy to install and tear down with your finger . (when tear down small diameter inner insert, can eject by screwdriver.)
- As right picture, can rotate clockwise and anticlockwise to adjust arrows to indicate needing months (use professional screwdriver to adjust , see page "P635")



Features:

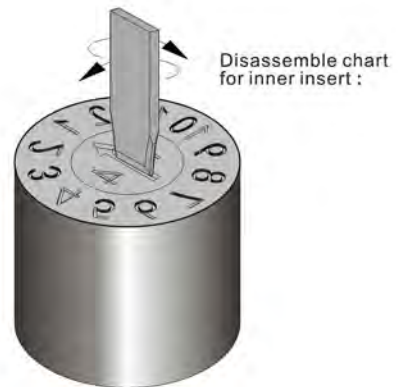
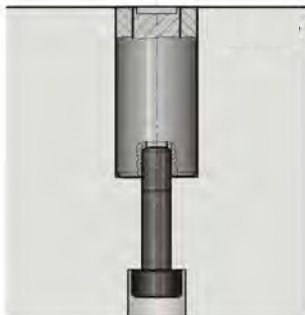
1. Inner inserts are be adjusted unlimitedly by left and right side, surface is smoothly with Inscription.

Order ZZ4861-2-4 Material: S136 Hardness: 50-55HRC

Materials	Shift	Days	Months	Year	d1	h	t3	M	@ ¥/P
ZZ4861-1- 4	ZZ4861-2- 4	ZZ4861-3- 4	ZZ4861-4- 4	ZZ4861-5- 4	4	12.5	2.5	M2 ×20	
ZZ4861-1- 5	ZZ4861-2- 5	ZZ4861-3- 5	ZZ4861-4- 5	ZZ4861-5- 5	5	14		M2.5×20	
ZZ4861-1- 6	ZZ4861-2- 6	ZZ4861-3- 6	ZZ4861-4- 6	ZZ4861-5- 6	6	16	3.0		
ZZ4861-1- 8	ZZ4861-2- 8	ZZ4861-3- 8	ZZ4861-4- 8	ZZ4861-5- 8	8	18		M3 ×20	
ZZ4861-1-10	ZZ4861-2-10	ZZ4861-3-10	ZZ4861-4-10	ZZ4861-5-10	10	22			
ZZ4861-1-12	ZZ4861-2-12	ZZ4861-3-12	ZZ4861-4-12	ZZ4861-5-12	12	25	5.5	M4 ×20	

Purchase year code date stamps, please mark which year you need on end code.

Installation Diagram:



Installation Guidelines:

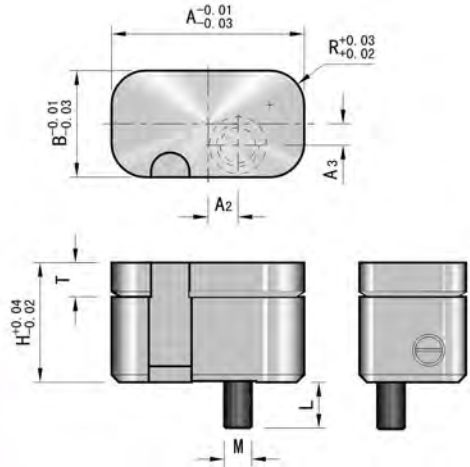
- Press the date stamp closely into mold with thumbs. fix it at the back side by using screws.
- As right picture, can rotate clockwise and anticlockwise to adjust arrows to indicate needing months (use professional screwdriver to adjust, see page "P635")

Ejector pins
 Ejector sleeves
 Slider retainers
 Latch locks
 Parting gates
 Recesses
 Ejector series
 Cooling inserts
 Locating pins
 Springs series
 Guide pins
 Guide pins
 Water plate series
 Chuck series
 Mold accessories

DIN

Date Stamps

ZZ4800



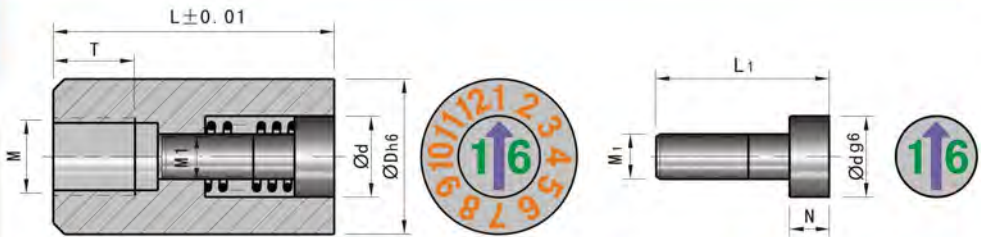
Features:

1. Square and circular angle design, easy to process install hole.
2. Unique Structure design, can replace identifying insert without tearing down the template, cost reduction.

Order ZZ4800-18-10 Material: S136 Hardness: 50-55HRC

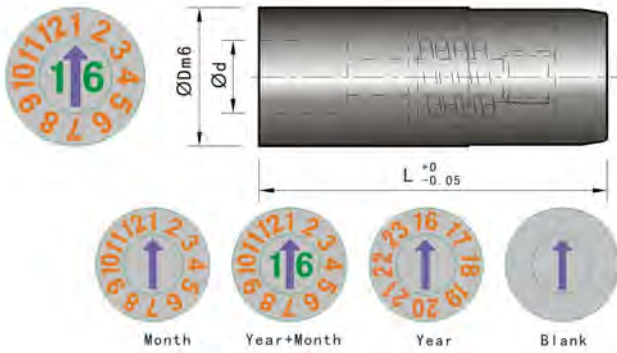
Code	A	B	A2	A3	H	L	T	R	M	@ ¥/P
ZZ4800-18-10	18	10	2.5	2	11.2	5		3.2		
ZZ4800-25-20	25	20	4.5	4	12.7		3.2		M3	
ZZ4800-35-25	35	25	8	6.5		4		3.5		

ZZ48705



Order ZZ48705-4 Material: S136 Hardness: 50-55HRC

T	L	D	d	N	L1	M	M1	@ ¥/S
3	14	4	2.5	2.3	10.5	M2	M1.4×0.2	
3.5	17	5	3.1	3	13	M3	M1.6×0.2	
4	20	8	4.6		14	M4	M2.5×0.35	
6	25	12	6.4	4	17	M5	M3 ×0.5	



Features:

1. Inner insert can be removed from front, no need to dismantle the mold, more simple.
2. Inner insert are replaceable, cost reduction.
3. Turn clockwise infinitely and smoothly, the surface have not bump phenomenon with Inscription.

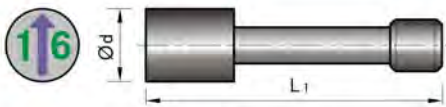
Installation Guidelines:

- Date stamps tight installation in parting mold.

Order FFA-0422SF Material: S136 Hardness: 50-55HRC

Months	Year+Month	Year	Blank	D	L	@ ¥ /P
FFA-0422SF	FFA-042212	FFA-042204	FFA-042200	4	12	
FFA-0530SF	FFA-053012	FFA-053004	FFA-053000	5		
FFA-0632SF	FFA-063212	FFA-063205	FFA-063200	6	20	
FFA-0847SF	FFA-084712	FFA-084705	FFA-084700	8		
FFA-1057SF	FFA-105712	FFA-105706	FFA-105700	10		
FFA-1267SF	FFA-126712	FFA-126708	FFA-126700	12		
FFA-1687SF	FFA-168712	FFA-168710	FFA-168700	16		
FFA-2007SF	FFA-200712	FFA-200710	FFA-200700	20		

Purchase year code date stamps, please mark which year you need on end code.



Arrow Year



Installation Guidelines:

- When replace inner insert, rotate in clockwise by screwdriver, finished with hearing "click" change arrow clockwise, take out inner insert anticlockwise (use specified screwdriver to adjust, see page "P635")

Order IIA-2275SF Material: S136 Hardness: 50-55HRC

Arrow	Year	d	L1	@ ¥ /P
IIA-2275SF	IIA-2275	2.2	7.5	
IIA-3075SF	IIA-3075	3		
IIA-3217SF	IIA-3217	3.2	17	
IIA-4717SF	IIA-4717	4.7		
IIA-5717SF	IIA-5717	5.7		
IIA-6717SF	IIA-6717	6.7		
IIA-8717SF	IIA-8717	8.7		
IIA-1007SF	IIA-1007	10.7		

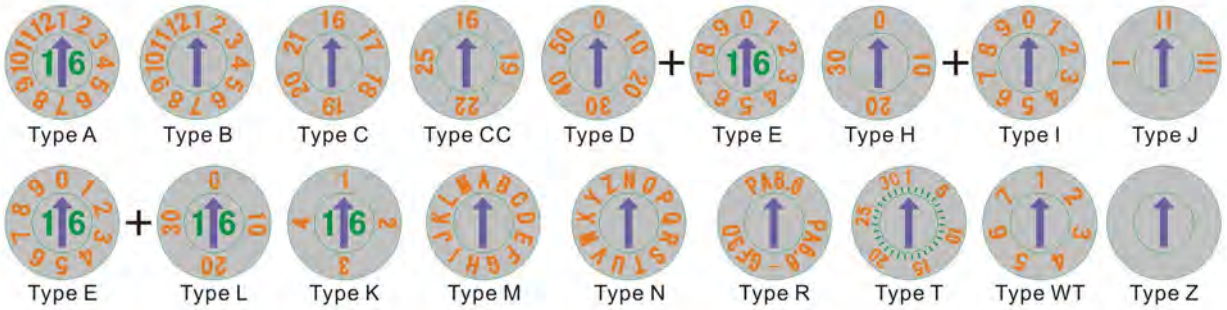
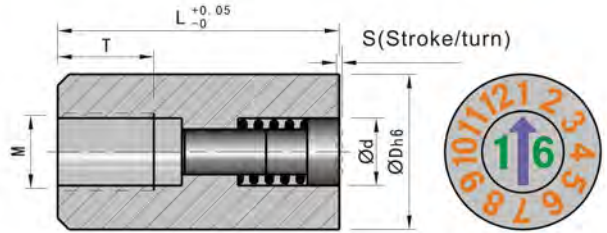
Purchase year code date stamps, please mark which year you need on end code.

Etcher pins
Etcher sleeves
Sinker rollers
Series
Latch locks
Series
Pouring gate
Series
Ejector series
Series
Cooling water
Series
Locating pins
Series
Springs series
Series
Guide pins
Guide pins
Water pipe
Series
Chuck series
Series
Mold
Accessories

DIN

Date Stamps

DDATI1000



Features:

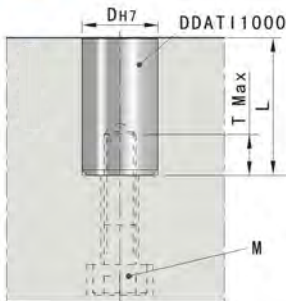
1. Simple structure and install conveniently.
2. Can replace the inner insert.

Order DDATI1000-D-Type Material:S136 Hardness:50-55HRC

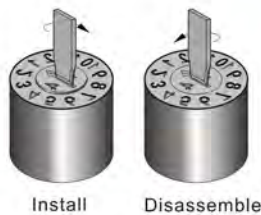
D	d	L	M	T	s	@ ¥/P
4	2.5	14	2			
5		17		3	0.20	
6	3.1	17	3			
8		20	4			
10	4.6	20	5	4	0.35	
12	6.4	25	6	6	0.50	
16	8.4	33	8	8	0.60	

Purchase year code date stamps, please mark which year you need on end code.

Installation Diagram:



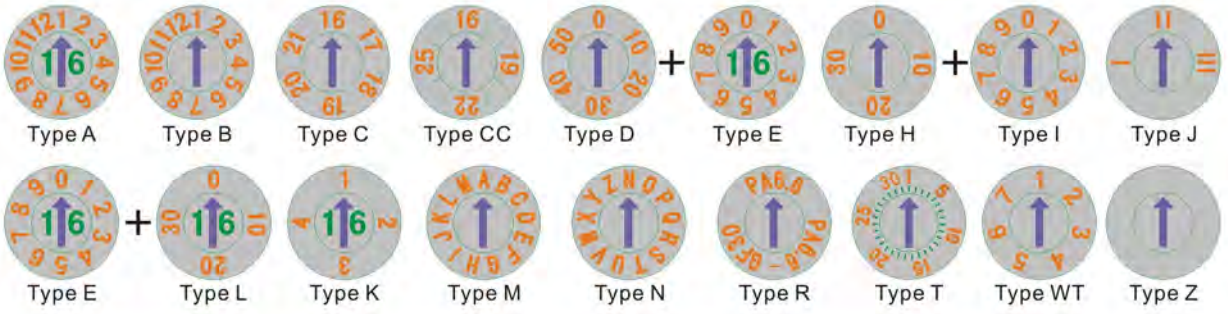
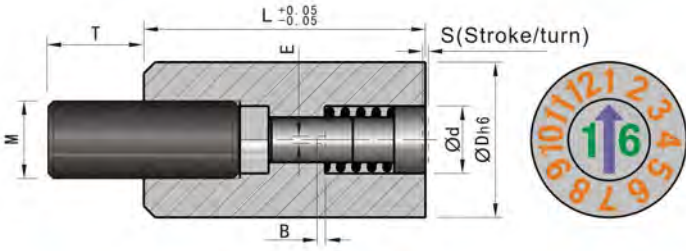
Disassemble chart for inner insert :



Installation Guidelines:

- Date stamps and mold need install clockwise with pressing by thumb.
- fix at back side with head cap screw.
- Inner inserts can not be adjusted unlimitedly.
- When adjusting, the inner inserts are not smooth enough.
- As right picture, inner insert to install clockwise and tear down anticlockwise.(use specified screwdriver to adjust, see page "P635")

DDATI1200



Features:

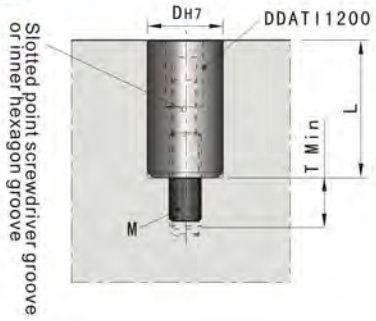
1. Simple Structure, to secure outside of the mold by a threaded pin.
2. Inner inserts can be replaceable.

Order DDATI1200-D-Type Material: S136 Hardness: 50-55HRC

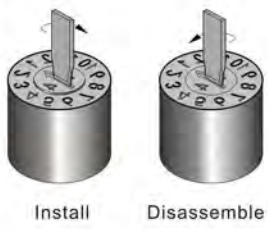
D	d	L	M	T	s	B	E	@ ¥ / P
3	1.6	14	2		0.20	1.5	SW1.3	
4	2.5				0.30		SW1.5	
5	3.1	17	3	4		0.5	0.8	
6					0.40			
8	4.6	20	4			0.7	1	
10			5					
12	6.4	25	6	6	0.60	1	1.5	
16	8.4	33	8	8				

Purchase year code date stamps, please mark which year you need on end code.

Installation Diagram:



Disassemble chart for inner insert :



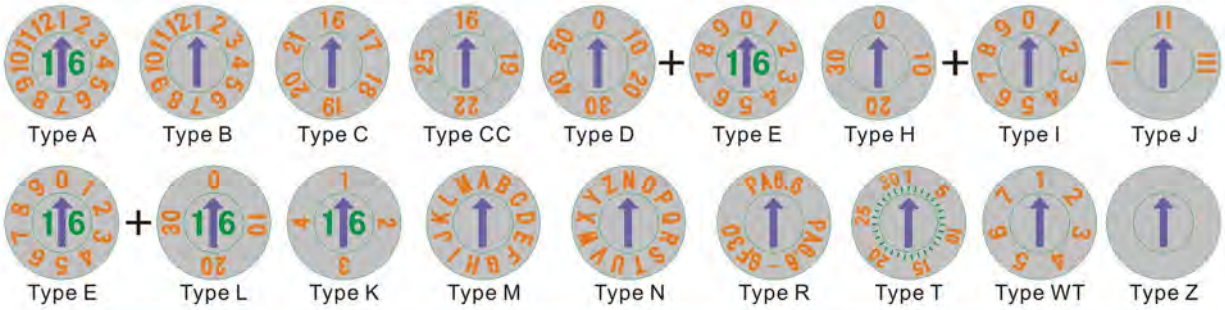
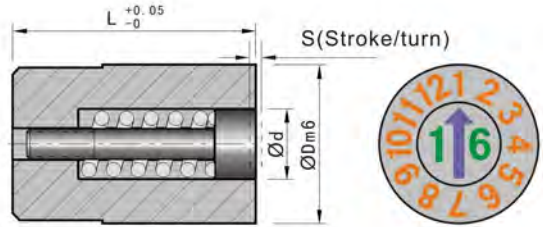
Installation Guidelines:

- Date stamps and mold need to install clockwise
- Date stamps and mold need to install clockwise.
- As right picture, inner insert to install clockwise and tear down anticlockwise. (use specified screwdriver to adjust, see page "P635")
- Inner inserts can not be adjusted unlimitedly.
- When adjusting, the inner inserts are not smooth enough.

DIN

Date Stamps

DDATI1300



Features:

- 1.Simple Structure and easy to install.
- 2.Inner insert can be replaceable, cost reduction.

Order DDATI1300-D-Type Material:S136 Hardness:50-55HRC

D	d	L	S	D1	@ ¥/P
2.6	1.4	4	0.20	1.5	
2.8	1.5			1.6	
3	1.8	5	0.25	1.8	
3.5	2.1			2.2	
4	3.1	8	0.20	3.2	
5	4.4	10	0.25	4.2	
6	5.2	12		5.2	
8	6.2	14	0.35	6.2	
10	8.2			8.2	
12					
16					

Purchase year code date stamps, please mark which year you need on end code.



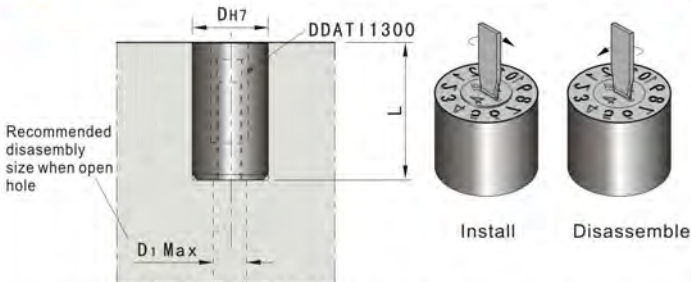
Installation Diagram:

Disassemble chart for inner insert :



Installation Guidelines:

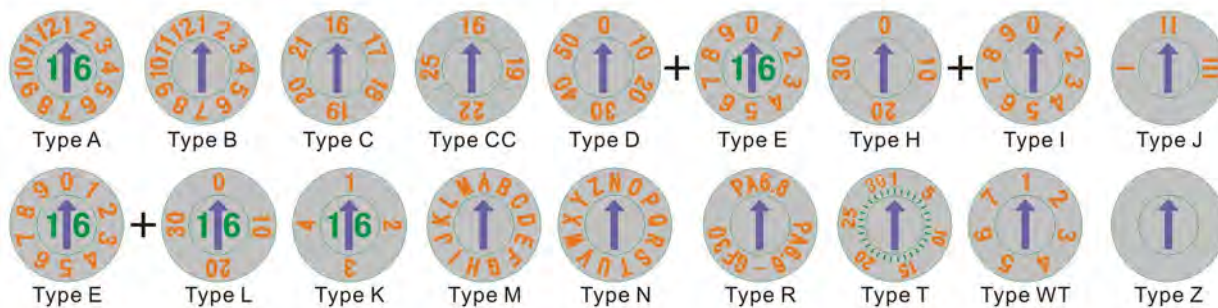
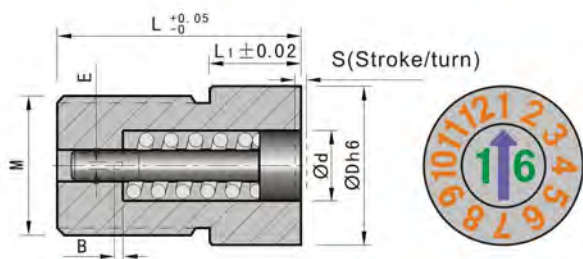
- Strike date stamps into hole with Rubber hammer, small hole will stop the inner insert from rotate(tear down inner insert before



- 1.install,if need to install all the whole date stamps, need keep the hole which is ejected by back side before install)
- 2.Inner inserts are not be adjusted unlimitedly.
- 3.When adjusting, the inner inserts are not smooth enough.
- 4.As right picture,inner insert to install clockwise and tear down anticlockwise.(use specified screwdriver to adjust, see page "P635")

DIN
Date Stamps

DDAT11800



Features:

1. Simple structure, can tear down date stamps from front.
2. Inner insert can be replaceable.

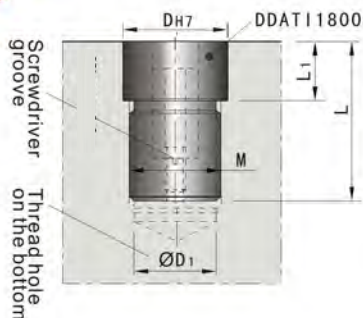
Order DDAT11800-D-Type Material: S136 Hardness: 50-55HRC

D	d	L	D1	L1	M	S	B	E	@ ¥/P
3	1.5	4	2.2	1.8	2.5×0.35	0.2	0.4	0.3	
3.5			2.7		3×0.35				
4	2.1	5	3.2		3.5×0.35	0.25		0.4	
5			4.1	2	4.5×0.5		0.5		
6	3.1	8	4.6		5 ×0.5	0.2		0.6	
8	4.4	10	5.6		6 ×0.5	0.25		0.8	
10	5.2	12	7.4	3	8 ×0.75		0.7	1	
12	6.2		9.4	4	10 ×0.75	0.35			
16	8.2	14	11	5	12 ×1		1	1.2	

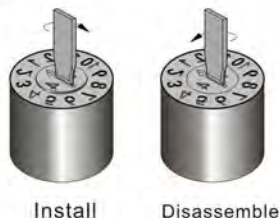
Purchase year code date stamps, please mark which year you need on end code.



Installation Diagram:



Disassemble chart for inner insert :



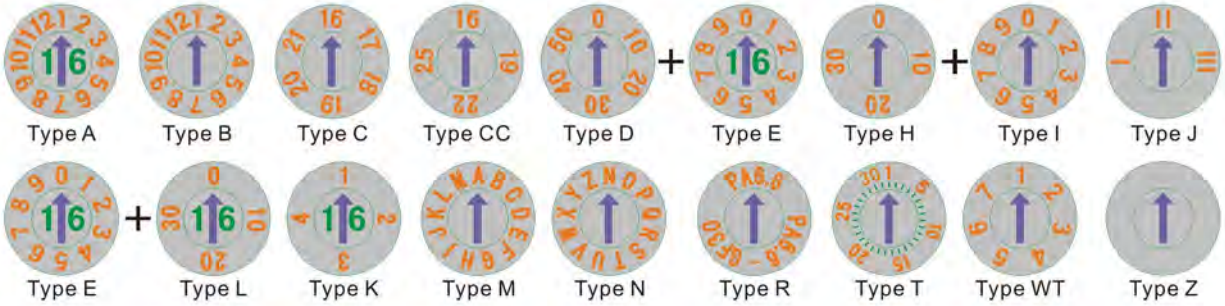
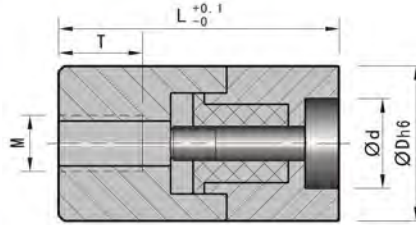
Installation Guidelines:

- As right picture, inner insert to install clockwise and tear down anticlockwise. (use specified screwdriver to adjust, see page "P635")
- Can't unlimited to adjust inner inserts.
- Inner inserts will have rugged phenomenon when adjust them.

DIN

Double date Stamps

DDATI2000



Features:

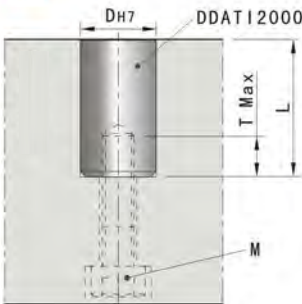
1. Simple Structure, to secure outside of the mold by a threaded pin.
2. Inner insert can be replaceable.
3. When adjusting, the inner inserts are smooth enough.

Order DDATI2000-D-Type Material:S136 Hardness:50-55HRC

D	d	L	M	T	@ ¥/P
4	2.5	14	2		
5				3	
6	3.1	17	3		
8			4		
10	4.6	20	5	4	
12	6.4	25	6	6	
16	8.4	33	8	8	

Purchase year code date stamps, please mark which year you need on end code.

Installation Diagram:



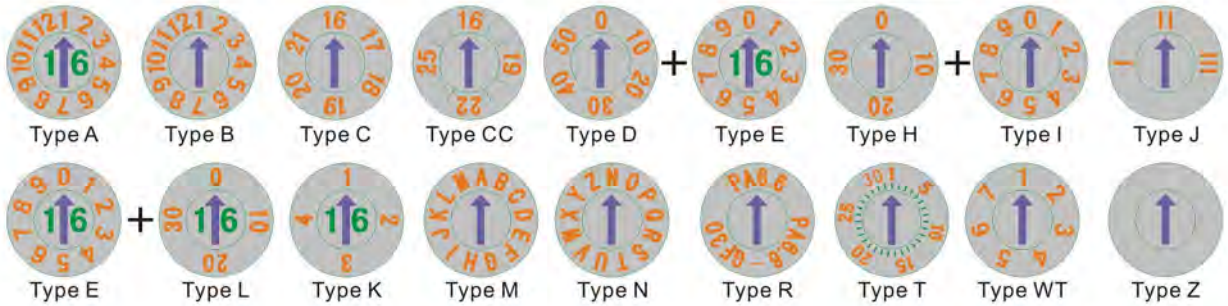
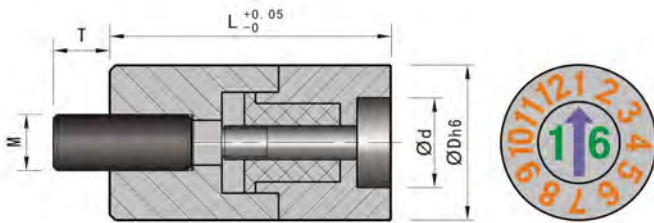
Disassemble chart for inner insert :



Installation Guidelines:

- Date stamps and mold need install clockwise with pressing by thumb fix at back side with head cap screw.
- As right picture, inner insert to install clockwise and anticlockwise revolve to disassemble inner insert . (use specified screwdriver to adjust, see page "P635")

DDATI2200



Features:

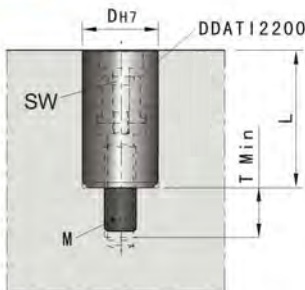
1. Simple Structure, to secure outside of the mold by a threaded pin.
2. Inner inserts are replaceable, cost reduction.

Order DDATI2200-D-Type Material: S136 Hardness: 50-55HRC

D	d	L	M	T	@ ¥/P
3	1.6	14	2		
4	2.5				
5				4	
6	3.1	17	3		
8			4		
10	4.6	20	5		
12	6.4	25	6	6	
16	8.4	33	8	8	

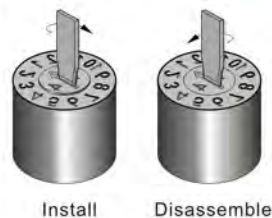
Purchase year code date stamps, please mark which year you need on end code.

Installation Diagram:



Inner hexagon

Disassemble chart for inner insert :



Installation Guidelines:

- Date stamps and mold need install clockwise with pressing by thumb, fix at back side with headless screw.
- Inner inserts are not be adjusted unlimitedly.
- As right picture, inner insert to install clockwise and tear down anticlockwise. (use specified screwdriver to adjust, see page "P635")

DIN

Date Stamps

Patent NO.:ZL 2008 2 0095940.3

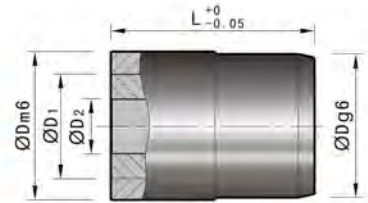
FFD



Blank (Arrow)



Year+Month



Features:

1. This type of date stamps is consist of twelve months and six groups years, cost reduction, more effectively to make use of the room and long lifespan.
2. Rotate inner insert clockwise to adjust arrows to indicate years, rotate anticlockwise to indicate the months, without Bump phenomenon.
3. Adopt ball plug and degrees groove to locate, Indicates a more accurate.
4. can carve with year, month, day.

FFD-080512 Material: S136 Hardness: 50-55HRC

12Months+Year	Blank	D	D1	D2	L	@ ¥/P
FFD-080512	FFD-080500	8	5.5			
FFD-100612	FFD-100600	10	6	3	20	
FFD-120812	FFD-120800	12	8	4		
FFD-161012	FFD-161000	16	10.5	5.3		

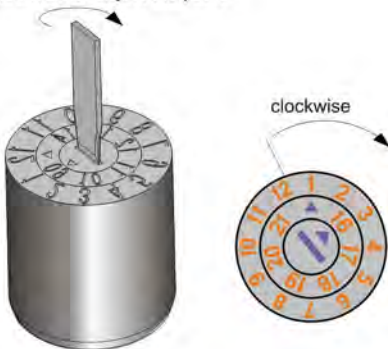
Purchase year code date stamps, please mark which year you need on end code.



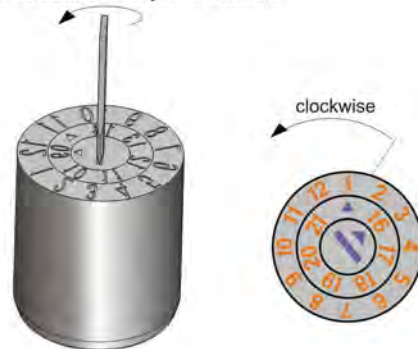
Installation Guidelines:

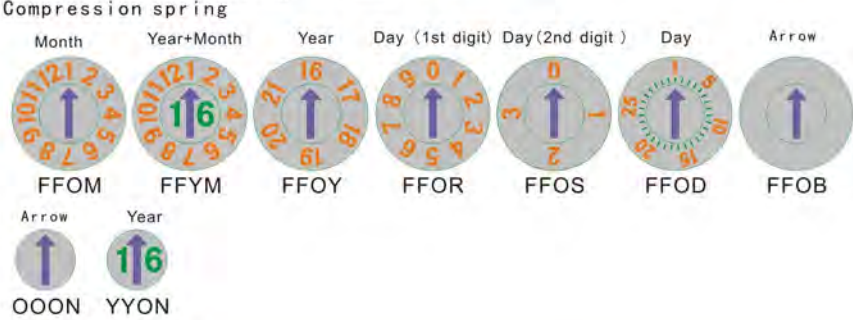
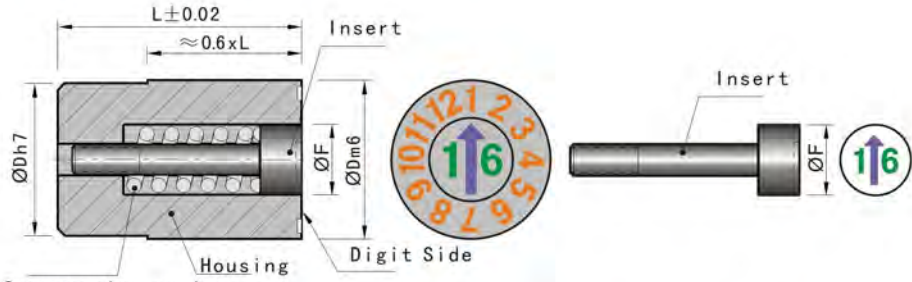
- Install for date stamps and mold to interwork, Strike date stamps into hole with Rubber hammer. (small hole will stop the inner insert to rotate)
- A whole one, inner inset can not be replaceable.

turn clockwise to adjust the years



turn counter-clockwise to adjust the months





- Features:**
1. Simple structure, easy install.
 2. Inner insert can be replaceable from front, No need disassemble mold, simple and convenient.

Order FFOB-6 Material: S136 Hardness: 50-55HRC

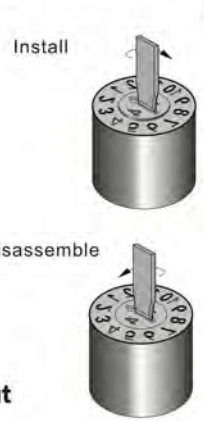
Months	Year&Months	Year	Days(1st digit)	Days(2nd digit)	Days	D	L	F	@ ¥ / P
FFOM	FFYM	FFOY	FFOR	FFOS	FFOD	6	8	3.1	
						8	10	4.4	
						10	12	5.2	
						12	14	6.2	
						16	14	8.2	
20	16	11							

Purchase year code date stamps, please mark which year you need on end code.

Diagram of install and tear down:



Disassemble chart for inner insert:



Installation Guidelines:

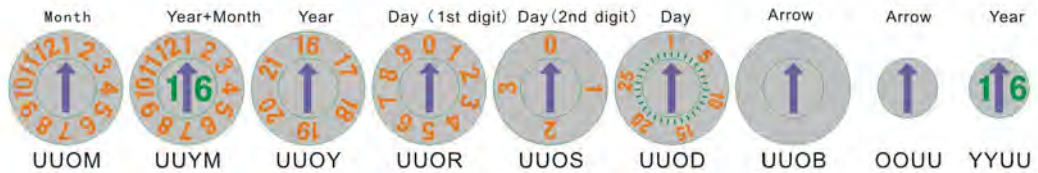
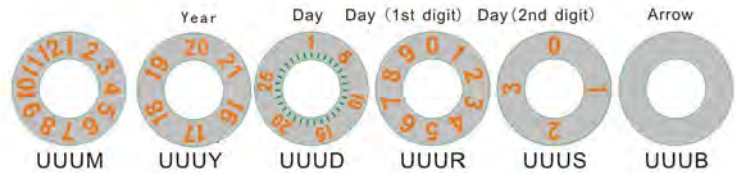
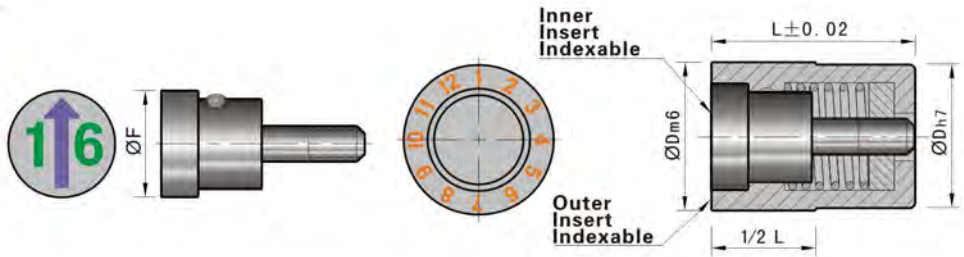
- Strike date stamps into hole with Rubber hammer. (small hole will stop the inner from rotate. (tear down inner insert before install. if need tear down the whole date stamps need keep the hole which is drive out by back side before install)
- As right picture, inner insert to install clockwise and tear down anticlockwise.
- When adjusting, the inner inserts are not smooth enough.

Encoder pins
Encoder sleeves
Sinter retainers
Latch locks
Painting gaskets
Rings
Ejector series
Cooling elements
Locating pins
Springs series
Guide pins
Water stops
Chuck series
Mold accessories



Date Stamps

UUOB



Features:

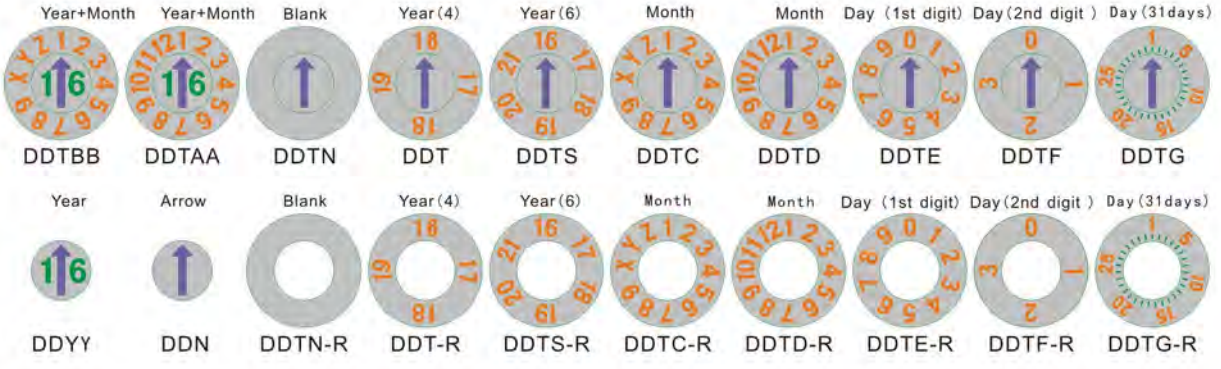
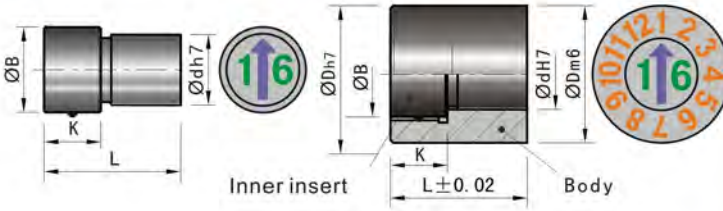
1. Indexable and front removable, without tearing down mold, simple and convenient.
2. The arrows indicate its digits exactly, with the springs and ball.
3. Easily and smoothly adjustable inner insert that is removable using a screwdriver.

Order UUOB-6 Material:S136 Hardness:50-55HRC

Year&Months	Months	Year	Days	Days(1st digit)	Days(2nd digit)	Blank	Year	Arrow	Months
UUYM- 6	UUOM- 6	UUOY- 6		UUOR- 6	UUOS- 6	UUOB- 6	YYUU- 6	OOUU- 6	UUUM- 6
UUYM- 8	UUOM- 8	UUOY- 8		UUOR- 8	UUOS- 8	UUOB- 8	YYUU- 8	OOUU- 8	UUUM- 8
UUYM-10	UUOM-10	UUOY-10		UUOR-10	UUOS-10	UUOB-10	YYUU-10	OOUU-10	UUUM-10
UUYM-12	UUOM-12	UUOY-12		UUOR-12	UUOS-12	UUOB-12	YYUU-12	OOUU-12	UUUM-12
UUYM-16	UUOM-16	UUOY-16	UUOD-16	UUOR-16	UUOS-16	UUOB-16	YYUU-16	OOUU-16	UUUM-16
UUYM-20	UUOM-20	UUOY-20	UUOD-20	UUOR-20	UUOS-20	UUOB-20	YYUU-20	OOUU-20	UUUM-20

Year	Days	Days(1st digit)	Days(2nd digit)	Blank	Dia	D	L	F	@ ¥ /P
UUUY- 6		UUUR- 6	UUUS- 6	UUUB- 6	6	6	8	3.7	
UUUY- 8		UUUR- 8	UUUS- 8	UUUB- 8	8	8	10	5	
UUUY-10		UUUR-10	UUUS-10	UUUB-10	10	10	12	6.3	
UUUY-12		UUUR-12	UUUS-12	UUUB-12	12	12	14	7.5	
UUUY-16	UUUD-16	UUUR-16	UUUS-16	UUUB-16	16	16	14	11	
UUUY-20	UUUD-20	UUUR-20	UUUS-20	UUUB-20	20	20	16	13.2	

Purchase year code date stamps, please mark which year you need on end code.



Features:

1. Inner inserts can be replaceable, cost reduction.
2. Adopt ball plug structure, Indicates a more accurate.
3. When adjusting, the inner inserts are smooth enough.

Order DDTN-4 Material: S136 Hardness: 50-55HRC

Days(2nd digit)	Days	Blank	Year	Blank	Year&Months	Year&Months	4Years	6Years
DDTF 4		DDTN 4	DDYY 4	DDN 4	DDTAA 4	DDTBB 4	DDT 4	DDTS 4
DDTF 5		DDTN 5	DDYY 5	DDN 5	DDTAA 5	DDTBB 5	DDT 5	DDTS 5
DDTF 6		DDTN 6	DDYY 6	DDN 6	DDTAA 6	DDTBB 6	DDT 6	DDTS 6
DDTF 8		DDTN 8	DDYY 8	DDN 8	DDTAA 8	DDTBB 8	DDT 8	DDTS 8
DDTF10		DDTN10	DDYY10	DDN10	DDTAA10	DDTBB10	DDT10	DDTS10
DDTF16	DDTG16	DDTN16	DDYY16	DDN16	DDTAA16	DDTBB16	DDT16	DDTS16
DDTF20	DDTG20	DDTN20	DDYY20	DDN20	DDTAA20	DDTBB20	DDT20	DDTS20

Months	Months	Days(1st digit)	Dia	D	d	L	@ ¥/P
DDTC 4	DDTD 4	DDTE 4	4	1.9	4	1.9	
DDTC 5	DDTD 5	DDTE 5	5	2.3	5	2.3	8
DDTC 6	DDTD 6	DDTE 6	6	2.8	6	2.8	
DDTC 8	DDTD 8	DDTE 8	8	4	8	4	10
DDTC10	DDTD10	DDTE10	10	5	10	5	12
DDTC16	DDTD16	DDTE16	16	10	16	10	14
DDTC20	DDTD20	DDTE20	20	12	20	12	16

Purchase year code date stamps, please mark which year you need on end code.



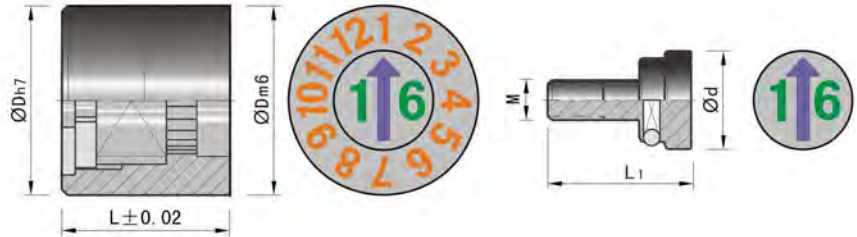
Installation Guidelines:

- Install for date stamps and mold to interwork, Strike date stamps into hole with Rubber hammer. (small hole will stop the inner insert to rotate)
- Inner insert can be not replaceable from front, need to tear down mold to replace another.

JIS

Date Stamps

DDTNX



Features:

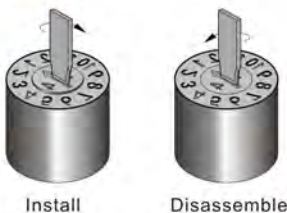
- 1.Inner insert can be replaceable from front , no need to tear down mold , sample and convenient.
- 2.Adopt ball plug structure , Indicates a more accurate.
- 3.When adjusting, the inner inserts are smooth enough.

Order DDTNX-6 Material:S136 Hardness:50-55HRC

D	Dm6	Dm7	L	L1	d	M	@ ¥/P
4	4	4			2.4		
5	5	5	0	8	2.9	M1.6×0.20	
6	6	6	-0.012		3.7		
8	8	8	0	10	5	M2.3×0.25	
10	10	10	-0.015	12	6.3	M2.5×0.35	
12	12	12	0		7.5	M3.0×0.35	
16	16	16	-0.018	14	11		
20	20	20	0/-0.021	16	15.7	M4.0×0.35	

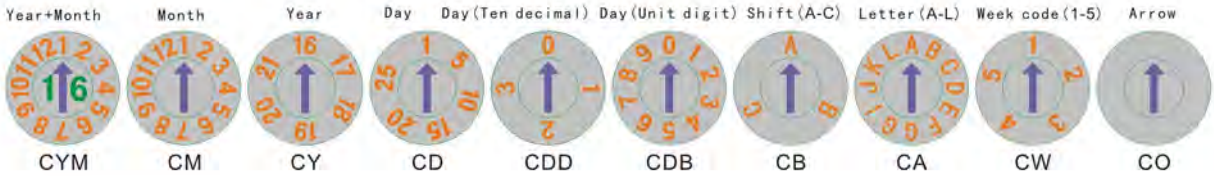
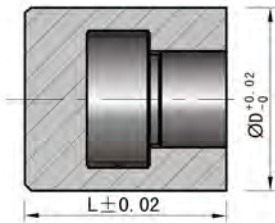
Purchase year code date stamps, please mark which year you need on end code.

Disassemble chart for inner insert :



Installation Guidelines:

- Install for date stamps and mold to interwork, Strike date stamps into hole with Rubber hammer. (small hole will stop the inner insert to rotate)
- As right picture, inner insert to install clockwise and tear down anticlockwise.
- Rotate clockwise inner insert to adjust months with screwdriver. (use specified screwdriver to adjust, see page "P635")



Features:

1. A whole one, can be not replaceable.
2. The arrows indicate its digits exactly with its excellent inner ball bearing structure.

Order CO-6-10 Material:S136 Hardness:50-55HRC

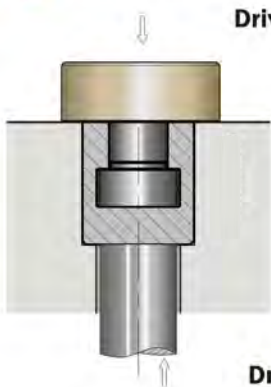
Year+Month	Months	Year	Days	2nd digit	1st digit	Shift	Letters	Diameter-Length	@ ¥/P
CYM 4- 6	CM 4- 6	CY 4- 6	-	CDD 4- 6	CDB 4- 6	CB 4- 6	CA 4- 6	4- 6	
CYM 4- 8	CM 4- 8	CY 4- 8	-	CDD 4- 8	CDB 4- 8	CB 4- 8	CA 4- 8	4- 8	
CYM 5- 8	CM 5- 8	CY 5- 8	CD 5- 8	CDD 5- 8	CDB 5- 8	CB 5- 8	CA 5- 8	5- 8	
CYM 6- 8	CM 6- 8	CY 6- 8	CD 6- 8	CDD 6- 8	CDB 6- 8	CB 6- 8	CA 6- 8	6- 8	
CYM 6-10	CM 6-10	CY 6-10	CD 6-10	CDD 6-10	CDB 6-10	CB 6-10	CA 6-10	6-10	
CYM 8-10	CM 8-10	CY 8-10	CD 8-10	CDD 8-10	CDB 8-10	CB 8-10	CA 8-10	8-10	
CYM10-10	CM10-10	CY10-10	CD10-10	CDD10-10	CDB10-10	CB10-10	CA10-10	10-10	
CYM10-12	CM10-12	CY10-12	CD10-12	CDD10-12	CDB10-12	CB10-12	CA10-12	10-12	
CYM12-12	CM12-12	CY12-12	CD12-12	CDD12-12	CDB12-12	CB12-12	CA12-12	12-12	
CYM12-14	CM12-14	CY12-14	CD12-14	CDD12-14	CDB12-14	CB12-14	CA12-14	12-14	
CYM16-14	CM16-14	CY16-14	CD16-14	CDD16-14	CDB16-14	CB16-14	CA16-14	16-14	
CYM20-14	CM20-14	CY20-14	CD20-14	CDD20-14	CDB20-14	CB20-14	CA20-14	20-14	
CYM20-16	CM20-16	CY20-16	CD20-16	CDD20-16	CDB20-16	CB20-16	CA20-16	20-16	

Purchase year code date stamps, please mark which year you need on end code.



Diagram of install and tear down:

Disassemble chart for inner insert :



Drive in

Drive out

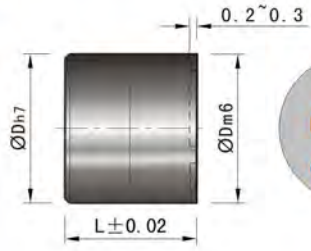


Installation Guidelines:

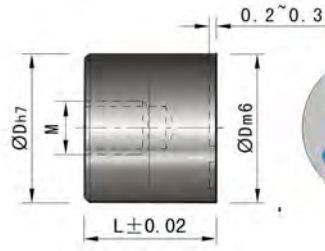
- Strike date stamps into hole with Rubber hammer. (small hole will stop the inner from rotate. (tear down inner insert before install. if need tear down the whole date stamps need keep the hole which is drive out by back side before install)
- As right picture, rotate clockwise and anticlockwise inner insert to adjust the arrows to indicate the months.

Date stamps Air valves series

AISI DIN



A1



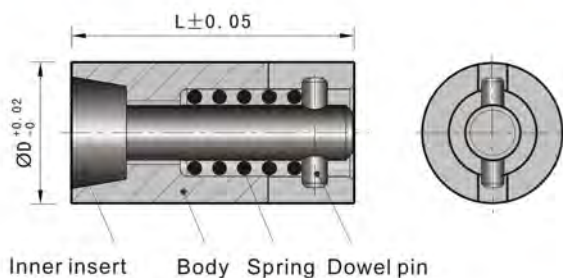
D1

Order A1-6-8 Material:S136 Hardness:50-55HRC

	D	L	@ ¥/P
	6	8	
	8	10	
	10	12	
	16	14	
	20	16	

Order D1-6-8 Material:S136 Hardness:50-55HRC

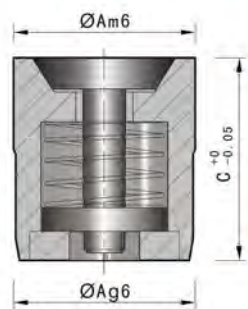
	D	L	M	@ ¥/P
	6	8		
	8	10	M4	
	10	12	M5	
	16	14		
	20	16	M6	



Features:
 1. Body and valves are manufactured completely from stainless steel, Excellent rust resistance.
 2. An effective method of release the vacuum created during plastic injection molding.
 3. To substitute ejector pins or other ejector parts for diemould.

Order AJV-D Material: S136 Hardness: 50-55HRC

Code	ØD	L	@ ¥ / P
AJV	8	15	
	10	20	
	12	25	
	16	30	
	20		
	25		
	30		



Features:
 1. Small room with install, choice for many kinds standard.
 2. Be better to use under the temperature 150.



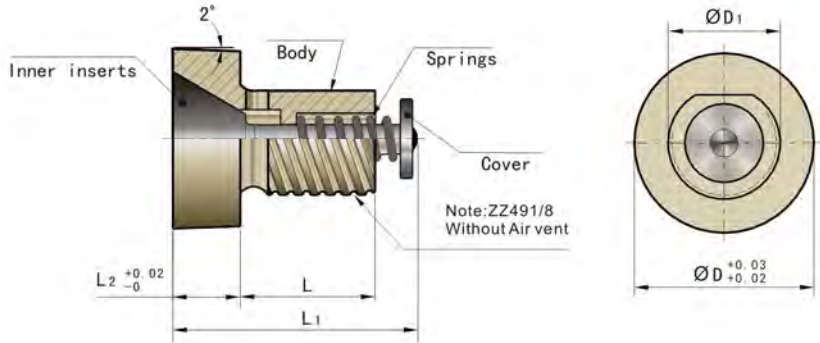
Order VVA-C-065212 Material: S136 Hardness: 50-55HRC

Code	A	C	@ ¥ / P
VVA-C-065212	6	12	
VVA-C-086512	8		
VVA-C-100812	10		
VVA-C-121012	12	20	
VVA-C-161320	16		
VVA-C-201720	20		

DIN

Air valves

ZZ491

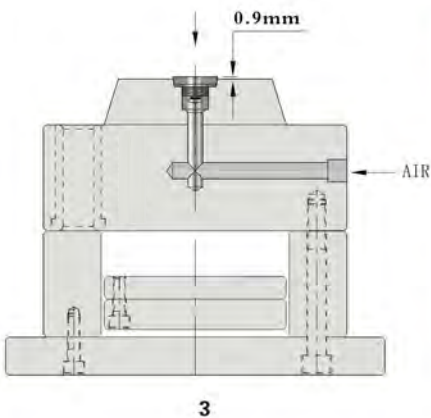
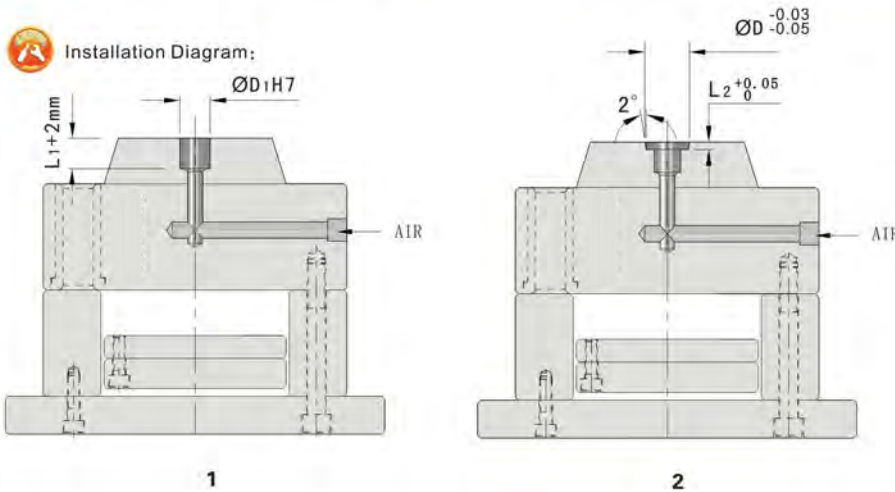


Order ZZ491-8 Material: Becu+Stainless steel

Code	D	D1	L	L1	L2	max.°C	@ ¥ /P
ZZ491- 8	8	6	8	16			
ZZ491-12	12	8	13	21	5	250	
ZZ491-16	16	10	12	22	6		

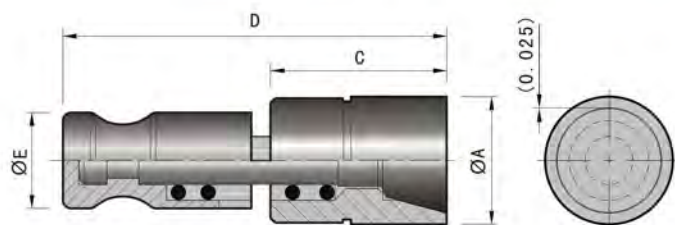


Installation Diagram:



Installation Guidelines:

- Drill holes for air supply, drill and ream guide bore for special counter bore.
- Machine tapered counter bore using EDM or reamer for receiving air valves. (match with concrete objects)
- When placing Z491 loosely into receiving bore it will protrude approx 0.9mm above the contour surface.
- After pressing it into home position, the valves is secured against any extreme operation condition.



Order VVA-01 Material: S136 Hardness: 50-55HRC

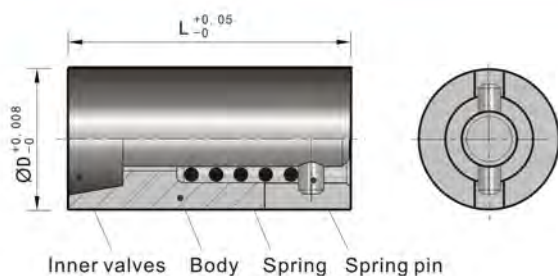
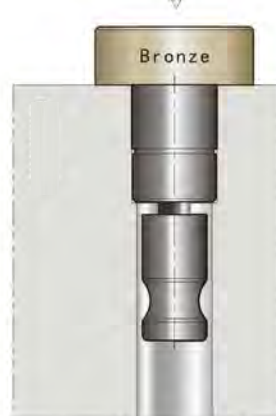
Code	A	C	D	E	H	R(max.)	@ ¥/P
VVA-01	8	11	24	6	6.75	0.1	
VVA-02	12	18	34	8	9	0.2	
VVA-03	18	22	45.5	12	14	0.3	



Dimension chart:



Drive in



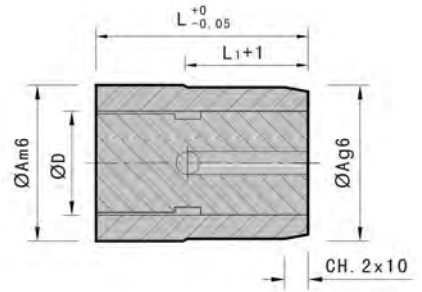
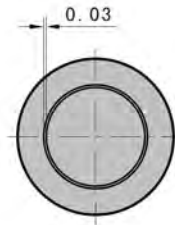
Order PPV-025 Material: S136 Hardness: 50-55HRC

Code	L	D	@ ¥/P
PPV-025		6.36	
PPV-037	9.53	9.54	
PPV-050	12.7	12.7	
PPV-075	19.05	19.06	
PPV-100	25.4	25.41	
PPV-150	38.1	38.12	

DIN

Double valves

VVD



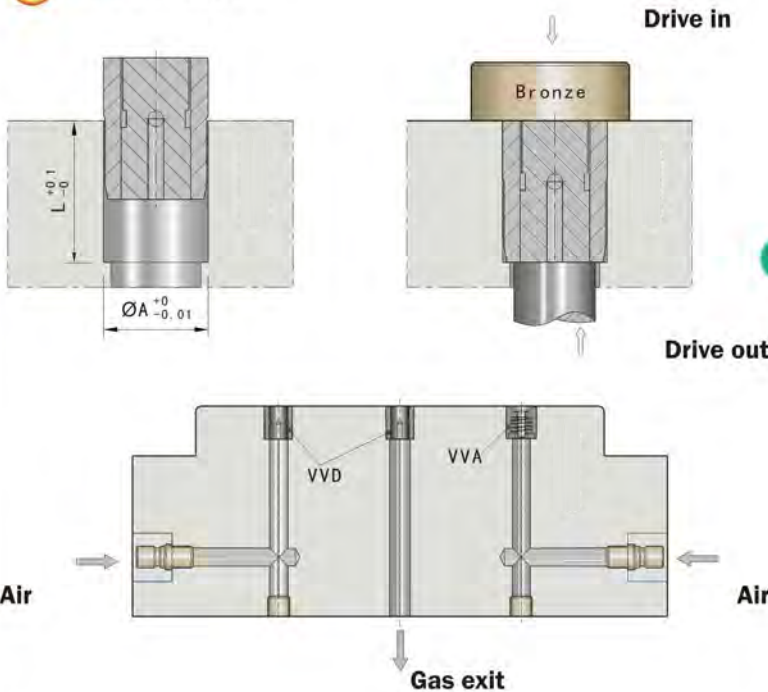
1. An effective method of semi pneumatic ejection
2. For tools with ribs or areas forming gas traps or vaccum condition.

Order VVD-080512 Material: S136 Hardness: 50-55HRC

Code	A	D	L	L1	@ ¥ /P
VVD-080512	8	5			
VVD-100612	10	6	12	7	
VVD-120812	12	8			
VVD-161020	16	10	20	12	



Installation Diagram:



Installation Guidelines:

- Strike valves into hole with Rubber hammer. (when tear down valves , holes reservation which are drive out at the back side before install)

Ejector Series





DIN	DIN	DIN	DIN	DIN
Two-stage ejectors	Two-stage ejectors	Two-stage ejectors	Two-stage ejectors	Two-stage ejectors
ZZ169	P186	ZZ1691	P188	ZZ1695
P191	ZZ5085	P195	ZZ1697	P195



DIN	DIN	DIN	DIN	DIN
Two-stage ejectors	Two-stage ejectors	Two-stage ejectors	Two-stage ejectors	Two-stage ejectors
ZZ1692	P198	EE1860	P201	LLR
P204	AAL	P204	DDX	P206



AISI	AISI	DIN	JIS	AISI
Two-stage ejectors	Two-stage ejectors	Two-stage ejectors	Round latch locks	Round latch locks
TTSTL	P208	TTSBL	P211	ZZ4
P214	EERST	P221	EER	P224



DIN	DIN	DIN	DIN	<i>Wmould</i>
Round latch locks	Round latch locks	Push Locks	Push Locks	Ejector institutions
Z Z163	P227	Z Z164	P227	ZZ6
P229	ZZ7	P231	DT12	P233



AISI	DIN	DIN	DIN	AISI
Ejector institutions	Accelerated ejector	Accelerated ejector	Accelerated ejector	Accelerated ejector
AAR-D	P235	ZZ141	P237	EEP
P238	AAE	P239	AAEB	P241



AISI	AISI	AISI	AISI	AISI
Accelerated ejector	Accelerated ejector	Slide units	Slide units	Core pin
AAEP	P241	AAKO	P243	CCA
P244	CCAMM	P244	CCAP1	P250



AISI	AISI	AISI	AISI	AISI
Core pin	Core pin	Core pin	Core pin	Core pin
CCAP1MM	P250	CCAP2	P250	CCAP2MM
P250	CCAP3	P250	CCAP3MM	P250



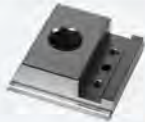
AISI		AISI		AISI		DIN		DIN	
Core pin		Core pin		Slide units		Slide units		Slide units	
CCSE2	P251	CCSE3	P251	CCBR	P251	ZZ4290	P252	ZZ4292	P254



DIN		DIN		DIN		DIN		DIN	
Slide units		Slide units		Slide units		Slide units		Slide units	
ZZ4293	P254	ZZ4294	P257	ZZ4295	P258	ZZ4296	P258	ZZ4298	P259



DIN		DIN		DIN		DIN		DIN	
Slide units		Slide units		Slide units		Slide construction kits		Slide units	
ZZ181	P260	ZZ1810	P261	ZZ1812	P262	ZZ1880	P263	ZZ1881	P264



DIN		DIN		DIN		DIN		DIN	
Slide units		Slide units		Slide construction kits		Slide casings		Slide units	
ZZ1801	P265	ZZ1802	P266	ZZ4200	P267	ZZ4205	P270	ZZ4210	P271



DIN		DIN		DIN		DIN		DIN	
Slide units		Locking heels		Locking heels		Wear plates		Slide units	
ZZ4211	P271	ZZ4220	P272	ZZ4222	P273	ZZ4230	P273	ZZ180	P274



DIN		JIS		JIS		JIS		JIS	
Locking heels		Slide units		Slide units		Slide units		Slide units	
ZZ1820	P275	MMSCSG	P276	MMSCSGM	P276	MMSCSB	P277	MMSCSBM	P277



DIN		DIN		DIN		DIN		DIN	
Sprung cores		Sprung cores		Sprung cores		Sprung cores		Sprung cores	
PPW	P280	EE3200	P282	EE3202	P283	PPF	P287	MMP	P287



DIN		DIN		DIN		JIS		JIS	
Slide core units		Slide core units		Slide core units		Slide core units		Slide core units	
DDF	P288	BBD	P288	ZZ1811	P289	DTK	P290	SSCZN	P291



JIS		JIS		JIS		JIS		JIS	
Slide core units		Slide core units		Slide core units		Slide core units		Slide core units	
SSCZA	P292	KKOCUM	P293	KKOCUF	P293	RRCSUF	P294	RRCSUM	P298



JIS		JIS		JIS		JIS		JIS	
Slide core units		Slide core units		Slide core units		Slide core units		Slide core units	
KKPHF	P299	RRCPHF	P299	SSCZNP	P300	SSCZAP	P300	MMTGHL	P301



JIS		JIS		JIS		AISI		AISI	
Slide core units		Slide core units		Slide core units		Slide core units		Slide core units	
MMTGHR	P301	MMTGL	P302	MMTGR	P302	UULC	P303	UULG	P303



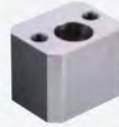
AISI		AISI		AISI		AISI		AISI	
Flatcore blades		Slide core units		Slide core units		Slide core units		Slide core units	
UULB	P304	VF/.../SS	P306	VF/.../JS	P306	VF/.../US	P306	VF/.../SB	P307



AISI		AISI		AISI		AISI		AISI	
Slide core units		Slide core units		Slide core units		Slide core units		Slide core units	
VF/.../JB	P308	VF/.../UB	P308	VF/.../GR	P308	VF/.../GP	P309	VF/.../HB	P309



DIN		DIN		Wmould		DIN		DIN	
Slide core units		Slide core units		Collapsible core		Helical spindle		Helical spindle	
SSD	P312	CCI	P312	DDT	P313	ZZ1500	P317	ZZ1520	P318



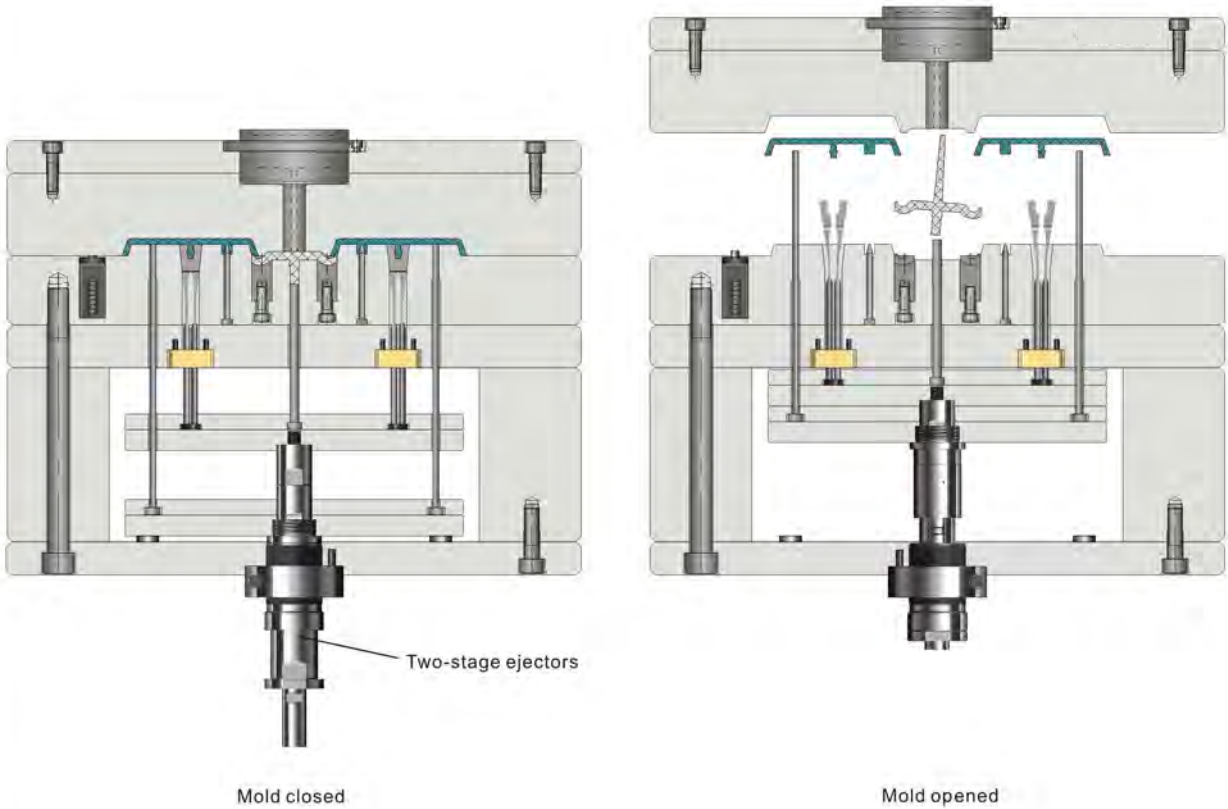
	DIN	DIN	JIS	JIS			
Angle pin housing		Angle pin housing	Angle pin housing	Angle pin housing			
BBG	P320	GGR	P321	AAPRSS	P322	AAPRWS	P323



Products Summary

Products Summary:

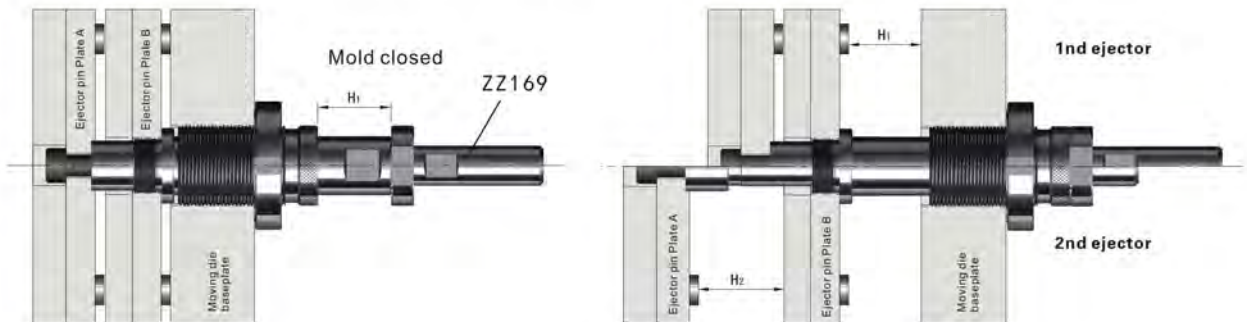
· Under normal circumstances, when finished products out of the mold, finished the ejector movement in single or multielement one time. But for special shape products, when bulk processing, the products keep in the mold cave, can not out of the mold automatically, two-stage ejector parts help ejection



Two-stage ejector Install example:

Example1:external install type:

1. After A, B plate eject H1 stroke, B plate stop working, A plate eject to H2, as drawing 1

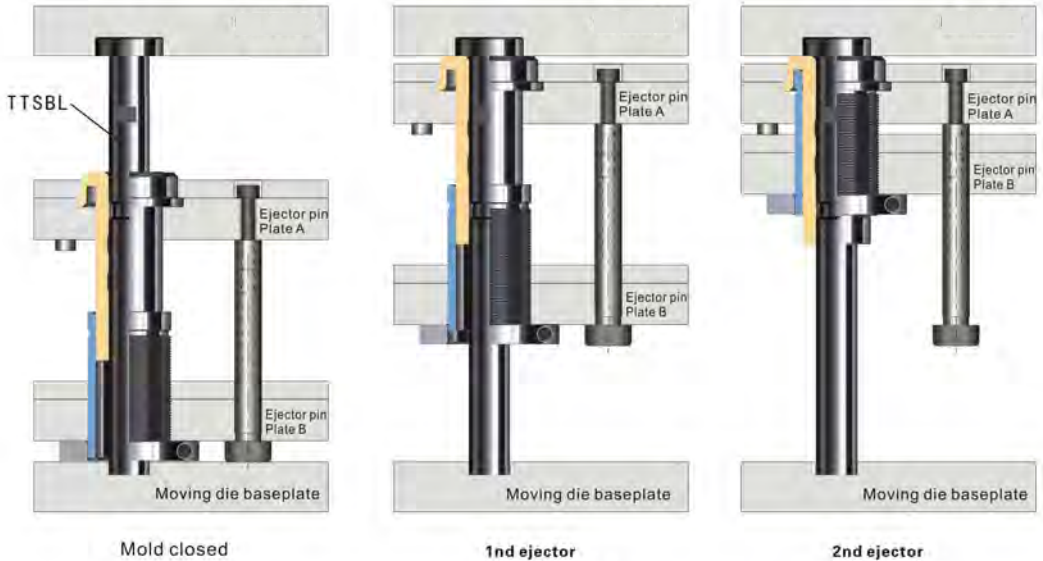


Drawing1

Products Summary

Example 4: Inner install type

1. After A. B plate eject stroke. A plate stop working. B plate continue eject. as drawing 4



Drawing4

Products spec:

Install in the inner, avoid the conflict without parts, save space, avoid damage during the transport processing.

Pay attention:

Two sets two-stage ejector install in one mould, all the mounting hole must vertical with the plate, and with the same concentricity.

H1: 1nd ejector stroke H2: 2nd ejector stroke

Drawing	Type	H1		H2		Code	Page
		Min	Max	Min	Max		
 <p>AISI</p>	3	8	82	12	82	TTSBL-20A	P211
		10	92	18	92	TTSBL-26A	
		12	102	24	102	TTSBL-32A	
 <p>AISI</p>	4	4	79	4	79	TTSTL-20A	P208
		6	84	6	84	TTSTL-26A	
		8	92	8	92	TTSTL-32A	
 <p>DIN</p>	3	6	76	3	76	ZZ1697-16	P186
		8	96	4	96	ZZ1697-20	
		10	130	5	130	ZZ1697-26	
 <p>DIN</p>	3	-	42	-	48	DDX-142622	P206
		-	54	-	80	DDX-163027	

Products Summary

H1:1nd ejector stroke H2:2nd ejector stroke

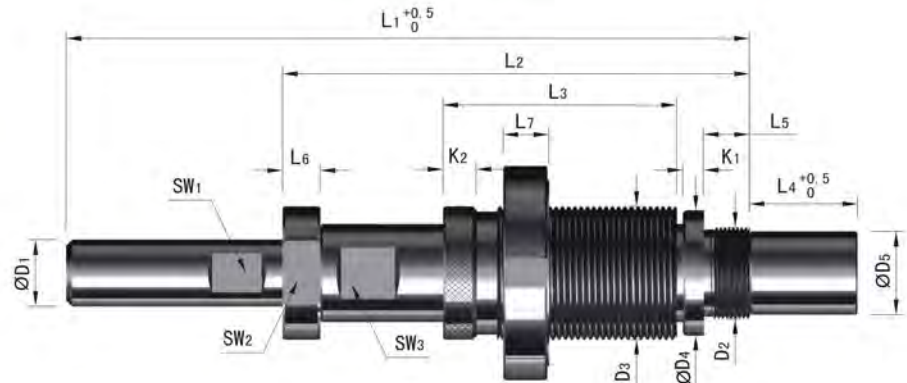
Drawing	Type	H1		H2		Code	Page
		Min	Max	Min	Max		
 DIN	1	5	30	3	50	ZZ169-16	P186
		6	40	4	70	ZZ169-22	
		7	50	4	70	ZZ169-30	
		7.5	60	5	80	ZZ169-40	
 DIN	1	3	20	-	44	ZZ1691-13	P188
		4	30	-	65	ZZ1691-17	
		5	42	-	80	ZZ1691-22	
		10	60	-	95	ZZ1691-30	
		14	86	-	130	ZZ1691-40	
		18	110	-	180	ZZ1691-52	
 DIN	2	4	45	4	45	ZZ1692-25-45	P198
		6	60	5	60	ZZ1692-32-60	
		8	80	6	80	ZZ1692-40-80	
 DIN	2	6	48	4	36	ZZ1695-22	P191
		8	60	5	50	ZZ1695-25	
		10	86	6	60	ZZ1695-32	
 DIN	1	-	30	-	50	EE1860-15	P201
		-	40	-	62	EE1860-18	
		-	50	-	82	EE1860-25	
		-	71	-	110	EE1860-33	
		-	100	-	160	EE1860-44	
 DIN	1	5	30	-	53	ZZ5085-16	P193
		10	40	-	72	ZZ5085-22	
		10	40	-	84	ZZ5085-28	
		10	40	-	88	ZZ5085-37	
 DIN	Single ejector pin plate achieve eject function	-	40	-	40	LLR-061620	P204
		-	40	-	40	LLR-081620	
		-	40	-	40	LLR-101620	
 DIN	Install on the side of the mould, different install method with different function. The type of the two-stage ejector have eject and latch lock functions.					Z Z4 Series	P214

- Ejector pins
- Ejector stroke series
- Circle pinholes series
- Latch tools
- Flanging gate series
- Done stamping Air valves series
- Ejector series
- Cooling inserts
- Locating pins series
- Springs series
- Guide pins
- Guide pins
- Guide pins Water plate series
- Chuck series
- Mold accessories

DIN

Two-stage ejectors

ZZ169



Features:

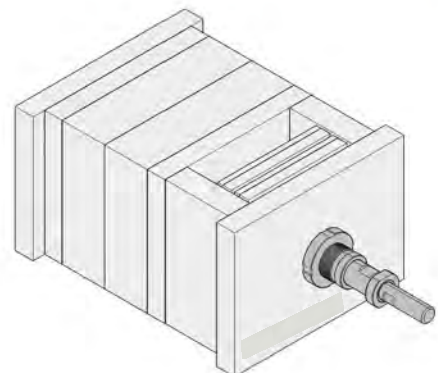
1. Interlocking mechanism design, safe and reliable.
2. The ejector bolt surface is processed with high-frequency treatment, easy to process and install.
3. Some important parts are made of SKD11 and by high quality heat treatment process to make it to be more resistant.
4. The surface with coating treatment, higher wear resistance creates longer lifespan.
5. Sizes are available for 4 different loading weights.

Order ZZ169-16

Code	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	L7
ZZ169-16	M22×1	M32×1.5	30	20	164	112	56	26	11	9	11
ZZ169-22	M30×1.5	M42×1.5	40	28	220	148	75	36	16	11	12
ZZ169-30	M40×1.5	M60×1.5	50	38	255	170	80	45	21	11	13
ZZ169-40	M52×1.5	M70×1.5	60	50	270	200	98	45	22	12	14

Code	D1	K1	K2	Sw1	Sw2	Sw3	H1		H2		@ ¥/P
							min.	max.	min.	max.	
ZZ169-16	16	5	8	13	28	20	5	30	3	50	
ZZ169-22	22	6	10	17	38	27	6	40	4	70	
ZZ169-30	30	7	14	24	55	38	7	50	5	80	
ZZ169-40	40	8	14	32	65	46	7.5	60	5	80	

Product space chart:



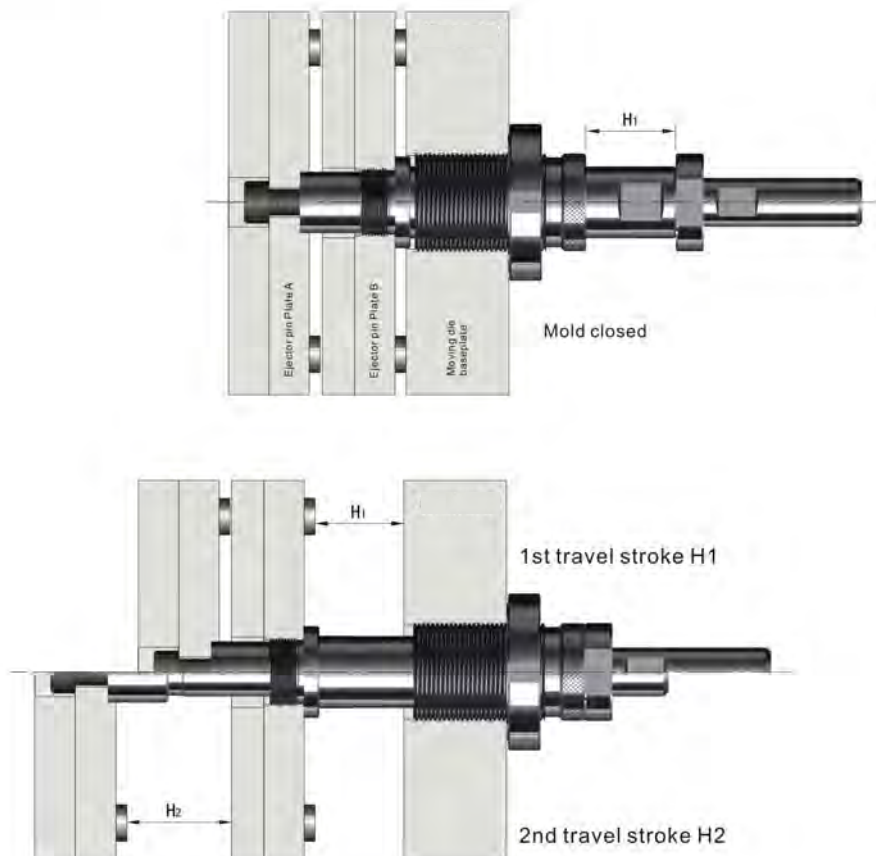


Installation Guidelines:

- Firstly process through holes into A ejector plate, process screw holes into B ejector plate and champing plate (screw holes dimension refer to the ones need matched with D2, D3). Customer can also make flange to lock parts.
- Process one mounting hole in the top of the ejector rod, this mounting hole need match with the through hole into B plate.
- Mount the champing sleeve ② directly on the bottom of champing plate, screw the sliding bushing ① into B ejector plate and the head of the ejector bolt ④ into A ejector plate.
- Adjust the position of champing sleeve ② and the champing plat (flange) to preset the travel stroke H_1 , and then fix the slotted nut ⑤.
- In order to connect with the central ejector bolt of the injection mold, it is available to thread the internal thread at the end of the ejector bolt. Different threads for different Two-stage ejectors.
- After installation, carry out a functional test to check whether the individual parts work well and the stroke applicable. (Recommend test on matched molds machine or injection machines, do not use Lifting Machine).
- The nut ⑥ had been strengthened in mounting, do not dismount the nut freely anytime to ensure normal function of the product.
- Request precise installation (only 1 set for 1 mold). Make sure the STROKE is exactly applicable, otherwise the product would be easy to damage.



Functional chart:

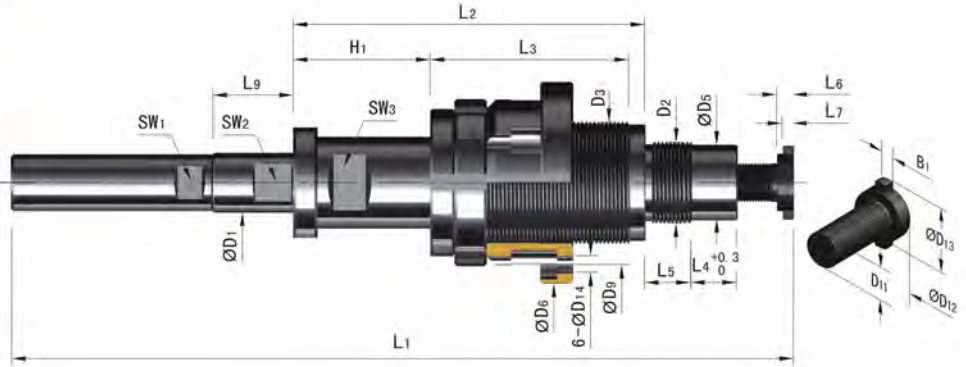


DIN

Two-stage ejectors

ZZ1691

2D 3D FL



Features:

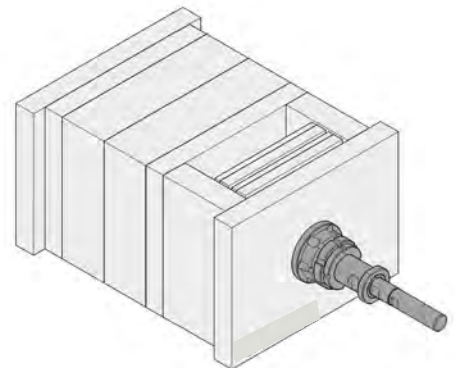
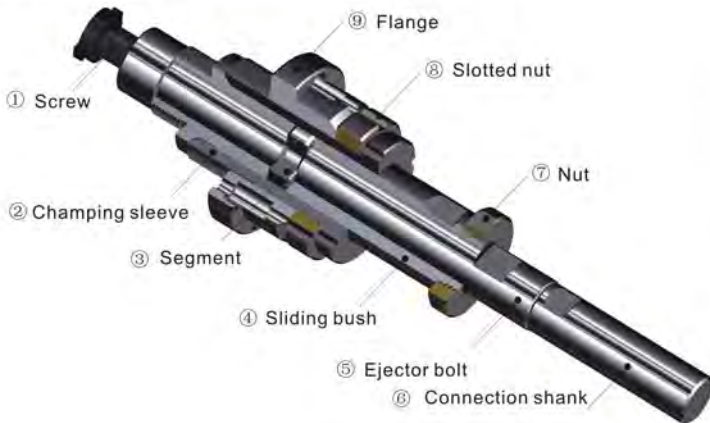
1. Interlocking mechanism design, safe and reliable.
2. The surface with coating treatment. Higher wear resistance creates longer lifespan.

Order ZZ1691-13

Code	D2	D3	D5	D6	D9	D11	D12	D13	D14	B1	Sw1	Sw2	Sw3
ZZ1691-13	M20×1	M28×1.5	18.5	50	41.6	M 8×0.75	13.4	17.6	4.3	3.2	10	10	17
ZZ1691-17	M24×1.5	M35×1.25	22	60	48	M11×1	17.4	22	5.4	4	13	12	21
ZZ1691-22	M30×1.5	M45×1.5	28	75	61	M14×1	21	27	6.5	5	17	17	27
ZZ1691-30	M40×1.5	M60×1.5	38	100	82	M18×1	26	33	8.8	6	24	22	36
ZZ1691-40	M55×1.5	M75×1.5	52	125	104	M25×1.5	35	43	11	8	32	32	46
ZZ1691-52	M72×1.5	M98×2	69	150	128	M34×1.5	48	58	11	9	41	41	65

Code	D1	L1	L2	L3	L4	L5	L6	L7	L9	H1	H2 max.	@ ¥ / P
ZZ1691-13	13	164	72	38.8		9	4	2.6	22	3- 20	44	
ZZ1691-17	17	228	110	63	21	12	5	3.5	25	4- 30	65	
ZZ1691-22	22	270	131	74	17	17	6	4	30	6- 42	80	
ZZ1691-30	30	340	166	89	27	17	7	5	38	10- 60	95	
ZZ1691-40	40	470	232	122	41	27	10	7	50	14- 86	130	
ZZ1691-52	52	583	295	155	51	27	15	11	60	18-110	180	

Product space chart:

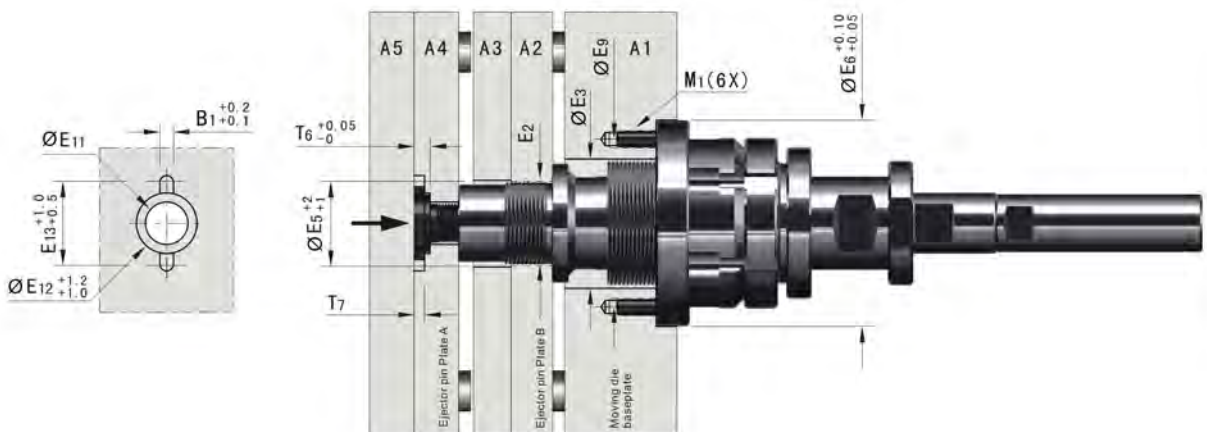




Installation Guidelines:

- Process through holes into A plate and champing plate, screw holes into B plate and 6 screw holes into champing plate (holes dimension refer to "Dimension chart"). Please note that all holes should be homocentric and perpendicular to parting surface.
- Fix the flange onto champing plate by hexagonal socket head cap screw, pre-tight the screw and lock it after other parts installation.
- Turn the champing sleeve ② into the flange⑨, screw the sliding bushing ④ into B ejector plate, lock the head of ejector bolt⑤ on ejector A plate by Screw ①.
- Adjust the position of champing sleeve ② and the champing plat (flange) to preset the travel stroke H1, and then fix the slotted nut ⑧.
- The internal thread at the end of the ejector bolt had been threaded in order to connect with the central ejector bolt of the injection mold. Different threads for different Two-stage ejectors.
- After installation, carry out a functional test to check whether the individual parts work well and the stroke applicable. (Recommend test on matched molds machine or injection machines, do not use Lifting Machine).
- The nut ⑦ had been strengthened in mounting, do not dismount the nut freely anytime to ensure normal function of the product.
- Request precise installation (only 1 set for 1 mold). Make sure the STROKE is exactly applicable, otherwise the product would be easy to damage.

Dimension chart:



D1	B1	E2	E3	E5	E6	E9	E11	E12	E13	T6	T7	M1
13	3.2	M20×1	30	21	50	41.6	10	13.4	18	4	3	M 4
17	4	M24×1.5	37	25	60	48	13	17.4	21	5	4	M 5
22	5	M30×1.5	47	31	75	61	16	21	28	6	4.5	M 6
30	6	M40×1.5	62	41	100	82	20	26	34	7	5.5	M 8
40	8	M55×1.5	77	56	125	104	27	35	44	10	7.5	M 10
52	9	M72×1.5	100	73	150	128	36	48	59	15	11.5	M10

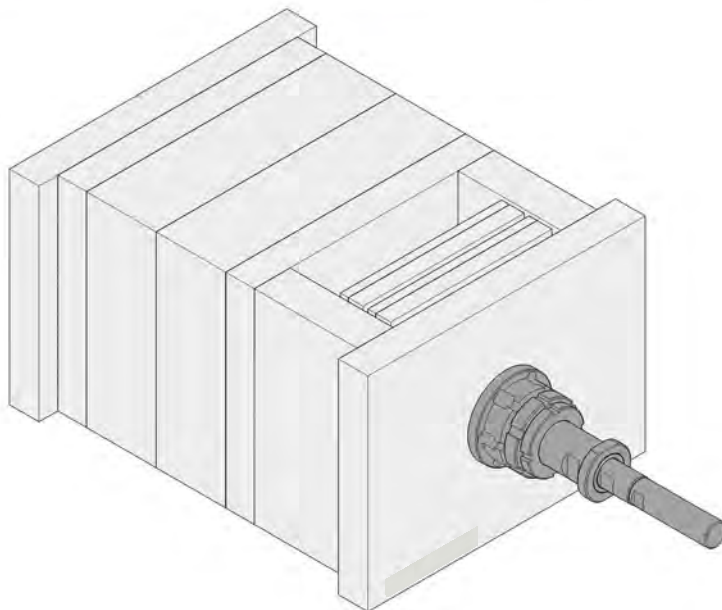
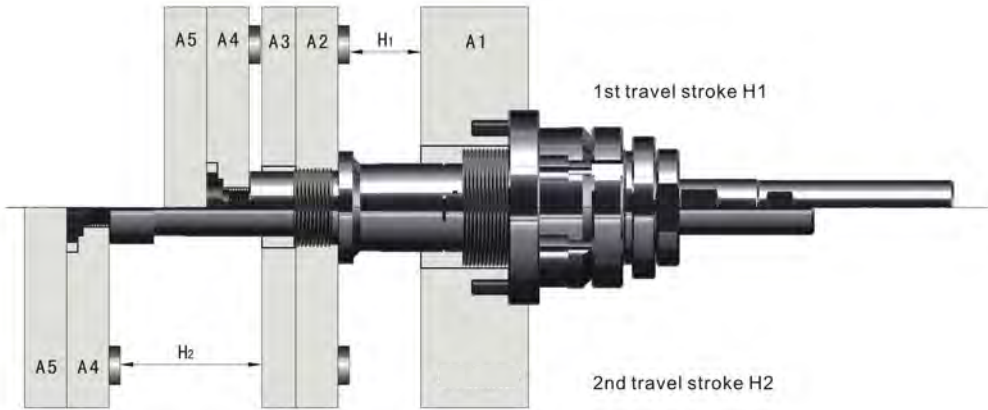
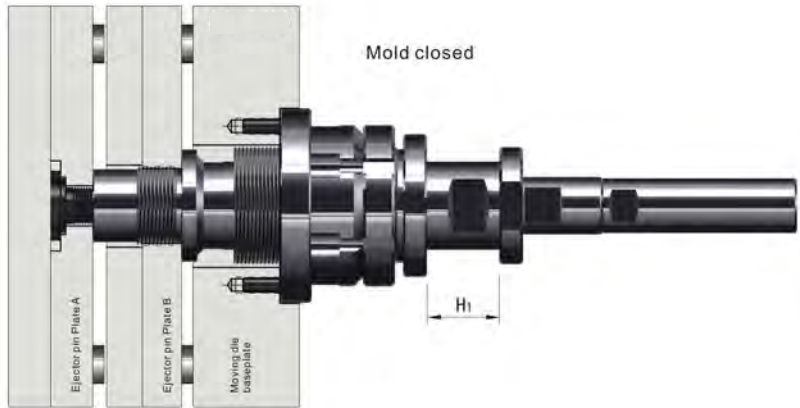
DIN

Two-stage ejectors

ZZ1691



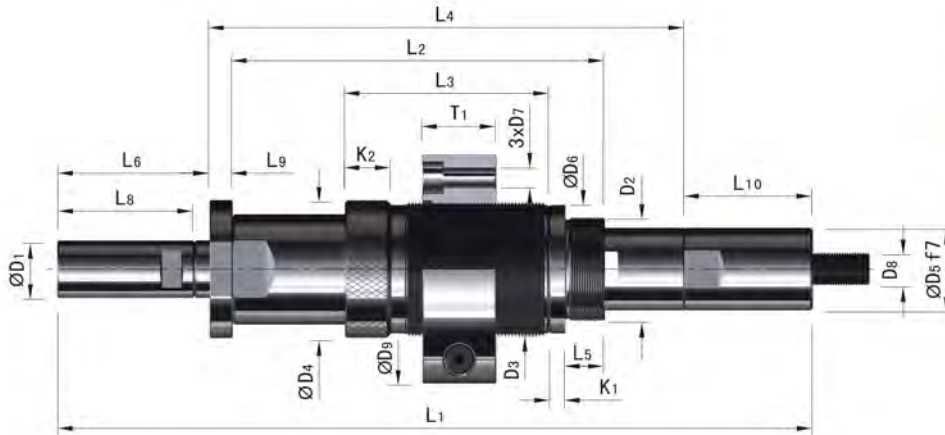
Functional chart:



- Ejector pins
- Ejector sleeves
- Slide retainers
- Slide
- Latch locks
- Plumbing pins
- Plumbing pins
- Gate stamps
- Gate valves
- Ejector series
- Cooling elements
- Locating pins
- Spring series
- Guide pins
- Guide pins
- Guide pins
- View pins
- Chuck series
- Mold accessories

DIN
Two-stage ejectors

ZZ1695



Features:

1. Interlocking mechanism design, safe and reliable.
2. The surface with coating treatment, higher wear resistance creates longer lifespan.

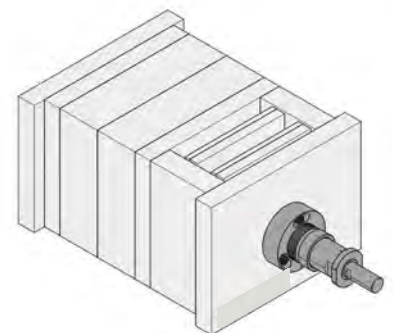
Order ZZ1695-22

Code	D2	D3	D4	D5	D6	D7	D8	D9	T1
ZZ1695-22	M40×1.5	M52×1.5	52	31.5	50		M12×1.5	90	25
ZZ1695-25	M45×1.5	M60×1.5	60	36	56	9	M14×1.5	100	32
ZZ1695-32	M55×1.5	M72×1.5	72	44	70	11	M16×1.5	110	42

Code	L1	L2	L3	L4	L5	L6	L8	L9	L10
ZZ1695-22	278	141	82	175	17	58	52	10	45
ZZ1695-25	329	163	89	207		66	60		56
ZZ1695-32	430	196	106	257	22	102	82	12	71

Code	D1	K1	K2	Sw1	Sw2	Sw3	H1		H2		@ ¥/P
							min.	max.	min.	max.	
ZZ1695-22	22	6	18	17	46	36	6	48	4	36	
ZZ1695-25	25	7		19	55	41	8	60	5	50	
ZZ1695-32	32	8	16	27	65	50	10	86	6	60	

Product space chart:



- Ejector pins
- Ejector sleeves
- Slide pullpin series
- Locating pins
- Pointing gates series
- Pusher gates series
- Pin valves series
- Ejector series
- Cooling elements series
- Locating pins series
- Spring series
- Guide pins
- Guide pins
- Guide pins
- Guide pins
- Chuck series
- Mod. accessories

Two-stage ejectors

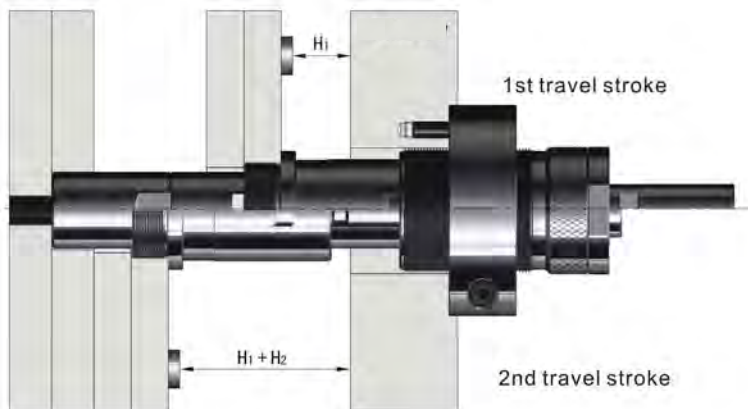


Installation Guidelines:

- Fix the locating flange ④ onto the champing plate by hexagonal socket head cap screw, pre-tight the screw and lock it after other parts installation.
- Turn the inner slide bush ⑤ into the locating flange ④, screw the outer slide bush ⑧ into B ejector plate.
- Customer can make small flange and lock it onto B ejector plate to match with outer slide bush ⑧.
- Fix the Adapter 1 ② onto A ejector plate by hexagonal socket head cap screw.
- Adjust the position of inner slide bush ⑤ and the locating flange ④ to preset the travel stroke H_1 , and then fix the locating flange ④.
- After installation, carry out a functional test to check whether the individual parts work well and the stroke applicable. (Recommend test on matched molds machine or injection machines, do not use Lifting Machine).
- The nut ⑥ had been strengthened in mounting, do not dismount the nut freely anytime to ensure normal function of the product.
- Request precise installation (only 1 set for 1 mold). Make sure the STROKE is exactly applicable, otherwise the product would be easy to damage.



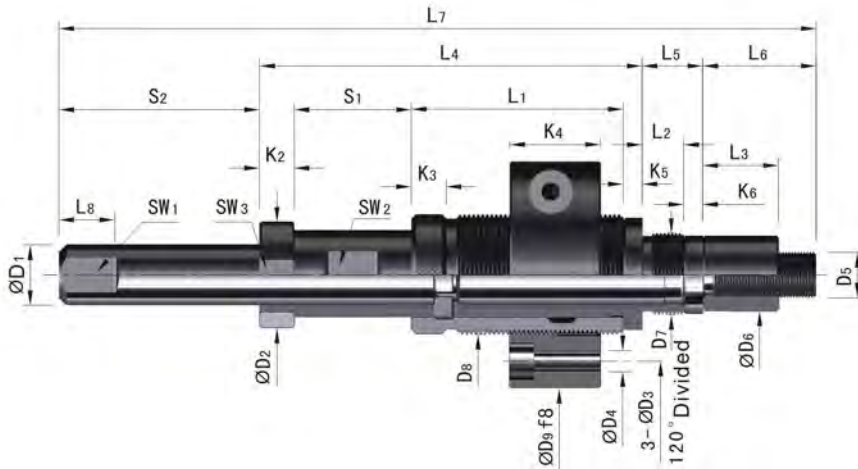
Functional chart:



Dismount adapter 2 ⑦ before mounting adapter 1 ②. Insert the adapter 1 from the axis of ejector rod by hexagon wrench, and then fix it onto A ejector plate by hexagonal socket head cap screw ①.

Two-stage ejectors

ZZ5085



Features:

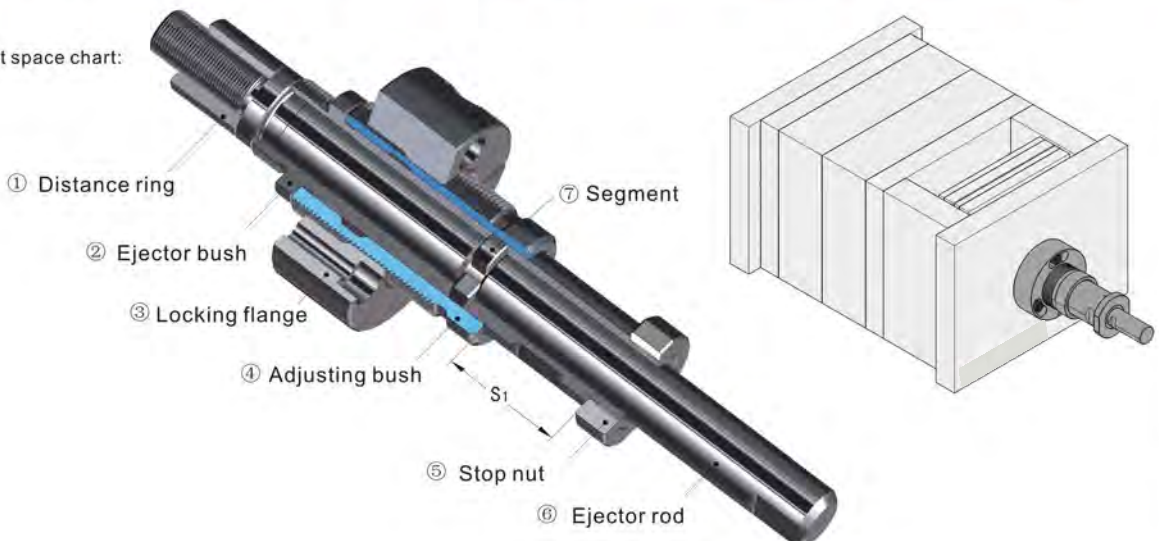
1. Interlocking mechanism design, safe and reliable.
2. The surface with coating treatment, higher wear resistance creates longer lifespan.

Order ZZ5085-16

Code	D2	D3	D4	D5	D6	D7	D8	D9	K2	K3	K4	K5	K6	L1
ZZ5085-16	32	46	5.6	M12×1	20.6	M22×1	M32×1.5	60	9	8	24	5	5	56
ZZ5085-22	42	62	6.6	M16×1.5	28	M30×1.5	M42×1.5	80	10	10	30	6	6	75
ZZ5085-28	53	72	9	M20×1.5	36	M38×1.5	M52×1.5	90	10.5	12	30	8	6	75
ZZ5085-37	64	80		M24×1.5	44	M48×1.5	M62×1.5	102	10.6					

Code	D1	L2	L3	L4	L5	L6	L7	L8	S1	S2	Sw1	Sw2	Sw3	@ ¥/P
ZZ5085-16	16	11	20	101	16	30	200	15	5-30	53	13	20	28	
ZZ5085-22	22		30	132		40	266	18		72	17	27	38	
ZZ5085-28	28	16	35	134	22	45	285	20	10-40	84	22	35	48	
ZZ5085-37	37		40	140		50	300			88	30	44	60	

Product space chart:



Two-stage ejectors

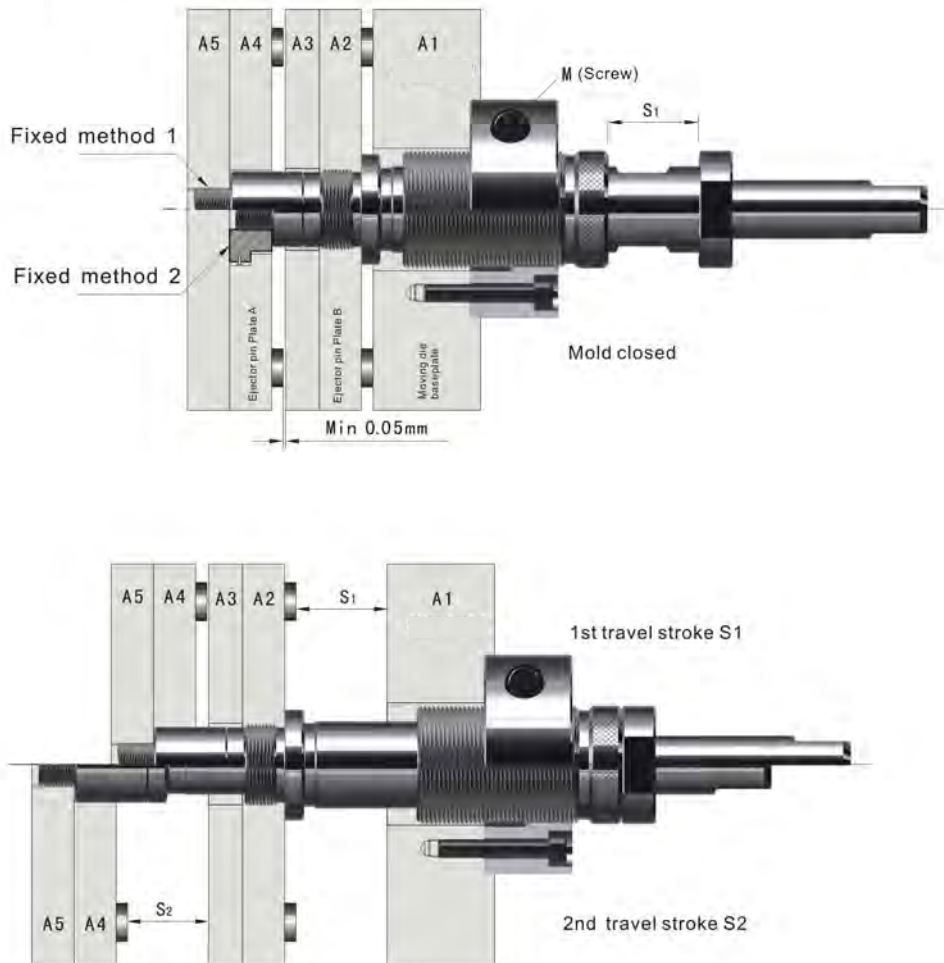


Installation Guidelines:

- Fix the locking flange ③ onto the champing plate by hexagonal socket head cap screw, pre-tight the screw and lock it after other parts installation.
- Turn the Adjusting Bush ④ into the Locking Flange ③, screw the Ejector Bush ② onto B ejector plate, lock the head of Ejector Rod ⑥ onto ejector A ejector plate. Customer can make small flange and then fix it onto B ejector plate to lock with Ejector Bush ② or Ejector Rod ⑥.
- Adjust the position of Adjusting Bush ④ and the Locking flange ③ to preset the travel stroke S_1 , and then fix the Locking flange ③.
- After installation, carry out a functional test to check whether the individual parts work well and the stroke applicable. (Recommend test on matched molds machine or injection machines, do not use Lifting Machine).
- The Stop Nut ⑤ had been strengthened in mounting, do not dismount the nut freely anytime to ensure normal function of the product.
- Request precise installation (only 1 set for 1 mold). Make sure the STROKE is exactly applicable, otherwise the product would be easy to damage.



Functional chart:

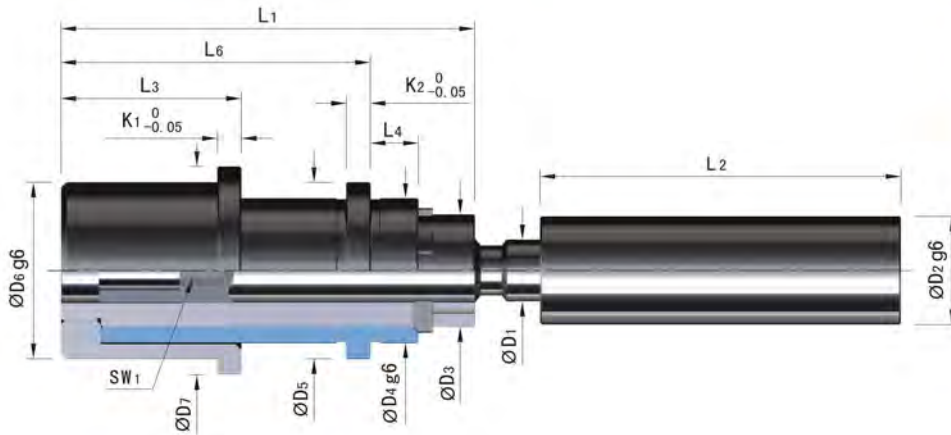


DIN

Two-stage ejectors

ZZ1697

CAD 2D 3D FL



Order ZZ1697-16

Code	D2	D3	D4	D5	D6	D7	L1	L2	L3	L4	L5
ZZ1697-16	27	28	36	44	44	52	103	90	45	12	5
ZZ1697-20	32	34	43	51	51	59	134	100	59	17	6
ZZ1697-26	42	43	54	63	64	73	168	150	74	22	7

Code	D1	L6	K1	K2	Sw1	H1		H2		@ ¥/P
						min.	max.	min.	max.	
ZZ1697-16	16	77	6	6	8	6	76	3	76	
ZZ1697-20	20	101	7	7	10	8	96	4	96	
ZZ1697-26	26	126	8	8	14	10	130	5	130	

Product space chart:



- Ejector pins
- Ejector sleeves
- Slide railiners
- Series
- Latch locks
- Series
- Pouring gates
- Series
- Dome stamps
- Air valves series
- Ejector series
- Cooling elements
- Series
- Locating parts
- Series
- Spacers series
- Series
- Guide pins
- Guide bush
- Series
- Guide strips
- Water plate series
- Series
- Chuck series
- Series
- Mold accessories

Two-stage ejectors

Features:

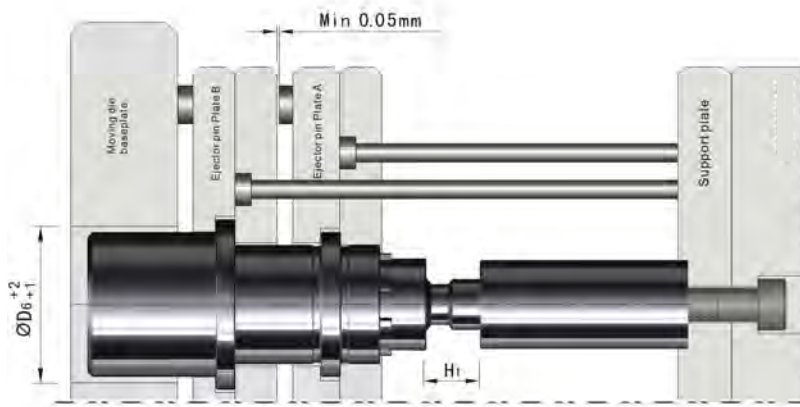
1. Interlocking mechanism design, safe and reliable.
2. The bride surface is processed with high-frequency treatment, easy to process and install.
3. Some important parts are made of SKD11 and by high quality heat treatment process to make it to be more resistant.
4. The surface with coating treatment, higher wear resistance creates longer lifespan.
5. It is mounted into the mold to avoid to collide with the outside parts of mold.



Installation Guidelines:

- Firstly process through holes into champing plate, process precise screw holes into the A, B ejector plates.
- Mount the flange onto B ejector plate, locating guide bush onto A ejector plate.
- Mount the bride after calculating the 1st travel stroke H1 accurately. Customer can process the screw holes after cutting the needed length from the bigger diameter side of bride and then screw the bride onto the bearing plate by hexagonal socket head cap screw. (Please make sure that : 1. the surface after cutting should be perpendicular to bride; 2. the bride should be in line with the central of sliding bush before locking; 3. The stroke could not be adjusted after mounting.)
- After installation, carry out a functional test to check whether the individual parts work well and the stroke applicable. (Recommend test on matched molds machine or injection machines, do not use Lifting Machine).
- A minimum 2 sets Two-stage ejector must to be mounted symmetrically in mold. Make sure the STROKE is exactly applicable, otherwise the product would be easy to damage.

Dimension chart:

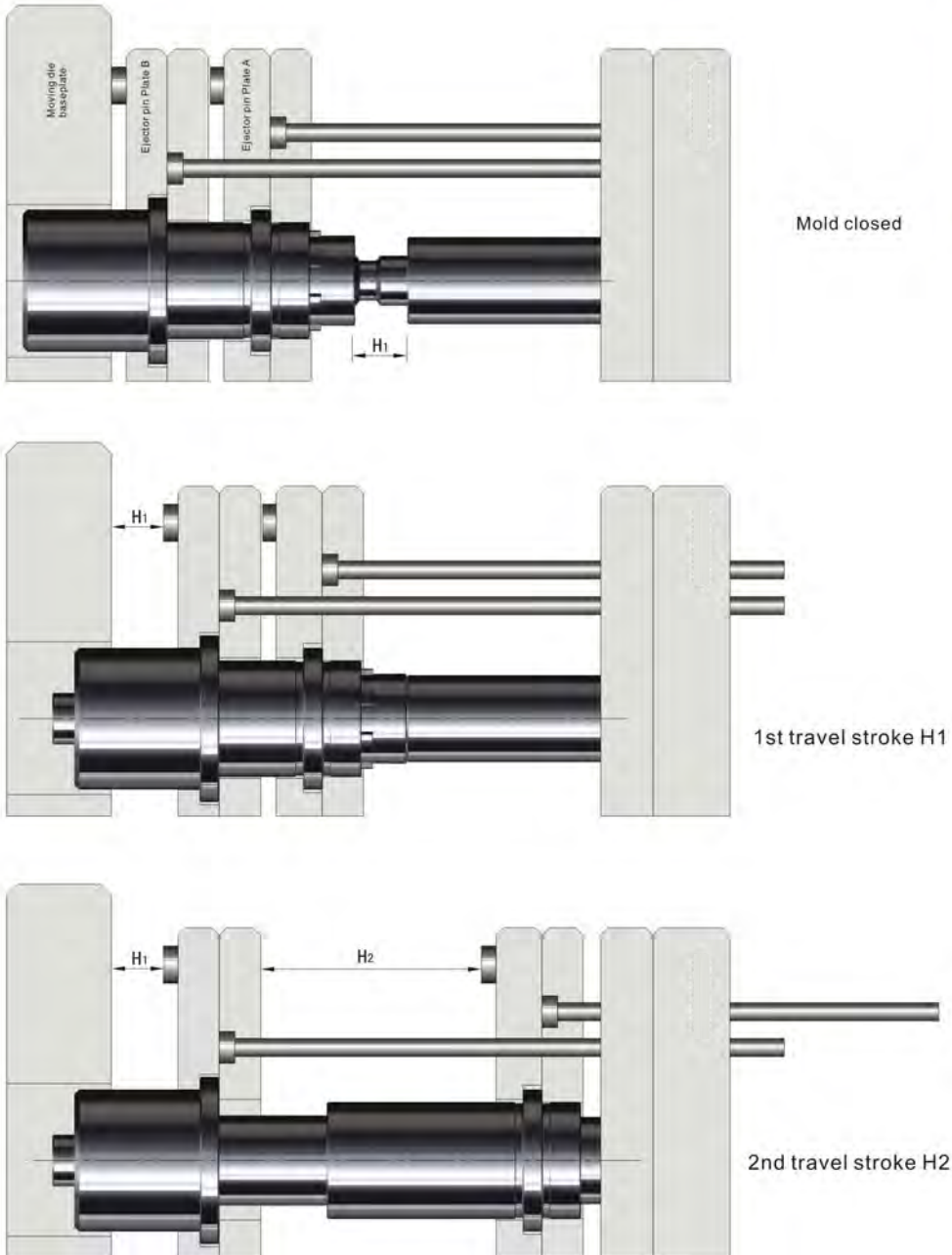


DIN
Two-stage ejectors

ZZ1697



Functional chart:



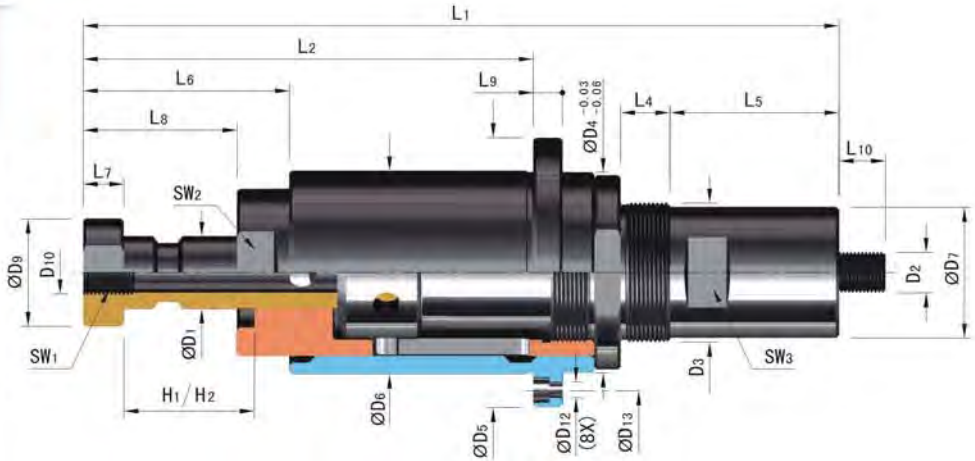
Ejector pins Ejector sleeves
Slide railliners series
Latch locks series
Pouring gates series
Die stamps Air valves series
Ejector series
Cooling elements series
Locating parts series
Springs series
Guide pins Guide bush
Guide strips Wear plate series
Chuck series
Mold processors

DIN

Two-stage ejectors

ZZ1692

2D 3D FL

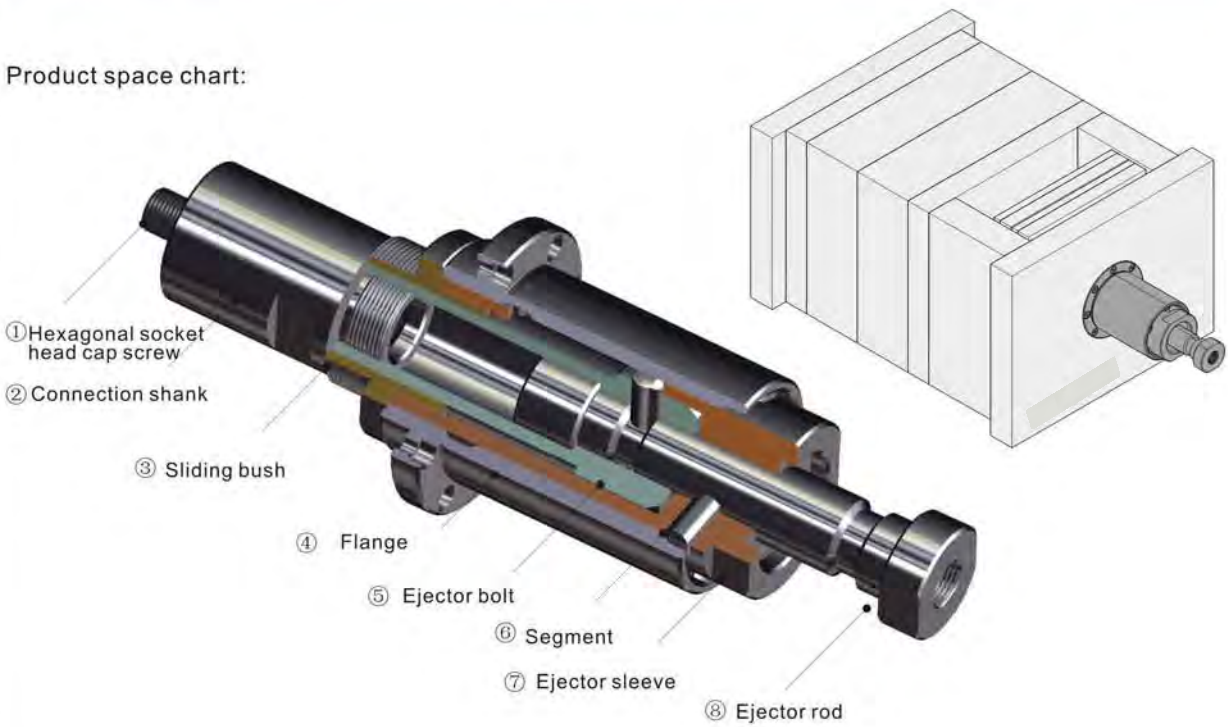


Order ZZ1692-25-45

Code	D2	D3	D4	D5	D6	D7	D9	D10	D12	D13	SW1	SW2	SW3	H1
ZZ1692-25-45	M14×1	M48×1.5	69	93	70	45	37	M16	5.4	81	32	50.2	38	4-45
ZZ1692-32-60	M18×1	M58×1.5	80	110	82	55	46	M24	6.4	95	41	60.2	46	6-60
ZZ1692-40-80	M24×1.5	M76×1.5	106	140	108	73	56		8.5	123	50	80.2	65	8-80

Code	D1	L1	L2	L4	L5	L6	L7	L8	L9	L10	H2		@ ¥ / P
											min.	max.	
ZZ1692-25-45	25	260	155		58	71	14	53	10	16	4	45	
ZZ1692-32-60	32	325	198	17	80	89	15	68	12	25	5	60	
ZZ1692-40-80	40	471	258	22	152	116	18	90	14	24	6	80	

Product space chart:



Features:

1. Interlocking mechanism design, safe and reliable.
2. Some important parts are made of SKD11 and by high quality heat treatment process to make it to be more resistant.
3. The surface with coating treatment, higher wear resistance creates longer lifespan.
4. Sizes are available for different loading weights.

Dimension chart:

Insert the connection shank ② from the end of the bride⑧ by hexagon wrench, and then fix it onto A ejector plate by hexagonal socket head cap screw ①.

Code	D2	D3	D4	D5	D7	D13	D14
ZZ1692-25-45	M14×1	M48×1.5	69	93	49	81	M5
ZZ1692-32-60	M18×1	M58×1.5	80	110	59	95	M6
ZZ1692-40-80	M24×1.5	M76×1.5	160	140	77	123	M8

**Installation Guidelines:**

- Screw the flange ④ onto champing plate, sliding bush ③ onto B ejector plate.
- Insert the connection shank ② from the end of the bride ⑧ by hexagon wrench and then fix it onto A ejector plate by hexagonal socket head cap screw ①.
- Do not adjust the stroke after installation, and make that that $H2 \leq H1$.
- After installation, carry out a functional test to check whether the individual parts work well and the stroke applicable. (Recommend test on matched molds machine or injection machines, do not use Lifting Machine).
- Request precise installation (only 1 set for 1 mold). Make sure the STROKE is exactly applicable, otherwise the product would be easy to damage.

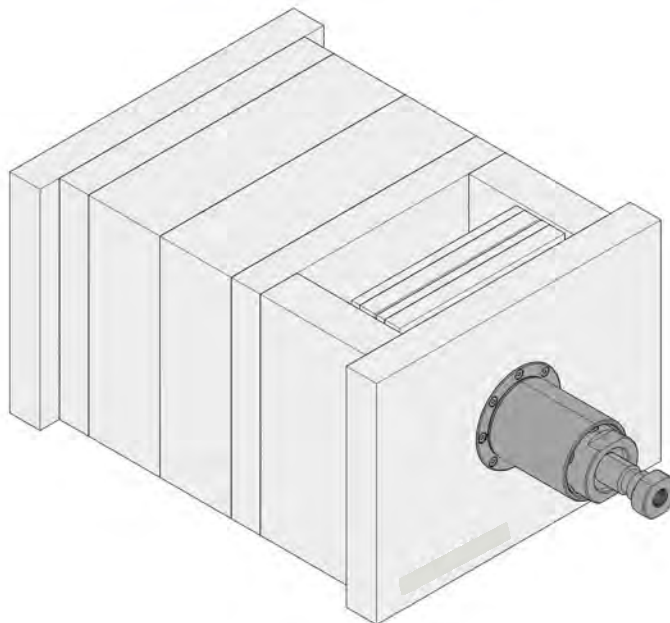
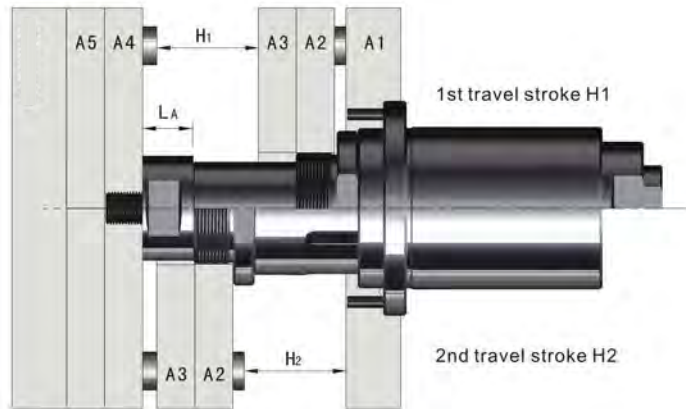
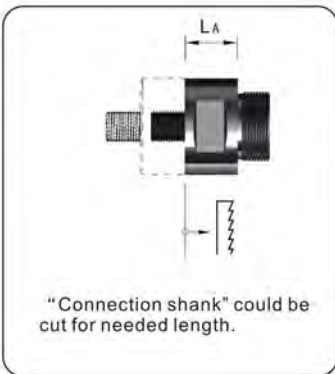
DIN

Two-stage ejectors

ZZ1692

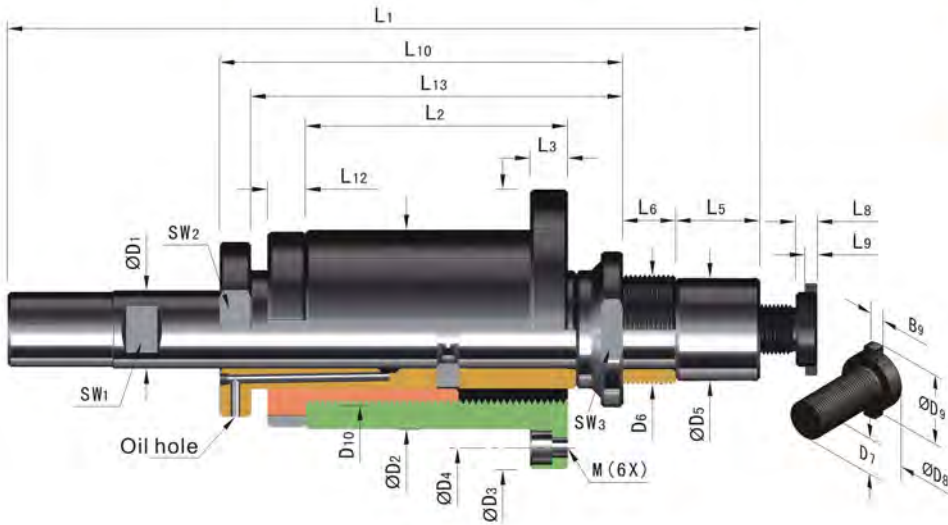


Functional chart:



DIN
Two-stage ejectors

EE1860



Features:

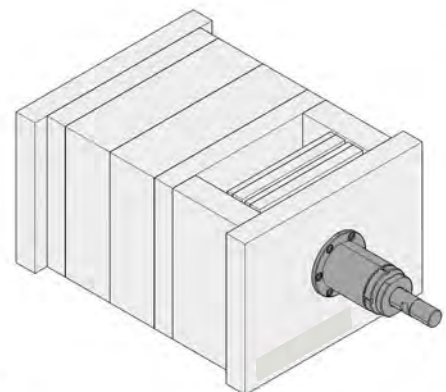
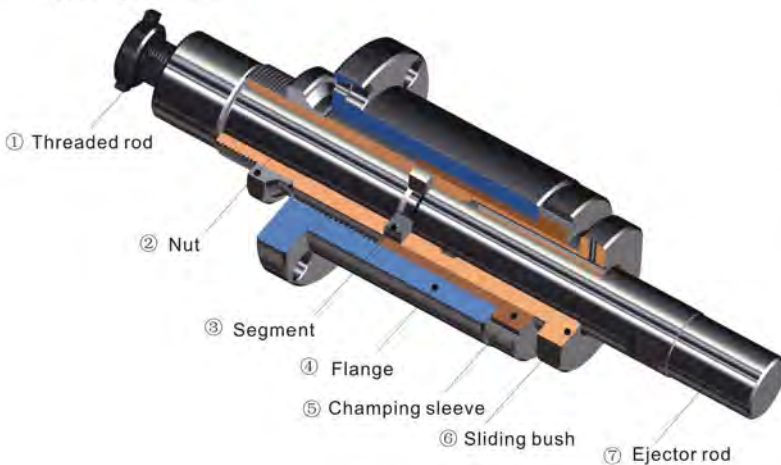
1. Interlocking mechanism design, safe and reliable.
2. The surface with coating treatment, higher wear resistance creates longer lifespan.

EE1860-15

Code	D2	D3	D4	D5	D6	D7	D8	D9	D10	B9	M	L1
EE1860-15	38	55	46	18.7	M20×1	M 9×1	15.5	20	M31×1.25	3.5	M 4	157
EE1860-18	50	72	60	24	M26×1.5	M12×1	18.5	23	M40×1.5	4	M 5	190
EE1860-25	64	90	76	33	M35×1.5	M16×1	24	30	M52×1.5	5	M 6	241
EE1860-33	80	114	96	43	M45×1.5	M20×1.25	29	37	M66×1.5	6	M 8	315
EE1860-44	100	138	118	56	M58×1.5	M28×1.5	40	48	M84×2	7	M10	428

Code	D1	L2	L3	L5	L6	L8	L9	L10	L12	L13	Sw1	Sw2	Sw3	@ ¥/P
EE1860-15	15	54	8	19	12	5	3.6	90	10	82	12	27	27	
EE1860-18	18	64	10	17	17	6	4	101	8	92	14	36	34.2	
EE1860-25	25	84	12	27	17	7	7	129	10	119	20	50	46	
EE1860-33	33	111	13	32	22	9	5	170	15	156	27	60	60	
EE1860-44	44	156	16	41	27	11	6	236	20	220	36	75	75	

Product space chart:



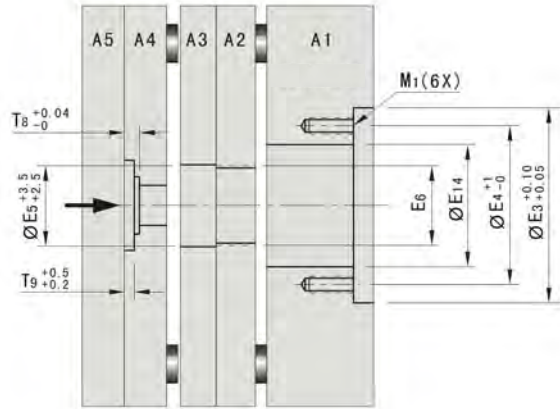
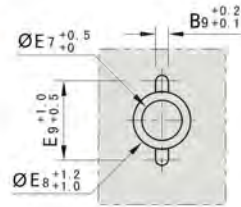
DIN

Two-stage ejectors

EE1860



Dimension chart:



D1	E3	E4	E5	E6	E7	E8	E9	E14	T8	T9	H1	H2	M1
15	55	46	18.7	M20×1	10	15.5	20	33	5	3.6	30	50	M 4
18	72	60	24	M26×1.5	13	18.5	23	42	6	4	40	62	M 5
25	90	76	33	M35×1.5	17	24	30	54	7	5	50	82	M 6
33	114	96	43	M45×1.5	22	29	37	68	9	5	71	110	M 8
44	138	118	56	M58×1.5	30	40	48	86	11	6	100	160	M10



Installation Diagram:

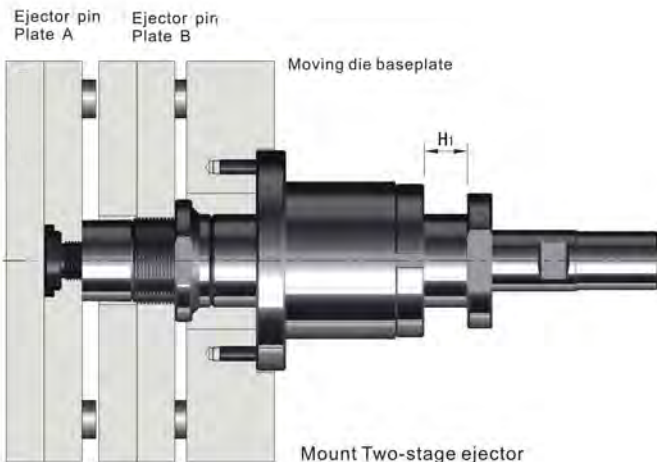


Cut needed length for ejector rod

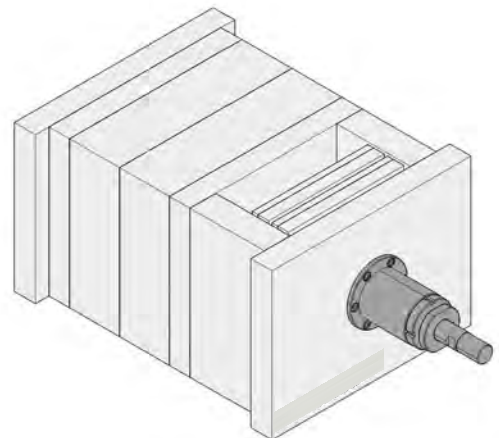
This side could be connected with injection mold after tapping.



Cut needed length for ejector flange



Mount Two-stage ejector



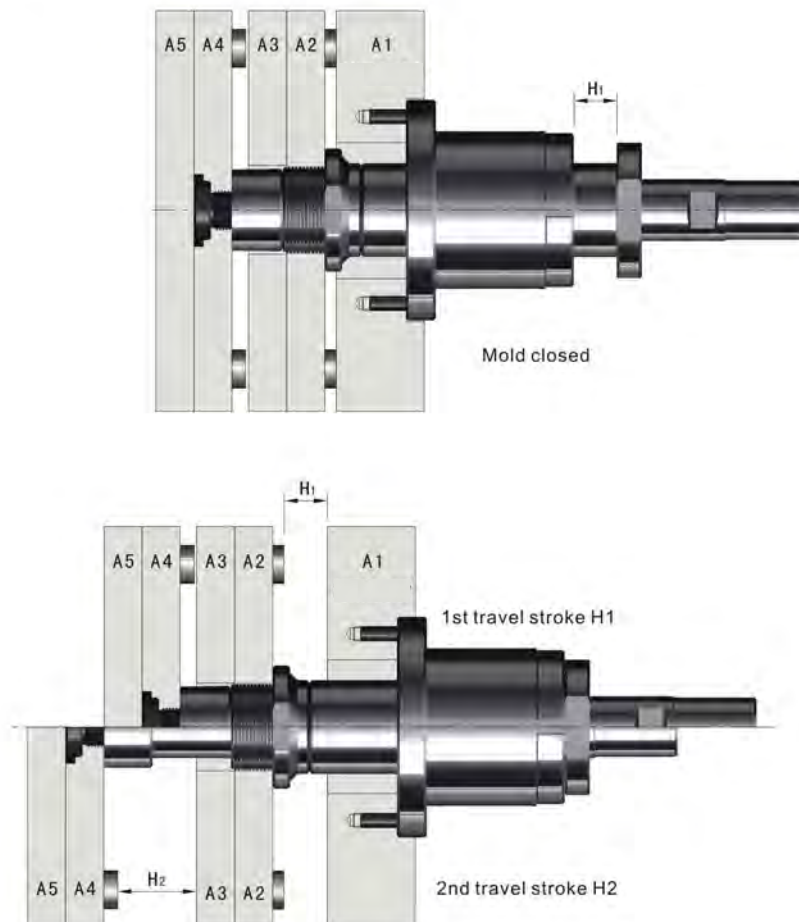


Installation Guidelines:

- Process the mounting holes as per dimension chart.
- Calculate the travel strokes accurately and cut the needed length for flange ④ and ejector rod ⑦. Do not adjust the strokes after installation.
- Mount the flange ④ into the champing plate, screw the sliding bushing ⑥ into B ejector plate and the ejector rod ⑦ into A ejector plate.
- In order to connect with the central ejector rod of the injection mold, it is available to thread the internal thread at the end of the ejector rod. Different threads for different Two-stage ejectors.
- After installation, carry out a functional test to check whether the individual parts work well and the stroke applicable. (Recommend test on matched molds machine or injection machines, do not use Lifting Machine).
- Request precise installation (only 1 set for 1 mold). Make sure the STROKE is exactly applicable, otherwise the product would be easy to damage.
- If need to maintain, please remove the two-stage ejector firstly.

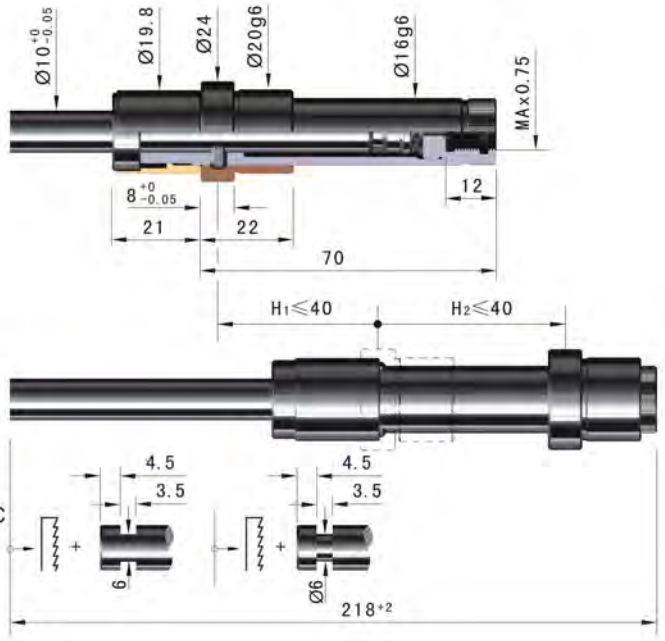
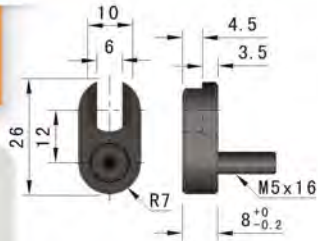


Functional chart:



DIN

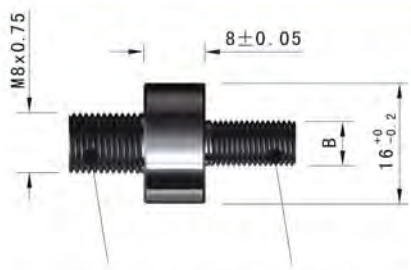
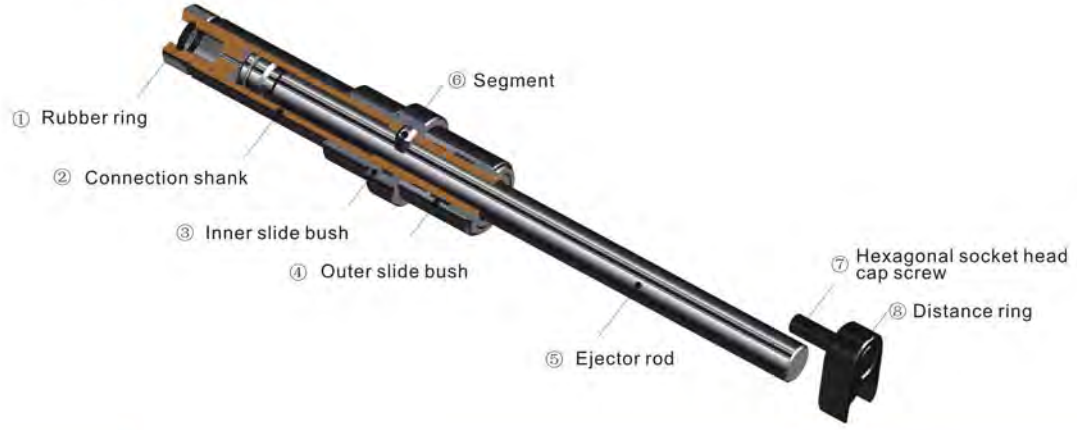
Two-stage ejectors



Order LLR-061620 Material:SUJ2 Hardness:58-62HRC

Code	A	AAL	@ ¥ /P
LLR-061620	6	-	
LLR-081620	8	-	
LLR-101620	10	-	

Product space chart:



Order AAL-0800M4 Material:SUJ2 Hardness:58-62HRC

Code	B	@ ¥ /P
AAL-0800M4	M4	
AAL-0800M5	M5	
AAL-0800M6	M6	
AAL-0800M8	M8	

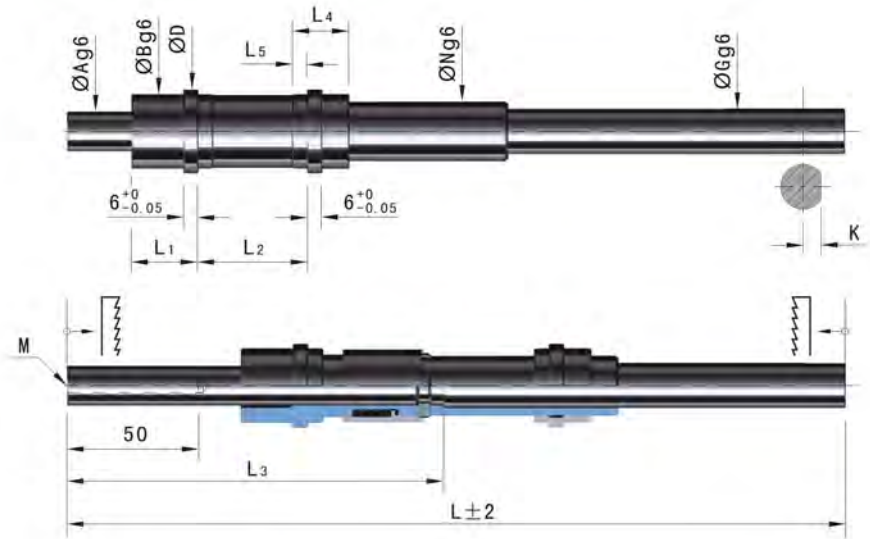
Connect:LLR-081620 Connect:PPW/PPS series

DIN

Two-stage ejectors

DDX

CAD 2D 3D FL



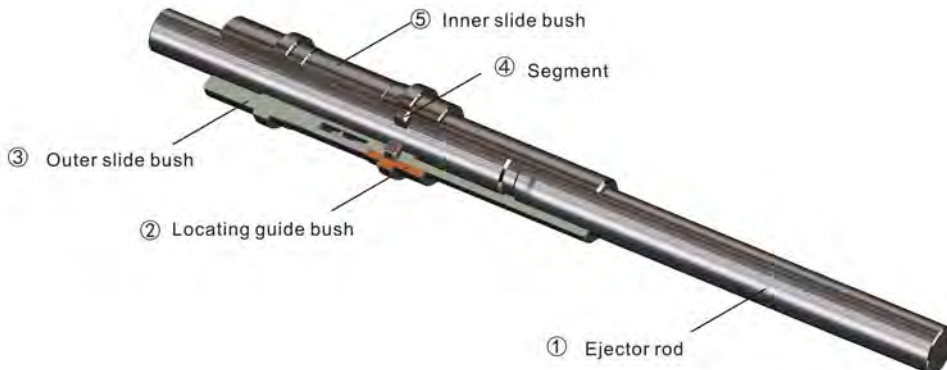
Features:

1. This type two-stage ejector structure is simple, easy for mount and need only small space for installation.
2. Some important parts are made of SKD11 and by high quality heat treatment process to make it to be more resistant.
3. The surface with coating treatment, higher wear resistance creates longer lifespan.

Order DDX-142622

Code	A	B	D	G	K	L	L1	L2	L3	L4	L5	N	H1	H2	M	@ ¥/P
DDX-142622	14	26	30	16	7.2	243	22	34	125	20	4	21	42	48	M6	
DDX-163027	16	30	34	18	8	314	27	44	152	23	6	24	54	80	M8	

Product space chart:

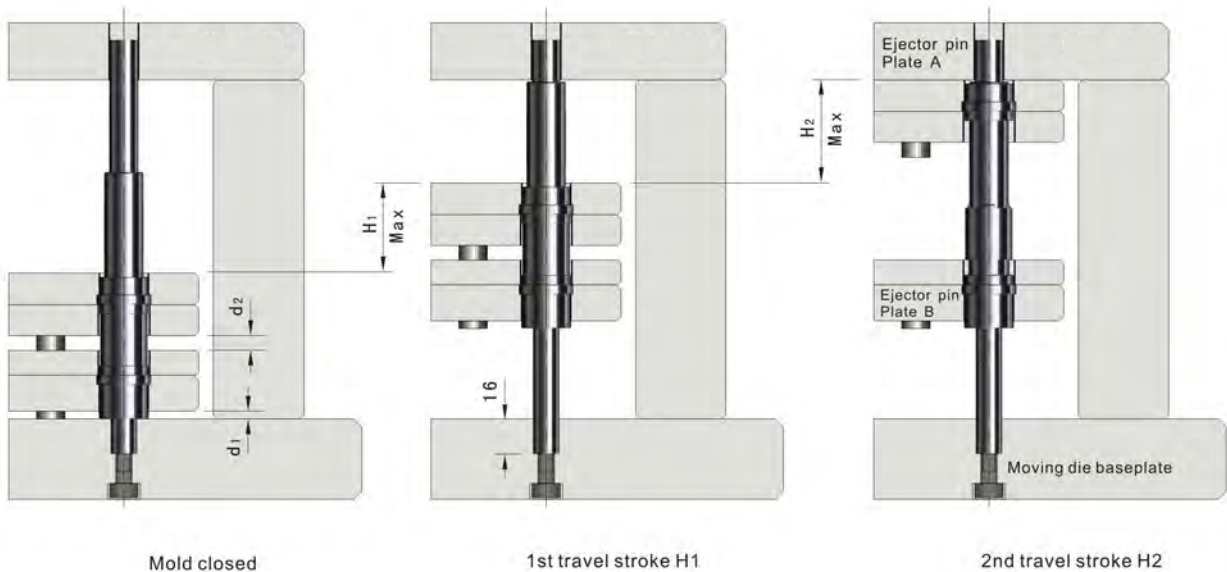


**Installation Guidelines:**

- Calculate the travel strokes accurately and cut the needed length from the both sides of ejector rod.
- Mount the locating guide bush onto A ejector plate, outer slide bush onto B ejector plate.
- Screw the ejector rod onto champing plate by hexagonal socket head cap screw.
- The travel strokes could not be adjusted after installation.
- All movable parts must be kept clean and lubricated smoothly periodically;
- After installation, carry out a functional test to check whether the individual parts work well and the stroke applicable. (Recommend test on matched molds machine or injection machines, do not use Lifting Machine).
- Recommend 4 sets two-stage ejectors be mounted in one mold, and must be mounted symmetrically and with same strokes, otherwise the product would be easy to damage.
- All mounting holes must be homocentric and perpendicular to parting surface.



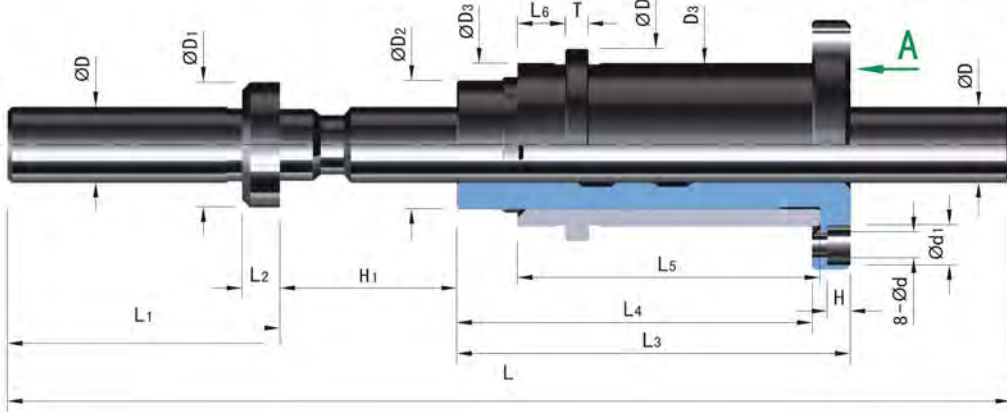
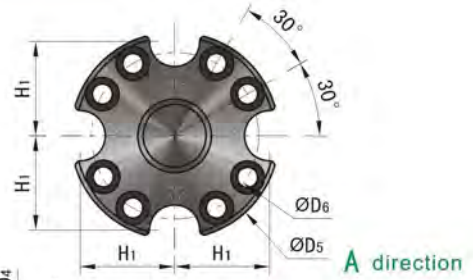
Functional chart:



DIN

Two-stage ejectors

TTSTL

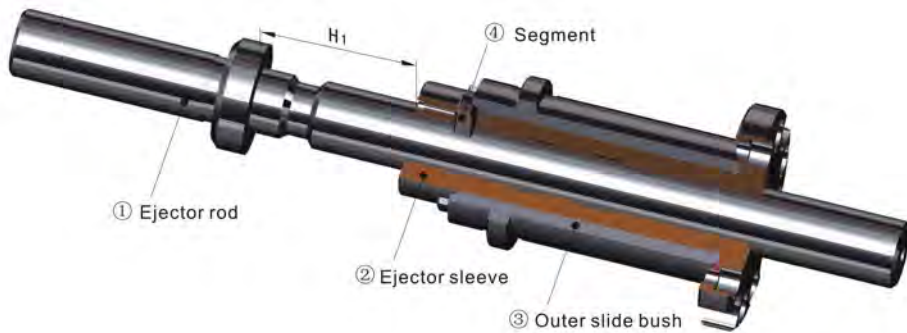


Order TTSTL-20A

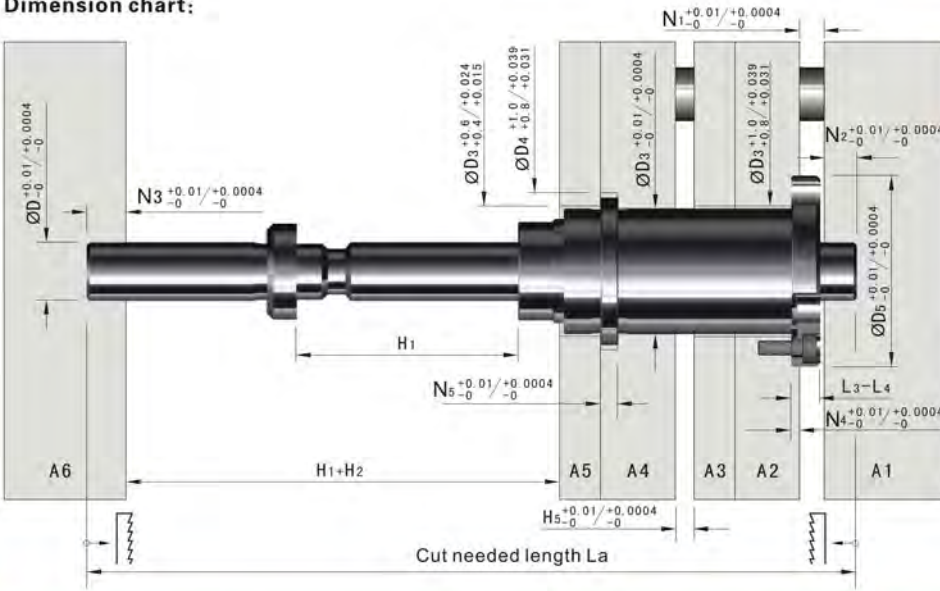
D	D1	D2	D3	D4	D5	D6	T	d	d1	H	H1
20 0/-0.01	33	34	43 0/-0.03	50.8	66 0/-0.03	53	6 0/-0.01	6.4	10.6	6.1	30
0.787 0/-0.004	1.3	1.34	1.693 0/-0.001	2	2.598 0/-0.001	2.09	0.236 0/-0.004	0.25	0.42	0.24	1.18
26 0/-0.01	42	44	54 0/-0.03	63	84 0/-0.03	67	8 0/-0.01	8.7	13.8	8.2	37
1.024 0/-0.004	1.65	1.69	2.126 0/-0.001	2.48	3.307 0/-0.001	2.64	0.315 0/-0.004	0.34	0.54	0.32	1.46
32 0/-0.01	53	54	68 0/-0.03	78	105 0/-0.03	85	10 0/-0.01	10.8	16.8	10.2	47
1.26 0/-0.004	2.09	2.13	2.677 0/-0.001	3.07	4.134 0/-0.001	3.35	0.394 0/-0.004	0.43	0.66	0.4	1.85

Code	L	L1	L2	L3	L4	L5	L6	Center Rod Dia	Component Item Number	単位	@ ¥ / P
TTSTL-20A	265	72	10	104	94	79.96	12.7	20mm (Small)	TTSTL-20CR	mm in	
TTSTL-26A	290	76	12	43	103	85.32	12.7	26mm (Medium)	TTSTL-26CR	mm in	
TTSTL-32A	320	82	15	54	113.4	93.68	15.88	32mm (Large)	TTSTL-32CR	mm in	
	12.6	3.23	0.59	2.13	4.46	3.688	0.625				

Product space chart:

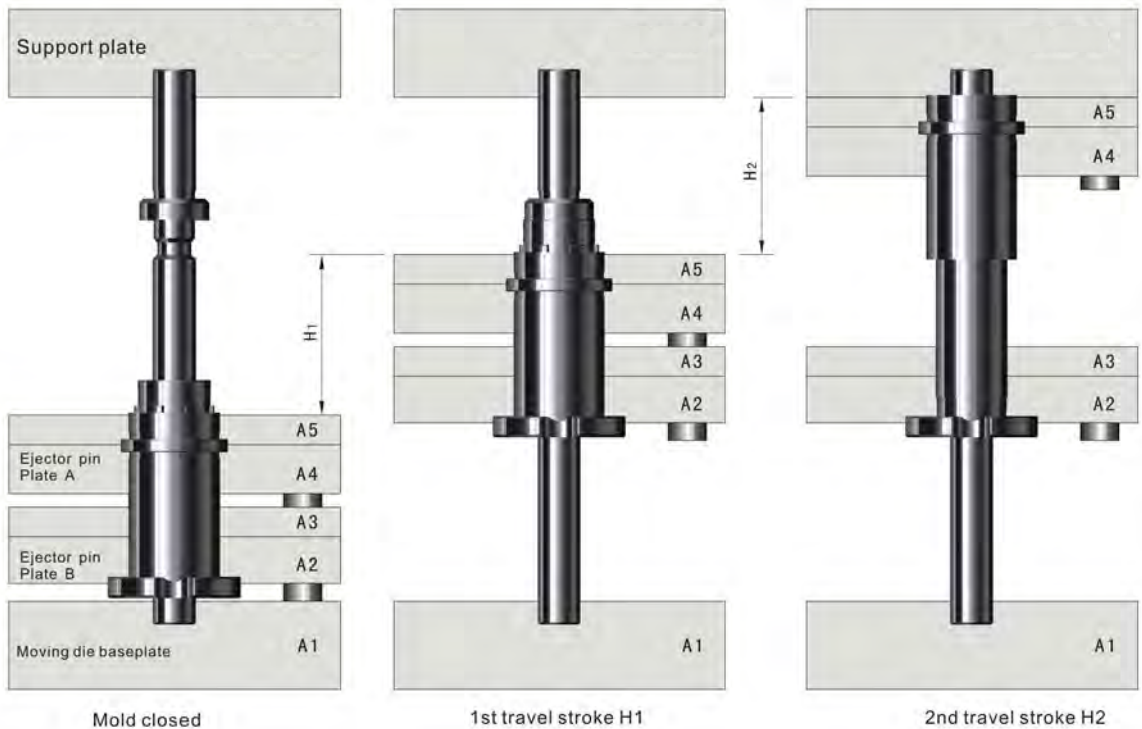


Dimension chart:



A2	A3	A4	A5	N1	N2	N3	N4	N5	H1		H2		# 12
									min.	max.	min.	max.	
25.4	12.7	25.4	12.7	8	8	8	3	4.76	4	79	4	79	mm
1	0.5	1	0.5	0.315	0.315	0.315	0.118	0.118	0.16	3.11	0.16	3.11	in
28.58	12.7	28.58	12.7	10	10	10	4	4.76	6	84	6	84	mm
1.125	0.5	1.125	0.5	0.394	0.394	0.394	0.157	0.118	0.24	3.31	0.24	3.31	in
28.58	15.88	28.58	15.88	15	12	12	4	4.76	8	92	8	92	mm
1.125	0.625	1.125	0.625	0.591	0.472	0.472	0.157	0.188	0.31	3.62	0.31	3.62	in

Functional chart:



- Ejector pins series
- Ejector sleeves
- Slide pullers series
- Lunch tools series
- Pushing gates series
- Dome stamps Air valves series
- Ejector series**
- Cooling elements
- Locating parts series
- Spring series
- Guide pins Guide bush series
- Guide pins Water plate series
- Chuck series
- Mold accessories

Two-stage ejectors

Features:

1. With mechanical bolt, easy to set up and install.
2. Internal installation avoids interferences with water line connectors and external mounted components.
3. The surface with coating treatment, higher wear resistance creates longer lifespan.

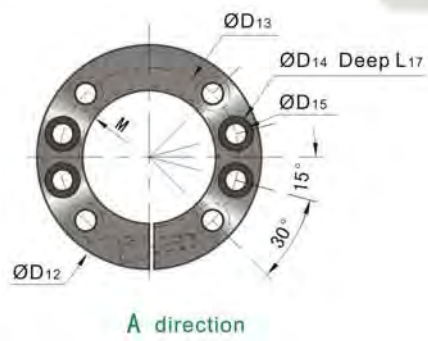
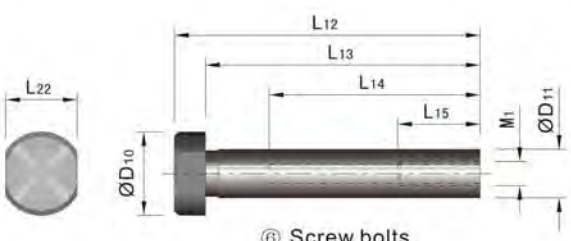


Installation Guidelines:

- Calculate the travel strokes accurately and cut the needed length from the both sides of ejector rod.
- Process the mounting holes as per dimension chart, and the holes should be homocentric and be perpendicular to parting surface.
- Dismount the outer slide bush ③ and ejector rod ①, and then mount the slide bush ③ onto A ejector plate, screw the ejector sleeve ② onto ejector B plate.
- Remount the outer slide bush ③ to ejector sleeve ②, inset ejector sleeve ② into and mount them them between wearing plate and champing plate.
- Do not adjust the travel strokes after installation.
- All movable parts must be kept clean and lubricated smoothly periodically.
- After installation, carry out a functional test to check whether the individual parts work well and the stroke applicable. (Recommend test on matched molds machine or injection machines, do not use Lifting Machine).
- A minimum 2 sets Two-stage ejector must to be mounted symmetrically in mold. Otherwise, the parts would be broken caused by the unbalanced force of two sides.
- 2-stage ejector must not be exposed to temperatures that exceed 120°C at any time.
- The two-stage ejector is precise parts, please do not apply together with any self-regulating parts. Wmould will not be responsible for any anomaly caused by it.
- Select 20mmØ (small), 26mmØ (medium) or 30mmØ (large) two-stage ejector based on the width of the mold base.



Two-stage ejectors



Features:

1. It is mounted into the mold to avoid to collide with the outside parts of mold.
2. The surface with coating treatment, higher wear resistance creates longer lifespan.

Order TTSBL-20A Material:SUJ2/SKD61 Hardness:58-62HRC/50-54HRC

D1	D2	D4	D5	D6	D8	D10	D11	D12	D13
34 0/-0.01	20 0/-0.01	58.2 0/-0.03	50.8 0/-0.02	34	43 0/-0.03	29	18	72	72
1.339 0/-0.004	0.787 0/-0.004	2.291 0/-0.001	2 0/-0.008	1.339	1.693 0/-0.001	1.14	0.71	2.83	2.83
44 0/-0.01	26 0/-0.01	70 0/-0.03	62.6 0/-0.02	43	54 0/-0.03	34	21	90	90
1.732 0/-0.004	1.024 0/-0.004	2.756 0/-0.001	2.46 0/-0.008	1.693	2.126 0/-0.001	1.34	0.83	3.54	3.54
58 0/-0.01	32 0/-0.01	87 0/-0.03	78 0/-0.02	54	68 0/-0.03	43	26	112	112
2.283 0/-0.004	1.26 0/-0.004	3.425 0/-0.001	3.07 0/-0.008	2.126	2.677 0/-0.001	1.69	1.02	4.41	4.41

D14	D15	L1	L2	L6	L7	L10	L12	L13	L14
10.5	6.4	280	10 +0.02/0	22.7	6 0/-0.01	86	136	125	107
0.41	0.25	11.2	0.394 +0.001/0	0.894	0.236 0/-0.0004	3.39	5.35	4.92	4.21
13.8	8.6	314	12 +0.02/0	22.7	6 0/-0.01	94	153	139	120
0.54	0.34	12.36	0.472 +0.001/0	0.894	0.236 0/-0.0004	3.7	6.02	5.47	4.72
16.8	10.8	354	14 +0.02/0	28.88	7 0/-0.01	105	171	154	138
0.66	0.43	13.94	0.551 +0.001/0	1.137	0.276 0/-0.0004	4.13	6.73	6.06	5.43

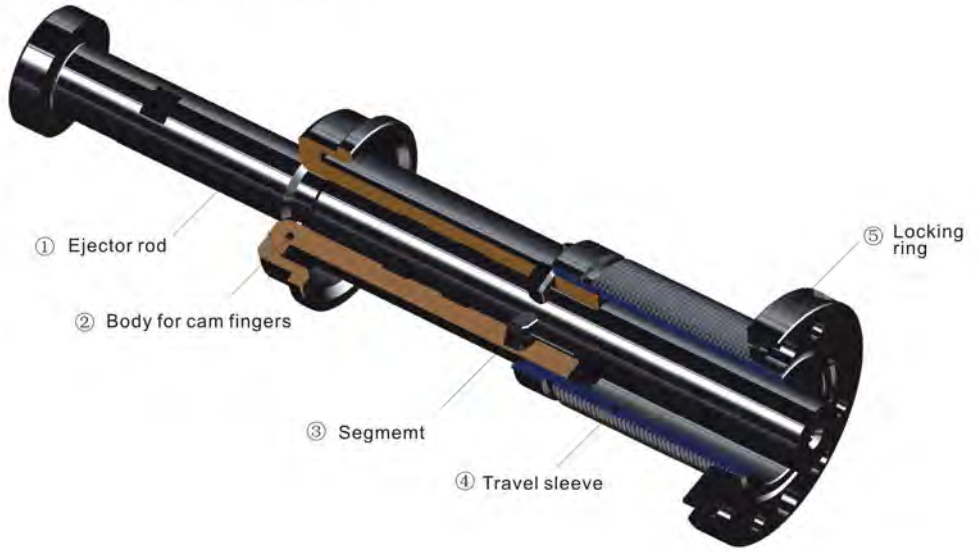
Code	L15	L16	L17	L22	R1	M	M1	单位	@ ¥/P
TTSBL-20A	30 1.18	10 0.39	6 0.24	26 1.02	R0.4 R0.02	M43.2×1.25	M10	mm in	
TTSBL-26A	40 1.57	13 0.51	8.1 0.32	30 1.18	R0.4 R0.02	M54.2×1.25	M12	mm in	
TTSBL-32A	50 1.97	16 0.63	10.1 0.4	36 1.42	R0.4 R0.02	M68.25×1.25	M16	mm in	

DIN

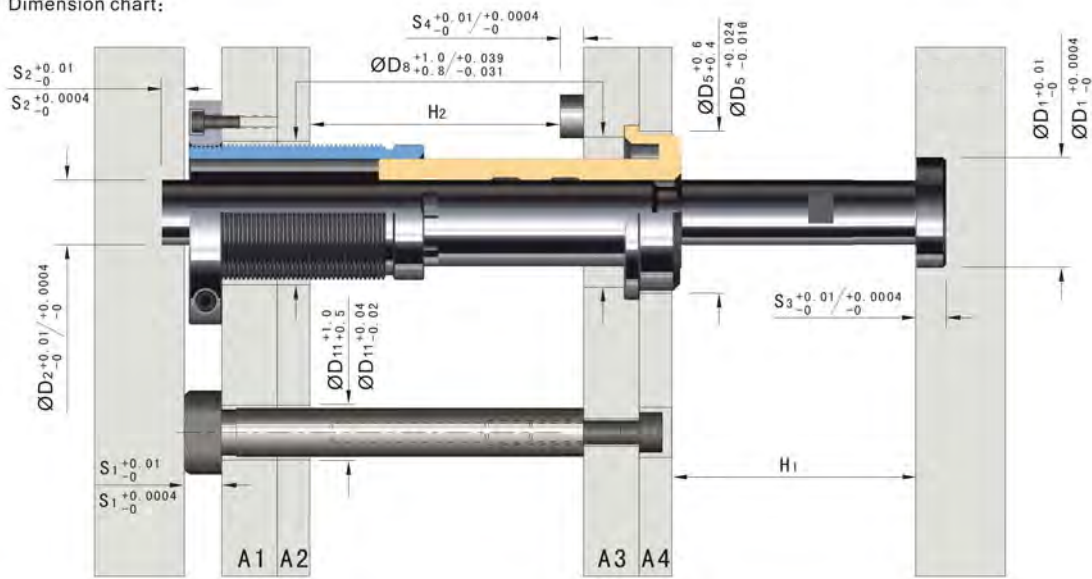
Two-stage ejectors

TTSBL

Product space chart:



Dimension chart:



A1	A2	A3	A4	S1	S2	S3	S4	S5	Center Rod Length	Travel Sleeve Length	H1		H2		T4	单位
											min.	max.	min.	max.		
25.4	12.7	25.4	12.7	11	8	10	4.76	4	277.96	86	8	82	12	82	M 6	mm
1	0.5	1	0.5	0.433	0.315	0.394	1.86	0.157	10.943	3.386	0.32	3.32	0.47	3.32	M 8	in
28.58	12.7	28.58	12.7	14	10	12	4.76	4	311.32	94	10	92	18	92	M 8	mm
1.125	0.5	1.125	0.5	0.551	0.394	0.472	1.86	0.157	12.257	3.701	0.39	3.62	0.71	3.62	M 8	in
28.58	15.88	28.58	15.88	17	12	14	6.29	6	352.21	105	12	102	24	102	M10	mm
1.125	0.625	1.125	0.625	0.669	0.472	0.551	0.248	0.238	13.867	4.134	0.47	4.02	0.94	4.02	M10	in

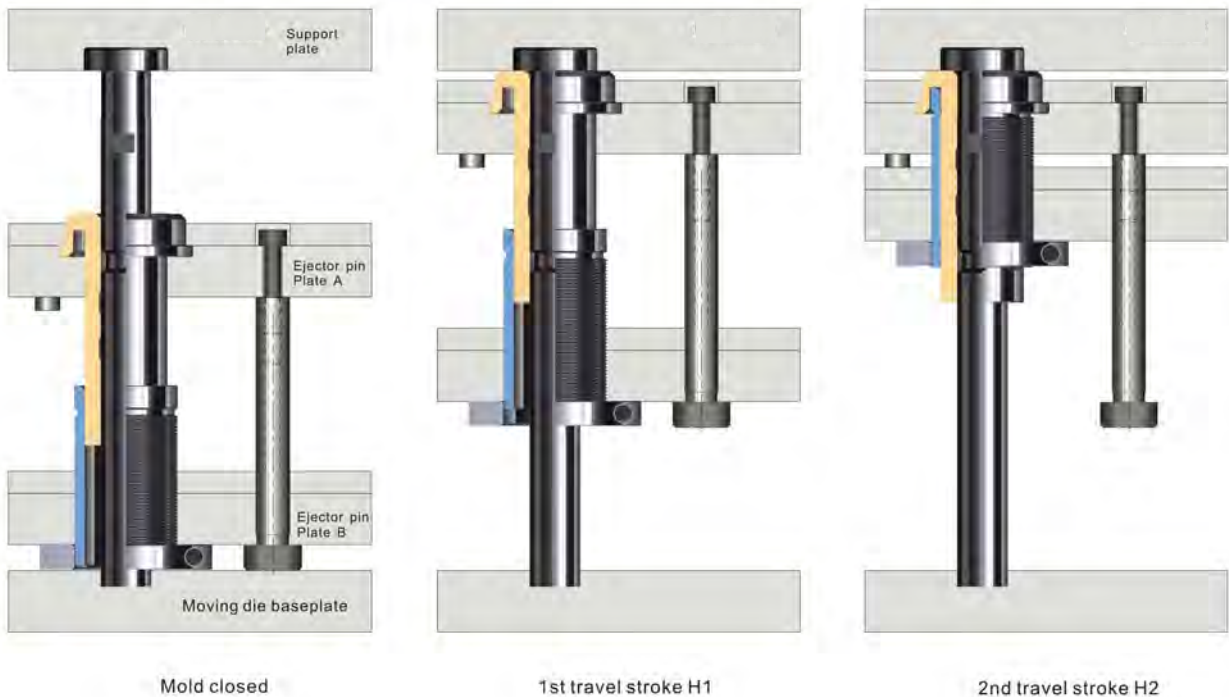


Installation Guidelines:

- Firstly process through holes into A ejector plate, process screw holes into B ejector plate and champing plate (screw holes dimension refer to the ones need matched with D2, D3). Customer can also make flange to lock parts.
- Process one mounting hole in the top of the ejector rod, this mounting hole need match with the through hole into B plate.
- Mount the champing sleeve ② directly on the bottom of champing plate, screw the sliding bushing ① into B ejector plate and the head of the ejector bolt ④ into A ejector plate.
- Adjust the position of champing sleeve ② and the champing plat (flange) to preset the travel stroke H1, and then fix the slotted nut ⑤.
- In order to connect with the central ejector bolt of the injection mold, it is available to thread the internal thread at the end of the ejector bolt. Different threads for different Two-stage ejectors.
- After installation, carry out a functional test to check whether the individual parts work well and the stroke applicable. (Recommend test on matched molds machine or injection machines, do not use Lifting Machine).
- The nut ⑥ had been strengthened in mounting, do not dismount the nut freely anytime to ensure normal function of the product.
- Request precise installation (only 1 set for 1 mold). Make sure the STROKE is exactly applicable, otherwise the product would be easy to damage.



Functional chart:

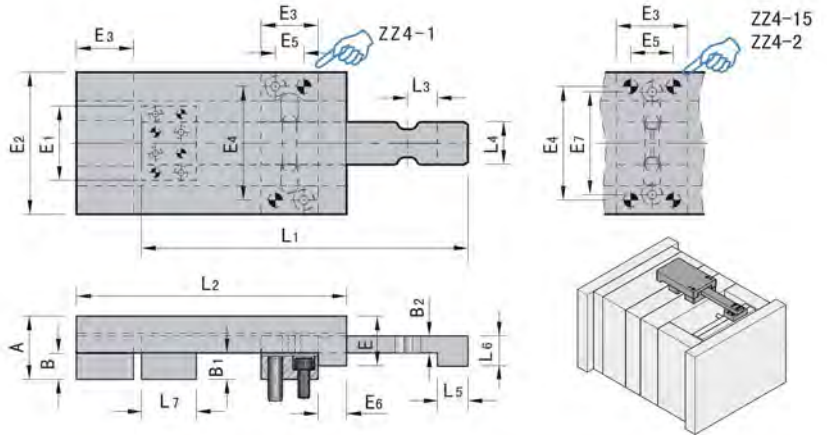


DIN

Two-stage ejectors

ZZ4

2D 3D FL



Features:

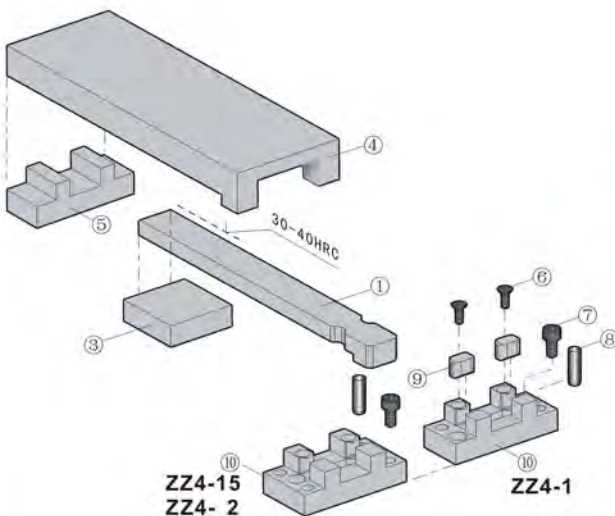
1. Different install methods, different function. This ZZ4 series latch locks with wide applicability which can be used as two-stage ejector, latch lock.

Order ZZ4-1-1-0

E2	A	B	B1	B2	E	E1	E3	E4	E5	E6	E7
50	22.3	9.3	9.2	6.8	17.5	30	20	40	10	10	-
75	30.3	12.3	12.2	8.8	23.5	45	30	65	20	15	56
90	37.5	15.5	15.3	11.8	29	60	36	74	25	15	74

Code	L1	L2	L3	L4	L5	L6	L7	Dowel pin	Mounting screws	@ ¥ /P
ZZ4- 1-1-0	146	146	10	15	10	9.6	30	Ø5×16	M4×12	
ZZ4-15-1-0	196	196	15	20	12	12	45	Ø6×20	M8×16	
ZZ4- 2-1-0	246	246	18	25	15	15	60	Ø6×20	M8×20	

Product space chart:



- ZZ4-1 with more dowel pin holes compared with
- ZZ4-15, ZZ4-2 (refer drawing).

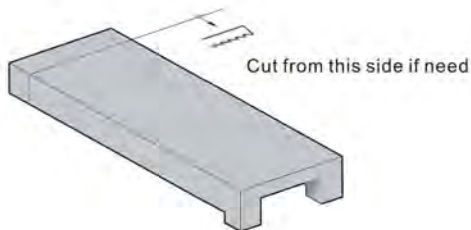
Pos	Name	Material	Hardness
1	Latch bar	Cr12MoV	55-58HRC
3	Spacer	S45C	-
4	Housing	718H	≈900HV
5	Spacer	S45C	-
9	Catch	SKD11	58-62HRC
10	Catch housing	718H	28-38HRC



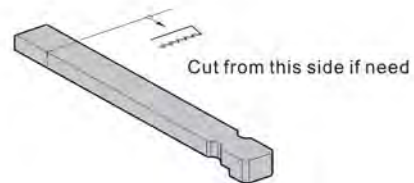
Installation Guidelines:

- Install the Latch housing ⑩ and should be parallel to parting surface.
- Install Reverse latch bar ① after cutting needed length and processing screw holes. Process dowel pin holes in holes after locking screws and in mold closed situation.
- Mount the Latch housing ⑩ and Reverse latch bar ① symmetrically in mold, and then calculate the Control plate ④ length according to the travel stroke. Process the dowel pin holes of Control plate ④ after other parts installation.
- A minimum 2 sets latch lock must to be mounted symmetrically in mold. Otherwise, the parts would be broken caused by the unbalanced force of two sides.
- After installation, carry out a functional test to check whether the individual parts work well and the stroke applicable.
- If need to maintain, please remove the latch lock firstly.

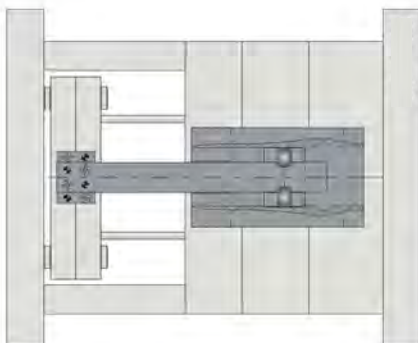
Control plate ④ cutting:



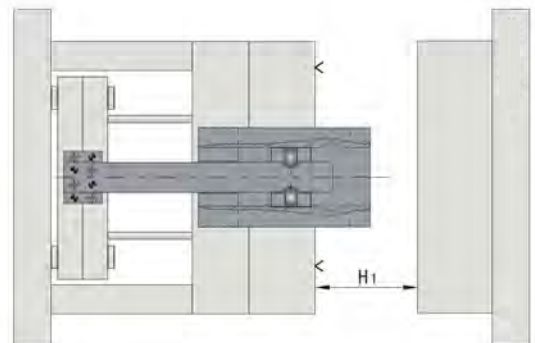
Reverse latch bar ①:



Functional chart:(Install method 1)



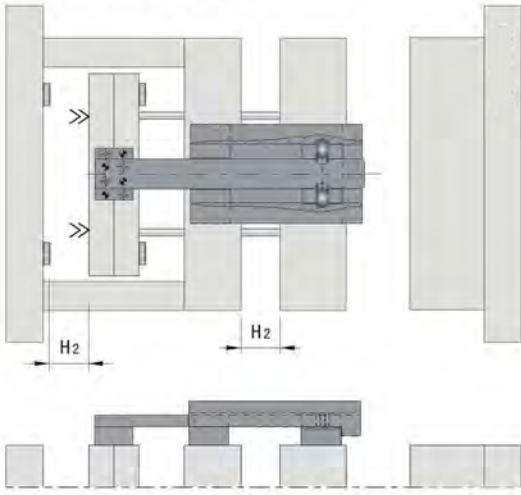
Mold closed



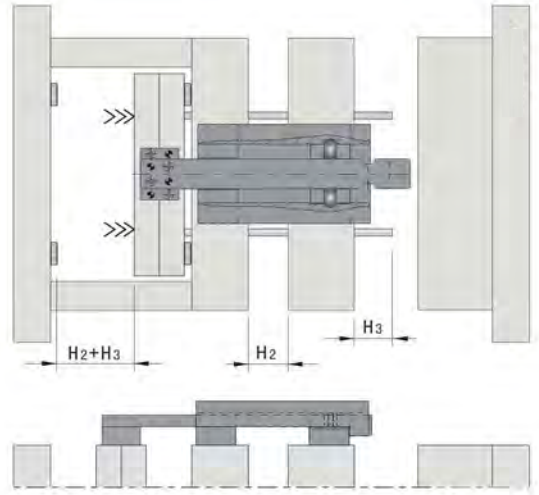
Mold opened

DIN

Two-stage ejectors



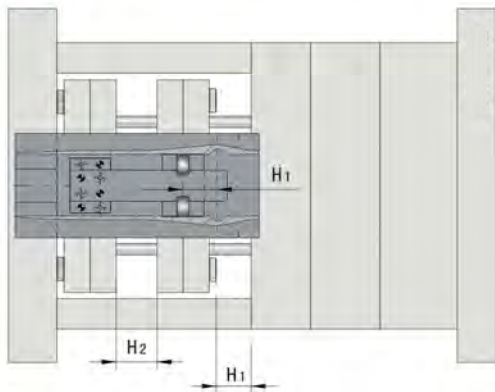
1st travel stroke



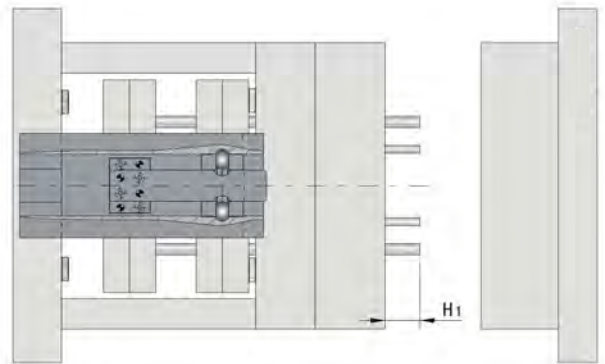
2nd travel stroke



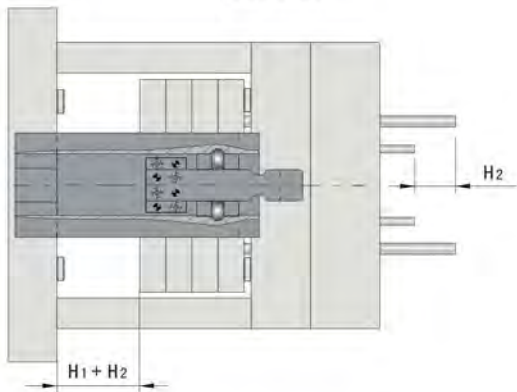
Functional chart:(Install method 2)



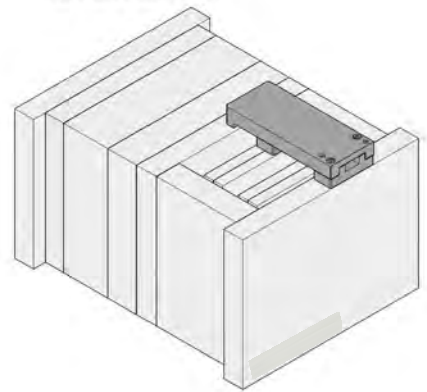
Mold closed



1st travel stroke H1

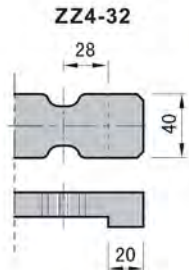
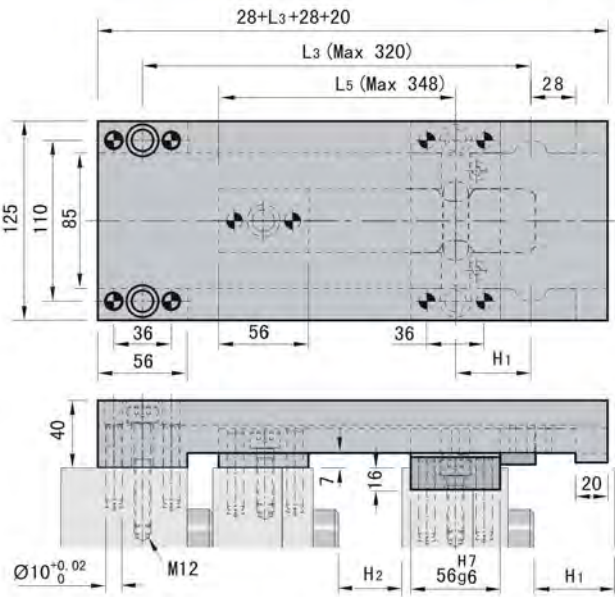


2nd travel stroke H2



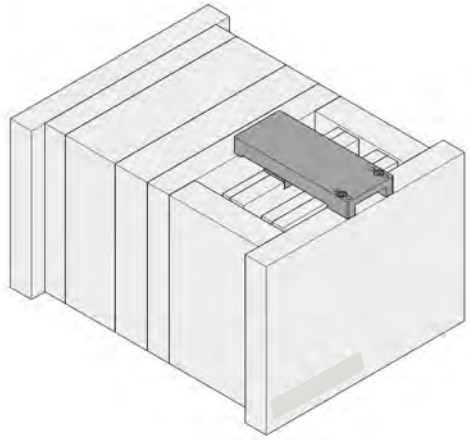
- Ejector pins
Ejector sleeves
- Slide retainers
Retainers
- Latch locks
Latch series
- Advancing plate
Advancing series
- Date stamps
Air valves series
- Ejector series
- Cooling elements
Cooling series
- Locating parts
Locating series
- Storage series
- Guide parts
Guide series
- Guide strips
Wear plate series
- Chuck series
- Mold
Accessories

DIN
Two-stage ejectors

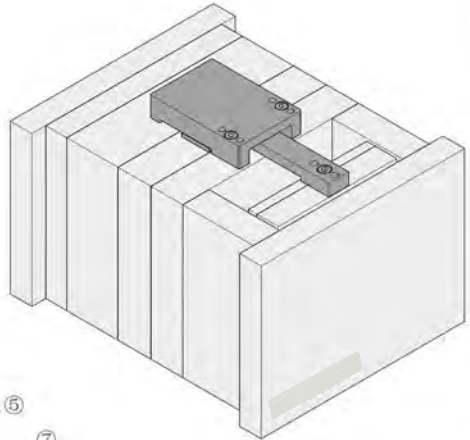
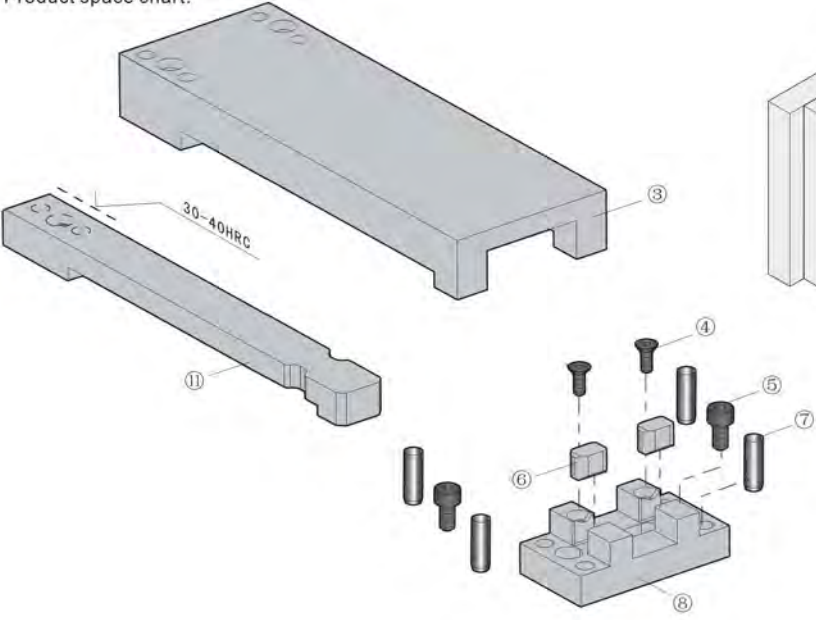


Order ZZ4-32-L3-L5

Pos	Name	Material	Hardness
3	Housing	718H	≈900HV
6	Catch	SKD11	58-62HRC
8	Catch housing	718H	28-38HRC
11	Latch bar	Cr12MoV	55-58HRC



Product space chart:

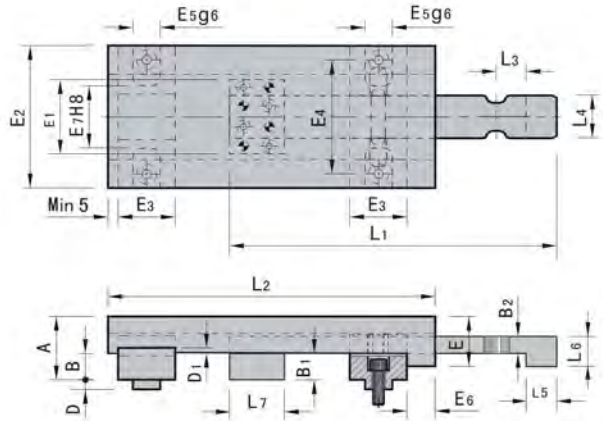


- Ejector pins
- Slider sleeves
- Slide rail/liners
- Latch locks
- Flanging gates
- Done stamps
- Air valves series
- Ejector series**
- Cooling elements
- Locating parts
- Springs series
- Guide pins
- Guide pins
- Water plate series
- Chuck series
- Mold accessories

DIN

Two-stage ejectors

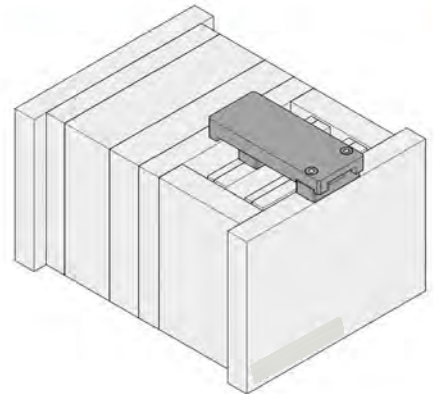
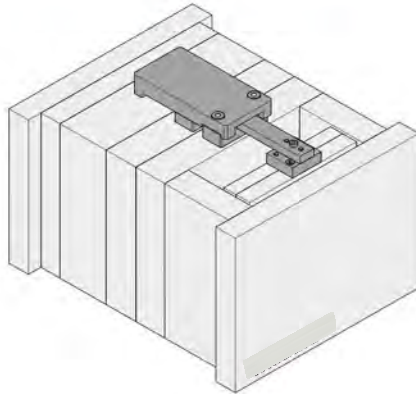
ZZ4



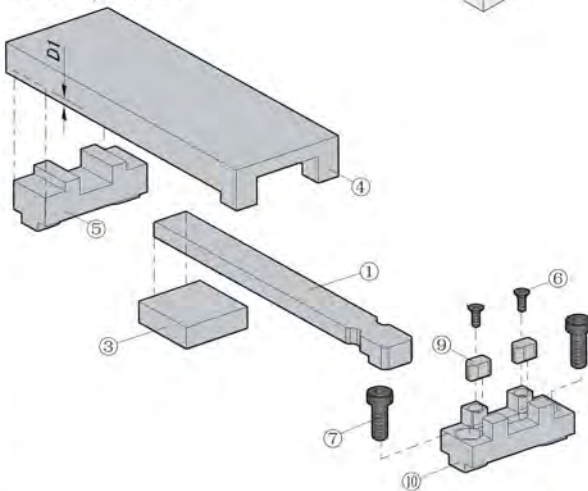
Order ZZ4-11-1-0

E2	A	B	B1	B2	E	E1	E3	E4	E5	E6	E7
50	22.3	9.3	9.2	6.8	17.5	30	20	38	10	10	22
75	30.3	12.3	12.2	8.8	23.5	45	30	56	12	15	30
90	37.5	15.5	15.3	11.8	29	60	36	72	14		38

Code	L1	L2	L3	L4	L5	L6	L7	D	D1	Mounting screws	@ ¥/P
ZZ4-11-1-0	146	146	10	15	10	9.6	30	4	3	M 6×20	
ZZ4-16-1-0	196	196	15	20	12	12	45	5	4.5	M 8×25	
ZZ4-21-1-0	246	246	18	25	15	15	60	6	6	M10×30	



Product space chart:



The Countersunk screw⑥ has no practical function, just to protect or remind the catch⑧.

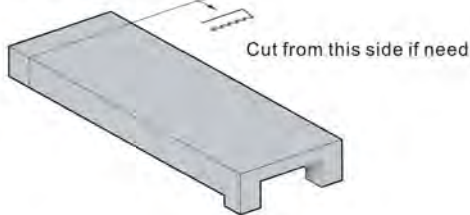
Pos	Name	Material	Hardness
3	Latch bar	Cr12MoV	55-58HRC
6	Spacer	S45C	-
8	Housing	718H	≈900HV
11	Spacer	S45C	-
8	Catch	SKD11	58-62HRC
11	Catch housing	718H	28-38HRC



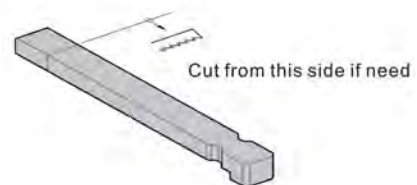
Installation Guidelines:

- Install the Latch housing and should be parallel to parting surface.
- Install Reverse latch bar after cutting needed length and processing screw holes. Process dowel pin holes in mold closed situation.
- Mount the Latch housing and Reverse latch bar symmetrically in mold, and then calculate the Control plate ④ length according to the travel stroke. Process the dowel pin holes of Control plate after other parts installation.
- A minimum 2 sets latch lock must to be mounted symmetrically in mold. Otherwise, the parts would be broken caused by the unbalanced force of two sides.
- After installation, carry out a functional test to check whether the individual parts work well and the stroke applicable.
- If need to maintain, please remove the latch lock firstly.

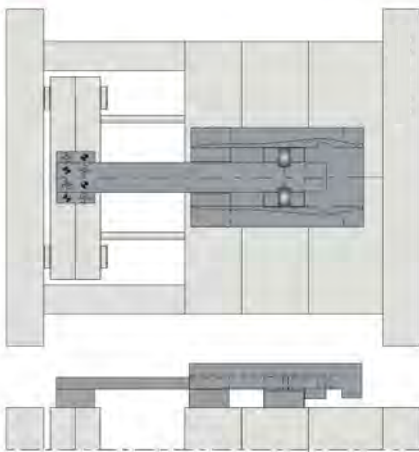
Control plate ④ cutting:



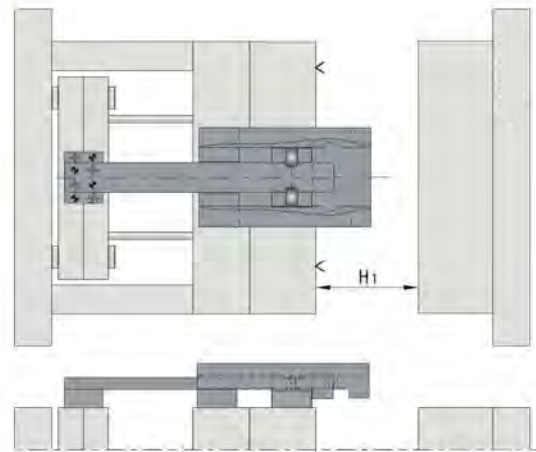
Reverse latch bar ①:



Functional chart:(Install method 1)



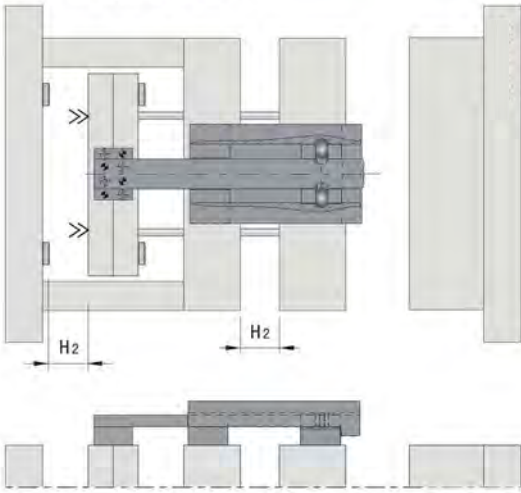
Mold closed



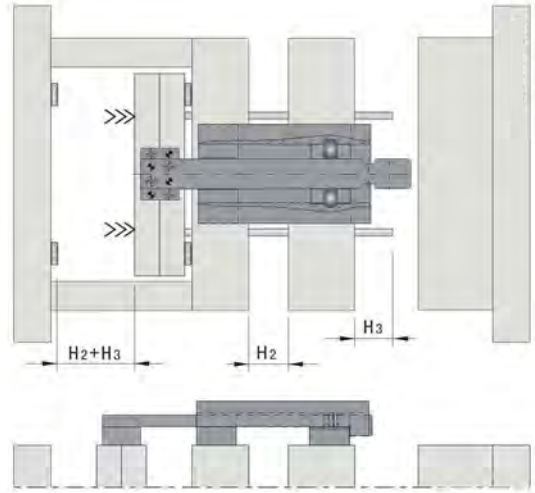
Mold opened

DIN

Two-stage ejectors



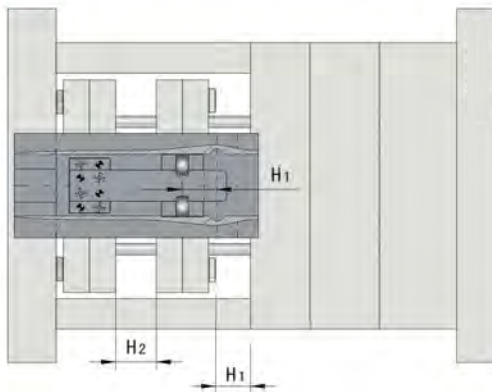
1st travel stroke



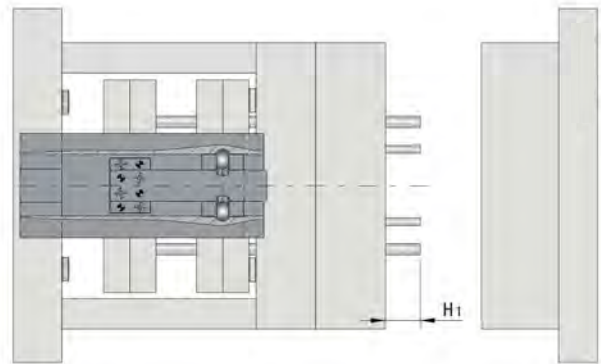
2nd travel stroke



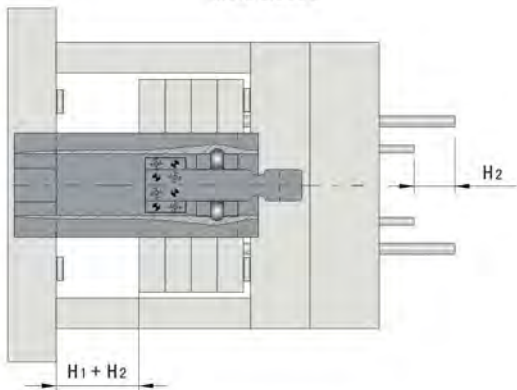
Functional chart:(Install method 2)



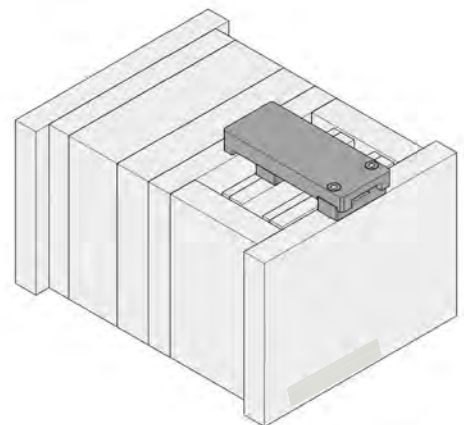
Mold closed



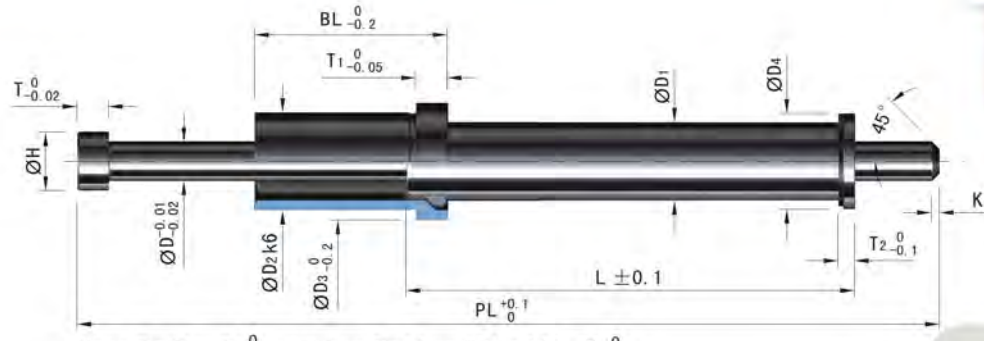
1st travel stroke H1



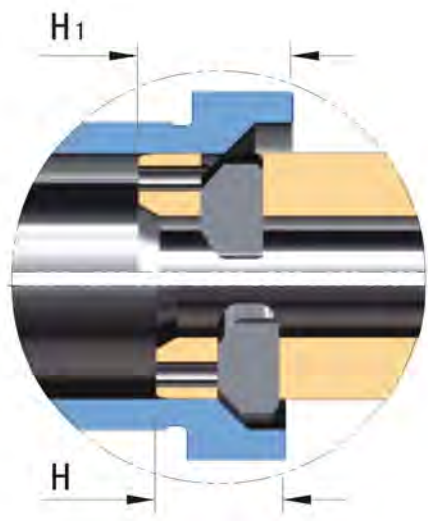
2nd travel stroke H2



- Ejector pins
Ejector sleeves
- Slide retainers
Retainers
- Latch locks
Latch locks
- Sliding plates
Sliding plates
- Date stamps
Date stamps
- Ejector series
- Cooling elements
Cooling elements
- Locating parts
Locating parts
- Storage sleeves
Storage sleeves
- Guide pins
Guide pins
- Guide strips
Guide strips
- Chuck series
Chuck series
- Mold
Accessories



When D=16, $D_{-0.02}^0$; when D=16 and PL>300, $T_{-0.05}^0$



D	H	H1
6	10.5	12
10	12.5	12.5
16	16.5	19

The values for activation finishing/starting point "H/H1" are for reference only

Features:

1. This early return unit is used to early return the ejector plate before mold closing, so that to avoid the slide core unit collide by ejector pin.
2. It is mounted into the mold to save the space, The early return function works even the stroke of ejector pin is large.
3. It can be used as Two-stage ejector.
4. It is mounted into the mold to avoid to collide with the outside parts and cooling system of mold.

Order EERST-D-BL-L-PL

Code	D	D1	D2	D3	D4	T	T1	T2	H	K	BL Designated unit 0.5mm	L Designated unit 0.5mm	PL Designated unit 0.5mm	@ ¥/P
EERST	6	15 -0.016/+0.027	20 +0.015/+0.002	24	18.8	6	8	4	10	2	25- 60	50 -100 100.5-125	50-200	
	10	20 -0.020/+0.033	25 +0.015/+0.002	30	24.5	8					35-100	60 -100 100.5-160	50-300	
	16	30 -0.020/+0.033	40 +0.018/+0.002	46	35.5	8	13	8	21	4	40-100	60 -100 100.5-160	50-350	

JIS

Round latch locks

EERST

Product space chart:

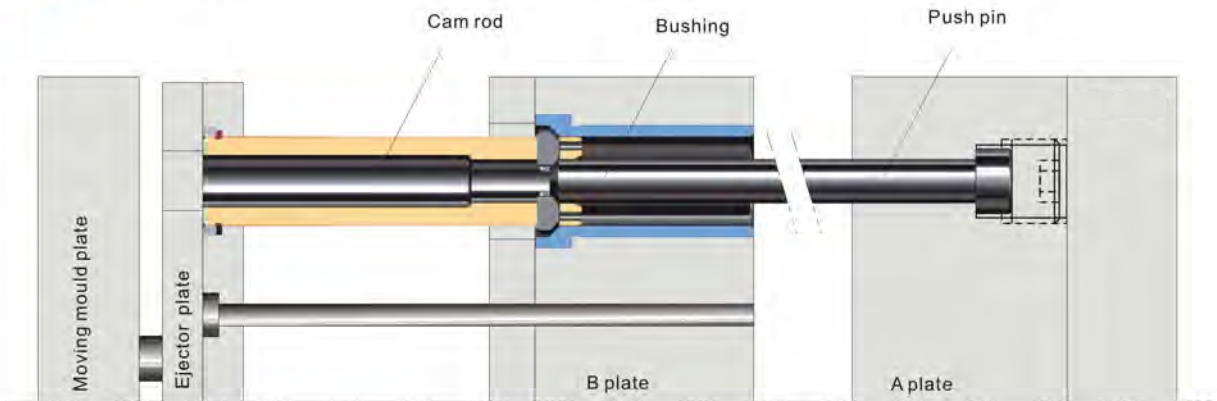


Installation Guidelines:

- Mount cam rod into the ejector plate, bushing into the B plate, push pin into the A plate.
- A minimum 2 sets Early ejector return assembly must to be mounted symmetrically in mold.
- If the early ejector return units were not mounted symmetrically, the uneven force will cause the parts damaged.
- Add the lubricating oil onto the joint area regularly.
- Make sure the early return units are mounted into the cam rod exactly, otherwise, it will cause the mold damaged.
- After the installation, carry out a functional test, check whether the individual parts work well, whether the stroke is applicable.



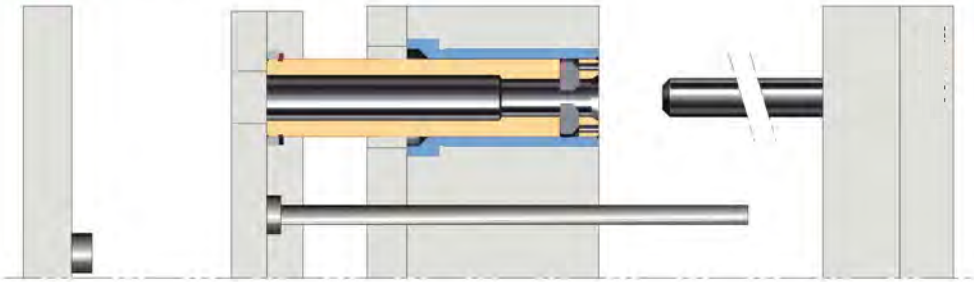
Installation Diagram:



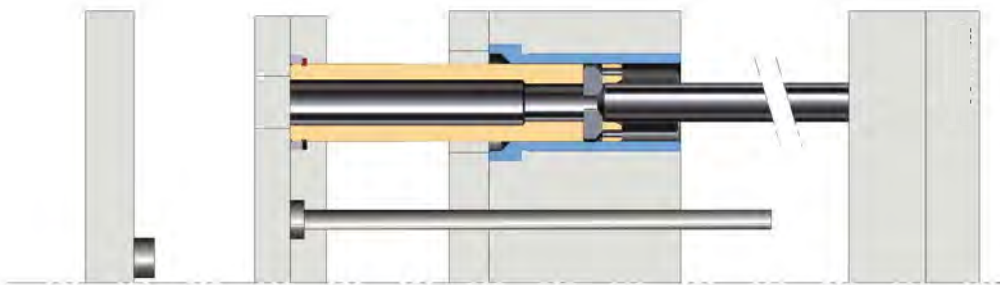
Ejector pins
Ejector sleeves
Slide retainers
Retainer
Latch locks
Sleeves
Lubricating plates
Sleeves
Gate starters
Air valves
Sleeves
Ejector series
Cooling elements
Sleeves
Locating parts
Sleeves
Storage sleeves
Guide pins
Guide bush
Guide stops
Wear plates
Sleeves
Chucks
Sleeves
Mold
Accessories



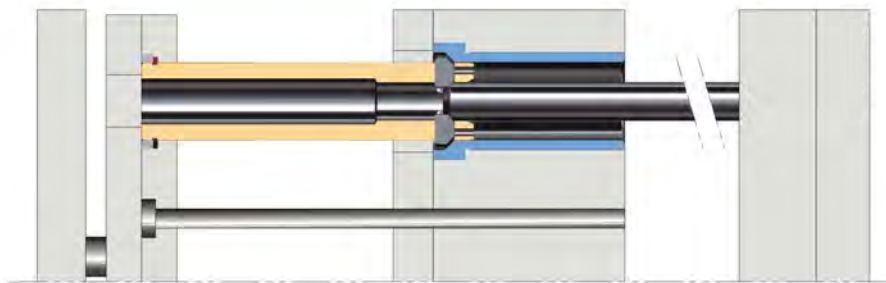
Functional chart:



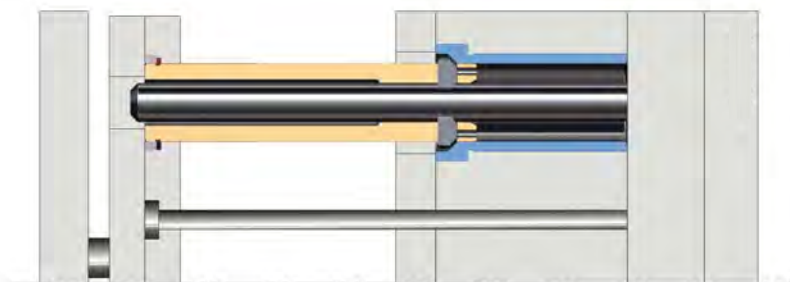
Mold opened



Mold closing 1



Mold closing 2



Mold closed

JIS
Round latch locks

EERST

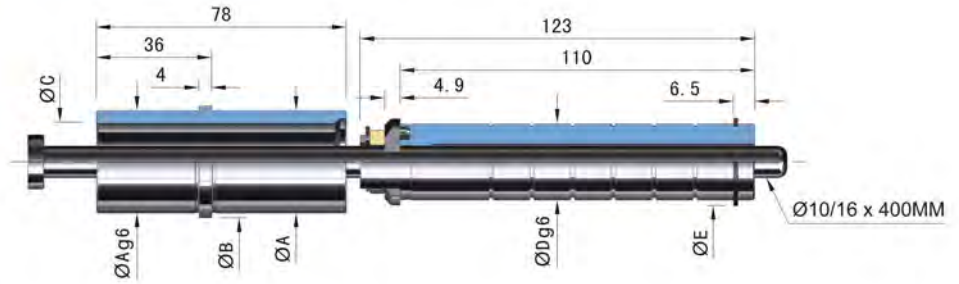


Ejector pins Ejector sleeves
Slide railiners series
Latch locks series
Pouring gate series
Date stamps Air valves series
Ejector series
Cooling elements series
Locating parts series
Springs series
Guide pins Guide bush
Guide strips Wear plate series
Chuck series
Mold processors

AISI

Round latch locks

EER



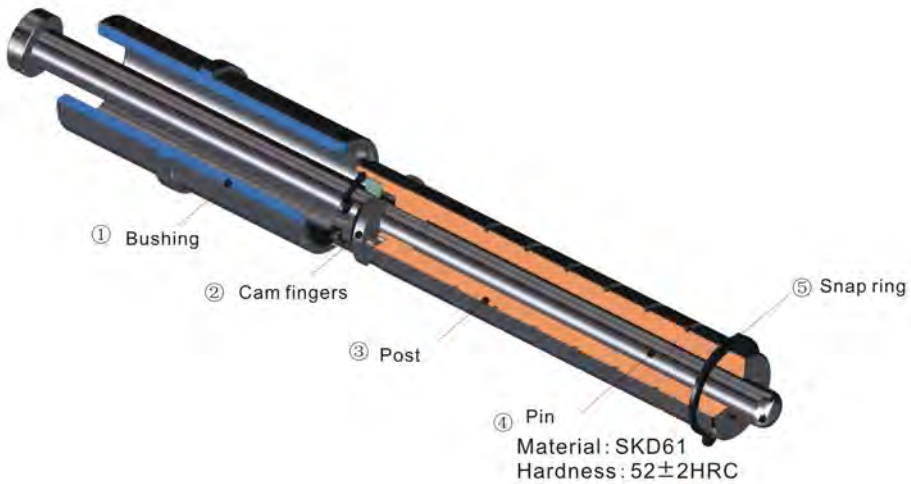
Features:

1. This early return assembly is used to early return the ejector plate before mold closed.
2. It is mounted inside the mold to save space. The early return function works even the stroke of the ejector pin is large.
3. It is mounted inside the mold to avoid to against extrusion the waterway and slides.

Order EER-100E Material:SUJ2 Hardness:58-62HRC

Code	A	B	C	D	E	F	G	H	@ ¥/P
EER-100E	32	35	24.2	24	27	10	5	17	
EER-101E	42	46	32.2	32	36	16	7	24	

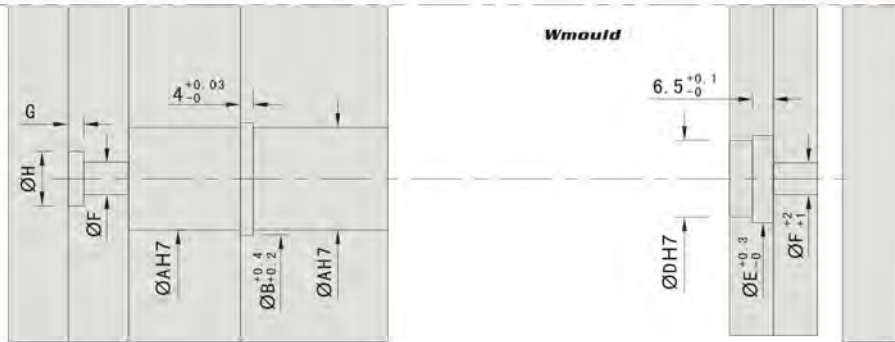
Product space chart:





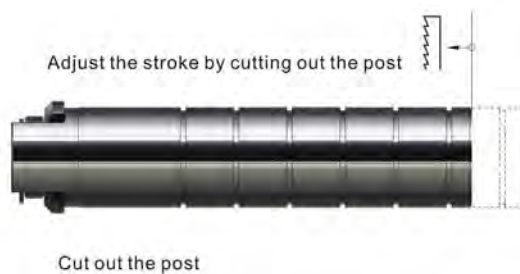
Installation Diagram:

EER



Installation Guidelines:

- Make sure the stroke is applicable. Adjust the stroke by cutting the length of post and pin.
- Process the mounting holes as per dimension chart, and the holes should be homocentric and perpendicular to parting surface.
- A minimum 2 sets Early ejector return assembly must to be mounted symmetrically in mold.
- If the early ejector return units were not mounted symmetrically, the uneven force will cause the parts damaged.
- Add the lubricating oil onto the joint area regularly.
- Make sure the round latch locks are mounted into the cam rod exactly, otherwise, it will cause the mold damaged.
- After the installation, carry out a functional test, check whether the individual parts work well, whether the stroke is applicable.



Ejector pins
Ejector sleeves
Slide pinholders
Latch locks
Rolling guide
Done stamps
Pin holder series
Ejector series
Cooling extrudable
Locating parts
Springs series
Guide pins
Guide pins
Vialer parts series
Chuck series
Mold processors

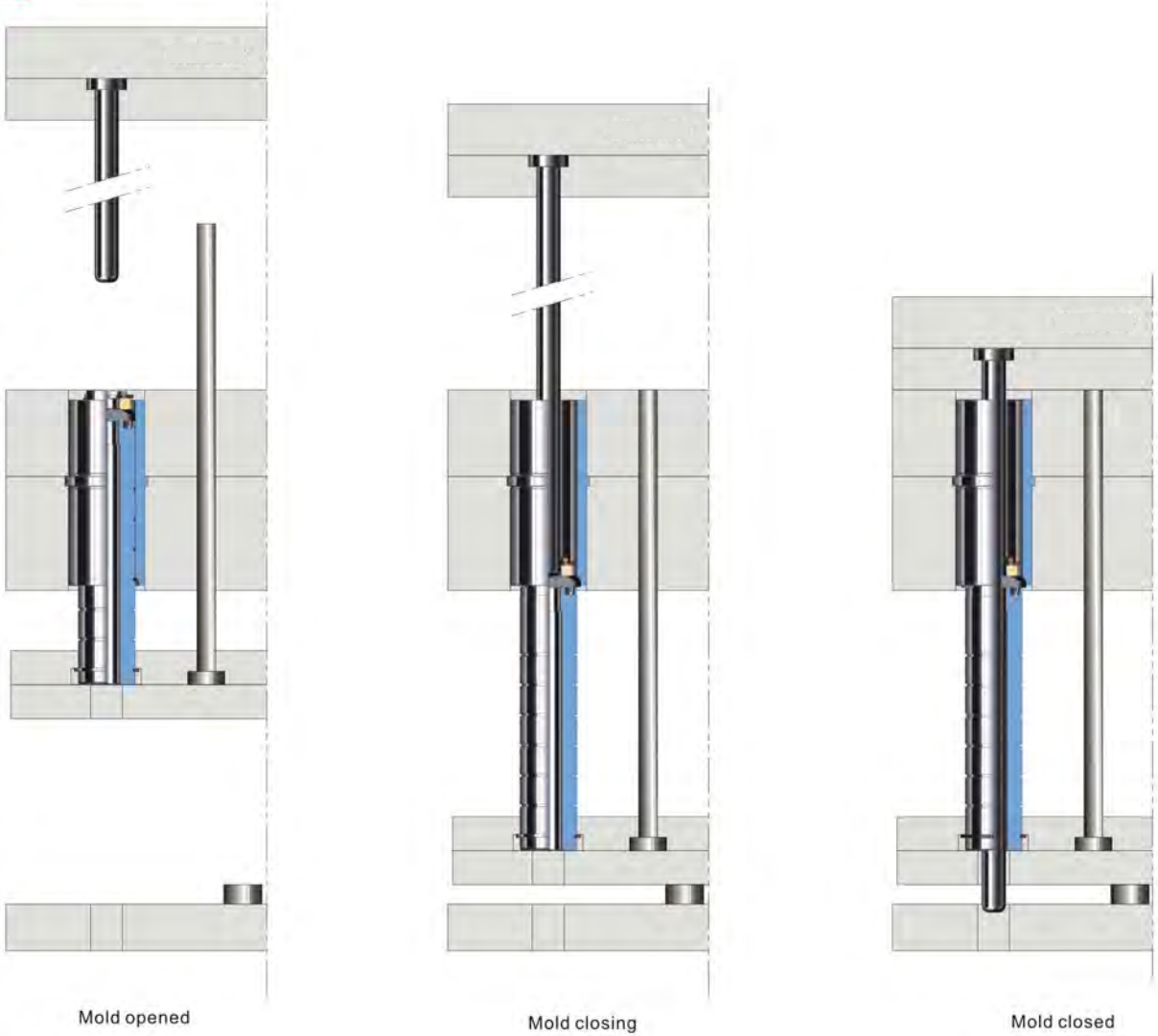
AISI

Round latch locks

EER

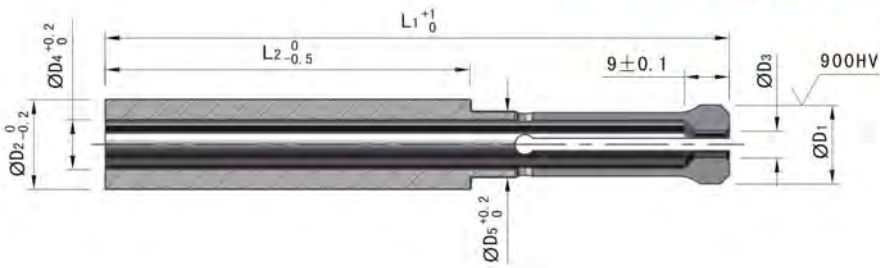


Functional chart:



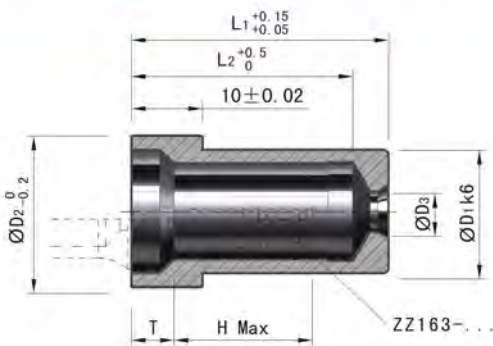
- Ejector pins
Ejector sleeves
- Slide retainers
Anvils
- Latch locks
sleeves
- Pouring gates
sleeves
- Dielectric stamps
Air Valves sleeves
- Ejector series**
- Cooling elements
sleeves
- Luxating parts
sleeves
- Springs
sleeves
- Guide pins
Guide bush
- Guide strips
Wear plate sleeves
- Chuck sleeves
- Mold
processories

DIN
Round latch locks



Order ZZ163-6-125 Material:SKD61 Hardness:48-52HRC

Code	D1	D2	D3	D4	D5	L1	L2	L3	max.F(N)	@ ¥ / P
ZZ163- 6-125	16	18	6	10	13	125	73	20	12000	
ZZ163-10-160	20	24	10	12.5	17	160	100	25	20000	



Order ZZ164-6-36 Material:SUJ2 Hardness:58±2HRC

Code	D1	D2	D3	L1	L2	T	max.H	@ ¥ / P
ZZ164- 6-36				36	31		24	
ZZ164- 6-46	18	22	6	46	41		34	
ZZ164- 6-56				56	51		44	
ZZ164-10-36				36	30	6.7	23	
ZZ164-10-46	24	29	10	46	40		33	
ZZ164-10-56				56	50		43	
ZZ164-10-76				76	70		63	

Features:

- 1.This early return unit is used to early return the ejector plate before mold closing.
- 2.Be used as Early Return Units or Two-stage Ejector.
- 3.It is mounted into the mold to avoid to collide with the outside parts and cooling system of mold.

DIN

Round latch locks

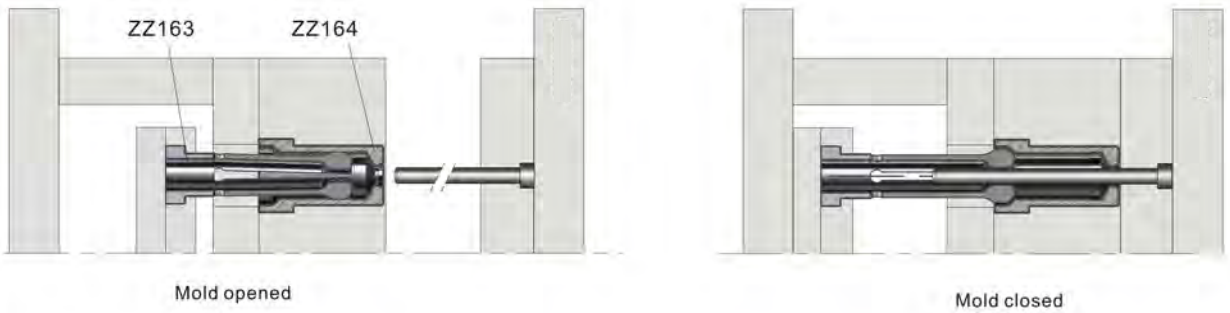


Installation Guidelines:

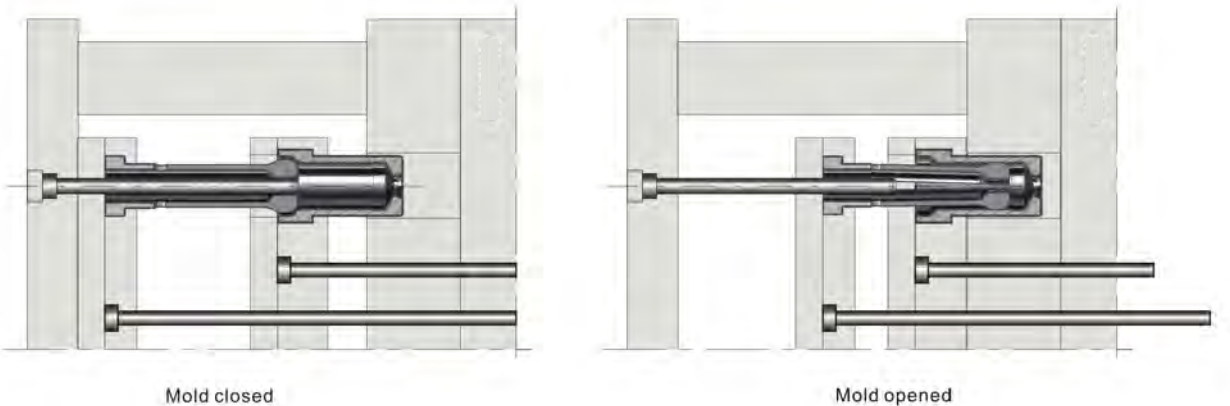
- Mount cam rod into the ejector plate, bushing into the B plate, push pin into the A plate.
- A minimum 2 sets Early ejector return assembly must to be mounted symmetrically in mold.
- If the early ejector return units were not mounted symmetrically, the uneven force will cause the parts damaged.
- Add the lubricating oil onto the joint area regularly.
- Make sure the early return units are mounted into the cam rod exactly, otherwise, it will cause the mold damaged.
- After the installation, carry out a functional test, check whether the individual parts work well, whether the stroke is applicable.



Functional chart(Used as Early Return Unit):



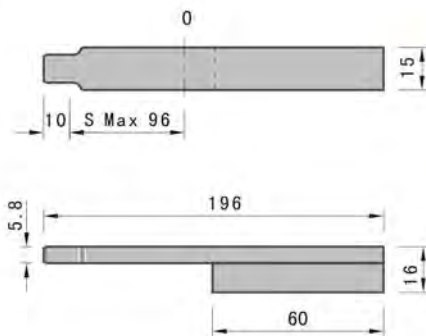
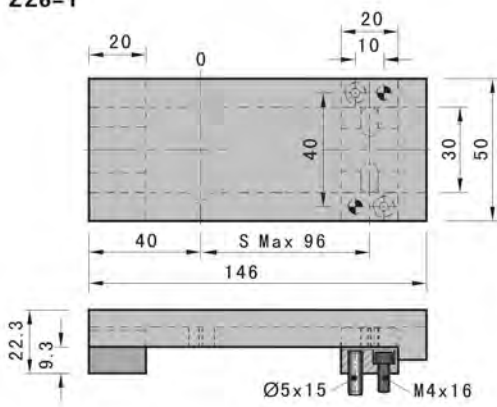
Functional chart(Used as Two-stage Ejector):



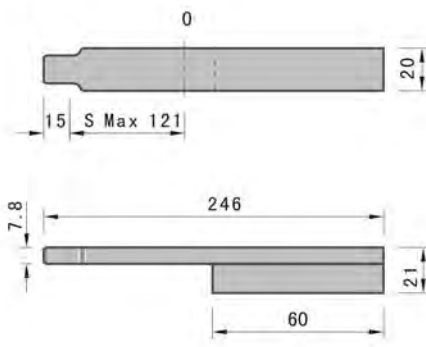
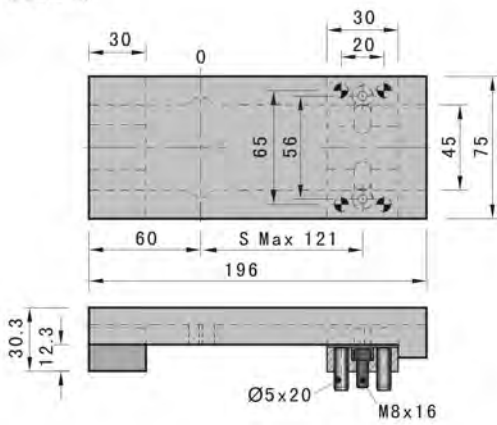
ZZ6



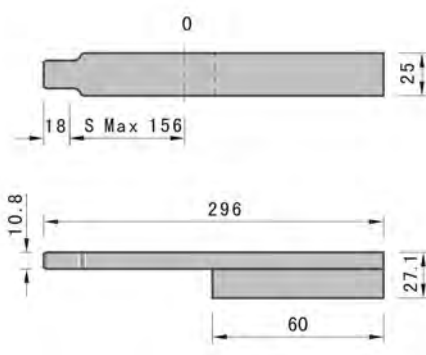
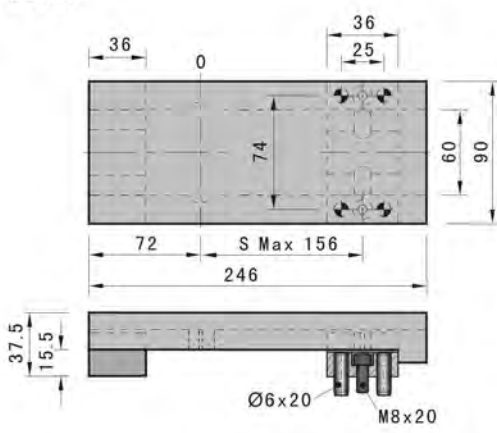
ZZ6-1



ZZ6-15



ZZ6-2

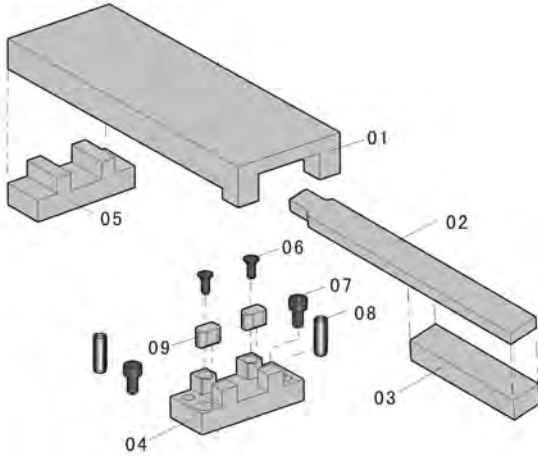


Electric parts
Electric drives
Slide rail/liners
Interlocks
Latching locks
Positioning gates
Drive stamps
Air valves series
Electric series
Cooling elements
Locating parts
Springs series
Guide pins
Guide bush
Guide strips
Wear plate series
Chuck series
Mold accessories

DIN

Push Locks

Product space chart:

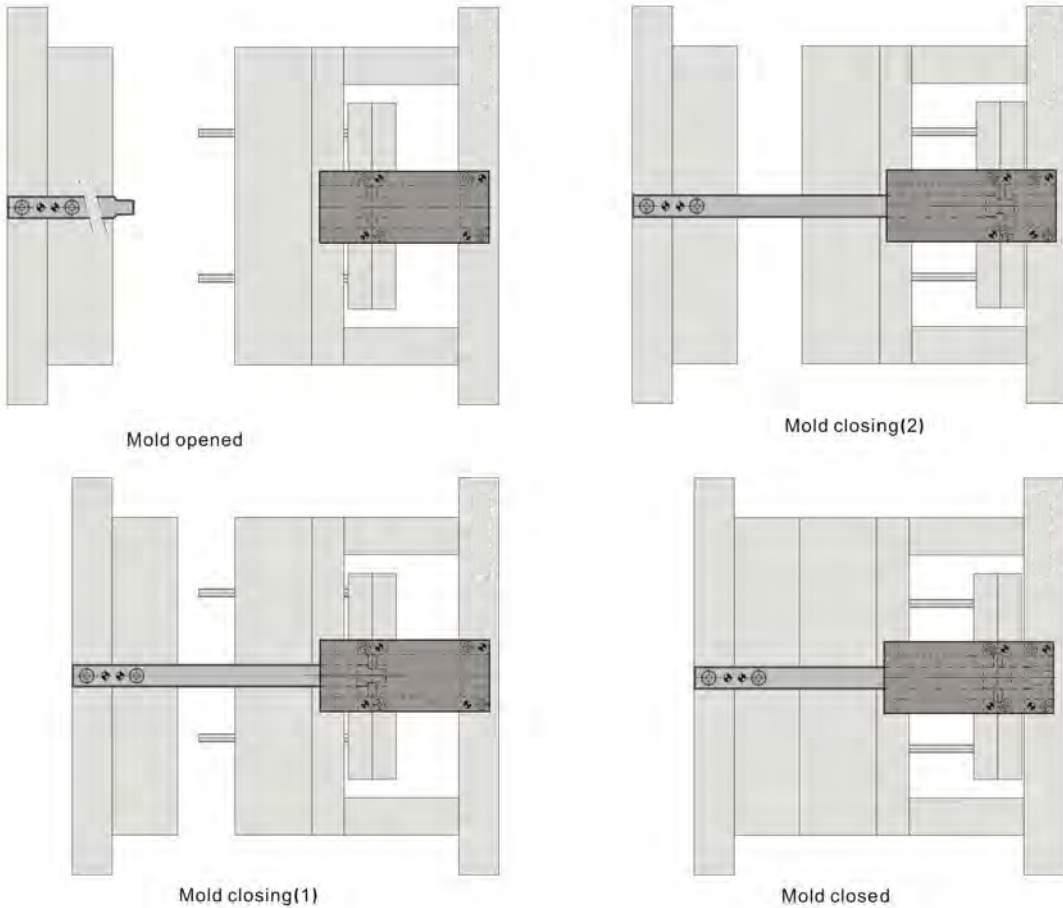


Installation Guidelines:

- This round latch lock is used to early return the ejector plate before mold closing to avoid mold damaged.
- A minimum 2 sets round latch locks must to be mounted symmetrically in mold.
- Make sure the stroke of latch locks are same, otherwise, the uneven force will cause mold damaged.
- S is the maximum stroke of ZZ6 in mold. The final stroke could be confirmed by adjusting the latch housing (04) in use.



Functional chart:

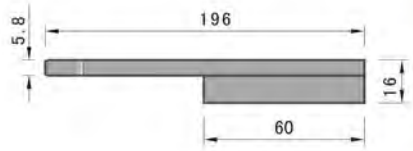
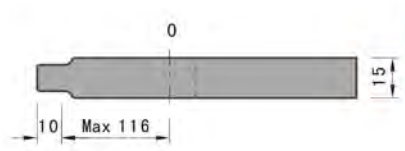
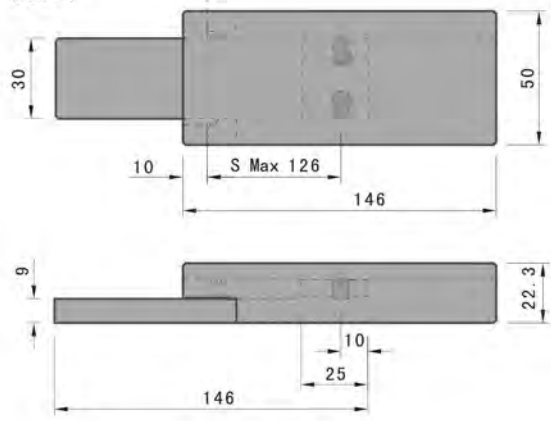


ZZ7

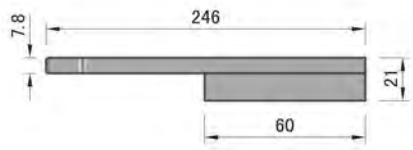
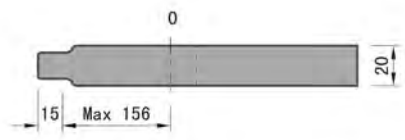
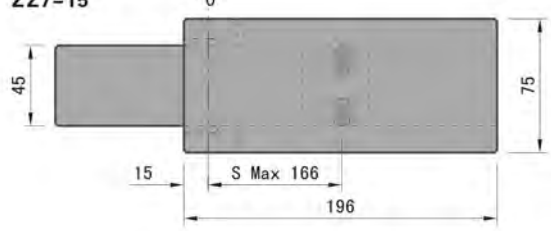
CAO 2D 10W 3D WIRE FL



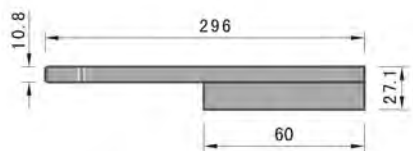
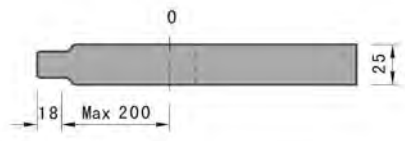
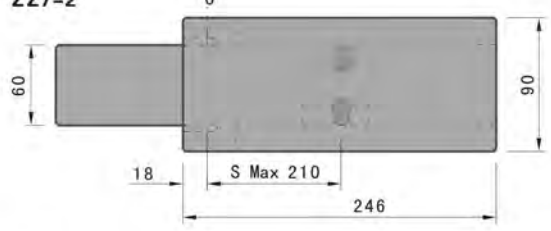
ZZ7-1



ZZ7-15



ZZ7-2

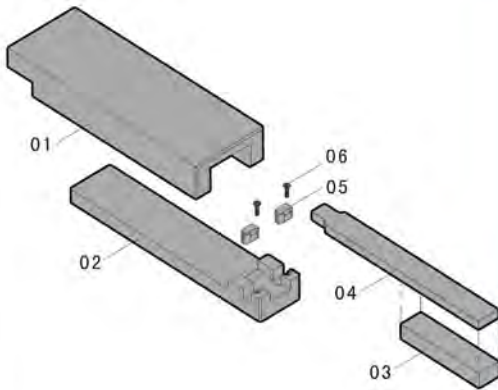


Ejector pins Ejector sleeves
Slide rail/liners sleeves
Latch locks
Pouring gate series
Dome stamps Air valves series
Ejector series
Cooling elements
Locating parts
Springs series
Guide pins Guide bush
Guide strips Wear plate series
Chuck series
Mod processors

DIN

Push Locks

Product space chart:

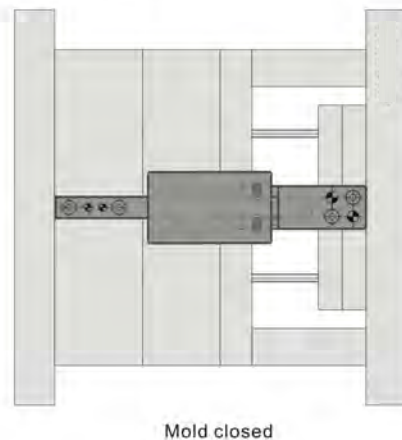
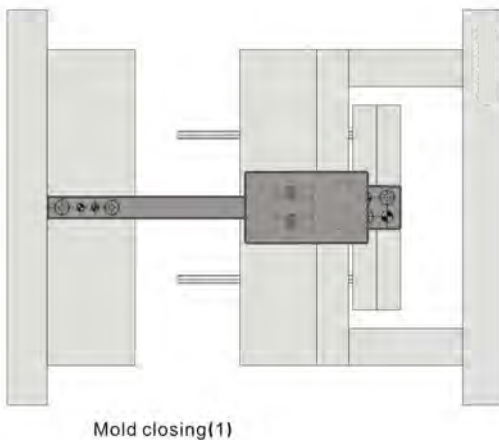
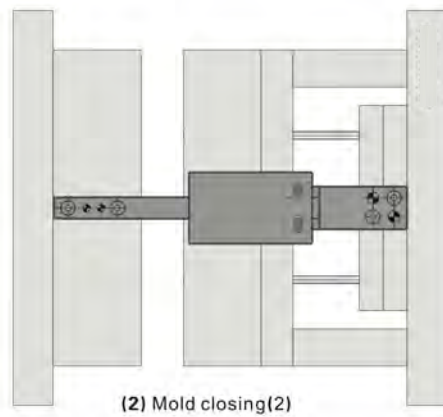
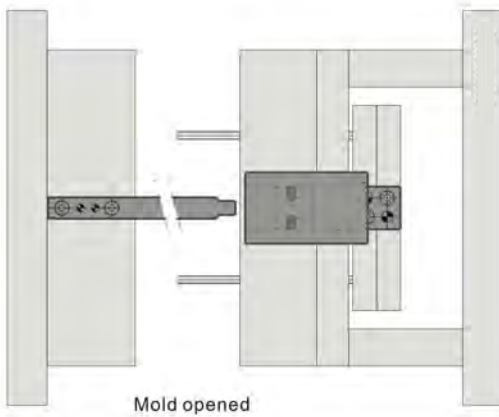


Installation Guidelines:

- This round latch lock is used to early return the ejector plate before mold closing to avoid mold damaged.
- A minimum 2 sets round latch locks must to be mounted symmetrically in mold.
- Make sure the stroke of latch locks are same, otherwise, the uneven force will cause mold damaged
- S is the maximum stroke of ZZ7 in mold.
- The screws (06) without function in mold operation.



Functional chart:





Ejector institutions

Working diagram:

- A: Mold closed.
- B: 1st travel stroke: round latch lock opened when part 2(body) reach to the ejector plate.
- C: 1st travel stroke finished: The latch bar released totally when part 2(body) reach to K position. Stroke H finished.
- D: 2nd travel stroke: latch bar sliding towards right after apart from bushing.
- E: Mold closing: latch bar have back into the bush (PS: make sure the latch bar are mounted into bushing exactly before returning the ejector plate).
- F: Mold closed.



Installation Diagram:

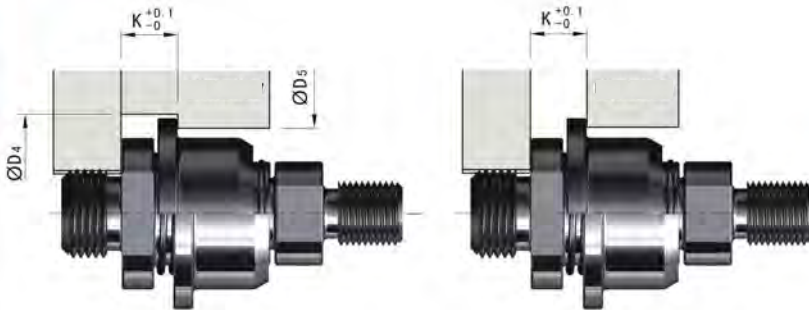


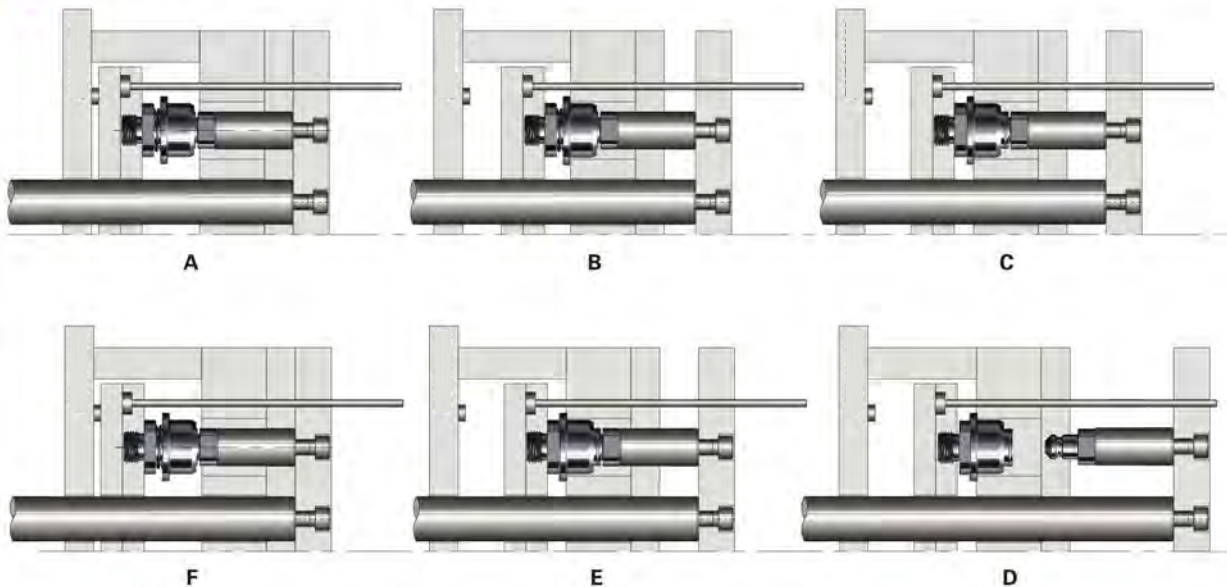
Diagram 1

Diagram 2

Code	D4	D5
DT12-300-...	1.693	1.338
DT12-400-...	1.99	1.575
DT12-500-...	2.756	2.284
DT12-600-...	3.11	2.598
DT12-700-...	3.425	3.07

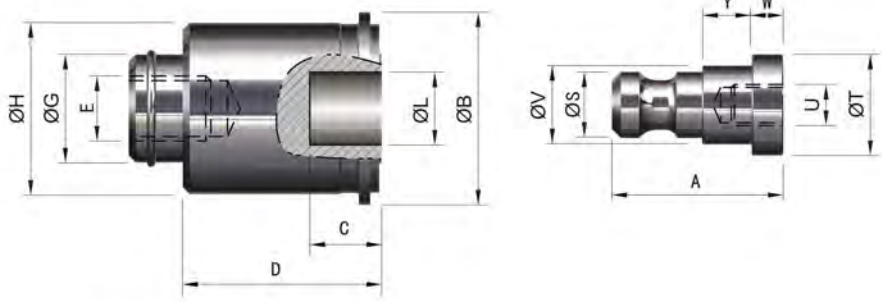


Functional chart:



AAR-D

2D 3D FL



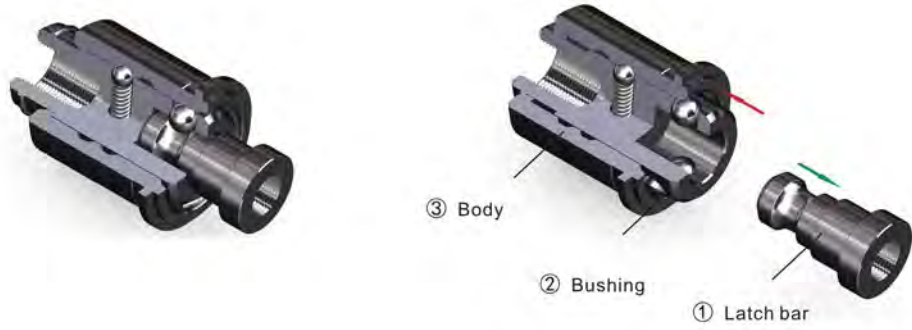
Features:
 1. Shorten mold change-over time.
 2. Can be put into existing molds to save time and money.
 3. Hydraulic return by fixed coupling.

Order AAR-D-01

Code	A	B	C±0.02	D	E	M	N	O ^{+0.05} / _{+0.02}	G	H
AAR-D-01	38	43	18	43.5	M16	23	18	7	24	38
AAR-D-02	43	73	24	70.5	M20	42	32		42	67

Code	L	S	Y	U	V	W	T	P Min.	Q Min.	拉力(Kgf)
AAR-D-01	15	14.7	11	M12	17.4	7	22.5	48	C+1	40
AAR-D-02	30	29.5	14	M16	29.4	8	40	80		140

Product space chart:

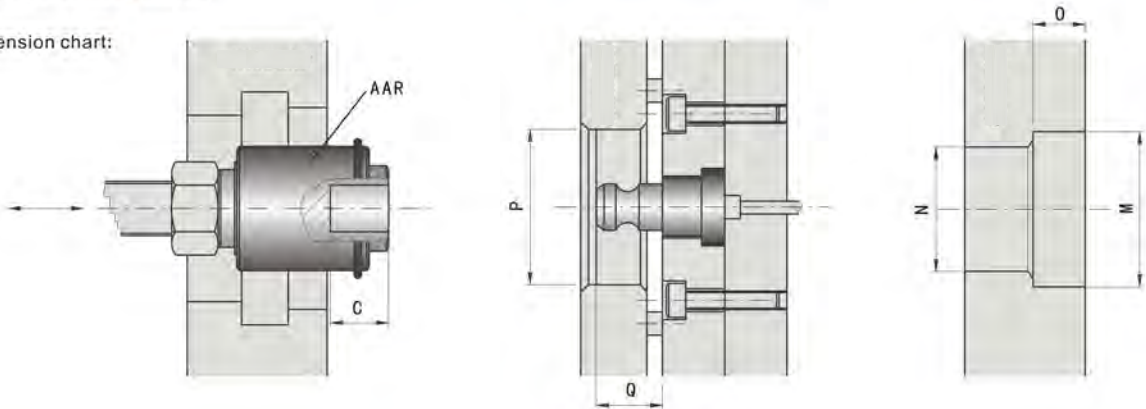


- Ejector pins
- Ejector sleeves
- Slide railbars
- Latch locks
- Pushing gate
- Date stamps
- Pin valves series
- Ejector series
- Cooling elements
- Locating parts
- Spring series
- Guide pins
- Guide push
- Guide strips
- Wear plate series
- Chuck series
- Mold accessories



Ejector institutions

Dimension chart:

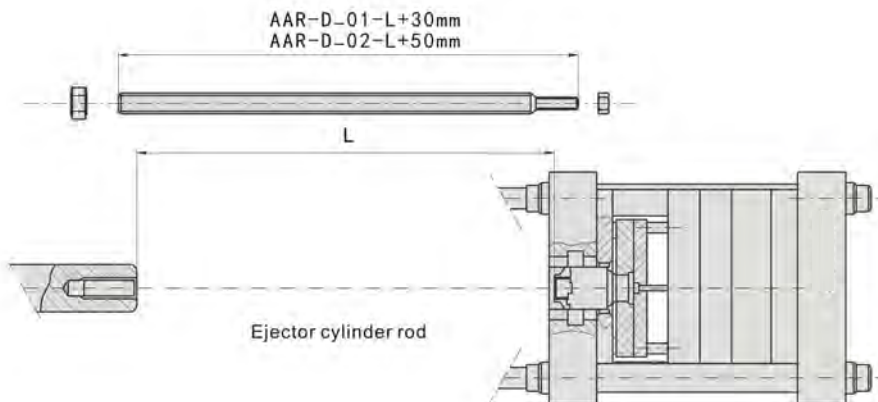


Installation Guidelines:

- Move the ejector plate to the molding position (mold closed).
- Move also the ejector cylinder rod to the fully retracted position. It's important to check by hand, that the rod is fully pushed back to the fully retracted position before measuring.
- Measure the distance between the coupling and ejector cylinder rod.
- Extend the ejector cylinder rod with an extra knock-out rod of the measured length +30mm for AAR-D-01 and 50mm for AAR-D-02.
- Move the mold ejector plates to the forward position (mold open).
- Lock both the extra knock-out rod and the other end of the quick coupling.
- Move the mold ejector plates back to the mold closed position and make the coupling between ejector plate and ejector cylinder rod. Make sure that the ejector plate and ejector cylinder rod are both in the mold closed position as soon as the coupling is made, if not, adjust.
- Do not use with quick mold change systems.
- One set AAR for one mold only.

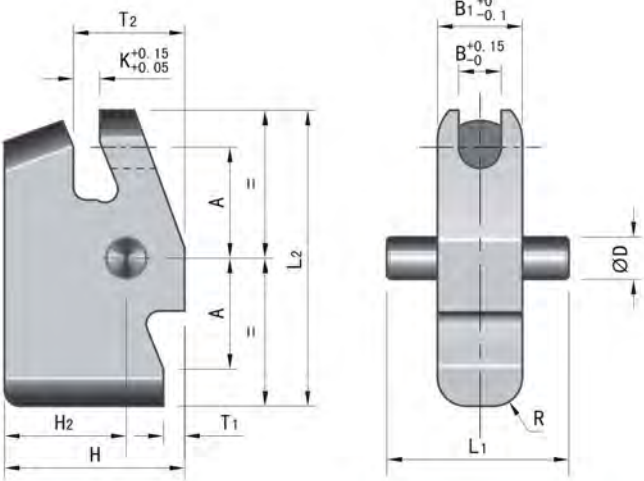


Installation Diagram:





Accelerated ejectors



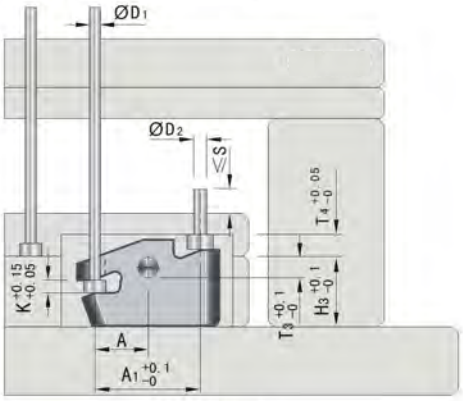
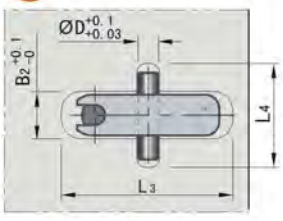
Order ZZ141-3 Material:Cr12MoV Hardness:56±2HRC

Code	D	D2	B	B1	B2	B3	A	A1	T1	T2	T3	T4
ZZ141-3	4	4	3	8	8.5	4	10	20	2	10	4	4
ZZ141-6	8	8	6	16	16.5	8	21	42	4	21	8	8
ZZ141-8	8	8	8	16	16.5	8	21	42	4	21	8	8

D1	L1	L2	L3	L4	H	H2	H3	K	R	S	@ ¥/P
3	16	26	31	23	19	14	16	3	4	2.5	
6	36	56	63	45	34	23	27	5	8	7.6	
8											

Functional chart:

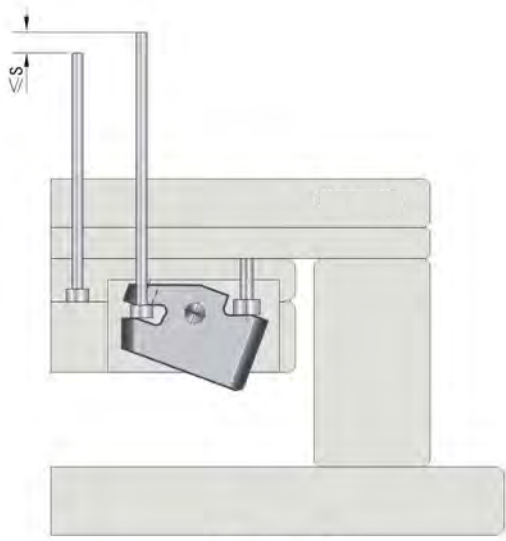
Installation Diagram:



Mold closed

Features:

1. Mount 1pcs ejector pin can enlarge the stroke during ejecting.
2. Save space and cost.



Mold opened

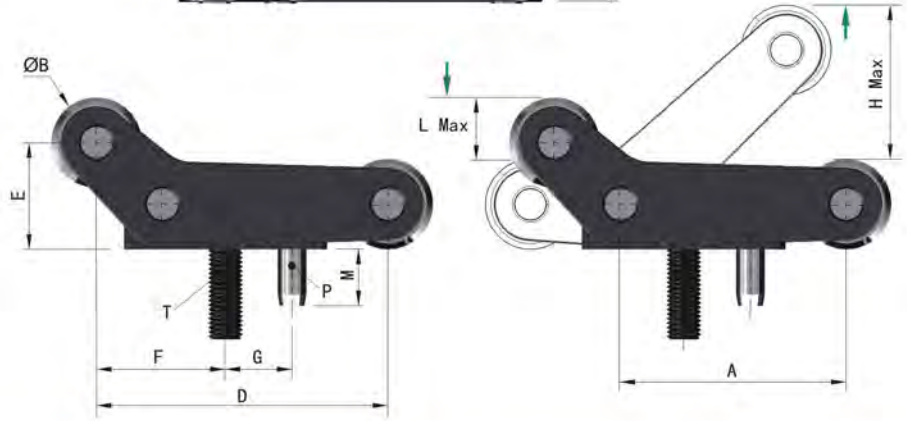
- Ejector pins
- Ejector sleeves
- Slide ejectors
- Side ejectors
- Latch locks
- Pushing gate
- Pushing gate
- Done stamps
- Air valves series
- Ejector series
- Cooling elements
- Locating parts
- Spring series
- Guide pins
- Guide pins
- Guide strips
- Water plate series
- Chuck series
- Mold accessories

DIN

Accelerated ejectors

EEP

GRG 2D 10WE 3D 10WE FL



Order EEP-20

Code	A	B	C	D	E	F	G	H max.	L max.	M	N	P	T	(Kgf) max. force	@ ¥/P
EEP-20	20	8	13.2	25.8	9.4	11.4	6	13.6	5.5	5	15	Ø2.5×10	M3×12	M3×12	
EEP-25	25	10	16	32.3	11.8	14.3	7	17	6.8	6	18.5	Ø 3×12	M4×16	M4×16	
EEP-37	37.5	15	22	48.5	17.7	21.5	10.5	25.5	10.2	8	25	Ø 4×16	M6×25	M6×25	
EEP-50	50	20	29.6	64.6	23.6	28.6	14	34	13.6	10	34	Ø 5×20	M8×30	M8×30	

Features:

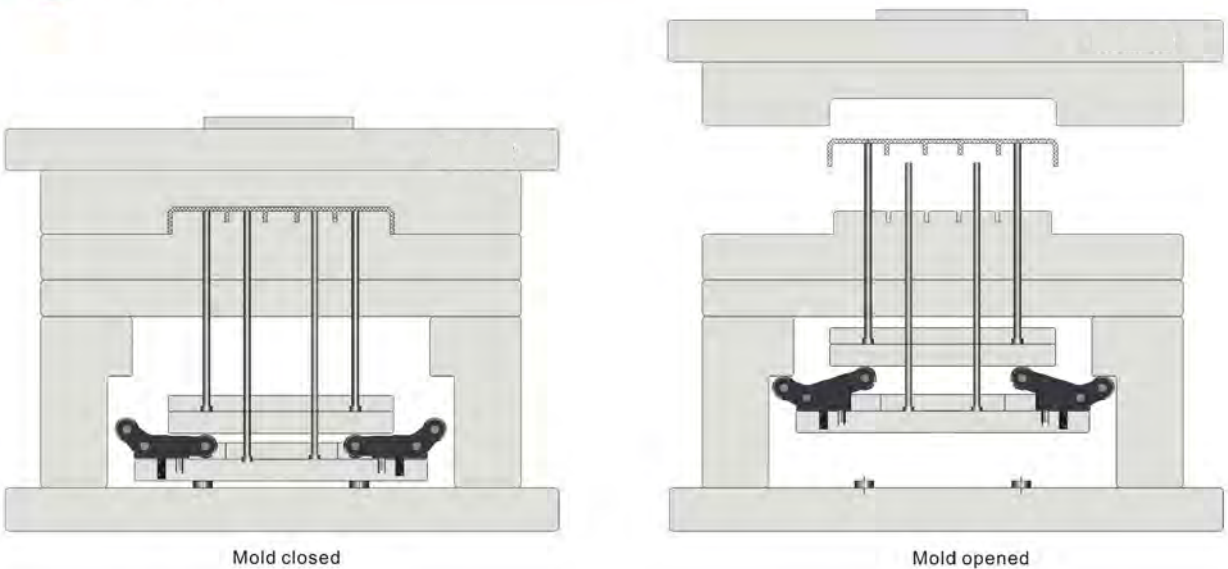
1. Simple mechanical, minimum space double ejection system.

Installation Guidelines:

- Mount the EEP onto B plate so that can help increasing movement of A plate while ejecting.
- A minimum 2 units must be assembled symmetrically to ensure a balanced movement is achieved.



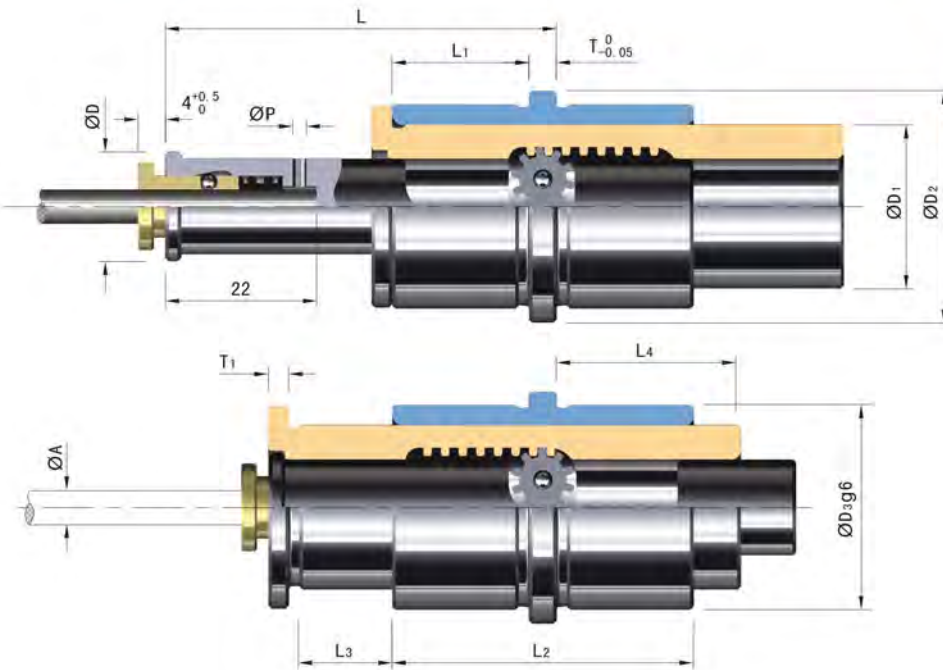
Functional chart:



Mold closed

Mold opened

DIN
Accelerated ejectors



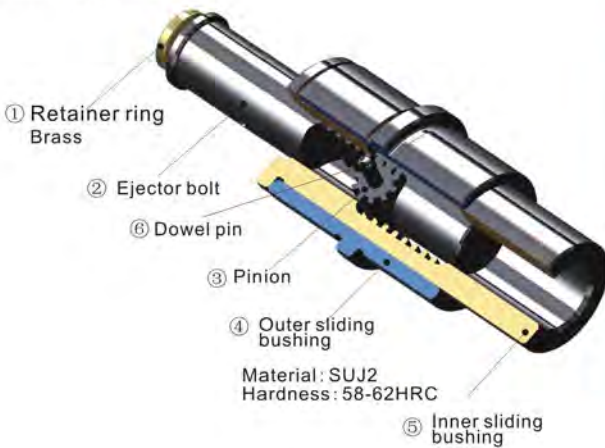
AAE

CAO 2D 3D FL

Order AAE-031620 Material:SKD61 Hardness:48-52HRC

Code	A	D	D1	D2	D3	L	L1	L2	L3	L4	L5	F	P	T	T1	@ ¥/P
AAE-031620	3															
AAE-041620	4	12.5	16	22	20	37	14	32	8	17	22	13	-			
AAE-052430	5													4	3	
AAE-062430	6	16	24	34	30	57	20	44	15	27	36	16				
AAE-082430	8	17										17	2			
AAE-103036	10															
AAE-123036	12	21.5	30	40	36	78	28	62	20	34	46	21		6	4	

Product space chart:



Features:

1. Quick replacement of ejector pin, minimum space required, save your cost.

Installation Guidelines:

- The round pocket (ØP) is needed to install dowel pin to stop the turning of ejector pin.
- All mounting holes should be perpendicular to parting surface.

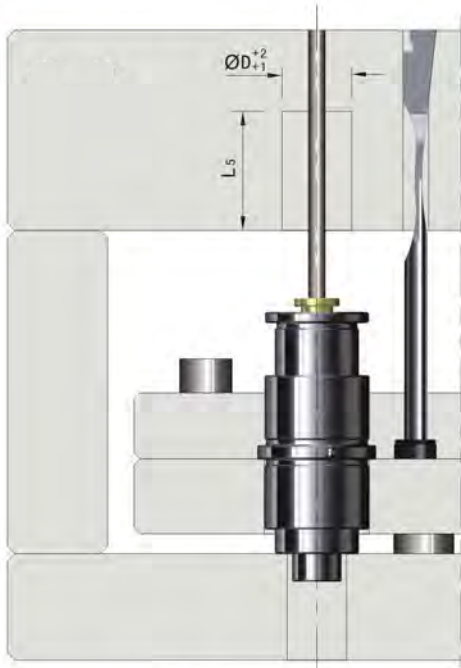
- Ejector pins
- Ejector sleeves
- Slide rail/liners series
- Linch locks series
- Pushing gates series
- Dome stamps Air valves series
- Ejector series**
- Cooling elements series
- Locating parts series
- Spring series
- Guide pins Guide bush
- Guide strips Water parts series
- Chuck series
- Modi accessories

DIN

Accelerated ejectors



Functional chart:



Mold closed

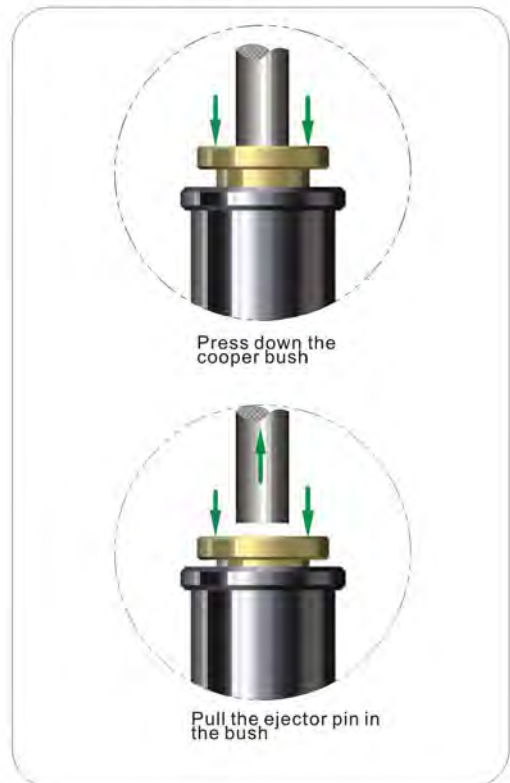


Mold opened(1)



Mold opened(2)

Dismount the ejector pin:



Press down the cooper bush

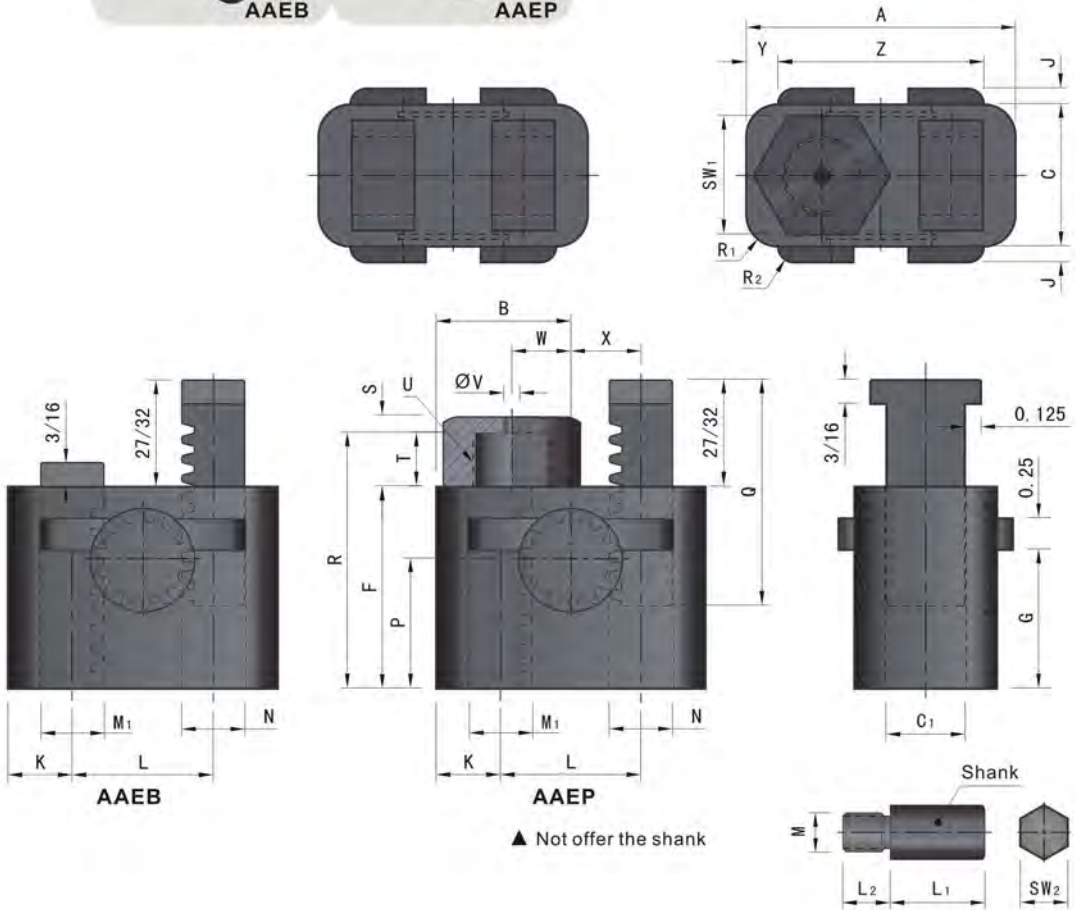
Pull the ejector pin in the bush

AISI
Accelerated ejectors



AAEB
AAEP

CRD 2D 100% 3D 99% FL



Order AAEB-10

A	B	C	E	F	G	H	J	K	L	M1	N	P	Q	R	S	T
2.125 0/- 0.002	1.062 0/- 0.002	1.125 0/- 0.002	9/16	1.6	1.1	1/2	0.125 ±0.002	0.51	1.103	1/2	1/2	1.03	1.783	2.025	0.55	0.425
2.875 0/- 0.004	1.437 0/- 0.002	1.625 0/- 0.002	13/16	1 7/8	1 1/4	5/8	0.187 ±0.002	5/8	1 5/8	3/4	3/4	1.016	2 1/16	2 3/8	0.68	1/2

Code	U	V	W	X	Y	Z	Sw1	Sw2	R1	R2	L1	L2	C1	M	@ ¥/P
AAEP-10	5/8-18	1/8	0.491	0.551		1.625	15/16	3/ 8	1/ 4		3/4	3/8	5/8	5/16-18	
AAEB-10	-	-	-	-	0.25	-	-	-	-	1/4	-	-	-	-	-
AAEP-20	1 1/8-12	1/4	5/8	13/16		2.375	1 3/8	9/16	3/16		0.72	1/2	1 1/8	3/ 8-16	
AAEB-20	-	-	-	-		-	-	-	-		-	-	-	-	-

- Ejector pins
- Ejector sleeves
- Side rollers
- Side rollers series
- Latch locks
- Pushing gates
- Pushing gates series
- Die stamps
- Die stamps series
- Ejector series
- Cooling elements
- Cooling elements series
- Locating parts
- Locating parts series
- Springs series
- Slider pins
- Slider pins series
- Guide strips
- Guide strips series
- Chuck series
- Chuck series
- Mold accessories
- Mold accessories series

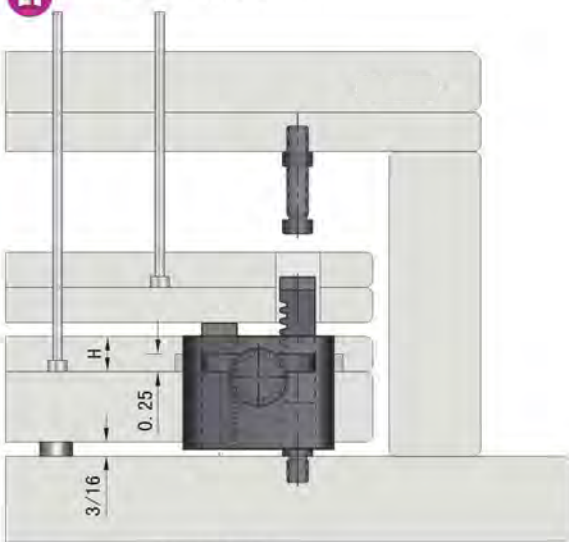


Accelerated ejectors

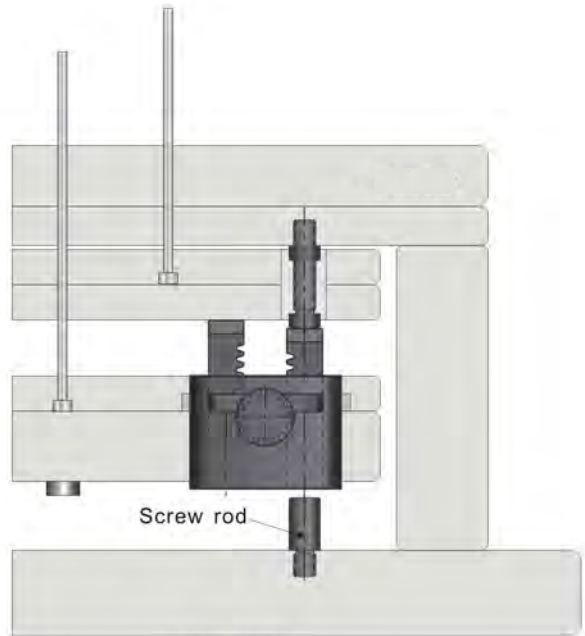
Features:

Accelerated ejectors use a rack and pinion mechanism to provide up to 15.8 mm additional ejector stroke. Their simple, linear movement can be used to increase the speed and stroke of ejector pins, ejector sleeves or entire ejector assemblies. The flanges and rounded corners on these units facilitate installation within the ejector assembly. The rectangular cross section of the racks prevents them from rotating. Included with each unit is a bumper stud which assures positive return of the racks when the ejector assembly is fully returned.

Functional chart AAEB:

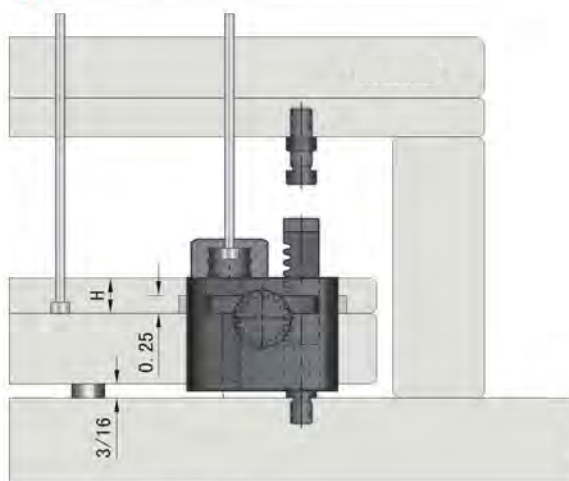


Mold closed

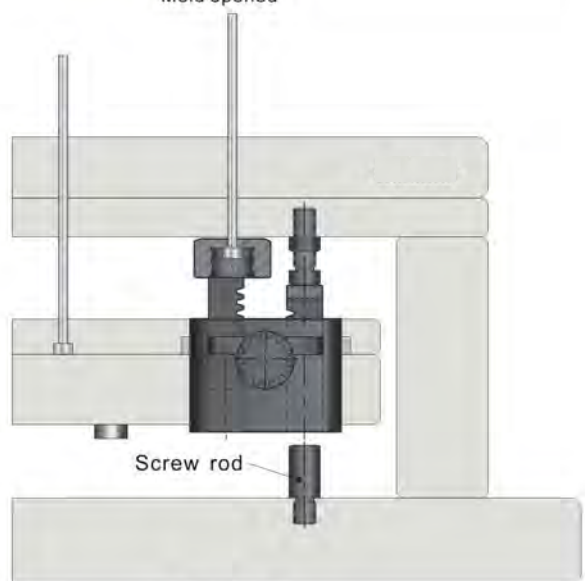


Mold opened

Functional chart AAEP:



Mold closed



Mold opened

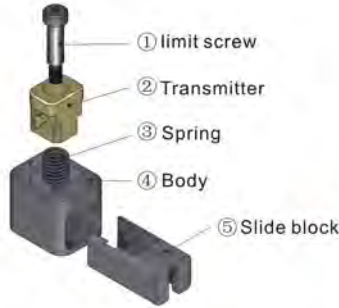
AISI

Slide units

CCA
CCAMM



Product space chart:



Order CCA-100

Code	@ ¥ /P
CCA-100(Inch)	
CCAMM-100 (Metric)	

Stroke=0.16"(4mm)

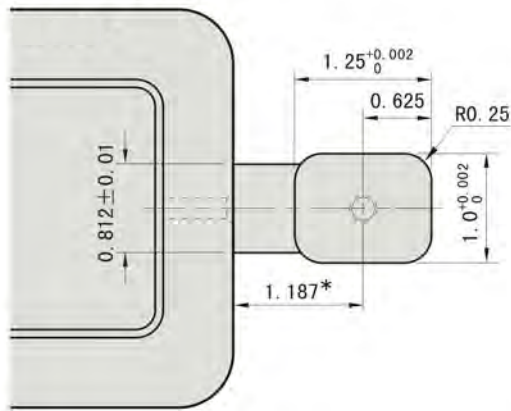
Features:

- 1.Small shape,easy to install and use.
- 2.Body ,slide block,transmitter,limit screw,springs are a complete set ,No need to extra processing the angle pin hole and other complicated processing.

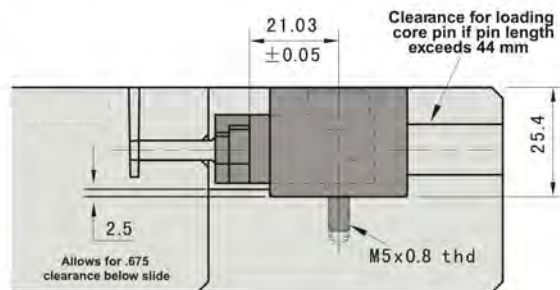
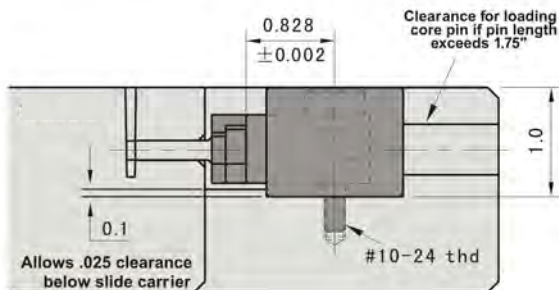
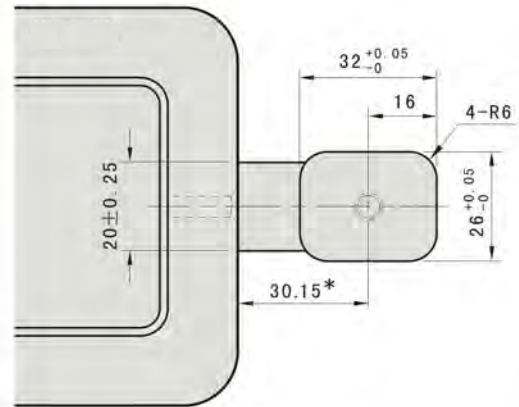


Installation Diagram:

CCA-100 Inch standard



CCAMM-100 Metric standard

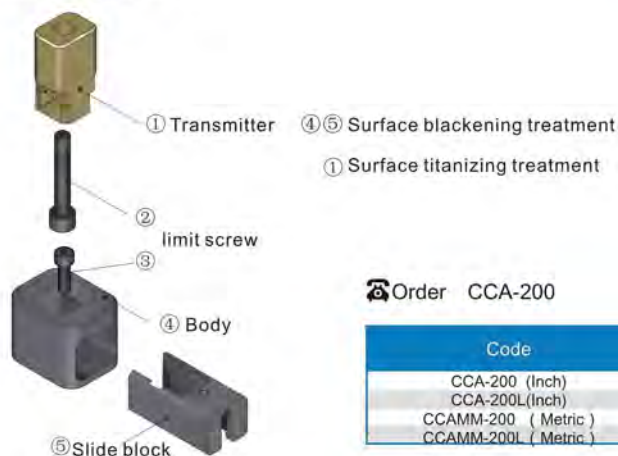


CCA
CCAMM

2D 3D FL



Product space chart:



Order CCA-200

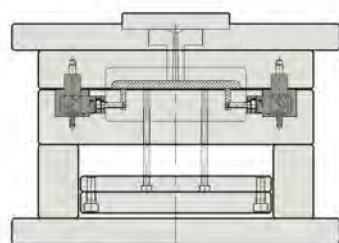
Code	@ ¥ / P
CCA-200 (Inch)	
CCA-200L(Inch)	
CCAMM-200 (Metric)	
CCAMM-200L (Metric)	

Stroke=0.23"(5.8mm)

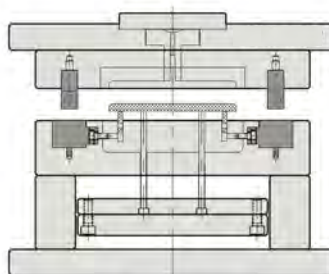
Features:

- 1.Small shape,easy to install and use.
- 2.body,slide block ,transmitter,limit screw are a complete set,No need to extra processing the angle pin hole and other complicated processing.

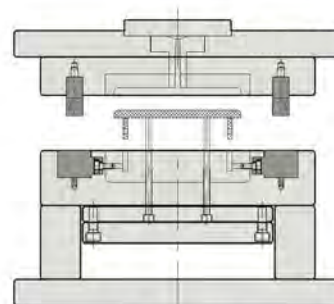
Functional chart:



Mold closed



Mold opening



Mold closed



Installation Guidelines:

- Refer to size drawing to processing installed holes .
- Transmitter will be fixed on A plate by limit screw,body and slide block are both fixed on B plate .
- When mold opening,transmitter drive slide block to move,After transmitter completely drop away from body slide block,ejector pin push plastic parts will finished whole release molds procedure.

AISI

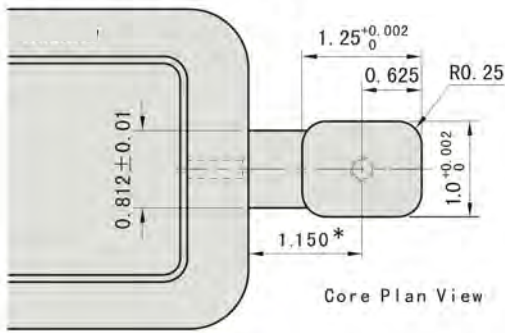
Slide units

CCA
CCAMM

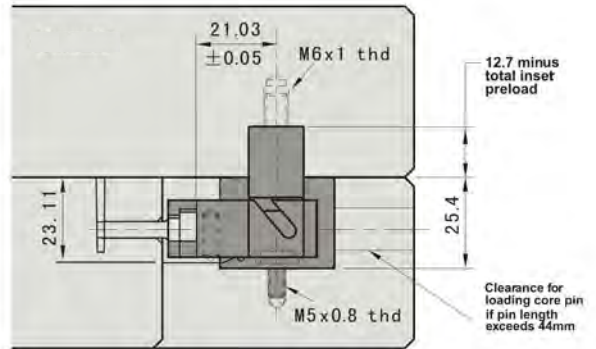
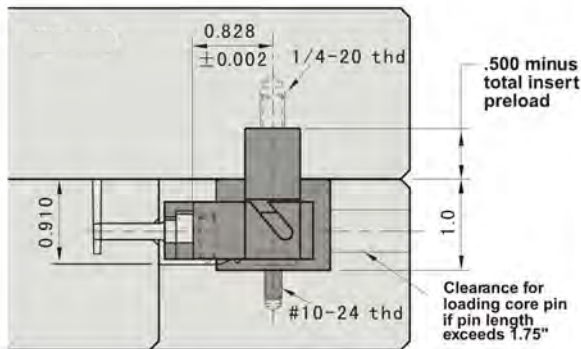
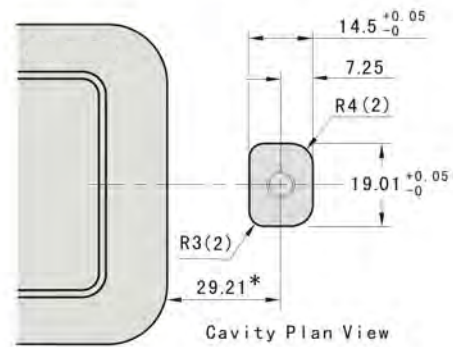
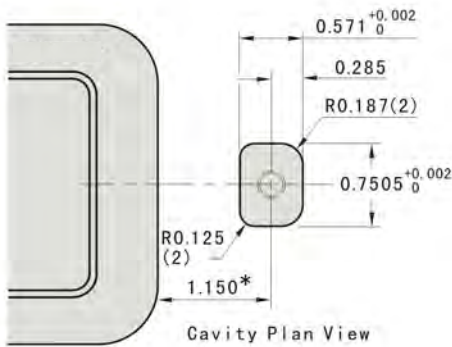
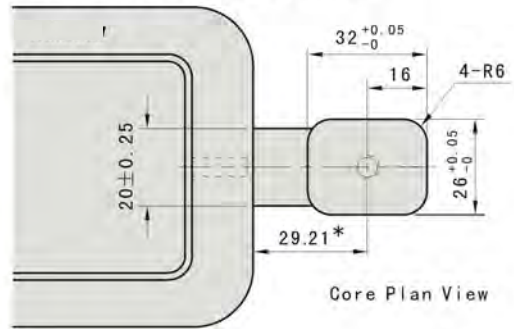


Installation Diagram:

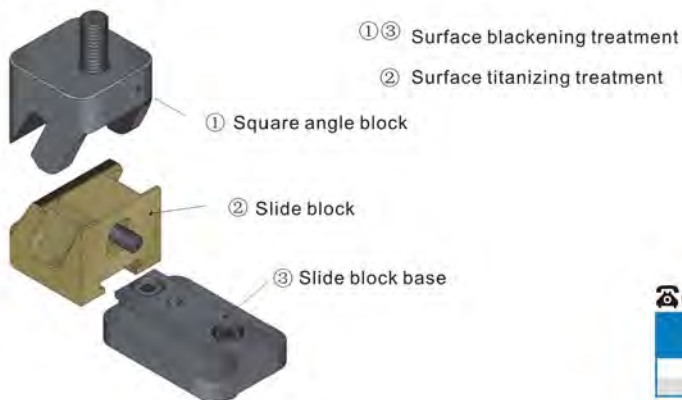
CCA-200/200L Inch standard



CCAMM-200/200L Metric standard



Product space chart:

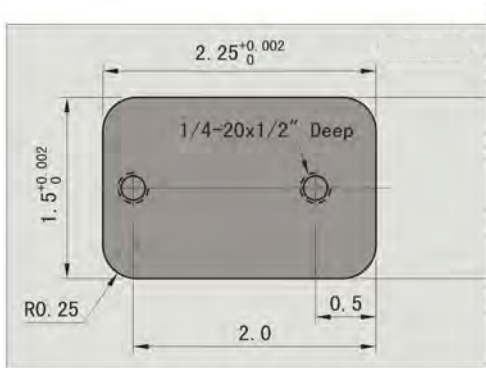


Order CCA-300

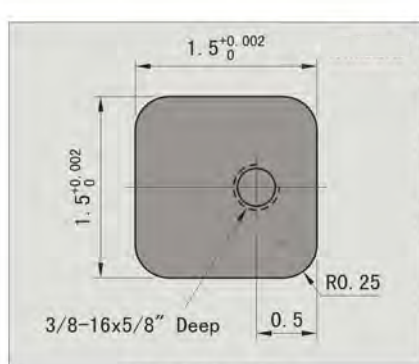
Code	@ ¥ / P
CCA-300	
CCA-300L	

Stroke=0.25"

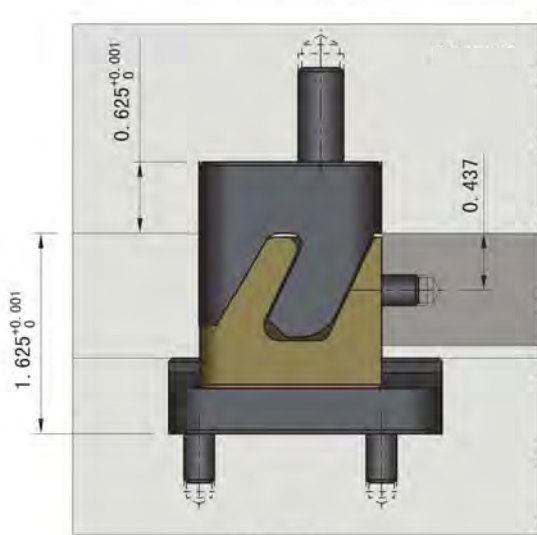
Installation Diagram:



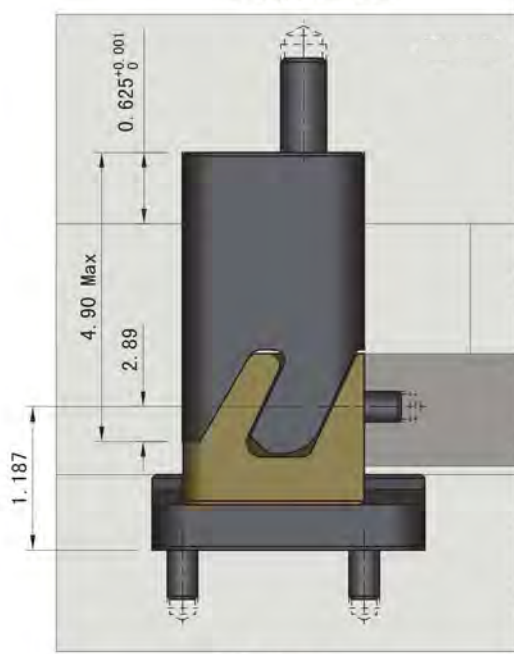
Core Plan View



Cavity Plan View



CCA-300



CCA-300L

- Electro pins
- Electro sleeves
- Slide rollers
- Slide rollers sleeves
- Latch locks
- Latch locks sleeves
- Flanging gate
- Flanging gate sleeves
- Dome stamps
- Dom. stamp sleeves
- Electro series
- Cooling elements
- Cooling elements sleeves
- Locating parts
- Locating parts sleeves
- Springs series
- Guide pins
- Guide pins sleeves
- Guide strips
- Guide strips sleeves
- Chuck series
- Chuck sleeves
- Mold processors

AISI

Slide units

CCAMM



Product space chart:

- ①③ Surface blackening treatment
- ② Surface titanizing treatment



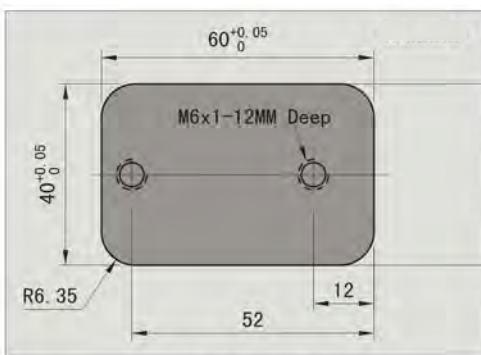
Order CCAMM-300

Code	@ ¥ / P
CCAMM-300	
CCAMM-300L	

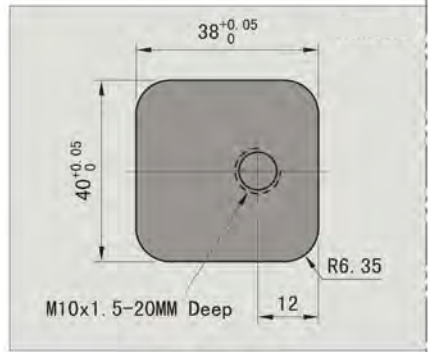
Stroke=6.35mm



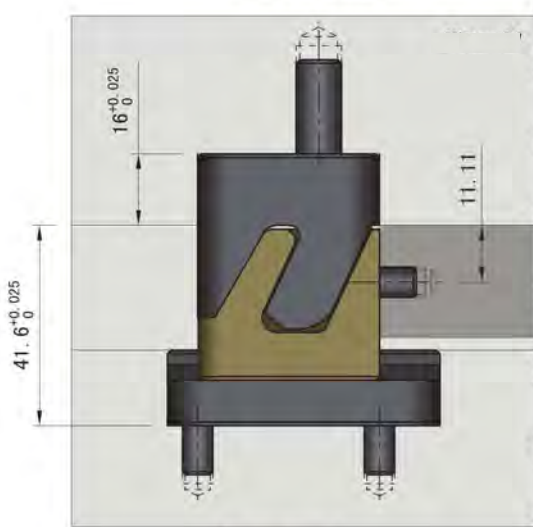
Installation Diagram:



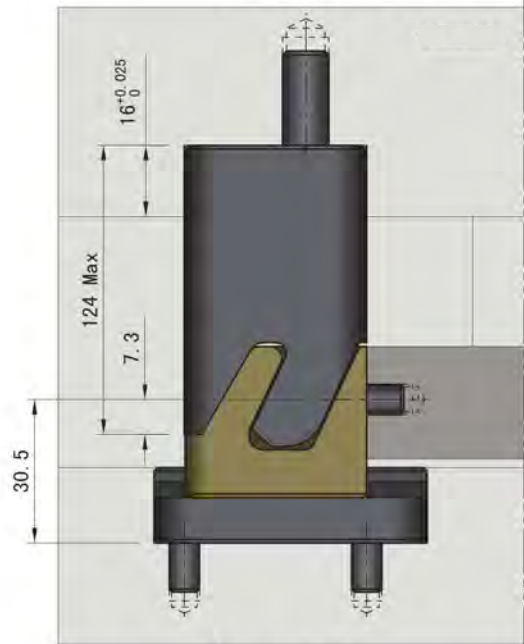
Core Plan View



Cavity Plan View



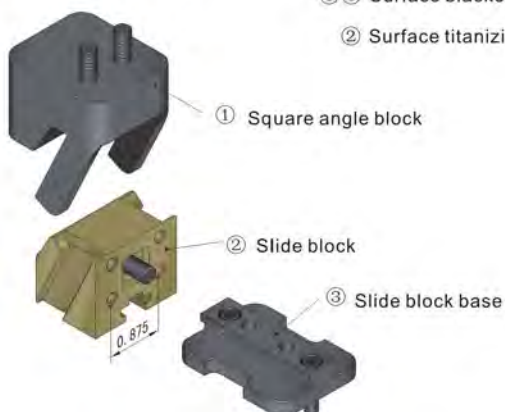
CCAMM-300



CCAMM-300L

CCAMM

Product space chart:



- ①③ Surface blackening treatment
- ② Surface titanizing treatment



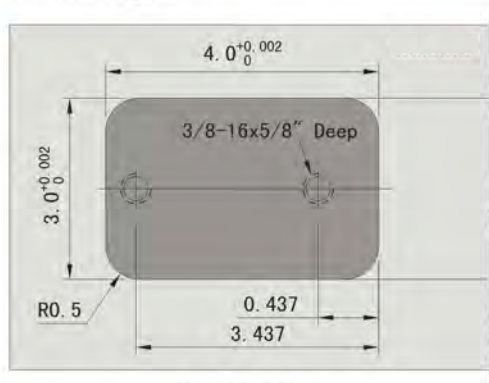
Order CCAMM-400

Code	@ ¥ / P
CCAMM-400	

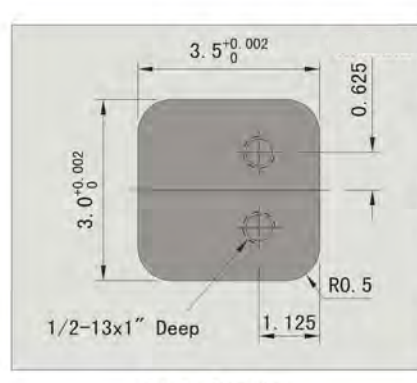
Stroke=1"



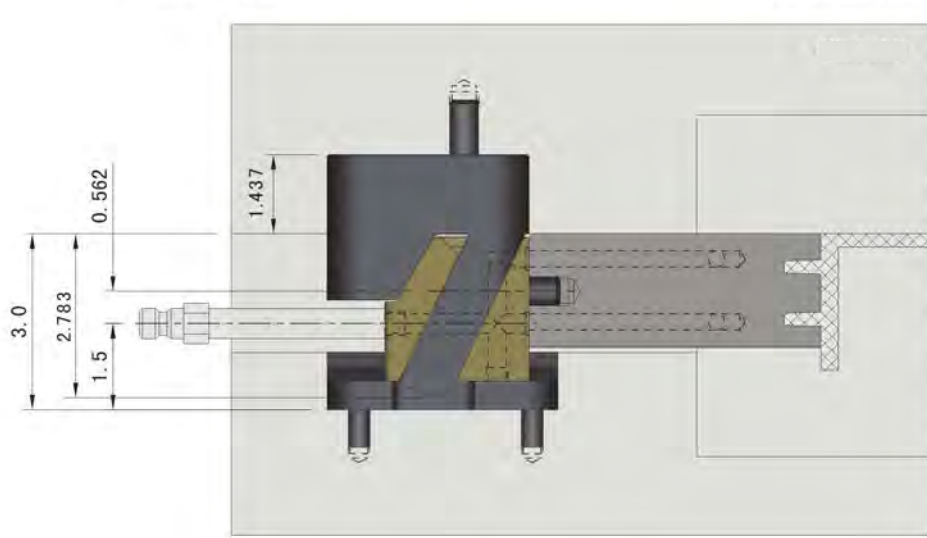
Installation Diagram:



Core Plan View



Cavity Plan View

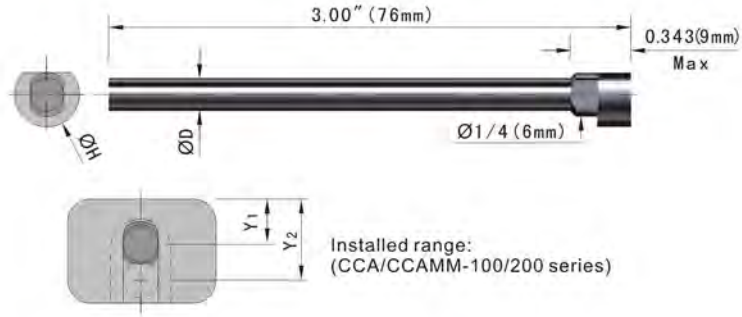


- Ejector pins series
- Slide railiners series
- Latch locks series
- Pouring gate series
- Dome stamps Air valves series
- Ejector series
- Cooling elements series
- Locating parts series
- Springs series
- Guide pins Guide bush series
- Guide strips V-gate plate series
- Chuck series
- Mold accessories



Core pin

CCAP1
CCAPMM



Order CCAP1-187 Material:SKH51 Hardness:58-62HRC

Code	D	H	Y1	Y2	@ ¥ / P
CCAP1- 187	0.1872/0.1869	0.37	0.5	0.75	
CCAP1- 375	0.3747/0.3744			0.688	
CCAPMM- 5	4.994/5.006mm	9.5mm		19.05mm	
CCAPMM-10	9.984/9.992mm		12.7mm	17.4 mm	

CCAP2
CCAP2MM



Order CCAP2-500 Material:SKH51 Hardness:58-62HRC

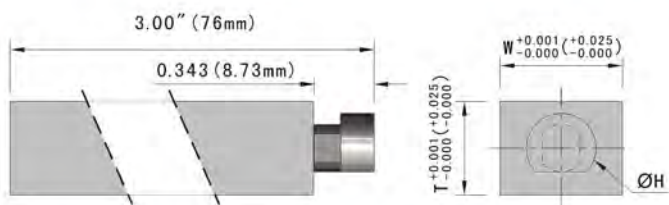
Code	D	H	@ ¥ / P
CCAP2-500	0.5001/0.5003	0.37	
CCAP2MM-13	13.002/13.007mm	9.5mm	

CCAP3
CCAP3MM



Order CCAP3-750 Material:SKH51 Hardness:58-62HRC

Code	D	T	@ ¥ / P
CCAP3-750	0.7504/0.7508	1/4-20	
CCAP3MM-19	19.009/19.019mm	M6-1	



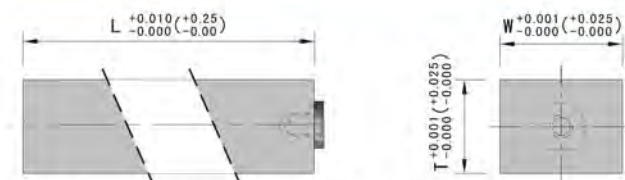
Usage range :(CCA/CCAMM-200/200L series)



CCSE2

Order CCSE2-62×75 Material:P20 Hardness:≈900HV(Nitrided)

Code	T	W	H	@ ¥/P
CCSE2-62×75	0.625	0.75	0.37	
CCSE2MM-16×19	16mm	19mm	9.5mm	



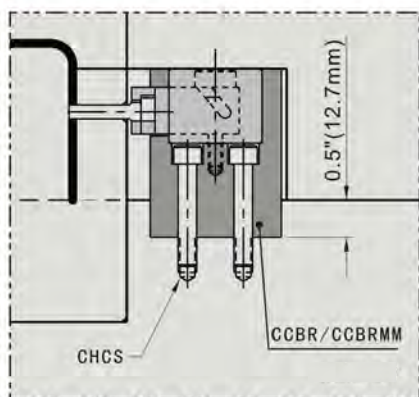
Usage range :(CCA/CCAMM-300/300L series)



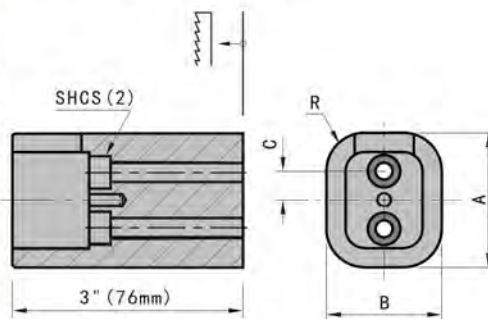
CCSE3

Order CCSE3-50 Material:P20 Hardness:≈900HV(Nitrided)

Code	T	W	L	@ ¥/P
CCSE3- 50			0.5	
CCSE3-200	0.875	1.5	2	
CCSE3MM-12			12mm	
CCSE3MM-50	22mm	38mm	50mm	



After cut off this end to use it



CCBR



Order CCBR-100

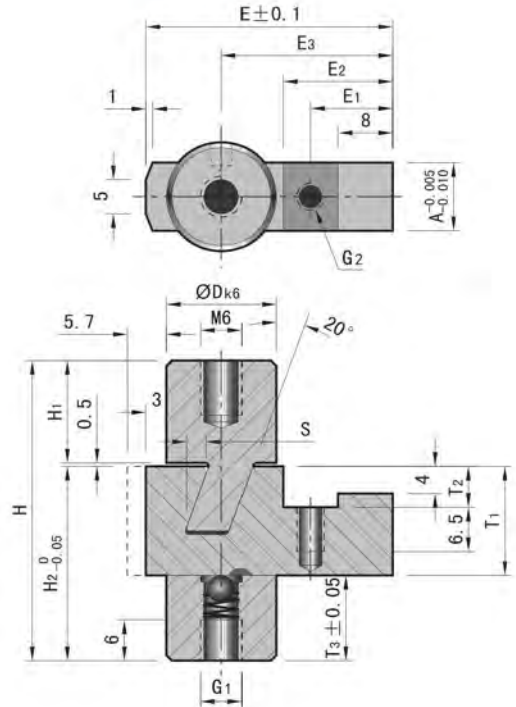
Code	A	B	C	R	SHCS	@ ¥/P
CCBR-100	1.750	1.50	0.375	0.50	1/4-20	
CCBRMM-100	44mm	38mm	10mm	12.7mm	M6-1	

DIN

Slide units

ZZ4290-0

CAD 2D 3D

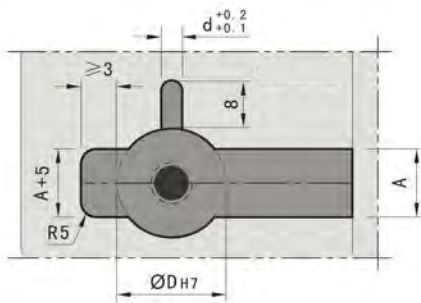


Order ZZ4290-0 Material:SKD61 Hardness:52±2HRC

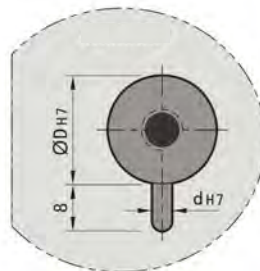
d	D	A	S	H	H1	H2	G1	G2
3	16	10	2.7	44	15	28.5	M6	M4

Code	T1	T2	T3	E	E1	E2	E3	@ ¥ /P
ZZ4290-0	16	6	12.5	36	12	16	25	

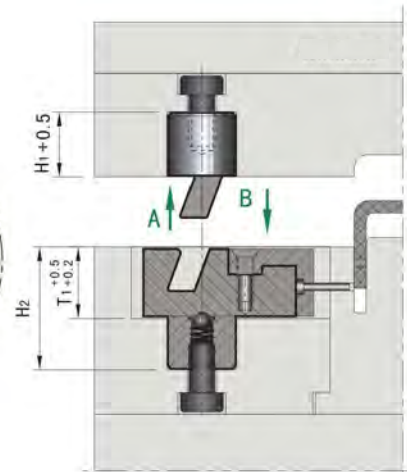
Installation Diagram:



B section

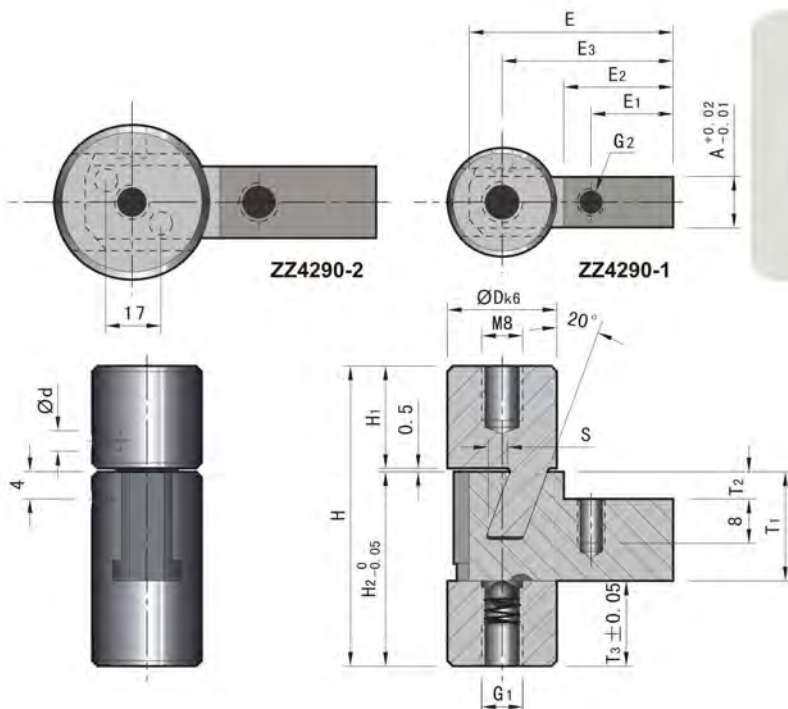


A section



ZZ4290-1
ZZ4290-2

2D 3D



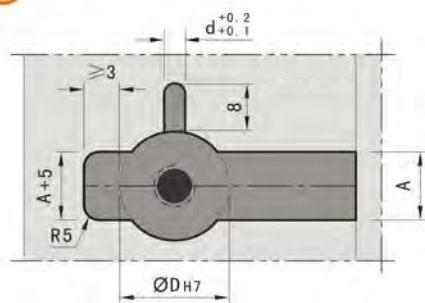
Order ZZ4290-1 Material:SKD61 Hardness:52±2HRC

d	D	A	S	H	H1	H2	G1	G2
3	25	11	3.4	61.5	26.5	34.5	M6	M3
4	40	22	6.4	60.5	20	40	M8	M5

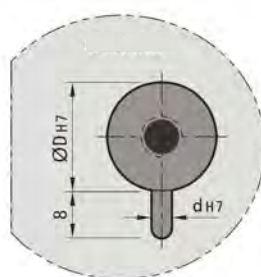
Code	T1	T2	T3	E	E1	E2	E3	@ ¥/P
ZZ4290-1	18	2.5	16.5	32.8	10.8	13.9	24.2	
ZZ4290-2	28	8	12	50	8	20	37	



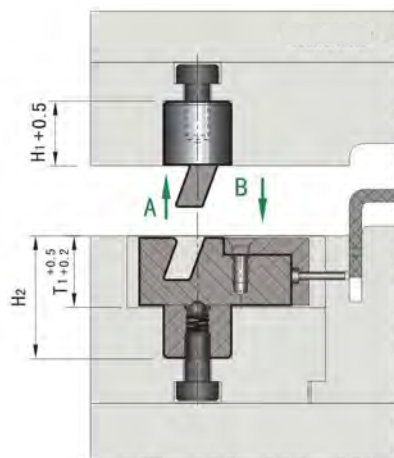
Installation Diagram:



B section



A section



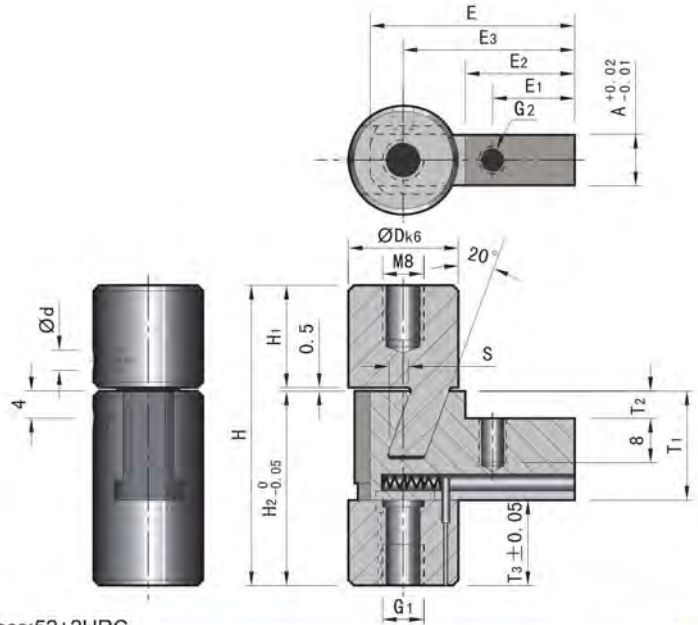
- ✓ Ejector pins series
- ✓ Slide rail/liners series
- ✓ Latch locks series
- ✓ Pouring gate series
- ✓ Dome stamps Air valves series
- ✓ Ejector series
- ✓ Cooling elements series
- ✓ Locating parts series
- ✓ Springs series
- ✓ Guide pins Guide bush
- ✓ Guide strips Vee/plate series
- ✓ Chuck series
- ✓ Mold accessories

DIN

Slide units

ZZ4292

2D 3D

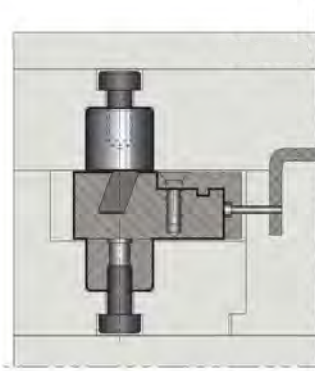


Order ZZ4292-1 Material:SKD61 Hardness:52±2HRC

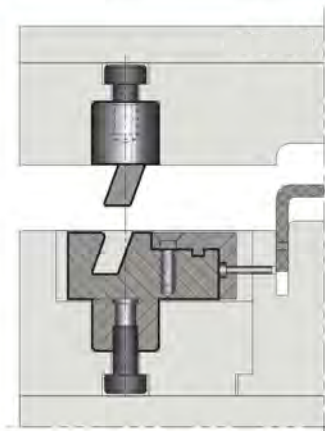
d	D	A	S	H	H1	H2	G1	G2
3	25	11	3.4	61.5	26.5	34.5	M6	M3
4	40	22	6.4	60.5	20	40	M8	M5

Code	T1	T2	T3	E	E1	E2	E3	@ ¥/P
ZZ4292-1	18	2.5	16.5	32.8	10.8	13.9	24.2	
ZZ4292-2	28	8	12	50	8	20	37	

Functional chart:



Mold closed



Mold opening

Features:

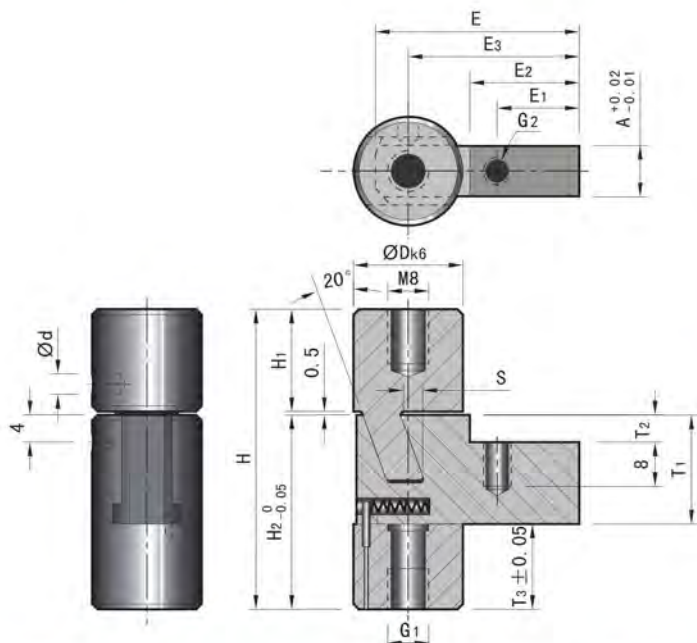
1. Well-knit structure, save room can reduce mold whole size.
2. Complete product specifications, apply to more occasion.
3. Easy to install and convenient for maintenance.

Installation Guidelines:

- The position of slide core need customer to processing.
- Please notes all movable parts must be lubricated smoothly

ZZ4293

2D 3D



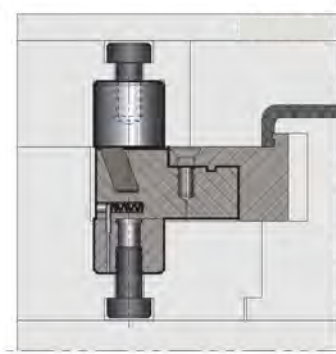
Order ZZ4293-1 Material:SKD61 Hardness:52±2HRC

d	D	A	S	H	H1	H2	G1	G2
3	25	11	3.4	61.5	26.5	34.5	M6	M3
4	40	22	6.4	60.5	20	40	M8	M5

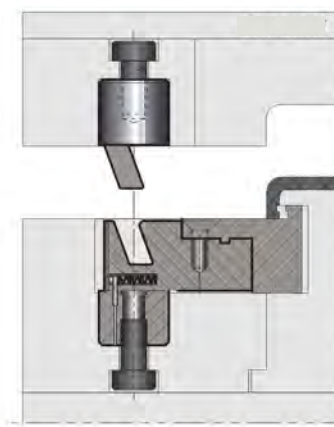
Code	T1	T2	T3	E	E1	E2	E3	@ ¥ / P
ZZ4293-1	18	2.5	16.5	36	10.8	13.9	24.2	
ZZ4293-2	28	8	12	56.5	8	20	37	



Functional chart:



Mold closed



Mold opening

Features:

1. Well-knit structure, save room can reduce mold whole size.
2. Complete product specifications, apply to more occasion.
3. Easy to install and convenient for maintenance.



Installation Guidelines:

- The position of slide core need customer to processing.
- Please notes all movable parts must be lubricated smoothly

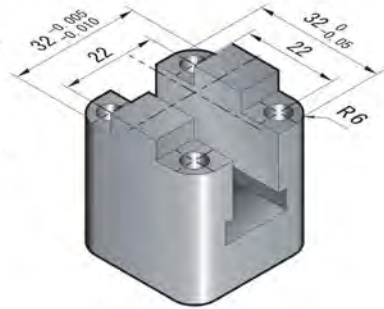
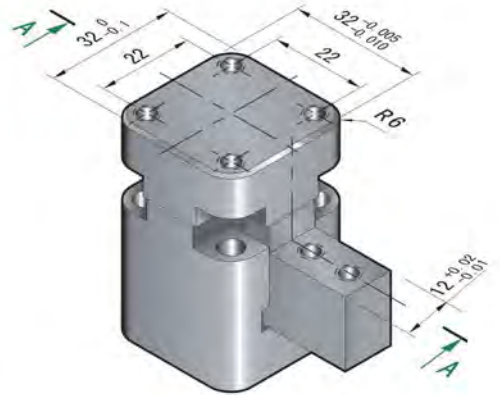
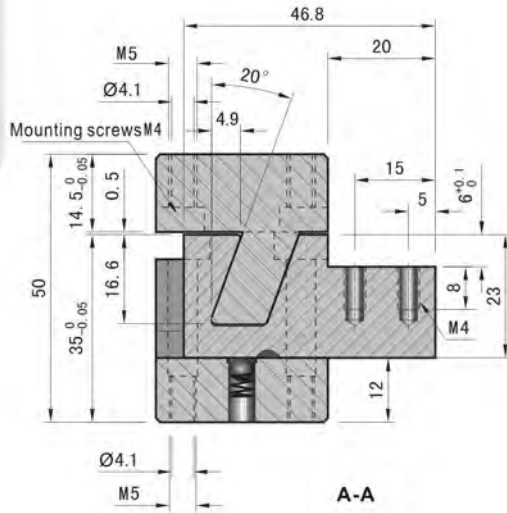
- Extractor pins series
- Slide pullers series
- Latch locks series
- Pouring gate series
- Dome stamps Air valves series
- Extractor series
- Cooling elements series
- Locating parts series
- Springs series
- Guide pins Guide bush series
- Guide strips Wear plate series
- Chuck series
- Mold processors

DIN

Slide units

ZZ4294

CAD 2D 3D

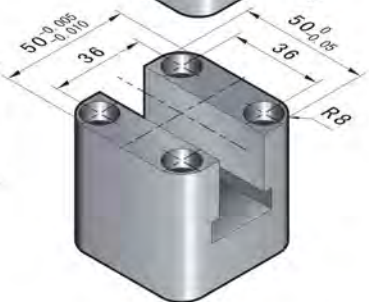
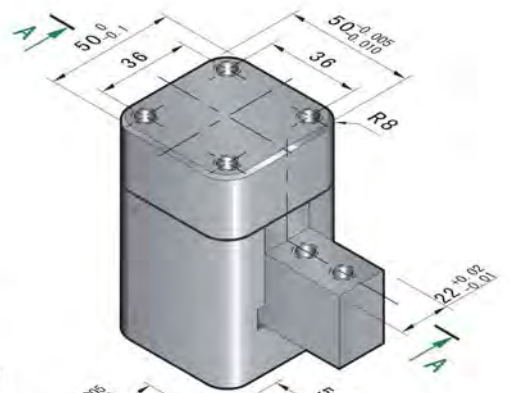
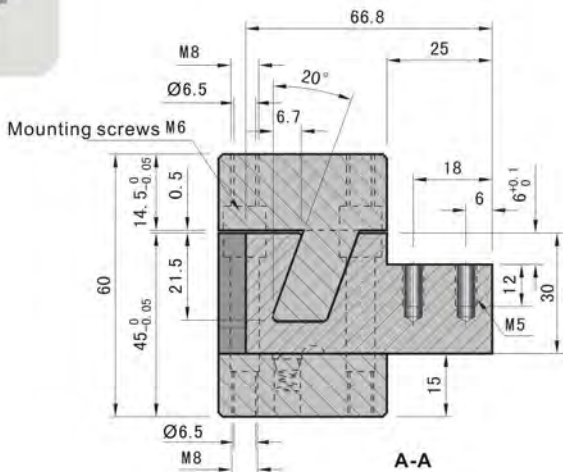


Order ZZ4294-0

Material:SKD61

Hardness:52±2HRC

CAD 2D 3D



Order ZZ4294-1

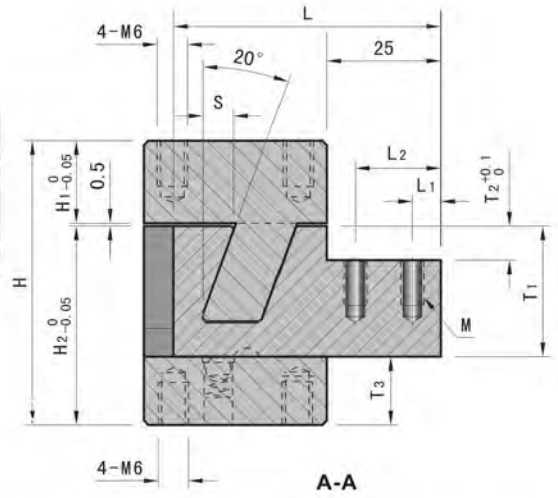
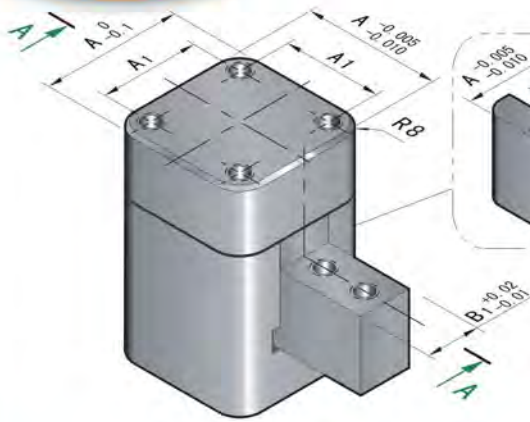
Material:SKD61

Hardness:52±2HRC



Slide units

ZZ4295

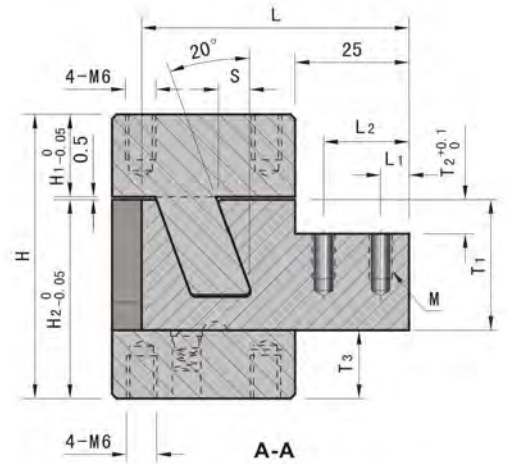
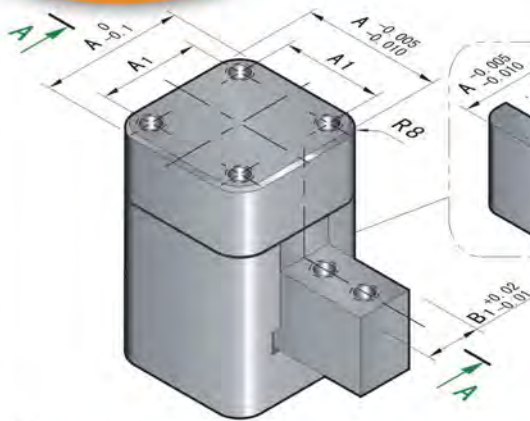


Order ZZ4295-1 Material:SKD61 Hardness:52±2HRC

A	A1	B	S	L	L1	L2	M
40	26	20	4.9	59.8	10	20	M4
60	46	35	9.9	74.8	6	18	M5

Code	H	H1	H2	T1	T2	T3	@ ¥/P
ZZ4295-1	52	14.5	37	25	6	12	
ZZ4295-2	72		57	40	10	17	

ZZ4296



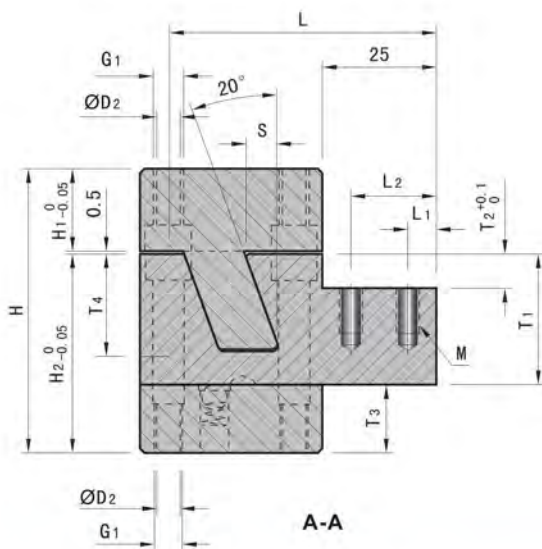
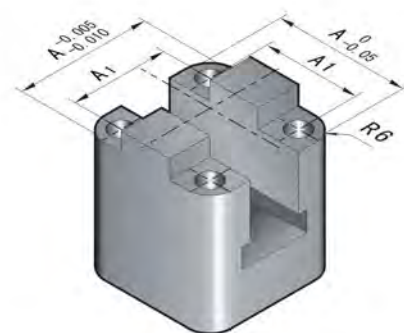
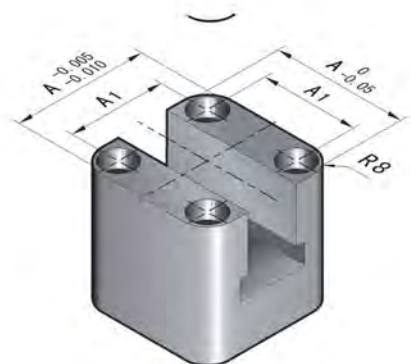
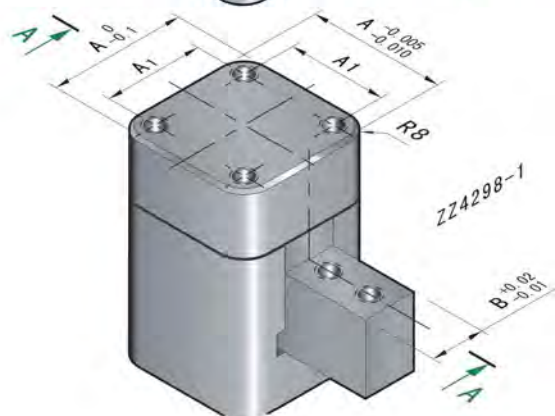
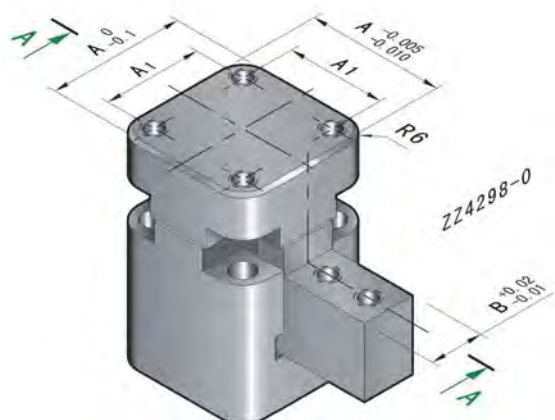
Order ZZ4296-1 Material:SKD61 Hardness:52±2HRC

A	A1	B	S	L	L1	L2	M
40	26	20	4.9	59.8	10	20	M4
60	46	35	9.9	84	6	18	M5

Code	H	H1	H2	T1	T2	T3	@ ¥/P
ZZ4296-1	52	14.5	37	25	6	12	
ZZ4296-2	72		57	40	10	17	

ZZ4298

2D 3D



Order ZZ4298-0 Material:SKD61 Hardness:52±2HRC

A	A1	B	S	L	L1	L2	L3	M	G1
32	22	12	4.9	51.5	5	15	20	M4	M5
50	36	22	6.7	74.5	6	18	25	M5	M8

Code	H	H1	H2	T1	T2	T3	T4	D2	@ ¥/P
ZZ4298-0	50	14.5	35	23	6	12	16.6	4.1	
ZZ4298-1	60		45	30		15	21.5	6.5	

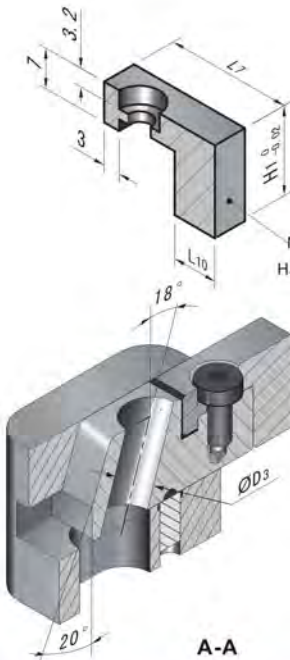
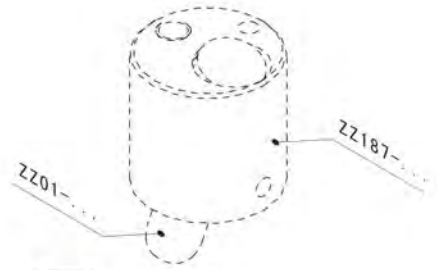
- Ejector pins series
- Slide railers series
- Latch locks series
- Pouring gates series
- Dome stamps series
- Ejector series
- Cooling elements series
- Locating parts series
- Spring series
- Guide pins series
- Guide strips series
- Chuck series
- Mold accessories

DIN

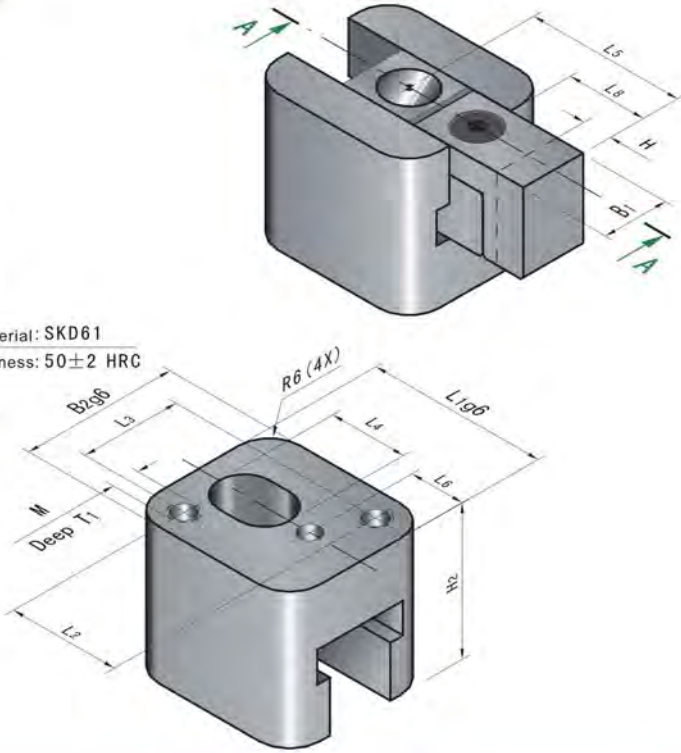
Slide units

ZZ181

CAD 2D 3D



Material: SKD61
Hardness: 50±2 HRC



Features:

- 1. Well-knit structure, space saving can reduce mold whole size.
- 2. Easy to install and convenient for maintenance.

Installation Guidelines:

- The position of slide core need customer to processing.
- Please notes all movable parts must be lubricated smoothly.

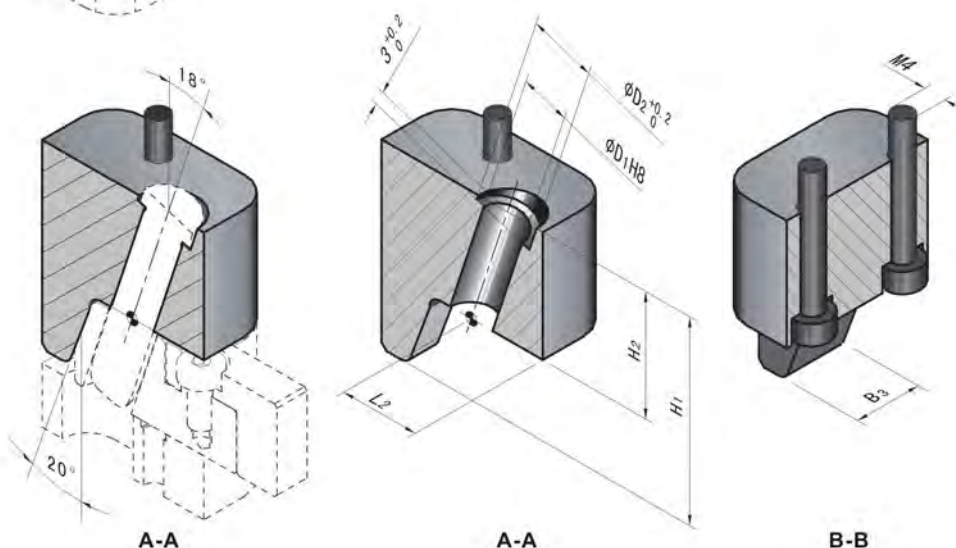
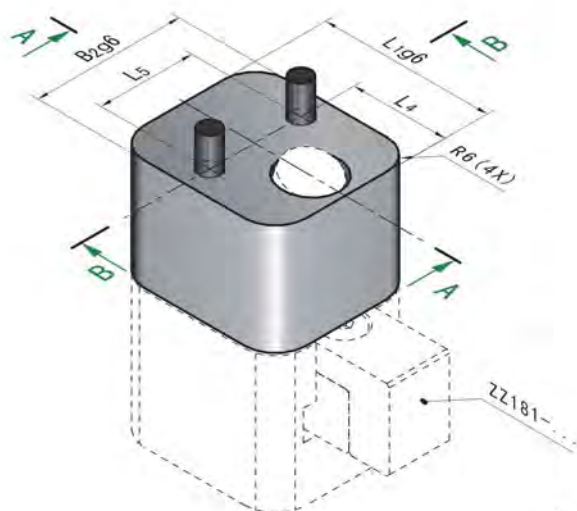
Order ZZ181-8×12×16

D1	B1	H1	H	H2	B2	D3	T1	L10	M
8	12	16	5	27	28	9	8	8	M5
10	16	18	6.5	32	32	11	10	10	M6

Code	L1	L2	L3	L4	L5	L6	L7	L8	@ ¥/P
ZZ181- 8×12×16	32	20	18	14	28.5	10	22	14.3	
ZZ181-10×16×18	40	29	20	17	32.5	12	25	15.3	

ZZ1810

2D 3D



Features:

1. Well-knit structure, space saving can reduce mold whole size.
2. Easy to install and convenient for maintenance.

Installation Guidelines:

- Need ZZ187 or zz1810 to match use it.
- The position of slide core need customer to processing.
- Please notes all movable parts must be lubricated smoothly.

Order ZZ1810-8 Material:Cr12MoV Hardness:53+2HRC

Code	D1	D2	B2	B3	L1	L2	L4	L5	H1	H2	@ ¥/P
ZZ1810- 8	8	11	28	11	32	14.2	18	18	36	22	
ZZ1810-10	10	13	32	15	40	17.2	22	20	44	27	

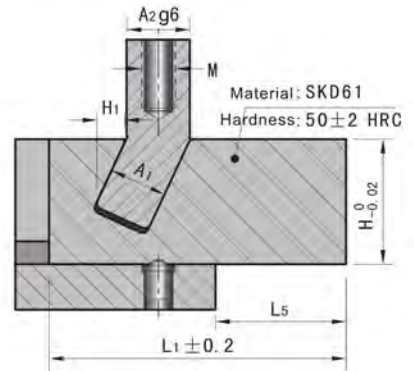
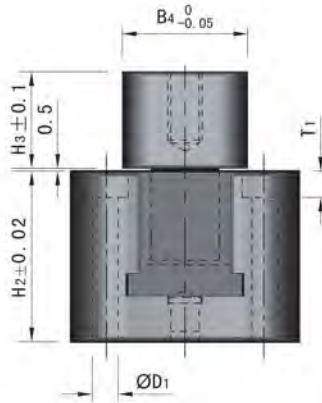
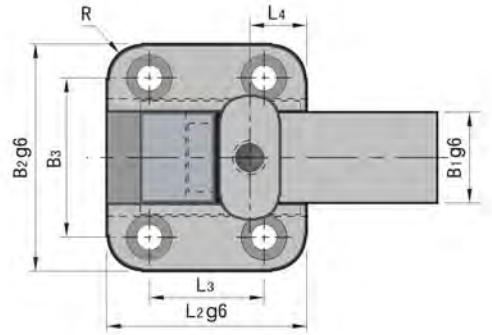
- Extractor pins
- Extractor sleeves
- Slide pullers
- Series
- Linch locks
- Series
- Pouring gate
- Series
- Dome stamps
- Air valves series
- Extractor series
- Cooling elements
- Series
- Locating parts
- Series
- Springs series
- Guide pins
- Guide bush
- Water plate series
- Chuck series
- Mold processors

DIN

Slide units

ZZ1812

CAD 2D 3D



Material: SKD61
Hardness: 50 ± 2 HRC

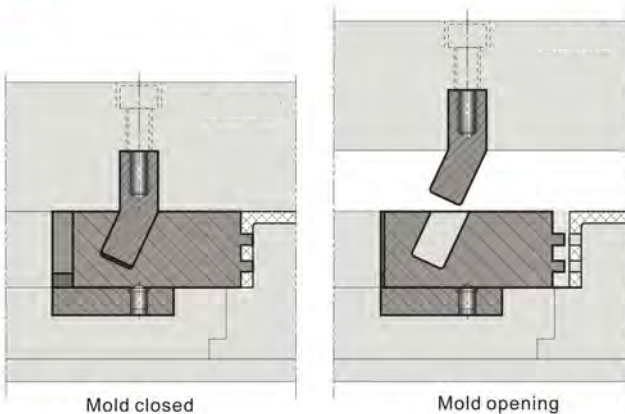
Order ZZ1812-10×16×22

A1	B1	H	H1	H2	H3	A2	B2	B3	B4	D1	T1
10	16	22	4.6	30	17	11	40	28	22	4.5	4.6
12	25	30	7	40	20	13	55	40	30	6.6	6.8

Code	L1	L2	L3	L4	L5	R	M	@ ¥/P
ZZ1812-10×16×22	52	35	20	10	22.9	6	M6	
ZZ1812-12×25×30	75	50	35	15	33.8	7	M8	



Function diagram:



Features:

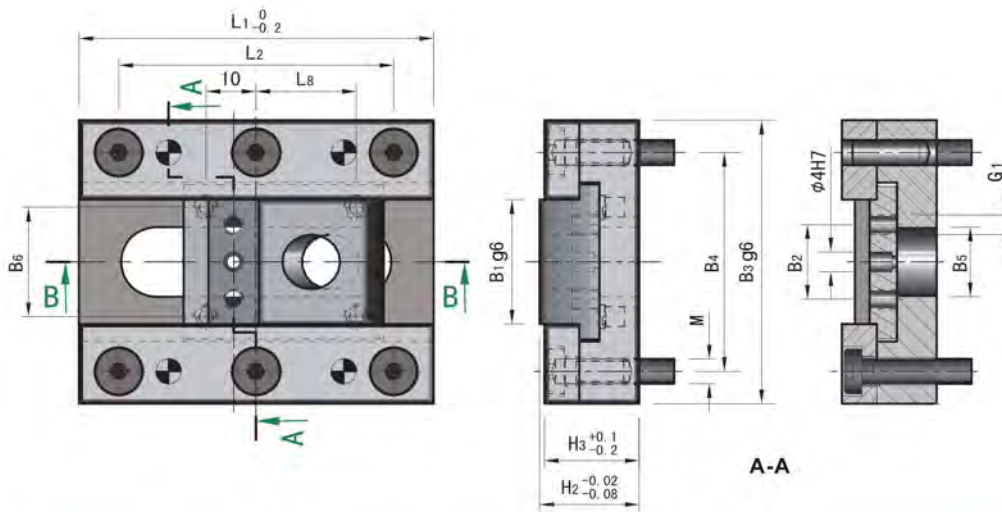
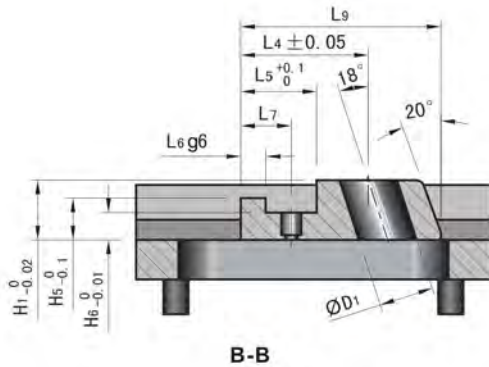
1. Well-knit structure, space saving can reduce mold whole size.
2. Easy to install and convenient for maintenance.

Installation Guidelines:

- H1 data is max.
- The position of slide core need customer to processing.
- Please notes all movable parts must be lubricated smoothly.

ZZ1880

ISO 2D



Order ZZ1880-12×25×71

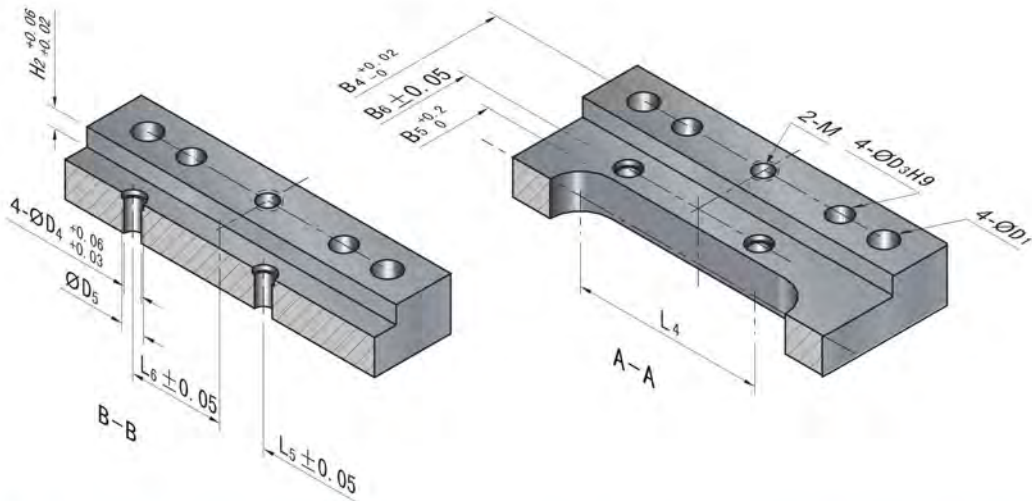
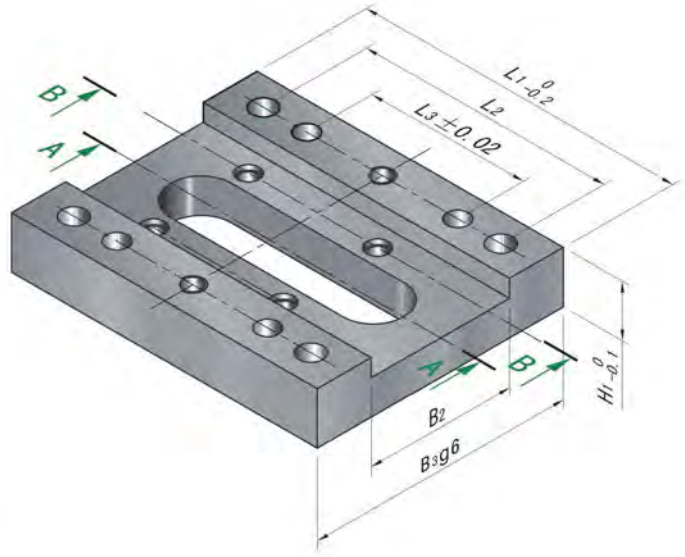
H1	B1	L1	L2	L4	L5	L6	L7	L8	L9	D1	M	G1
12	25	71	55	25.45	15.1	5	10	20	40	11	M5	M4
	40			24.45						13		
	63			27						15		
16	25	100	84	28	18.1	8	13	25	50	13	M6	M5
	40			31.7						15		
	63			30.7						13		
20	40	100	84	31.7	22.1	10	16	25	55	15	M6	M5
	63			30.7						13		
	80			33.45						15		
25	40	100	84	31.7	22.1	10	16	25	55	15	M6	M5
	63			30.7						13		
	80			33.45						15		

Code	B2	B3	B4	B5	B6	H2	H3	H5	H6	@ ¥ / P
ZZ1880-12×25× 71	15	57	44	14	22					
ZZ1880-12×40× 71	20	72	59	14	30	20	19	8.4	5.5	
ZZ1880-12×63× 71	30	95	82	16	50					
ZZ1880-16×25× 71	15	57	44	14	22					
ZZ1880-16×40× 71	20	72	59	14	30	24	23	9.9	6	
ZZ1880-16×63× 71	30	95	82		50					
ZZ1880-20×40×100	20	80	64		30					
ZZ1880-20×63×100	30	103	87		50	30	29	13.4	9	
ZZ1880-20×80×100	40	120	104	16	60					
ZZ1880-25×40×100	20	80	64		30					
ZZ1880-25×63×100	30	103	87		50	35	34	15.9	10	
ZZ1880-25×80×100	40	120	104		60					

DIN

Slide casings

ZZ1881

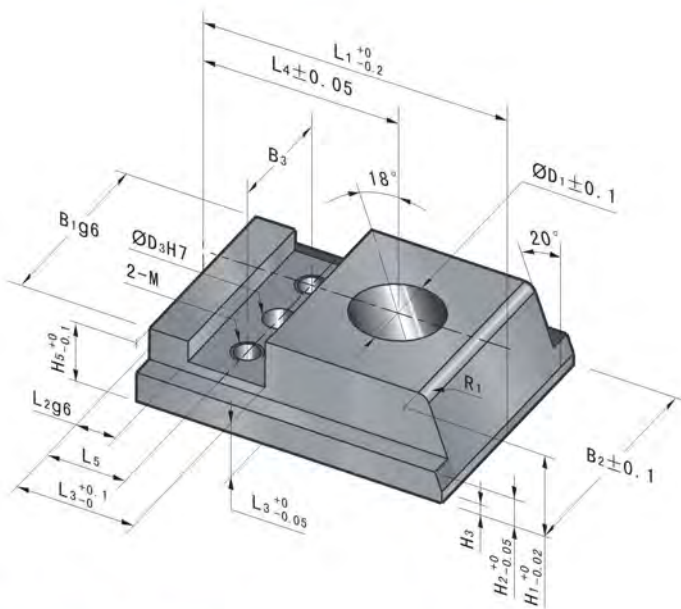


Order ZZ1881-25×57×71

B3	L1	B2	B4	B5	B6	H1	H2	D1	D3	D4
57		32	44		22					4
72	71	47	59	14	30	12	4	5.5	5	
95		70	82		50					6
80		47	64	16	30					
103	100	70	87		50	15	5	6.6	6	
120		87	104		60					

Code	D5	L2	L3	L4	L5	L6	M	ZZ1801-... B1	@ ¥/P
ZZ1881-25× 57× 71	5							25	
ZZ1881-40× 72× 71		55	35	40		20	M5	40	
ZZ1881-63× 95× 71					10			63	
ZZ1881-40× 80×100	7							40	
ZZ1881-63×103×100		84	60	50		25	M6	63	
ZZ1881-80×120×100								80	

ZZ1801



Order ZZ1801-12×25×40

H1	B1	L1	H2	H3	H4	H5	D1	D3	R1
12	25 40 63 25	40	4	1.5	5.5	8.4	11		1.5
16	40 63	45			6	9.9	15	4	
20	40 63 80 40	50	5	2	9	13.4	13		2
25	63 80	55			10	15.9	15		

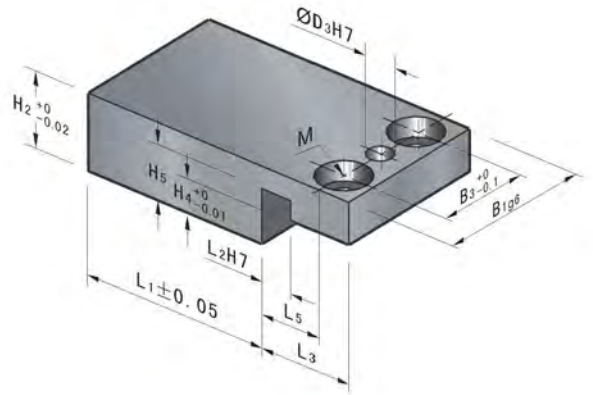
Code	B2	B3	L2	L3	L4	L5	M	@ ¥/P
ZZ1801-12×25×40	31	15			25.45			
ZZ1801-12×40×40	46	20	5		24.45			
ZZ1801-12×63×40	69	30		15.1		10		
ZZ1801-16×25×45	31	15			28		M4	
ZZ1801-16×40×45	46	20	5.5		27			
ZZ1801-16×63×45	69	30						
ZZ1801-20×40×50	46	20			31.7	13		
ZZ1801-20×63×50	69	30	8	18.1	30.7			
ZZ1801-20×80×50	86	40						
ZZ1801-25×40×55	46	20						
ZZ1801-25×63×55	69	30	10	22.1	33.45	16	M5	
ZZ1801-25×80×55	86	40						



- Ejector pins
- Ejector sleeves
- Slide rail/liners series
- Linch locks series
- Pouring gates series
- Data stamps
- Air valves series
- Ejector series**
- Cooling elements series
- Locating parts series
- Springs series
- Guide pins
- Guide bush
- Guide strips
- Wear plate series
- Chuck series
- Mold accessories

DIN
Slides

ZZ1802



☎ ZZ1802-12×25×30

H1	B1	L1	L2	L3	L5	D3
12	25	30	5	15	10	4
	40					
	63					
16	25	40	5.5	18	13	
	40					
	63					
20	40	40	8	22	16	
	63					
	80					
25	40	10	10	16	16	
	63					
	80					

Code	B3	H4	H5	M	@ ¥/P
ZZ1802-12×25×30	15	5.5	8.5	M4	
ZZ1802-12×40×30	20				
ZZ1802-12×63×30	30				
ZZ1802-16×25×30	15	6	10		
ZZ1802-16×40×30	20				
ZZ1802-16×63×30	30				
ZZ1802-20×40×40	20	9	13.5		
ZZ1802-20×63×40	30				
ZZ1802-20×80×40	40				
ZZ1802-25×40×40	20	10	16	M5	
ZZ1802-25×63×40	30				
ZZ1802-25×80×40	40				



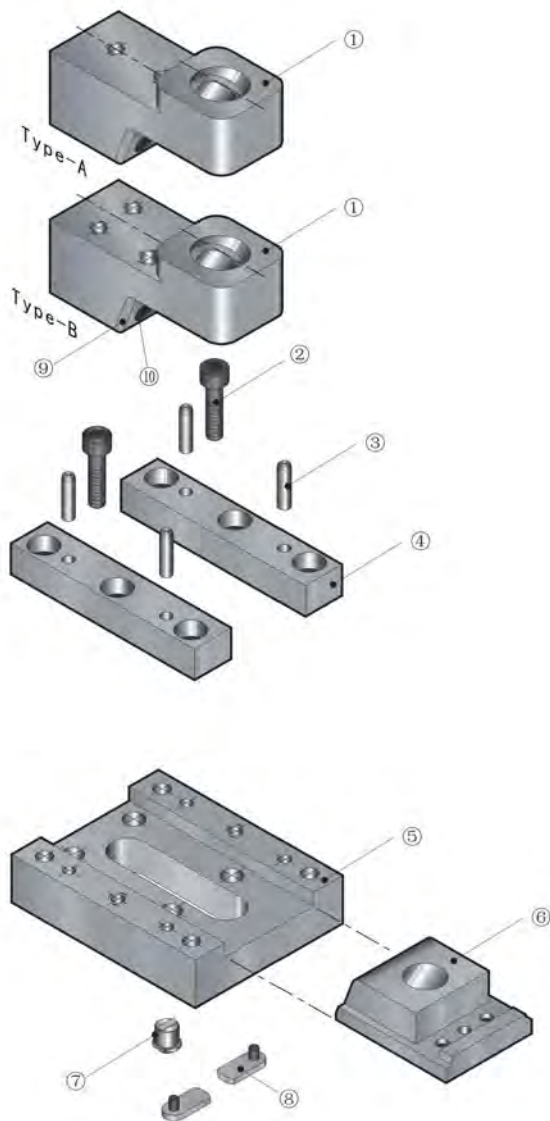


Slide construction kits

ZZ4200



Product space chart:



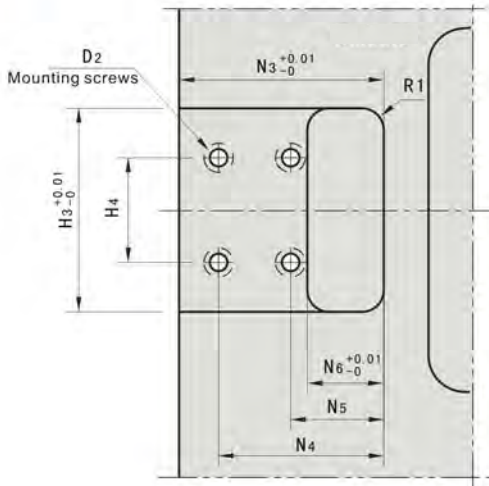
No.	Spec.	QTY(PCS)
1	ZZ4220-...	1
2	Screw bolt	2
3	Dowel pin	4
4	ZZ4240-...	2
5	ZZ4205-...	1
6	ZZ4210-...	1
7	ZZ5134-...	1
8	ZZ4211-...	2
9	ZZ4230-...	1
10	Screw	1/2

Order ZZ4200-H1-T1-N1

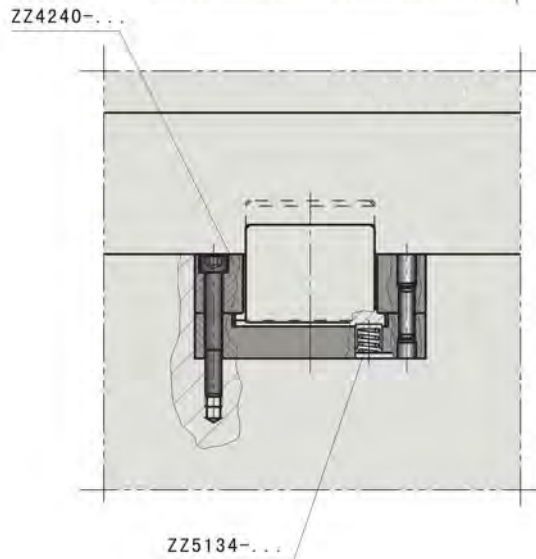
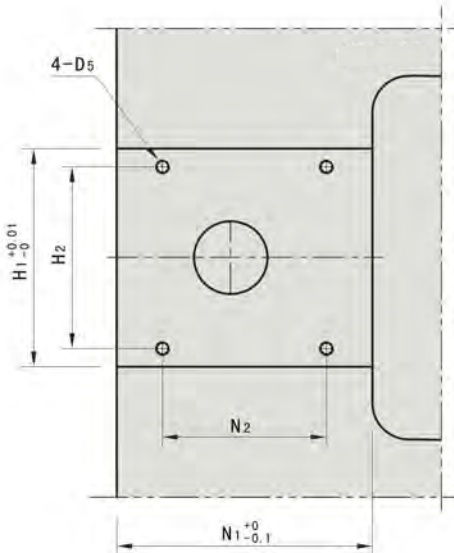
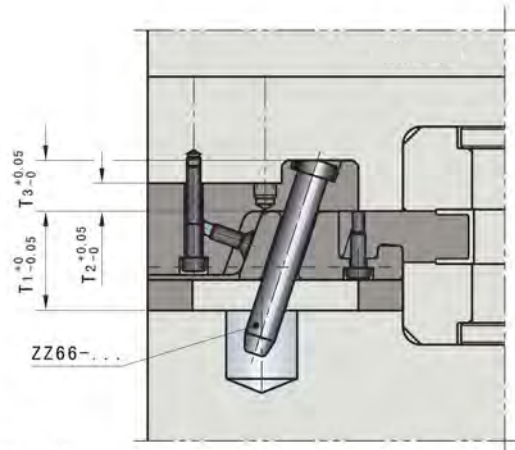
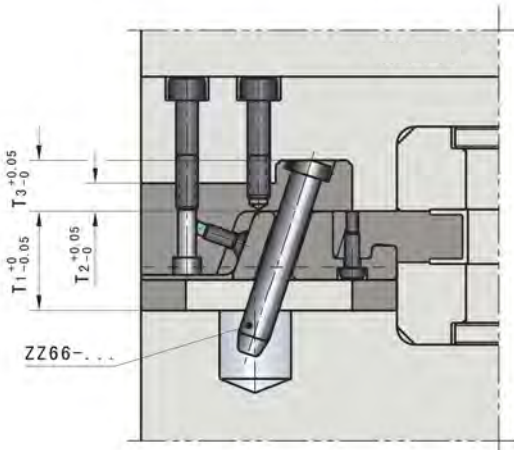
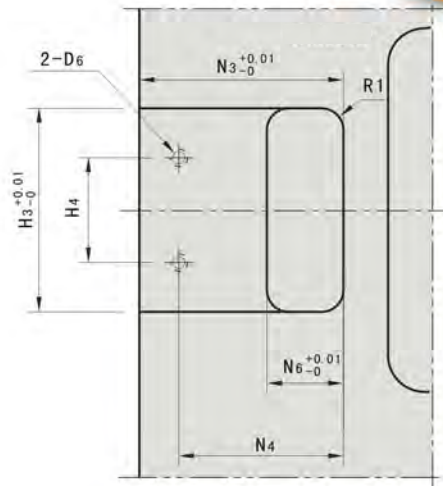
ZZ4200	ZZ4205-(1x)	ZZ4210-(1x)	ZZ4220-(1x)	ZZ4230-(1x)	ZZ4240-(2x)	ZZ5134-(1x)	ZZ4211-(2x)	@ ¥ /P
50-28- 75	50-17- 75	20-16-40	18-15-65	18-15-4				
55-28- 75	55-17- 75	25-16-40	23-15-65	23-15-4				
60-28- 75	60-17- 75	30-16-45	28-15-70	28-15-4				
70-28- 75	70-17- 75	40-16-45	38-15-70	38-15-4	15-11- 75			
80-28- 75	80-17- 75	50-16-45	48-15-70	48-15-4				
90-28- 75	90-17- 75	60-16-45	58-15-70	58-15-4				
60-28- 90	60-17- 90	30-16-45	28-15-70	28-15-4		7	1	
70-28- 90	70-17- 90	40-16-45	38-15-70	38-15-4	15-11- 90			
80-28- 90	80-17- 90	50-16-45	48-15-70	48-15-4				
76-42-100	76-20-100	40-30-64	38-29-82.5	38-29-6				
86-42-100	86-20-100	50-30-64	48-29-82.5	48-29-6	18-22-100			
96-42-100	96-20-100	60-30-64	58-29-82.5	58-29-6				

Installation Diagram:

Method of installation 1:



Method of installation 2:

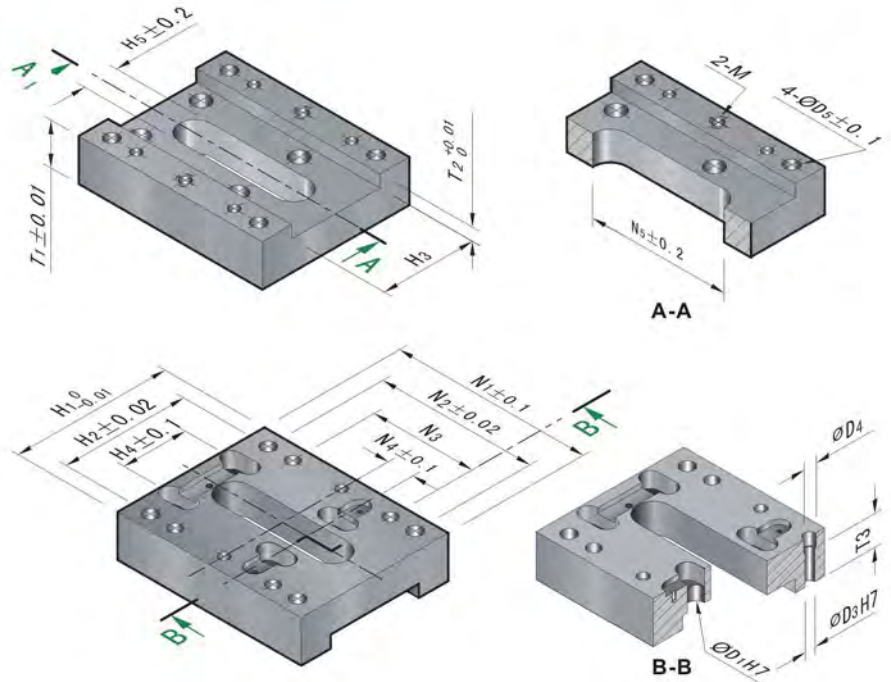


Electric pins
Electric pin sleeves
Slide rail/rollers series
Latch locks
Flanging gate series
Dome stopnuts
Air valves series
Electric series
Cooling elements series
Locating parts series
Springs series
Guide pins
Guide bush
Guide strips
Wear plate series
Chuck series
Mill accessories

DIN

Slide casings

ZZ4205

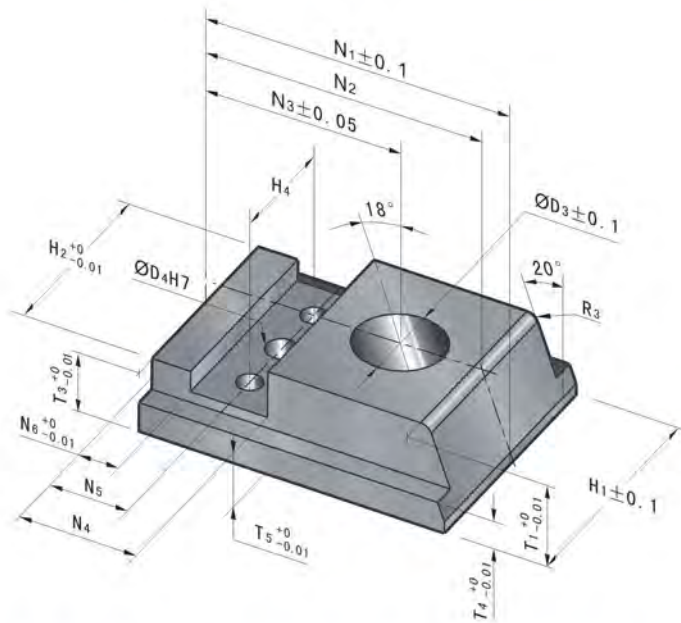


Order ZZ4205-H1-T1-N1 Material:SKD11 Hardness:58±2HRC

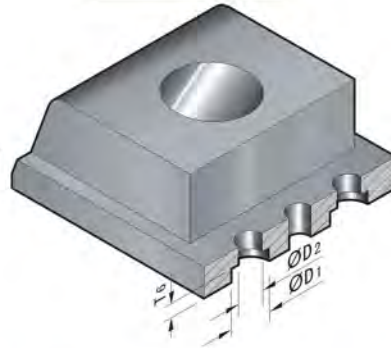
H1	T1	N1	H2	H3	H4	H5	T2	T3	M
50			38	26	18	9			
55			43	31	21	11			
60		75	48	36	25				
70			58	46	32				
80	17		68	56	42		5	12	M5
90			78	66	52				
60		90	48	36	25	13			
70			58	46	32				
80			68	56	42				

Code	N2	N3	N4	N5	D1	D3	D4	D5	@ ¥ / P
ZZ4205	60	40	10	51	7	4	5	5.5	
	70	50		61					





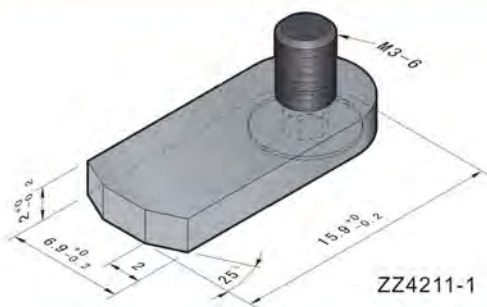
ZZ4210



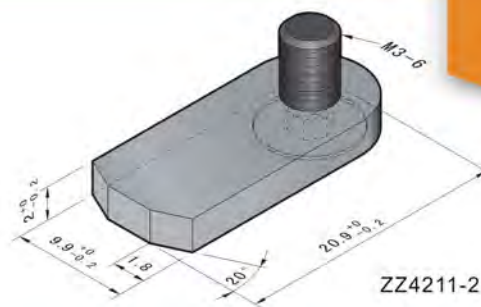
Order ZZ4210-H2-T1-N1 Material:SKD61 Hardness:50-54HRC

H2	T1	N1	H1	H4	T3	T4	T5	T6	N2
20		40	25	13				2.4	35
25			30	15					
30	16		35	18	8	5	5		
40		45	45	25				3.2	40
50			55	30					
60			65	40					

Code	N3	N4	N5	N6	D1	D2	D3	D4	@ ¥/P
	24				6	3.2	9	3	
ZZ4210	26	15	10	5	8	4.3	13	4	



ZZ4211-1



ZZ4211-2

ZZ4211

Order ZZ4211-1

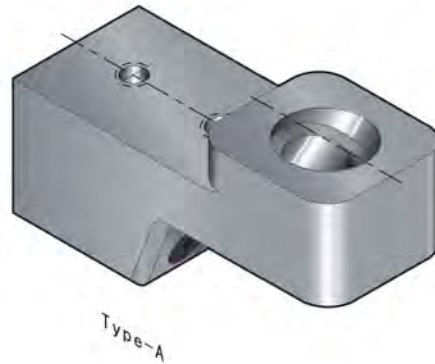
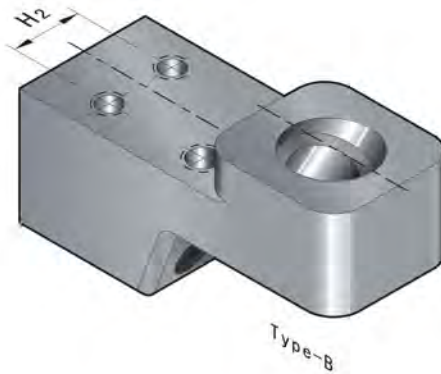
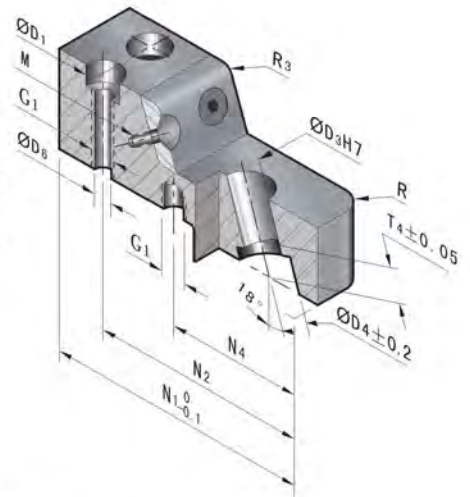
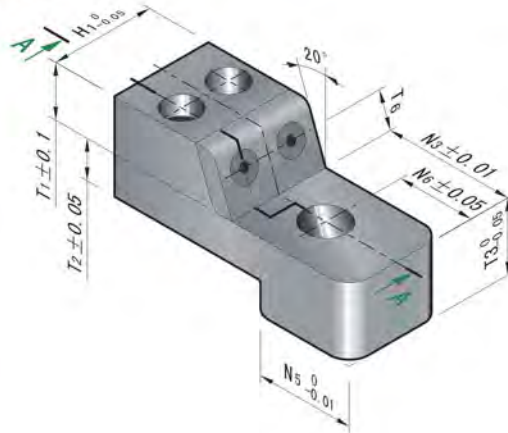
Code	@ ¥/P
ZZ4211-1	
ZZ4211-2	

- ✓ Ejector pins
- ✓ Ejector sleeves
- ✓ Slide rail/liners
- ✓ Latch locks
- ✓ Pouring gates
- ✓ Date stamps
- ✓ Air valves series
- ✓ Ejector series
- ✓ Cooling elements
- ✓ Locating parts
- ✓ Springs series
- ✓ Guide pins
- ✓ Guide strips
- ✓ Wear plate series
- ✓ Chuck series
- ✓ Mold processors

DIN

Locking heels, double sided

ZZ4220

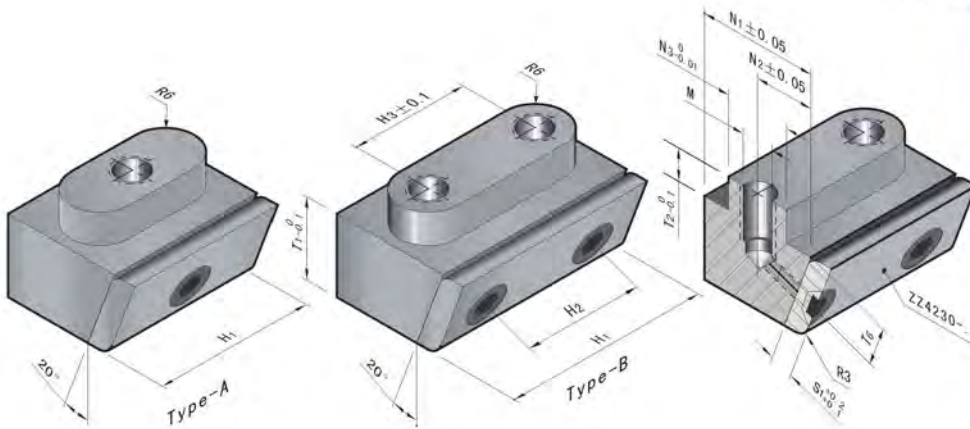


ZZ4220-H1-T1-N1 Material:SKD11 Hardness:60±2HRC

H1	T1	N1	Type	H2	T2	T3	T4	T6	N2	N3	N4	N5
18	15	65	A	-	11	20	3	8	50	25	26	20
23				4								
28				14								
38				22								
48	29	82.5	B	32	14	25	6	15	65	37.5	36.5	30
58				42								
38				18								
48				28								
58	45	115	A	44	19	33	8	22	73	46	49	42
78				64								
98				-								
35				28								
55	21	10	B	28	10	10.4	10	8	94	60	59	47
18				10								
23				11.5								
28				14.5								

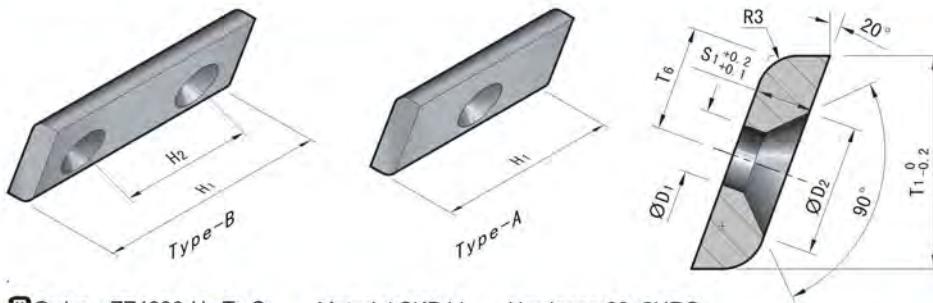
Code	N6	D1	D3	D4	D6	R	M	G1	@ ¥/P			
ZZ4220	14	10	8	11.5	5.3	5	M4	M6				
	21		10	14.5								
	22.5	11	12	17	6.4	6	M6	M8				
			28	16					21	8.4	8	M10
			33	20					26			

ZZ4222



Order ZZ4222-H1-T1 Material:SKD11 Hardness:60±2HRC

Code	H1	T1	Type	H2	H3	T2	T6	N1	N2	N3	S1	D5	M	@ ¥ / P
ZZ4222	18	15	A	-	4	6	8	22	11	12	4	4.3	M6	
	23			9										
	28			14										
	38			22										
	48			32										
	58	42	B	18	18	10	15	38.6	18.6	18	6	6.5		
	38	18												
	48	28												
	58	38												
	78	44												
	98	64	A	-	13	12	22	48.6	21.6	20	6	6.5		
	35	28												
	55	50												
	78	50												
	98	70												



ZZ4230



Order ZZ4230-H1-T1-S1 Material:SKD11 Hardness:60±2HRC

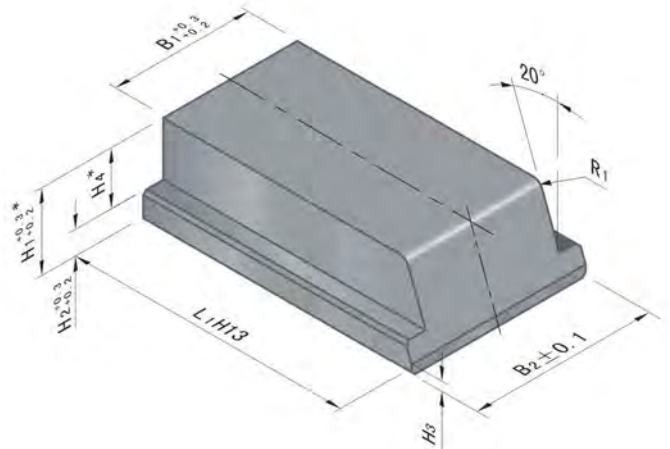
Code	H1	T1	S1	Type	H2	T6	D1	D2	@ ¥ / P
ZZ4230	18	15	4	A	-	8	4.5	9.2	
	23								
	28								
	38								
	48								
	58	29	6	B	14	15	6.6	13.7	
	38				22				
	48				32				
	58				42				
	78				64				
	98	45	-	A	28	22	-	-	
	35				50				
	55				50				
	78				70				
	98				70				

DIN

Slides

ZZ180

CAD 2D

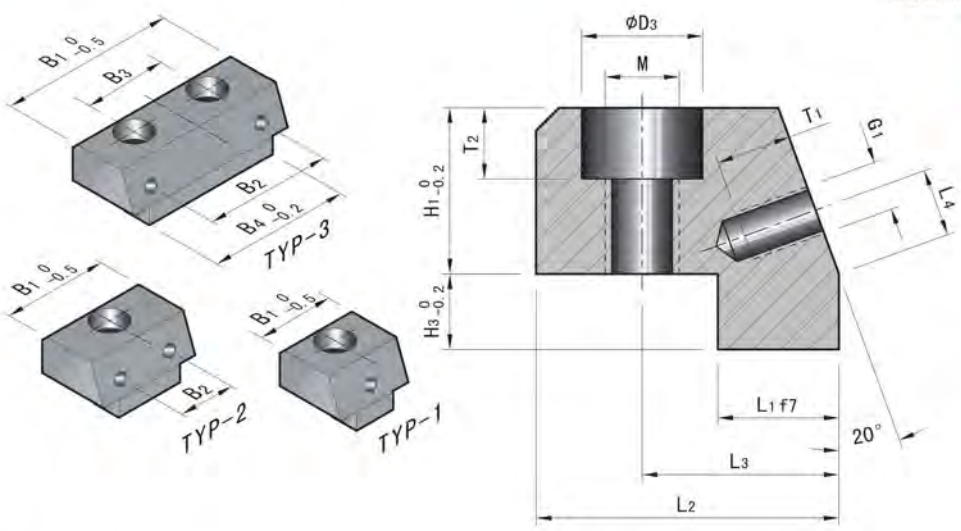


Order ZZ180-H1×L1×B1 Material:SKD61 Hardness:52±2HRC

Code	H1	L1	B1	B2	H2	H3	H4	R1	@ ¥/P
ZZ180-12× 40× 20			20	26					
ZZ180-12× 40× 25	12	40	25	31			8		
ZZ180-12× 40× 40			40	46					
ZZ180-12× 40× 63			63	69	4	1.5		1.5	
ZZ180-16× 50× 20			20	26					
ZZ180-16× 50× 25	16	50	25	31			12		
ZZ180-16× 50× 40			40	46					
ZZ180-16× 50× 63			63	69					
ZZ180-20× 63× 40			40	46					
ZZ180-20× 63× 63	20	63	63	69	5	2	15	2	
ZZ180-20× 63× 80			80	86					
ZZ180-25× 71× 40			40	46					
ZZ180-25× 71× 63	25	71	63	69			20		
ZZ180-25× 71× 80			80	86					
ZZ180-32×100× 63			63	71					
ZZ180-32×100× 80	32		80	88			26		
ZZ180-32×100×100		100	100	108					
ZZ180-40×100× 63			63	71	6	3		3	
ZZ180-40×100× 80	40		80	88			34		
ZZ180-40×100×100			100	108					
ZZ180-50×112× 80			80	90					
ZZ180-50×112×100	50		100	110			42		
ZZ180-50×112×125		112	125	135					
ZZ180-63×112× 80			80	90	8	4		4	
ZZ180-63×112×100	63		100	110			55		
ZZ180-63×112×125			125	135					



Locking heels, double sided



ZZ1820-12x18 Material:SKD11 Hardness:58±2HRC

Code	ZZ180... H1	B1	H1	H3	L1	L2	L3	L4	d3	@ ¥ / P
ZZ1820-12x18		18								
ZZ1820-12x22		22								
ZZ1820-12x30	12	30	11		8	20	13	4.5	10	
ZZ1820-12x50		50		5						
ZZ1820-16x18		18								
ZZ1820-16x22		22								
ZZ1820-16x30	16	30	15		10	25	17	7	11	
ZZ1820-16x50		50								
ZZ1820-20x30		30								
ZZ1820-20x38		38								
ZZ1820-20x53	20	53	19	6		32	20	10		
ZZ1820-25x30		30			12					
ZZ1820-25x38		38								
ZZ1820-25x53	25	53	24	8		40	25	13		
ZZ1820-32x38		38							15	
ZZ1820-32x50		50								
ZZ1820-32x71	32	71	31	9		45	28	17		
ZZ1820-40x38		38			16					
ZZ1820-40x50		50								
ZZ1820-40x71	40	71	39	11		50	30	21		
ZZ1820-50x50		50								
ZZ1820-50x63	50	63	49	14	20	56	34	26	18	
ZZ1820-50x85		85								

Order ZZ1820-12x18 Material:SKD11 Hardness:58±2HRC

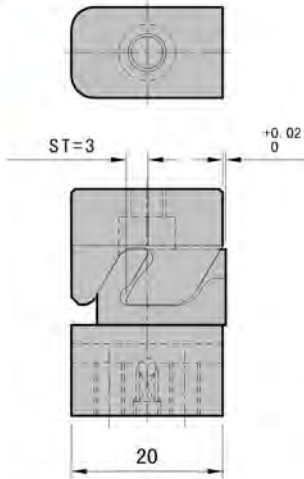
Code	B2	B3	B4	T1	T2	Typ	M	G1	@ ¥ / P
ZZ1820-12x18	-	-	10			1			
ZZ1820-12x22			12						
ZZ1820-12x30	16		20	5	5.7	2	M 6		
ZZ1820-12x50	36	24	40			3			
ZZ1820-16x18	-	-	10						
ZZ1820-16x22			12			1			
ZZ1820-16x30	16		18		6.8	2	M 8		
ZZ1820-16x50	36	24	38			3		M4	
ZZ1820-20x30	16	-	16						
ZZ1820-20x38	24	-	24	7		2			
ZZ1820-20x53	39	25	39			3			
ZZ1820-25x30	16	-	16						
ZZ1820-25x38	24	-	24			2			
ZZ1820-25x53	39	25	39			3			
ZZ1820-32x38	18	-	20			2	M10		
ZZ1820-32x50	30	20	32						
ZZ1820-32x71	51	35	53			3			
ZZ1820-40x38	18	-	20			2			
ZZ1820-40x50	30	20	32	10		3		M6	
ZZ1820-40x71	51	39	53						
ZZ1820-50x50	30	-	28			2			
ZZ1820-50x63	43	30	41		11		M12		
ZZ1820-50x85	65	45	63			3			

- Exciter pins series
- Exciter sleeves
- Slide rail/liners series
- Latch locks series
- Flanging guide series
- Anti-vibration series
- Drive slippers series
- Exciter series
- Cooling elements series
- Locating parts series
- Spacers series
- Guide pins/Guide bush series
- Guide strips/Wear plate series
- Clutch series
- Mold accessories

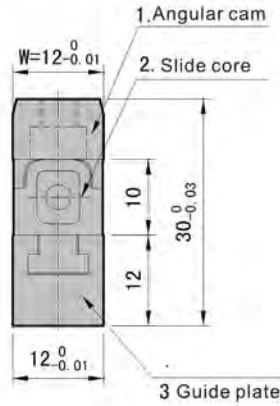
JIS

Slide units

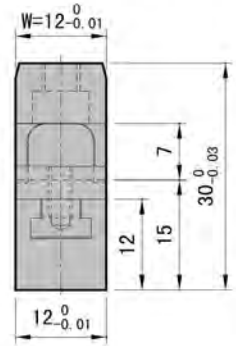
MMSCSG
MMSCSGM



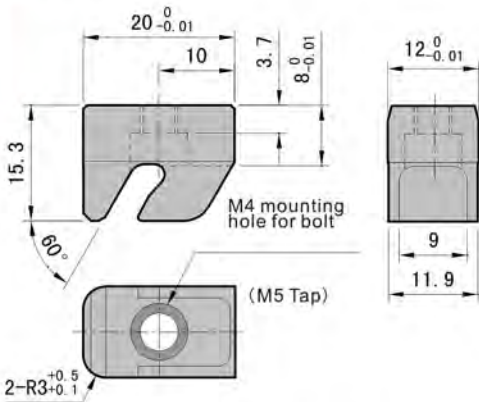
MMSCSG-3-12
Inlay part processed



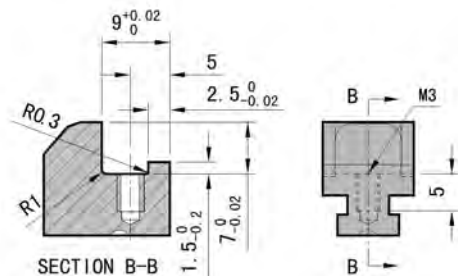
MMSCSGM-3-12
Tapped



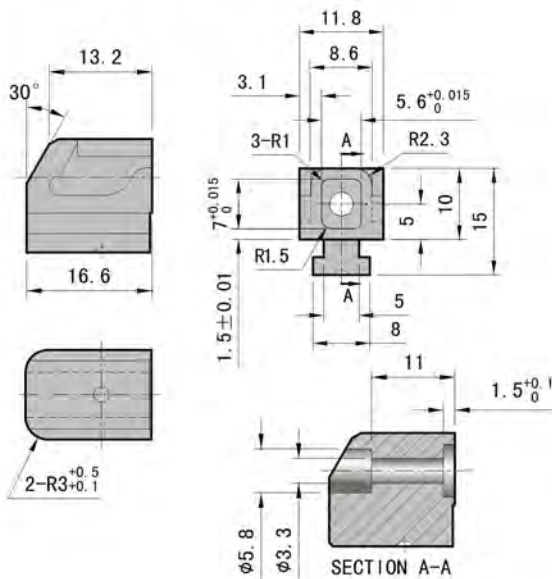
1. Angular Cams



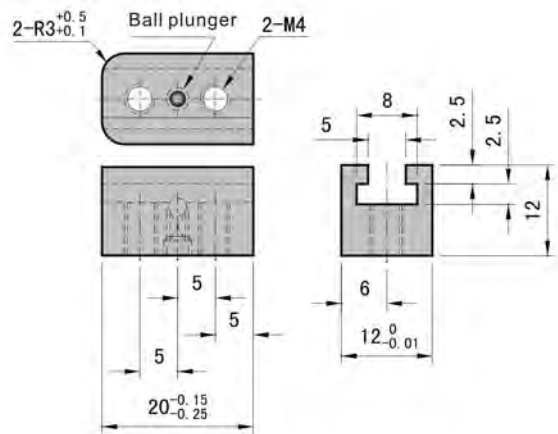
2. Slide cores (Tapped)



2. Slide cores (Inlay part processed)



3. Guide plates

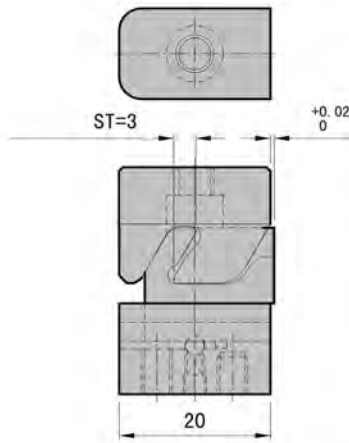


Order MMSCSG-3-12

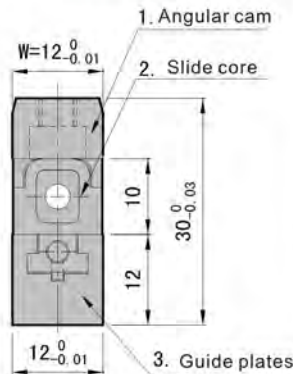
Code	ST	W	@ ¥/P
MMSCSG-3-12	3	12	
MMSCSGM-3-12			

Remark: Whole sets, just can interchange by itself.

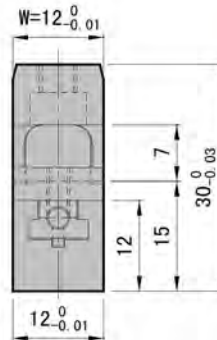
MMSCSB
MMSCSBM



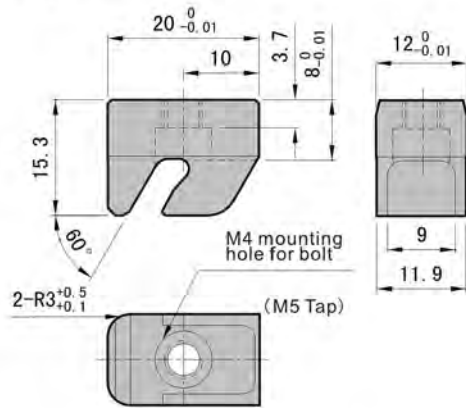
MMSCSB-3-12
(Inlay part processed)



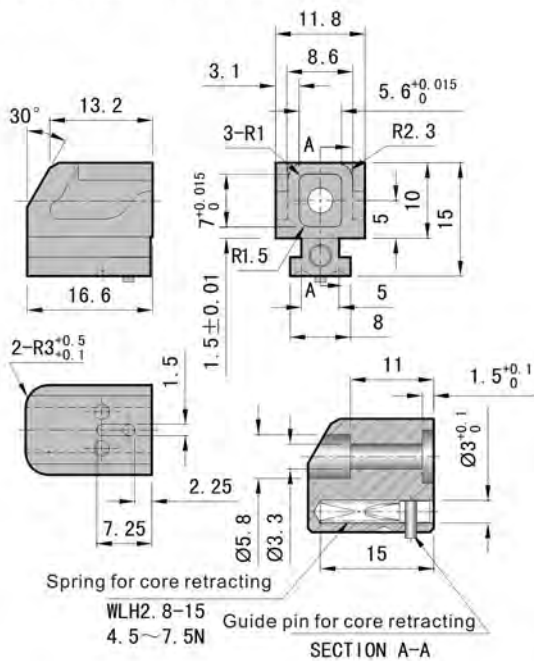
MMSCSBM-3-12
(Tapped)



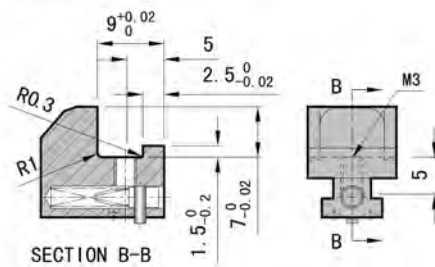
1. Angular Cams



2. Slide cores (Inlay part processed)

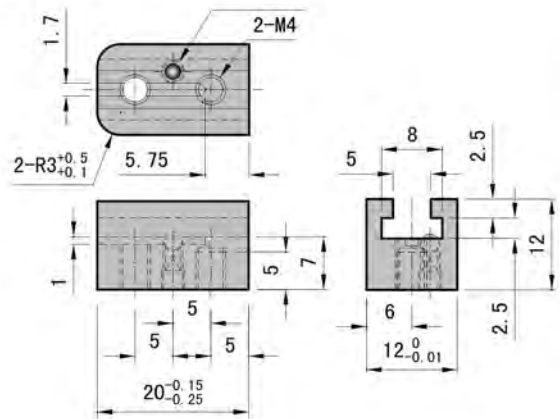


2. Slide cores (Tapped)



3. Guide plates

Ball plunger



Order MMSCSB-3-12

Code	ST	W	@ ¥ / P
MMSCSB-3-12	3	12	
MMSCSBM-3-12			

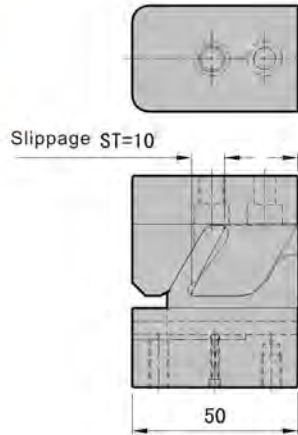
Remark: Whole sets, just can interchange by itself.

JIS

Slide units

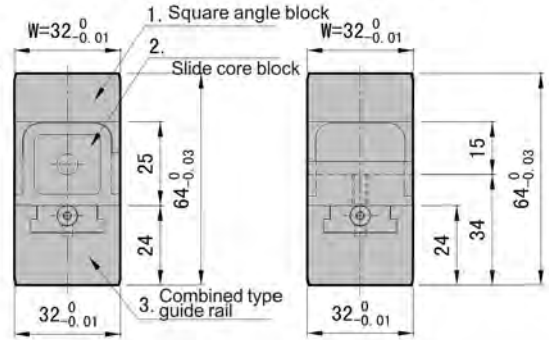
MMSCSB
MMSCSBM

CR 2D

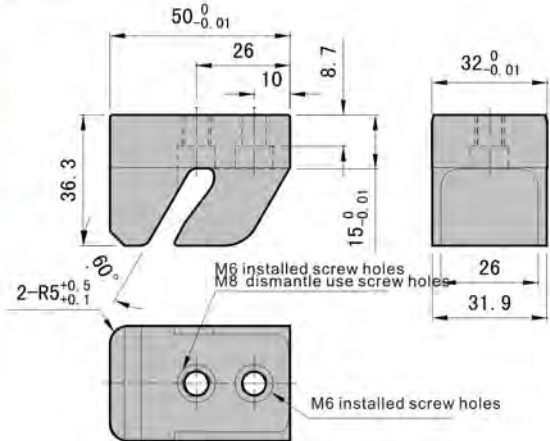


MMSCSB-10-32
(Embedded processing)

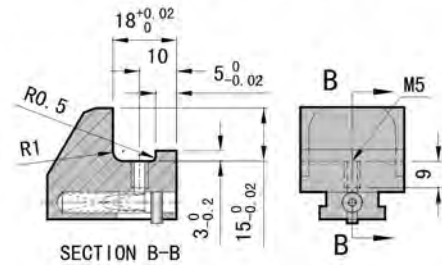
MMSCGB-10-32
(Screw processing)



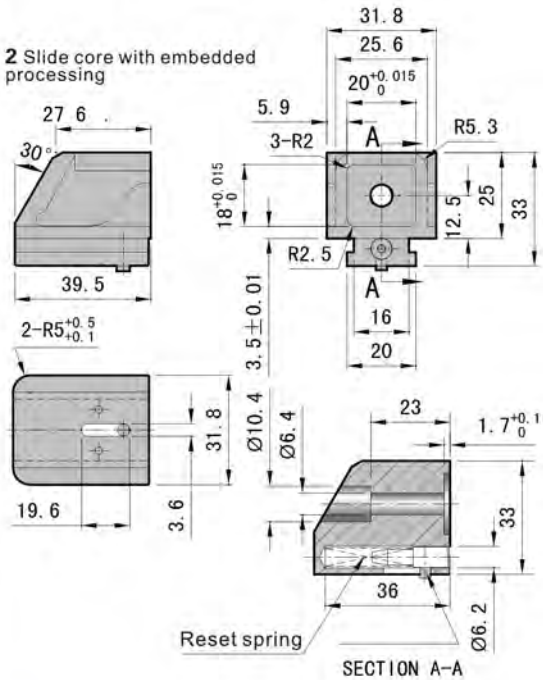
1. Square angle block



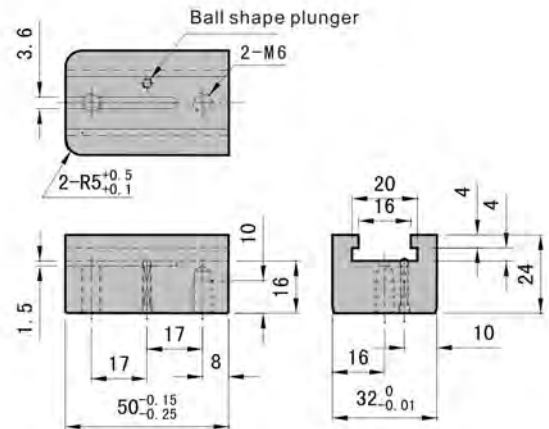
2. Slide core block with screw processing



2 Slide core with embedded processing



3. Combined type guide rail



Order MMSCSB-10-32

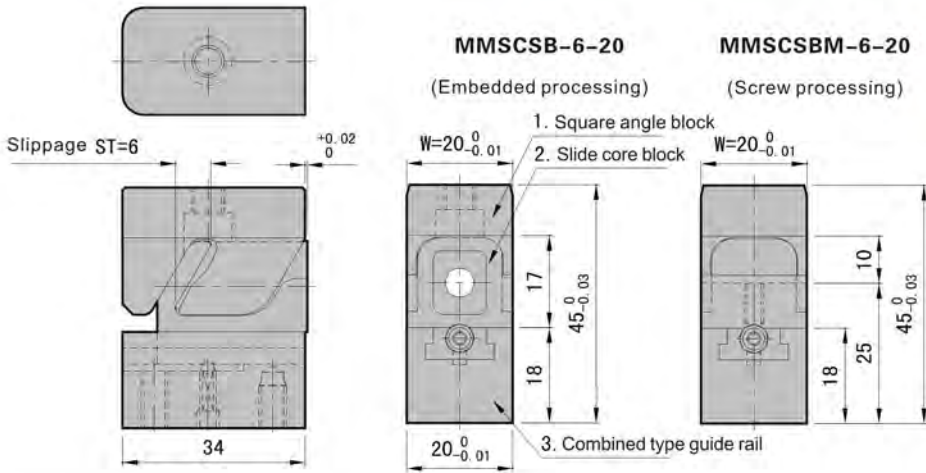
Code	ST	W	@ ¥ / P
MMSCSB-10-32	10	32	
MMSCSBM-10-32			

Remark: Whole sets, just can interchange by itself.

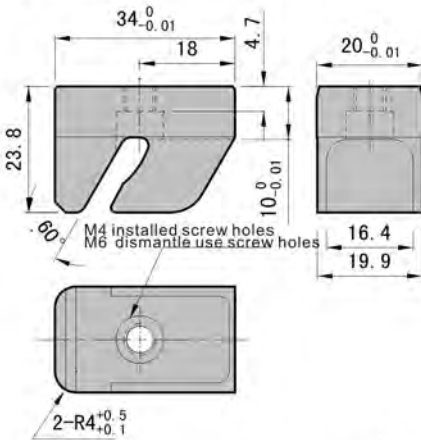
MMSCSB
MMSCSBM



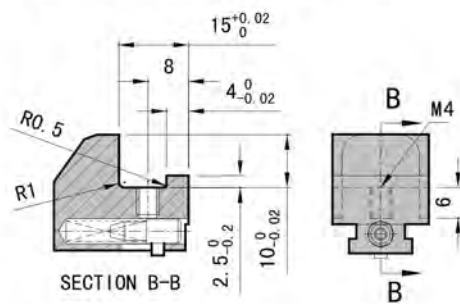
6.8.0
2D



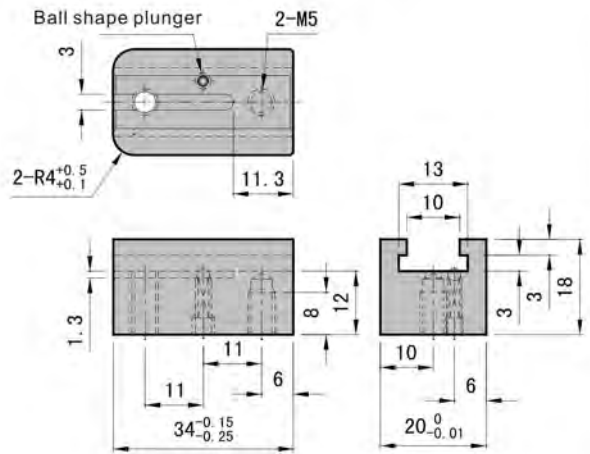
1. Square angle block



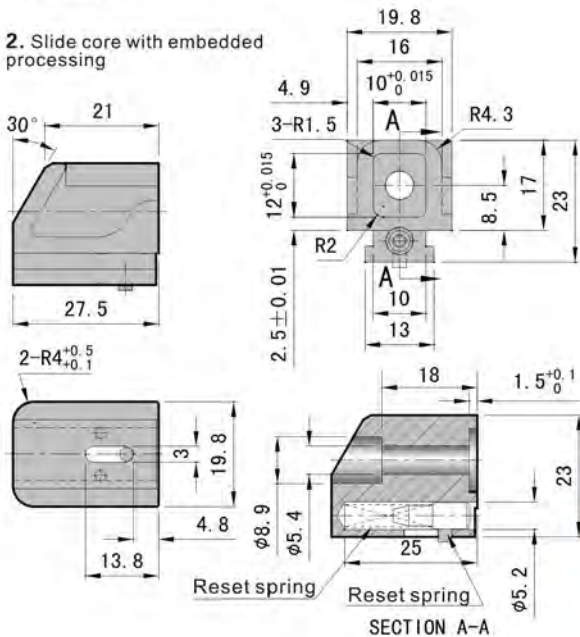
2. Slide core block with screw processing



3. Combined type guide rail



2. Slide core with embedded processing



Order MMSCSB-6-20

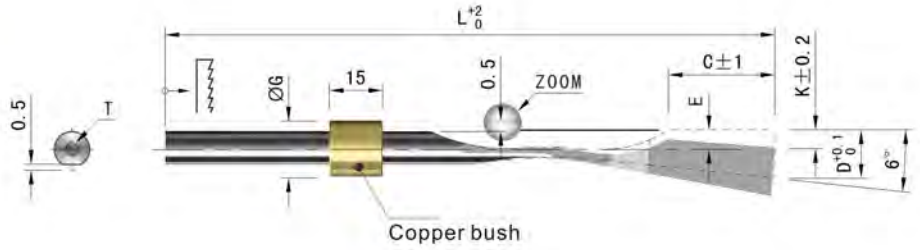
Code	ST	W	@ ¥ / P
MMSCSB-6-20	6	20	
MMSCSBM-6-20			

Remark: Whole sets, just can interchange by itself.

DIN

Sprung cores

PPW



Feature:

1. Simple structure, small installation space, only same as ejector pin size.
2. Easy to install, simplify processing procedure and save cost.
3. Can use it lonely or two pcs to use together.
4. Each code of the sprung core have pad and installed screw.
5. 30 ending code of lengthening sprung core have brass bush.

Order PPW-060622

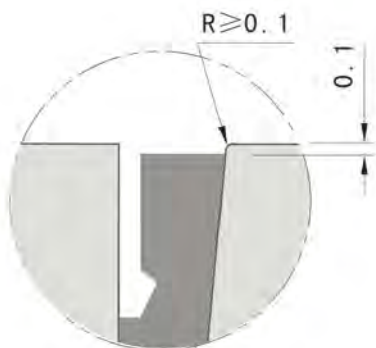
Code	A	B	C	D	E	G	K	L	M	N	R	U	V	T	W	@ ¥/P
PPW-060622			22	9		-	3.5	125	16	18						
PPW-060630			30	10		12	4.5	175	20	26						
PPW-060822	6	6.2	22	9	3.5	-	3.5	125	16	18	1.25	12	5	M4×36	M4×16	
PPW-060830		8.2	30	10		12		175	20	26						
PPW-080825			25	11.5		-		140	18	21						
PPW-081025		10.2	30	11.2	4.5	12	4.5	175	20	26						
PPW-081030	8		25	11.5		-		140	18	21	2	14	6	M5×36	M5×16	
PPW-081225		12.2	30	11.2		12										
PPW-081230			25	11.5		-										
PPW-101430		14.2	30	13.6	5.5	16	5.5	175	20	26						
PPW-101630	10	16.2									2.5	18	8	M6×36	M6×16	
PPW-101830		18.2														

1. When standard parts can't meet real demand, our company can design nonstandard sprung core.
2. If need us to design nonstandard sprung core, please provide plastic products 3D or mould drawing.
3. Any doubt, welcome inquiry us!

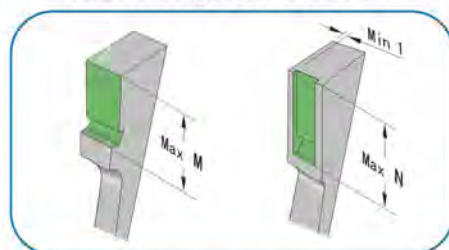


Installation Guidelines:

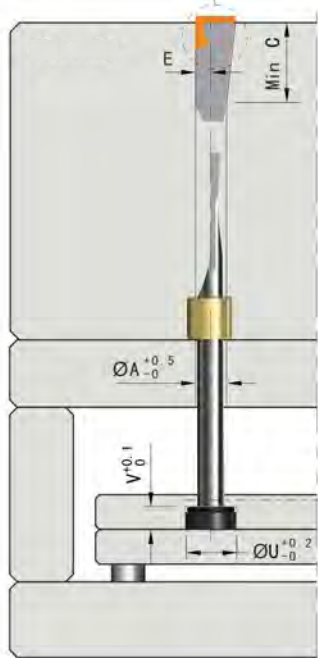
- In order to sure release smoothly, suggest barb position do correspondading withdrawal gradient.
- Sprung core gradient (the reverse side of rubber position) and core completely plying-up(Guarantee plying -up length C value)
- If sprung core too length when install it, can cut off from end, (after cutting off to locking screw depth correspondading is shallow, if cut off long length, need nonstandard custom made)



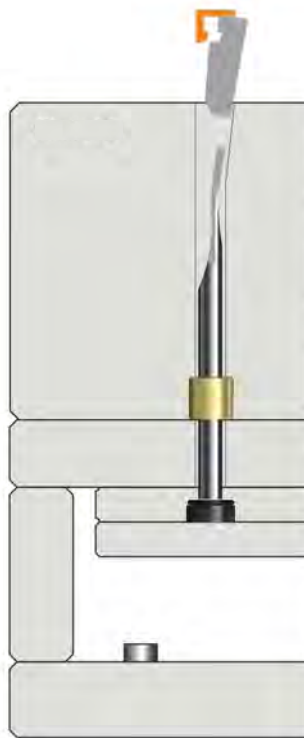
Max.forming position size.



Function chart:



Mold closed



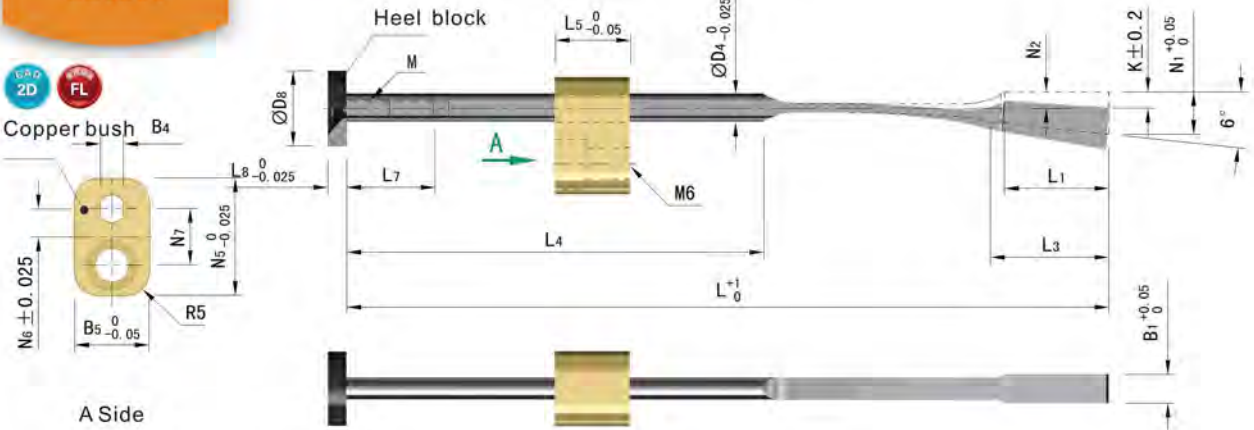
Mold open

Ejector pins
Ejector sleeves
Slide pullers
Latch locks
Flanging gates
Dome strippers
Ap valves series
Ejector series
Cooling elements
Locating parts
Springs series
Guide pins
Guide pins
Guide pins
Chuck series
Mold accessories

DIN

Sprung cores

EE3200



Feature:

1. Simple structure, small installation space, only same as ejector pin size.
2. Easy to install, simplify processing procedure and save cost.
3. Can use it lonely or two pcs to use together. Match use together refer to code EE3202.
4. Each code of the sprung core have pad and installed screw.
5. 30 ending code of lengthening sprung core have brass bush.

Order EE3200-6-9.0-162

B1	N1	L	L1	L3	L4	L5	L7	L8	N2	K
6.2	9	162	22	24.3	88	16	19	4	3.5	3.5
8.2			26	30	111					
10.2			30	33.1	107					
12.2	11.5	200	30	33.1	107	16	19	4	4.5	4.5
14.2			30	33.1	107					
16.2			30	33.1	107					

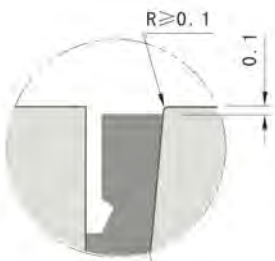
Code	B4	B5	D4	D8	N5	N6	N7	M	@ ¥ / P
EE3200- 6- 9.0-162	4.83		5.94					M4	
EE3200- 8- 9.0-162	5.08		6.35						
EE3200-10-11.5-200		16		16	25	6	12	M5	
EE3200-12-11.5-200	7.37								
EE3200-14-12.5-200									
EE3200-16-12.5-200									

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3. Any doubt, welcome inquiry us!

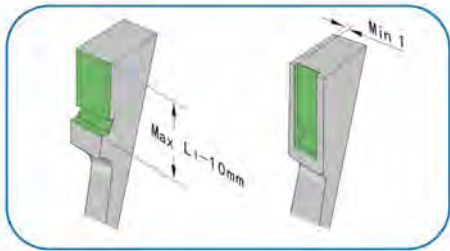


Installation Guidelines:

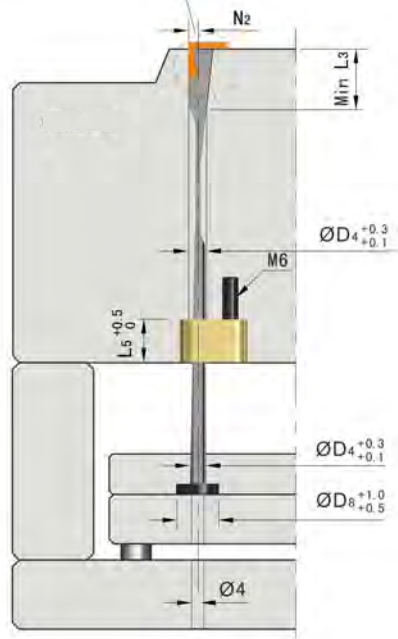
- Install in mould core, must be sure sprung core gradient (the reverse side of rubber position) and core completely plying-up (Guarantee plying -up length L3 value).
- Sprung core stroke K value is show sprung core max highest stroke after completely spray, From max highest the value corresponding became smaller
- All holes position processing and joint face turn into right angle.
- In order to sure release smoothly, suggest barb position do corresponding withdrawal gradient.
- Nonstandard custom made.



Max. forming position size.



Function chart:



Mold closed



Mold open

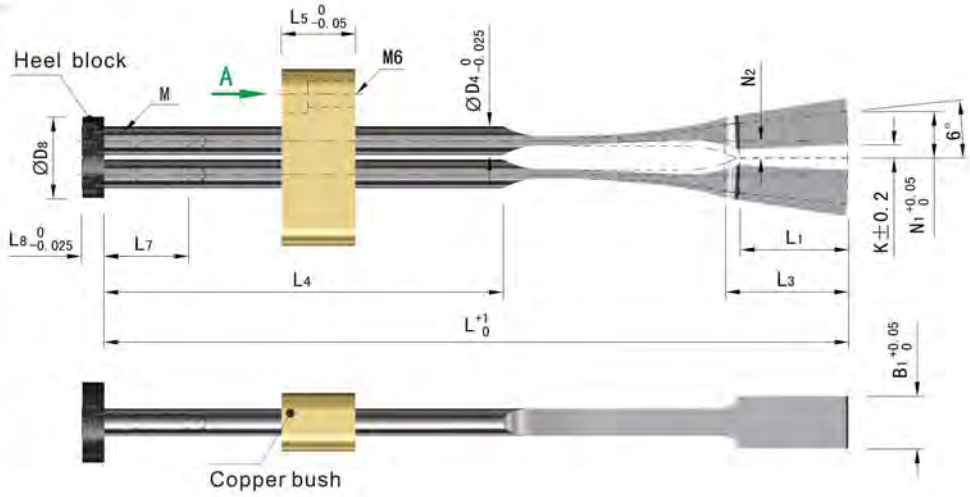
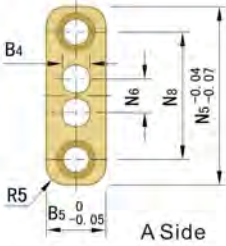
Electric pins series
Circle pin series
Launch tools series
Flanging gate series
Dome stamps Air valves series
Electric series
Cooling elements series
Locating pins series
Springs series
Guide pins Guide bush series
Guide pins (Water pipe) series
Chuck series
Mold accessories

DIN

Sprung cores

EE3202

ISO 2D
FL



Feature:

1. Simple structure, small installation space, only same as ejector pin size.
2. Easy to install, simplify processing procedure and save cost.
3. Each code of the sprung core have pad and installed screw.
4. Two pieces use together can come true double face or more faces barb release mould.

Order EE3202-6-9.0-162

B1	N1	L	L1	L3	L4	L5	L7	L8	N2	L2	N5	N6
6.2	9	162	22	24.3	88				3.5	12.5	45	7
12.2	11.5		26	30.0	111	20	19	6	4.5	16.5		
14.2	12.5	200	30	33.1	107					20	48	9
16.2												

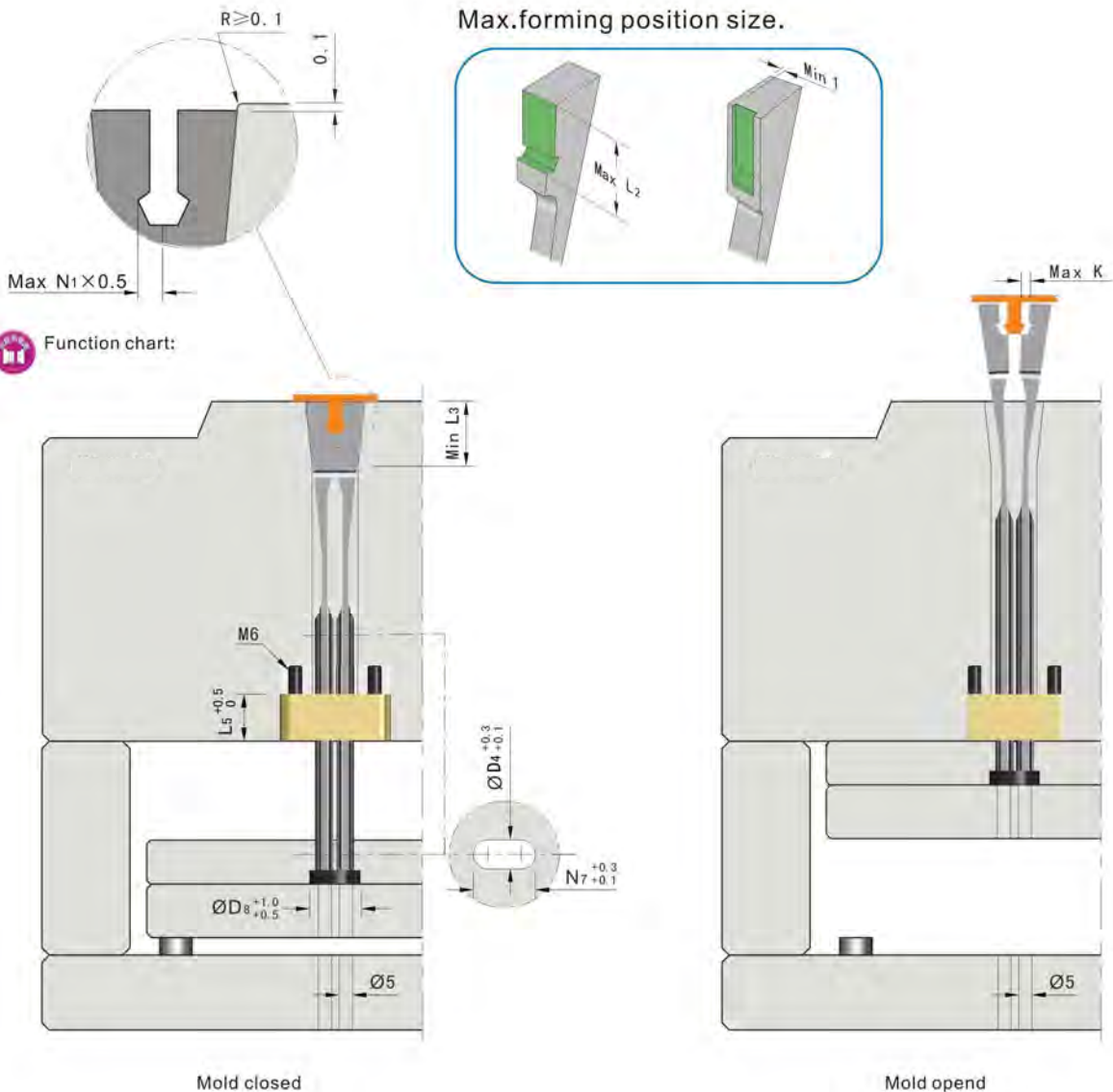
Code	B4	B5	D4	D8	N7	N8	K	M	@ ¥ / P
EE3202- 6- 9.0-162	4.83		5.94	20	13	32.3	3.5	M4	
EE3202-12-11.5-200									
EE3202-14-12.5-200	7.37	16	7.92	22	17	34.3	4.5	M5	
EE3202-16-12.5-200									

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2. If need us to design nonstandard sprung core, please provide plastic products 3D or mould drawing.
3. Any doubt, welcome inquiry us!



Installation Guidelines:

- Install in mould core, must be sure sprung core gradient (the reverse side of rubber position) and core completely plying-up (Guarantee plying-up length L_3 value).
- Sprung core stroke K value is show sprung core max highest stroke after completely spray, From max highest the value correspondading became smaller
- All holes position processing and joint face turn into right angle.
- In order to sure release smoothly, suggest barb position do corresponding withdrawal gradient.
- Nonstandard custom made.

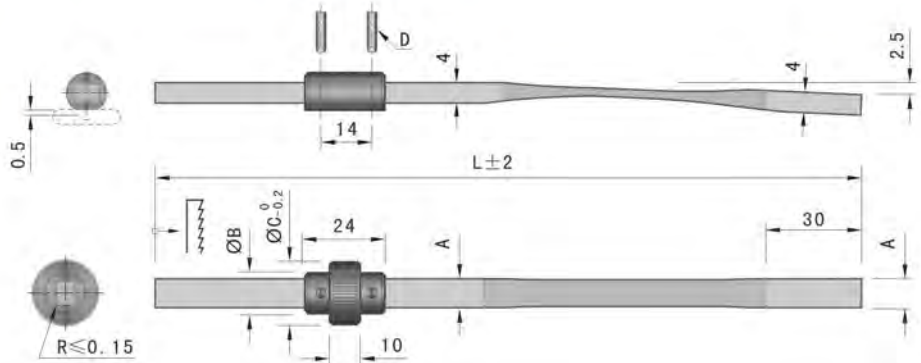


DIN

Sprung cores

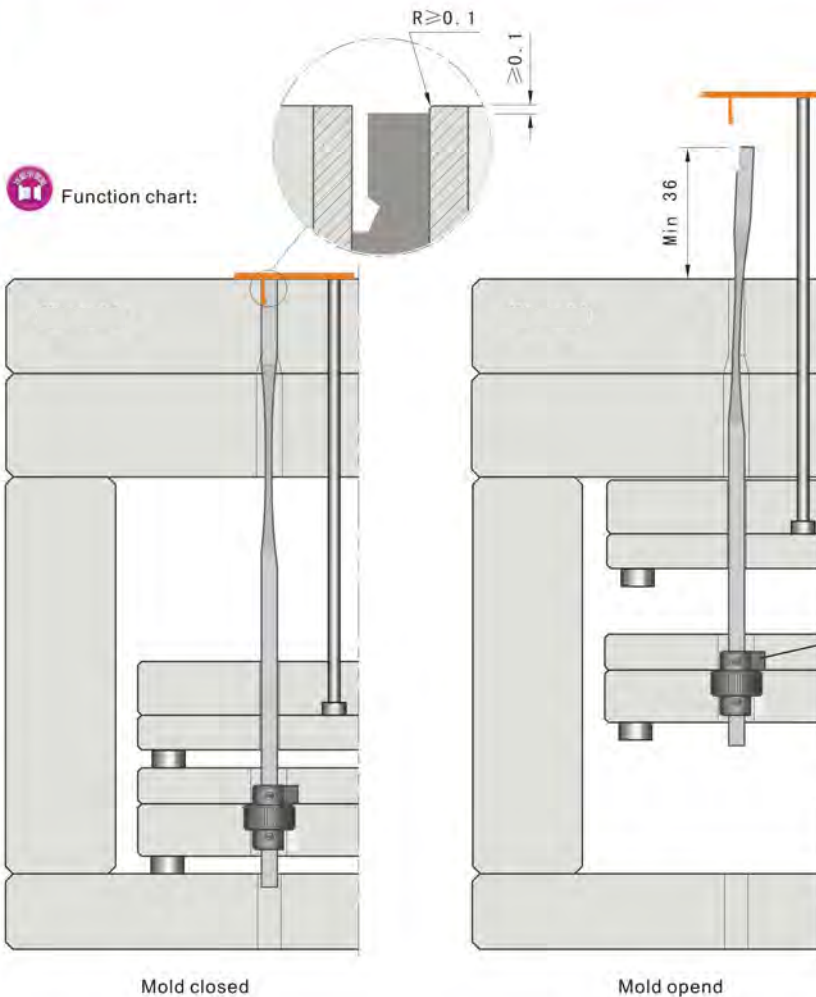
PPF

2D
FL

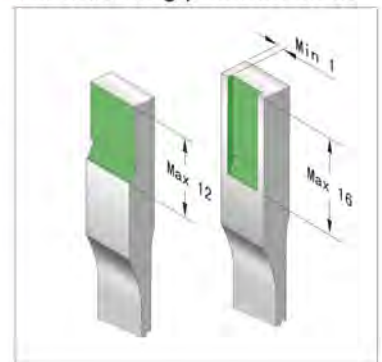


Order PPF-A

Code	A	ØB	C	ØD	L	@ ¥ / P
PPF-06	6	M10×0.75	16	Ø3× 8	150	
PPF-08	8	M12×0.75	18	Ø4×10		
PPF-10	10	M14×0.75	20	Ø4×12		
PPF-12	12	M16×0.75	22	Ø4×14	200	

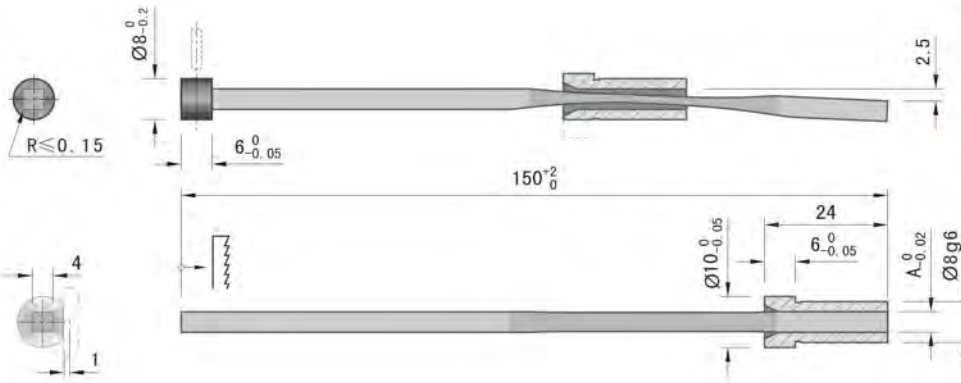


Max.forming position size.



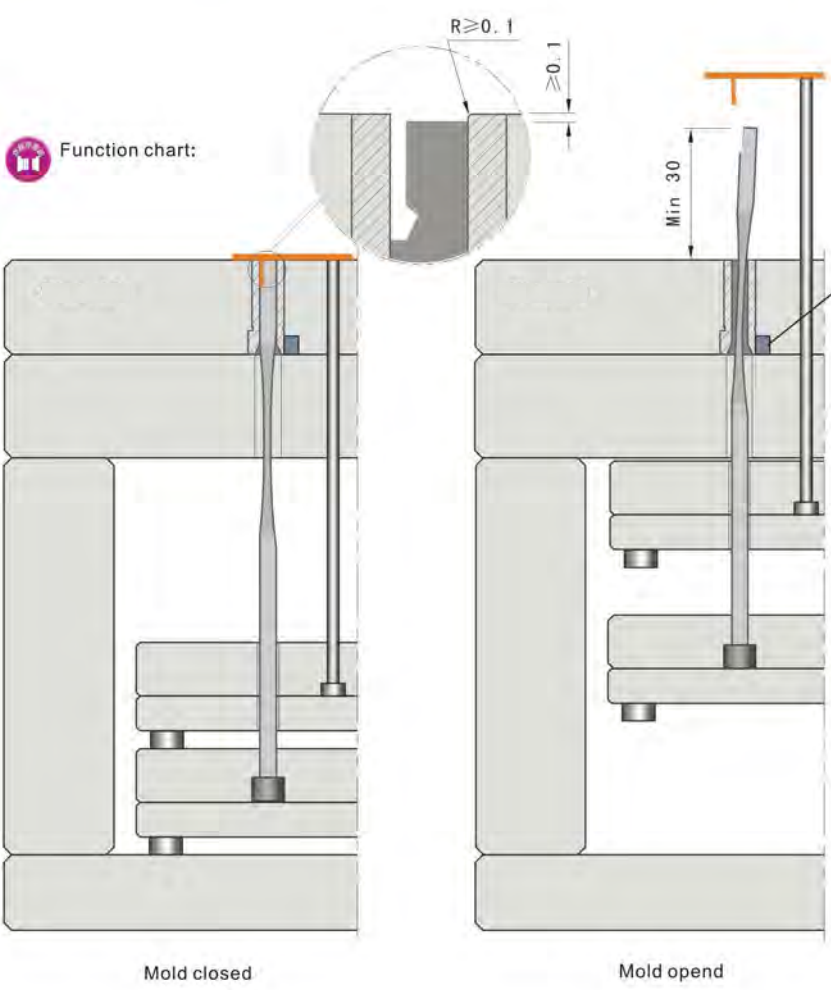
- No this heel block, have to processing and match to do by oneself.
- Function:when sprung core completely ejector,prevent sprung core unexpected move to break.

DIN
Sprung cores



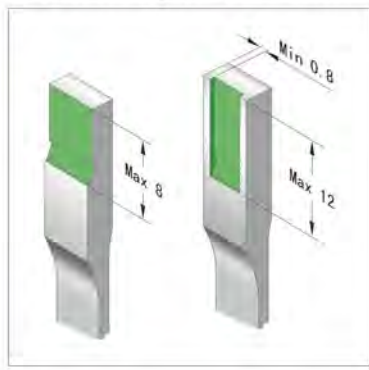
Order MMP-044150

Code	A	@ ¥ / P
MMP-044150	4	
MMP-054150	5	



- No this pad, have to processing and match to do by oneself.
- Function: when sprung core completely ejector, prevent sprung core unexpected move to break.

Max. forming position size.



- Ejector pins
- Ejector sleeves
- Slide rollers
- Slide rollers series
- Lunch tools
- Pairing gates
- Done stamp
- AV valves series
- Ejector series
- Cooling elements
- Locating parts
- Springs series
- Guide pins
- Guide pins
- Guide pins
- Wear plate series
- Chuck series
- Mold processors

DIN

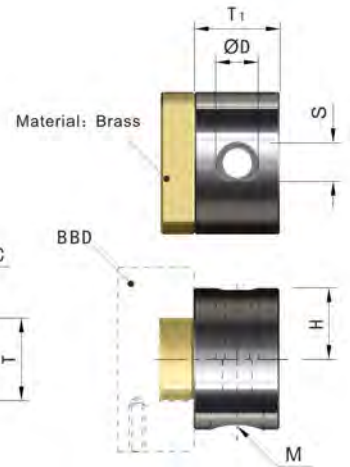
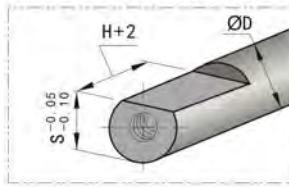
Slide core units

DDF

ISO 2D



Suit for Flat core blades



Feature:

1. Slide parts adopt high strength brass made, durable in use.
2. Safety and stable fixed angle bar, same ejector pin plate usage space.

Order DDF-D-T1-C Material:SKD61 Hardness:51±3HRC

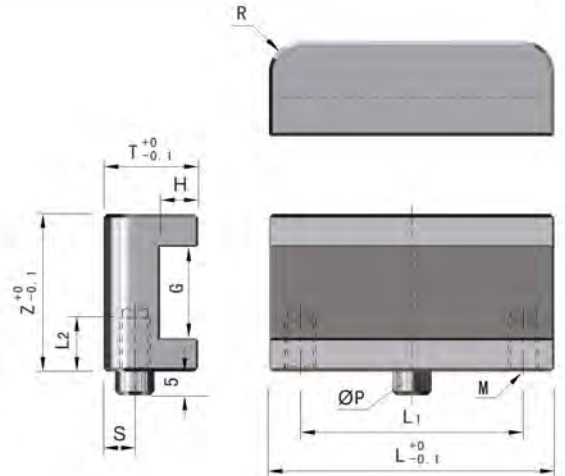
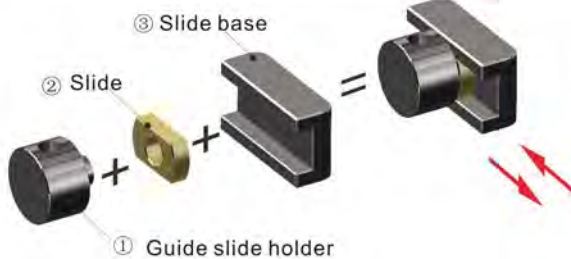
Code	D	T1	C	T	H	S	M	@ ¥/P
DDF-061220	6					5.5	M 4×12	
DDF-081220	8	12	20	11.5	10	7.5	M 5×12	
DDF-101624	10					9.5	M 6×16	
DDF-121624	12	16	24	13.5	12	11	M 8×16	
DDF-162032	16	20	32	19	16	14.5	M 8×22	
DDF-202538	20	25	38	21	19	18.5	M10×25	
DDF-253148	25	31	48	28	24	23	M12×35	

BBD

ISO 2D



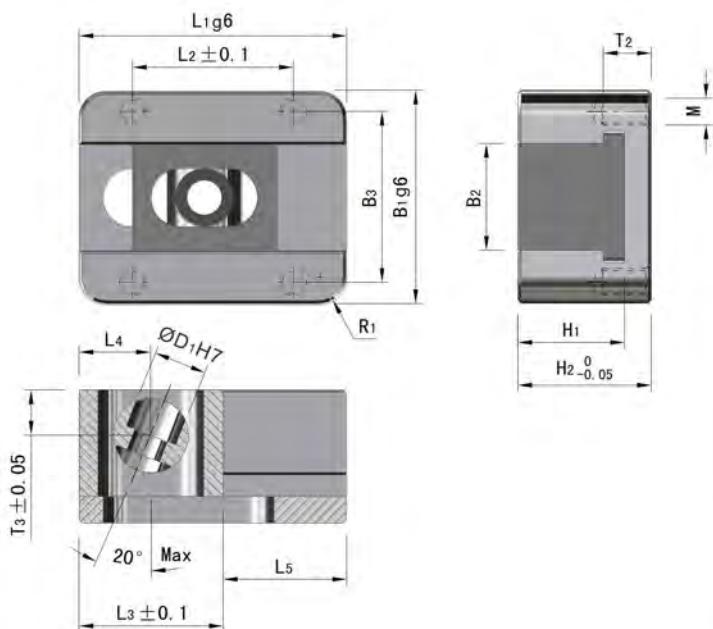
Product space chart:



Order BBD-T-Z-L Material:S45C Hardness:≈45HRC

Code	T	Z	L	S	H	G	L2	P	R	L1	M	@ ¥/S
BBD-122036	12	20	36		4.8	11.5	10	Ø 5×12	4	28	M 5	
BBD-142266	14	22	66	4	6.3	13.5	12			42		
BBD-162440	16	24	40		6.3	13.5	12	Ø 6×14	5	30	M 6	
BBD-203260	20	32	60	5	8.3	19	15			44		
BBD-253872	25	38	72	7	10.3	21	18	Ø 8×18	6	56	M 8	
BBD-314890	31	48	90	8	13.3	28	18	Ø10×28	8	74	M10	

ZZ1811

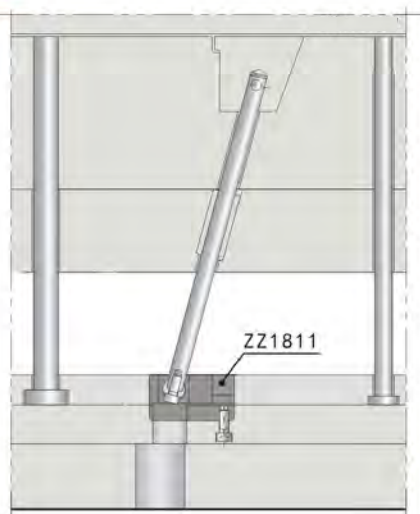


Order ZZ1811-D1

D1	B1	B2	B3	H1	H2	L1	L2	L3	L4
10	40	20	32	20	25	50	30	27	13.5
14	48	25	39	28	35	70	50	35	17.5

Code	D1	L5	T2	T3	R1	M	@ ¥/P
ZZ1811-10	10	23	10	8.5	5	M5	
ZZ1811-14	14	35	12	12.5	6	M6	

Installation Diagram:



- Feature:**
1. Compare with DTK, KOCU-F etc slide units, the ZZ1811 with more flexibility and can work from 0-20°.
 2. Simple structure and easy to install.

Product space chart:

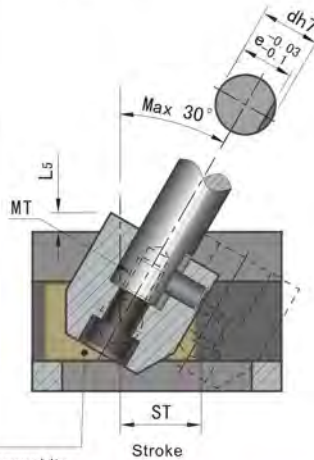
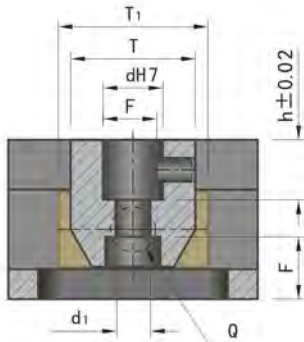
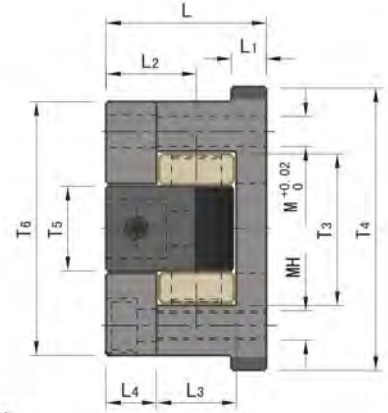
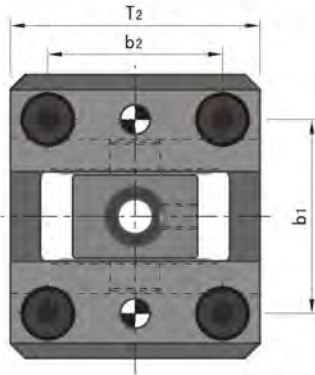


- Injector pins
- Slide railers
- Latch locks
- Pouring gate
- Dome stamps
- Air valves series
- Injector series
- Cooling elements
- Locating parts
- Springs series
- Guide pins
- Guide strips
- Chuck series
- Mold accessories

JIS

Slide core units

DTK



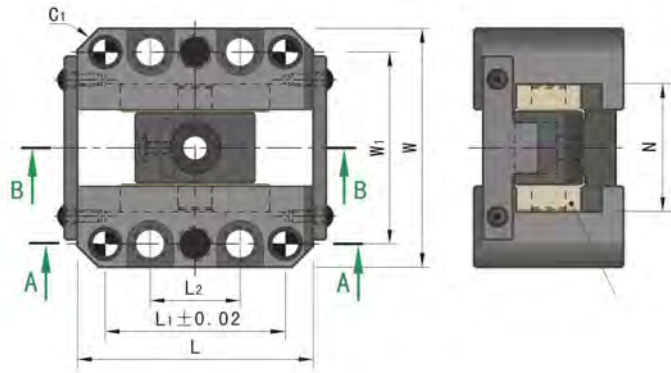
Self lubrication plate: brass+graphite

This type of slide core unit is fitted to the ejector plate, contain the molding lifter plate parts, after molding, eject the inner uneven slide core with the slide plate parts within the slide stroke, then the plastic can be push out from the mold.

Order DTK-8 Material:S45C

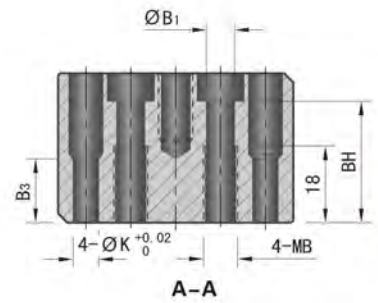
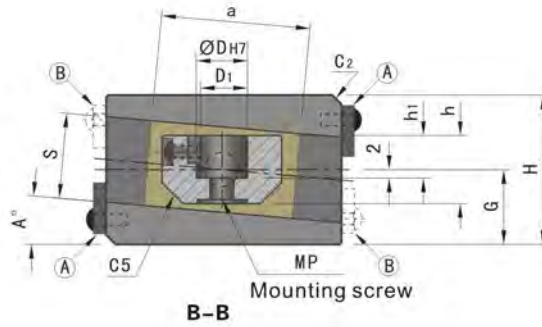
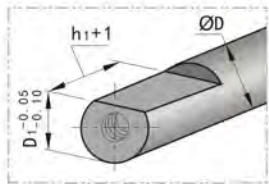
Ød	T	T1	T2	T3	T4	T5	T6	L	L1	L2	L3	L4	L5	ØM
8	20	20	32	19	33	11	30	22	5	12.5	11	7	10.5	3
10	25	25	45	25	45	15	40	27	7	15.5	15	8	11.3	4
12	30	30	50	31	57	17	51	32	8	18	16	10	4	6
16	30	40	65	38	65	22	58	36	11	20	20	12	5	8
20	40	50	80	44	80	26	72	42	15	23	22	12	8	8
25	45	55	90	52	93	32	85	50	15	28	26	15	9	10
30	50	60	100	60	101	38	93	55	15	30	30	18	10	10
35	60	75	120	70	120	45	110	62	15	35	34	18	10	10
40	70	85	135	80	130	55	120	70	15	40	44	20	12	10
45	80	95	150	90	140	60	130	80	15	45	50	20	14	10

Code	Ød	h	ØQ	Ød1	b1	b2	e	F	Stroke	MT	MH	@ ¥/P
DTK-08	8	8	7	4.5	24	20	7	10	10	M 4	M 3	
DTK-10	10	10	7	5.5	32	30	9	12.5	18	M 5	M 4	
DTK-12	12	12	10	7	39	35	11	15	20	M 6	M 6	
DTK-16	16	16	12	9	46	40	14.5	15	25	M 8	M 6	
DTK-20	20	20	14	11	56	55	18	16	30	M10	M 8	
DTK-25	25	25	16	14	66	65	22.5	17	35	M12	M10	
DTK-30	30	30	18	14	74	70	27	17	40	M12	M10	
DTK-35	35	35	20	18	85	80	32	18	45	M16	M12	
DTK-40	40	40	25	18	95	90	36	19	50	M16	M12	
DTK-45	45	45	30	18	105	110	40	24	55	M16	M12	



Self lubrication plate: brass+graphite

Suit for Flat core blades

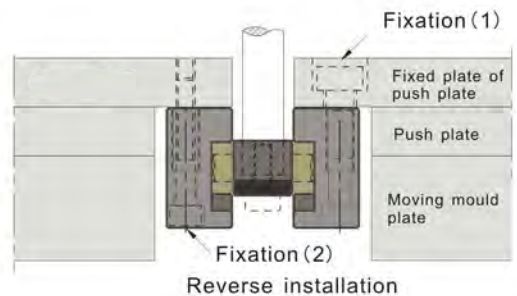
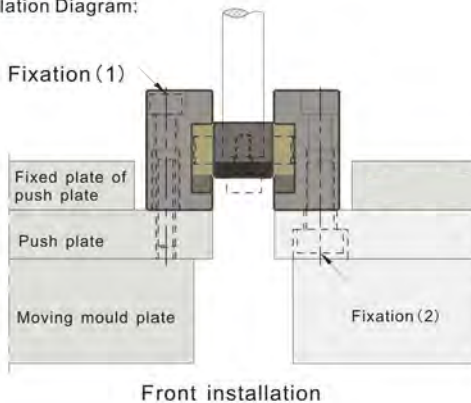


Order SSCZN-D-A° Material: S45C

D	W	L	H	C1	C2	D1	d	h	h1	N	S	a	G	K
12	56	55	35	5	-	11	5.5	16	10	30	20	35	17.5	6
16	60	65	36	6	5	15	9	18	11	33	24	40	18	8
20	68	70	43			18	13	38	21.5					
25	75	80	45			22	15	45	22.5					
30	81	95	54			27.5	17	51	27					

Code	D	L1	L2	W1	B1	B3	BH	MB	A°	Block installation position		MP	@ ¥/P
										(A)	(B)		
SSCZN	12	42	21	45	6.6	15	28.5	M 8	0 1 2 3 4 5 6 7 8 9 10	0°-10°	-	M 5	
	16	46	25	48			29.5			M 8			
	20	50	35	55	34.5	4°-10°	0°-3°			M 10			
	25	60	50	62	36.5	0°-10°	-			M 10			
	30	75	50	68	8.6	20	45.5	M10					

Installation Diagram:



JIS

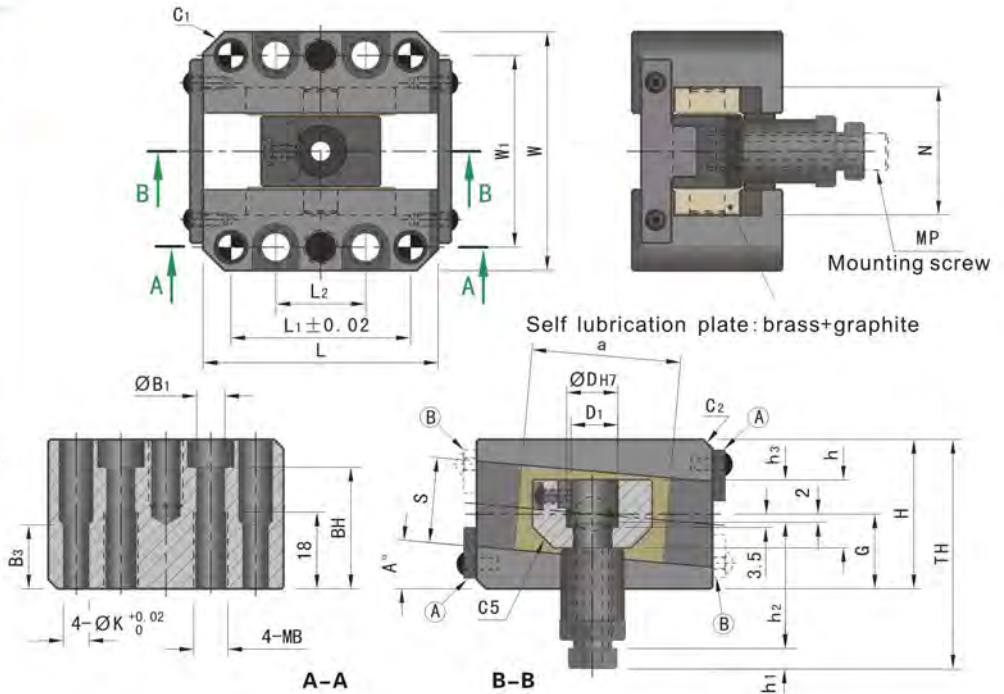
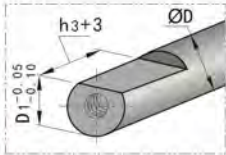
Slide core units

SSCZA

CSG 2D
FL



Suit for Flat core blades



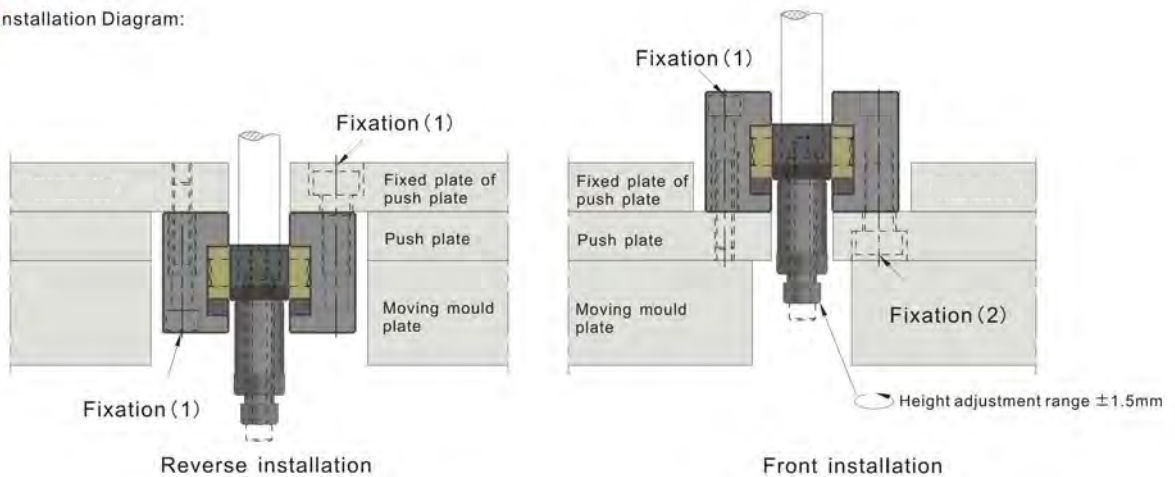
Order SSCZA-D-A° Material: S45C

D	W	L	H	C1	C2	D1	d	h	h1	h2	h3	N	S	a	TH
12	56	55	35	5	-	11	5.5	16			10	30	20	35	58.5
16	60	65	36			15	9	18			11	33			59
20	68	70	43	6		18		22	6	36	13	38	24	40	65.5
25	75	80	45		5	22	11	26		39	15	45	26	45	69.5
30	81	95	54			27.5		30		41	17	51	30	55	76

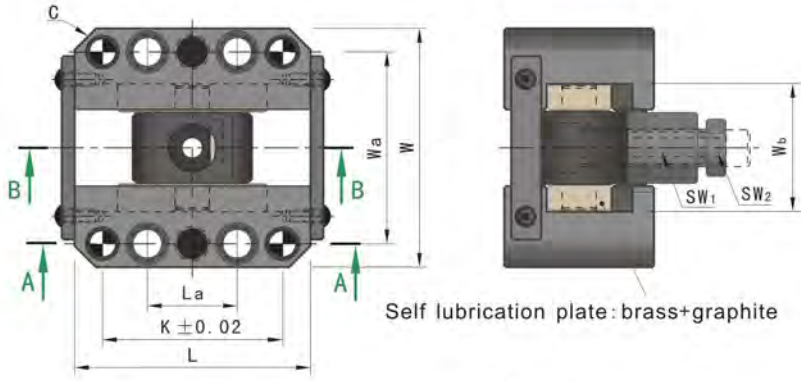
Code	D	L1	L2	W1	B1	B3	BH	G	K	MB	MP	Block installation position		A°	@ ¥/P
												(A)	(B)		
SSCZA	12	42	21	45	6.6	15	28.5	17.5	6	M 8	M 5 M 8	0°-10°	-	0 1 2 3	
	16	46		48			29.5	18							
	20	50	25	55			34.5	21.5	8	M10	M10	4°-10°	0°-3°	8 9 10	
	25	60	35	62	8.6	20	36.5	22.5							0°-10°
30	75	50	68			45.5	27								



Installation Diagram:

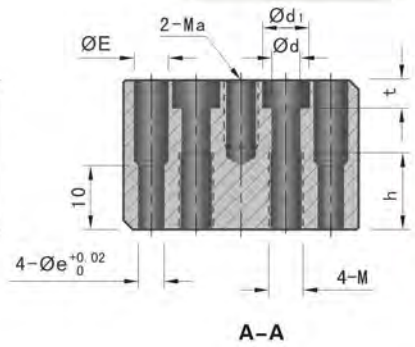
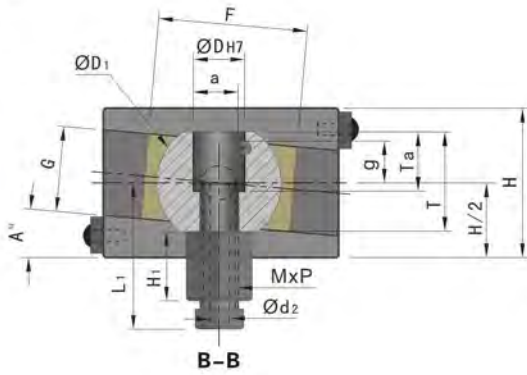
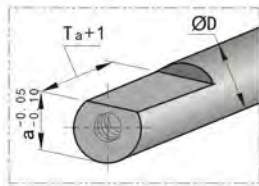


KKOCUM



Self lubrication plate: brass+graphite

Suit for Flat core blades



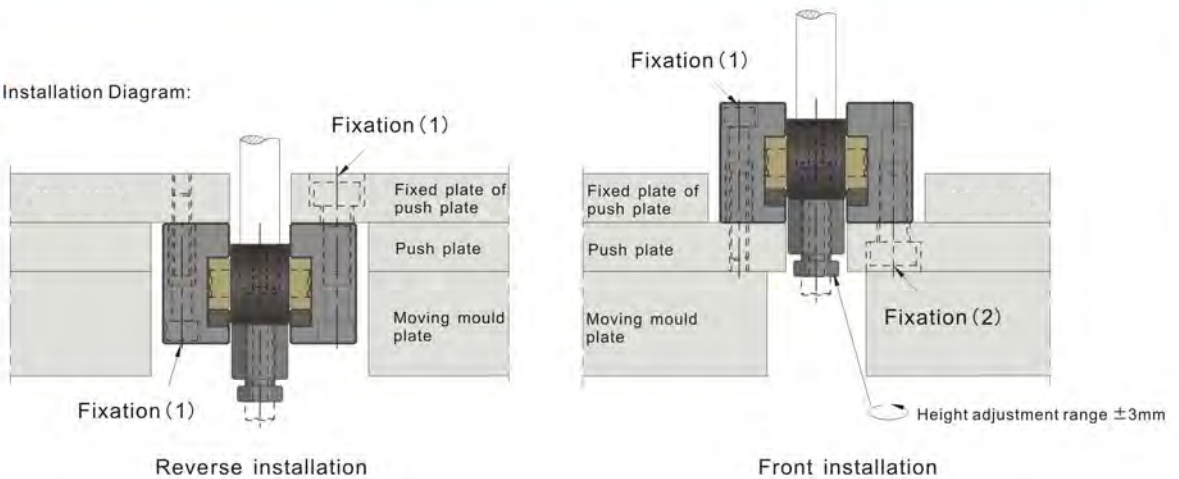
Order KKOCUM-D-A° Material:S45C

D	W	Wa	Wb	L	La	L1	K	C	d	d1	d2	H	H1	h	E	e
16	64	50	36	70	25	42	50	6	6.6	11	9	40	21	20	6.6	6
20	76	60	43	75	30	45	55				11	46				
25	81	65	48	85	40	49	65	8	8.6	14	13	48	21.5	25	9	8
30	88	72	55	100	50	55	80					54	26			

D	T	Ta	t	a	G	g	F	D1	Sw1	Sw2	M	Ma	MxP	A	@ ¥/P	A	@ ¥/P
16	24	15	6.5	13	10	10	45	30	17	14	M 8	M 8	M14×1.5	increments of 0°		increments of 1°	
20	30	18	7	17	13	13	45	40	22	19			M18×1.5			1°-10°	
25	35	20.5	8.5	22	14	14	50	45	27	22	M10	M10	M22×1.5				
30	38	22	10	27	15	15	60	50	32	27			M27×1.5				



Installation Diagram:



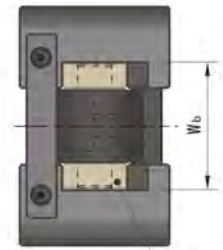
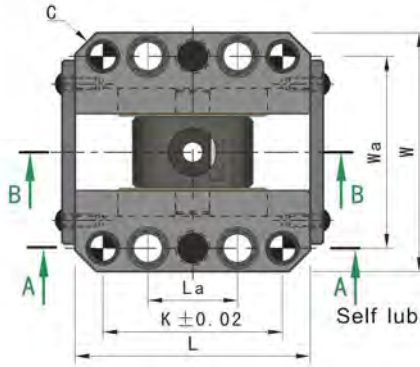
Reverse installation

Front installation

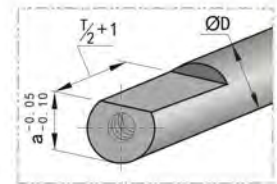
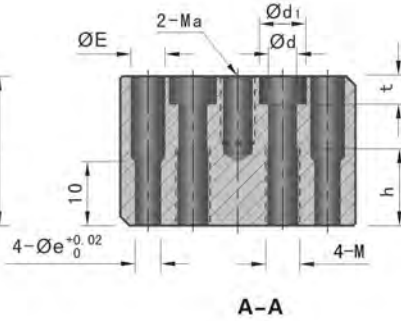
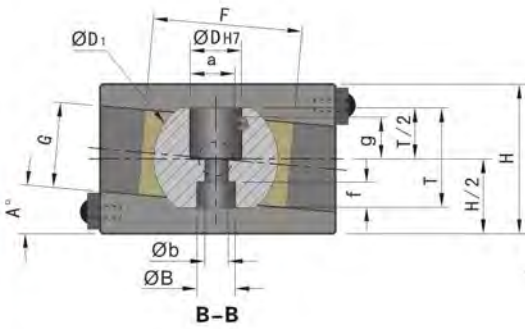
JIS

Slide core units

KKOCUF



Self lubrication plate: brass+graphite

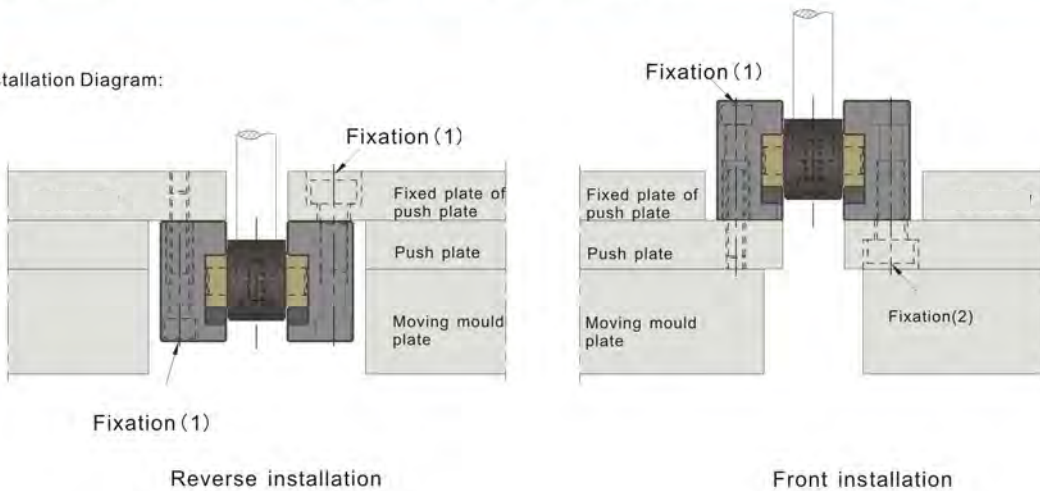


Order KKOCUF-D-A° Material: S45C

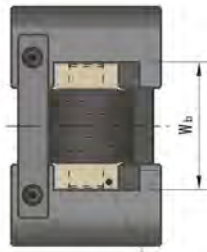
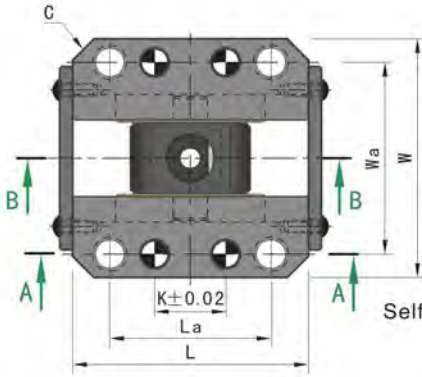
D	W	Wa	Wb	L	La	K	C	d	d1	H	h	E	e	t
16	64	50	36	70	25	50	6	6.6	11	40	20	6.6	6	6.5
20	76	60	43	75	30	55				46				
25	81	65	48	85	40	65	8	8.6	14	48	25	9	8	8.5
30	88	72	55	100	50	80				54				

D	D1	a	B	b	g	F	f	G	T	M	Ma	A	@ ¥/P	A	@ ¥/P
16	30	13	16	9	10	45	6	24	24	M 8	M 8	0°		1°-10°	
20	40	17	20	11	13	50	8	26	30						
25	45	22	25	14	14	60	9.5	26	35	M10	M10				
30	50	27		15	15		9	30	38						

Installation Diagram:

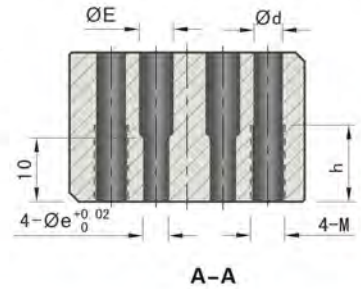
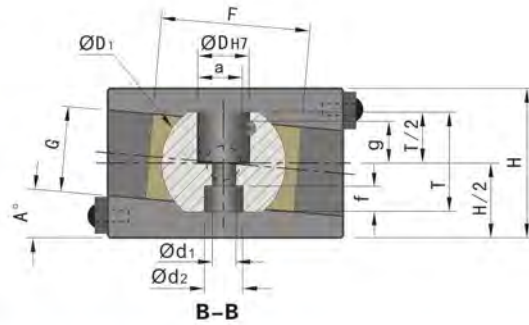
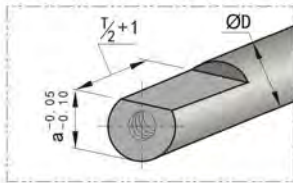


RRCSUF



Self lubrication plate: brass+graphite

Suit for Flat core blades



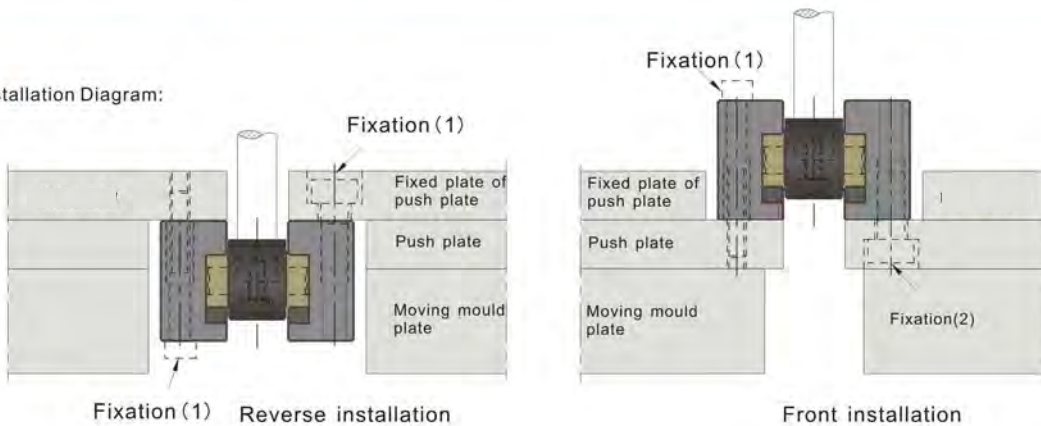
Order RRCSUF-D-A° Material:S45C

D	W	Wa	Wb	L	La	K	C	D1	d	d1	d2	h	H		
													0°-10°	11°-15°	16°-20°
10	45	36	26	50	30	16	3	20	3.5	6	10	14	28	-	-
12	51	40	29	60	40	20	4	25	6.6	7	12	20	35	41	48
16	54	44	33	65	38	18	8	30	8.6	9	16	25	40	47	55
20	64	51	38	70	42	20	10	45		11	20	25	44	52	61
25	70	58	45	80	45	20	10	45	14	14	25	30	54	62	72
30	78	64	51	100	70	40	8	50					55	60	70
35	92	75	58	115	85	50	8	55	10.6	18	32	30	65	78	90
40	100	82	66	125	85	50	8	60	10.6	18	32	30	65	78	90

Code	D	T	G	F	f	E	e	p	a	g	M	A	@ ¥/P	
													A	@ ¥/P
RRCSUF	10	16	17	28	3	6	5	3	8.5	6.5	M 5	0°-5°		
	12	20	20	36	5	6.6	6	4	10	8	M 8			
	16	24	20	40	6	9	8	6	13	10	M10			
	20	30	24	40	7				17	13				
	25	35	26	45	9.5	11	10	8	22	14	M12			
	30	38	30	50	9				27	15				
	35	40	34	55	10	11.5	10	8	31	15				
	40	43	38	60	11.5				36	16				



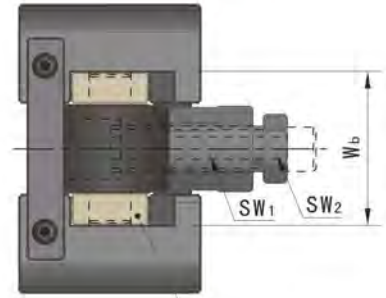
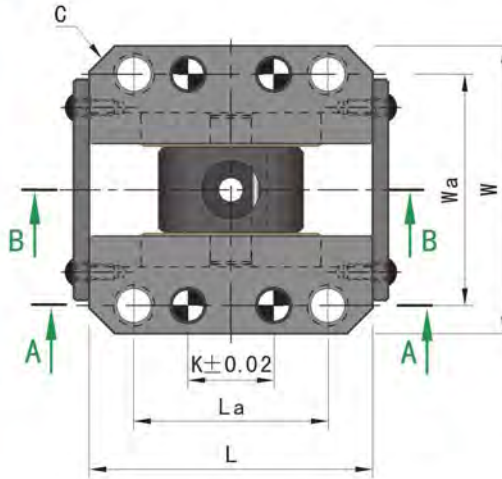
Installation Diagram:



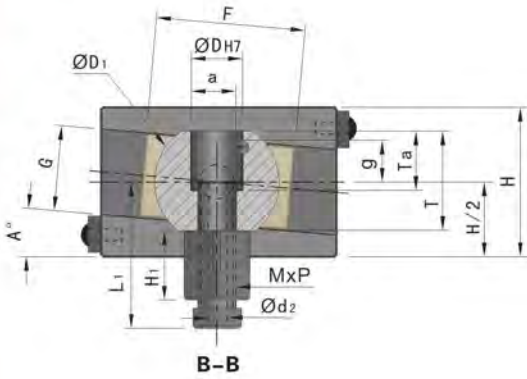
JIS

Slide core units

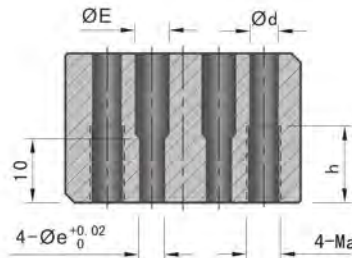
RRCSUM



Self lubrication plate: brass+graphite

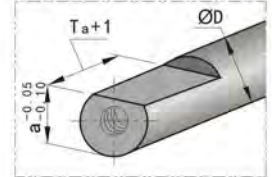


B-B



A-A

Suit for Flat core blades



Order RRCSUM-D-A° Material:S45C

D	W	Wa	Wb	L	La	C	D1	d	d2	E	e	K
16	54	44	33	65	38	8	30	6.6	9	6.6	6	18
20	64	51	38	70	42		40		11			
25	70	58	45	80	45	10	45	8.6		9	8	20
30	78	64	51	100	70		50		13			40
35	92	75	58	115		8	55	10.6		11	10	50
40	100	82	66	125	85		60		17			

D	h	T	Ta	G	F	a	g	Sw1	Sw2	Ma
16	20	24	15	20	40	13	10	17	14	M 8
20		30	18	24		17	13	22	19	
25	25	35	20.5	26	45	22	14	27	22	M10
30		38	22	30	55	27	15	32	27	
35	30	40	23	34	70	31		36	32	M12
40		43	24.5	38		36	16	41	38	

D	H			H1		L1		MxP	A Inclination (°)	@ ¥/P	A Inclination (°)	@ ¥/P
	0°-10°	11°-15°	16°-20°	0°-10°	11°-20°	0°-10°	11°-20°					
16	35	41	48	21	28	42	50	M14×1.5	0°		1°-20°	
20	40	47	55		29	45	54	M18×1.5				
25	44	52	61	21.5	30.5	49	59	M22×1.5				
30	54	62	72	25	35	54	64	M27×1.5				
35	60	70	82	28	38	58	68	M30×1.5				
40	65	78	90	29	39	60.5	70.5	M36×1.5				

JIS

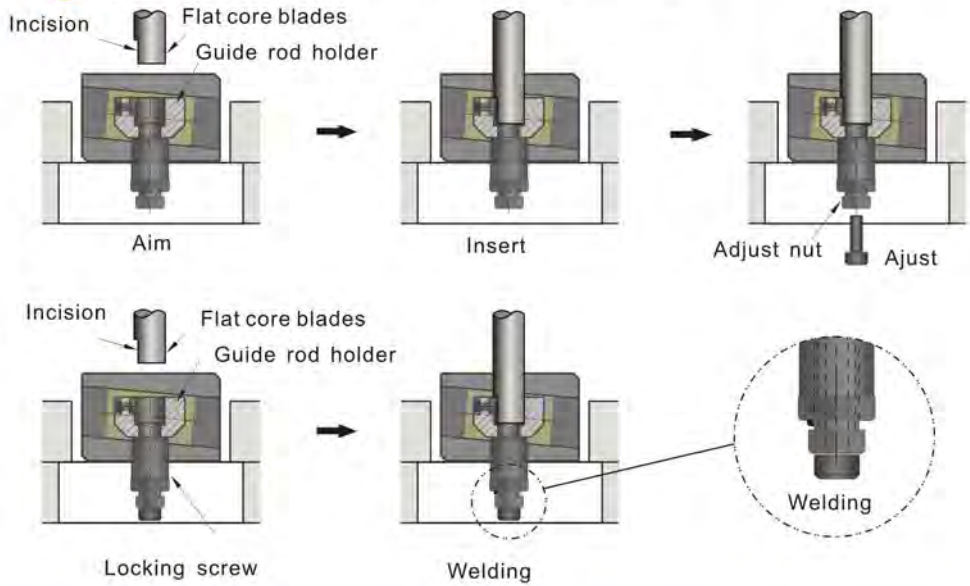
Slide core units

RRCSUM



Installation Diagram:

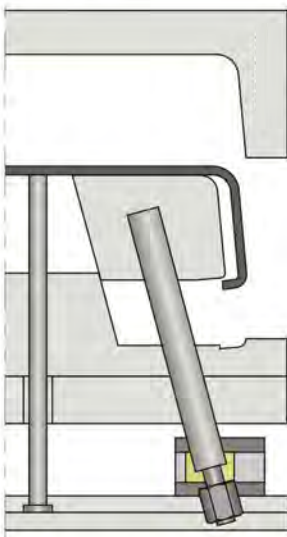
Flat core blades: adjustable type



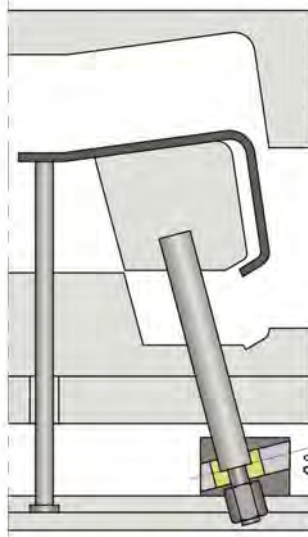
Angle bar installation method:

- The cut of angle bar alignment check rotating surface of angle bar fixed base.
- Angle bar insert into angle bar fixed base to make sure position
- Revolve adjustable nut to confirm angle bar position, (According to different code to adjust height, please refer to code illustration.
- Locking nut, at the same use head cap screw fixed angle bar.
- Please adjust nut and locking nut weld to avoid angle bar loosen.

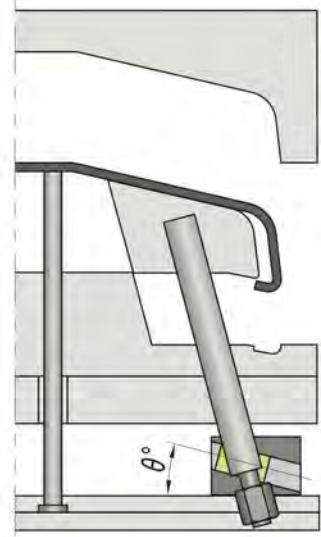
Example:



Drawing 1:0 Angle(level)



Drawing 2:With angle(descend)



Drawing 3:With angle(ascend)

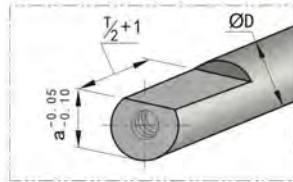
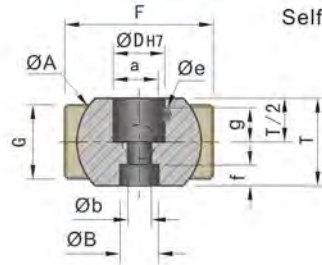
**KKPHF
RRCPHF**

ISO
2D



Self lubrication plate: brass+graphite

Suit for Flat core blades



Order **KKPHF-D** Material:S45C

D	W	Wa	F	t	G	A	a	T
8	24	12	25	6	13		7.5	
10	28	14	32	7	17	20	8.5	16
12	31	17	40		20	25	10	20
16	36	21	45		24	30	13	24
20	43	28		7.5	40	40	17	30
25	48	33	50		26	45	22	35
30	55	38	60	8.5	30	50	27	38
35	64	44	70	10	34	55	31	40
40	72	50	80	11	38	60	36	43

Code	D	g	f	B	b	e	S.H.C.S Mounting screws	@ ¥/P
KKPHF	8		5	10	5		M 4×10	
	10	6.5	4	12	6	3	M 5×12	
	12	8.5	5	13	7		M 6×14	
	16	10	6	16	9	4	M 8×20	
	20	13	8	20	11		M10×25	
	25	14	9.5			6		
	30	15	9	25	14		M12×30	
	35	15	10					
	40	16	11.5	32	18	8	M16×35	

Order **RRCPHF** Material:S45C

D	W	Wa	F	t	G	A	a	T
10	26	14	28		17	20	8.5	16
12	29	17	36	6	20	25	10	20
16	33	20	40		24	30	13	24
20	38	25		6.5	26	40	17	30
25	45	30	45	7.5	30	45	22	35
30	51	36	55		34	50	27	38
35	58	42	70	8	38	55	31	40
40	66	48		9		60	36	43

Code	D	g	f	B	d	e	S.H.C.S Mounting screws	@ ¥/P
RRCPHF	10	6.5	3	10	6	3	M 5×12	
	12	8	5	12	7	4	M 6×14	
	16	10	6	16	9		M 8×20	
	20	13	7	20	11		M10×25	
	25	14	9.5			6		
	30	15	9	25	14		M12×30	
	35	15	10					
	40	16	11.5	32	18	8	M16×35	

JIS

Slide core units

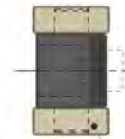
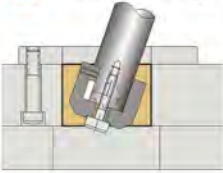
SSCZNP



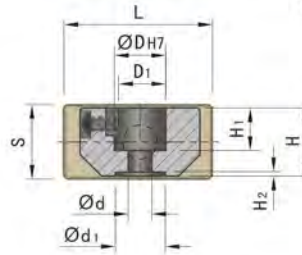
CRG 2D



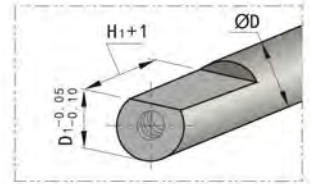
Installation Diagram:



Self lubrication plate: brass+graphite



Suit for Flat core blades



Order SSCZNP-D Material: S45C

Code	D	D1	d	d1	H	H1	H2	W	W1	S	L	T	@ ¥/P
SSCZNP	12	11	5.5	-	16	10	-	30	17	20	35	6.5	
	16	15	9	16	18	11	3	33	20	24	40	7	
	20	18			22	13	5.5	38	25	26	45	7	
	25	22	11	20	26	15		45	31	26	45	7	
	30	27.5			30	17	3.5	51	36	30	55	7.5	

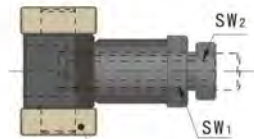
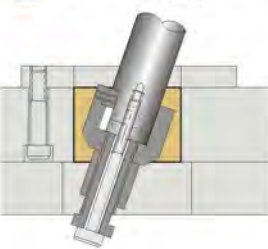
SSCZAP



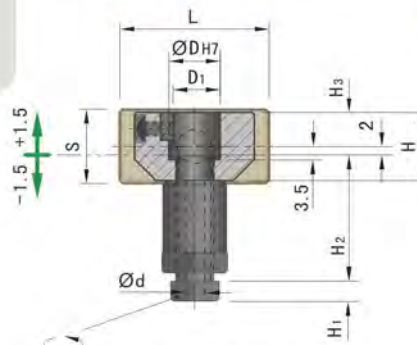
CRG 2D



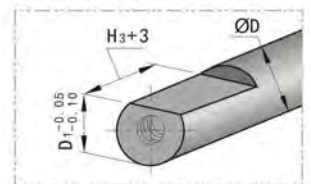
Installation Diagram:



Self lubrication plate: copper+graphite



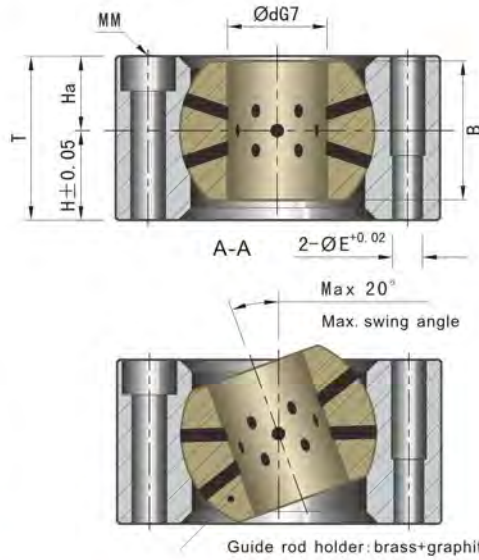
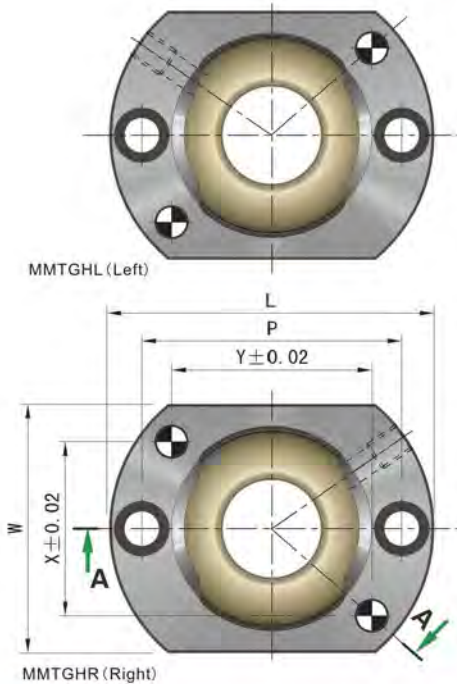
Suit for Flat core blades



Order SSCZAP-D Material: S45C

Code	D	D1	d	H	H1	H2	H3	W	W1	S	L	T	SW1	SW2	@ ¥/P
SSCZAP	12	11	5.5	16				30	17	20	35		17	12	
	16	15	9	18				33	20	24	40	6.5	21	16	
	20	18		22	6			36	25	26	45	7	24	19	
	25	22	11	26				39	31	26	45	7	24	19	
	30	27.5		30				41	36	30	55	7.5			

MMTGHL
MMTGHR



1. It is recommended to use the combination of Slide core unit similar with DTK series, apply to Large die and mold.
2. The inclined pin has angle of 0° to 20° , easy for installation, and with its Graphites inserts, it can reduce friction when the inclined pin moving.

3. The usage of MMTG & MMTGH, it reduce the swing due to the length of inclined pin. Load concentrated at guide bearing end, increase of upward resistance.

Order MMTGHL-d Material:S45C

d	W	L	T	H	Ha	L	B	e	p
25	57	85	42	21	21	33			64
30	65	94	48	24	24	37		8	72
35	72	98	54	27	27	40			78
40	77	106	58	29	29	44			84
50	88	124	66	33	33	48		10	102

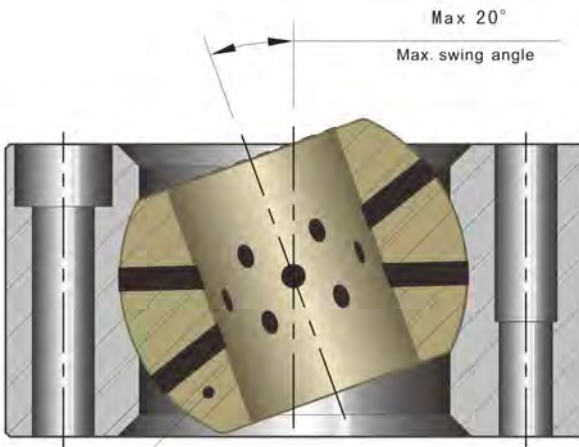
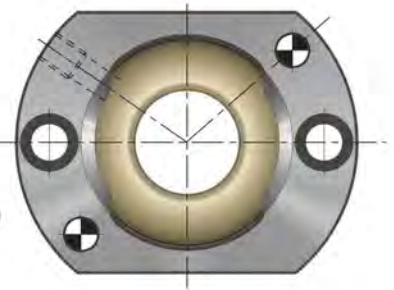
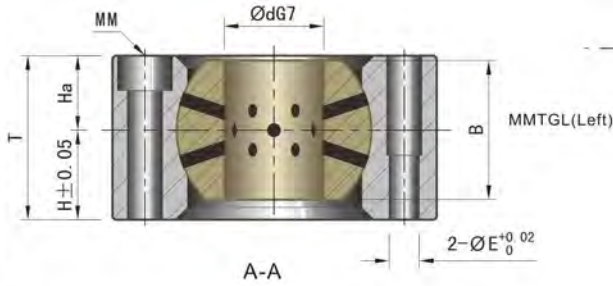
Code	d	X	Y	MM	Dowel pin	Mounting screws	@ ¥/P
MMTGHL	25	42	50	M10	Ø 8×30	M10×45	
	30	48	55			M10×55	
	35	52	60			M10×60	
MMTGHR	40	55	65	M12	Ø10×40	M10×65	
	50	65	78			M12×65	

Old version code	New code
MMTG(right)	MMTGL (left)
	MMTGR (right)
MMTGH(right)	MMTGHL(left)
	MMTGHR(right)

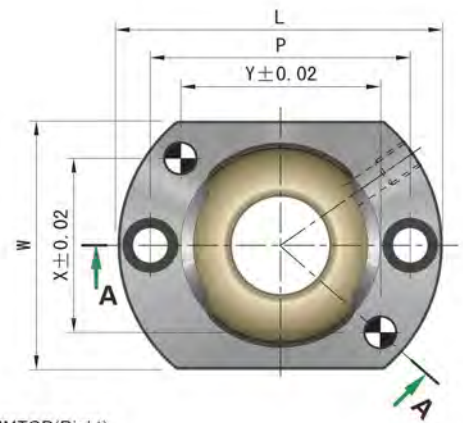


Slide core units

MMTGL
MMTGR



Guide rod holder: brass+graphite



MMTGR(Right)

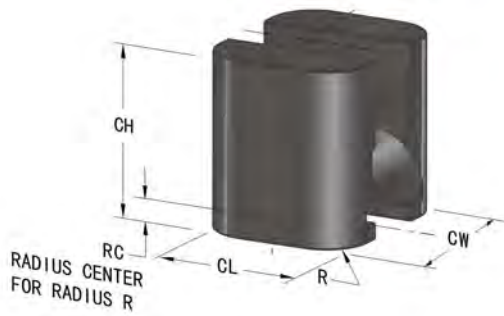
1. New code MMTGL.
2. MMTGR instead of old code MMTG.
3. Usage environment: max 170°C.

Order MMTGL-d Material: S45C

d	W	L	T	H	Ha	B	e	p
8	28	44	17	9	8	14	5	32
10	30	46	20	11	9	16	5	34
12	32	50	22	12	10	18	6	36
16	45	58	29	16	13	25	6	45
20	50	65	33	18	15	28	8	52
25	57	78	38	21	17	33	8	62
30	65	86	43	24	19	37	8	70

Code	d	X	Y	MM	Dowel pin	Mounting screws	@ ¥ / P
MMTGL MMTGR	8	20	28	M5	Ø5×20	M5×20	
	10	22	30	M5	Ø5×20	M5×25	
	12	22	30	M6	Ø6×25	M6×25	
	16	30	35	M6	Ø6×25	M6×35	
	20	35	40	M6	Ø6×25	M6×40	
	25	40	50	M8	Ø8×30	M8×45	
	30	48	55	M8	Ø8×30	M8×50	

AISI
Slide core units



UULC

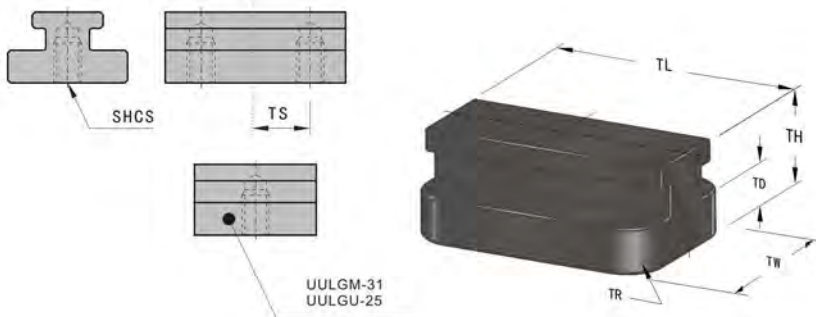


Order UULCM-50 Material:SKD61 Surface:900HV Hardness:40-44HRC

Code(Inch)	CW	CL	CH	RC	R	Series	@ ¥ / P
UULCM- 50	0.5	0.437	0.625	0.125	0.25	0.25	
UULCU- 87	0.875	0.75	0.875	0.187	0.406	0.5	
UULCX-175	1.75	1.5	1.656	0.125	0.875	1	

Code(Metric)	CW	CL	CH	RC	R	Series	@ ¥ / P
UULCMM-22	22	18	25	6	10	10	

UULG



Order UULGM-31 Material:SKD61 Surface:900HV Hardness:40-44HRC

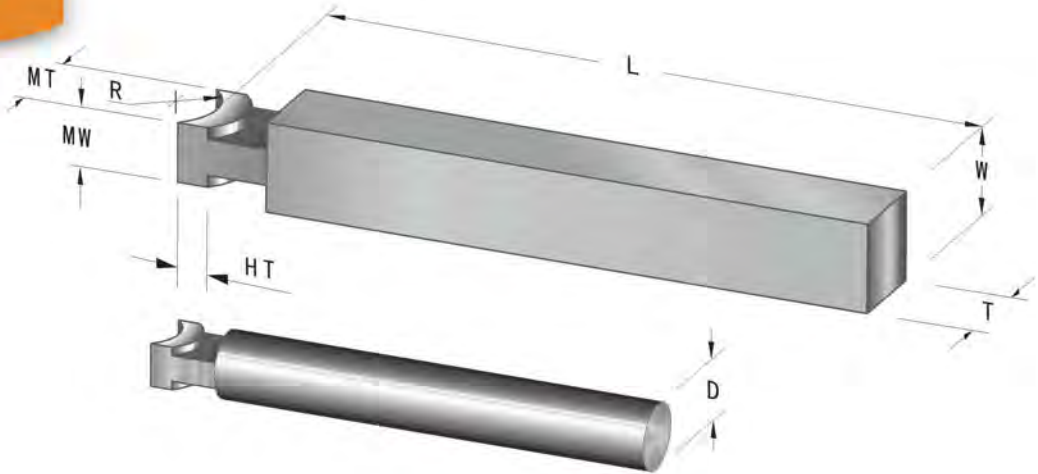
Code(Inch)	TS	TL ^{+0.000} _{-0.010}	TW ^{+0.000} _{-0.001}	TH ^{+0.010} _{-0.000}	TD ^{+0.010} _{-0.000}	TR	Series	SHCS (Included)	Travel Allowed	@ ¥ / P
UULGM- 31	-	0.75	0.5	0.5	0.344	0.094	0.25	#10-32x1"	5/16	
UULGM-100	0.5	1.5							1 1/8	
UULGU- 25	-	1							1/ 4	
UULGU- 50	0.375	1.25	0.875	0.468	0.219	0.188	0.5	1/4-20x3/4	1/ 2	
UULGU-100	0.625	1.75							1"	
UULGU-150	0.75	2.25							1 1/2	
UULG - 50	0.625	2							1/ 2	
UULG - 100	0.875	2.5	1.75	0.625	0.25	0.313	1	3/8-16x1 1/4	1"	
UULG - 250	1.375	4							2 1/2	

Code(Metric)	TS	TL ^{+0.000} _{-0.025}	TW ^{+0.000} _{-0.025}	TH ^{+0.25} _{-0.00}	TD ^{+0.25} _{-0.00}	TR	Series	Shcs (Included)	Travel Allowed	@ ¥ / P
UULGMM-10	10	33	22	13	6	5	10	M-5x20	10	
UULGMM-30	15	52							30	

AISI

Flat core blades

UULB



Order UULBM-37×25-L8 Material:SKD61 Hardness:38-42HRC

Code(Inch)	T ^{+0.010} _{-0.000}	W ^{+0.010} _{-0.000}	L	HT	R	Series (MW)	MT (Min. Thk.)	@ ¥/P
UULBM-37×25-L8	3/8	1/4		0.156	0.25	0.25	0.25	
UULBM-50×25-L8	1/2	3/8	8"				0.312	
UULBM-75×37-L8	3/4	1/2						
UULBU-50×50-L8		1/2	14"					
UULBU-50×50-L14	1/2		8"					
UULBU-50×100-L8		1"	14"					
UULBU-50×100-L14			8"					
UULBU-100×50-L8	1"		14"	0.187	0.406	0.5	0.5	
UULBU-100×50-L14		1/2	8"					
UULBU-150×50-L8	1 1/2		14"					
UULBU-150×50-L14			8"					
UULBU-75×150-L8	3/4	1 1/2	14"				0.625	
UULBU-75×150-L14			8"					
UULBU-150×75-L8	1 1/2	3/4	14"					
UULBU-150×75-L14			10"					
UULB×100×150-L10		1 1/2	18"					
UULB-100×150-L18	1"		10"	0.375	0.875	1	1	
UULB-100×100-L10			18"					
UULB-100×100-L18		1"	10"					
UULB-150×100-L10	1 1/2		18"					
UULB-150×100-L18								

Code(Metric)	T ^{+0.025} _{-0.000}	W ^{+0.025} _{-0.000}	L	HT	R	Series (MW)	MT (Min. Thk.)	@ ¥/P
UULBMM-10×10-L250	10	10	250	0.5	10	10	10	
UULBMM-15×15-L250	15	15					15	
UULBMM-20×20-L400	20	20	400				20	

Code(Inch)	D ^{+0.000} _{-0.001}	L	R	HT	Series (MW)	MT (Min. Thk.)	@ ¥/P
UULBM-43D - L8	Ø7/16	8"	0.25	0.156	0.25	0.312	
UULBU-75D - L8							
UULBU-75D -L14	Ø3/ 4	14"	0.406	0.187	0.5	0.5	
UULBU-75D -L18		18"					
UULBX-125D-L10		10"					
UULBX-125D-L18	Ø1 1/4	18"	0.875	0.375	1	1	

Code(Metric)	D ^{+0.000} _{-0.025}	L	R	HT	Series (MW)	MT (Min. Thk.)	@ ¥/P
UULBMM-15D-L250	Ø15	250	10	5	10	10	

AISI

Slide core units

VF-...-SS
VF-...-JS
VF-...-US



Order VF-06-SS

Code	@ ¥ /P
VF-06-SS	
VF-08-SS	
VF-10-SS	
VF-13-SS	
VF-16-SS	
VF-20-SS	

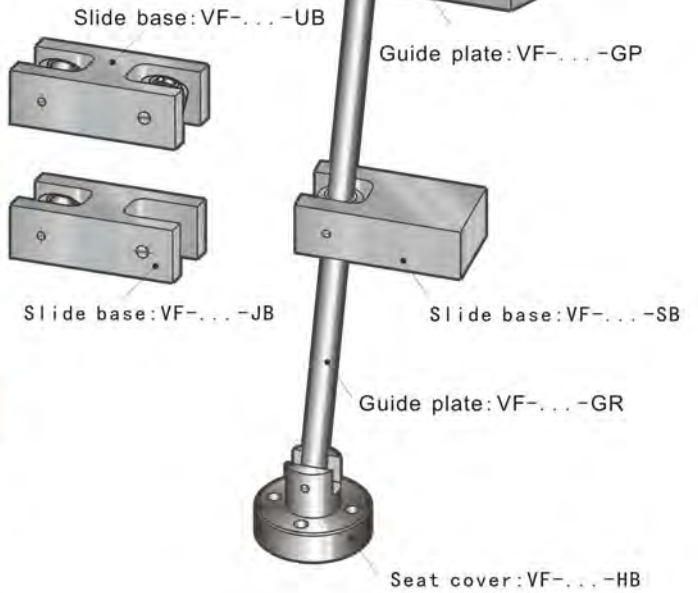
Order VF-06-JS

Code	@ ¥ /P
VF-06-JS	
VF-08-JS	
VF-10-JS	
VF-13-JS	
VF-16-JS	
VF-20-JS	

Order VF-06-US

Code	@ ¥ /P
VF-06-US	
VF-08-US	
VF-10-US	
VF-13-US	
VF-16-US	
VF-20-US	

Product space chart

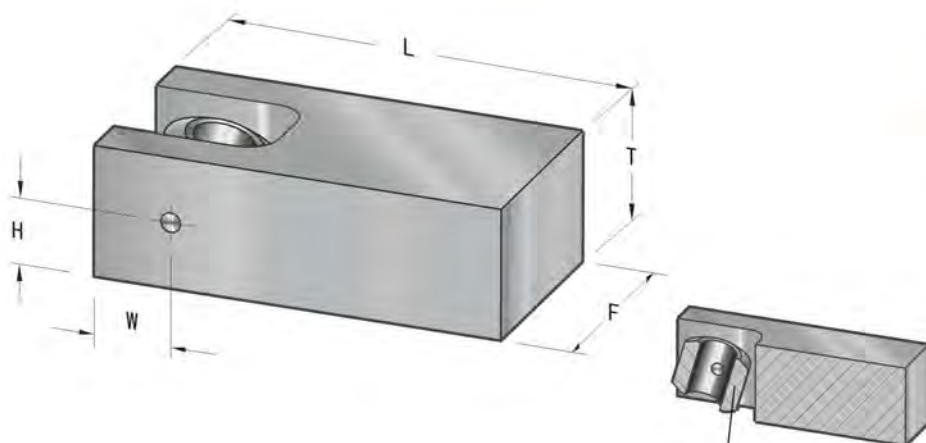


VF-...-SS: 	VF-...-JS: 	VF-...-US:
GP 	GP 	GP
GR 	GR 	GR
SB 	JB 	UB
HB 	HB 	HB



Slide core units

VF-...-SB

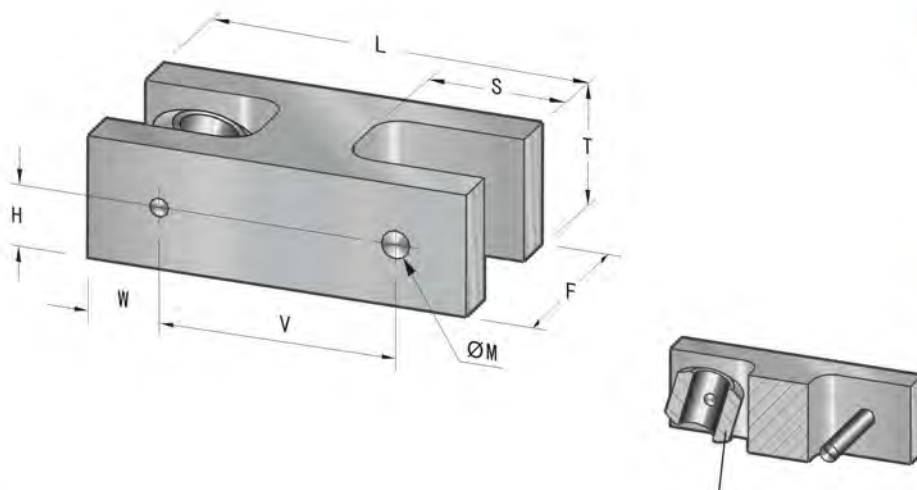


Materials: SKD61
Hardness: 48-52HRC

Order VF-06-SB Material:P20 Hardness:28-32HRC

Symbol	VF-06-SB	VF-08-SB	VF-10-SB	VF-13-SB	VF-16-SB	VF-20-SB	@ ¥ /P
T	13 0/-0.02	15 0/-0.02	20 0/-0.03	25 0/-0.03	30 0/-0.05	40 0/-0.05	
F	20 0/-0.02	25 0/-0.02	32 0/-0.03	40 0/-0.03	50 0/-0.05	60 0/-0.05	
L	40	50	60	80	100	130	
H	6.5	7.5	10	12.5	15	20	
W	7.5	10	12.5	15	20	25	

VF-...-JB



Materials: SKD61
Hardness: 48-52HRC

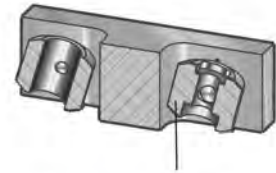
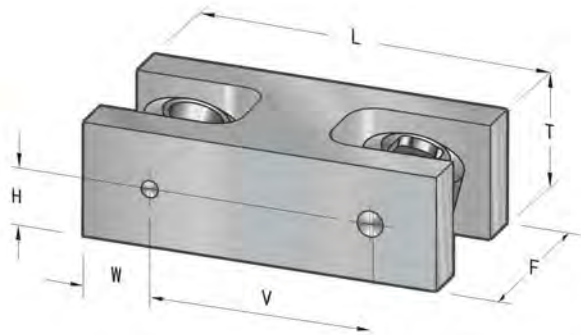
Order VF-06-JB Material:P20 Hardness:28-32HRC

Symbol	VF-06-JB	VF-08-JB	VF-10-JB	VF-13-JB	VF-16-JB	VF-20-JB	@ ¥ /P
T	13 0/-0.02	15 0/-0.02	20 0/-0.03	25 0/-0.03	30 0/-0.05	40 0/-0.05	
F	20 0/-0.02	25 0/-0.02	32 0/-0.03	40 0/-0.03	50 0/-0.05	60 0/-0.05	
L	40	50	60	80	100	130	
S	15	20	25	30	40	50	
H	6.5	7.5	10	12.5	15	20	
W	7.5	10	12.5	15	20	25	
V	25	30	35	50	60	80	
M	Ø3	Ø4	Ø5	Ø6	Ø8	Ø10	

AISI

Slide core units

VF-...-UB

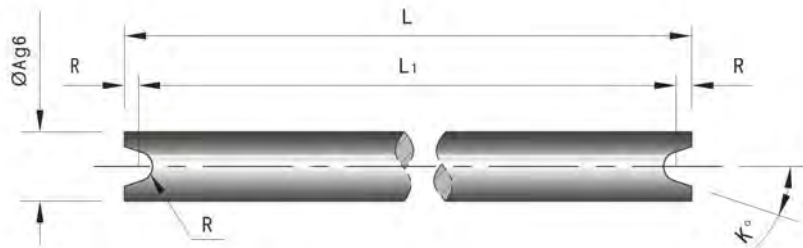


Materials: SKD61
Hardness: 48-52HRC

Order VF-06-UB Material:P20 Hardness:28-32HRC

Symbol	VF-06-UB	VF-08-UB	VF-10-UB	VF-13-UB	VF-16-UB	VF-20-UB	@ ¥ /P
T	13 0/-0.02	15 0/-0.02	20 0/-0.03	25 0/-0.03	30 0/-0.05	40 0/-0.05	
F	20 0/-0.02	25 0/-0.02	32 0/-0.03	40 0/-0.03	50 0/-0.05	60 0/-0.05	
L	40	50	60	80	100	130	
H	6.5	7.5	10	12.5	15	20	
W	7.5	10	12.5	15	20	25	
V	25	30	35	50	60	80	

VF-...-GR



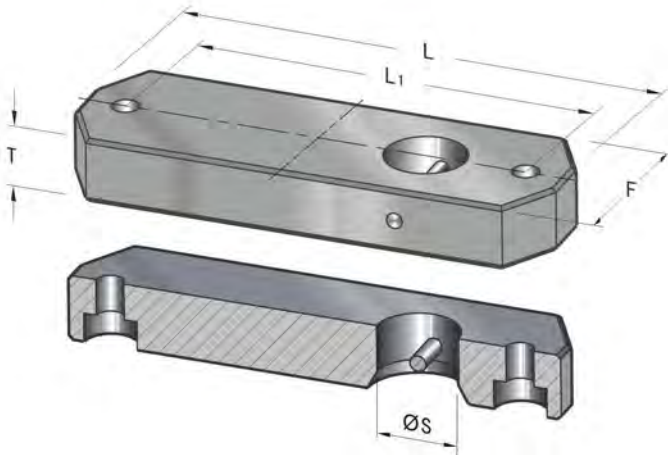
Order VF-06-GR Material:SUJ2 Hardness:58-62HRC

Symbol	VF-06-GR	VF-08-GR	VF-10-GR	VF-13-GR	VF-16-GR	VF-20-GR	@ ¥ /P
A ³⁰	Ø6 -0.004/-0.012	Ø8 -0.005/-0.014	Ø10 -0.005/-0.014	Ø13 -0.006/-0.017	Ø16 -0.006/-0.017	Ø20 -0.007/-0.020	
L	150	190	250	310	370	500	
L1	L1	L1	L1	L1	L1	L1	
R	1 +0.02/0	1.5 +0.02/0	2 +0.03/0	2.5 +0.03/0	3 +0.05/0	3.5 +0.05/0	
K ³⁰			30° Max				

AISI

Slide core units

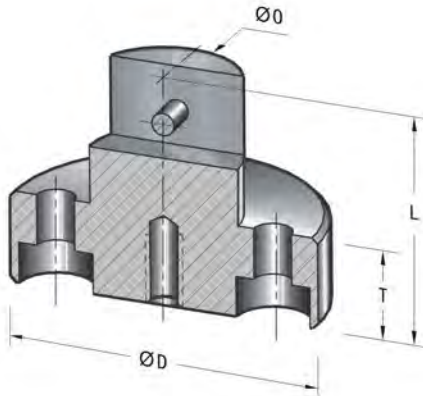
VF-...-GP



Order VF-06-GP Material:P20 Hardness:28-32HRC

Symbol	VF-06-GP	VF-08-GP	VF-10-GP	VF-13-GP	VF-16-GP	VF-20-GP	@ ¥ /P
T	8 0/-0.02	10 0/-0.02	12 0/-0.03	15 0/-0.03	20 0/-0.05	25 0/-0.05	
F	20 0/-0.02	25 0/-0.02	32 0/-0.03	40 0/-0.03	50 0/-0.05	60 0/-0.05	
L	60 0/-0.04	70 0/-0.04	90 0/-0.06	120 0/-0.06	150 0/-0.1	180 0/-0.1	
L1	50	60	75	105	130	155	
S	Ø10	Ø13	Ø16	Ø20	Ø25	Ø30	

VF-...-HB



Order VF-06-HB Material:P20 Hardness:28-32HRC

Symbol	VF-06-HB	VF-08-HB	VF-10-HB	VF-13-HB	VF-16-HB	VF-20-HB	@ ¥ /P
O	Ø13 0/-0.05	Ø16 0/-0.05	Ø20 0/-0.07	Ø25 0/-0.07	Ø32 0/-0.1	Ø40 0/-0.1	
L	20	25	30	35	40	50	
D	Ø27 0/-0.2	Ø34 0/-0.2	Ø42 0/-0.3	Ø51 0/-0.3	Ø65 0/-0.5	Ø80 0/-0.5	
T	8 -0.1/-0.2	10 -0.1/-0.2	12 -0.1/-0.3	15 -0.1/-0.3	18 -0.1/-0.5	22 -0.1/-0.5	

AISI

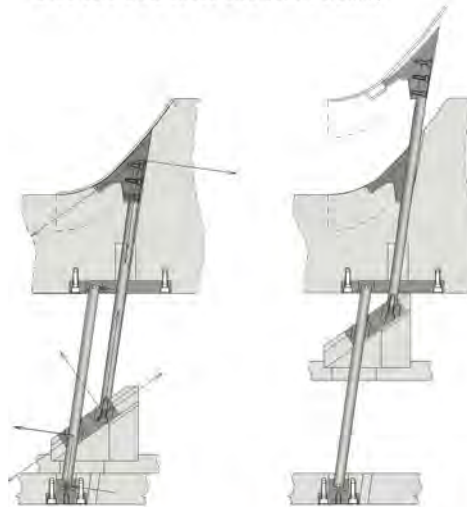
Slide core units

VF-...-SS
VF-...-JS
VF-...-US

FL

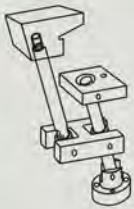


Slide core units stress distribution drawing

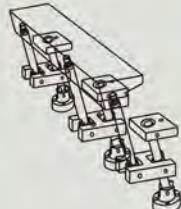


Feature:

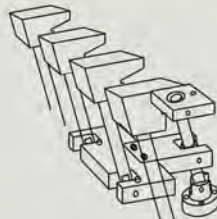
1. Degree and ejector stroke will can't limit movement of slide unit, movement reliable and steady.
2. Products design large degree of freedom avoid reinforcing, convex plate, curved surface shape side groove to interfere.
3. Have enough adiabatic expansion space .
4. Easy to processing ,easy assembly and disassembly, no bending moment.
5. extensively use in small type precision mould and super-weight mould. single rank, paratactic, alternate rank. directly rank ect various combination to meet different demand.



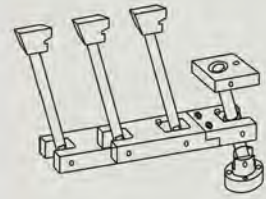
Drawing 1: single



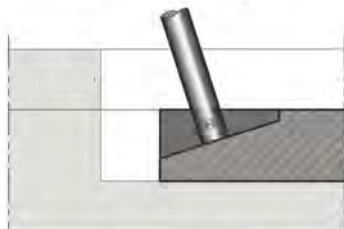
Drawing 2: side by side



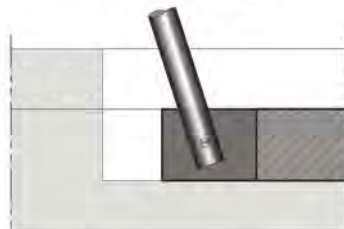
Drawing 3: double side by side



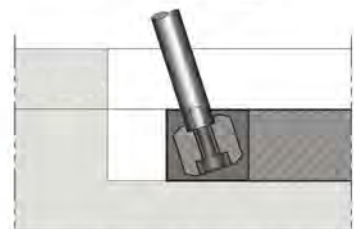
Drawing 4: straight line



Reserved space, satisfied with customer's special processing requirements



The simplest dowel pin locating way

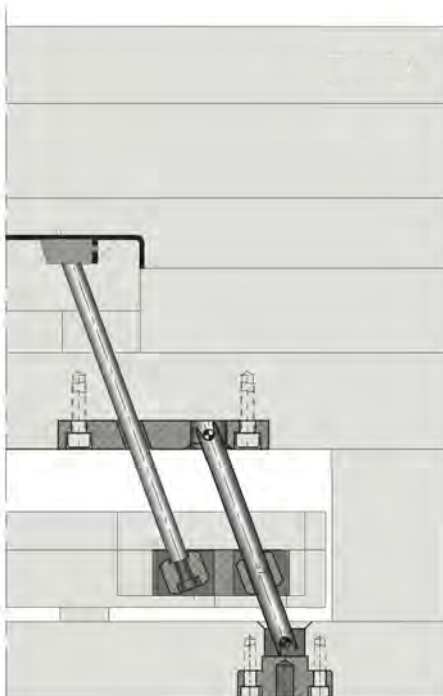


Processing a normal screw hole on the end of the pin, fixed with screw, easy to install, suitable for use wide range

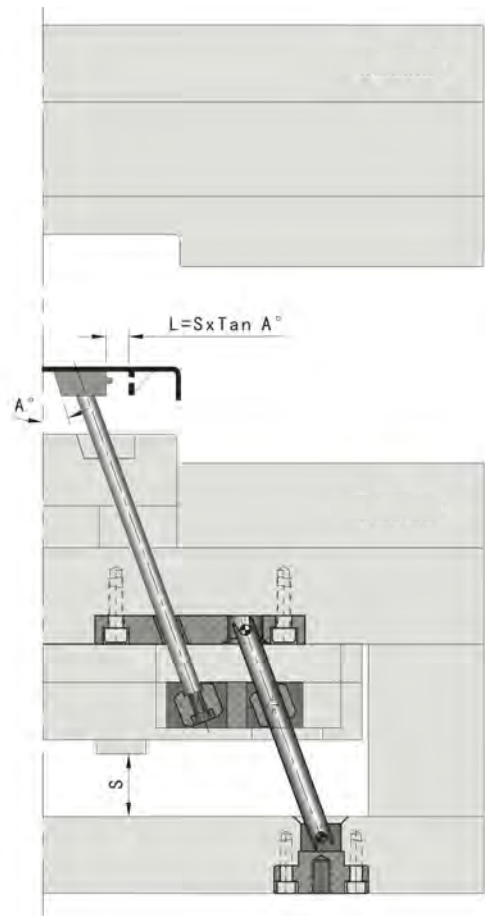

Installation Guidelines:

- VF series slide core unit have socket sleeve, guide rod, slide base ,guide board 4part constitution.
- The usage range of Slide unit from 5°-30°.
- Socket sleeve fixed on movement board by head cap screw.
- Slide stroke avoid interfere ejector pin board.
- Release mould distance L by mean of calculate formula: $L=S \times \tan A^\circ$, S is ejector pin board stroke, A is install angle, also can get it from CAD drawing.

A°	
Min.	Max.
5°	30°


Installation Diagram:


Mold closed



Mold open

Ejector pins series
Slide pinless series
Locust tools series
Pouring gate series
Done stamps Air valves series
Ejector series
Cooling elements series
Locating pins series
Springs series
Guide pins Guide bush
Guide pins (Water pipe) series
Chuck series
Mold accessories

DIN

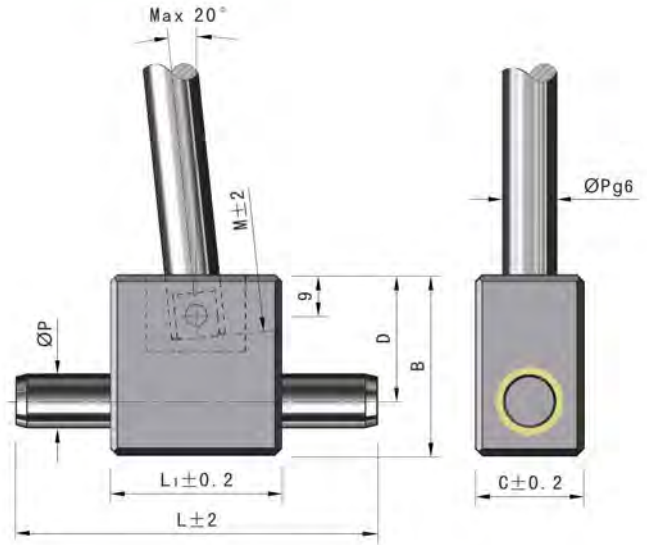
Slide core units

SSD

CA 2D



Product space chart:

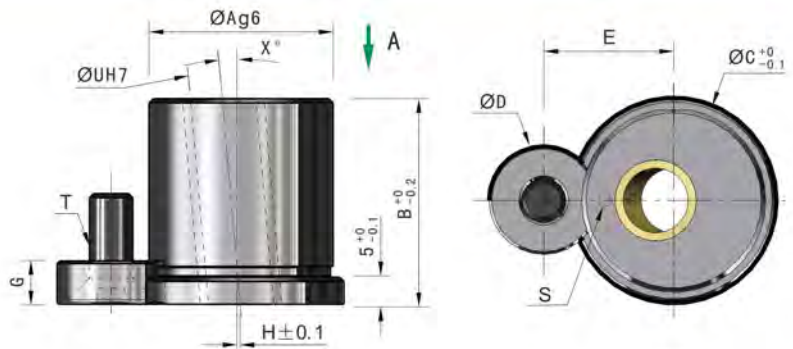


Order SSD-3220GR Material:SUJ2 Hardness:58-62HRC

Code	L ₁	B	C	D	L	M	P	@ ¥/P
SSD-3220GR	32	37	20	27	80	180	10	
SSD-3824GR	38	38	24	28		210	12	
SSD-4528GR	45	44	28	30	100	250	16	

CCI

CA 2D

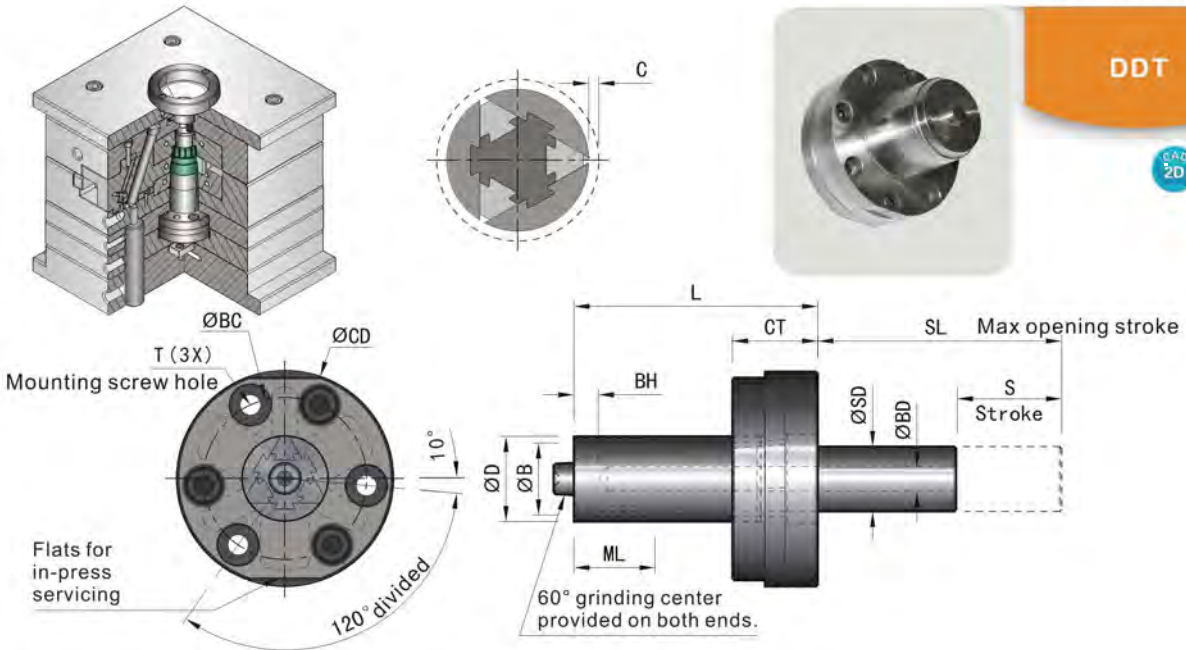


Aside

Order CCI-3034GR Material:SUJ2 Hardness:55-62HRC

Code	A	B	C	D	E	G	H	U	X	S	T	@ ¥/P
CCI-3034GR- 5	30	34	34	16	20	6		10		M6×6	M6×16	
CCI-3438GR- 5	34	38	38	20	24	8	0	12	5	M8×6	M8×20	
CCI-4040GR- 5	40	40	44	20	27	8		16		M8×6	M8×20	
CCI-3034GR-10	30	34	34	16	20	6	7	10		M6×6	M6×16	
CCI-3438GR-10	34	38	38	20	24	8	8.5	12	10	M8×6	M8×20	
CCI-4040GR-10	40	40	44	20	27	8		16		M8×6	M8×20	
CCI-3034GR-15	30	34	34	16	20	6	7	10		M6×6	M6×16	
CCI-3438GR-15	34	38	38	20	24	8	8.5	12	15	M8×6	M8×20	
CCI-4040GR-15	40	40	44	20	27	8	8.5	16		M8×6	M8×20	
CCI-3034GR-20	30	34	34	16	20	6	7	10		M6×6	M6×16	
CCI-3438GR-20	34	38	38	20	24	8	8.5	12	20	M8×6	M8×20	
CCI-4040GR-20	40	40	44	20	27	8	8.5	16		M8×6	M8×20	

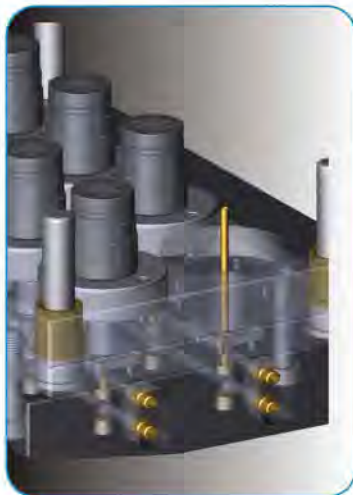
DDT



Order DDT-18

D	B +3" Single side	ML	C	CD +0/-0.05	CT ±0.05	L +0.01/-0	SL
21	17	22	1.1	53	21	60	
33	25	28	1.6	60	22	67	60
42	33	43	2.1	76	28	85	
54	42	50	2.4	98	37	104	70

Code	SD +0/-0.02	BD	BH	BC	S	T	@ ¥ /P
DDT-18	16	6	6	40	34	M5×25	
DDT-28	20	8	8	47	38		
DDT-38	25	10	10	60	54	M6×35	
DDT-48	30	12	12	78	62	M8×40	



Features:

1. Design of scalability structure by mechanical.
2. Stroke: 5%~7% for per side.
3. Instead of expensive pinion and rack.
4. Only needs small space for installation.
5. Shorten the mold manufacturing cycle.
6. Within waterway.
7. Provide a variety of standard types for choice, and also customer made
8. The structure is more simple than rotary unwound thread mechanism.

W mould

Collapsible core



General thread design

Right

Wrong

Right

Wrong

DDT core thread design

Right

Right

Right

Right

DDT-18					
Diameter(D)		Collapse(C)		Stroke(S)	
mm.	in.	mm.	in.	mm.	in.
21	0.827	0.5	0.02	19.5	0.768
20	0.787	0.71	0.028	27	1.063
19	0.748	0.92	0.036		
18	0.709	0.98	0.039	34	1.339
17	0.669	1.05	0.041		

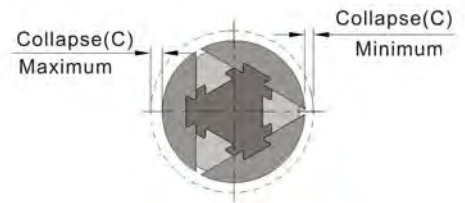
DDT-28					
Diameter(D)		Collapse(C)		Stroke(S)	
mm.	in.	mm.	in.	mm.	in.
33	1.299	0.98	0.039	34.5	1.358
32	1.26	1.11	0.044		
31	1.22	1.14	0.049		
30	1.181	1.19	0.047		
29	1.141	1.23	0.048		
28	1.102	1.28	0.050	38	1.496
27	1.062	1.33	0.052		
26	1.024	1.39	0.055		
25	0.984	1.45	0.057		

DDT-38					
Diameter(D)		Collapse(C)		Stroke(S)	
mm.	in.	mm.	in.	mm.	in.
42	1.654	1.16	0.046	41	1.614
41	1.614	1.37	0.054	48	1.89
40	1.575	1.57	0.062		
39	1.535	1.61	0.063		
38	1.496	1.66	0.065		
37	1.457	1.71	0.067	54	2.126
36	1.417	1.76	0.069		
35	1.378	1.82	0.072		
34	1.339	1.88	0.074		
33	1.299	1.94	0.076		

DDT-48					
Diameter(D)		Collapse(C)		Stroke(S)	
mm.	in.	mm.	in.	mm.	in.
54	2.126	1.25	0.049	44.7	1.76
53	2.087	1.45	0.057	51.3	2.02
52	2.047	1.66	0.065	58.1	2.287
51	2.008	1.79	0.07		
50	1.969	1.83	0.072		
49	1.929	1.87	0.074		
48	1.89	1.92	0.076		
47	1.85	1.97	0.078		
46	1.811	2.01	0.079	62	2.441
45	1.772	2.06	0.081		
44	1.732	2.11	0.083		
43	1.693	2.17	0.085		
42	1.654	2.22	0.087		

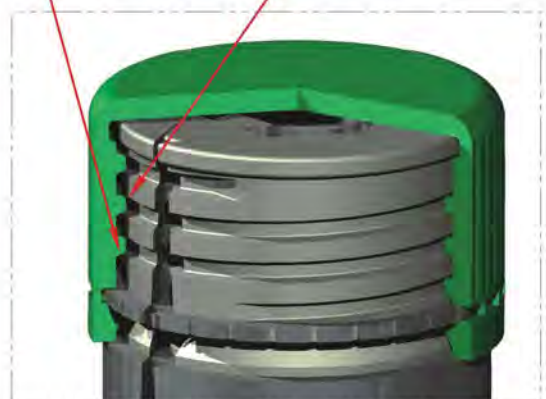
Features:

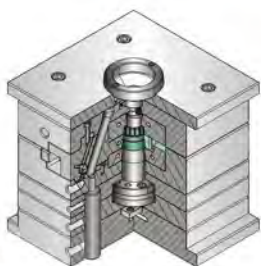
1. General threads are designed to be unscrewed out of the mold which could not position the threads accurately, DDT threads only where you need them.
2. General threads designed to be stripped snap bead that normally require large radii for release. DDT core snap bead can be flat also.



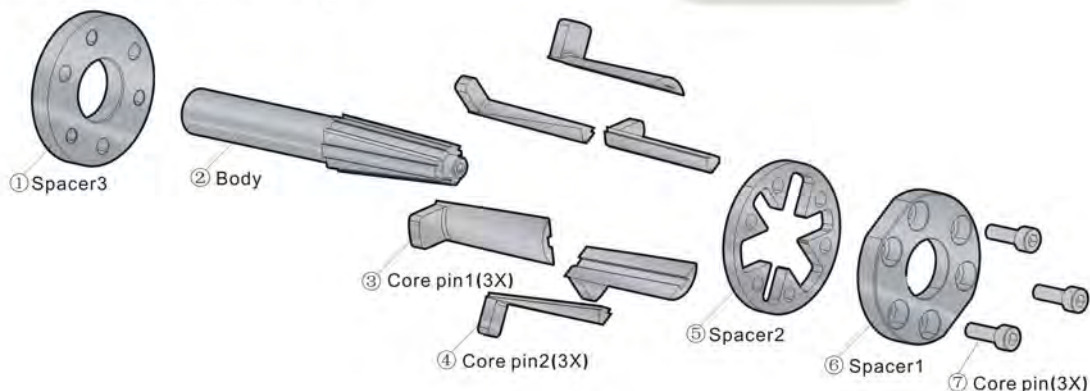
Calculating required collapse vs undercut depth:

$$\bullet \text{ Undercut} + \text{Shrink} + \text{Clearance} = \text{Total Collapse Req'd}$$

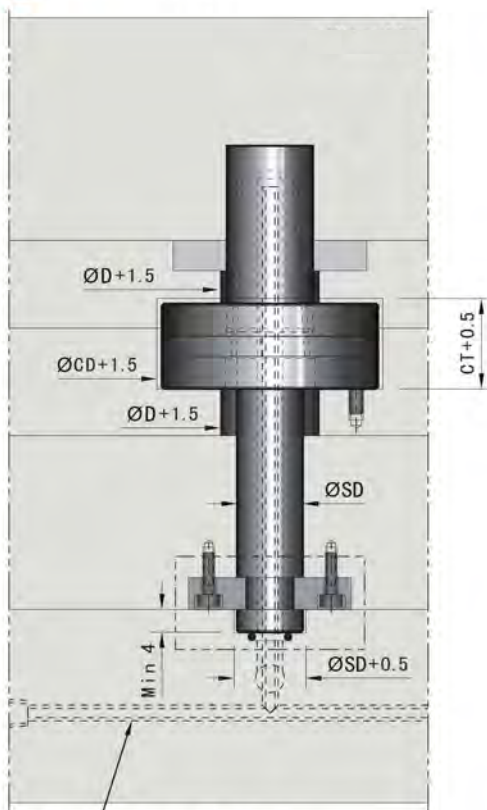




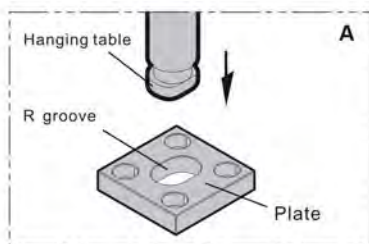
Product space chart:



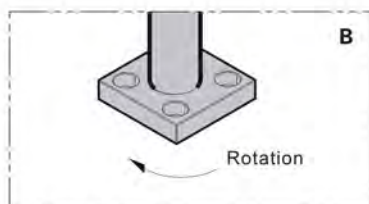
Installation Diagram:



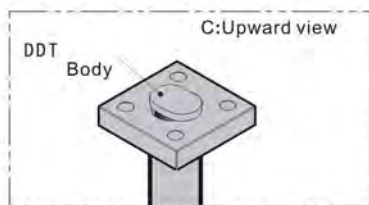
Cooling water channel



A: The hang of the body will be inserted in R groove of plate.



B: The body will be rotated 90°, and make it lock with plate.



C: The position which the hang lock plate as show on the left.

Body quickly install diagram

Escator pins
Escator sleeves
Slide rollers
Slide rollers series
Latch locks
Latch locks series
Pouring gates
Pouring gates series
Drive slippers
Drive slippers series
Escator series
Cooling elements
Cooling elements series
Locating parts
Locating parts series
Spacers series
Guide pins
Guide pins series
Guide strips
Guide strips series
Chuck series
Chuck series
Mold accessories

Collapsible core

DDT

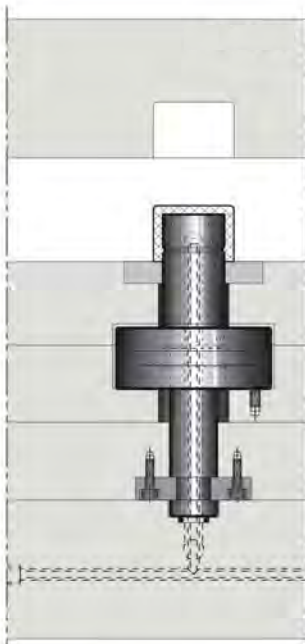


Installation Guidelines:

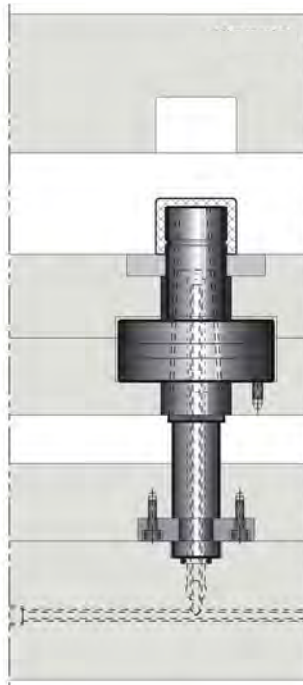
- MUST confirm proper sequence with mold builder.
- NOTE: If DDT Core is shutting off on steel to form a feature (ie: hole), the shut off must be separated prior to DDT Core collapse. Also, the DDT Core must be fully expanded before shut off comes into position.
- Confirm press is capable of achieving proper sequence.
- Confirm plates are staging forward without binding while on the bench. Verify DDT center pin is flush to slightly proud of segments and verify stack heights.



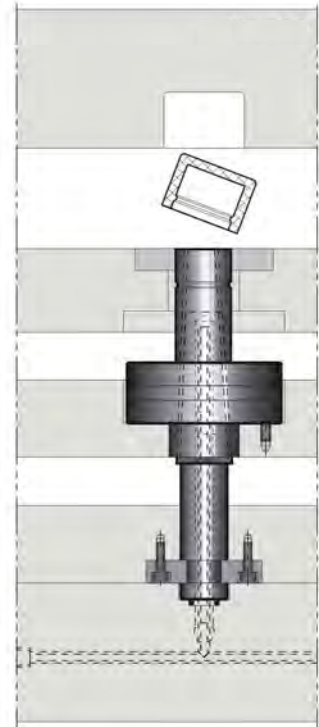
Functional chart:



Mold opening



In the process of the ejection

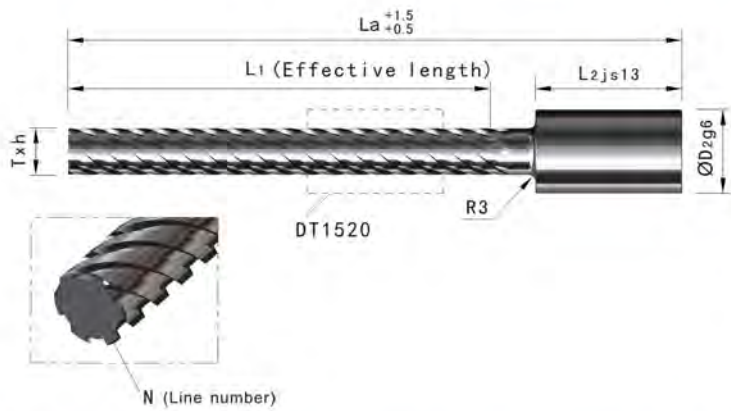


Mold opened

Ejector pins
Ejector sleeves
Slide railers
Ratier
Laser locks
series
Moulding plates
series
Gate starters
Air valves series
Ejector series
Cooling elements
Locating parts
series
Springs series
Guide pins
Guide bush
Guide shoes
Wiper table series
Chuck series
Mold
accessories

DIN

Helical spindle



ZZ1500



Order ZZ1500-16x50-R-160 Hardness:718H Hardness:Surface treatment nitrided

Code	T×h	旋向	La	L1	L2	D2	N	@ ¥/P																									
ZZ1500-16× 50-R-160	Tr16× 50	R	240	160	50	28	5																										
ZZ1500-16× 50-R-250			330	250																													
ZZ1500-16× 63-R-160	Tr16× 63		240	160	63	36	7																										
ZZ1500-16× 63-R-250			330	250																													
ZZ1500-20× 63-R-250	Tr20× 63		345	250					80	45	9																						
ZZ1500-20× 63-R-315			410	315																													
ZZ1500-20× 80-R-250	Tr20× 80		345	250								100	56	10																			
ZZ1500-20× 80-R-315			410	315																													
ZZ1500-20×100-R-250	Tr20×100		345	250											100	56	11																
ZZ1500-20×100-R-315			410	315																													
ZZ1500-25× 80-R-315	Tr25× 80		430	315														100	56	11													
ZZ1500-25× 80-R-400			515	400																													
ZZ1500-25×100-R-315	Tr25×100		430	315																	100	56	11										
ZZ1500-25×100-R-400			515	400																													
ZZ1500-25×125-R-315	Tr25×125		430	315																				100	56	11							
ZZ1500-25×125-R-400			515	400																													
ZZ1500-25×160-R-315	Tr25×160		430	315																							100	56	11				
ZZ1500-25×160-R-400			515	400																													
ZZ1500-32×100-R-355	Tr32×100		490	355																										100	56	11	
ZZ1500-32×100-R-450			585	450																													
ZZ1500-32×125-R-355	Tr32×125	490	355	100				56																									11
ZZ1500-32×125-R-450		585	450																														
ZZ1500-32×160-R-355	Tr32×160	490	355		100	56	11																										
ZZ1500-32×160-R-450		585	450																														
ZZ1500-32×200-R-355	Tr32×200	490	355						100	56	11																						
ZZ1500-32×200-R-450		585	450																														

Order ZZ1500-16x50-L-160 Hardness:718H Hardness:Surface treatment nitrided

Code	T×h	旋向	La	L1	L2	D2	N	@ ¥/P																									
ZZ1500-16× 50-L-160	Tr16× 50	L	240	160	50	28	5																										
ZZ1500-16× 50-L-250			330	250																													
ZZ1500-16× 63-L-160	Tr16× 63		240	160	63	36	7																										
ZZ1500-16× 63-L-250			330	250																													
ZZ1500-20× 63-L-250	Tr20× 63		345	250					80	45	9																						
ZZ1500-20× 63-L-315			410	315																													
ZZ1500-20× 80-L-250	Tr20× 80		345	250								100	56	10																			
ZZ1500-20× 80-L-315			410	315																													
ZZ1500-20×100-L-250	Tr20×100		345	250											100	56	11																
ZZ1500-20×100-L-315			410	315																													
ZZ1500-25× 80-L-315	Tr25× 80		430	315														100	56	11													
ZZ1500-25× 80-L-400			515	400																													
ZZ1500-25×100-L-315	Tr25×100		430	315																	100	56	11										
ZZ1500-25×100-L-400			515	400																													
ZZ1500-25×125-L-315	Tr25×125		430	315																				100	56	11							
ZZ1500-25×125-L-400			515	400																													
ZZ1500-25×160-L-315	Tr25×160		430	315																							100	56	11				
ZZ1500-25×160-L-400			515	400																													
ZZ1500-32×100-L-355	Tr32×100		490	355																										100	56	11	
ZZ1500-32×100-L-450			585	450																													
ZZ1500-32×125-L-355	Tr32×125	490	355	100				56																									11
ZZ1500-32×125-L-450		585	450																														
ZZ1500-32×160-L-355	Tr32×160	490	355		100	56	11																										
ZZ1500-32×160-L-450		585	450																														
ZZ1500-32×200-L-355	Tr32×200	490	355						100	56	11																						
ZZ1500-32×200-L-450		585	450																														

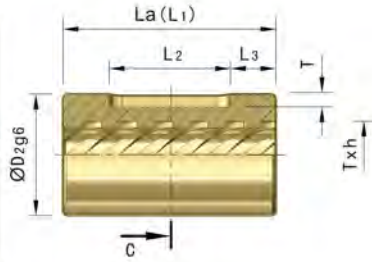
DIN

Helical spindle

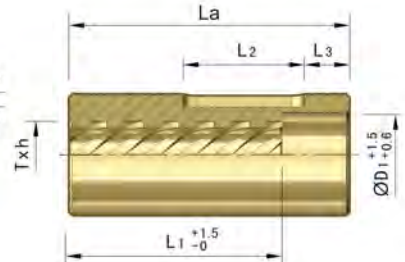
ZZ1520



N
(Line number) C-C



Type-A



Type-B

Order ZZ1520-16×50-R-50 Hardness:AL-Bronze

Code	T×h	Rotation	Type	La	L1	L2	L3	B2	D2	T	N	@ ¥/P					
ZZ1520-16× 50-R- 50	Tr16× 50	R (Right)	A	50	50	28	11	6	28	2.8	5						
ZZ1520-16× 50-R- 80			B	80		40	15										
ZZ1520-16× 63-R- 50	Tr16× 63		A	50		28	11										
ZZ1520-16× 63-R- 80			B	80		40	15										
ZZ1520-20× 63-R- 63	Tr20× 63		A	63	63	36	13.5	8	36	3.8	6						
ZZ1520-20× 63-R-100			B	100		50	18										
ZZ1520-20× 80-R- 63	Tr20× 80		A	63	36	13.5											
ZZ1520-20× 80-R-100			B	100	50	18											
ZZ1520-20×100-R- 63	Tr20×100		A	63	100	36	13.5	12	45	4.8	7						
ZZ1520-20×100-R-100			B	100		50	18										
ZZ1520-25× 80-R- 80	Tr25× 80		A	80	50	15											
ZZ1520-25× 80-R-125			B	125	63	20											
ZZ1520-25×100-R- 80	Tr25×100		A	80	80	50	15	14	56	5.5	8						
ZZ1520-25×100-R-125			B	125		63	20										
ZZ1520-25×125-R- 80	Tr25×125		A	80	50	15											
ZZ1520-25×125-R-125			B	125	63	20											
ZZ1520-25×160-R- 80	Tr25×160		A	80	100	50	15	14	56	5.5	9						
ZZ1520-25×160-R-125			B	125		63	20										
ZZ1520-32×100-R-100	Tr32×100		A	100	100	63	18.5						14	56	5.5	9	
ZZ1520-32×100-R-160			B	160		80	25										
ZZ1520-32×125-R-100	Tr32×125	A	100	63	18.5												
ZZ1520-32×125-R-160		B	160	80	25												
ZZ1520-32×160-R-100	Tr32×160	A	100	100	63	18.5	14	56	5.5	10							
ZZ1520-32×160-R-160		B	160		80	25											
ZZ1520-32×200-R-100	Tr32×200	A	100	100	63	18.5						14	56	5.5	10		
ZZ1520-32×200-R-160		B	160		80	25											

Order ZZ1520-16×50-L-50 Hardness:AL-Bronze

Code	T×h	Rotation	Type	La	L1	L2	L3	B2	D2	T	N	@ ¥/P					
ZZ1520-16× 50-L- 50	Tr16× 50	L (Left)	A	50	50	28	11	6	28	2.8	5						
ZZ1520-16× 50-L- 80			B	80		40	15										
ZZ1520-16× 63-L- 50	Tr16× 63		A	50		28	11										
ZZ1520-16× 63-L- 80			B	80		40	15										
ZZ1520-20× 63-L- 63	Tr20× 63		A	63	63	36	13.5	8	36	3.8	6						
ZZ1520-20× 63-L-100			B	100		50	18										
ZZ1520-20× 80-L- 63	Tr20× 80		A	63	36	13.5											
ZZ1520-20× 80-L-100			B	100	50	18											
ZZ1520-20×100-L- 63	Tr20×100		A	63	100	36	13.5	12	45	4.8	7						
ZZ1520-20×100-L-100			B	100		50	18										
ZZ1520-25× 80-L- 80	Tr25× 80		A	80	50	15											
ZZ1520-25× 80-L-125			B	125	63	20											
ZZ1520-25×100-L- 80	Tr25×100		A	80	80	50	15	14	56	5.5	8						
ZZ1520-25×100-L-125			B	125		63	20										
ZZ1520-25×125-L- 80	Tr25×125		A	80	50	15											
ZZ1520-25×125-L-125			B	125	63	20											
ZZ1520-25×160-L- 80	Tr25×160		A	80	100	50	15	14	56	5.5	9						
ZZ1520-25×160-L-125			B	125		63	20										
ZZ1520-32×100-L-100	Tr32×100		A	100	100	63	18.5						14	56	5.5	9	
ZZ1520-32×100-L-160			B	160		80	25										
ZZ1520-32×125-L-100	Tr32×125	A	100	63	18.5												
ZZ1520-32×125-L-160		B	160	80	25												
ZZ1520-32×160-L-100	Tr32×160	A	100	100	63	18.5	14	56	5.5	10							
ZZ1520-32×160-L-160		B	160		80	25											
ZZ1520-32×200-L-100	Tr32×200	A	100	100	63	18.5						14	56	5.5	10		
ZZ1520-32×200-L-160		B	160		80	25											

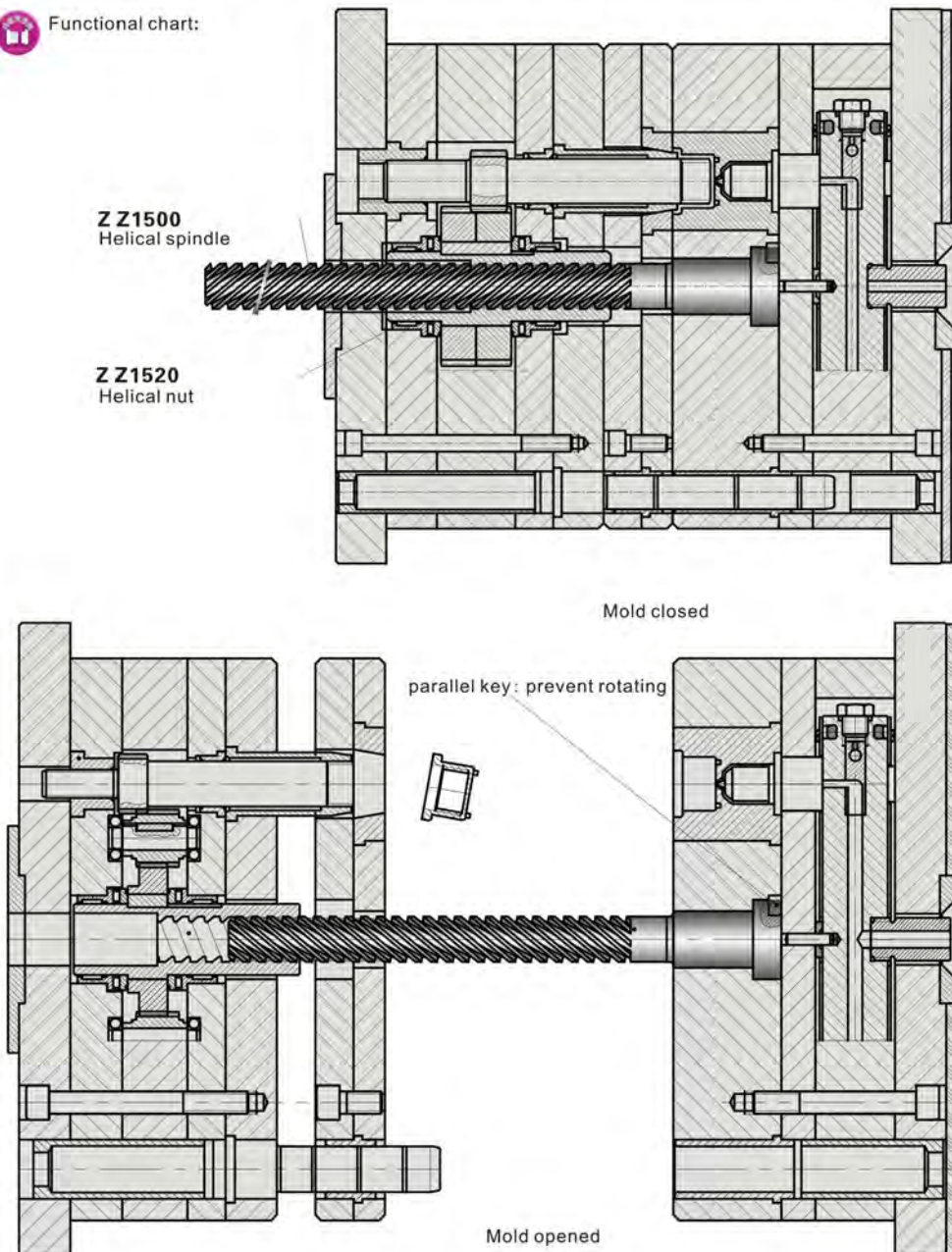


Installation Guidelines:

- The ZZ1500 helical spindle with two types: Left-Hand thread and Right-Hand thread, kindly choose the corresponding type for helical nuts.
- The helical spindle ZZ5100 must be prevented from rotating by one parallel key which need to be made by customer.
- The material and treatment for helical spindle ZZ1500 are 718H+ surface nitrided. please avoid any scratch for thread matching area while installing.



Functional chart:



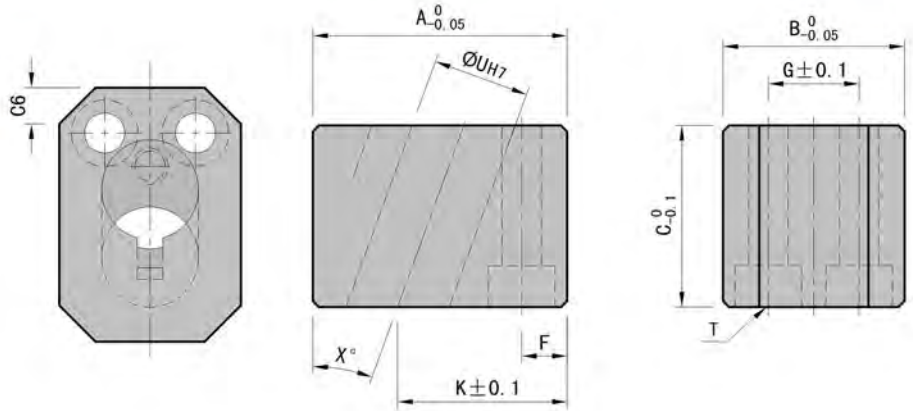
DIN

Angle pin housing

BBG

ISO 2D

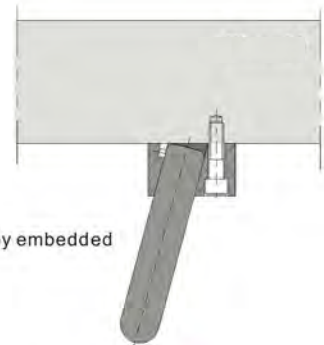
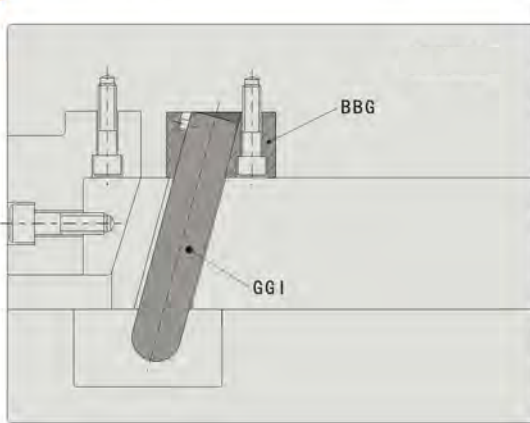
FL



Order BBG-423016-15 Material: 1.2510 Hardness: 48-52HRC

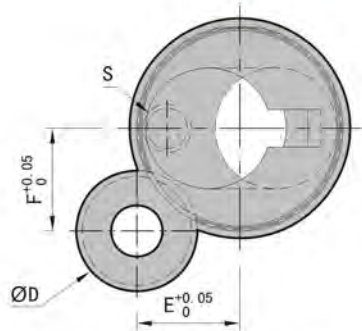
Code	A	B	C	F	G	K	T	U	X°	@ ¥/P
BBG-423016-15	42	30	30	7.5	15	28	M 6×35	16		
BBG-504020-15	50	40	36	9	22	34	M 8×40	20	15	
BBG-554024-15	55	40	40			38	M 8×45	24		
BBG-655028-15	65	50	45	12	26	45	M10×50	28		
BBG-423016-20	42	30	30	7.5	15	28	M 6×35	16		
BBG-504020-20	50	40	36	9	22	34	M 8×40	20	20	
BBG-504024-20	55	40	40			38	M 8×45	24		
BBG-655028-20	65	50	45	12	26	45	M10×50	28		

Installation Diagram:

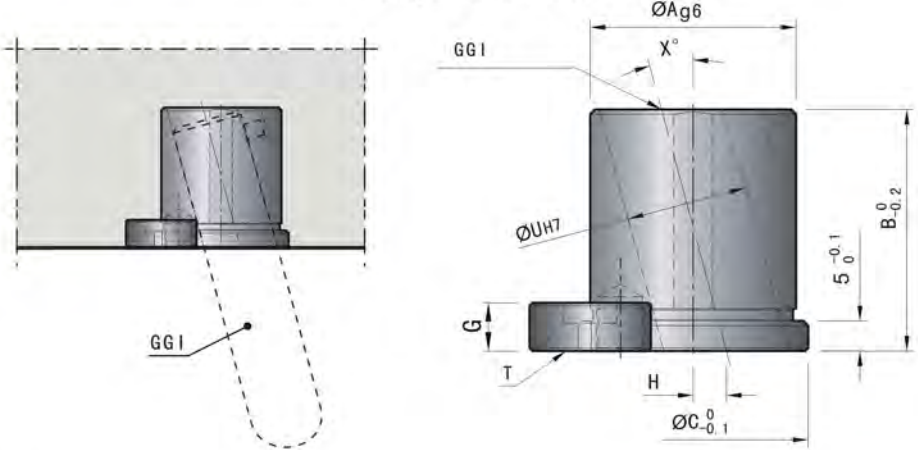


Note: Must installation by embedded

Wrong



Cooperate with GGI



Order GGR-182622-10 Material:SUJ2 Hardness:58-62HRC

Code	A	B	C	D	E	F	G	H	S	T	U	X°	@ ¥/P
GGR-182622-10	18	26	22	12	10.8	7.5		3.8	M5×5	M5×16	10	10	
GGR-222826-10	22	28	26	16	11	11	6	4	M6×6	M6×16	12		
GGR-283432-10	28	34	32		13	13		5			16		
GGR-344038-10	34	40	38		17	17		5.5			20		
GGR-424546-10	42	45	46	20	19.5	19.5	8	6	M8×6	M8×20	24		
GGR-465050-10	46	50	50		21	21		7			28		
GGR-182622-15	18	26	22	12	10.8	7.5		3.8	M5×5	M5×16	10	15	
GGR-222826-15	22	28	26	16	11	11	6	4	M6×6	M6×16	12		
GGR-283432-15	28	34	32		13	13		5			16		
GGR-344038-15	34	40	38		17	17		5.5			20		
GGR-424546-15	42	45	46	20	19.5	19.5	8	6	M8×6	M8×20	24		
GGR-465050-15	46	50	50		21	21		7			28		

1. Only need machining one installation hole, and apply together with specialized angle pin. Do not need machine angle hole.
2. Two size of 10° and 15° for your choose.
3. Apply together with GGI.
4. Within spacer and mounting screw (T).

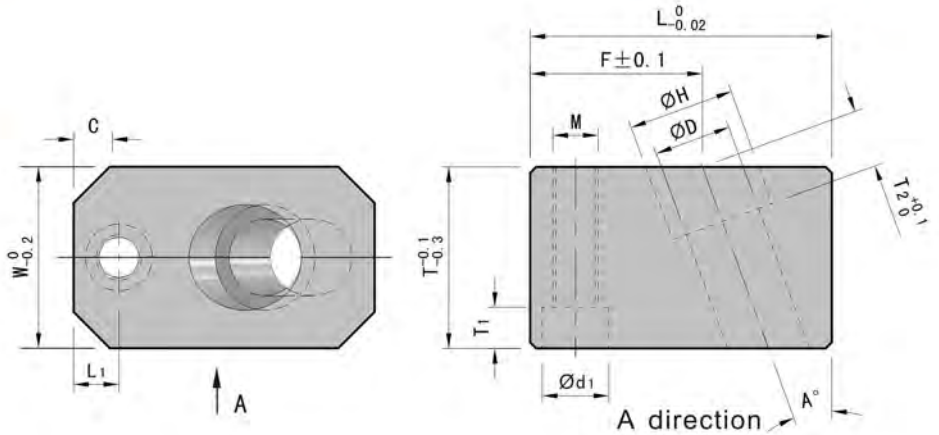
JIS

Angle pin housing

AAPRSS

ISO 2D

FL



Order AAPRSS-D-T-A°

Hardness:S45C

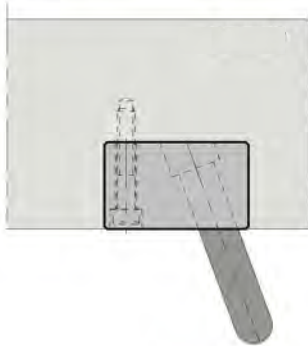
A=10~20°

Code	D	DH7	W	L	L1	H	T2
AAPRWS	8	8	+0.015	16	35	7	5
	10	10	- 0	18	40	12	10
	13	13	+0.018	22	50	14	10
	16	16	- 0	25	55	17	10
	20	20	+0.021/-0	30	65	20	13

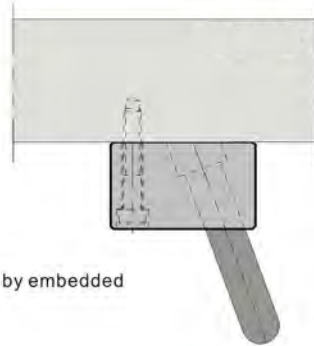
Code	D	d1	t1	F	C	M	Mounting screws	T	@ ¥ /P
AAPRWS	8			19				20	25
	10	11	7	21	3	8	M 6	25	30
	13			27				30	35
	16	14	9	29		10	M 8	35	40
	20	18	11	35	5	12	M10	40	45



Installation Diagram:



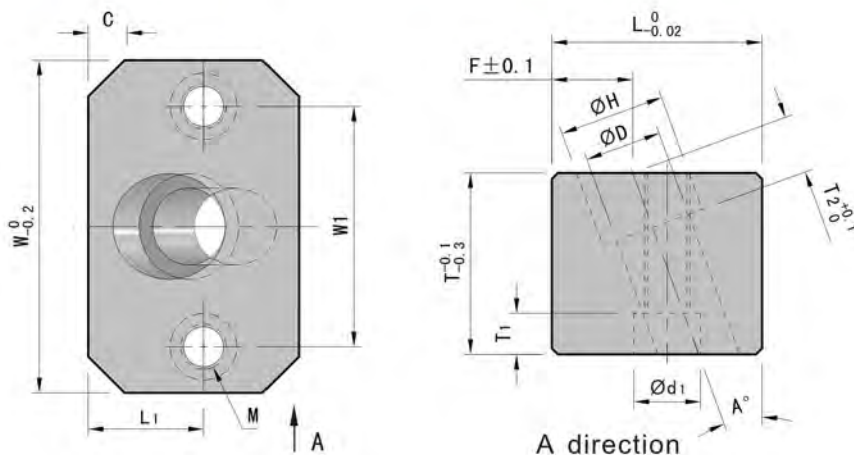
Right



Wrong

Note: Must installation by embedded

AAPRWS



Order AAPRWS-D-T-A°

Material: S45C

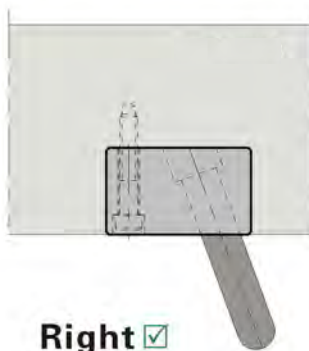
A=10~20°

Code	D	DH7		W	W1	L	L1	H	T2
AAPRWS	8	8	+0.015	38	24	5	14	12	5
	10	10	-0	40	26	10	16	14	10
	13	13	+0.018	44	30		18	17	
	16	16	-0	48	34		21	20	
	20	20		58	40	13	25	24	13
	25	25	+0.021	65	46		30	29	
30	30	-0	75	54	15	35	36	15	

Code	D	d1	t1	F	C	Drawing thread	Mounting screws	T	@ ¥/P
AAPRWS	8	11	7	8	3	8	M 6	20	25
	10			25				30	
	13			30				35	
	16			15	5			35	40
	20	14	9	18	10	10	M 8	40	45
	25			22	10	12	M10	45	50
30	18	11					55	60	

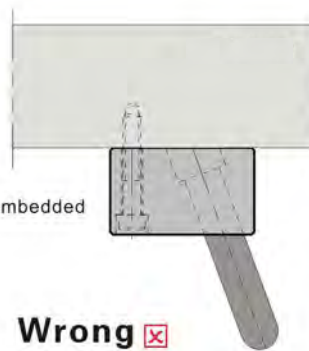


Installation Diagram:



Right ✓

Note: Must installation by embedded



Wrong ✗

- Electric pins series
- Side railers series
- Latch locks series
- Painting gates series
- Dome stamps AP valves series
- Electric series
- Cooling elements series
- Locating parts series
- Spacers series
- Guide pins Guide bush series
- Guide strips V-belt plate series
- Chuck series
- Mold accessories



TRUST

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Cooling elements Series





DIN	DIN	DIN	DIN	DIN
Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs
ZZ80	P334	ZZ80(45°)	P334	ZZ801
				P335
				ZZ801(45°)
				P334
				ZZ80(90°)
				P338



DIN	DIN	DIN	DIN	DIN
Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs
ZZ80(90°)	P338	ZZ801(90°)	P338	ZZ803
				P339
				ZZ804
				P339
				ZZ805
				P336



DIN	DIN	DIN	DIN	DIN
Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs
ZZ8051	P336	ZZ807	P337	ZZ80700
				P337
				ZZ807(45°)
				P340
				ZZ807(90°)
				P340



DIN	DIN	DIN	DIN	DIN
Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs
ZZ80700(45°)	P341	ZZ80700(90°)	P341	ZZ80HT
				P342
				ZZ80HT(45°)
				P342
				ZZ80HT(90°)
				P343



DIN	DIN	DIN	DIN	DIN
Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs
ZZ801HT	P343	ZZ801HT(45°)	P344	ZZ801HT(90°)
				P344
				ZZ807HT
				P345
				ZZ807HT(45°)
				P345



DIN	DIN	DIN	DIN	DIN
Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs
ZZ807HT(90°)	P346	ZZ80700HT	P349	ZZ808HT
				P347
				ZZ808HT(45°)
				P348
				ZZ808HT(90°)
				P348



DIN	DIN	DIN	DIN	DIN
Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs	Quick release connector plugs
ZZ808	P348	ZZ802	P349	ZZ80700HT(45°)
				P349
				ZZ80700HT(90°)
				P349
				EE2232
				P350



DIN		DIN		DIN		AISI		AISI	
Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs	
EE2222	P350	EE2234	P351	EE2224	P351	SSVK(45°)	P352	SSVK	P352



AISI		AISI		AISI		AISI		AISI	
Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs	
SSK(45°)	P353	SSK-D	P353	MMK10	P354	MMK12	P354	MMK15	P354



AISI		AISI		AISI		AISI		AISI	
Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs	
MMK10-...-PL	P356	MMK15-...-PL	P356	MMK100	P355	MMK120	P355	MMK150	P355



AISI		AISI		AISI		AISI		AISI	
Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs	
MMK100-...-PL	P357	MMK150-...-PL	P357	SST12	P357	SSK	P358	SSK(90°)	P358



AISI		AISI		AISI		AISI		AISI	
Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs	
SSVK	P359	SSVK(90°)	P358	FFSVK	P360	FFSK	P360	SSTN-PL	P360



AISI		AISI		AISI		AISI		AISI	
Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs	
SSK-...-PL	P361	SSK-...-PL(90°)	P361	SSK-...-PL(45°)	P362	SSVK-...-PL(45°)	P363	SSVK-...-PL	P363



AISI		AISI		AISI		AISI		AISI	
Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs	
SSVK-...-PL(90°)	P363	JJS-...-M	P364	JJS-...-MV	P528	JJS	P364	JJS-...-V	P364



AISI		AISI		AISI		AISI		AISI	
Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs	
JJS-...-204	P365	JJS-...-204-V	P365	JJS(90°)	P365	JJS-...-V	P366	JJS(45°)	P366



AISI		AISI		AISI		AISI		AISI	
Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs	
JJS-...-V(45°)	P366	JJS-...-SV	P367	JJS-...-SV(90°)	P367	JJS-...-SV(45°)	P367	JJS-...-MSV	P368



AISI		AISI		AISI		AISI		AISI	
Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs	
JJS-...-SV	P368	JJSL	P369	JJSL(45°)	P369	JJSL(90°)	P369	JJSL-...-V	P370



AISI		AISI		AISI		AISI		AISI	
Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs		Quick release connector plugs	
JJSL-...-V(45°)	P370	JJSL-...-V(90°)	P370	JJSL-...-SV	P371	JJSL-...-SV(45°)	P371	JJSL-...-SV(90°)	P371



DIN		DIN		DIN		DIN		DIN	
Nipples		Nipples		Nipples		Nipples		Nipples	
ZZ81	P372	ZZ81(90°)	P372	ZZ811	P373	ZZ90	P373	ZZ811HT	P374



DIN		DIN		DIN		DIN		DIN	
Nipples		Nipples		Nipples		Nipples		Nipples	
ZZ87	P374	ZZ88	P375	ZZ880	P375	ZZ881	P375	ZZ89	P376



DIN		DIN		DIN		DIN		DIN	
Nipples		Nipples		Nipples		Nipples		Nipples	
ZZ810	P376	ZZ812	P377	ZZ814	P377	ZZ905	P378	ZZ906	P378



DIN		DIN		DIN		AISI		AISI	
Nipples		Nipples		Nipples		Nipples		Nipples	
ZZ831	P378	ZZ830	P379	ZZ83	P379	SST11	P380	SST13	P381



AISI		AISI		AISI		AISI		AISI	
Nipples		Nipples		Nipples		Nipples		Nipples	
SST14	P371	SST15	P381	BBEP	P382	SSTN	P382	BBSS	P383



AISI		AISI		AISI		AISI		AISI	
Nipples		Nipples		Nipples		Nipples		Nipples	
AATN	P383	EEJP	P384	FFN	P384	NN	P385	JJP	P387



AISI		AISI		AISI		AISI		AISI	
Nipples		Nipples		Nipples		Nipples		Nipples	
JJPF	P388	JJP-SV	P388	JJPB	P389	PPCS	P389	JJTW	P390



AISI		AISI		AISI		AISI		AISI	
Nipples		Nipples		Nipples		Nipples		Nipples	
JJWS	P390	HHX-JTW	P391	JJTWF	P391	JJEMM	P392	JJEMMR	P392



AISI		AISI		AISI		AISI		AISI	
Nipples		Nipples		Nipples		Nipples		Nipples	
JJEMF	P393	JJEMFR	P393	JJEFS	P394	JJEFSR	P394	JJELF	P394



AISI		AISI		AISI		AISI		DIN	
Nipples		Nipples		Straight & spiral brass plug baffles		Straight & spiral brass plug baffles		Straight & spiral brass plug baffles	
JJEFL	P395	JJEFLR	P395	BBB	P396	BBBS	P397	EE2102	P399



DIN		JIS		JIS		JIS		JIS	
Straight & spiral brass plug baffles		Straight & spiral brass plug baffles		Straight & spiral brass plug baffles		Spiral plastic plug baffles		Spiral plastic plug baffles	
EE2108	P400	BBFPXR	P401	BFAPR	P401	WWRCAN	P402	WWRCTN	P402



JIS		JIS		DIN		DIN		DIN	
Spiral plastic plug baffles		Spiral plastic plug baffles		Pressure plugs		Pressure plugs		Pressure plugs	
WWRCBN	P402	WWRCCN	P402	ZZ94	P404	ZZ940	P405	ZZ941	P405



DIN		AISI		AISI		Wmould		Wmould	
Pressure plugs		Pressure plugs		Pressure plugs		Cooling tubes		Cooling tubes	
ZZ942	P405	BBP	P406	AAN	P406	BBTC	P406	BBTCM	P406



Wmould		Wmould		Wmould		Wmould		Wmould	
Cooling tubes		Cooling tubes		Cooling tubes		Cooling tubes		Cooling circuit plugs	
TPC	P406	BBTS	P406	BBTSM	P406	TPS	P406	DTW	P407



Wmould		DIN		TAIWAN		TAIWAN		TAIWAN	
Heat pipes		French nipples		Cooling tubes		Cooling tubes		Cooling tubes	
HTK	P408	RRPL	P410	WWCPFT	P420	WWCPF	P420	WJA	P421



TAIWAN		DIN	
Cooling tubes		Mold mounted manifolds	
WJB	P421	IIM	P422

Products Summary

Cooling series summary instruction:

Rely on cooling series to control mold temperature to shorten products molding cycle ,keep physical property steady and enhance products forming size precision,The design of layout is best effective method for cooling circuit in injection mold and die casting mold .

Products feature:

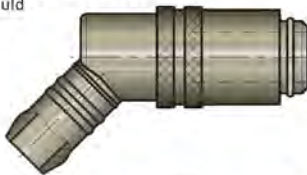
- 1.thermostability,can be used it up to 200℃ , some high temperature products can use it up to 250℃
- 2.good flowability ,So that get lowest pressure loss.
- 3.Interchangeability ,Same code can provide a full range of products to match each other .
- 4.Inner structure can provide two choose one is with valve ,another one without valve to meet different demand .
- 5.Easy to installed, fast to connection or cut off .
- 6.Extensive application,can used in air ,water ,oil ,variety of medium .
- 7.Bear high voltage ,working pressure :Max13bar(1.3Mpa)

Note:

- 1.When used it ,The temperature Can't pass permit medium temperature .
- 2.Not permit medium will Can't used it .
- 3.Work pressure Can't exceed big pressure range .

Quick release connection ,Nipples (with valve), applications on the mould

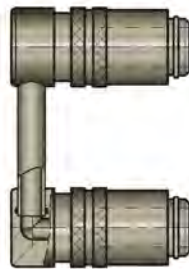
ZZ80HT-...
ZZ80-...



ZZ802



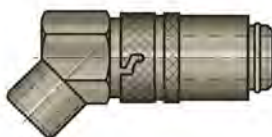
ZZ805-...



ZZ807-...
ZZ807HT-...



ZZ80700-...
ZZ80700HT-...



ZZ803-...



Standard type	
Medium	Max (°C)
Air	200
Oil	120
Water	100

High temperature type	
Medium	Max (°C)
Air	250
Oil	200
Water	160

Note:

- 1.When the code with HT is mean high temperature products,for examples:"ZZ80HT"
2. Valve Nipples only match the quick release connector with valve.

Please coated seal on screw connection position before used it ,so that get better effective.



ZZ811
ZZ811HT

	with valve
	open flow (without valve)

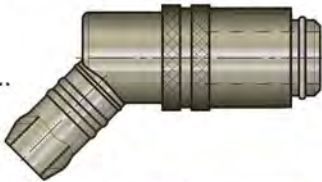
Ejector pins
 Ejector sleeves
 Guide pin/insert
 Guide pin/insert series
 Punch series
 Mold processor
 Cooling elements
 Locating pins
 Springs series
 Guide pins
 Guide bush
 Valve pin/pin series
 Chuck series
 Mold processor

Products Summary

Quick release connection, Nipples adaptation table (with valve):

DIN

ZZ80HT-...
ZZ80-...



DIN

ZZ802-...



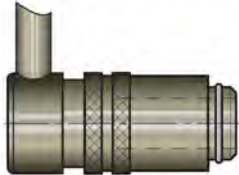
DIN

ZZ801-...
ZZ801HT-...



DIN

ZZ805-...



DIN

ZZ8051-...



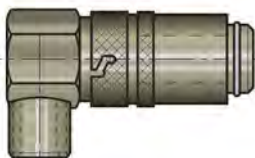
DIN

ZZ807-...
ZZ807HT-...



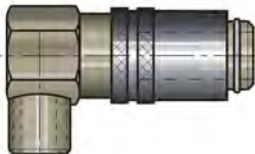
DIN

ZZ80700-...
ZZ80700HT-...



DIN

ZZ808HT-...
ZZ808-...



DIN

ZZ802



DIN

ZZ81



DIN

ZZ83



DIN

ZZ830



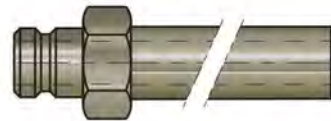
DIN

ZZ831



DIN

ZZ90



Extractor pins
Extractor sleeves

Slide retainers
Sleeves

Latch locks
Series

Pausing gate
Series

Date stamps
Air valves series

Extractor series

Cooling elements
Series

Locating parts
Series

Spring series

Gate parts
Gate dash

Guide strips
Vibr. plate series

Chucks series

Mold
Accessories

Products Summary

Quick release connection, Nipples adaptation table (with valve):

AISI
JJS



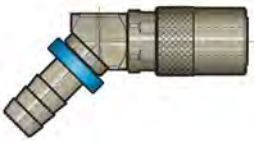
AISI
JJS



AISI
JJS



AISI
JJSL



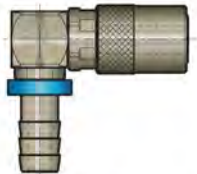
AISI
JJSL



AISI
JJS-SV



AISI
JJS-SV



AISI
JJS-SV



AISI
JJS-SV



AISI
JJP



AISI
JJPB



AISI
JJPF



AISI
JJP-SV



Extractor pins Extractor sleeves
Slide railiners sleeves
Latch locks series
Pouring gates series
Date stamps Air valves series
Extractor series
Cooling elements
Locating parts series
Spacers series
Guide pins Guide bush
Guide strips Wear plate series
Chuck series
Mold accessories

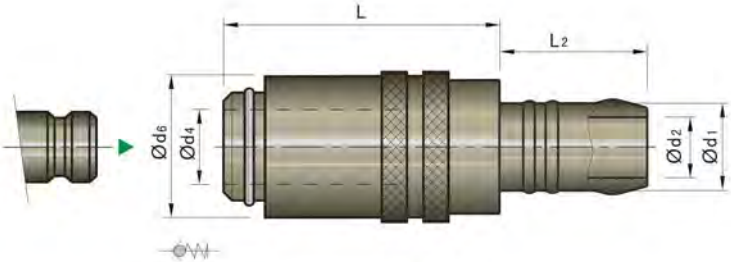
DIN

Quick release connector plugs

ZZ80



- ZZ802-...
- ZZ81-...
- ZZ811-...
- ZZ83-...
- ZZ830-...
- ZZ831-...
- ZZ90-...



Medium	Max (°C)
Air	200
Oil	120
Water	100

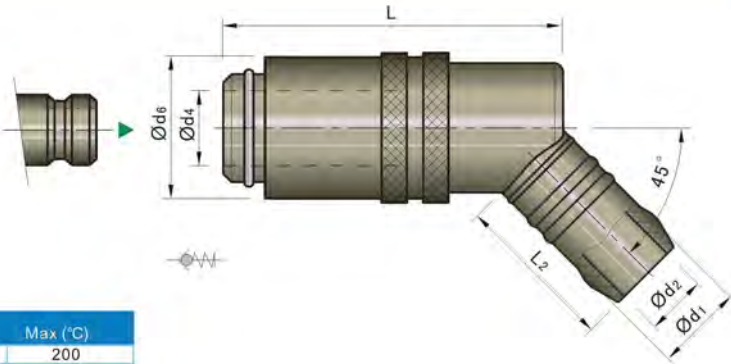
Order ZZ80-5 Material: Brass

Code	L	L2	d2	d6	d1/d4	p(bar)	@ ¥/P
ZZ80- 5	21.5	13.5	3.5	10	5	10	
ZZ80- 9	31	22	6	17	9		
ZZ80-13	37	25	9	22	13	15	
ZZ80-19	58	32	13	31	19	20	

ZZ80-...-45



- ZZ802-...
- ZZ81-...
- ZZ811-...
- ZZ83-...
- ZZ830-...
- ZZ831-...
- ZZ90-...



Medium	Max (°C)
Air	200
Oil	120
Water	100

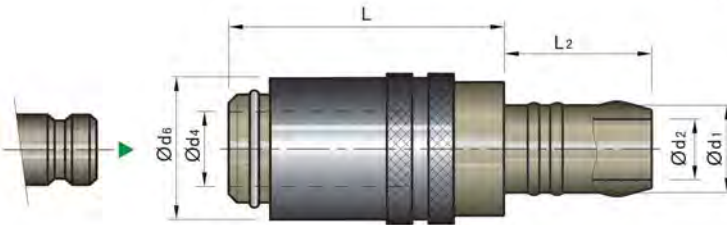
Order ZZ80-5-45 Material: Brass

Code	L	L2	d2	d6	d1/d4	p(bar)	@ ¥/P
ZZ80- 5-45	29.5	13.5	3.5	10	5	10	
ZZ80- 9-45	41	28	6	17	9		
ZZ80-13-45	51		9	22	13	15	
ZZ80-19-45	78	34	13	31	19	20	

DIN

Quick release connector plugs

ZZ81-...
ZZ83-...
ZZ830-...
ZZ831-...
ZZ90-...



ZZ801

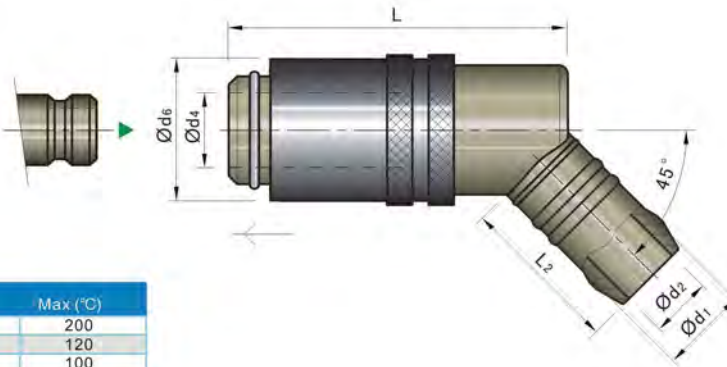


Medium	Max (°C)
Air	200
Oil	120
Water	100

Order ZZ801-5 Material: Brass

Code	L	L2	d2	d6	d1/d4	p(bar)	@ ¥ /P
ZZ801- 5	21.5	13.5	3.5	10	5	10	
ZZ801- 9	31	22	6	17	9		
ZZ801-13	37	25	9	22	13	15	
ZZ801-19	58	32	13	31	19	20	

ZZ81-...
ZZ83-...
ZZ830-...
ZZ831-...
ZZ90-...



ZZ801-...45



Medium	Max (°C)
Air	200
Oil	120
Water	100

ZZ801-5-45 Material: Brass

Code	L	L2	d2	d6	d1/d4	p(bar)	@ ¥ /P
ZZ801- 5-45	29.5	13.5	3.5	10	5	10	
ZZ801- 9-45	41	28	6	17	9		
ZZ801-13-45	51	-	9	22	13	15	
ZZ801-19-45	78	34	13	31	19	20	

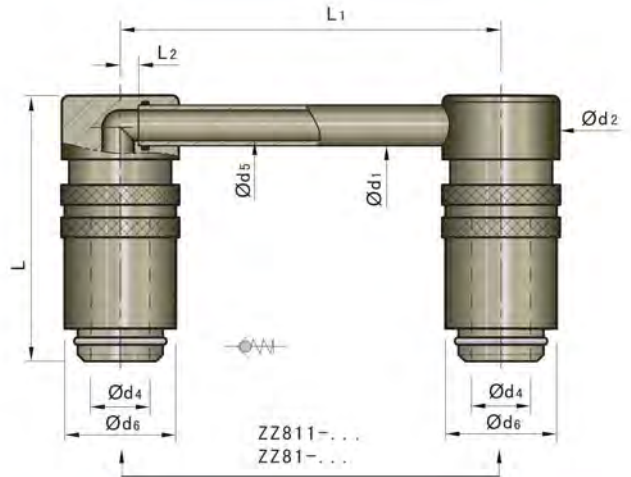
DIN

Quick release connector plugs

ZZ805



Medium	Max (°C)
Air	200
Oil	120
Water	100



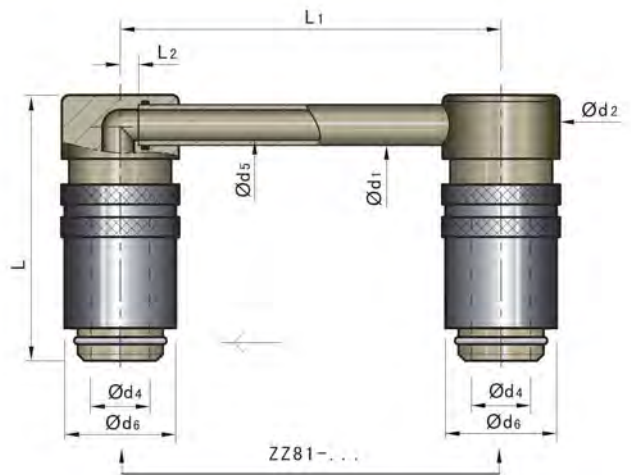
Order ZZ805-d4-L1 Material: Brass

d4	L1	L	L2	d1	d2	d5	d6	p(bar)	@ ¥/P
9	125	43	2	8	20	6	17	10	
	250								
	500								
13	125	53		10	26	8	22	15	
	250								
19	500	80	3	14	36	12	31	20	

ZZ8051



Medium	Max (°C)
Air	200
Oil	120
Water	100



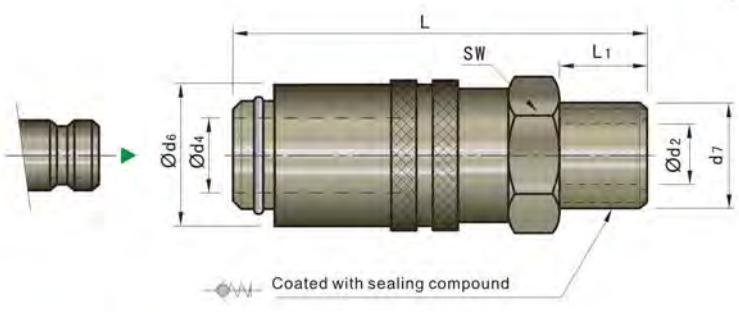
Order ZZ8051-d4-L1 Material: Brass

d4	L1	L	L2	d1	d2	d5	d6	p(bar)	@ ¥/P
9	125	43	2	8	20	6	17	10	
	250								
	500								
13	125	53		10	26	8	22	15	
	250								
	500								

DIN

Quick release connector plugs

- ZZ802-...
- ZZ81-...
- ZZ811-...
- ZZ83-...
- ZZ830-...
- ZZ831-...
- ZZ90-...



ZZ807

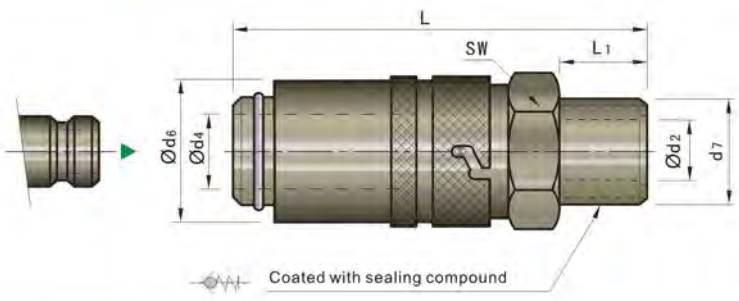


Medium	Max (°C)
Air	200
Oil	120
Water	100

Order ZZ807-9-14×1.5 Material: Brass

Code	d4	d7	d2	d6	L	L1	SW	p(bar)	@ ¥ / P
ZZ807- 9-14×1.5	9	M14×1.5	6	17	48	9	17	10	
ZZ807-13-16×1.5	13	M16×1.5	9	22	52		22	15	
ZZ807-19-24×1.5		M24×1.5	15		78	16			
ZZ807-19-R1/2	19	G1/2A	13	31	74	22	30	20	

- ZZ802-...
- ZZ81-...
- ZZ811-...
- ZZ83-...
- ZZ830-...
- ZZ831-...
- ZZ90-...



ZZ80700



Medium	Max (°C)
Air	200
Oil	120
Water	100

Order ZZ80700-9×14×1.5 Material: Brass

Code	d4	d7	d2	d6	L	L1	SW	p(bar)	@ ¥ / P
ZZ80700- 9×14×1.5	9	M14×1.5	6	17.25	51	9.5	17	10	
ZZ80700-13×16×1.5	13	M16×1.5	9	22.1	60	9	22	15	

- Exciter pins
- Exciter sleeves
- Slide railheads
- Slide rails
- Latch locks
- Pointing gates
- Ad. valves series
- Data stamps
- Exciter series
- Cooling elements
- Locating parts
- Spacers series
- Guide pins
- Guide bush
- Guide strips
- Wear plate series
- Chuck series
- Mold accessories

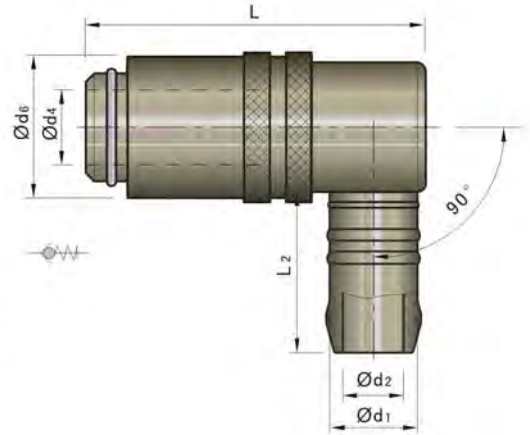
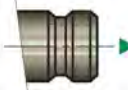
DIN

Quick release connector plugs

ZZ80-...-90



- ZZ802-...
- ZZ81-...
- ZZ811-...
- ZZ83-...
- ZZ830-...
- ZZ831-...
- ZZ90-...



Medium	Max (°C)
Air	200
Oil	120
Water	100

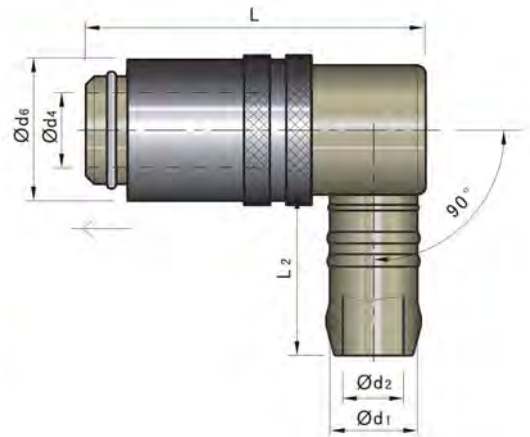
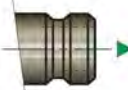
Order ZZ80-5-90 Material: Brass

Code	L	L2	d2	d6	d1/d4	p(bar)	@ ¥ / P
ZZ80- 5-90	29.5	13.5	3.5	10	5	10	
ZZ80- 9-90	41	24	6	17	9		
ZZ80-13-90	51	28	9	22	13	15	
ZZ80-19-90	78	34	13	31	19	20	

ZZ801-...-90



- ZZ81-...
- ZZ83-...
- ZZ830-...
- ZZ831-...
- ZZ90-...



Medium	Max (°C)
Air	200
Oil	120
Water	100

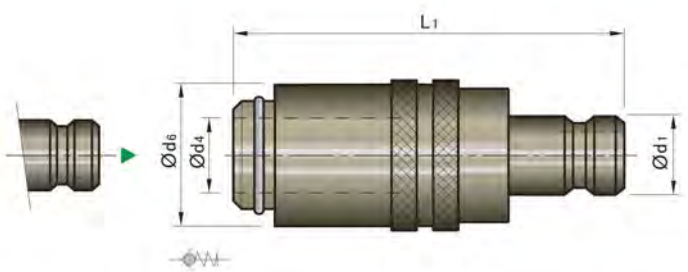
Order ZZ801-5-90 Material: Brass

Code	L	L2	d2	d6	d1/d4	p(bar)	@ ¥ / P
ZZ801- 5-90	29.5	13.5	3.5	10	5	10	
ZZ801- 9-90	41	24	6	17	9		
ZZ801-13-90	51	28	9	22	13	15	
ZZ801-19-90	78	34	13	31	19	20	

DIN

Quick release connector plugs

- ZZ802-...
- ZZ81-...
- ZZ811-...
- ZZ83-...
- ZZ830-...
- ZZ831-...
- ZZ90-...



Medium	Max (°C)
Air	200
Oil	120
Water	100

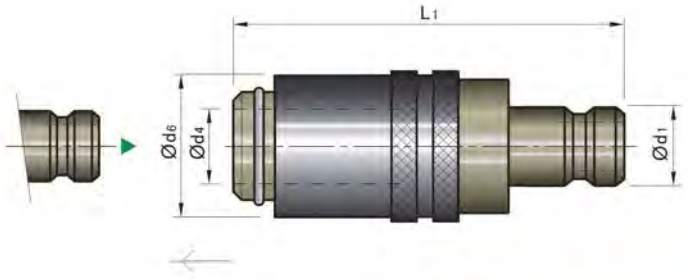
ZZ803



Order ZZ803-d4-d1 Material: Brass

d4	d1	d6	L1	p(bar)	@ ¥ / P
9	9.4	17.25	40.55	10	
9.4	9	17.5	43		
13	13.5	22.1	52.05	15	
13.5	13	23	55.55		

- ZZ802-...
- ZZ81-...
- ZZ811-...
- ZZ83-...
- ZZ830-...
- ZZ831-...
- ZZ90-...



Medium	Max (°C)
Air	200
Oil	120
Water	100

ZZ804



Order ZZ804-d4-d1 Material: Brass

d4	d1	d6	L1	p(bar)	@ ¥ / P
9	9.4	17.25	40.55	10	
9.4	9	17.5	43		
13	13.5	22.1	52.05	15	
13.5	13	23	55.55		

- Extractor pins series
- Extractor sleeves series
- Slide railiners series
- Latch locks series
- Pushing gates series
- Date stamps Air valves series
- Extractor series
- Coupling elements series
- Locating parts series
- Spacers series
- Guide pins Guide bush series
- Guide strips V-belt plate series
- Chuck series
- Mold accessories

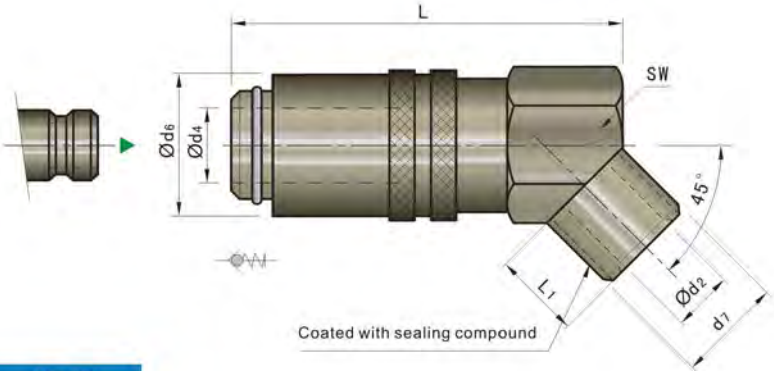
DIN

Quick release connector plugs

ZZ807-...-45



- ZZ802-...
- ZZ81-...
- ZZ811-...
- ZZ83-...
- ZZ830-...
- ZZ831-...
- ZZ90-...



Medium	Max (°C)
Air	200
Oil	120
Water	100

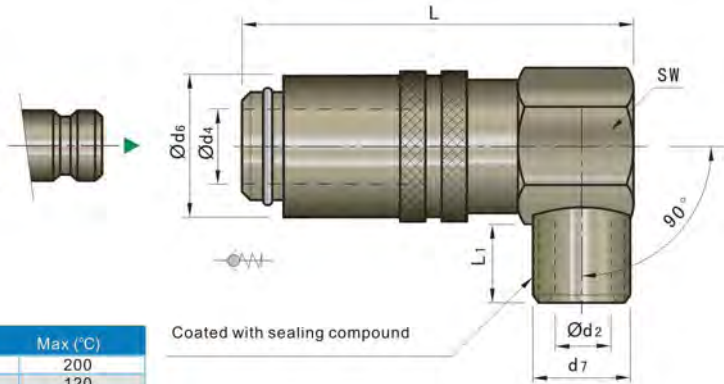
Order ZZ807-9-14×1.5-45 Material: Brass

Code	d4	d7	d2	d6	L	L1	SW	p(bar)	@ ¥ /P
ZZ807- 9-14×1.5-45	9	M14×1.5	6	17	47	9	17	10	
ZZ807-13-16×1.5-45	13	M16×1.5	9	22	54		22	15	
ZZ807-19-24×1.5-45	19	M24×1.5	13	31	80	18	30	20	

ZZ807-...-90



- ZZ802-...
- ZZ81-...
- ZZ811-...
- ZZ83-...
- ZZ830-...
- ZZ831-...
- ZZ90-...



Medium	Max (°C)
Air	200
Oil	120
Water	100

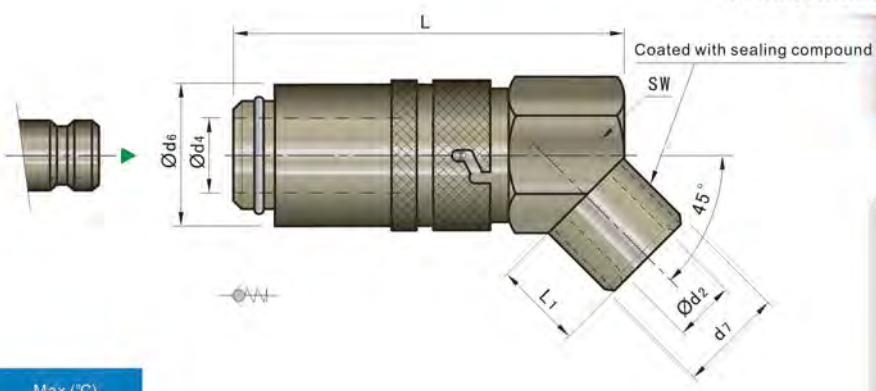
Order ZZ807-9-14×1.5-90 Material: Brass

Code	d4	d7	d2	d6	L	L1	SW	p(bar)	@ ¥ /P
ZZ807- 9-14×1.5-45	9	M14×1.5	6	17	47	9	17	10	
ZZ807-13-16×1.5-45	13	M16×1.5	9	22	54		22	15	
ZZ807-19-24×1.5-45	19	M24×1.5	13	31	80	16	30	20	

DIN

Quick release connector plugs

- ZZ802-...
- ZZ81-...
- ZZ811-...
- ZZ83-...
- ZZ830-...
- ZZ831-...
- ZZ90-...



Medium	Max (°C)
Air	200
Oil	120
Water	100

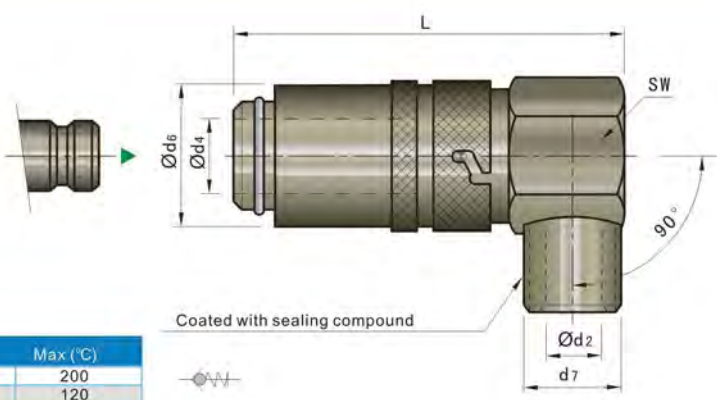
ZZ80700-...-45



Order ZZ80700-9-14×1.5-45 Material: Brass

Code	d4	d7	d2	d6	L	L1	SW	p(bar)	@ ¥ /P
ZZ80700- 9-14×1.5-45	9	M14×1.5	6	17.25	50.5	12	17	10	
ZZ80700-13-16×1.5-45	13	M16×1.5	9	22.1	61.5		22	15	

- ZZ802-...
- ZZ81-...
- ZZ811-...
- ZZ83-...
- ZZ830-...
- ZZ831-...
- ZZ90-...



Medium	Max (°C)
Air	200
Oil	120
Water	100

ZZ80700-...-90



Order ZZ80700-9-14×1.5-90 Material: Brass

Code	d4	d7	d2	d6	L	SW	p(bar)	@ ¥ /P
ZZ80700- 9-14×1.5-90	9	M14×1.5	6	17.25	50.5	17	10	
ZZ80700-13-16×1.5-90	13	M16×1.5	9	22.1	61.5	22	15	

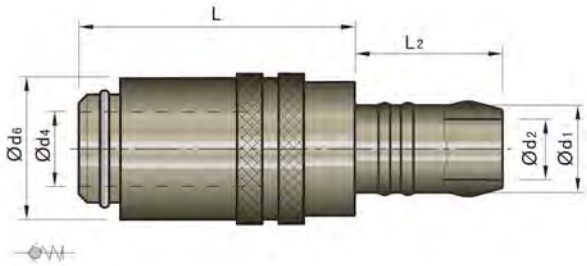
DIN

Quick release connector plugs

ZZ80HT



- ZZ802-...
- ZZ81-...
- ZZ811-...
- ZZ811HT-...
- ZZ83-...
- ZZ830-...
- ZZ831-...
- ZZ90-...



Medium	Max (°C)
Air	250
Oil	200
Water	160

Order ZZ80HT-d1/d4

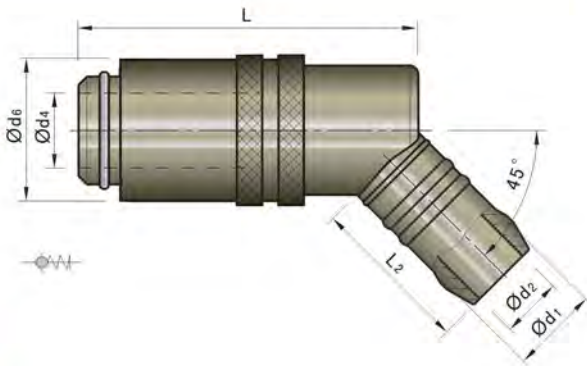
Material: Brass

d1/d4	d2	d6	L	L2	p(bar)	@ ¥ /P
9	6	17	31	22	10	
13	9	22	37	25	15	

ZZ80HT-...-45



- ZZ802-...
- ZZ81-...
- ZZ811-...
- ZZ811HT-...
- ZZ83-...
- ZZ830-...
- ZZ831-...
- ZZ90-...



Medium	Max (°C)
Air	250
Oil	200
Water	160

Order ZZ80HT-d1/d4-45

Material: Brass

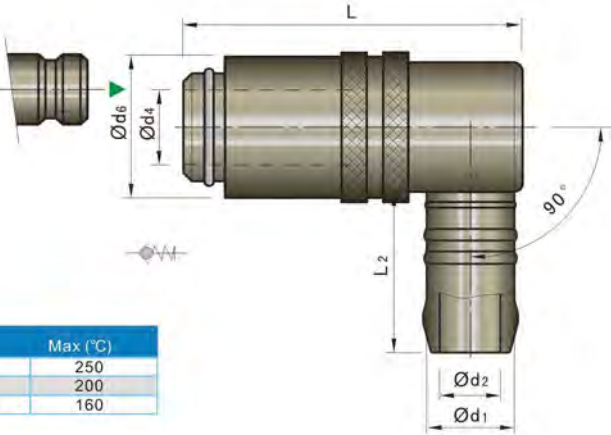
d1/d4	d2	d6	L	L2	p(bar)	@ ¥ /P
9	6	17	41	28	10	
13	9	22	51		15	

Quick release connector plugs

ZZ80HT-...-90



- ZZ802-...
- ZZ81-...
- ZZ811-...
- ZZ811HT-...
- ZZ83-...
- ZZ830-...
- ZZ831-...
- ZZ90-...



Medium	Max (°C)
Air	250
Oil	200
Water	160

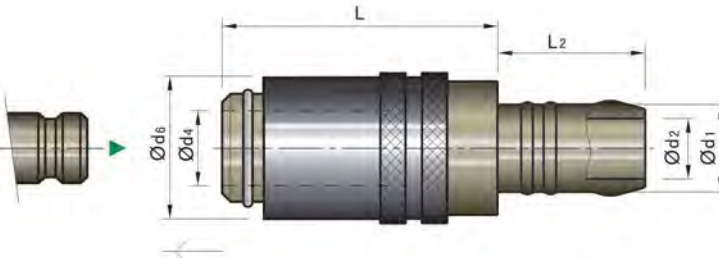
Order ZZ80HT-d1/d4-90 Material: Brass

d1/d4	d2	d6	L	L2	p(bar)	@ ¥ / P
9	6	17	41	24	10	
13	9	22	51	28	15	

ZZ801HT



- ZZ81-...
- ZZ83-...
- ZZ830-...
- ZZ831-...
- ZZ90-...



Medium	Max (°C)
Air	250
Oil	200
Water	160

Order ZZ801HT-d1/d4 Material: Brass

d1/d4	d2	d6	L	L2	p(bar)	@ ¥ / P
9	6	17	31	22	10	
13	9	22	37	25	15	

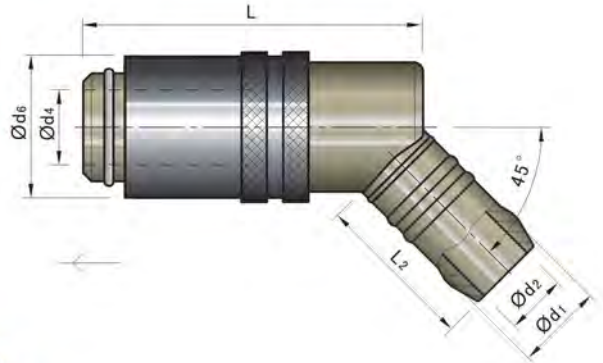
DIN

Quick release connector plugs

ZZ801HT-...-45



ZZ81-...
ZZ83-...
ZZ830-...
ZZ831-...
ZZ90-...



Medium	Max (°C)
Air	250
Oil	200
Water	160

Order ZZ801HT-d1/d4-45

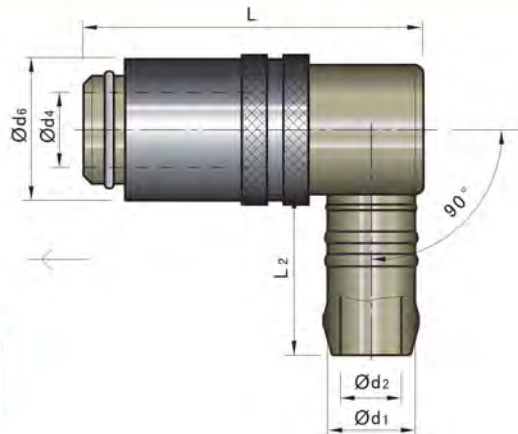
Material: Brass

d1/d4	d2	d6	L	L2	p(bar)	@ ¥ / P
9	6	17	41	28	10	
13	9	22	51		15	

ZZ80HT-...-90



ZZ81-...
ZZ83-...
ZZ830-...
ZZ831-...
ZZ90-...



Medium	Max (°C)
Air	250
Oil	200
Water	160

Order ZZ80HT-d1/d4-90

Material: Brass

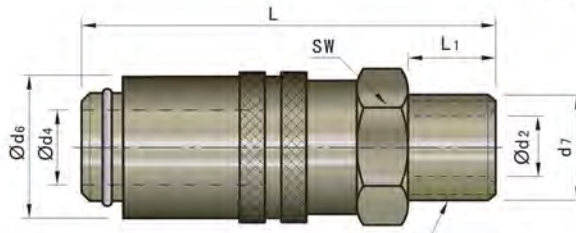
d1/d4	d2	d6	L	L2	p(bar)	@ ¥ / P
9	6	17	41	24	10	
13	9	22	51	28	15	

Quick release connector plugs

ZZ807HT



- ZZ802-...
- ZZ81-...
- ZZ811-...
- ZZ811HT-...
- ZZ83-...
- ZZ830-...
- ZZ831-...
- ZZ90-...



Coated with sealing compound



Medium	Max (°C)
Air	250
Oil	200
Water	160

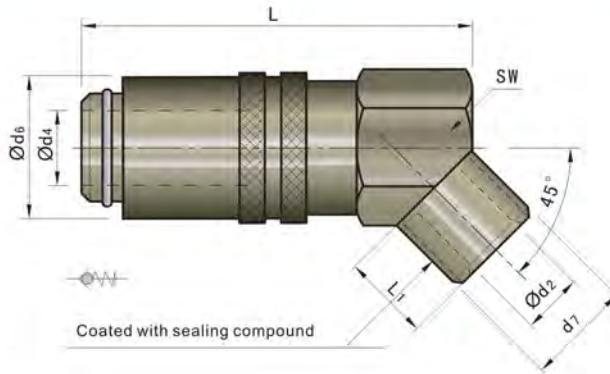
Order ZZ807HT- 9-14×1.5 Material: Brass

Code	d4	d7	d2	d6	L	L1	SW	p(bar)	@ ¥ /P
ZZ807HT- 9-14×1.5	9	M14×1.5	6	17	48	9	17	10	
ZZ807HT-13-16×1.5	13	M16×1.5	9	22	52		22	15	

ZZ807HT-...-45



- ZZ802-...
- ZZ81-...
- ZZ811-...
- ZZ811HT-...
- ZZ83-...
- ZZ830-...
- ZZ831-...
- ZZ90-...



Coated with sealing compound



Medium	Max (°C)
Air	250
Oil	200
Water	160

Order ZZ807HT-9-14×1.5-45 Material: Brass

Code	d4	d7	d2	d6	L	L1	SW	p(bar)	@ ¥ /P
ZZ807HT- 9-14×1.5-45	9	M14×1.5	6	17	47	9	17	10	
ZZ807HT-13-16×1.5-45	13	M16×1.5	9	22	54		22	15	

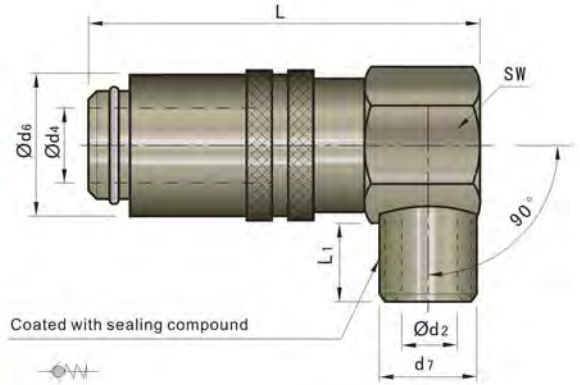
DIN

Quick release connector plugs

ZZ807HT-...-90



- ZZ802-...
- ZZ81-...
- ZZ811-...
- ZZ811HT-...
- ZZ83-...
- ZZ830-...
- ZZ831-...
- ZZ90-...



Medium	Max (°C)
Air	250
Oil	200
Water	160

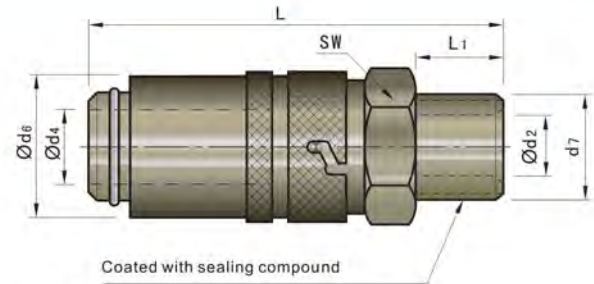
Order ZZ807HT-9-14×1.5-90 Material: Brass

Code	d4	d7	d2	d6	L	L1	SW	p(bar)	@ ¥ /P
ZZ807HT- 9-14×1.5-90	9	M14×1.5	6	17	47	9	17	10	
ZZ807HT-13-16×1.5-90	13	M16×1.5	9	22	54		22	15	

ZZ80700HT



- ZZ802-...
- ZZ81-...
- ZZ811-...
- ZZ811HT-...
- ZZ83-...
- ZZ830-...
- ZZ831-...
- ZZ90-...



Medium	Max (°C)
Air	250
Oil	200
Water	160

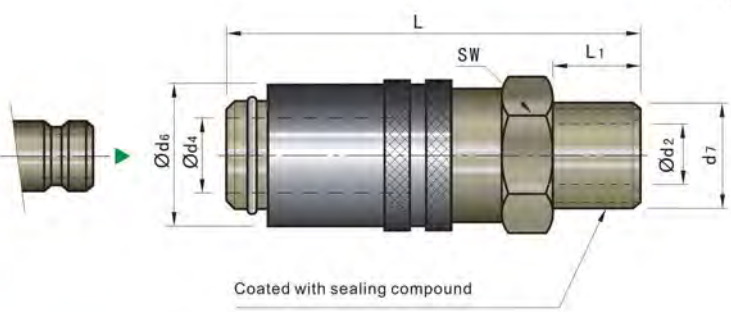
Order ZZ80700HT-d4-d7 Material: Brass

Code	d4	d7	d2	d6	L	L1	SW	p(bar)	@ ¥ /P
ZZ80700HT- 9-14×1.5	9	M14×1.5	6	17.25	51	9.5	17	10	
ZZ80700HT-13-16×1.5	13	M16×1.5	9	22.1	60	9	22	15	

DIN

Quick release connector plugs

ZZ81-...
ZZ83-...
ZZ830-...
ZZ831-...
ZZ90-...



Medium	Max (°C)
Air	250
Oil	200
Water	160

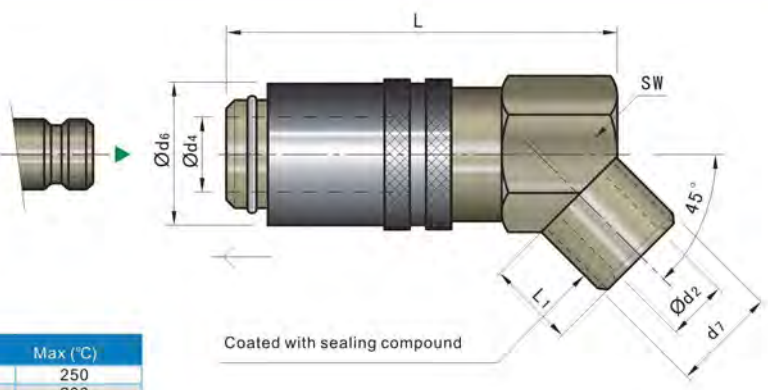
Order ZZ808HT-9-14×1.5 Material: Brass

Code	d4	d7	d2	d6	L	L1	SW	p(bar)	@ ¥ /P
ZZ808HT- 9-14×1.5	9	M14×1.5	6	17	48	9	17	10	
ZZ808HT-13-16×1.5	13	M16×1.5	9	22	52		22	15	

ZZ808HT



ZZ81-...
ZZ83-...
ZZ830-...
ZZ831-...
ZZ90-...



Medium	Max (°C)
Air	250
Oil	200
Water	160

Order ZZ808HT-...45-9-14×1.5-45 Material: Brass

Code	d4	d7	d2	d6	L	L1	SW	p(bar)	@ ¥ /P
ZZ808HT- 9-14×1.5-45	9	M14×1.5	6	17	48	9	17	10	
ZZ808HT-13-16×1.5-45	13	M16×1.5	9	22	52		22	15	

ZZ808HT-...-45



- Extractor pins
- Extractor sleeves
- Slide railbars
- Slide railbars series
- Latch locks
- Locking parts
- Pointing gates
- Pointing gates series
- Date stamps
- Date stamps series
- Extractor series
- Cooling elements
- Locating parts
- Springs series
- Guide pins
- Guide pins series
- Guide pins
- Guide pins series
- Chuck series
- Mold accessories

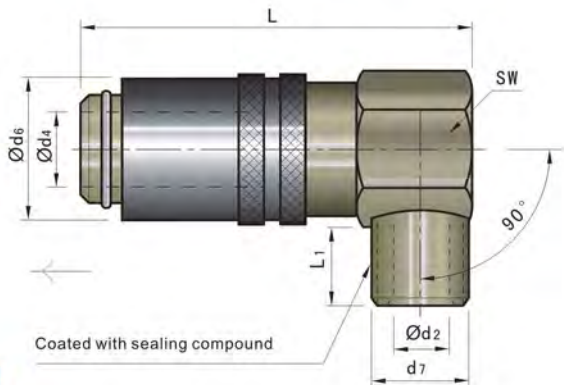
DIN

Quick release connector plugs

ZZ808HT-...-90



- ZZ81-...
- ZZ83-...
- ZZ830-...
- ZZ831-...
- ZZ90-...



Coated with sealing compound

Medium	Max (°C)
Air	250
Oil	200
Water	160

Order ZZ808HT-9-14×1.5-90

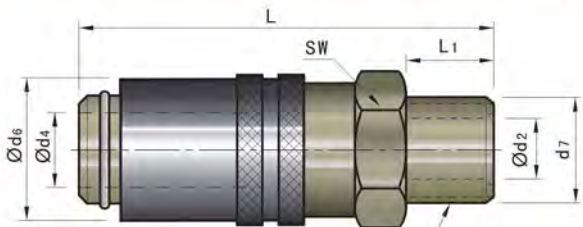
Material: Brass

Code	d4	d7	d2	d6	L	L1	SW	p(bar)	@ ¥ / P
ZZ808HT- 9-14×1.5-90	9	M14×1.5	6	17	47		17	10	
ZZ808HT-13-16×1.5-90	13	M16×1.5	9	22	52	9	22	15	

ZZ808



- ZZ81-...
- ZZ83-...
- ZZ830-...
- ZZ831-...
- ZZ90-...



Coated with sealing compound

Medium	Max (°C)
Air	200
Oil	120
Water	100

Order ZZ808-13-16×1.5

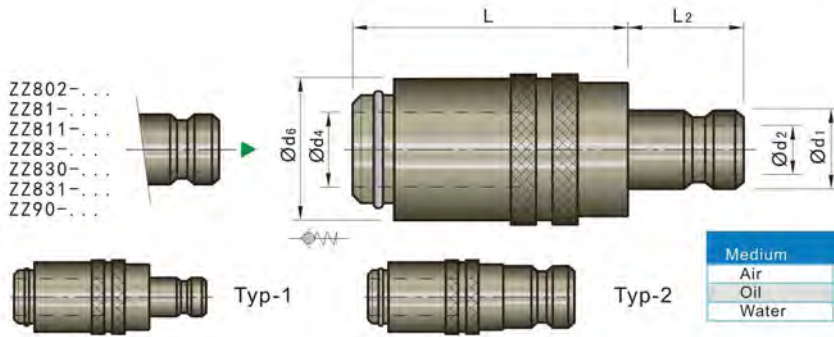
Material: Brass

Code	d4	d7	d2	d6	L	L1	SW	p(bar)	@ ¥ / P
ZZ808HT-13-16×1.5	13	M16×1.5	9	22	52	9	22	15	
ZZ808HT-19-24×1.5	19	M24×1.5	15	31	78	16	30	20	



DIN

Quick release connector plugs

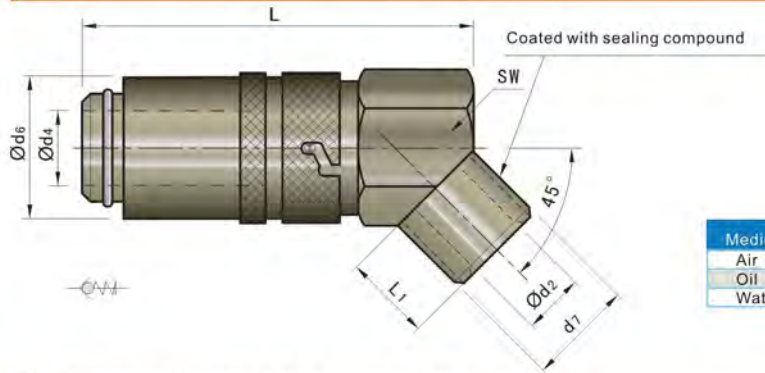


Medium	Max (°C)
Air	200
Oil	120
Water	100



Order ZZ802-d4-d1 Material: Brass

d4	d1	d2	d6	L	L2	Typ	p(bar)	@ ¥ /P
5	9	6	10	20.5	15	2	10	
9	13	8	17	30	14	1		
13	9	6	22	36.5	27	2	15	
19	13	9	31	58	14	1		

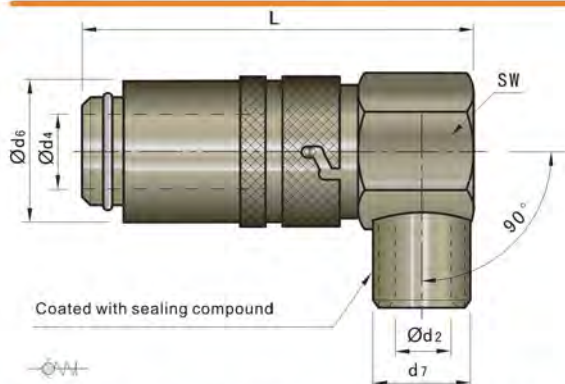


Medium	Max (°C)
Air	250
Oil	200
Water	160



Order ZZ80700-9-14×1.5-45 Material: Brass

Code	d4	d7	d2	d6	L	L1	SW	p(bar)	@ ¥ /P
ZZ80700HT- 9-14×1.5-45	9	M14×1.5	6	17.25	50.5	12	17	10	
ZZ80700HT-13-16×1.5-45	13	M16×1.5	9	22.1	61.5		22	15	



Medium	Max (°C)
Air	250
Oil	200
Water	160



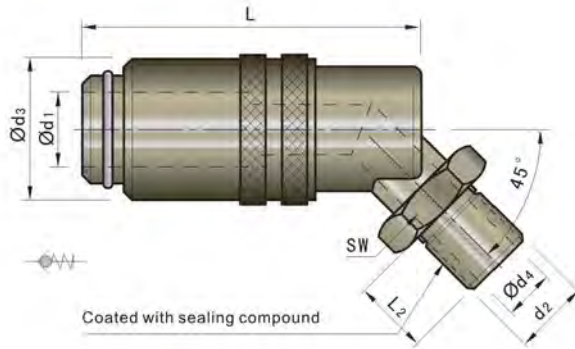
Order ZZ80700-9-14×1.5-90 Material: Brass

Code	d4	d7	d2	d6	L	L1	SW	p(bar)	@ ¥ /P
ZZ80700HT- 9-14×1.5-90	9	M14×1.5	6	17.25	50.5	9	17	10	
ZZ80700HT-13-16×1.5-90	13	M16×1.5	9	22.1	61.5		22	15	

DIN

Quick release connector plugs

EE2232
(45°)

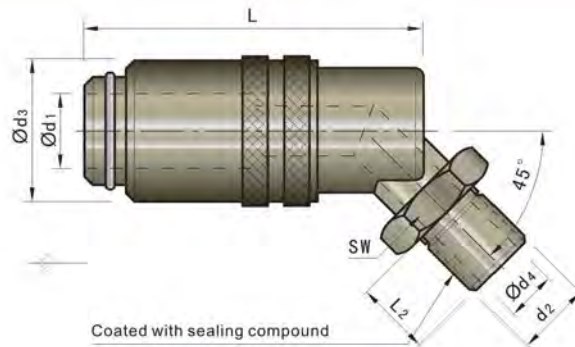


Medium	Max (°C)
Air	200
Oil	120
Water	100

Order EE2232-9-14 Material: Brass

Code	d1	d2	d4	d3	L	L2	SW	p(bar)	@ ¥ /P
EE2232- 9-14	9	M14×1.5	6	17	42	9	14	15	
EE2232-13-16	13	M16×1.5	9	24	51	10	17		
EE2232-19-24	19	M24×1.5	13	31	80	18	30		

EE2222
(45°)



Medium	Max (°C)
Air	200
Oil	120
Water	100

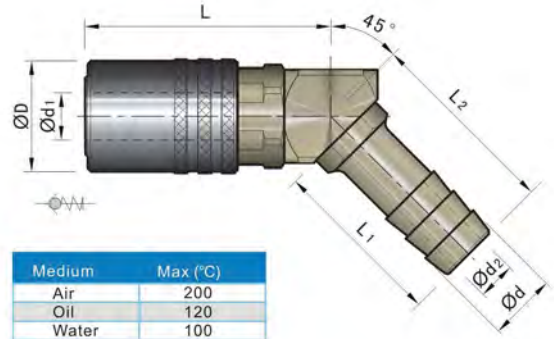
Order EE2222-9-14 Material: Brass

Code	d1	d2	d4	d3	L	L2	SW	p(bar)	@ ¥ /P
EE2222- 9-14	9	M14×1.5	6	17	42	9	14	15	
EE2222-13-16	13	M16×1.5	9	22	51	10	17		
EE2222-19-24	19	M24×1.5	13	31	80	18	30		

AISI

Nipples

SSVK(45°)

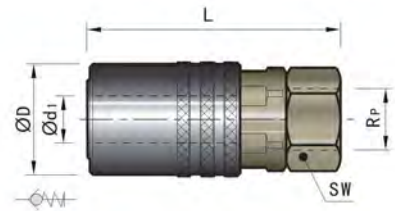


Medium	Max (°C)
Air	200
Oil	120
Water	100

Order SSVK-306 Material: Brass

Code	d1	d2	d	D	L	L1	L2	Series	@ ¥/P
SSVK-306		5	7.3						
SSVK-309	9.5	6	10.5	17	38	27	34	N 6	
SSVK-311			12.2						
SSVK-313	13.6	9	14	22.6	52		37	N 9	
SSVK-319	20	16	20	30	74	46	69	N16	

SSVK

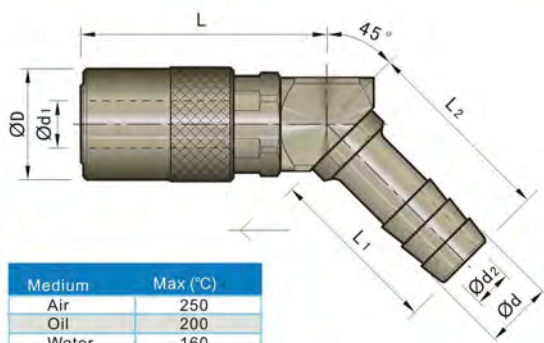


Medium	Max (°C)
Air	200
Oil	120
Water	100

Order SSVK-200 Material: Brass

Code	Rp	d1	L	D	SW	Series	@ ¥/P
SSVK-200	1/8"BSP	9.5	39	17	1/2"	N 6	
SSVK-300	1/4"BSP	13.6	53	22.6	3/8"	N 9	
SSVK-500	1/2"BSP	20	57	30	1 1/8"	N16	





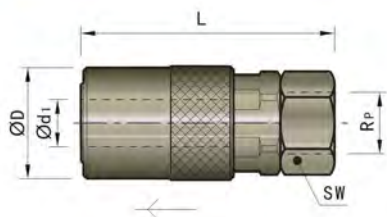
Medium	Max (°C)
Air	250
Oil	200
Water	160



SSK(45°)

Order SSK-306 Material: Brass

Code	d1	d2	d	D	L	L1	L2	Series	@ ¥ / P
SSK-306	9.5	5	7.3	17	38	27	34	N 6	
SSK-309		6	10.5						
SSK-311	13.6	9	12.2	22.6	52	46	69	N 9	
SSK-313		14							
SSK-319	20	16	20	30	67				



Medium	Max (°C)
Air	250
Oil	200
Water	160



SSK-D

Order SSK-D-200 Material: Brass

Code	Rp	d1	L	D	SW	Series	@ ¥ / P
SSK-D-200	1/8"BSP	9.5	39	17	1/2"	N 6	
SSK-D-300	1/4"BSP	13.6	53	22.6	3/8"	N 9	
SSK-D-500	1/2"BSP	20	59	30	11/8"	N16	



- Extractor pins
- Extractor sleeves
- Slide retainers
- Series
- Latch locks
- Series
- Pouring gates
- Series
- Date stamps
- Air valves
- Series
- Episor series
- Cooling elements
- Series
- Locating parts
- Series
- Springs
- Series
- Guide pins
- Guide bush
- Series
- Guide strips
- Wear plate
- Series
- Chuck series
- Series
- Mold
- Accessories

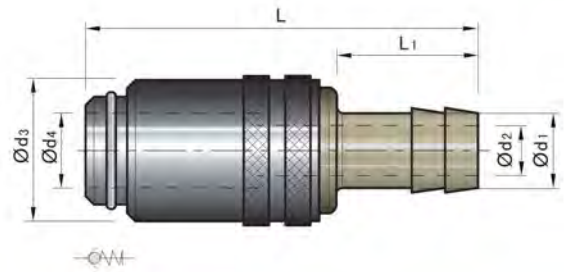
AISI

Quick release connector plugs

MMK 10



Medium	Max (°C)
Air	200
Oil	120
Water	100



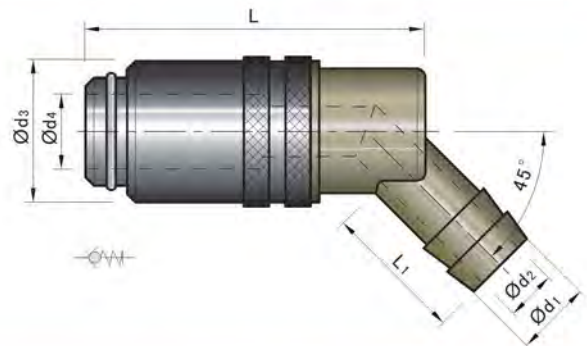
MMK 10-9V Material: Brass

Code	d1	d2	d3	d4	L	L1	P(bar)	T(°C)	@ ¥ / P
MMK 10- 9V	9	6	17	9	47	17	15	200	
MMK 10-13V	13	9	22	13	61	25	10		

MMK 12(45°)



Medium	Max (°C)
Air	200
Oil	120
Water	100



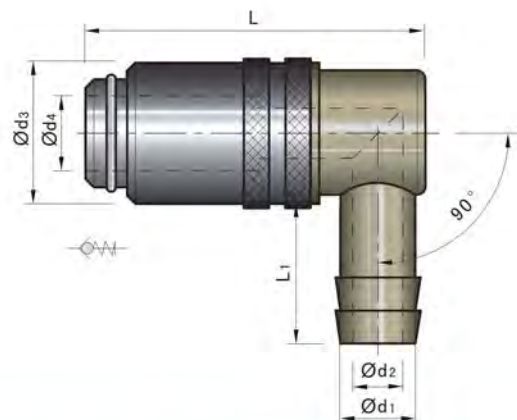
MMK 12-9V Material: Brass

Code	d1	d2	d3	d4	L	L1	P(bar)	T(°C)	@ ¥ / P
MMK 12- 9V	9	6	17	9	41	17	15	200	
MMK 12-13V	13	9	22	13	51	25	10		

MMK 15(90°)



Medium	Max (°C)
Air	200
Oil	120
Water	100

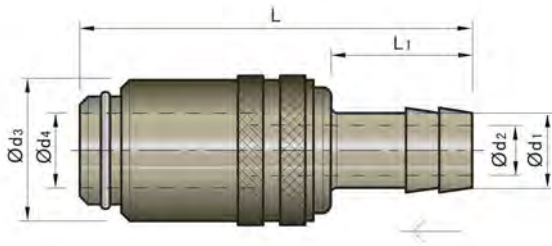


MMK 15-9V Material: Brass

Code	d1	d2	d3	d4	L	L1	P(bar)	T(°C)	@ ¥ / P
MMK 15- 9V	9	6	17	9	41	19	15	200	
MMK 15-13V	13	9	22	13	51	28	10		

AISI

Quick release connector plugs

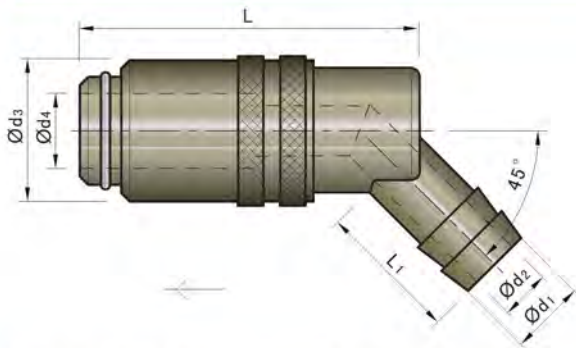


MMK 100

Medium	Max (°C)
Air	200
Oil	120
Water	100

Order MMK-100-9 Material: Brass

Code	d1	d2	d3	d4	L	L1	P(bar)	T(°C)	@ ¥/P
MMK-100- 9	9	6	17	9	47	17	15	200	
MMK-100-13	13	9	22	13	61	25	10		

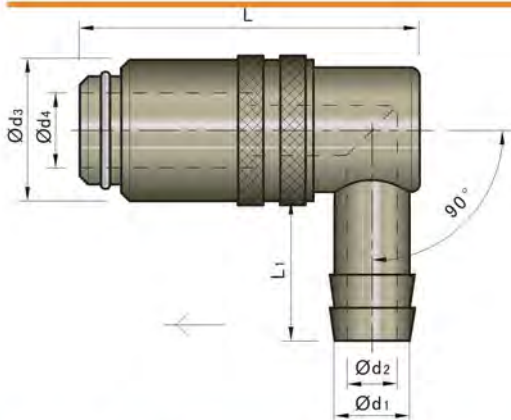


MMK 120(45°)

Medium	Max (°C)
Air	200
Oil	120
Water	100

Order MMK-120-9 Material: Brass

Code	d1	d2	d3	d4	L	L1	P(bar)	T(°C)	@ ¥/P
MMK-120- 9	9	6	17	9	41	17	15	200	
MMK-120-13	13	9	22	13	51	25	10		



MMK 150(90°)

Medium	Max (°C)
Air	200
Oil	120
Water	100

Order MMK-150-9 Material: Brass

Code	d1	d2	d3	d4	L	L1	P(bar)	T(°C)	@ ¥/P
MMK-150- 9	9	6	17	9	41	19	15	200	
MMK-150-13	13	9	22	13	51	28	10		

Ejector pins
 Ejector sleeves
 Side railers
 series
 Launch locks
 series
 Poling gates
 series
 Date stamps
 Air valves series
 Ejector series
 Cooling elements
 Locating parts
 series
 Springs series
 Guide pins
 Guide push
 Guide strips
 V-block plate series
 Chuck series
 Mold
 accessories

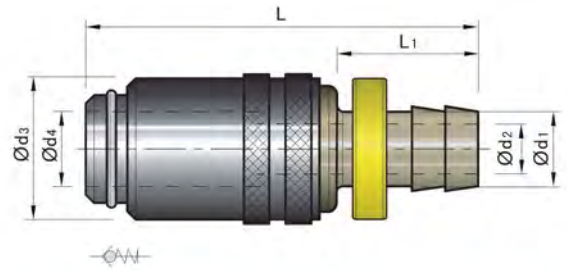
AISI

Quick release connector plugs

MMK 10-...-PL



Medium	Max (°C)
Air	200
Oil	120
Water	100



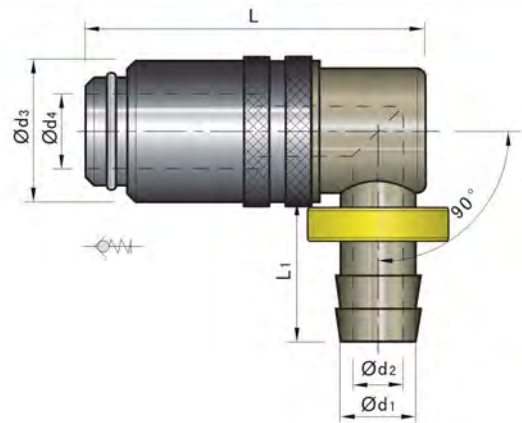
Order MMK 10-9V-PL Material: Brass

Code	d1	d2	d3	d4	L	L1	P(bar)	@ ¥/S
MMK 10- 9V-PL	10	7.5	17	9	54	24	15	
MMK 10-13V-PL	13	10	23	13	64	28	10	

MMK 15-...-PL



Medium	Max (°C)
Air	200
Oil	120
Water	100



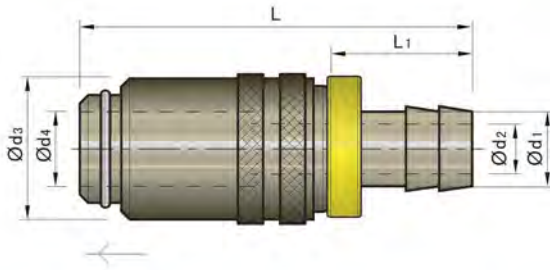
Order MMK 15-9V-PL Material: Brass

Code	d1	d2	d3	d4	L	L1	P(bar)	@ ¥/S
MMK 15- 9V-PL	10	7.5	17	9	42	24	15	
MMK 15-13V-PL	13	10	23	13	52	28	10	



AISI

Quick release connector plugs

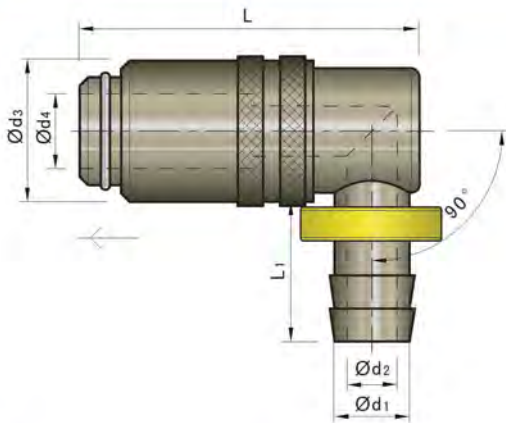


MMK 100-...-PL

Medium	Max (°C)
Air	200
Oil	120
Water	100

Order MMK-100-9-PL Material: Brass

Code	d1	d2	d3	d4	L	L1	P(bar)	@ ¥/S
MMK-100- 9-PL	10	7.5	17	9	54	24	15	
MMK-100-13-PL	13	10	23	13	64	28	10	

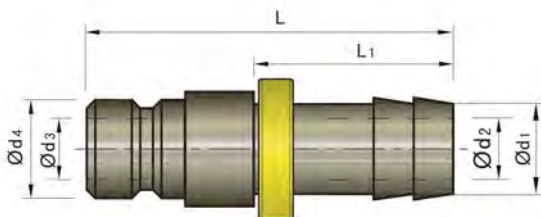


MMK 150-...-PL

Medium	Max (°C)
Air	200
Oil	120
Water	100

Order MMK-150-9-PL Material: Brass

Code	d1	d2	d3	d4	L	L1	P(bar)	@ ¥/S
MMK-100- 9-PL	10	7.5	17	9	42	24	15	
MMK-100-13-PL	13	10	23	13	52	28	10	



SST 12

Medium	Max (°C)
Air	200
Oil	120
Water	100

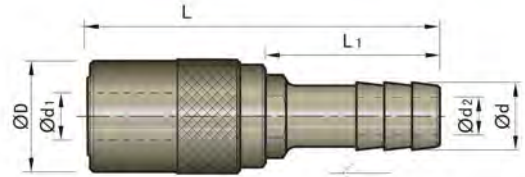
Order SST 12-9-PL Material: Brass

Code	d4	d1	d2	d3	L	L1	@ ¥/S
SST 12- 9-PL	9	10	7.5	6	44	24	
SST 12-13-PL	13	13	10	9	55	28	



Quick release connector plugs

SSK

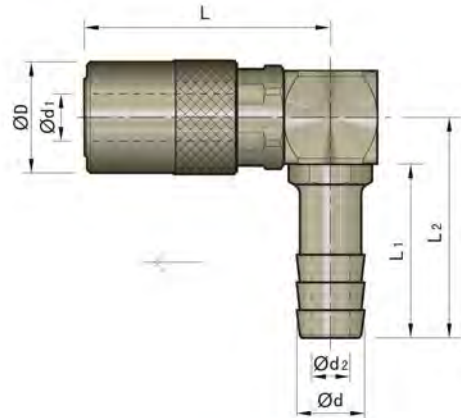


Medium	Max (°C)
Air	200
Oil	120
Water	100

Order SSK-106 Material: Brass

Code	d1	d2	d	D	L1	L	Series	@ ¥ / P	
SSK-106	9.5	5	7.3	17	25	52	N 6		
SSK-109		6	10.5						
SSK-111	13.6	9	12.2	22.6	32	62	N 9		
SSK-113			14						
SSK-119	20	16	20	30			77	N16	

SSK(90°)



Medium	Max (°C)
Air	200
Oil	120
Water	100

Order SSK-206 Material: Brass

Code	d1	d2	d	D	L	L1	L2	Series	@ ¥ / P	
SSK-206	9.5	5	7.3	17	38	27	34	N 6		
SSK-209		6	10.5							
SSK-211	13.6	9	12.2	22.6	52	46	37	N 9		
SSK-213			14							
SSK-219	20	16	20	30	68			69	N16	



Quick release connector plugs

FFSVK



Medium	Max (°C)
Air	200
Oil	120
Water	100



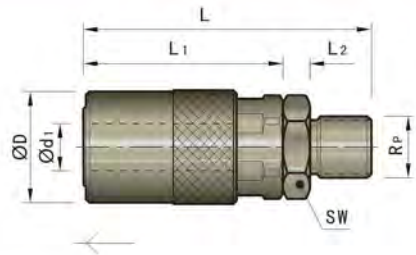
Order FFSVK-106V Material: Brass

Code	Rp	d1	L	D	L1	L2	SW	Series	@ ¥ /P
FFSVK-106V	1/4"BSP	9.5	46	17	30.5	8	1/2"	N 6	
FFSVK-111V	3/8"BSP	13.6	60	22.6	41	8.5	3/8"	N 9	
FFSVK-119V	1/2"BSP	17.5	76	30	57	7	11/8"	N16	

FFSK



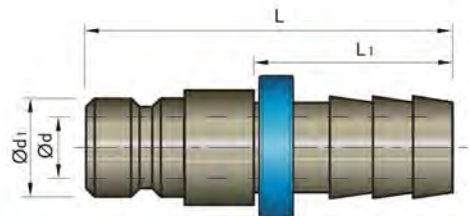
Medium	Max (°C)
Air	200
Oil	120
Water	100



Order FFSK-206V Material: Brass

Code	Rp	d1	L	D	L1	L2	SW	Series	@ ¥ /P
FFSK-206V	1/4"BSP	9.5	46	17	30.5	7	1/2"	N 6	
FFSK-211V	3/8"BSP	13.6	60	22.6	41	8	3/8"	N 9	
FFSK-219V	1/2"BSP	17.5	72	30.6	51	8.5	11/8"	N16	

SSTN-...-PL

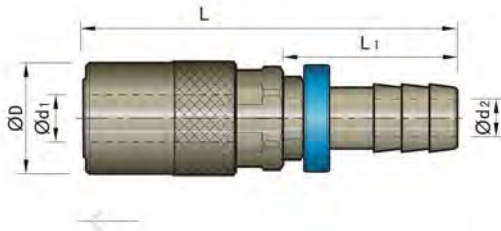


Order SSTN-9-PL Material: Brass

Code	d	d1	fits hose ID	L1	L	Series	@ ¥ /S
SSTN- 9-PL	6	9.4	3/8"	24	37	N 6	
SSTN-13-PL	9	13.5	1/2"	28	48	N 9	
SSTN-19-PL	14	19.9	3/4"	28	63.5	N16	

AISI

Quick release connector plugs

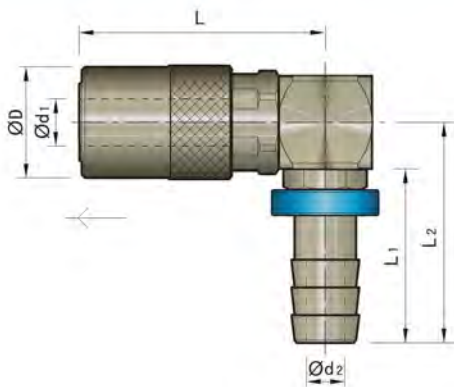


SSK-...-PL

Medium	Max (°C)
Air	200
Oil	120
Water	100

Order SSK-106-PL Material: Brass

Code	d1	d2	fits hose ID	D	L1	L	Series	@ ¥ /S
SSK-106-PL	9.5	5	1/4"	17	25	52	N 6	
SSK-109-PL		6	3/8"	22.6		62	N 9	
SSK-111-PL	13.6	9	1/2"	30	32	77	N16	
SSK-113-PL		14	3/4"					



SSK-...-PL
(90°)

Medium	Max (°C)
Air	200
Oil	120
Water	100

Order SSK-206-PL Material: Brass

Code	d1	d2	fits hose ID	D	L	L1	L2	Series	@ ¥ /S
SSK-206-PL	9.5	5	1/4"	17	38	27	34	N 6	
SSK-209-PL		6	3/8"	22.6	52		37	N 9	
SSK-211-PL	13.6	9	1/2"	30	68	46	69	N16	
SSK-213-PL		14	3/4"						

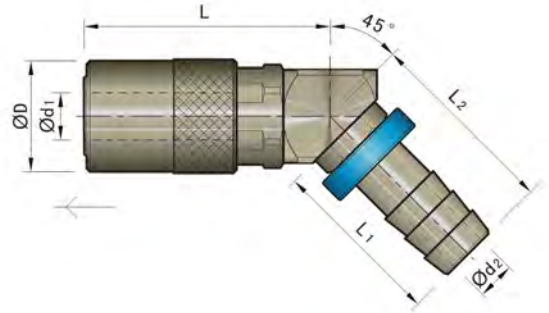
AISI

Quick release connector plugs

SSK-...-PL
(45°)



Medium	Max (°C)
Air	200
Oil	120
Water	100



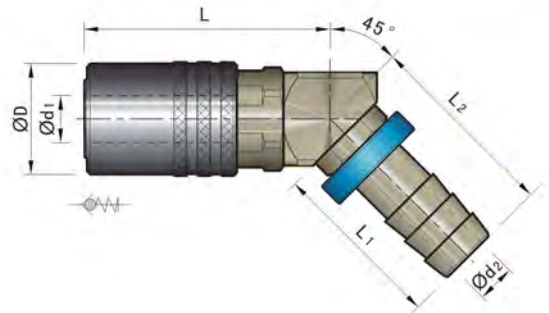
Order SSK-306-PL Material: Brass

Code	d1	d2	fits hose ID	D	L	L1	L2	Series	@ ¥/S
SSK-306-PL	9.5	5	1/4"	17	38	27	34	N 6	
SSK-309-PL		6	3/8"				37	N 9	
SSK-311-PL	13.6	9	1/2"	22.6	52	46	69	N16	
SSK-313-PL	20	14	3/4"	30	68				

SSVK-...-PL
(45°)



Medium	Max (°C)
Air	200
Oil	120
Water	100



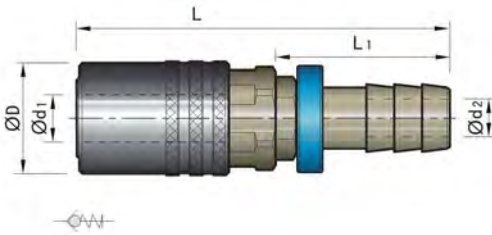
Order SSVK-306-PL Material: Brass

Code	d1	d2	fits hose ID	D	L	L1	L2	Series	@ ¥/S
SSVK-306-PL	9.5	5	1/4"	17	38	27	34	N 6	
SSVK-309-PL		6	3/8"				37	N 9	
SSVK-311-PL	13.6	9	1/2"	22.6	52	46	69	N16	
SSVK-313-PL	20	14	3/4"	30	68				



AISI

Quick release connector plugs

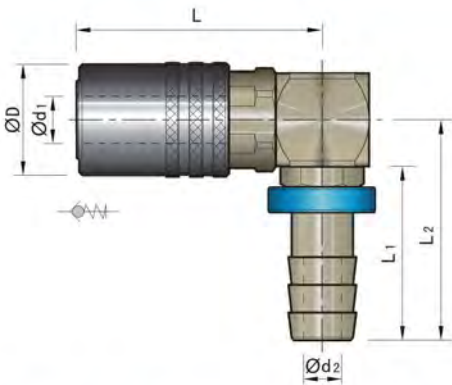


SSVK-...-PL

Medium	Max (°C)
Air	200
Oil	120
Water	100

Order SSVK-106-PL Material: Brass

Code	d1	d2	fits hose ID	D	L1	L	Series	@ ¥/S
SSVK-106-PL	9.5	5	1/4"	17	27	57	N 6	
SSVK-109-PL		6	3/8"					
SSVK-111-PL	13.6			22.6		68	N 9	
SSVK-113-PL		9	1/2"					



SSVK-...-PL
(90°)

Medium	Max (°C)
Air	200
Oil	120
Water	100

Order SSK-206-PL Material: Brass

Code	d1	d2	fits hose ID	D	L	L1	L2	Series	@ ¥/S
SSK-206-PL	9.5	5	1/4"	17	38	27	34	N 6	
SSK-209-PL		6	3/8"						
SSK-211-PL	13.6			22.6	52		37	N 9	
SSK-213-PL		9	1/2"						



AISI

Quick release connector plugs

JJS-...-M



Medium	Max (°C)
Air	200
Oil	120
Water	100



Order JJS-201-M Material: Brass

Code	Fits hose I.D. or pipe thread	Hose stem I.D. or thru hole	Used with sockets	@ ¥ /P
JJS-201-M	1/8NPT	1/ 4	JJP(F/B)-250 To 253	
JJS-302-M	1/4NPT	3/ 8	JJP(F/B)-351 To 354	
JJS-504-M	1/2NPT	9/16	JJP(F)-553 To 556	

JJS-...-MV



Medium	Max (°C)
Air	200
Oil	120
Water	100



Order JJS-201-MV Material: Brass

Code	Fits hose I.D. or pipe thread	Hose stem I.D. or thru hole	Used with sockets	@ ¥ /P
JJS-201-MV	1/8NPT	1/ 4	JJP(F/B)-250 To 253	
JJS-302-MV	1/4NPT	3/ 8	JJP(F/B)-351 To 354	
JJS-504-MV	1/2NPT	9/16	JJP(F)-553 To 556	

JJS



Medium	Max (°C)
Air	200
Oil	120
Water	100



Order JJS-200 Material: Brass

Code	Fits hose I.D. or pipe thread	Hose stem I.D. or thru hole	Used with sockets	@ ¥ /P
JJS-200	1/8NPT	1/4	JJP(F/B)-250 To 253	
JJS-300	1/4NPT	3/8	JJP(F/B)-351 To 354	
JJS-500	1/2NPT	5/8	JJP(F)-553 To 556	

JJS-...-V



Medium	Max (°C)
Air	200
Oil	120
Water	100



Order JJS-200-V Material: Brass

Code	Fits hose I.D. or pipe thread	Hose stem I.D. or thru hole	Used with sockets	@ ¥ /P
JJS-200-V	1/8NPT	1/4	JJP(F/B)-250 To 253	
JJS-300-V	1/4NPT	3/8	JJP(F/B)-351 To 354	
JJS-500-V	1/2NPT	5/8	JJP(F)-553 To 556	

Quick release connector plugs



Medium	Max (°C)
Air	200
Oil	120
Water	100



Order JJS-204 Material: Brass

Code	Fits hose I.D. or pipe thread	Hose stem I.D. or thru hole	Used with sockets	@ ¥ /P
JJS-204	1/ 4	3/16	JJP(F/B)-250 To 253	
JJS-205	5/16			
JJS-206	3/ 8	1/ 4		
JJS-306			JJP(F/B)-351 To 354	
JJS-308	1/ 2	3/ 8		
JJS-504			JJP(F)-553 To 556	
JJS-506	3/ 4	5/ 8		

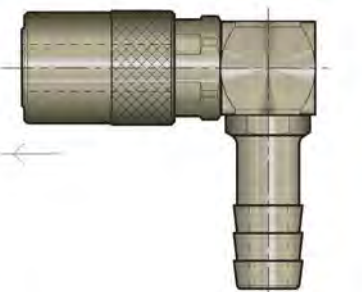


Medium	Max (°C)
Air	200
Oil	120
Water	100



Order JJS-204-V Material: Brass

Code	Fits hose I.D. or pipe thread	Hose stem I.D. or thru hole	Used with sockets	@ ¥ /P
JJS-204-V	1/ 4	3/16	JJP(F/B)-250 To 253	
JJS-205-V	5/16			
JJS-206-V	3/ 8	1/ 4		
JJS-306-V			JJP(F/B)-351 To 354	
JJS-308-V	1/ 2	3/ 8		
JJS-504-V			JJP(F)-553 To 556	
JJS-506-V	3/ 4	5/ 8		



Medium	Max (°C)
Air	200
Oil	120
Water	100



Order JJS-214 Material: Brass

Code	Fits hose I.D. or pipe thread	Hose stem I.D. or thru hole	Used with sockets	@ ¥ /P
JJS-214	1/ 4	3/16	JJP(F/B)-250 To 253	
JJS-215	5/16			
JJS-216	3/ 8	1/ 4		
JJS-316			JJP(F/B)-351 To 354	
JJS-318	1/ 2	3/ 8		
JJS-514			JJP(F)-553 To 556	
JJS-516	3/ 4	9/16		

Extractor pins
Extractor sleeves
Slide rail pins
Slide rail nuts
Latch locks
Pouring gates
Data stamps
Air valves series
Ejector series
Cooling elements
Locating parts
Springs series
Guide pins
Guide bush
Guide strips
Wear plate series
Chuck series
Mold accessories

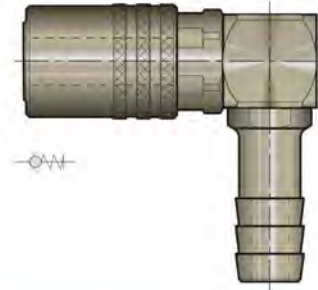
AISI

Quick release connector plugs

JJS-...-V



Medium	Max (°C)
Air	200
Oil	120
Water	100



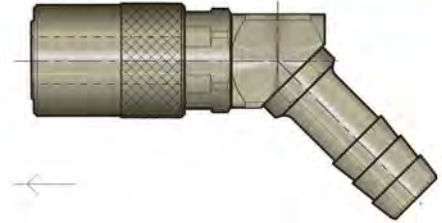
Order JJS-214-V Material: Brass

Code	Fits hose I.D. or pipe thread	Hose stem I.D. or thru hole	Used with sockets	@ ¥ /P
JJS-214-V	1/ 4	3/16	JJP(F/B)-250 To 253	
JJS-215-V	5/16			
JJS-216-V	3/ 8	1/ 4	JJP(F/B)-351 To 354	
JJS-316-V				
JJS-318-V	1/ 2	3/ 8	JJP(F)-553 To 556	
JJS-514-V				
JJS-516-V	3/ 4	9/16		

JJS(45°)



Medium	Max (°C)
Air	200
Oil	120
Water	100



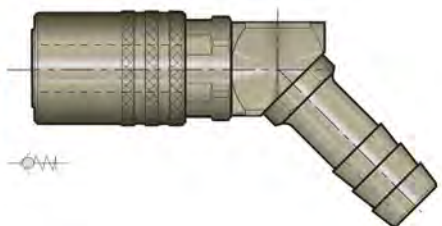
Order JJS-224 Material: Brass

Code	Fits hose I.D. or pipe thread	Hose stem I.D. or thru hole	Used with sockets	@ ¥ /P
JJS-224	1/ 4	3/16	JJP(F/B)-250 To 253	
JJS-225	5/16			
JJS-226	3/ 8	1/ 4	JJP(F/B)-351 To 354	
JJS-326				
JJS-328	1/ 2	3/ 8	JJP(F)-553 To 556	
JJS-524				
JJS-526	3/ 4	9/16		

JJS-...-V
(45°)



Medium	Max (°C)
Air	200
Oil	120
Water	100



Order JJS-214-V Material: Brass

Code	Fits hose I.D. or pipe thread	Hose stem I.D. or thru hole	Used with sockets	@ ¥ /P
JJS-224-V	1/ 4	3/16	JJP(F/B)-250 To 253	
JJS-225-V	5/16			
JJS-226-V	3/ 8	1/ 4	JJP(F/B)-351 To 354	
JJS-326-V				
JJS-328-V	1/ 2	3/ 8	JJP(F)-553 To 556	
JJS-524-V				
JJS-526-V	3/ 4	9/16		

AISI

Quick release connector plugs



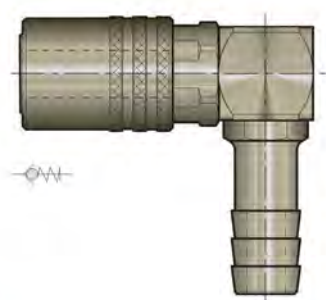
Medium	Max (°C)
Air	200
Oil	120
Water	100



JJS-...-SV

Order JJS-204-SV **M** Material: Brass

Code	Fits hose I.D. or pipe thread	Hose stem I.D. or thru hole	Used with sockets	@ ¥ /S
JJS-204-SV	1/ 4	3/16		
JJS-205-SV	5/16		JJP(F/B)-250 To 253(SV)	
JJS-206-SV	3/ 8	1/ 4		
JJS-306-SV			JJP(F/B)-351 To 354(SV)	
JJS-308-SV	1/ 2	3/ 8		



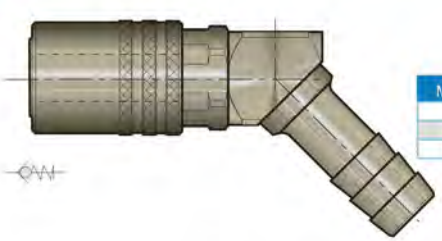
Medium	Max (°C)
Air	200
Oil	120
Water	100



JJS-...-SV (90°)

Order JJS-214-SV **M** Material: Brass

Code	Fits hose I.D. or pipe thread	Hose stem I.D. or thru hole	Used with sockets	@ ¥ /S
JJS-214-SV	1/ 4	3/16		
JJS-215-SV	5/16		JJP(F/B)-250 To 253(SV)	
JJS-216-SV	3/ 8	1/ 4		
JJS-316-SV			JJP(F/B)-351 To 354(SV)	
JJS-318-SV	1/ 2	3/ 8		



Medium	Max (°C)
Air	200
Oil	120
Water	100



JJS-...-SV (45°)

Order JJS-214-SV **M** Material: Brass

Code	Fits hose I.D. or pipe thread	Hose stem I.D. or thru hole	Used with sockets	@ ¥ /S
JJS-224-SV	1/ 4	3/16		
JJS-225-SV	5/16		JJP(F/B)-250 To 253(SV)	
JJS-226-SV	3/ 8	1/ 4		
JJS-326-SV			JJP(F/B)-351 To 354(SV)	
JJS-328-SV	1/ 2	3/ 8		

Ejector pins
 Ejector sleeves
 Side railers
 series
 Latch locks
 series
 Pointing gates
 series
 Date stamps
 Air valves series
 Ejector series
 Cooling elements
 series
 Locating parts
 series
 Springs series
 Guide pins
 Guide push
 series
 Guide stops
 Wear plate series
 Chuck series
 Mold
 accessories

AISI

Quick release connector plugs

JJS-...-MSV



Medium	Max (°C)
Air	200
Oil	120
Water	100



Order JJS-201-MSV Material: Brass

Code	Fits hose I.D. or pipe thread	Hose stem I.D. or thru hole	Used with sockets	@ ¥ / S
JJS-201-MSV	1/8NPT	1/ 4	JJP(F/B)-250 To 253(SV)	
JJS-302-MSV	1/4NPT	3/ 8	JJP(F/B)-351 To 354(SV)	

JJS-...-SV



Medium	Max (°C)
Air	200
Oil	120
Water	100



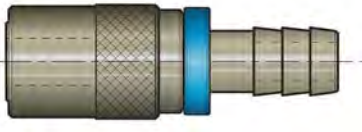
Order JJS-200-SV Material: Brass

Code	Fits hose I.D. or pipe thread	Hose stem I.D. or thru hole	Used with sockets	@ ¥ / S
JJS-200-SV	1/8NPT	1/4	JJP(F/B)-250 To 253(SV)	
JJS-300-SV	1/4NPT	3/8	JJP(F/B)-351 To 354(SV)	



AISI

Quick release connector plugs



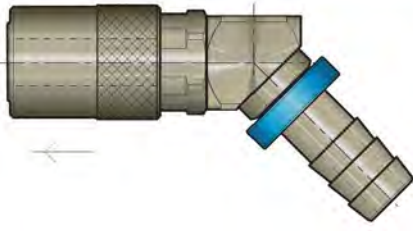
Medium	Max (°C)
Air	200
Oil	120
Water	100



JJSL

Order JJSL-0204 Material: Brass

Code	Fits hose I.D. or pipe thread	Hose stem I.D. or thru hole	Used with sockets	@ ¥/S
JJSL-0204	1/ 4	3/16	JJP(F/B)-250 To 253	
JJSL-0206	3/ 8	1/ 4		
JJSL-0306			JJP(F/B)-351 To 354	
JJSL-0308	1/ 2	3/ 8		
JJSL-0504			JJP(F)-553 To 556	
JJSL-0506	3/ 4	5/ 8		



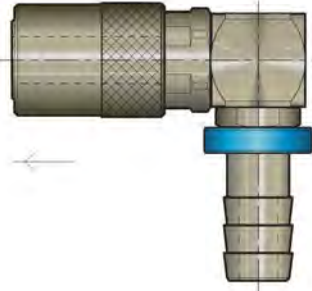
Medium	Max (°C)
Air	200
Oil	120
Water	100



JJSL(45°)

Order JJSL-0224 Material: Brass

Code	Fits hose I.D. or pipe thread	Hose stem I.D. or thru hole	Used with sockets	@ ¥/S
JJSL-0224	1/ 4	3/16	JJP(F/B)-250 To 253	
JJSL-0226	3/ 8	1/ 4		
JJSL-0326			JJP(F/B)-351 To 354	
JJSL-0328	1/ 2	3/ 8		
JJSL-0524			JJP(F)-553 To 556	
JJSL-0526	3/ 4	5/ 8		



Medium	Max (°C)
Air	200
Oil	120
Water	100



JJSL(90°)

Order JJSL-0214 Material: Brass

Code	Fits hose I.D. or pipe thread	Hose stem I.D. or thru hole	Used with sockets	@ ¥/S
JJSL-0214	1/ 4	3/16	JJP(F/B)-250 To 253	
JJSL-0216	3/ 8	1/ 4		
JJSL-0316			JJP(F/B)-351 To 354	
JJSL-0318	1/ 2	3/ 8		
JJSL-0514			JJP(F)-553 To 556	
JJSL-0516	3/ 4	5/ 8		

Ejector pins
 Ejector sleeves
 Side railers
 Latch locks
 Pinning gates
 Date stamps
 Air valves series
 Ejector series
 Cooling elements
 Locating parts
 Springs series
 Guide pins
 Guide bush
 Guide strips
 Wear plate series
 Chuck series
 Mold accessories

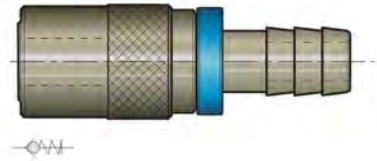
AISI

Quick release connector plugs

JJSL-...-V



Medium	Max (°C)
Air	200
Oil	120
Water	100



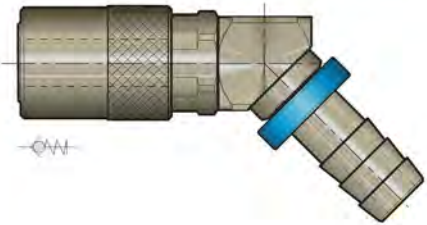
Order JJSL-0204V Material: Brass

Code	Fits hose I.D. or pipe thread	Hose stem I.D. or thru hole	Used with sockets	@ ¥ / S
JJSL-0204V	1/ 4	3/16	JJP(F/B)-250 To 253	
JJSL-0206V	3/ 8	1/ 4		
JJSL-0306V			JJP(F/B)-351 To 354	
JJSL-0308V				
JJSL-0504V	1/ 2	3/ 8		
JJSL-0506V	3/ 4	5/ 8	JJP(F)-553 To 556	

JJSL-...-V
(45°)



Medium	Max (°C)
Air	200
Oil	120
Water	100



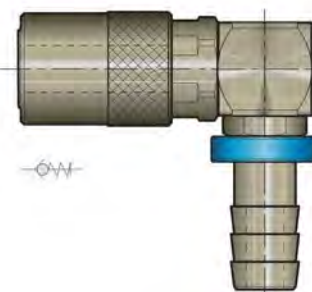
Order JJSL-0224V Material: Brass

Code	Fits hose I.D. or pipe thread	Hose stem I.D. or thru hole	Used with sockets	@ ¥ / S
JJSL-0224V	1/ 4	3/16	JJP(F/B)-250 To 253	
JJSL-0226V	3/ 8	1/ 4		
JJSL-0326V			JJP(F/B)-351 To 354	
JJSL-0328V				
JJSL-0524V	1/ 2	3/ 8		
JJSL-0526V	3/ 4	5/ 8	JJP(F)-553 To 556	

JJSL-...-V
(90°)



Medium	Max (°C)
Air	200
Oil	120
Water	100

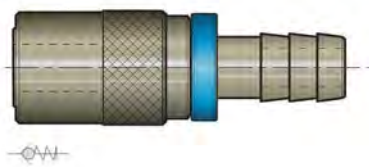


Order JJSL-0214V Material: Brass

Code	Fits hose I.D. or pipe thread	Hose stem I.D. or thru hole	Used with sockets	@ ¥ / S
JJSL-0214V	1/ 4	3/16	JJP(F/B)-250 To 253	
JJSL-0216V	3/ 8	1/ 4		
JJSL-0316V			JJP(F/B)-351 To 354	
JJSL-0318V				
JJSL-0514V	1/ 2	3/ 8		
JJSL-0516V	3/ 4	5/ 8	JJP(F)-553 To 556	



Quick release connector plugs



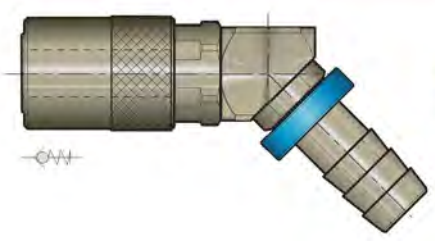
Medium	Max (°C)
Air	200
Oil	120
Water	100



JJSL-...-SV

Order JJSL-0204-SV Material: Brass

Code	Fits hose I.D. or pipe thread	Hose stem I.D. or thru hole	Used with sockets	@ ¥/S
JJSL-0204-SV	1/ 4	3/16	JJP(F/B)-250 To 253(SV)	
JJSL-0206-SV	3/ 8	1/ 4		
JJSL-0306-SV			JJP(F/B)-351 To 354(SV)	
JJSL-0308-SV	1/ 2	3/ 8		



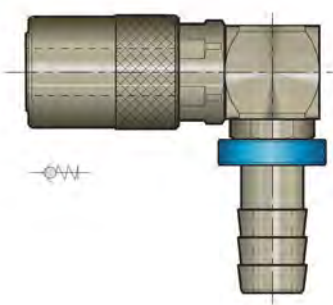
Medium	Max (°C)
Air	200
Oil	120
Water	100



JJSL-...-SV (45°)

Order JJSL-0224-SV Material: Brass

Code	Fits hose I.D. or pipe thread	Hose stem I.D. or thru hole	Used with sockets	@ ¥/S
JJSL-0224-SV	1/ 4	3/16	JJP(F/B)-250 To 253(SV)	
JJSL-0226-SV	3/ 8	1/ 4		
JJSL-0326-SV			JJP(F/B)-351 To 354(SV)	
JJSL-0328-SV	1/ 2	3/ 8		



Medium	Max (°C)
Air	200
Oil	120
Water	100



JJSL-...-SV (90°)

Order JJSL-0214-SV Material: Brass

Code	Fits hose I.D. or pipe thread	Hose stem I.D. or thru hole	Used with sockets	@ ¥/S
JJSL-0214-SV	1/ 4	3/16	JJP(F/B)-250 To 253(SV)	
JJSL-0216-SV	3/ 8	1/ 4		
JJSL-0316-SV			JJP(F/B)-351 To 354(SV)	
JJSL-0318-SV	1/ 2	3/ 8		

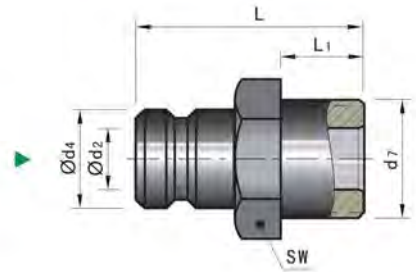
- Explosive pins
- Explosive sleeves
- Slide raileners
- Slide sleeves
- Latch locks
- Pinning gates
- Pin valves series
- Date stamps
- Explosive series
- Cooling elements
- Locating parts
- Spring series
- Guide pins
- Guide bush
- Guide strips
- Wear plate series
- Chuck series
- Mold accessories

DIN
Nipples

ZZ81



- ZZ80-...
- ZZ801-...
- ZZ802-...
- ZZ805-...
- ZZ8051-...
- ZZ807-...
- ZZ808-...
- ZZ82-...



Order ZZ81-5-5×0.5

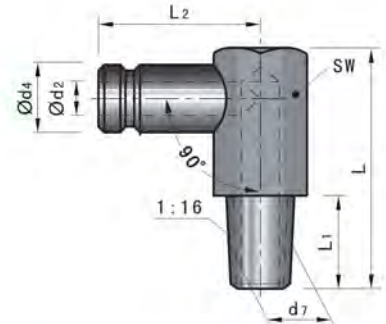
Material: Brass Surface plating treatment

Code	L	L1	d2	d4	d7	SW	@ ¥/P
ZZ81- 5- 5×0.5	18	5	2.7	5	M 5×0.5	7	
ZZ81- 5- 8×0.75	20				M 8×0.75	9	
ZZ81- 9- 7×1		7	4.5		M 7×1		
ZZ81- 9- 8×0.75					M 8×0.75		
ZZ81- 9- 9×1	24		5.5		M 9×1	11	
ZZ81- 9-10×1				9	M10×1		
ZZ81- 9-R1/8			6		G1/8A		
ZZ81- 9-14×1.5					M14×1.5		
ZZ81- 9-R1/4					G1/4A		
ZZ81-13-11×1		9	8.5		M11×1	15	
ZZ81-13-14×1.5	26				M14×1.5		
ZZ81-13-R1/4			9	13	G1/4A		
ZZ81-13-16×1.5					M16×1.5	17	
ZZ81-13-R3/8					G3/8A		
ZZ81-19-24×1.5	51	16			M24×1.5	27	
ZZ81-19-R1/2	47	12	13	19	G1/2A	22	
ZZ81-19-R3/4	51	16			G3/4A	27	

ZZ81-...-90



- ZZ80-...
- ZZ801-...
- ZZ802-...
- ZZ807-...
- ZZ82-...



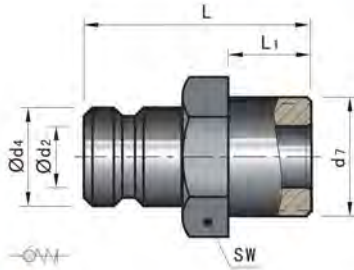
Order ZZ81-5-5×0.5-90°

Material: Brass Surface plating treatment

Code	L	L1	L2	d2	d4	d7	SW	@ ¥/P
ZZ81- 5- 5×0. 5-90	15.5	5		2.7	5	M 5×0.5	9	
ZZ81- 5- 8×0.75-90	17.5	7	14.5			M 8×0.75		
ZZ81- 9- 8×0.75-90		9		4.5				
ZZ81- 9-10×1-90	27		23	6	9	M10×1	11	
ZZ81- 9-R1/8-90						R1/8A		
ZZ81-13-14×1.5-90	34	11	25	9	13	M14×1.5	15	
ZZ81-13-R1/4-90						R1/4A		
ZZ81-19-24×1.5-90	47	16	42	13	19	M24×1.5	24	
ZZ81-19-R1/2-90						R1/2A		

DIN
Nipples

ZZ80-...
ZZ802-...
ZZ807-...
ZZ80700-...
ZZ805-...
ZZ82-...



ZZ811

Medium	Max (°C)
Air	200
Oil	120
Water	100

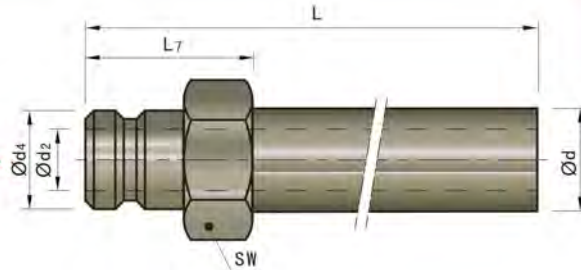
Order ZZ811-5-5×0.5

Material: Brass Surface plating treatment

Code	L	L1	d2	d4	p(bar)	d7	SW	@ ¥/P
ZZ811- 5- 5×0. 5	28	5	2.7	5	10	M 5×0.5	9	
ZZ811- 5- 8×0.75	30	7				M 8×0.75		
ZZ811- 9-14×1.5	29	12	6	9	15	M14×1.5	15	
ZZ811- 9-R1/4			G1/4A					
ZZ811-13-16×1.5	30		9	13	15	M16×1.5	17	
ZZ811-13-R3/8			G3/8A					
ZZ811-19-24×1.5	51	16	13	19	20	M24×1.5	27	
ZZ811-19-R3/4						G3/4A		

ZZ82-...
ZZ807-...
ZZ808-...
ZZ80HT-...
ZZ801HT-...
ZZ807HT-...
ZZ808HT-...

ZZ80-...
ZZ801-...
ZZ802-...
ZZ803-...
ZZ804-...
ZZ805-...
ZZ8051-...
ZZ825-...



ZZ90

Order ZZ90-5-63

Material: Brass

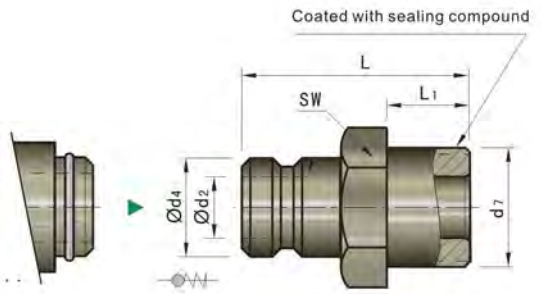
Code	L	L7	d	d2	d4	SW	@ ¥/P
ZZ90- 5× 63	63	15	5	3	5	7	
ZZ90- 5×100	100		5	5	9		
ZZ90- 9× 63	63	21	8	5	9	11	
ZZ90- 9×100	100		10	6			
ZZ90- 9×120	120	23	10	6	13	15	
ZZ90- 9×240	240		14	9			
ZZ90- 9×360	360	35	14	9	19	22	
ZZ90-13×150	150		21	13			
ZZ90-13×300	300		21	13	19	22	
ZZ90-13×450	450						
ZZ90-19×500	500						
ZZ90-19×800	800						

DIN
Nipples

ZZ811HT



- ZZ80-...
- ZZ802-...
- ZZ807-...
- ZZ80700-...
- ZZ805-...
- ZZ82-...
- ZZ80HT-...
- ZZ807HT-...
- ZZ80700HT-...

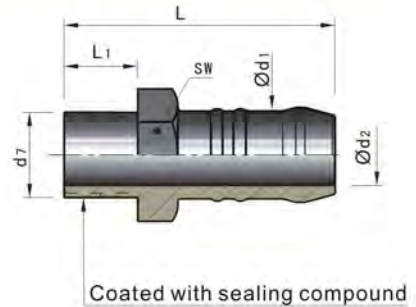


Medium	Max (°C)
Air	250
Oil	200
Water	160

Order ZZ811HT-9x14x1.5 Material: Brass

Code	d4	d7	d2	L	L1	SW	p(bar)	@ ¥/P
ZZ811HT- 9x14x1.5	9	M14x1.5	6	29		15	10	
ZZ811HT- 9xR1/4A		G1/4A			12			
ZZ811HT-13x16x1.5	13	M16x1.5	9	30		17	15	
ZZ811HT-13xR3/8		G3/8A						

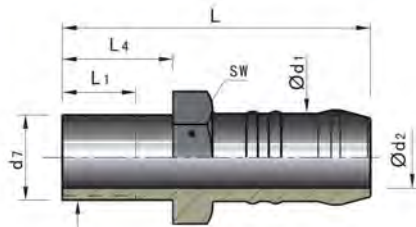
ZZ87



Order ZZ87-5-5x0.5 Material: Brass

d7	d1	d7	d2	L	L1	SW	@ ¥/P			
ZZ87- 5- 5x0.5	5	M 5x0.5	3.5	21.5	5	7				
ZZ87- 5- 8x0.75		M 8x0.75		23.5		9				
ZZ87- 7- 7x1	9	M 7x1	4.5	33.5	7	11				
ZZ87- 9- 8x0.75		M 8x0.75								
ZZ87- 9- 9x1		M 9x1								
ZZ87- 9-10x1	13	M10x1	9	40	9	15				
ZZ87- 9-R1/8		G1/8A								
ZZ87-13-11x1		M11x1								
ZZ87-13-12x1.5		M12x1.5								
ZZ87-13-14x1.5		M14x1.5								
ZZ87-13-16x1.5		M16x1.5								
ZZ87-13-R1/4		G1/4A								
ZZ87-13-R3/8		G3/8A								
ZZ87-19-24x1.5		M24x1.5						56	16	27
ZZ87-19-R1/2		G1/2A						50	12	22
ZZ87-19-R3/4	G3/4A	56	16	27						

DIN
Nipples



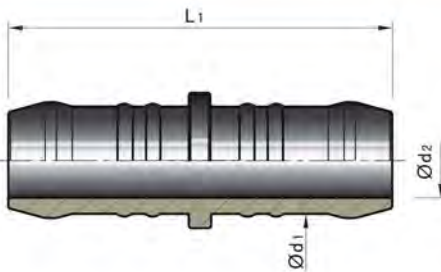
Coated with sealing compound



ZZ88

Order ZZ88-9-10×1 Material: Brass Surface plating treatment

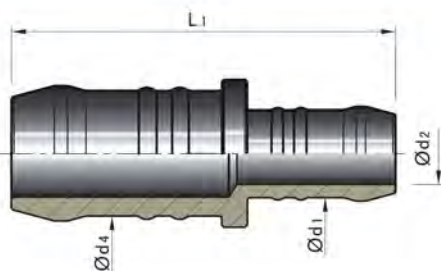
Code	d1	d7	d2	L	L1	L4	SW	@ ¥/P
ZZ88- 9-10×1	9	M10×1 G1/8A	6	40.5	7	14	11	
ZZ88- 9-R1/8								
ZZ88-13-12×1.5	13	M12×1.5	8	47	9	16	15	
ZZ88-13-14×1.5		M14×1.5	9					
ZZ88-13-R1/4		G3/8A						
ZZ88-19-24×1.5	19	M24×1.5	13	62	12	22	27	
ZZ88-19-R1/2		G1/2A						



ZZ880

Order ZZ880-5×5 Material: Brass Surface plating treatment

Code	d1	d2	L1	@ ¥/P
ZZ880- 5× 5	5	3.5	29	
ZZ880- 9× 9	9	6	48	
ZZ880-13×13	13	9	54	
ZZ880-13×13	19	13	69	



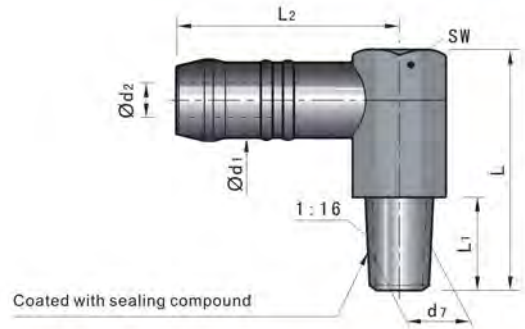
ZZ881

Order ZZ881-5×9 Material: Brass Surface plating treatment

Code	d1	d4	d2	L1	@ ¥/P
ZZ881- 5× 9	5	9	3.5	39	
ZZ881- 9×13	9	13	6	51.5	
ZZ881-13×19	13	19	9	62	

DIN
Nipples

ZZ89



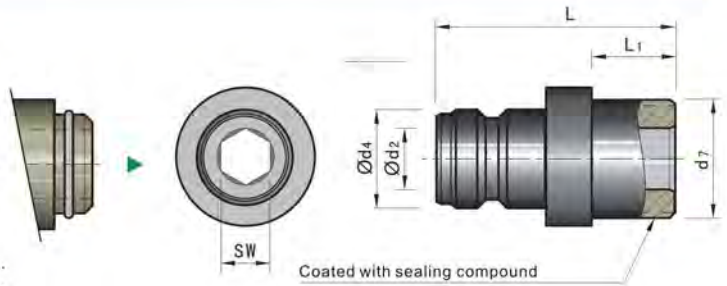
Order ZZ89-9-8×0.75 Material: Brass Surface plating treatment

Code	d1	d7	d2	L	L1	L2	SW	@ ¥/P
ZZ89- 9- 8×0.75		M 8×0.75						
ZZ89- 9-10×1	9	M10×1	6	27	9	28	11	
ZZ89- 9-R1/8		R1/8						
ZZ89-13-14×1.5	13	M14×1.5	9	34	11	32.5	15	
ZZ89-13-R1/4		R1/4A						
ZZ89-19-24×1.5	19	M24×1.5	13	47	16	44	24	
ZZ89-19-R1/2		R1/2A						

ZZ810

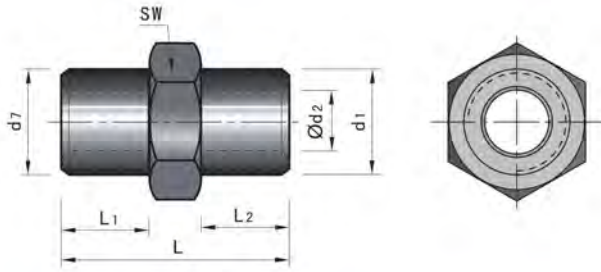


- ZZ80-...
- ZZ801-...
- ZZ802-...
- ZZ803-...
- ZZ804-...
- Zz825-...
- ZZ805-...
- ZZ8051-...
- ZZ807-...
- ZZ808-...
- ZZ82-...
- ZZ80HT-...
- ZZ801HT-...
- ZZ807HT-...
- ZZ808HT-...



Order ZZ810-5-5×0.5 Material: Brass Surface plating treatment

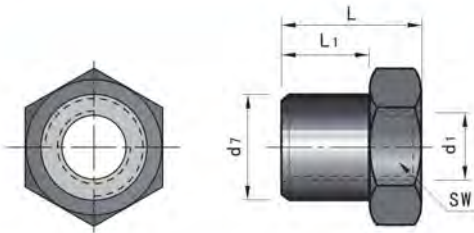
Code	d4	d7	d2	L	L1	SW	@ ¥/P
ZZ810- 5× 5×0.5		M 5×0.5		18	5	2.5	
ZZ810- 5× 8×0.75	5	M 8×0.75	2.7	20			
ZZ810- 9× 7×1		M 7×1					
ZZ810- 9× 8×0.75		M 8×0.75	4.5				
ZZ810- 9× 9×1		M 9×1		24	7		
ZZ810- 9×10×1	9	M10×1				5	
ZZ810- 9×R1/8		R1/8A					
ZZ810- 9×14×1.5		M14×1.5	6				
ZZ810- 9×R1/4		R1/4A					
ZZ810-13×11×1		M11×1	8.5				
ZZ810-13×14×1.5		M14×1.5		26	9		
ZZ810-13×R1/4	13	R1/4A	9			7	
ZZ810-13×16×1.5		M16×1.5					
ZZ810-13×R3/8		R3/8A					
ZZ810-19×24×1.5		M24×1.5		51	16		
ZZ810-19×R1/2	19	R1/2A	13	47	12	11	
ZZ810-19×R3/4		R3/4A		51	16		



ZZ812

Order ZZ812-14×1.5 Material: Brass Surface plating treatment

Code	d1	d7	d2	L	L1	L2	SW	@ ¥/P
ZZ812-14×1.5	M14×1.5	M14×1.5	6	23	9		17	
ZZ812-14×1.5-R1/4	G1/4A	G1/4A						
ZZ812-R1/4	M14×1.5	G1/2A				9	22	
ZZ812-R1/2-14×1.5	M16×1.5	M16×1.5						
ZZ812-16×1.5	M16×1.5	M16×1.5	9	30	12		19	
ZZ812-16×1.5-R3/8	G3/8A	G3/8A						
ZZ812-R3/8	M16×1.5	G1/2A					22	
ZZ812-R1/2-16×1.5	M16×1.5	M24×1.5		40	16	16	27	
ZZ812-24×1.5	M24×1.5	M24×1.5		36			27	
ZZ812-24×1.5-R1/2	G1/2A	G1/2A	13	30	12	12	22	
ZZ812-R1/2	G1/2A	G1/2A						
ZZ812-R3/4	G3/4A	G3/4A		40	16	16	27	
ZZ812-R3/4-24×1.5	M24×1.5	G3/4A						



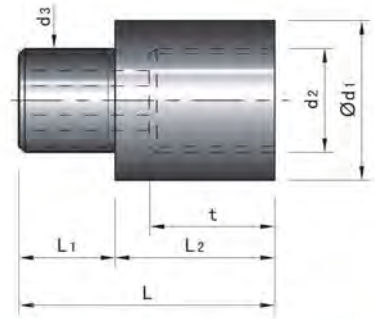
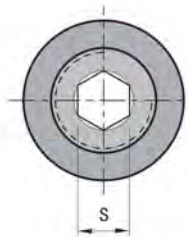
ZZ814

Order ZZ814-14×1.5-10×1 Material: Brass Surface plating treatment

Code	d1	d7	L	L1	SW	@ ¥/P
ZZ814-14×1.5-10×1	M10×1	M14×1.5	11	7	17	
ZZ814-18×1.5-14×1.5	M14×1.5	M18×1.5	14	9	22	
ZZ814-R1/4-R1/8	G1/8	G1/4A	11	7	17	
ZZ814-R3/8-R1/4	G1/4	G3/8A	13	9	19	
ZZ814-R1/2-R3/8	G3/8	G1/2A	18	12	24	
ZZ814-24×1.5-16×1.5	M16×1.5	M24×1.5	24	16	27	
ZZ814-R3/4-R1/2	G1/2	G3/4A				

DIN
Nipples

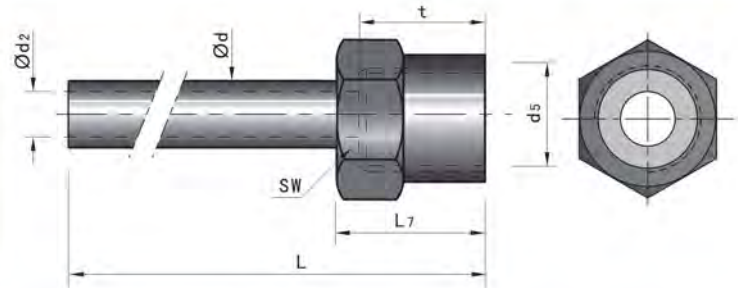
ZZ905



Order ZZ905-14×1.5-10×1 Material: Brass Surface plating treatment

Code	d2	d3	d1	L	L1	L2	t	s	@ ¥/P
ZZ905-14×1.5-10×1	M14×1.5	M10×1	17	22	7	15	12	6	
ZZ905-R1/4-R1/8	G1/4	G1/8A							
ZZ905-16×1.5-14×1.5	M16×1.5	M14×1.5	22	24	9			8	
ZZ905-R3/8-R1/4	G3/8	G1/4A							

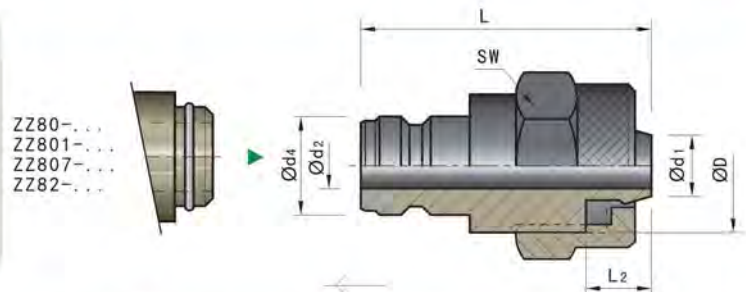
ZZ906



Order ZZ906-9×120-14×1.5 Material: Brass Surface plating treatment

Code	Typ	L	d5	d	d2	L7	t	SW	@ ¥/P
ZZ906- 9×120-14×1.5	9	120	M14×1.5	10	6	15.5	12	17	
ZZ906- 9×240-14×1.5		240							
ZZ906-13×150-16×1.5	13	150	M16×1.5	14	9	21	16	22	
ZZ906-13×300-16×1.5		300							
ZZ906-19×500-24×1.5	19	500	M24×1.5	21	13	21	16	30	
ZZ906-19×800-24×1.5		800							

ZZ831

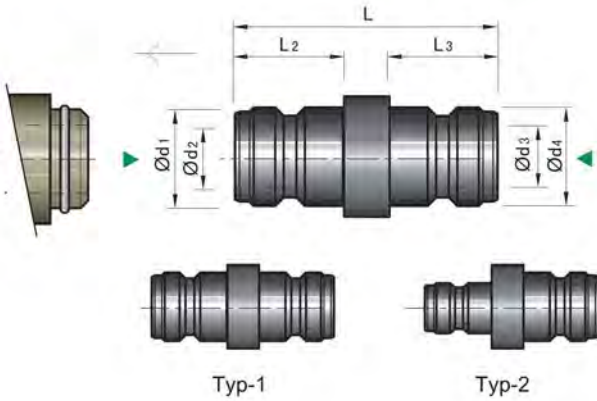


Order ZZ831-d4-d1 Material: Brass Surface plating treatment

d4	d1	d2	L	L2	D	SW	@ ¥/P
9	6	5	32	6	M12×1	14	

DIN
Nipples

ZZ80-...
ZZ801-...
ZZ805-...
ZZ8051-...
ZZ807-...
ZZ80700-...
ZZ808-...
ZZ82-...



ZZ80-...
ZZ801-...
ZZ805-...
ZZ8051-...
ZZ807-...
ZZ80700-...
ZZ808-...
ZZ82-...

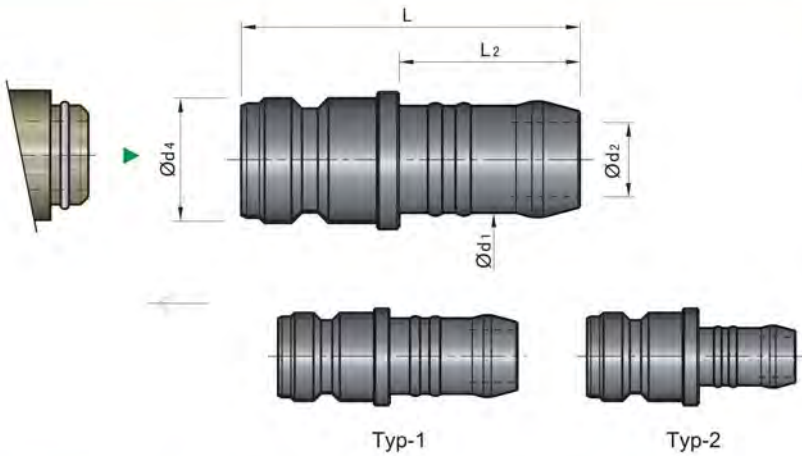
ZZ830



Order ZZ830-d1-d4 Material: Brass

d1	d4	d2	d3	L	L2	L3	P(bar)	Typ	@ ¥/P
5	5	2.7	2.7	22 26.5	10	10	10	1 2	
9	9	6	6	30.5		14		1 2	
13	13	9	9	31	14		15	1 2	
19	19	13	13	46 59	27	27		20	1

ZZ80-...
ZZ801-...
ZZ807-...
ZZ82-...



ZZ83

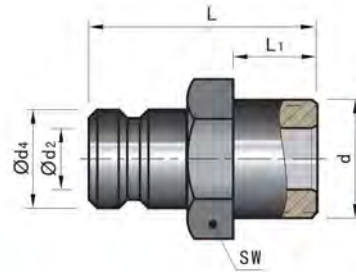


Order ZZ83-d4-d1 Material: Brass

d4	d1	d2	L	L2	Typ	@ ¥/P
5	5	3.5	25	13.5	1	
9	9	6	43.5	22.5		
13	13	9	42	25		
19	19	13	61	32		
9	5	3.5	29.5	13.5	2	
13	9	6	39.5	22.5		
19	13	9	54	25		

AISI
Nipples

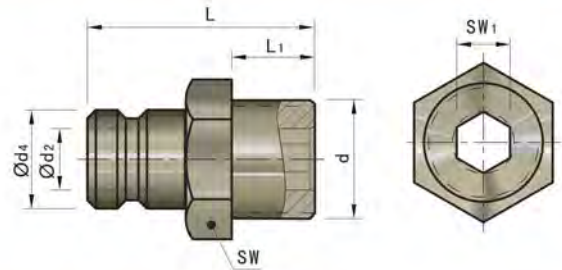
SST11



Order SST11-9-M8x0.75 Material: Brass

Code	d	d2	d4	L	L1	P(bar)	T(°C)	SW	@ ¥/P		
SST 11- 9-M 8x0.75	M 8x0.75	4.5		24	7	15	200	11			
SST 11- 9-M10x1	M10x1										
SST 11- 9-R1/8"	1/8"BSP	6	9	26	9	10		15			
SST 11- 9-M14x1.5	M14x1.5										
SST 11- 9-R1/4"	1/4"BSP	9	13	26	9	10		17			
SST 11-13-M14x1.5	M14x1.5										
SST 11-13-M16x1.5	M16x1.5										
SST 11-13-R3/8"	3/8"BSP										

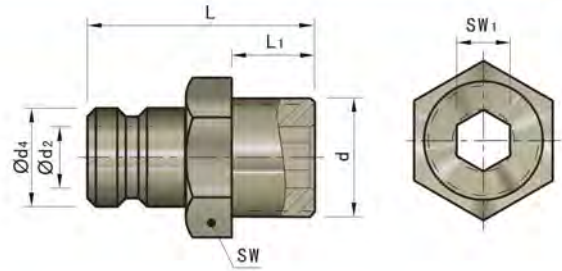
SST11



Order SST11-9-R1/8"H Material: Brass

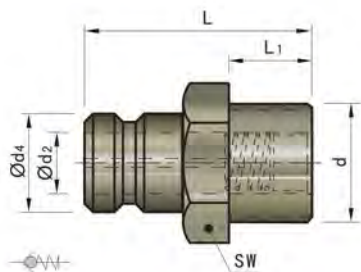
Code	d	d2	d4	L	L1	P(bar)	T(°C)	SW	SW1	@ ¥/P
SST 11-9-R1/8"H	1/8"BSP	6	9	24	7	15	200	11	5	
SST 11-9-M10x1H	M10x1									
SST 11-9-R1/4"H	1/4"BSP					26	9	15	200	15
SST 11-9-M14x1.5H	M14x1.5									

SST11



Order SST11-13-R1/4"H Material: Brass

Code	d	d2	d4	L	L1	P(bar)	T(°C)	SW	SW1	@ ¥/P
SST 11-13-R1/4"H	1/4"BSP	9.3	13	26	9	15	200	15	8	
SST 11-13-M14x1.5H	M14x1.5									
SST 11-13-M16x1.5H	M16x1.5									
SST 11-13-R3/8"H	3/8"BSP									



Medium	Max (°C)
Air	200
Oil	120
Water	100

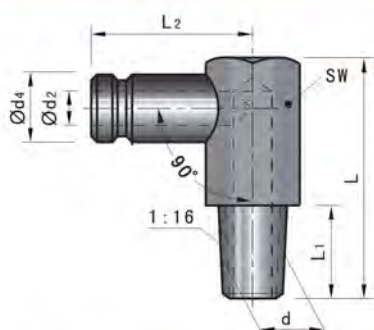


SST13

Order SST13-9-M14×1.5

Material: Brass

Code	d	d2	d4	L	L1	P(bar)	T(°C)	SW	@ ¥/P
SST-13- 9-M14×1.5	M14×1.5								
SST-13- 9-R1/4"	1/4"BSP	6	9	29	12	15	200	15	
SST-13-13-M16×1.5	M16×1.5								
SST-13-13-R3/8"	3/8"BSP	9	13	30		10		17	

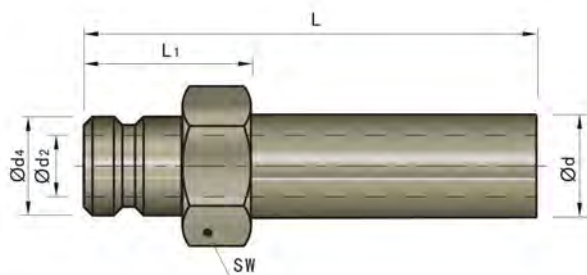


SST14

Order SST14-9-M8×0.75

Material: Brass

Code	d	d2	d4	L	L1	L2	SW	@ ¥/P
SST-14- 9-M 8×0.75	M 8×0.75	4.5						
SST-14- 9-M10×1	M10×1	6	9	27	9	23	11	
SST-14- 9-R1/8"	1/8"BSPT							
SST-14-13-M14×1.5	M14×1.5	9	13	34		25	15	
SST-14-13-R1/4"	1/4"BSPT							



SST15

Order SST15-9-120

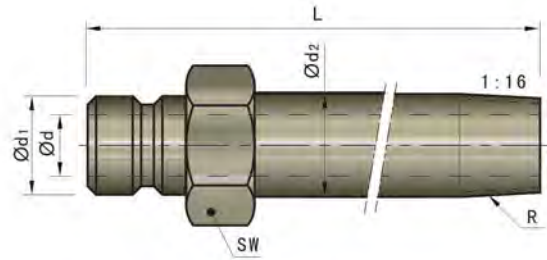
Material: Brass

Code	d	d2	d4	L	L1	SW	@ ¥/P
SST-15- 9×120				120			
SST-15- 9×240	10	6	9	240	21	11	
SST-15- 9×360				360			
SST-15-13×150				150			
SST-15-13×300	14	9	13	300	23	15	
SST-15-13×450				450			

Ejector pins
 Ejector sleeves
 Side railers
 series
 Latch locks
 series
 Pouring gates
 series
 Date stamps
 Air valves
 series
 Ejector series
 Cooling elements
 Locking parts
 series
 Springs series
 Guide pins
 Guide bush
 Guide strips
 Guide plate
 series
 Chuck series
 Mold
 accessories

AISI
Nipples

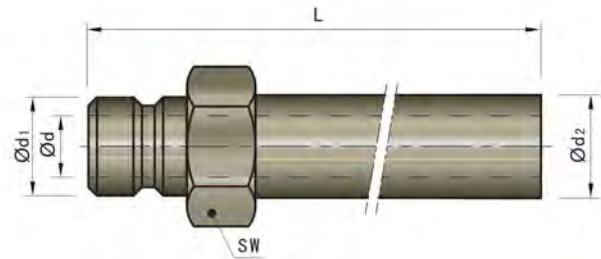
BBEP



Order BBEP-1810 Material: Brass

Code	R	L	SW	d	d1	d2	Series	@ ¥/P
BBEP-1810	1/8"BSPT	100	11	6	9.4	10	N6	
BBEP-1415	1/4"BSPT	150	15	9	13.5	14	N9	

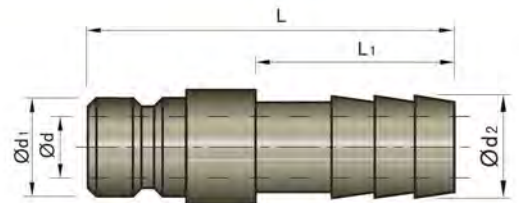
BBEP



Order BBEP-1815 Material: Brass

Code	L	SW	d	d1	d2	Series	@ ¥/P
BBEP-1815	150	11	6	9.4	10	N6	
BBEP-1825	250	15	9	13.5	14	N9	

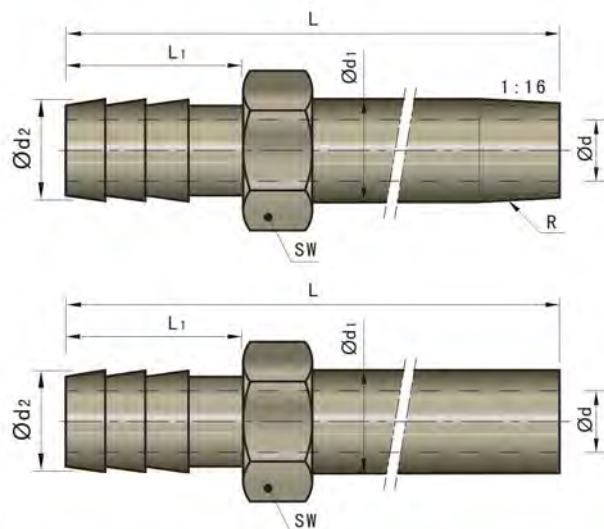
SSTN



Order SSTN-9 Material: Brass

Code	d	d1	d2	L1	L	Series	@ ¥/P
SSTN- 9	6	9.4	10	17	39	N 6	
SSTN-13	9	13.5	14	21	41	N 9	
SSTN-19	15.5	19.9	20	46	91	N16	

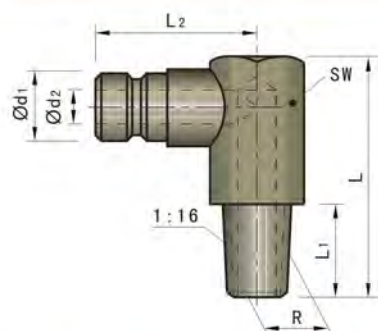
BBSS



Order BBSS-1810 Material: Brass

Code	R	L	L1	d	d1	d2	SW	@ ¥/P
BBSS-1810	1/8"BSPT	100						
BBSS-1815	-	150	17	6	10	10	11	
BBSS-1825	-	250						
BBSS-1415	1/4"BSPT	150	25	9	14	14	15	
BBSS-1425	-	250						

AATN



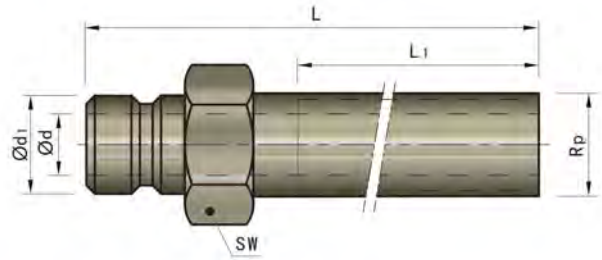
Order AATN-9 Material: Brass

Code	R	d1	d2	L	L1	L2	SW	Series	@ ¥/P
AATN- 9	1/8"BSPT	9.4	6	27	9	23	11	N6	
AATN-13	1/4"BSPT	13.5	9	34		24.5	15	N9	

- Explosive pins
- Explosive sleeves
- Side railers
- Series
- Latch locks
- Pointing gates
- Series
- Date stamps
- Ad valves series
- Explosive series
- Cooling elements
- Locating parts
- Series
- Springs series
- Guide pins
- Guide bush
- Guide pins
- Guide plate series
- Chuck series
- Mold accessories

AISI
Nipples

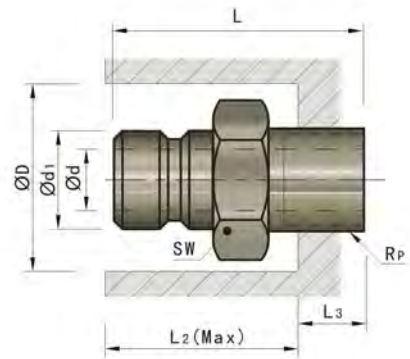
EEJP



Order EEJP-2514 Material: Brass

Code	Rp	d1	d	L	L1	SW	Series	@ ¥ / P				
EEJP-2514	1/8"BSP	9.4	6.3	100	61	12	N6					
EEJP-2516				150								
EEJP-2518				200								
EEJP-2524	1/4"BSP			100		15						
EEJP-2526				150								
EEJP-2528				200								
EEJP-2534	3/8"BSP	13.5	9.5	100	61	18	N9					
EEJP-2536				150								
EEJP-2538				200								
EEJP-3514	1/8"BSP			9.4		6.3		100	61	15	N6	
EEJP-3516								150				
EEJP-3518								200				
EEJP-3524	1/4"BSP	13.5	9.5		100		61	15		N9		
EEJP-3526					150							
EEJP-3528					200							
EEJP-3534	3/8"BSP			13.5	9.5	100		61	18		N9	
EEJP-3536						150						
EEJP-3538						200						

FFN

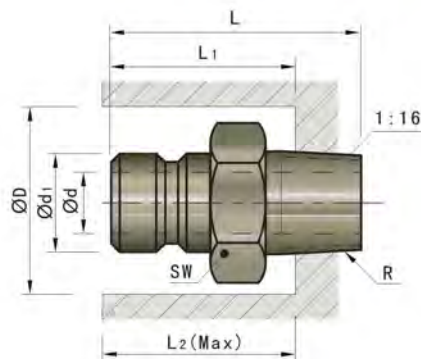


Order FFN-9-14A Material: Brass

Code	Rp	D	L2	d1	d	L	L3	SW	Series	@ ¥ / P						
FFN- 9-14A	1/4"BSP	30	23.5	13.5	9	34	11.5	16	N 9							
FFN- 9-38A								19								
FFN-16-38A	3/8"BSP							32		29.5	19.9	15	40	24.5	N16	
FFN-16-38AL																22
FFN-16-12A	1/2"BSP	32	29.5	19.9	15	45	16.5		N16							
FFN-16-12AL							25.5									

AISI
Nipples

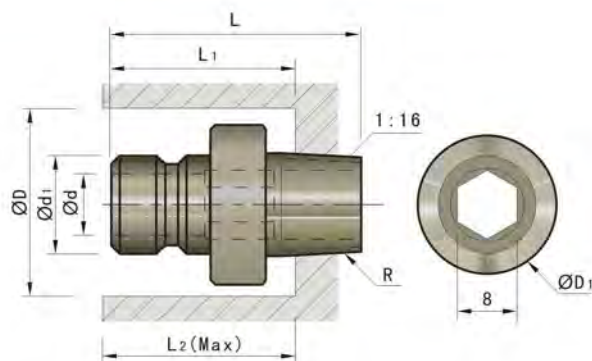
NN



Order NN-6-1/8"A Material: Brass

Code	R	d1	d	L	D	L1	L2	SW	Series	@ ¥ /P
NN- 6-1/8"A	1/8"BSPT			24	22	17	18	13	N 6	
NN- 6-MA	M10×1	9.4	6	23						
NN- 6-1/4"A	1/4"BSPT			29	26	19	20	16		
NN- 6-3/8"A	3/8"BSPT			30	30	21	22	19	N 9	
NN- 9-1/8"A	1/8"BSPT				26	25	26	14		
NN- 9-1/4"A	1/4"BSPT			34	30	26	28	16		
NN- 9-3/8"A	3/8"BSPT	13.5	9		26	25	26	19	N 9	
NN- 9-MA	M10×1			29.5	26	25	26	16		
NN- 9-1/2"A	1/2"BSPT			39	37	26	28	24		
NN-16-1/2"A	1/2"BSPT	19.9	16	44	32	37	38	22	N16	
NN-16-3/4"A	3/4"BSPT			45	38	38	40	29		

NN

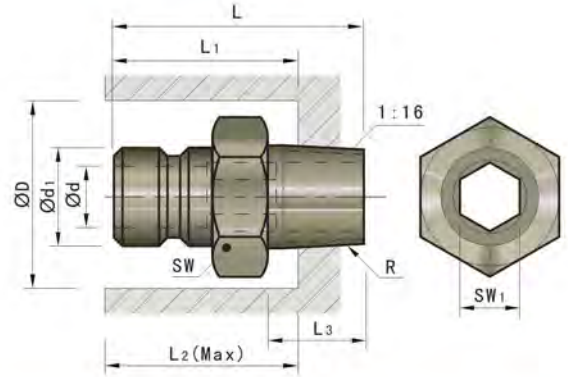


Order NN-9-3/8AH Material: Brass

Code	R	d1	d	L	D1	D	L2	L1	Series	@ ¥ /P
NN-9-3/8AH	3/8"BSPT	13.5	9	34	21	30	28	26	N9	

AISI
Nipples

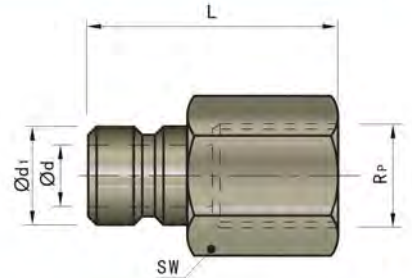
NN



Order NN-9-1/8AHN Material: Brass

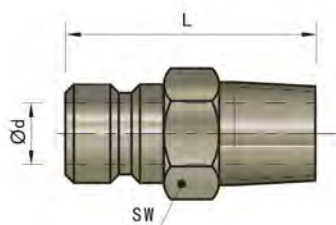
Code	R	d	d1	L	L3	D	L2	L1	SW	SW1	Series	@ ¥ /P
NN-6-1/8AHN	1/8"BSPT	6	9.4	23	9	22	16	14	11	5	N6	
NN-6-M10×1AHN	M10×1			28								
NN-6-1/4AHN	1/4"BSPT			28								
NN-6-M14×1.5AHN	M14×1.5	9.3	13.5	34	14	26	22	20	16	8	N9	
NN-9-1/4AHN	1/4"BSPT			34								
NN-9-M14×1.5AHN	M14×1.5			34								
NN-9-M16×1.5AHN	M16×1.5	9.3	13.5	35	14	30	23	21	19	8	N9	
NN-9-3/8AHN	3/8"BSPT			35								

NN



Order NN-6-1/8"l Material: Brass

Code	Rp	d1	d	L	SW	Series	@ ¥ /P
NN-6-1/8"l	1/8"BSP	9.4	6	28	13	N6	
NN-6-1/4"l	1/4"BSP			32	16		
NN-6-3/8"l	3/8"BSP			34	19		
NN-9-1/4"l	1/4"BSP	13.5	9	37	16	N9	
NN-9-3/8"l	3/8"BSP			39	19		
NN-9-1/2"l	1/2"BSP			46	24		



Order JJP-250 Material: Brass

Code	L	R	d	SW	Used with sockets	@ ¥ /P
JJP-250	59/64	1/16NPT	3/16	7/16	JJS-204-(V/SV)	
JJP-251	1 5/32	1/ 8NPT		9/16	To	
JJP-252	1 3/16	1/ 4NPT	1/ 4	11/16	JJS-226-(V/SV)	
JJP-253	1 3/16	3/ 8NPT		9/16	To	
JJP-351	1 3/16	1/ 8NPT		11/16	JJS-306-(V/SV)	
JJP-352	1 25/64	1/ 4NPT		11/16	To	
JJP-353	1 25/64	3/ 8NPT	3/ 8		JJS-328-(V/SV)	
JJP-354	1 37/64	1/ 2NPT		7/ 8	To	
JJP-553	1 9/16	3/ 8NPT	7/16		JJS-504-(V)	
JJP-554	1 3/ 4	1/ 2NPT	5/ 8		To	
JJP-556	1 3/ 4	3/ 4NPT		1 1/ 8	JJS-526-(V)	



Installation Diagram:

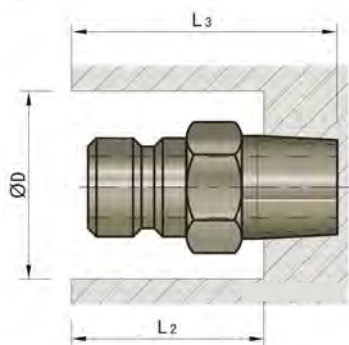


Figure 1

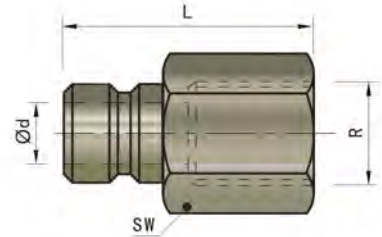


Figure 2

Code	D	L2	L3	L1
JJP-250	11/16	11/16	1"	5/ 8
JJP-251	27/32		1 3/16	7/ 8
JJP-252-(SV)		15/16	1 1/ 4	29/32
JJP-253-(SV)			1 1/ 4	7/ 8
JJP-351	1.000		1 7/16	1 1/32
JJP-352-(SV)		1 3/32	1 7/16	1 1/16
JJP-353-(SV)		1 1/ 8	1 9/16	1 1/16
JJP-354-(SV)	1 3/16	1 1/ 4	1 9/16	1 3/16
JJP-553	1 1/ 4	1 3/16	1 5/ 8	1 1/ 8
JJP-554	1 1/ 4	1 1/ 2	1 13/16	1 1/16
JJP-556	1 1/ 2	1 9/16	1 7/ 8	1 1/ 2

AISI
Nipples

JJPF



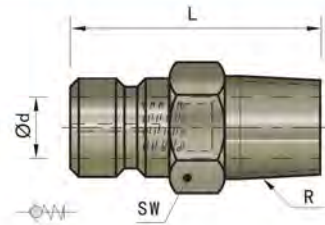
Order JJPF-0250 **Material: Brass**

Code	L	R	d	SW	Used with sockets	@ ¥ / P
JJPF-0250	1"	1/16NPT		1/ 2	JJS-204-(V/SV) To	
JJPF-0251		1/ 8NPT	1/ 4	5/ 8	JJS-226-(V/SV)	
JJPF-0252	1 9/32	1/ 4NPT		3/ 4		
JJPF-0253	1 13/32	3/ 8NPT		5/ 8	JJS-306-(V/SV) To	
JJPF-0351	1 3/32	1/ 8NPT	11/32	3/ 4	JJS-328-(V/SV)	
JJPF-0352	1 31/64	1/ 4NPT		15/16	JJS-504-(V) To	
JJPF-0353	1 37/64	3/ 8NPT	3/ 8	1 1/ 8	JJS-526-(V)	
JJPF-0354	1 49/64	1/ 2NPT				
JJPF-0553	1 11/16	3/ 8NPT	9/16			
JJPF-0554		1/ 2NPT	5/ 8			
JJPF-0556	1 49/64	3/ 4NPT				

JJP...-SV



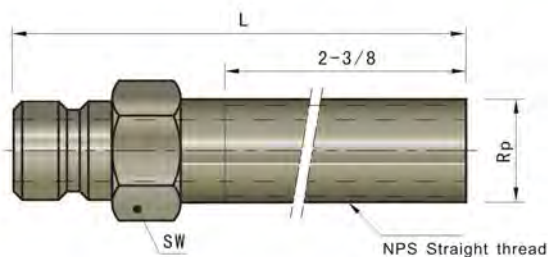
Medium	Max (°C)
Air	200
Oil	120
Water	100



Order JJP-252-SV **Material: Brass**

Code	L	R	d	SW	Used with sockets	@ ¥ / P
JJP-252-SV	1 5/32	1/4NPT		9/16	JJS-204-SV To JJS-226-SV	
JJP-253-SV	1 3/16	3/8NPT	1/4	11/16		
JJP-352-SV	1 29/64	1/4NPT		9/16	JJS-306-SV To JJS-328-SV	
JJP-353-SV	1 29/64	3/8NPT	3/8	11/16		
JJP-354-SV	1 37/64	1/2NPT		7/ 8		

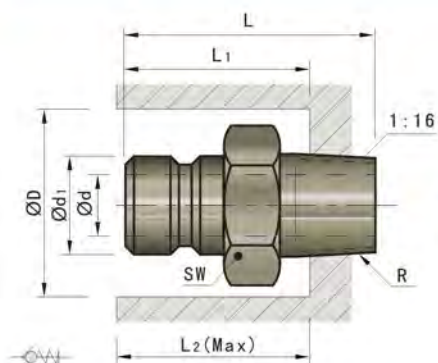
AISI
Nipples



JJPB

Order JJPB-2514 Material: Brass

Code	Rp	L	SW	Used with sockets	@ ¥ /P
JJPB-2514		4"			
JJPB-2516	1/8	6"	7/16		
JJPB-2518		8"			
JJPB-2524		4"		JJS-204-(V/SV)	
JJPB-2526	1/4	6"	9/16	To	
JJPB-2528		8"		JJS-226-(V/SV)	
JJPB-2534		4"			
JJPB-2536	3/8	6"	11/16		
JJPB-2538		8"			
JJPB-3514		4"			
JJPB-3516	1/8	6"	9/16		
JJPB-3518		8"			
JJPB-3524		4"		JJS-306-(V/SV)	
JJPB-3526	1/4	6"		To	
JJPB-3528		8"		JJS-328-(V/SV)	
JJPB-3534		4"			
JJPB-3536	3/8	6"	11/16		
JJPB-3538		8"			



Medium	Max (°C)
Air	200
Oil	120
Water	100



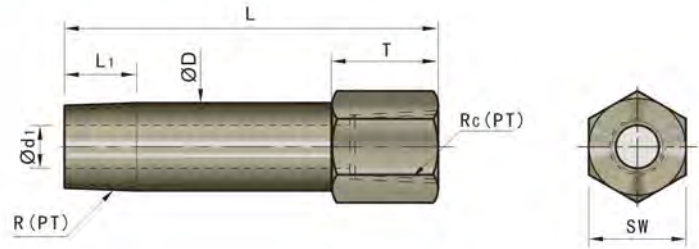
PPCS

Order PPCS-6-14A Material: Brass

Code	R	d1	d	L	D	L1	L2	SW	Series	@ ¥ /P
PPCS- 6-14A	1/4"BSPT	9.4	6	29	28	18	20	16	N 6	
PPCS- 6-38A	3/8"BSPT			29.5	30			19		
PPCS- 9-14A	1/4"BSPT				28	25	27	16		
PPCS- 9-38A	3/8"BSPT	13.5	9	34	30	26	28	19	N 9	
PPCS- 9-12A					37			24		
PPCS-16-12A	1/2"BSPT	19.9	15	44.4	35	32	34	7/8"	N16	
PPCS-16-34A	3/4"BSPT				42	30	32	11/8"		

AISI
Nipples

JJTW

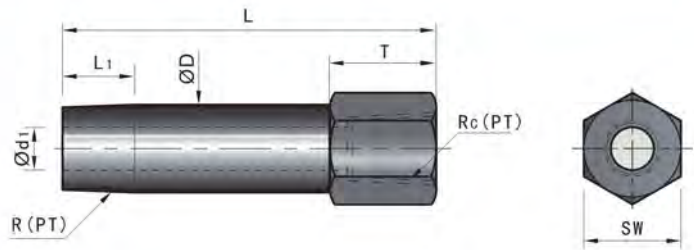


Order JJTW-No.-L Material: Brass

No.	B	T	D	d1	L1	Rc(PT)	R(PT)
1	14	13	10.5	6	10	1/8	1/8
2	17	16	13.8	8		1/4	1/4
3	21	17	17.3	10		3/8	3/8

No.	@ ¥ / P														
	L30	L35	L40	L45	L50	L70	L90	L110	L130	L150	L170	L190	L210	L230	L250
1															
2															
3															

JJWS

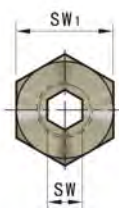
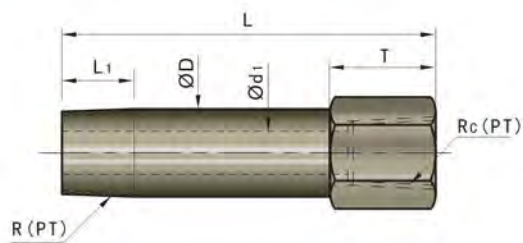


Order JJWS-No.-L Material: Stainless steel

No.	B	T	D	d1	L1	Rc(PT)	R(PT)
1	14	13	10.5	6	10	1/8	1/8
2	17	16	13.8	8		1/4	1/4
3	21	17	17.3	10		3/8	3/8

No.	@ ¥ / P														
	L30	L35	L40	L45	L50	L70	L90	L110	L130	L150	L170	L190	L210	L230	L250
1															
2															
3															

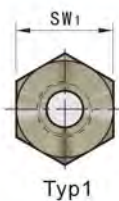
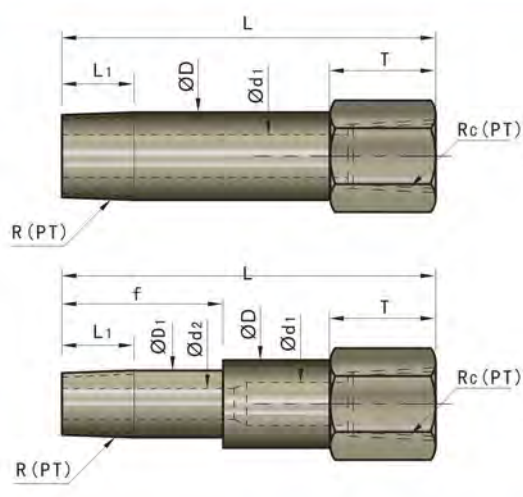
HHX-JTW



Order HHX-JTW-No.-L Material: Brass

No.	SW	SW1	T	D	d1	L1	Rc(PT)	R(PT)
1	6	14	13	10	6	9	1/8	1/8
2	8	17	16	13	8	11	1/4	1/4
3	10	21	17	17	10	13	3/8	3/8

No.	@ ¥ / P										
	L50	L60	L70	L80	L90	L100	L110	L120	L130	L140	L150
1											
2											
3											



JJTWF

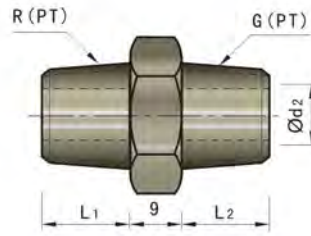
Order JJTWF-No.-L Material: Brass

No.	SW	T	D	D1	d1	d2	f	L1	Rc(PT)	R(PT)	Typ
12	17	16	13.8	-	6	-	-	10	1/8	1/4	1
23	21	17	17.3	-	8	-	-	12	1/4	3/8	1
21	17	16	13.8	11	8	6	15	10	1/4	1/8	2
32	21	17	17.3	14	10	8	-	10	3/8	1/4	2

No.	@ ¥ / P										
	L50	L60	L70	L80	L90	L100	L110	L120	L130	L140	L150
12											
23											
21											
32											

AISI
Nipples

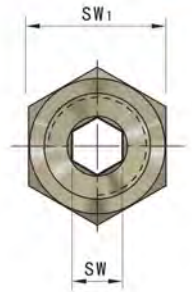
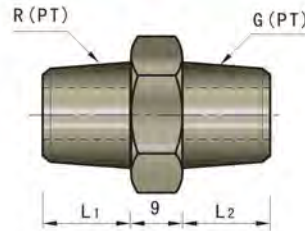
JJEMM



Order JJEMM-No. Material: Brass

No.	L1	L2	d2	R(PT)	G(PT)	SW1	@ ¥ /P
11	10	10	6	1/8	1/8	14	
12					1/4	17	
13					3/8	21	
22	12	10	8	1/4	1/4	17	
23					3/8	21	
33					3/8	21	

JJEMMR

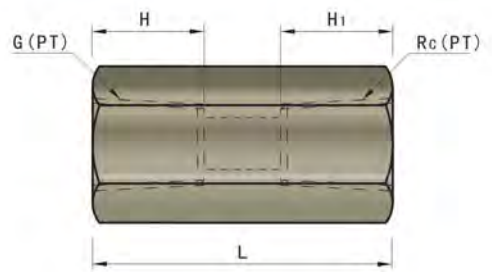
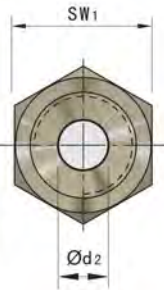


Order JJEMMR-No. Material: Brass

No.	L1	L2	R(PT)	G(PT)	SW	SW1	@ ¥ /P
11	10	10	1/8	1/8	6	14	
12				1/4		17	
13				3/8		21	
22	12	10	1/4	1/4	8	17	
23				3/8		21	
33				3/8		21	

AISI
Nipples

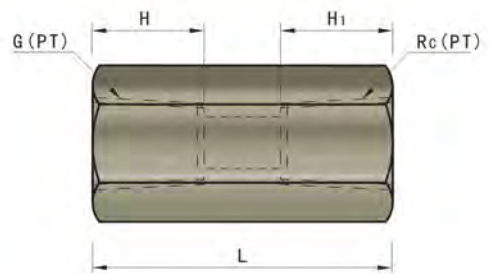
JJEFS



Order JJEFS-No. Material: Brass

No.	H	H1	d2	L	Rc(PT)	G(PT)	SW1	@ ¥/P
11	10	10	6	30	1/8	1/8	17	
12			8		1/4	1/4	19	
22			10		3/8	3/8	22	
23	12	12	10					
33								

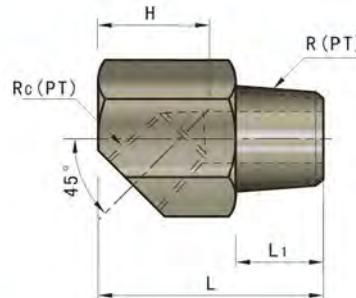
JJEFSR



Order JJEFSR-No. Material: Brass

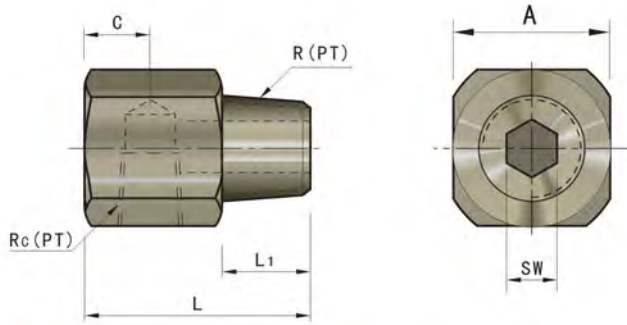
No.	H	H1	L	Rc(PT)	G(PT)	SW	SW1	@ ¥/P
11	10	10	30	1/8	1/8	6	17	
12				1/4	1/4	8	19	
22				3/8	3/8	10	22	
23	12	12						
33								

JJELF



Order JJELF-No. Material: Brass

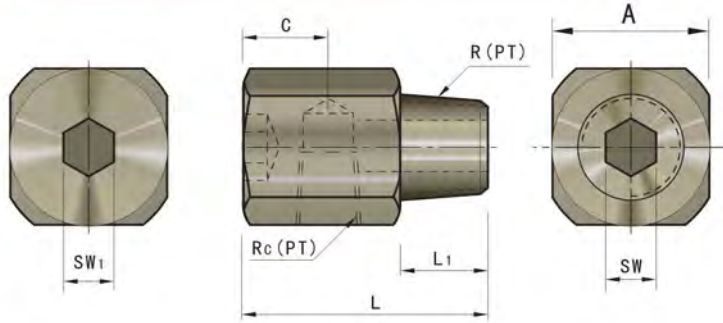
No.	L	L1	R(PT)	Rc(PT)	SW	SW1	@ ¥/P
11	30	10	1/8	1/8	6	19	
12	32	12	1/4	1/4	8		



JJEFL

Order JJEFL-No. Material: Brass

No.	L	L1	A	C	Rc(PT)	R(PT)	SW	@ ¥/P
11	35	9	14	12	1/8	1/8		
12	37	11	14		1/8	1/4	6	
21	41	9	17.5	11	1/4	1/8		
22	43	11	17.5		1/4	1/4	8	
23	45	13	17.5		1/4	3/8	6	
31	48	11	22	13	3/8	1/4	8	
32	50	13	22		3/8	3/8		



JJEFLR

Order JJEFLR-No. Material: Brass

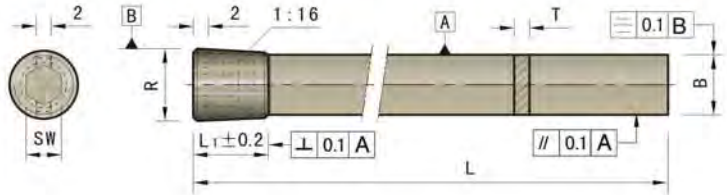
No.	L	L1	A	C	Rc(PT)	R(PT)	SW	SW1	@ ¥/P
11	35	9	14	12	1/8	1/8			
22	47.3	11	17.5	15.3	1/4	1/4	6	6	
33	56	13	22	18	3/8	3/8	8	8	



AISI

Straight brass plug baffles

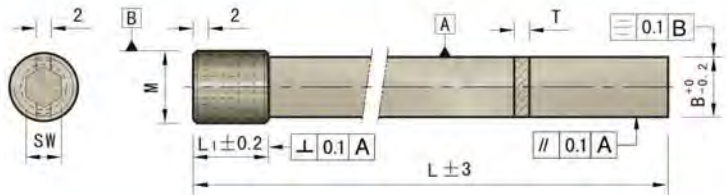
BBB



Order BBB-100-1/8

Material: Brass

Code	R	B	L	L1	T	d	SW	@ ¥/P
BBB-100-1/8	1/8"BSPT	8.2	104	8	1.6	8.5	5	
BBB-200-1/8			204					
BBB-125-1/4	1/4"BSPT	11.2	131	10	2.4	11.5	6	
BBB-250-1/4			258					
BBB-150-3/8	3/8"BSPT	14.7	156	12	3.2	15	8	
BBB-300-3/8			309					
BBB-200-1/2	1/2"BSPT	18.2	207	12	3.2	18.5	10	
BBB-400-1/2			410					
BBB-300-3/4	3/4"BSPT	23.2	309	12	3.2	23.5	12	
BBB-500-3/4			512					



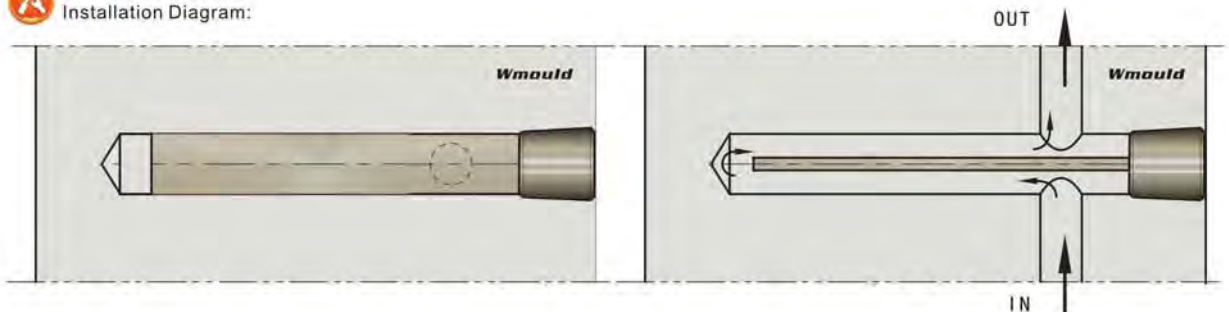
Order BBB-100-M8×0.75

Material: Brass

Code	B	L	L1	T	d	SW	M	@ ¥/P
BBB-100-M 8×0.75	5.8	104	8	1.6	6	4	M 8×0.75	
BBB-200-M 8×0.75		204			8			
BBB-100-M10×1	7.8	104	8	2	8	5	M10×1	
BBB-200-M10×1		204			8			
BBB-125-M12×1.5	9.8	129	10	2.4	10	6	M12×1.5	
BBB-250-M12×1.5		254			10			
BBB-150-M16×1.5	13.8	154	12	2.5	14	8	M16×1.5	
BBB-300-M16×1.5		304			12			
BBB-150-M20×1.5	17.8	154	12	2.5	18	10	M20×1.5	
BBB-200-M20×1.5		304			12			
BBB-300-M20×1.5	19.8	204	12	2.5	20	12	M24×2	
BBB-400-M20×1.5		404			12			
BBB-150-M24×2	19.8	154	12	2.5	20	12	M24×2	
BBB-300-M24×2		304			12			

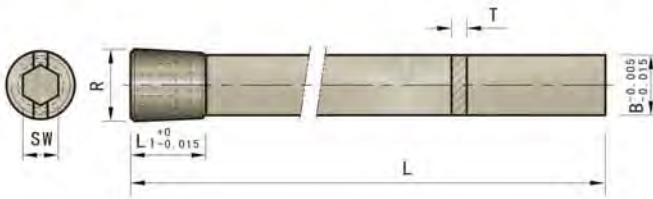


Installation Diagram:



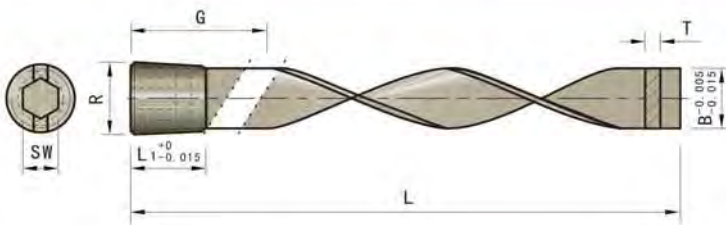
AISI

Straight & Spiral brass plug baffles



Order BBB-05-4 M Material: Brass

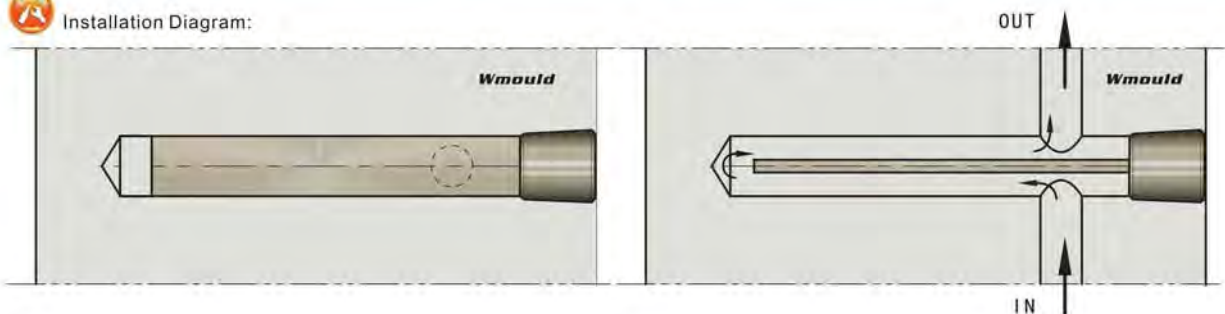
Code	R	B	L	L1	T	Drill size	SW	@ ¥ / P
BBB- 05- 4	1/16NPT	0.245	4"	0.250	0.50	1/ 4	5/32	
BBB- 05- 8			8"					
BBB- 10- 4	1/ 8NPT	0.307	4"	0.406	1/16	5/16	3/16	
BBB- 10- 8			8"					
BBB- 20- 5	1/ 4NPT	0.432	5"	0.531	3/32	7/16	1/ 4	
BBB- 20-10			10"					
BBB- 40- 6	3/ 8NPT	0.557	6"	0.656	1/ 8	9/16	5/16	
BBB- 40-12			12"					
BBB- 60- 8	1/ 2NPT	0.682	8"	0.656	1/ 8	11/16	3/ 8	
BBB- 60-16			16"					
BBB-100-12	3/ 4NPT	0.932	12"	0.656	1/ 8	15/16	9/16	
BBB-100-20			20"					
BBB-140-16	1NPT	1.120	16"	0.656	1/ 8	1 1/ 8	5/ 8	
BBB-140-24			24"					



Order BBBS-0504 M Material: Brass

Code	R	B	L	L1	G	T	Drill size	SW	@ ¥ / P
BBBS- 0504	1/16NPT	0.245	4"	0.250	2"	0.50	1/ 4	5/32	
BBBS- 0508			8"						
BBBS- 1004	1/ 8NPT	0.307	4"	0.406	2"	1/16	5/16	3/16	
BBBS- 1008			8"						
BBBS- 2005	1/ 4NPT	0.432	5"	0.531	2"	3/32	7/16	1/ 4	
BBBS- 2010			10"						
BBBS- 4006	3/ 8NPT	0.557	6"	0.656	2"	1/ 8	9/16	5/16	
BBBS- 4012			12"						
BBBS- 6008	1/ 2NPT	0.682	8"	0.656	3"	1/ 8	11/16	3/ 8	
BBBS- 6016			16"						
BBBS-10012	3/ 4NPT	0.932	11 7/8"	0.656	4"	1/ 8	15/16	9/16	
BBBS-10020			19 7/8"						
BBBS-14016	1NPT	1.120	15 7/8"	0.656	5"	1/ 8	5/ 8		
BBBS-14024			23 7/8"						

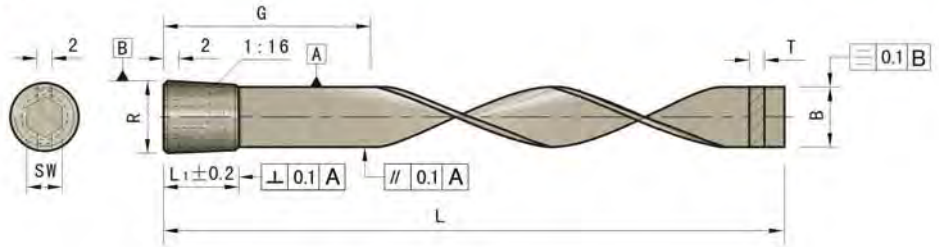
Installation Diagram:



AISI

Spiral brass plug baffles

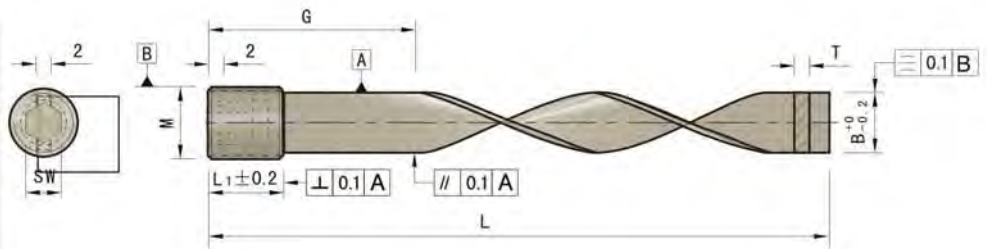
BBBS



Order BBBS-100-1/16

Material: Brass

Code	R	G	B	L	L1	T	安装孔 D _{H13}	Rotations	SW	@ ¥ /P
BBBS-100-1/16	1/16"BSPT	51	6.2	102			Ø6.5	360°	4	
BBBS-200-1/16		102		202				540°		
BBBS-100-1/ 8	1/ 8"BSPT	51	8.2	102	8	1.6	Ø8.5	360°	5	
BBBS-200-1/ 8		102		202				540°		
BBBS-125-1/ 4	1/ 4"BSPT	51	11.2	127				360°		
BBBS-250-1/ 4		102		252			Ø11.5	540°	6	
BBBS-150-3/ 8		51		152				360°		
BBBS-300-3/ 8	3/ 8"BSPT	102	14.7	302	10	2.4	Ø15	540°	8	
BBBS-200-1/ 2	1/ 2"BSPT	76	18.2	203			Ø18.5	360°	10	
BBBS-400-1/ 2		127		402				540°		
BBBS-300-3/ 4	3/ 4"BSPT	102	23.2	302			Ø23.5	360°	12	
BBBS-500-3/ 4		153		502				540°		
BBBS-400-1	1"BSPT	127	28.2	402	12	3.2	Ø28.5	360°	17	
BBBS-600-1		203		602				540°		



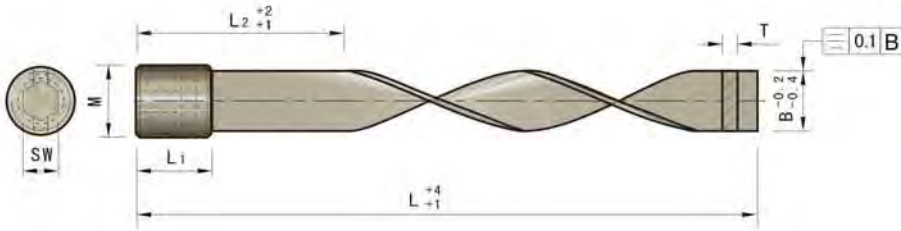
Order BBBS-100-M8×0.75

Material: Brass

Code	G	B	L	L1	T	安装孔 D _{H13}	Rotations	SW	M	@ ¥ /P
BBBS-100-M 8×0.75	50		102				360°			
BBBS-200-M 8×0.75	100	5.8	202			6	540°	4	M 8×0.75	
BBBS-300-M 8×0.75	150		302	8	1.6		720°			
BBBS-100-M10×1	50		102				360°			
BBBS-200-M10×1	100	7.8	202			8	540°	5	M10×1	
BBBS-300-M10×1	150		302				720°			
BBBS-125-M12×1.5	50	9.8	127				360°			
BBBS-250-M12×1.5	100		252		2.0	10	540°	6	M12×1.5	
BBBS-150-M16×1.5	50	13.8	152				360°			
BBBS-300-M16×1.5	100		302	10	2.4	14	540°	8	M16×1.5	
BBBS-150-M20×1.5	50	17.8	152				360°			
BBBS-300-M20×1.5	100		302			18	540°	10	M20×1.5	
BBBS-150-M24×2	50	19.8	152				180°			
BBBS-300-M24×2	100		302	12	2.5	20	540°	12	M24×2	

Spiral brass plug baffles

EE2102

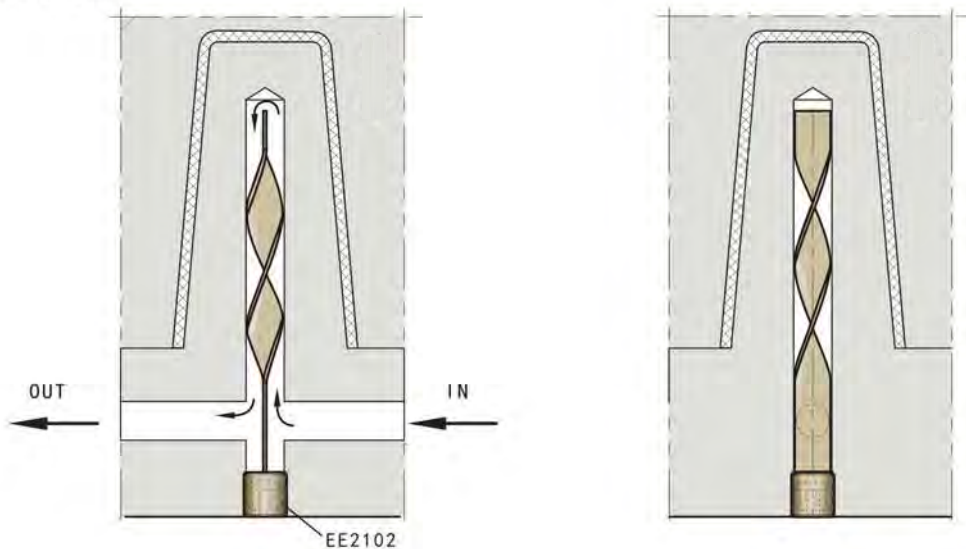


Order EE2102-8-100 Material: Brass

Code	B	T	L	L1	L2	M	SW	@ ¥/P
EE2102- 8-100	6	1.6	100	8	50	M 8×0.75	4	
EE2102- 8-200			200		100			
EE2102-10-100	8		100		50	M10×1	5	
EE2102-10-200			200		100			
EE2102-12-125	10		125		50	M12×1.5		
EE2102-12-250			250		100			
EE2102-14-150	12		150		50	M14×1.5	6	
EE2102-14-300			300		100			
EE2102-16-150	14	2.4	150	10	50	M16×1.5		
EE2102-16-300			300		100			
EE2102-18-180	16		180		50	M18×1.5	8	
EE2102-18-300			300		100			
EE2102-20-150	18		150		50	M20×1.5	10	
EE2102-20-300			300		100			
EE2102-24-150	20	3.2	150	12	50	M24×2	12	
EE2102-24-300			300		100			
EE2102-1/8-100	8.5	1.6	100	8	50	G1/8"	5	
EE2102-1/8-200			200		100			
EE2102-1/4-125	11.5		125		50	G1/4"	7	
EE2102-1/4-250			250		100			
EE2102-3/8-150	15	2.4	150	10	50	G3/8"	8	
EE2102-3/8-300			300		100			
EE2102-1/2-200	18.5		200		75	G1/2"	10	
EE2102-1/2-400			400		125			
EE2102-3/4-300	23.5	3.2	300	12	100	G3/4"	12	
EE2102-3/4-500			500		150			



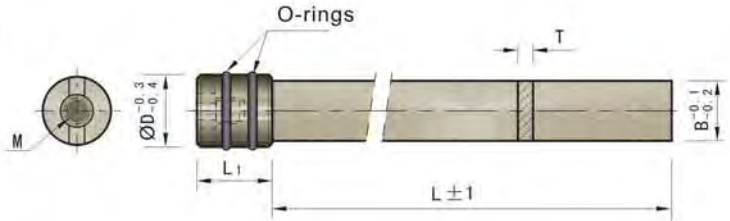
Installation Diagram:



DIN

Straight brass plug baffles

EE2108

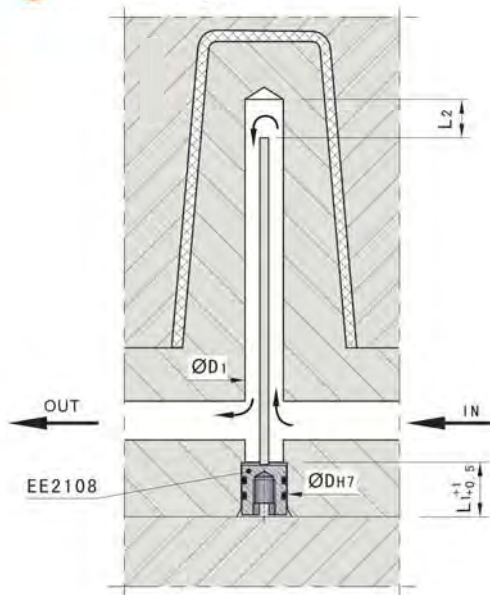


Order EE2108-B-L Material: Brass

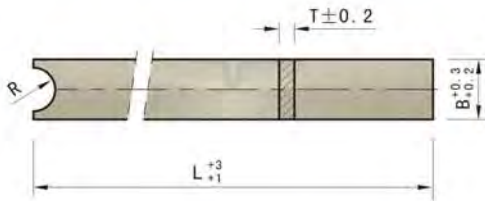
B	L	L1	L2	D	D1	T	M	@ ¥/P
6	140		6	8	6	2	M 3	
8	180	13	8	10	8		M 5	
10			10	12	10		M 6	
12	220		12	14	12			
15			15	16	15		M 8	
16	250	16	16	18	16			
18			18	20	18		M10	
20	300	20	20	22	20		M12	
25			25	26	25		M16	
25	390	22						



Installation Diagram:



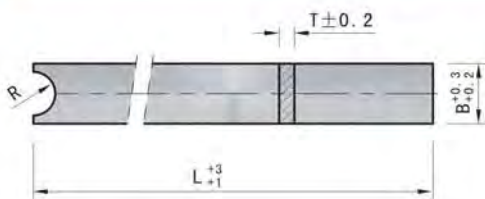
JIS
Straight plug baffles



BBFPXR

Order BBFPXR-B-L Material: Brass

B	R	T	@ ¥/P							
			L50	L70	L90	L110	L130	L150	L170	L200
10	4	2								
12										
16										
18										
20	5	3								
22										
24										
25	8	3								
28										
30										
35										



BBFAPR

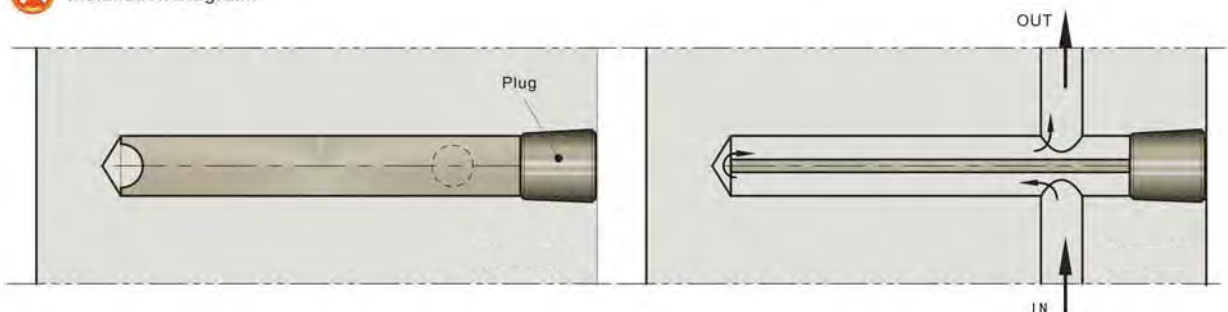
Order BBFAPR-B-L Material: Aluminum

B	R	T	@ ¥/P							
			L50	L70	L90	L110	L130	L150	L170	L200
10	4	2								
12										
16										
18										
20	5	3								
22										
24										
25	8	3								
28										
30										
35										

Suggest straight and spiral brass plug baffles press into cooling series holes to prevent it from revolve .



Installation Diagram:





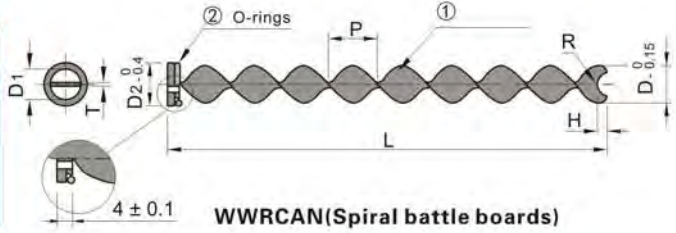
Spiral plastic plug baffles

WWRCAN
WWRCTN
WWRCCN
WWRCCN

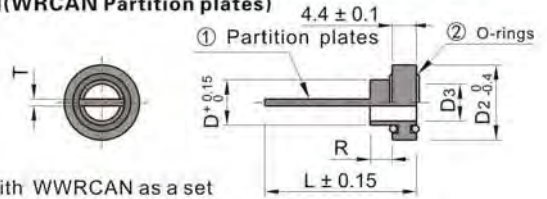


Code	Components	Material	Q'ty
①		PA6*(Nylon)+30% Glass fiber	1
②	O-rings	Fluoric rubber	1

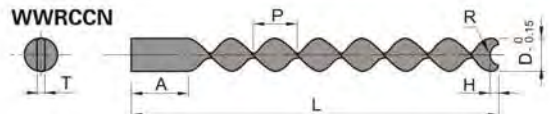
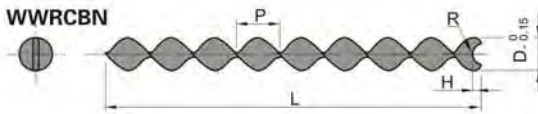
Code	Components	Material	Q'ty
①	Partition plates	PA6*(Nylon)+30% Glass fiber	1
②	O-rings	Fluoric rubber	2



WWRCTN(WRCAN Partition plates)



▲Use it with WWRCAN as a set



M Material:PA6+30%GF(PA6*(Nylon)+30% Glass fiber)

M Material:PA6+30%GF(PA6*(Nylon)+30% Glass fiber)

Order WWRCAN-D

Code	D	D1	D2	T	R	H	P	A	@ ¥ /P
									L
WWRCAN (Baffle boards)	8	8	15	1.5	2	2	20	4.2	L100
	10	10	18	1.8	2.5	2.5			L200
	12	11	22	2	3	3			L300
	16	15	25	3	4	4			
20	18	30	3	5	5				

Order WWRCTN-D

Code	D	D2	D3	T	R	B	@ ¥ /P
							L
WWRCTN (Partition plates)	8	15	6	1.2	4.1	4.5	L25
	10	18	8	1.5			L30
	12	22	10	1.6			L35
	16	25	13	2			L40
20	30	17					

Order WWRCBN-D

Code	D	R	H	P	@ ¥ /P
					L
WWRCBN	8	2	2	20	L 96 L196 L296
	10	2.5	2.5		
	12	3	3		
	16	4	4		
20	5	5			

Order WWRCCN-D

Code	D	T	R	H	P	@ ¥ /P	
						L	
WWRCCN	8	1.5	2	2	20	L100	
	10	1.8	2.5	2.5		L200	
	12	2	3	3			
	16		4	4			
	20	3	5	5		25	L100 L200 L300
	25	3.5	6	6			L100 L200 L300 L400

Features:

1. Cooling water is spiral flowing, increase touch area of mold cavity ,so cooling effective is heighten than normal separate plate.
2. Material is made of plastic with solder glass ,not rust ,cooling water holes not block.
3. Apply to normal separate plate cooling , when cooling holes upper and lower deviation ,separate plate is difficulty to insert .spiral water sleeve have elasticity ,Even cooling holes have deviation ,no problem to installing.
4. The front shape and length of spiral water sleeve can cut to adjust according to request.
5. When take apart spiral water sleeve .Water scale in cooling series can be removed

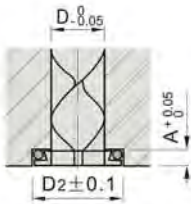


Figure 1(WWRCAN/WWRCTN)
Separate type

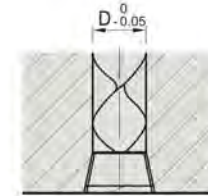
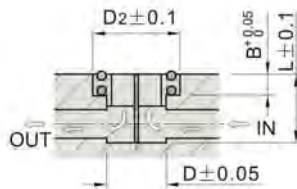


Figure 2(WWRCBN)
Straight type

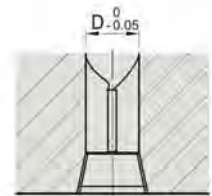


Figure 3(WWRCCN)
Straight type

Installation Guidelines:

- Separated parts and cooling holes shall be right angle to installation.
- When install WWRCAN spiral brass plug baffles, Separate parts shall be same direction with separate parts of WWRCTN.
- No right angle to install WWRCBN spiral brass plug baffles and cooling holes, It will be reduce cooling effect.
- Even install according to installed holes size to installed. sometimes easy to leak water, The reason as below
A. Installion plate become deformed
B. The distance between fixed position of installation plate and spiral brass plug baffles have a little far.
- O ring precision not same.

When encounter this situation, please adopt to add fixed point quantity, Use O ring to seal on external side of installed position, Let installed holes processing depth lower than recommended values, By means of further processing to adjustment them.

Installation Diagram:

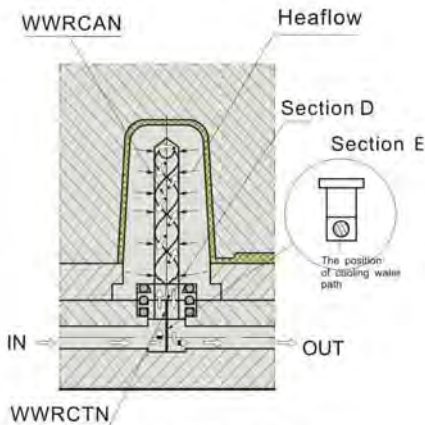


Figure 1(WWRCAN/WWRCTN)
Separate type

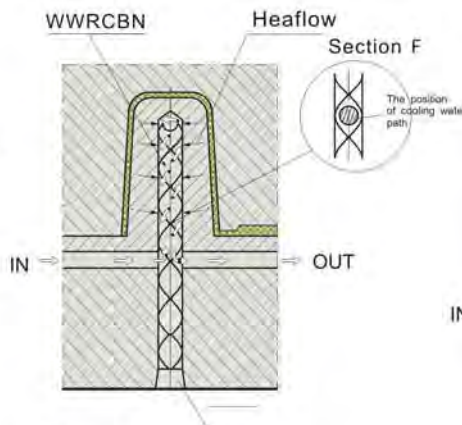


Figure 2(WWRCBN)
Straight type

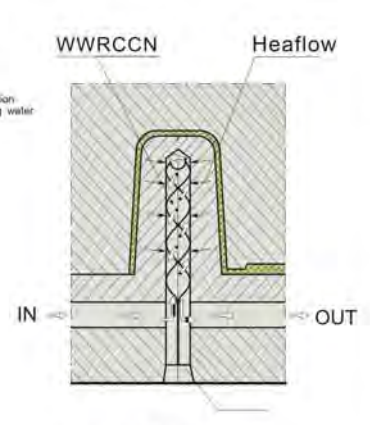


Figure 3(WWRCCN)
Straight type

DIN

Pressure plugs

ZZ94



Order ZZ94-R1/8 **M** Material: Brass Surface plating treatment

Code	R	L	SW	@ ¥ /P
ZZ94- 5×0.5	M 5×0.5	5	3	
ZZ94- 7×1	M 7×1			
ZZ94- 8×0.75	M 8×0.75		4	
ZZ94- 9×1	M 9×1	8	5	
ZZ94-10×1	M10×1			
ZZ94-11×1	M11×1		6	
ZZ94-12×1.5	M12×1.5			
ZZ94-14×1.5	M14×1.5	10	7	
ZZ94-R1/8	R1/8A	8	5	
ZZ94-R1/4	R1/4A		7	
ZZ94-R3/8	R3/8A	10	8	
ZZ94-R1/2	R1/2A		10	

ZZ940

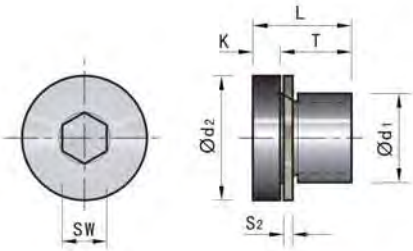


Order ZZ940-R1/8 **M** Material: Brass Surface plating treatment

Code	Rp	L	SW	@ ¥ /P
ZZ940- 7×1	M 7×1		3	
ZZ940- 8×0.75	M 8×0.75		4	
ZZ940- 9×1	M 9×1	8	5	
ZZ940-10×1	M10×1			
ZZ940-11×1	M11×1		6	
ZZ940-12×1.5	M12×1.5			
ZZ940-14×1.5	M14×1.5	10	7	
ZZ940-R1/8	G1/8A	5	8	
ZZ940-R1/4	G1/4A	7		
ZZ940-R3/8	G3/8A	8	10	
ZZ940-R1/2	G1/2A	10		



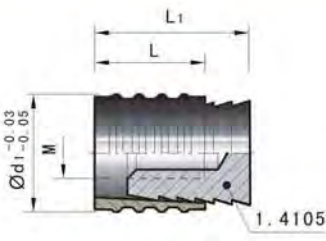
Pressure plugs



ZZ941

Order ZZ941-10×1 **M** Material: Brass Surface plating treatment

Code	K	S2	T	L	d2	d1	SW	@ ¥/P
ZZ941-10×1	3	1	8	11	14	M10×1	5	
ZZ941-12×1.5		1.5	12	15	17	M12×1.5	6	
ZZ941-14×1.5		1.5	12	15	19	M14×1.5	8	
ZZ941-R1/8	4	1	8	11	14	G1/8A	5	
ZZ941-R1/4		1.5	12	15	18	G1/4A	6	
ZZ941-R3/8		1.5	12	15	22	G3/8A	8	
ZZ941-R1/2	4	1.5	14	18	26	G1/2A	10	

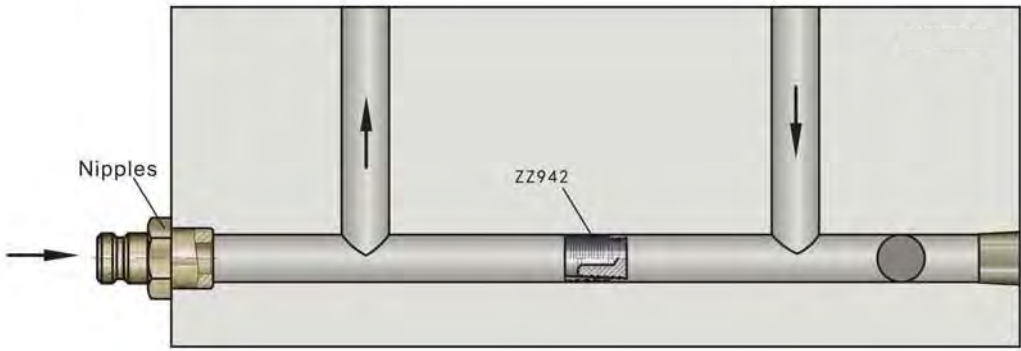


ZZ942

Order ZZ942-6 **M** Material: Brass Surface plating treatment

Code	L1	L	M	d1	@ ¥/P
ZZ942- 6	11.5	8	M3	6	
ZZ942- 8			M4	8	
ZZ942-10	14	10	M6	10	
ZZ942-12			M6	12	
ZZ942-15			M6	15	
ZZ942-16	16	12	M8	16	

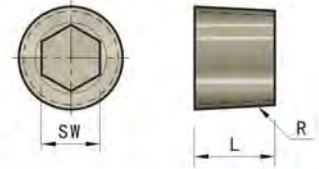
Installation Diagram:



AISI

Pressure plugs

BBP

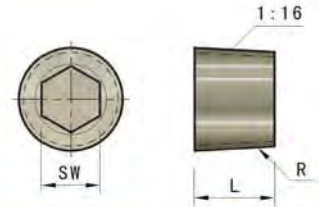


Order BBP-10

Material: Brass

Code	R	L	SW	@ ¥ /P
BBP- 10	1/8NPT	0.250	3/16	
BBP- 20	1/4NPT	0.406	1/ 4	
BBP- 40	3/8NPT		5/16	
BBP- 60	1/2NPT	0.531	3/ 8	
BBP-100	3/4NPT		9/16	
BBP-140	1NPT	0.656	5/ 8	

AAN

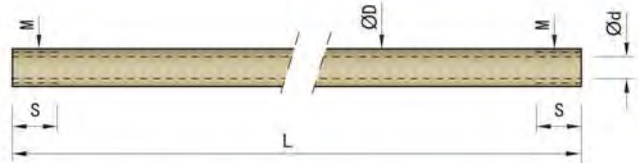


Order AAN-10

Material: Brass

Code	R	L	SW	@ ¥ /P
AAN- 8	1/8"BSPT	8	5	
AAN- 4	1/4"BSPT	10	7	
AAN- 3	3/8"BSPT		8	
AAN-10	M10x1	8	5	
AAN- 2	1/2"BSPT	10	10	

BBTC
BBTCM



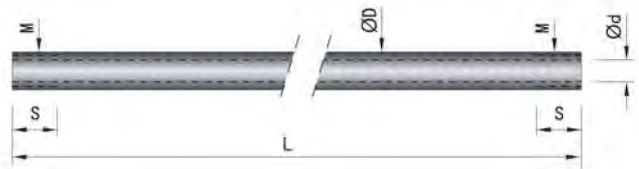
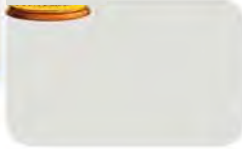
Order BBTC-D-L

Material: Brass

Note: No thread in the both ends for TPC

d	D	S	M					@ ¥ /S				
			BBTC	BBTCM	TPC	L100	L200	L300	L400	L500		
1.5	3	6	No. 5-44	M 3x0.35	/							
3	5	6	No.10-32	M 5x0.5	/							
4	6	8	1/ 4-28	M 6x0.75	/							
6	8	10	5/16-24	M 8x0.75	/							
8	12	12	7/16-20	M12x1.0	/							

BBTS
BBTSM

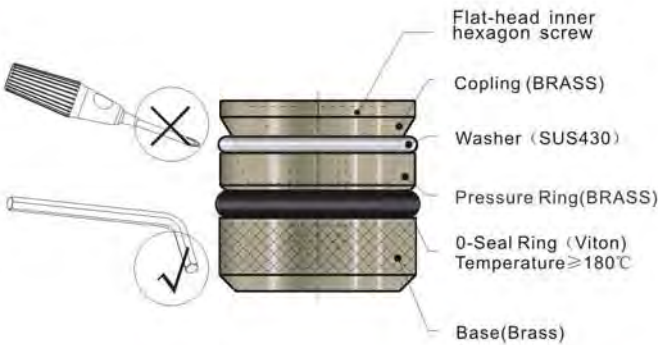


Order BBTS-D-L

Material: Stainless steel

Note: No thread in the both ends for TPC

d	D	S	M			@ ¥ /S				
			BBTS	BBTSM	TPS	L100	L200	L300	L400	L500
1.5	3	6	No. 5-44	-	/					
3	5	6	No.10-32	M 5x0.5	/					
4	6	8	1/ 4-28	M 6x0.75	/					
6	8	10	5/16-24	M 8x0.75	/					
8	12	12	7/16-20	M12x1.0	/					



Features:

1. This plug function used in plastic mould, any water channel cooling, heating system, Rely on requisite flow direction to match.
2. Easy to installation, Any position of cooling holes can install them.

Order DTW-06

Code	Outer Dia(Ø)+0-0.1	Length (mm)	Hex socket size(mm)	Hex socket type	Torque force(kgf/cm)	@ ¥ /P
DTW-06	6	11	2	M2.5	12-13	
DTW-08	8		2.5	M3	21-22	
DTW-09	9		3	M4	34-35	
DTW-10	10					
DTW-12	12					

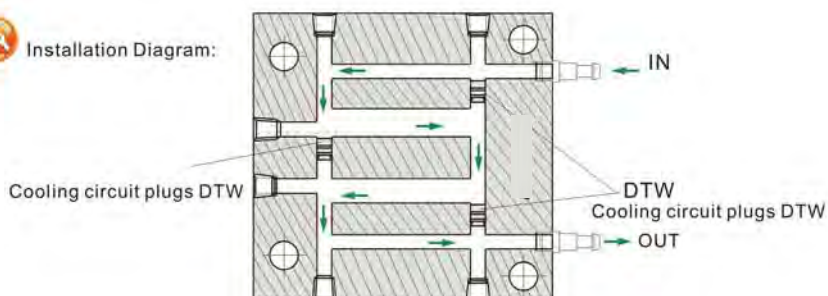


Installation Guidelines:

- Water channel holes diameter tolerance according to +0.1mm to processing, for example: Out diameter Ø6 cooling circuit plugs, mould drill shall be 6.1mm
- Screw off this screw, After use hex wrench stand up to screw, stuffing in holes, then use hex wrench to tighten, make O ring seal dilatancy to block up cooling holes.
- Cooling circuit plugs in water, If cant better fixed, Please screw off this screw, then use air gun pull away to fixed position again.



Installation Diagram:



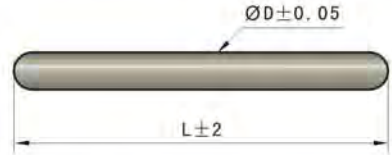
Wmould

Heat pipes

HTK



End position



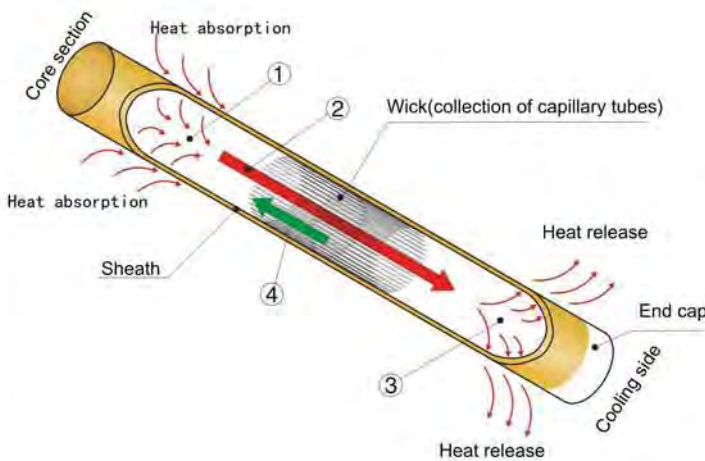
Order HTK-D-L

Code	D	L40-300
HTK	2	
	3	
	4	
	5	
	6	
	8	

Features:

1. Good cooling effective, HTK heat pipes not used in metal heat conductivity, but by mean of refrigerant sheat transfer media to use it. Heat conductivity is 200 times than brass pipes, also with better thermal response.
2. Stable cooling effective, It is different from previous method, HTK few time get rusty, incrustant ect, thereby decrease water flow make heat pipes reduce effective.
3. Reduce the cooling water circuits, simplification of the cooling water circuit, and reduce the volume of mold.
4. Fasting installation, no screw for fixing.

For Example:



Cross section:

※ Wick is a collection of capillary tubes.

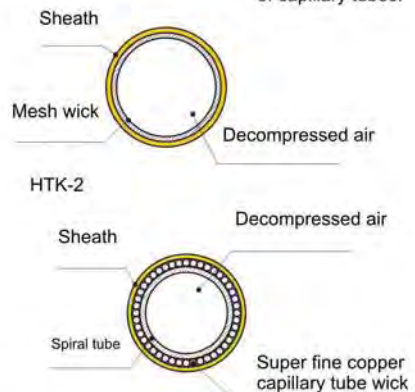
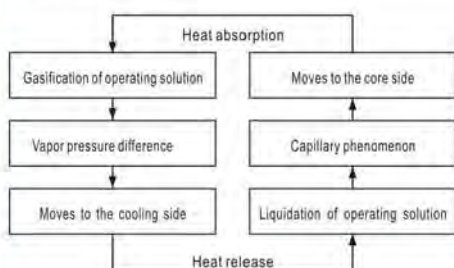
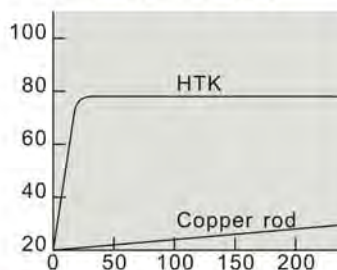


Figure 2 HTK-3, 4, 5, 6, 8

Exploded View of the HTK Heat Transaction Pipe:

- ① The operating solution absorbs the core side heat and gasifies;
- ② Vapor pressure difference causes the gasified operating solution to move to the cooling side;
- ③ Moved to the cooling side, the gasified solution releases heat and liquidates;
- ④ The wick's capillarity causes the operating solution to return to the core side.

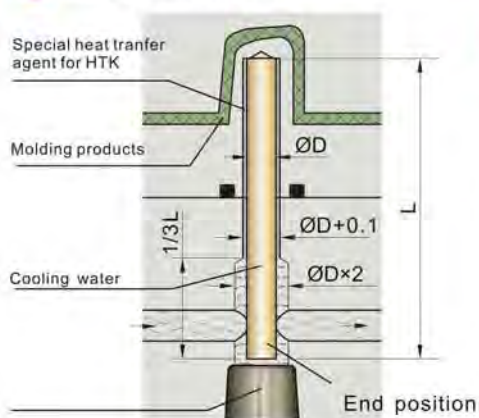
Operating cycle of the HTK heat transaction pipe**Thermal response property**

(Testing conditions)

- Heating medium: Hot water (80°C)
- Cooling medium: Air (room temperature)
- Heating/cooling section size: 1:1
- Measured location: Cooling section
- Pipe size: Ø4 L105

Order HTK-D-L

Code	D	@ ¥ / P															
		L35	L40	L45	L50	L55	L60	L65	L75	L85	L105	L125	L145	L165	L205	L225	
HTK	2																
	3																
	4																
	6																
	8																

**Installation instructions:****Installation Guidelines:**

- Installed holes shall be bigger 0.1mm than heat pipe .
- Please use special heat transfer agent fill to the full space when install heat pipe.
- Insert heat pipe , end position shall be on side of heat pipe.
- Usage temperature :30°C-200°C
- Please refer to installation instructions to processing installed holes.

Notes:

1. Installed holes shall be bigger 0.1mm than heat pipe. Use under a temperature of 200° C or lower. (Burst temperature 250° C) It is designed to withstand an internal pressure up to 20kgf/cm²(For example, the internal pressure rises to 16kgf/cm² at 200° C) .
2. If the cooling section area is insufficient, proper cooling effects may not be obtained. Provide a water cooling jacket referring to mounting method, and secure the cooling section area.
3. Do not cut or disassemble.
4. Bending or squashing the heat transaction pipe hampers its cooling function.
5. Do not use oil for cooling

DIN

Nipples

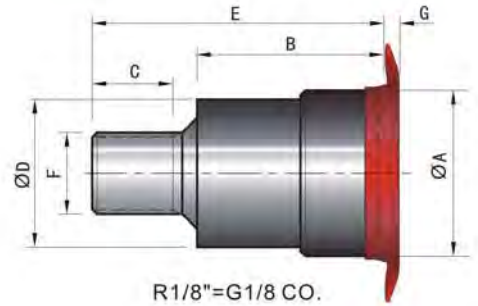
RRPL



Medium	Max(bar)	Max(°C)
Water	10	90

1. Straight through type external thread will coated teflon jack

Products code add B, It is mean with blue ring
Products code add R, It is mean with red ring



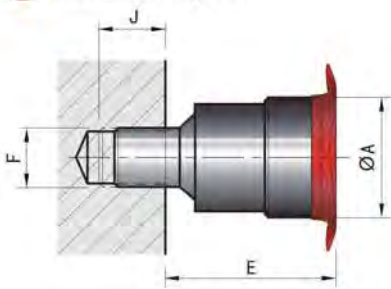
R1/8"=G1/8 CO.

Order RRPL 06.1150

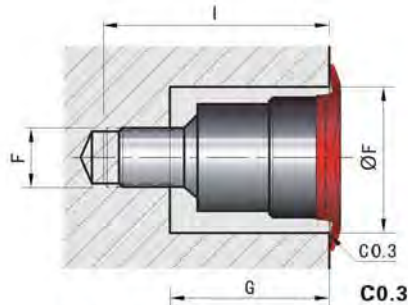
Code	Thread F	ØA	B	C	ØD	E	G	Allen key	Part-NO. without colour ring	@ ¥ /P		
RRPL 06	R1/8	17	18.5	7.5	14	28.5	1.5	6	RRPL 06.1150			
	NPT1/8			7					RRPL 06.1250			
	R1/4		15.5	RRPL 06.1151								
	NPT1/4		-	29.5					RRPL 06.1251			
RRPL 08	R1/8	21	22	8	17.5	32		1/4"	RRPL 08.1150			
	NPT1/8			7				RRPL 08.1250				
	R1/4		21	10				8	RRPL 08.1151			
	NPT1/4		-	33				5/16"	RRPL 08.1251			
	R3/8		11	11			8	RRPL 08.1152				
	NPT3/8						5/16"	RRPL 08.1252				
RRPL 12	R3/8	32	28	14	25	41	10	RRPL 12.1152				
	NPT3/8						7	RRPL 12.1252				
	R1/2		13	16.5			-	32		44	3/8"	RRPL 12.1153
	NPT1/2										14	RRPL 12.1253
	R3/4		14	14			-	-		32	1.4	RRPL 12.1154
	NPT3/4										9/16"	RRPL 12.1254



Installation Diagram:



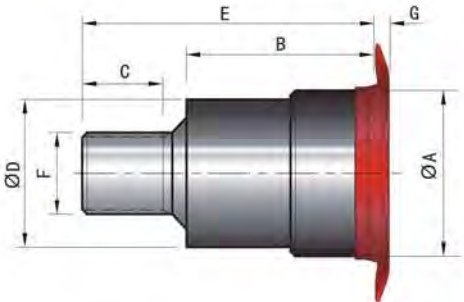
Micro convex type)



All-buried type)

Code	Thread F	ØA	E	J min.	ØF min.	G	I	Allen key	Recommended tightening torque(Nm)
RRPL 06	G1/8	17	20	10	18.5	20.5	29.5	6	15
	NPT1/8		22	13		22.5	31.5	1/4"	
	G1/4		18	13.5		18.5	30.5	6	
	NPT1/4		20	10		20.5	33	1/4"	
RRPL 08	G1/8	21	23	12	22.5	24	34	6	30
	NPT1/8		25.5	10		25.5	35	1/4"	
	G1/4		22	12		23	34	8	
	NPT1/4		24	13		23.5	35.5	5/16"	
	G3/8		12	13		13	25	8	
	NPT3/8		14	18		14	27	5/16"	
RRPL 12	G3/8	32	29	15	33.5	30	42	10	50
	NPT3/8		33	18		33	46	3/8"	
	G1/2		30	15		31	45	14	
	NPT1/2		35	18		34.5	51	9/16"	
	G3/4		15	18		20	36	14	
	NPT3/4		17.5	18		17.5	36.5	9/16"	

DIN
Nipples



Medium	Max(bar)	Max(°C)
Water	10	90

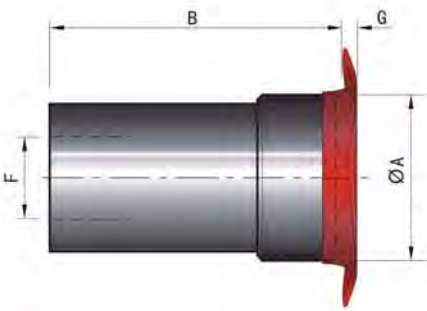
2. Straight through type external thread jack

Products code add B, It is mean with blue ring
Products code add R, It is mean with red ring



Order RRPL 06.1410

Code	Thread F	ØA	B	C	ØD	E	G	Allen key	Part-NO. without colour ring	@ ¥ /P
RRPL 06	M10×1	17	18.5		14	28.5		6	RRPL 06.1410	
RRPL 08	M10×1.5	21	22	8		32	1.5		RRPL 08.1410	
	M14×1.5		21		17.5			8	RRPL 08.1411 RRPL 08.1414	



Medium	Max(bar)	Max(°C)
Water	10	90

3. Straight through type internal thread jack

Products code add B, It is mean with blue ring
Products code add R, It is mean with red ring

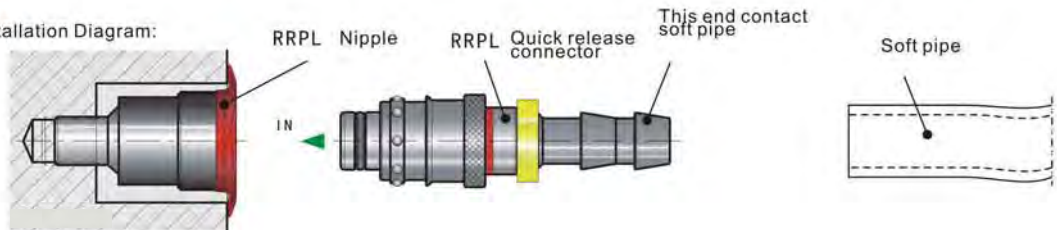


Order RRPL 08.1100

Code	Thread F	ØA	B	G	Allen key	Part-NO. without colour ring	@ ¥ /P
RRPL 08	G1/8	21	22	1.5	6	RRPL 08.1100	
	NPT1/8				1/4"	RRPL 08.1200	
	G1/4				8	RRPL 08.1101	
	NPT1/4				5/16"	RRPL 08.1201	
RRPL 12	G3/8	32	50		12	RRPL 12.1102	
	G1/2					RRPL 12.1103	



Installation Diagram:



- Exhaust pipe series
- Slide rail series
- Latch hook series
- Painting gate series
- Data stamp series
- Explosive series
- Cooling element series
- Locating parts series
- Spring series
- Guide pin series
- Guide pin series
- Chuck series
- Mold accessories

DIN

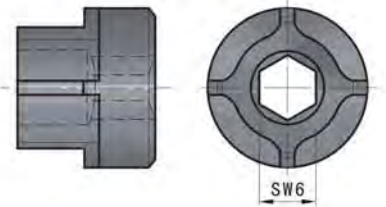
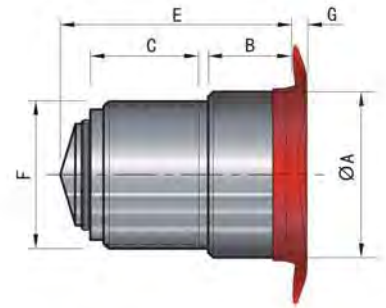
Nipples

RRPL

Medium	Max(bar)	Max(°C)
Water	10	90

4. Straight through type external thread jack

Products code add B, It is mean with blue ring
Products code add R, It is mean with red ring



SRPL 08-ON
SRPL 08-ON Jack installed tool

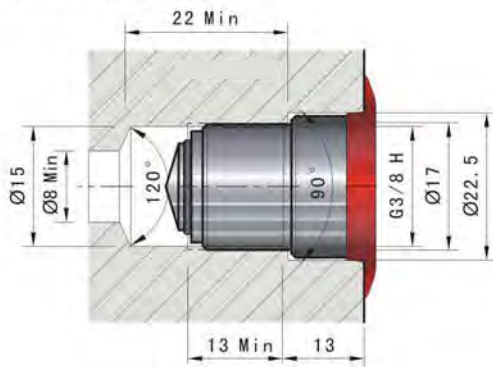
Order RRPL 08.9000

Order RRPL 08.1152-ON-JV

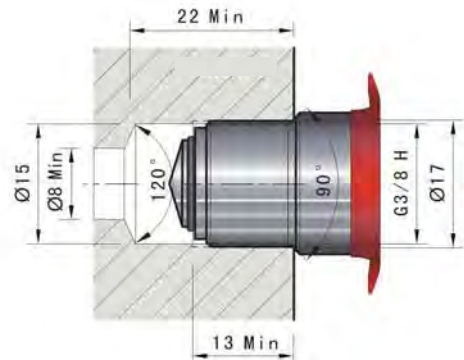
Code	Thread F	ØA	B	C	E	G	Part-NO. without colour ring	@ ¥ /P
RRPL 08	R3/8	21	11	16	29	1.5	RRPL 08.1152-ON-JV	



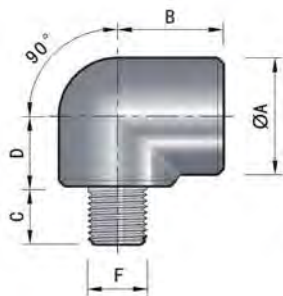
Installation Diagram:



(All-buried type)



(Micro convex type)

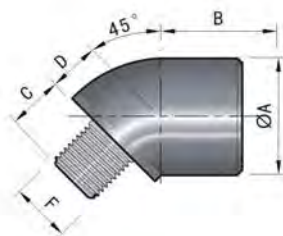


Medium	Max(bar)	Max(°C)
Water	10	90



Order RRPL 08.1150-RE

Code	Thread F	ØA	B	C	ØD	H/flat	Part-NO.	@ ¥ / P
RRPL 08	R1/8	22	22	10	13	19	RRPL 08.1150-RE	
	R1/4			12			RRPL 08.1151-RE	
	NPT1/4			14			RRPL 08.1251-RE	
	R3/8			13			RRPL 08.1152-RE	

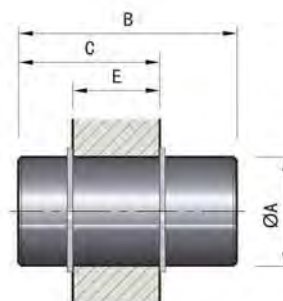


Medium	Max(bar)	Max(°C)
Water	10	90



Order RRPL 08.1150-RO

Code	Thread F	ØA	B	C	ØD	H/flat	Part-NO.	@ ¥ / P
RRPL 08	R1/8	22	18.5	10	6.5	19	RRPL 08.1150-RO	
	R1/4			12	4.5		RRPL 08.1151-RO	
	R3/8						RRPL 08.1152-RO	



Medium	Max(bar)	Max(°C)
Water	10	90



Order RRPL 08.2000

Code	ØA	B	C	E	Part-NO.	@ ¥ / P
RRPL 08	22	35	23	10 max.	RRPL 08.2000	

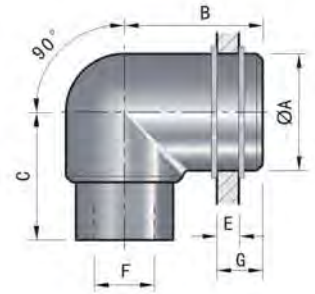
- Elaborate parts series
- Slide rail series
- Latch hook series
- Painting gate series
- Drive stamp series
- Explosive series
- Cooling elements series
- Locating parts series
- Spring series
- Guide pins series
- Water table series
- Chuck series
- Mold accessories

DIN
Nipples

RRPL



Medium	Max(bar)	Max(°C)
Water	10	90



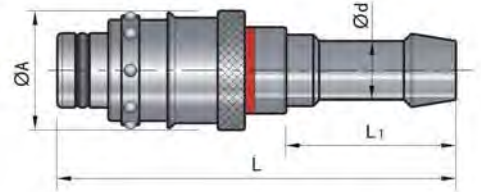
Order RRPL 08.2101-RE

Code	Thread F	A	B	C	E	G	Part-NO.	@ ¥/P
RRPL 08	G1/4	22	22	21	6.5 max.	10	RRPL 08.2101-RE	



Medium	Max(bar)	Max(°C)
Water	10	90

Products code add B, It is mean with blue ring
Products code add R, It is mean with red ring



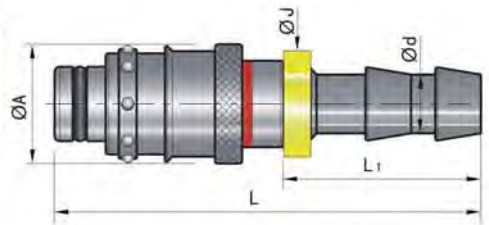
Order RRPL 06.6808

Code	d	A	L	L1	Part-NO. with a black ring	@ ¥/P
RRPL 06	Ø 8	17	55	23	RRPL 06.6808	
	Ø 6					
	Ø 8					
RRPL 08	Ø 10	20	66	28	RRPL 08.6808	
	Ø12.5					
	Ø13					
RRPL 12	Ø13	28	78	33	RRPL 12.6813	
	Ø16				RRPL 12.6816	



Medium	Max(bar)	Max(°C)
Water	10	90

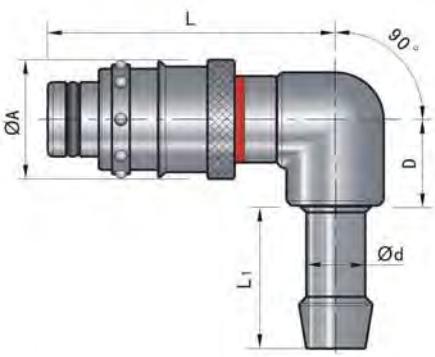
Products code add B, It is mean with blue ring
Products code add R, It is mean with red ring



Order RRPL 08.6808-CN

Code	d	A	L	L1	J	Part-NO. with a black ring	@ ¥/P
RRPL 08	3/8"	20	62	24.5	19.5	RRPL 06.6808-CN	
	1/2"		69	29	23.5	RRPL 08.6806-CN	
RRPL 12	5/8"	28	74	36.5	27	RRPL 08.6808-CN	
			81.5			RRPL 08.6810-CN	

DIN
Nipples



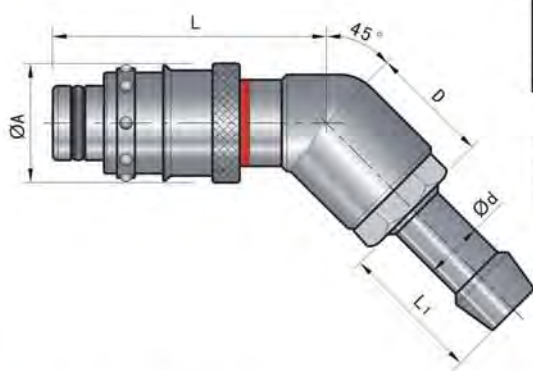
Medium	Max(bar)	Max(°C)
Water	10	90

Products code add B, It is mean with blue ring
Products code add R, It is mean with red ring



Order RRPL 08.6806-RE

Code	d	A	L	L1	D	Part-NO. with a black ring	@ ¥ /P
RRPL 08	Ø 6	20	49	28	23.5	RRPL 08.6806-RE	
	Ø 8			23		RRPL 08.6808-RE	
	Ø10			28		RRPL 08.6810-RE	
RRPL 12	Ø12.5	28	76	33	27	RRPL 08.6812-RE	
	Ø13			RRPL 12.6813-RE			
	Ø16			RRPL 12.6816-RE			



Medium	Max(bar)	Max(°C)
Water	10	90

Products code add B, It is mean with blue ring
Products code add R, It is mean with red ring

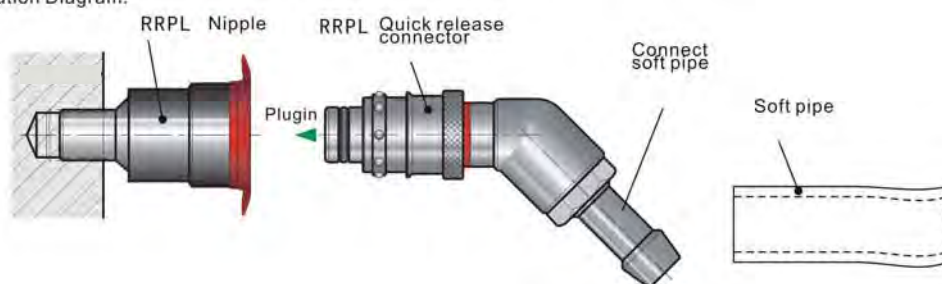


Order RRPL 08.6806-RO

Code	d	A	L	L1	D	Part-NO. with a black ring	@ ¥ /P
RRPL 08	Ø 6	20	43	28	21	RRPL 08.6806-RO	
	Ø 8			23		RRPL 08.6808-RO	
	Ø10			28		RRPL 08.6810-RO	
RRPL 12	Ø12.5	28	72	33	24	RRPL 08.6812-RO	
	Ø13			RRPL 12.6813-RO			
	Ø16			RRPL 12.6816-RO			

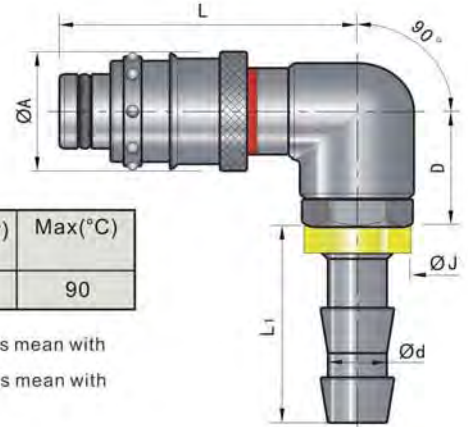


Installation Diagram:



DIN
Nipples

RRPL

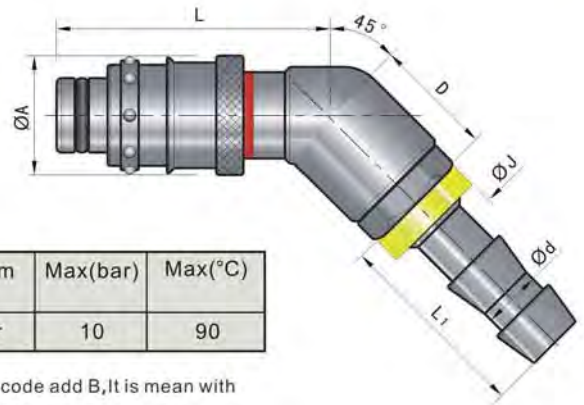


Medium	Max(bar)	Max(°C)
Water	10	90

Products code add B, It is mean with blue ring
Products code add R, It is mean with red ring

Order RRPL 08.6810-CN-RE

Code	d	ØA	L	L1	D	J	Part-NO. with a black ring	@ ¥ /P
RRPL 08	3/8"	20	48.5	24.5	23.5	19.5	RRPL 08.6810-CN-RE	
	1/2"			29	25.5	23.5	RRPL 08.6813-CN-RE	
RRPL 12	5/8"	28	75.5	36.5	30.5	27	RRPL 12.6813-CN-RE	
					30	27	RRPL 12.6816-CN-RE	



Medium	Max(bar)	Max(°C)
Water	10	90

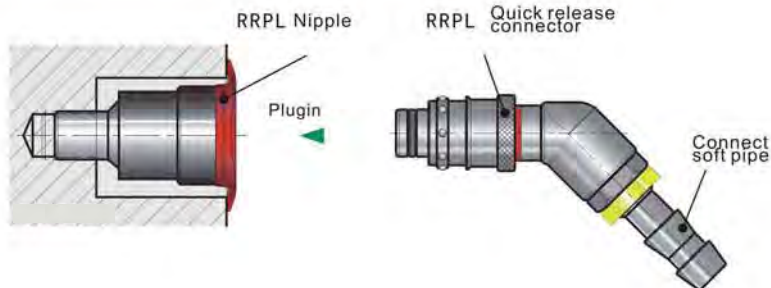
Products code add B, It is mean with blue ring
Products code add R, It is mean with red ring

Order RRPL 08.6810-CN-RO

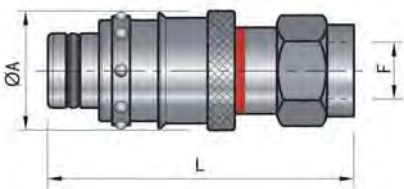
Code	d	ØA	L	L1	D	J	Part-NO. with a black ring	@ ¥ /P
RRPL 08	3/8"	20	43	24.5	21	19.5	RRPL 08.6810-CN-RO	
	1/2"			29	23	23.5	RRPL 08.6813-CN-RO	
RRPL 12	5/8"	28	72	36.5	27.5	27	RRPL 12.6813-CN-RO	
					27	27	RRPL 12.6816-CN-RO	



Installation Diagram:



DIN
Nipples



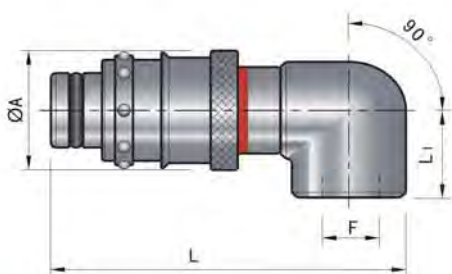
Medium	Max(bar)	Max(°C)
Water	10	90

Products code add B, It is mean with blue ring
Products code add R, It is mean with red ring



Order RRPL 08.6101

Code	Thread F	ØA	L	Part-NO. with a black ring	@ ¥ /P
RRPL 08	G1/4 NPT1/4	20	48.5	RRPL 08.6101 RRPL 08.6201	
RRPL 12	G1/2 NPT1/2	28	61 63	RRPL 12.6103 RRPL 12.6203	



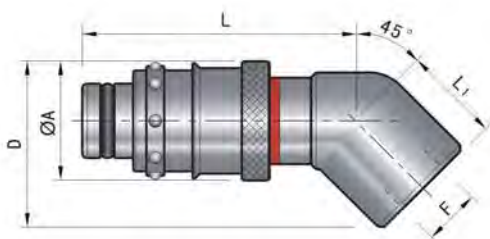
Medium	Max(bar)	Max(°C)
Water	10	90

Products code add B, It is mean with blue ring
Products code add R, It is mean with red ring



Order RRPL 08.6101-RE

Code	Thread F	ØA	L	L1	E	Part-NO. with a black ring	@ ¥ /P
RRPL 08	G1/4 NPT1/4	20	48.5 60.5	16.5 15	31 38.9	RRPL 08.6101-RE RRPL 08.6201-RE	
RRPL 12	G3/8 NPT3/8	28	75.5	20	52.9	RRPL 12.6102-RE RRPL 12.6202-RE	



Medium	Max(bar)	Max(°C)
Water	10	90

Products code add B, It is mean with blue ring
Products code add R, It is mean with red ring



Order RRPL 08.6101-RO

Code	Thread F	ØA	L	L1	D	Part-NO. with a black ring	@ ¥ /P
RRPL 08	G1/4 NPT1/4	20	43 57.5	14 14.5	27.5 28.5	RRPL 08.6101-RO RRPL 08.6201-RO	
RRPL 12	G3/8 NPT3/8	28	72	17	33	RRPL 12.6102-RO RRPL 12.6202-RO	

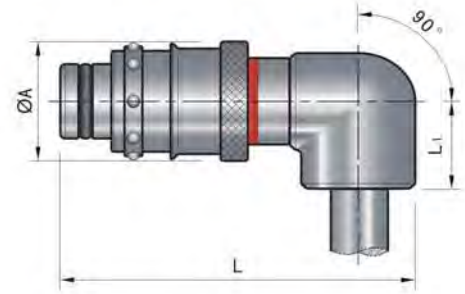
- Extractor pins
- Extractor sleeves
- Slide railbars
- Slide railbars series
- Latch tools
- Pinning tools
- Pinning tools series
- Drill stamps
- Drill stamps series
- Explosive series
- Cooling elements
- Locking parts
- Locking parts series
- Spring series
- Guide pins
- Guide pins series
- Slide stops
- Slide stops series
- Chuck series
- Mold accessories

DIN
Nipples

RRPL



Products code add B,
It is mean with blue ring
Products code add R,
It is mean with red ring

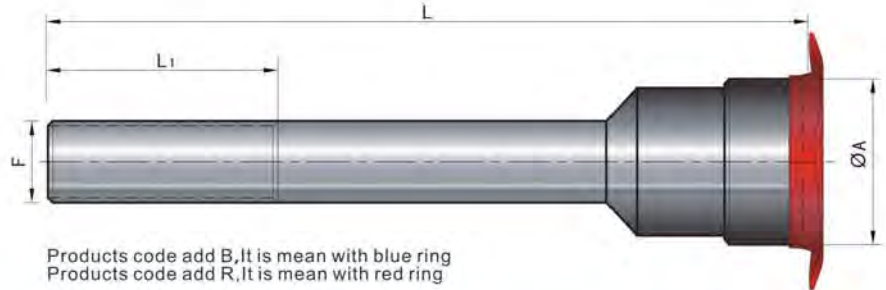


Medium	Water
Max(bar)	10
Max(°C)	90

Order RRPL 08.6000-RE

Code	ØA	L	L1	Part-NO. with a black ring	@ ¥ /P
90° plug RRPL 08	20	59	17	RRPL 08.6000-RE	
Tube		Tube, supply length=1m		RR113 910 00	

Medium	Water
Max(bar)	10
Max(°C)	90



Products code add B, It is mean with blue ring
Products code add R, It is mean with red ring

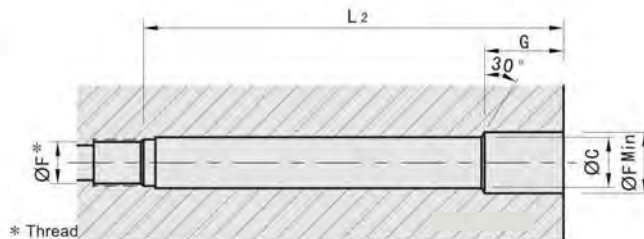
Order RRPL 08.1010-50-RF

Thread	L min./max.	L1 Threaded	L2	G	H / flats	Tightening torque N m
G1/8	34/ 50	26	L-5.5	23	6	10
	50/100	60				
	100/150	60				
G1/4	38.5/50	26.5	L-7.5	23	8	30
	55/100	60				
	105/150	60				
155/200	60					

Code	Øa	ØC	ØF min.	Part-NO. without collar	@ ¥ /P
RRPL 08	21	11	22.5	RRPL 08.1010- 50-RF	
				RRPL 08.1010-100-RF	
				RRPL 08.1010-150-RF	
		14		RRPL 08.1011- 50-RF	
				RRPL 08.1011-100-RF	
				RRPL 08.1011-150-RF	
RRPL 08.1011-200-RF					

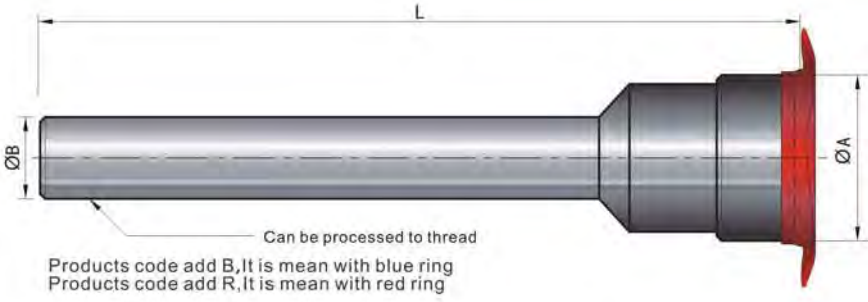


Installation Diagram:



* Thread

DIN
Nipples



RRPL

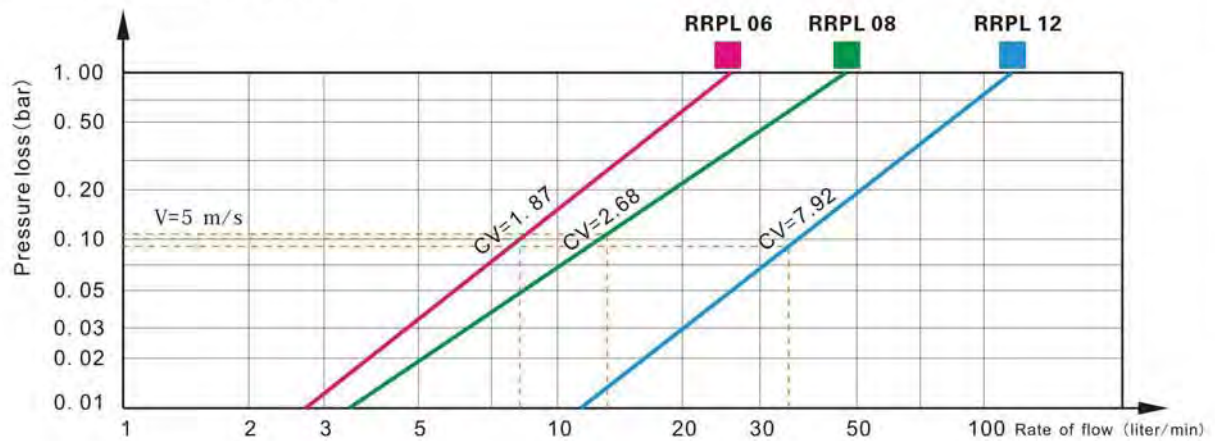
Medium	Water
Max(bar)	10
Max(°C)	90

Order RRPL 06.1010-100-R

ØA	ØB	ØC	ØF min.	G	H / flats	Tightening torque N.m
17			18.5	20		
	10.2	11			6	10
21			22.5	23		
	13.5	14			8	30
32			33.5	43		
	17.2	18			11	
	21.3	22		45		50

Code	Thread to be cut	L min./max.	L2	Part-NO. without collar	@ ¥ / P
RRPL 06		33/100		RRPL 06.1010-100-R	
		100/150	L- 5.5	RRPL 08.1010-100-R	
		150/200		RRPL 08.1010-150-R	
		200/250		RRPL 08.1010-200-R	
RRPL 08	R1/8 or NPT1/8	34/100		RRPL 08.1010-250-R	
		100/150	L- 7.5	RRPL 08.1011-100-R	
		150/200		RRPL 08.1011-150-R	
		200/250		RRPL 08.1011-200-R	
		56/150		RRPL 08.1011-250-R	
	R1/4 or NPT1/4	150/200	L- 8.5	RRPL 12.1002-150-R	
		200/250		RRPL 12.1002-200-R	
		59/150		RRPL 12.1002-250-R	
RRPL 12	R3/8 or NPT3/8	150/200	L-11.5	RRPL 12.1003-150-R	
		200/250		RRPL 12.1003-200-R	
	R1/2 or NPT1/2	150/200		RRPL 12.1003-250-R	
		200/250			

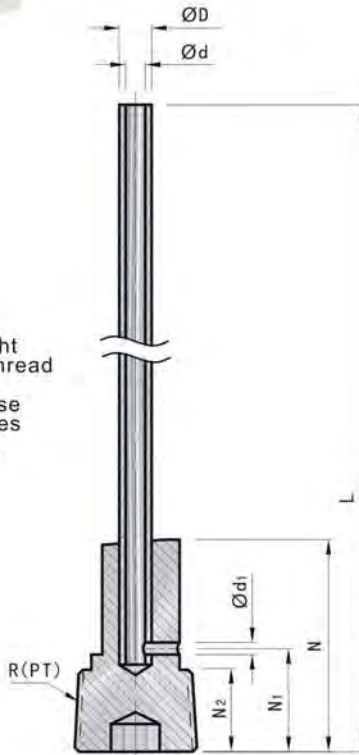
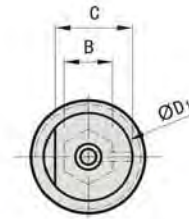
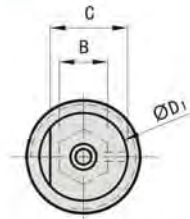
Rate of flow, pressure loss drawing:



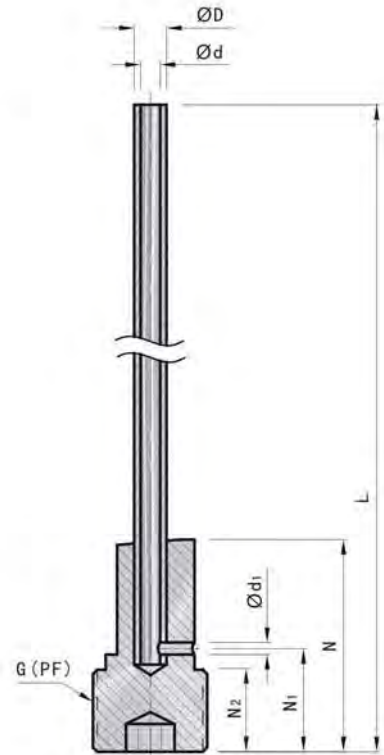
JIS

Cooling tubes

WWCPFT
WWCPF



WWCPFT



WWCPF

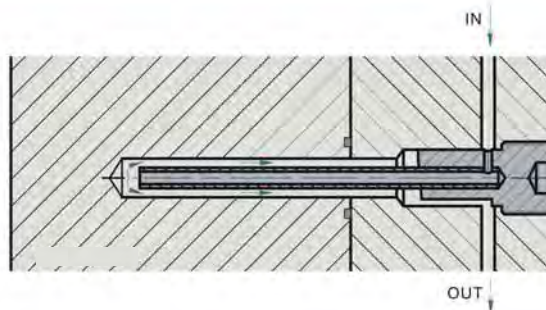
1. WWCPF thread position adopt Inch straight thread G (PF) .The position of WWCPFT thread parts adopt taper thread R.
2. PT and PF same thread distance, but please notes installed screw holes PF thread holes installed PT thread will be water leakage, conversely PF thread cant screwing in PT screw holes.

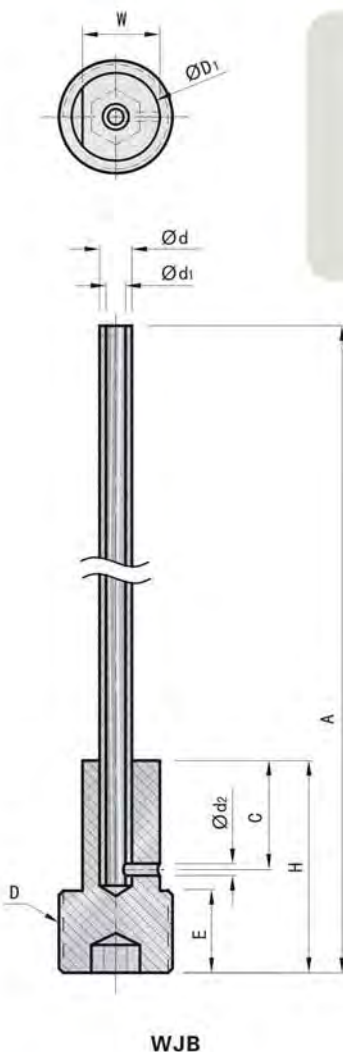
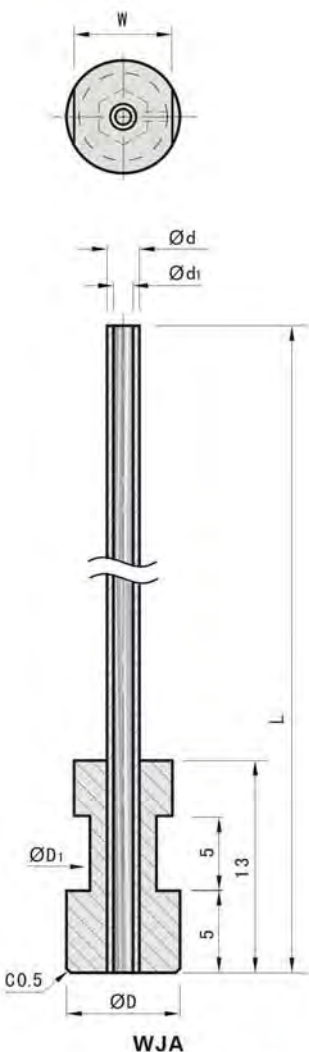
Order WWCPFT-D-L Material: Stainless steel

Code	D	L	B	N	N1	N2	C	D1	d1	d	R/PT WWCPFT	G(PF) WWCPF	@ ¥ / P
WWCPF	2	100	4	20	13	10	6.7	8	1.6	1.5	1/8	1/8	
		200							2.5	2.5			
WWCPFT	3	100-200	5	23	15	12	8.5	10	3.6	3	1/4	1/4	
		300											
	4	200											
		300											

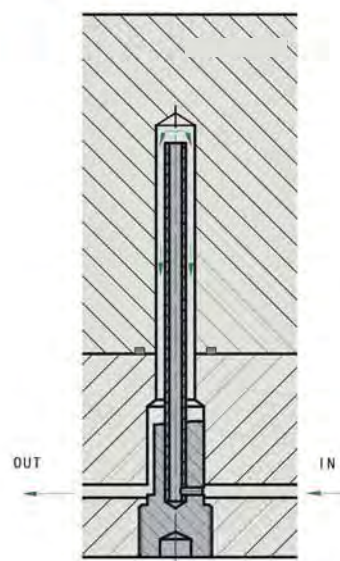


Installation Diagram:





Installation Diagram:



Order WJA-d-L Material: Stainless steel

Code	Ød	Ød1	L	ØD	ØD1	W	ØB	@ ¥/P
WJA	2	1.5	200	8	6	6	5	
	3	2.5						
	4	3	300	10	8	8		

Order WJB-d-A Material: Stainless steel

Code	Ød	Ød1	Ød2	ØD	ØD1	A	C	E	H	W	ØB	@ ¥/P
WJB	2.5	1.5	2	PF1/8	8	200	6	10	20	6.7	5	
	3	2.5	2.6									
	4	3	3.6	PF1/4	10	300	7	12	22	8.5	8	

- Extractor pins series
- Side rollers series
- Latch tools series
- Pouring gates series
- Die casters series
- Explosive series
- Cooling elements series
- Locating parts series
- Spacers series
- Guide pins series
- Guide rollers series
- Chuck series
- Mold accessories

DIN

Mold mounted manifolds

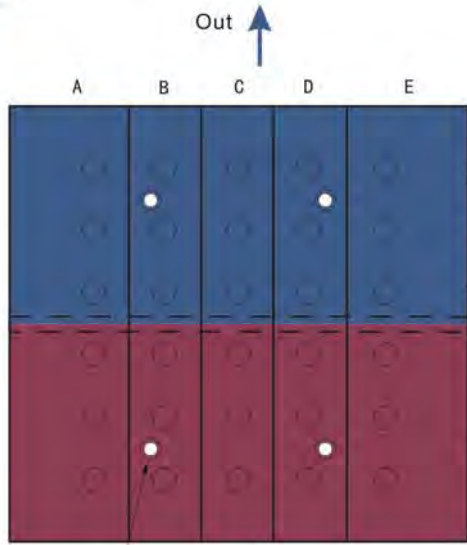
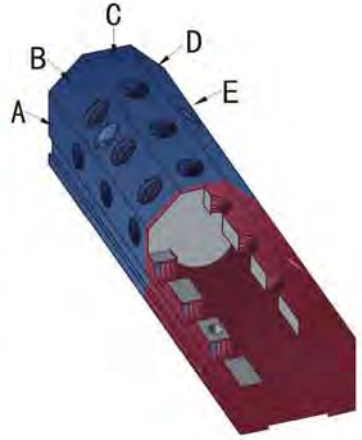


Figure 1



Installed screw holes

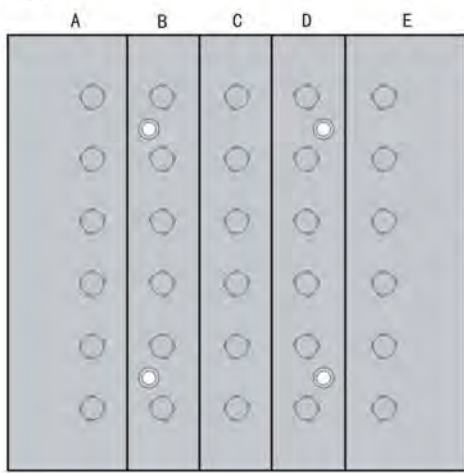
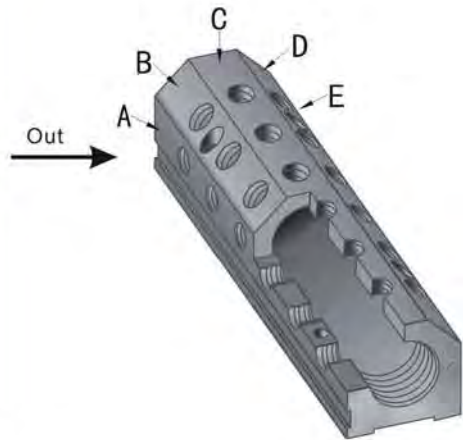


Figure 2



1. This Inline manifold, reduce chance of hookup errors, simplification of the cooling water circuit design, fast mounting.
2. Available for various hookup threads, wide application ,custom threads are available.
3. Hoses and manifolds are color coded (red for hot out and blue for cold in for easy identification).

Mold mounted manifolds



Order IIM3-8-BD-8-8-1/4-P-R/B Material: AL

2.750"
1.875"
0.875"
0.000"

1.375"

IIM3-2-AB-4 1/8" or 1/4" | IIM3-2-BD-4 1/8" or 1/4" | IIM3-2-BCD-6 1/8" or 1/4" | IIM3-2-ABC-6 1/8" or 1/4" | IIM3-2-BD-2-2 1/8" or 1/4" | IIM3-2-ABCDE-5-5 1/8"

@ ¥ / P

4.750"
3.875"
2.875"
1.875"
0.875"
0.000"

2"

IIM3-4-C-4 1/8" or 1/4" | IIM3-4-BD-8 1/8" or 1/4" | IIM3-4-BCD-12 1/8" or 1/4" | IIM3-4-ABC-12 1/8" or 1/4" | IIM3-4-BD-4-4 1/8" or 1/4" | IIM3-4-ABC-6-6 1/8"

@ ¥ / P

6.750"
5.875"
4.875"
3.875"
2.875"
1.875"
0.875"
0.000"

4"

IIM3-6-C-6 1/8" or 1/4" | IIM3-6-BD-12 1/8" or 1/4" | IIM3-6-BCD-18 1/8" or 1/4" | IIM3-6-ABC-18 1/8" or 1/4" | IIM3-6-BD-6-6 1/8" or 1/4" | IIM3-6-ABC-9-9 1/8" or 1/4"

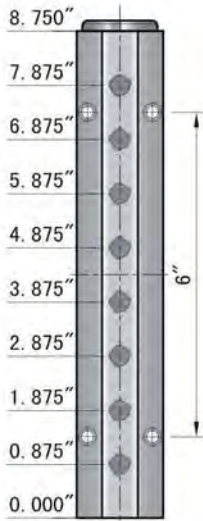
@ ¥ / P

Escator pins series
Slide railbars series
Latch hooks series
Pointing guides series
Data stamps series
Escator series
Cooling elements series
Locating pins series
Spring series
Guide pins series
Water valve series
Chuck series
Mold accessories

DIN

Mold mounted manifolds

IIM



Order IIM3-8-BD-8-8-1/4-P-R/B

Material: AL



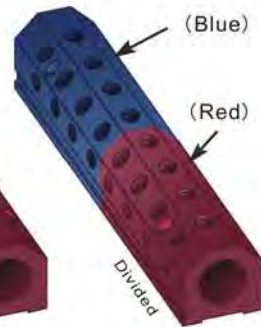
IIM3-8-C-8
1/8" or 1/4"



IIM3-8-BD-16
1/8" or 1/4"

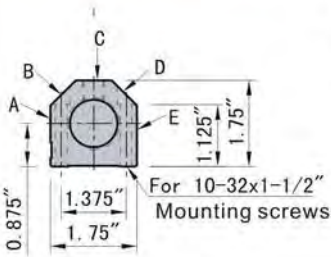


IIM3-8-BD-8-8
1/8" or 1/4"



IIM3-8-ABC-12-12
1/8"

@ ¥ / P



Part Number Code:

IIM3-6-B-6-1/4-N-Red

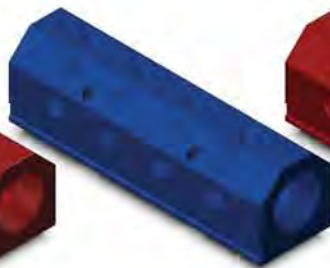
Manifold
 (3)=3/4"NPT Ports
 6=6.750" Overall length
 B Row on side "B"
 6Holes
 1/4"Out"
 Thread Type: N=NPT No marking
 P=BSPP Mark BSPP
 T=BSPT Mark BSPT
 Red-Blue



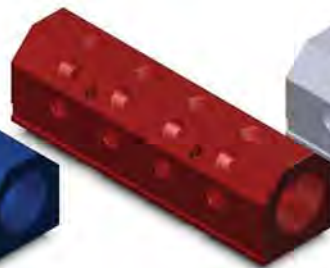
• No need color ,will not use color code ,defaulted natural colour.



Red and blue anodic oxidation



Blue anodic oxidation



Red anodic oxidation

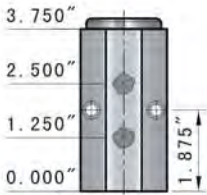


Natural colour anodic oxidation

IIM



Order IIM4-11-BD-8-8-3/8-T-R/B Material: AL



IIM4-4-AB-4
1/4" or 3/8"



IIM4-4-BD-4
1/4" or 3/8"



IIM4-4-BCD-6
1/4" or 3/8"



IIM4-4-ABC-6
1/4" or 3/8"

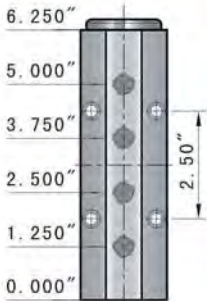


IIM4-4-BD-2-2
1/4" or 3/8"



IIM4-4-ABCDE-5-5
1/4"

@ ¥ / P



IIM4-6-C-4
1/4" or 3/8"



IIM4-6-BD-8
1/4" or 3/8"



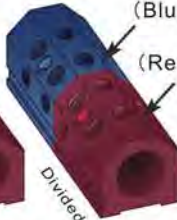
IIM4-6-BCD-12
1/4" or 3/8"



IIM4-6-ABC-12
1/4" or 3/8"

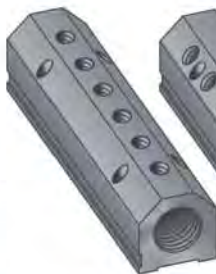
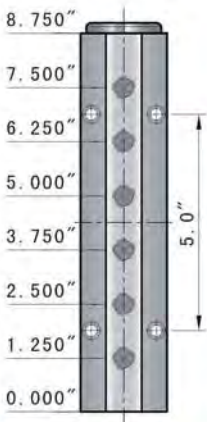


IIM4-6-BD-4-4
1/4" or 3/8"



IIM4-6-ABC-6-6
1/4" or 3/8"

@ ¥ / P



IIM4-9-C-6
1/4" or 3/8"



IIM4-9-BD-12
1/4" or 3/8"



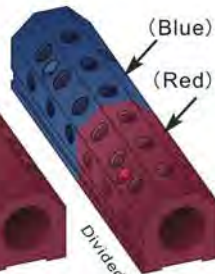
IIM4-9-BCD-18
1/4" or 3/8"



IIM4-9-ABC-18
1/4" or 3/8"



IIM4-9-BD-6-6
1/4" or 3/8"



IIM4-9-ABC-9-9
1/4" or 3/8"

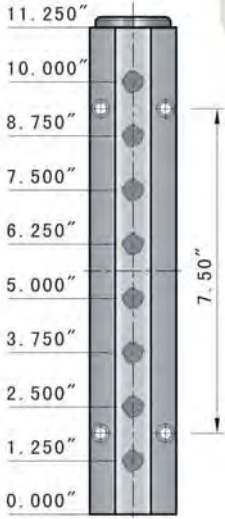
@ ¥ / P

Extractor pins series
Slide railbars series
Latch tools series
Porting guides series
Auto stampers series
Extractor series
Cooling elements series
Landing parts series
Spacers series
Guide pins series
Slide rails series
Chuck series
Mold accessories

DIN

Mold mounted manifolds

IIM



Order IIM4-11-BD-8-8-3/8-T-R/B

Material: AL



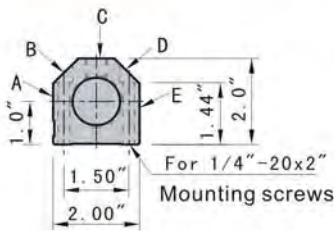
IIM4-11-C-8
1/4" or 3/8"

IIM4-11-BD-16
1/4" or 3/8"

IIM4-11-BD-8-8
1/4" or 3/8"

IIM4-11-ABC-12-12
1/4" or 3/8"

@ ¥ / P



Part Number Code:
IIM4-9-B-6-3/8-N-Red

Manifold
Blue-Red
Thread Type: N=NPT No marking
P=BSPP Mark BSPP
T=BSPT Mark BSPT
3/8" Out"
6Holes
B Row on side "B"
6=8.75" Overall length
(4)=1"NPT Ports



• No need color ,will not use color code ,defaulted natural colour.



Red and blue anodic oxidation

Blue anodic oxidation

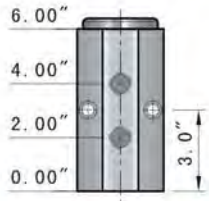
Red anodic oxidation

Natural colour anodic oxidation

Mold mounted manifolds



Order IIM6-18-BD-8-8-1/2-T-R/B Material: AL



IIM6-6-AB-4
3/8" or 1/2"



IIM6-6-BD-4
3/8" or 1/2"



IIM6-6-BCD-6
3/8" or 1/2"



IIM6-6-ABC-6
3/8" or 1/2"



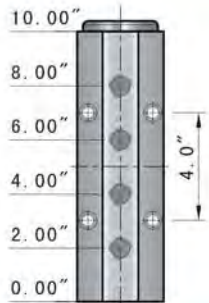
IIM6-6-BD-2-2
3/8" or 1/2"



IIM6-6-ABCDE-5-5
1/4"

(Blue)
(Red)

@ ¥ / P



IIM6-10-C-4
3/8" or 1/2"



IIM6-10-BD-8
3/8" or 1/2"



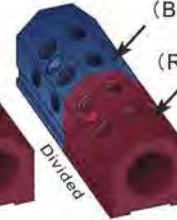
IIM6-10-BCD-12
3/8" or 1/2"



IIM6-10-ABC-12
3/8" or 1/2"



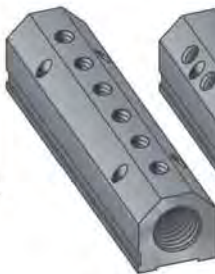
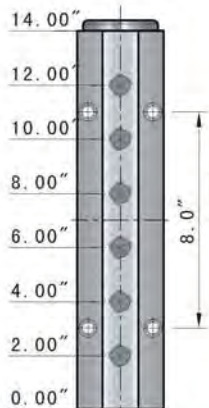
IIM6-10-BD-4-4
3/8" or 1/2"



IIM6-10-ABC-6-6
3/8" or 1/2"

(Blue)
(Red)

@ ¥ / P



IIM4-14-C-6
3/8" or 1/2"



IIM6-14-BD-12
3/8" or 1/2"



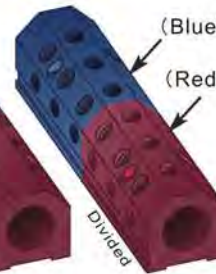
IIM6-14-BCD-18
3/8" or 1/2"



IIM6-14-ABC-18
3/8" or 1/2"



IIM6-14-BD-6-6
3/8" or 1/2"



IIM6-14-ABC-9-9
3/8" or 1/2"

(Blue)
(Red)

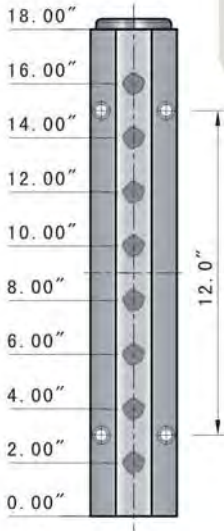
@ ¥ / P

Extractor pins series
Slide railbars series
Latch tools series
Pouring gates series
Gate stamps series
Extractor series
Cooling elements series
Locating parts series
Spacers series
Guide pins series
Slide plates series
Chuck series
Mold accessories

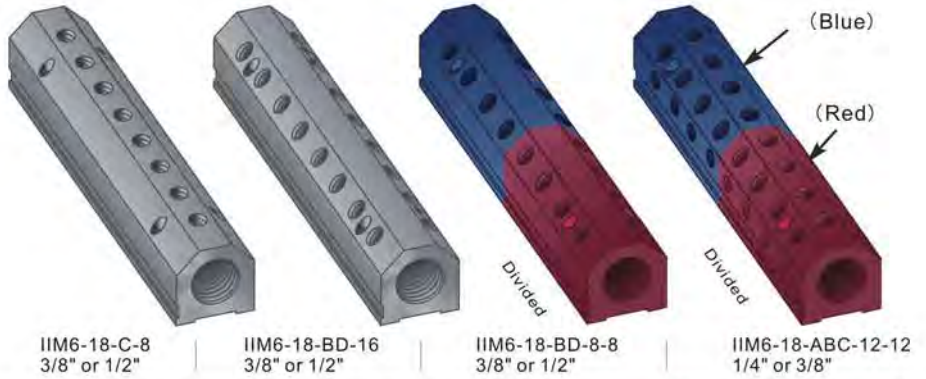


Mold mounted manifolds

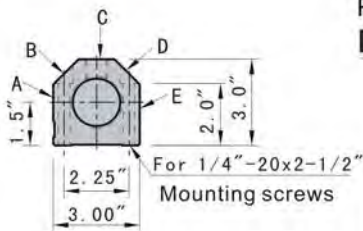
IIM



Order IIM4-11-BD-8-8-3/8-T-R/B Material: AL

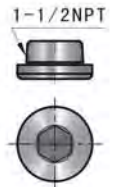


@ ¥ / P



Part Number Code:
IIM6-14-B-6-1/2-N-Red

Manifold
 (6)=1-1/2"NPT Ports
 14=14" Overall length
 B Row on side "B"
 6Holes
 1/2"Out"
 Thread Type: N=NPT No marking
 P=BSPP Mark BSPP
 T=BSPT Mark BSPT
 Red-Blue



• No need color ,will not use color code ,defaulted natural colour.

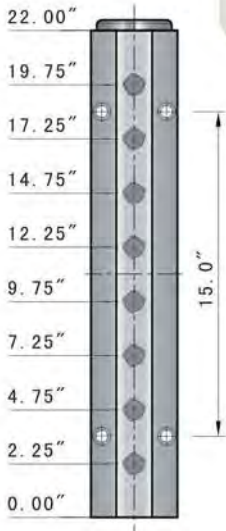


Red and blue anodic oxidation Blue anodic oxidation Red anodic oxidation Natural colour anodic oxidation



Mold mounted manifolds

IIM



Order IIM4-11-BD-8-8-3/8-T-R/B

Material: AL



IIM8-22-C-8
1/2" - 3/4" or 1"

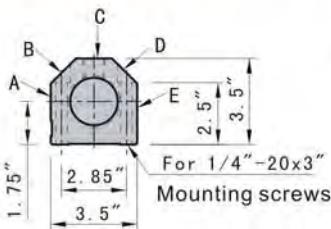
IIM8-22-BD-16
1/2" - 3/4" or 1"

IIM8-22-BD-8-8
1/2" - 3/4" or 1"

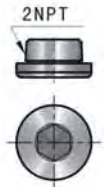
IIM8-22-ABC-12-12
1/2" or 3/4"

@ ¥/P

Part Number Code:
IIM8-17-C-6-1/2-N-Red



Manifold
Red-Blue
Thread Type: N=NPT No marking
P=BSPP Mark BSPP
T=BSPT Mark BSPT
1/2" Out
6Holes
C Row on side "B"
17=17" Overall length
(8)=2"NPT Ports



No need color ,will not use color code ,defaulted natural colour.



Red and blue anodic oxidation

Blue anodic oxidation

Red anodic oxidation

Natural colour anodic oxidation

Locating Parts Series





DIN		DIN		DIN		DIN		DIN	
Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks	
EE1304	P435	EE1306	P435	EE1308	P436	EE1320	P437	ZZ085-...-1	P438



DIN		DIN		DIN		DIN		DIN	
Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks	
ZZ085-...-2	P438	ZZ18	P441	ZZ19	P440	ZZ07	P439	ZZ17	P439



DIN		DIN		DIN		DIN		DIN	
Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks	
ZZ50	P442	ZZ51	P444	ZZ071-...-1	P446	ZZ072-...-2	P446	ZZ071-...-2	P447



DIN		DIN		DIN		DIN		DIN	
Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks	
ZZ072-...-1	P447	ZZ060	P448	ZZ08	P448	ZZ080	P449	ZZ48	P450



DIN		AISI		AISI		AISI		AISI	
Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks	
ZZ46-S	P450	MMTR	P451	FFTR	P451	RRSI	P451	TTL-P	P451



AISI		AISI		AISI		AISI		AISI	
Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks	
FFW45	P452	PPLM	P452	PPLF	P452	GGL	P453	GGLM	P453



AISI		AISI		AISI		AISI		AISI	
Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks	
PPLL	P454	PPLF	P455	PPXM	P455	SSSI	P456	SSL	P456



AISI		AISI		AISI		AISI		AISI	
Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks	
SSLM	P456	TTL	P457	TTLM	P457	XXSI	P458	SSLX	P459



AISI		AISI		AISI		AISI		JIS	
Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks	
SSLS	P459	SSLMS	P459	BBGT	P460	BBGS	P460	TTSSB	P461



JIS		JIS		JIS		TAIWAN		TAIWAN	
Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks		Square Interlocks	
VVTTSB	P462	TTBS	P463	TTBSF	P464	TTL-L	P465	PL	P465



TAIWAN		TAIWAN		JIS		JIS		JIS	
Square Interlocks		Square Interlocks		Round locating units		Round locating units		Round locating units	
KY	P466	LK	P466	TTPNF	P467	TTPNFC	P468	TTPN	P469



JIS		JIS		JIS		TAIWAN		AISI	
Round locating units		Round locating units		Round locating units		Round locating units		Round locating units	
TTPNV	P469	TTPNC	P470	TTPV	P470	TTP-T	P471	MMTM	P472



AISI		AISI		AISI		AISI		AISI	
Round locating units		Shoulder Plates		Round locating units		Round locating units		Heel block	
FFTM	472	AAGS	P472	MMT	P473	FFT	P473	SSP	P473

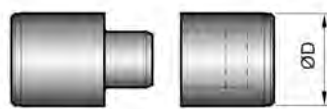


DIN		DIN		DIN	
Round locating units		Round locating units		Round locating units	
ZZ05	P474	ZZ051	P474	ZZ06	P475

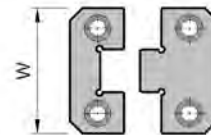
Products Summary

Type			Standard	Code	Page	Standard	Code	Page	
Round	Taper	Metric	JIS	TTPN	P469	JIS	TTPV	P470	
				TTPNV	P469	TAIWAN	TTP	P471	
				TTPNC	P470	DIN	ZZ05	P474	
		DIN	ZZ06	P475	ZZ051		P474		
		American system	AISI	MMT/FFT/AAGS	P473				
	AISI		MMT/FFT/SSP	P473					
	No taper	Metric	JIS	TTPNF	P467	JIS	TTPNFC	P468	
	Square	Standard	Metric	DIN	EE1304	P435	DIN	EE1306	P435
					EE1308	P436		ZZ085-...-1	P440
					EE1320	P437		ZZ085-...-2	P440
ZZ50					P442	ZZ18/ZZ19		P441/438	
ZZ51					P444	ZZ07/ZZ17		P438	
ZZ071-...-1					P446	ZZ48		P450	
ZZ071-...-2					P447	ZZ46		P450	
ZZ072-...-1					P446	ZZ060		P448	
ZZ072-...-2					P447	ZZ08		P448	
TAIWAN					LK	P466		ZZ080	P449
AISI			RRSI	P451	AISI	SSSI	P456		
			FFW45	P452		SSLM	P456		
			GGLM	P453		SSLMS	P459		
JIS			TTSSB	P461	JIS	TTLM	P457		
			VVTTSB	P462		TTBSF	P464		
			TTBS	P463		TTL-L	P465		
TAIWAN			PL	P465	TAIWAN	KY	P466		
American system			AISI	MMTR/FFTR	P451	AISI	GGL	P453	
		TTL-P		P451	PPLL		P454		
		PPLM/PPLF		P452	SSL		P456		
		TTL		P457	SSLS		P459		
		BBGT		P460	BBGS		P460		
		XXSI		P458					
X-Style		American system	PPLF/PPXM	P455		SSLX	P459		

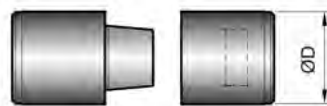
Diagram



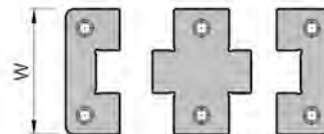
No taper



Standard



Taper



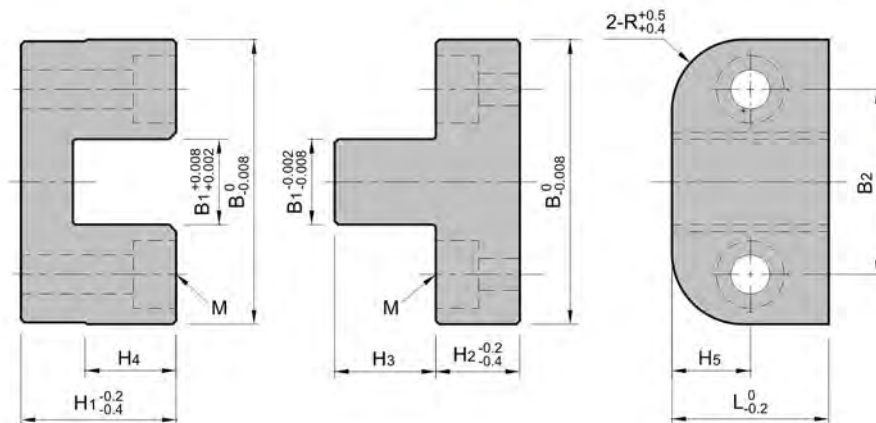
X-Style

Square Interlocks

EE1304



ISO 2D



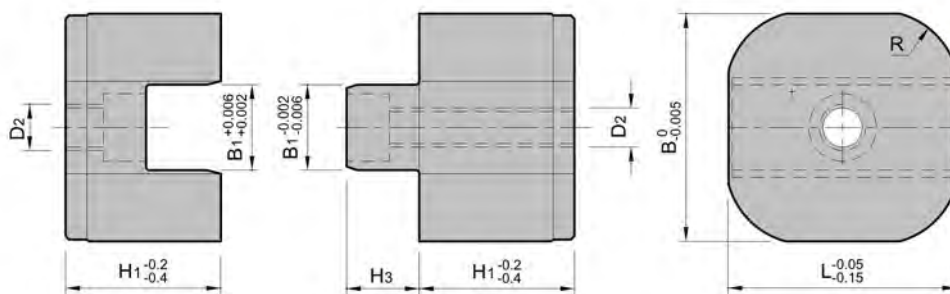
Order EE1304-34

Code	B	B1	B2	H1	H2	H3	H4	H5	L	R	M	@ ¥ / P
EE1304-34	34	10	22	18	10	12	11	9	18	8	M4	
EE1304-40	40	12	26	22	12	14	13	11	22		M5	
EE1304-50	50	18	34	30	15	18	17	15	30	10	M6	
EE1304-64	64	22	42	40	18	24	23	20	40		M8	
EE1304-72	72	26	48	46	20	28	27	26	52			

EE1306



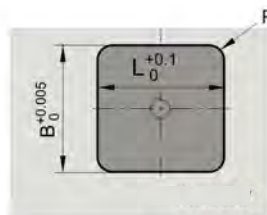
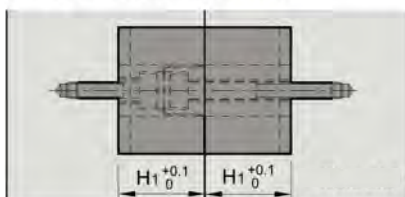
ISO 2D



Order EE1306-16

Code	B	B1	D2	H1	H3	L	R max.	M
EE1306-16	16	8	M4	12	6	16	3.25	M3
EE1306-20	20	10	M5	14	7	20	4.5	M4
EE1306-25	25	12	M6	16	8	25	5.4	M5

The dimensional tolerance of installation open frame is recommended:

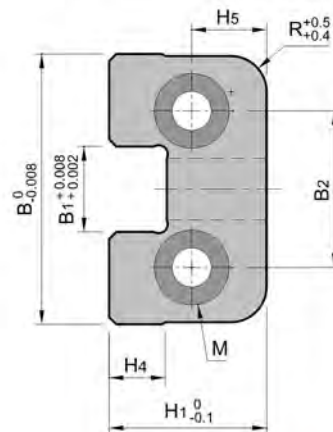
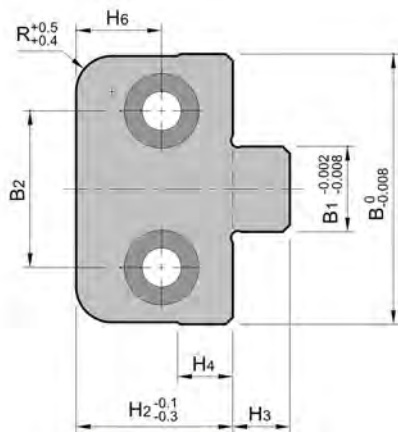
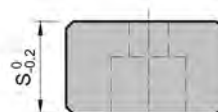


DIN

Square Interlocks

EE1308

CAD 2D

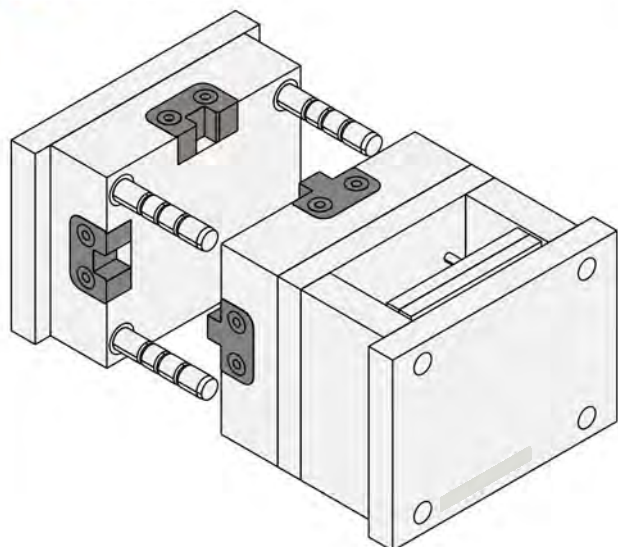


Order EE1308-40

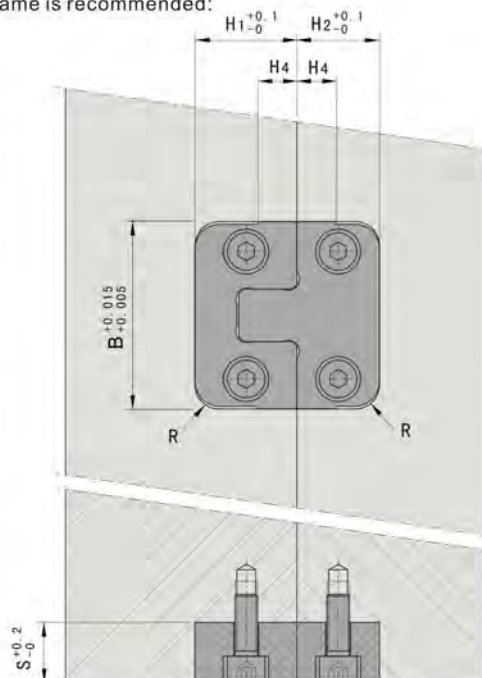
Code	B	B1	B2	H1	H2	H3	H4	H5	H6	S	R	M	@ ¥ / P
EE1308-40	40	10	26	17	14	11	6	8.5	7	10	4	M 5	
EE1308-46	46	12	30	22	17	12	7	11	8.5	12	5	M 6	
EE1308-50	50	14	34	27	22	16	10	13.5	11	16	6	M 6	
EE1308-60	60	18	40	36	27	20	14	18	13.5	20	8	M 8	
EE1308-76	76	24	50	40	36	25	18	20	18	25	10	M10	



Installation Diagram:

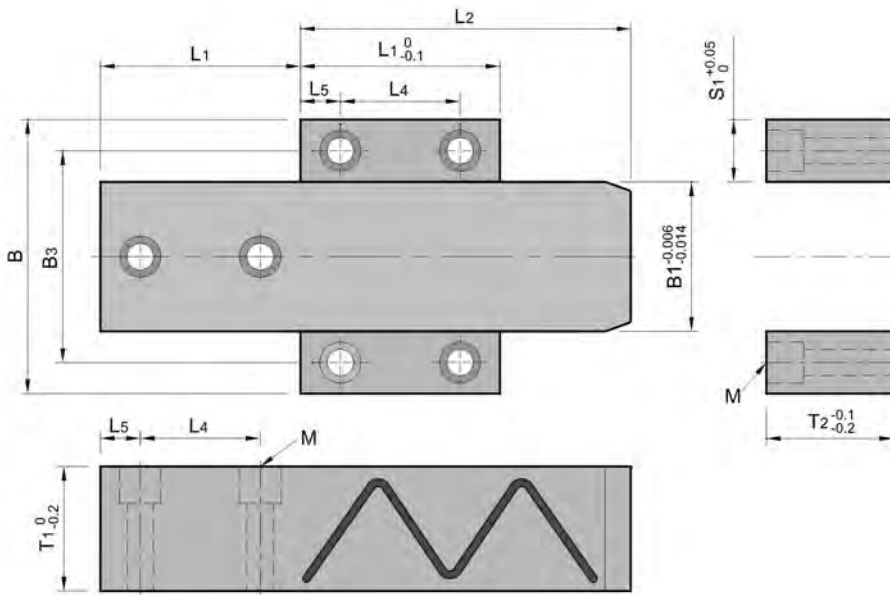


The dimensional tolerance of installation open frame is recommended:



DIN
Square Interlocks

EE1320

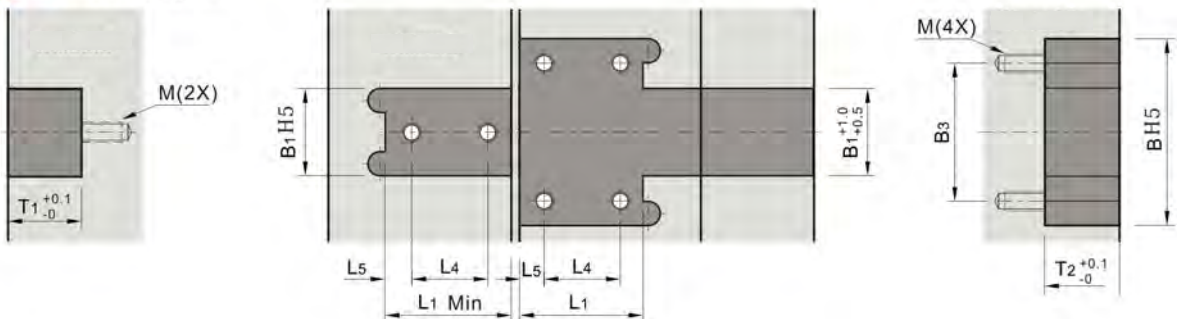


Order EE1320-16-10-44

Code	B1	S1	L2	B	B3	L1	L4	L5	T1	T2	M	@ ¥/P
EE1320-16-10-44			44									
EE1320-16-10-54	16	10	54	36	26	26	14	6	14	14.2	M 4	
EE1320-16-10-64			64									
EE1320-25-12-54			54									
EE1320-25-12-74	25	12	74	49	37	34	18		22	22.3	M 5	
EE1320-25-12-94			94									
EE1320-34-16-54			54					8				
EE1320-34-16-94			94									
EE1320-34-16-134	34	16	134	66	50	44	28		30	30.5	M 6	
EE1320-34-16-174			174									
EE1320-46-20-74			74									
EE1320-46-20-114	46	20	114	86	66	62	38	12	38	38.8	M 8	
EE1320-46-20-154			154									
EE1320-46-20-194			194									
EE1320-60-25-94			94									
EE1320-60-25-134			134									
EE1320-60-25-174	60	25	174	110	85	80	48	16	50	51.2	M10	
EE1320-60-250-214			214									
EE1320-60-25-254			254									
EE1320-80-32-114			114									
EE1320-80-32-154			154									
EE1320-80-32-194	80	32	194	144	112	98	58	20	70	71.6	M12	
EE1320-80-32-234			234									
EE1320-80-23-274			274									
EE1320-80-32-314			314									



Installation Diagram:

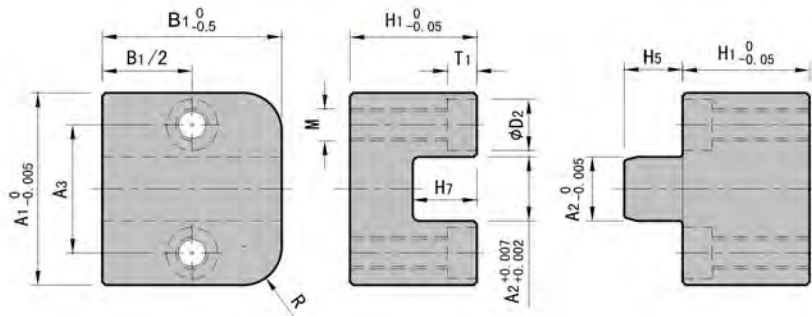


DIN

Square Interlocks

ZZ085-...-1

CAO
2D

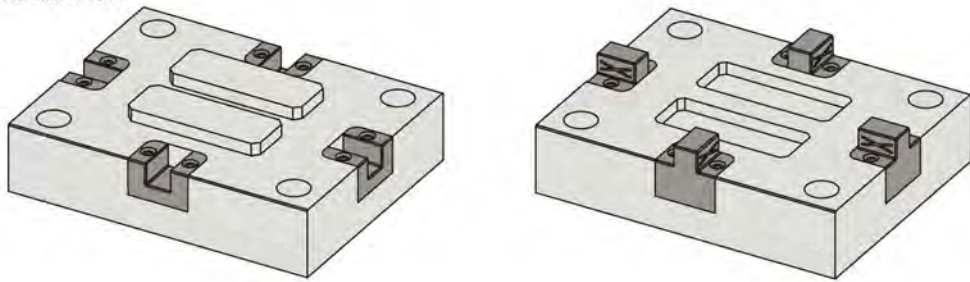


ZZ085-30-28-1

Code	A1	B1	Typ	A2	A3	H7	H5	H1	R	T1	D2	M
ZZ085-30-28-1	30	28		10	20	10	9	19.8	6	4.6	8	M5
ZZ085-50-33-1	50	33	1	20	35	17.5	16.5	29.8	8	6.8	11	M8
ZZ085-75-38-1	75	38		30	52	25	24	39.8	10	9	15	M10

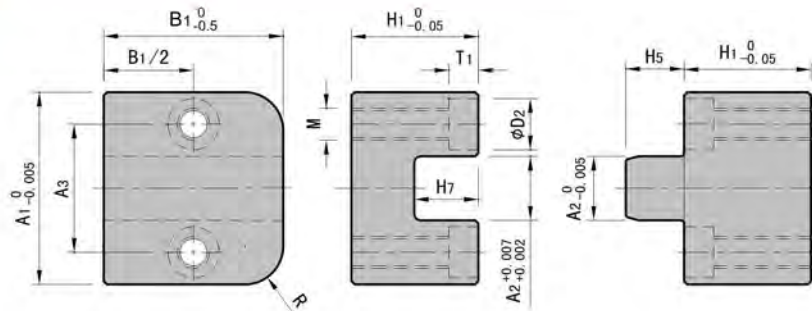


Installation instructions:



ZZ085-...-2

CAO
2D



ZZ085-30-28-2

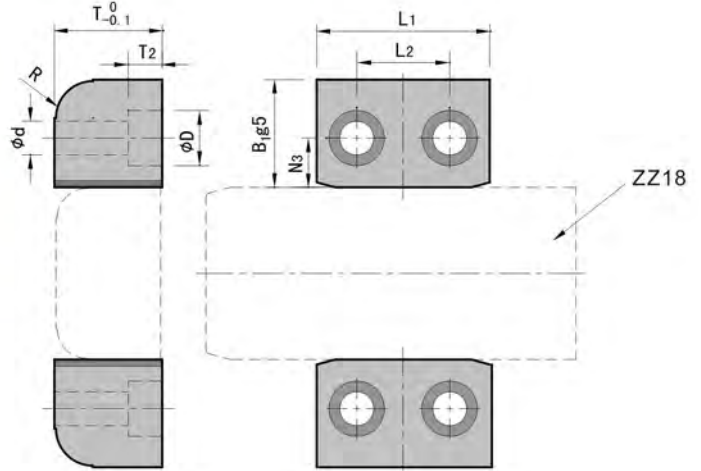
Code	A1	B1	Typ	A2	A3	H7	H5	H1	R	T1	D2	M
ZZ085-30-28-2	30	28		10	20	10	9	19.8	6	4.6	8	M5
ZZ085-50-33-2	50	33	2	20	35	17.5	16.5	29.8	8	6.8	11	M8
ZZ085-75-38-2	75	38		30	52	25	24	39.8	10	9	15	M10

DIN

Square Interlocks

ZZ19

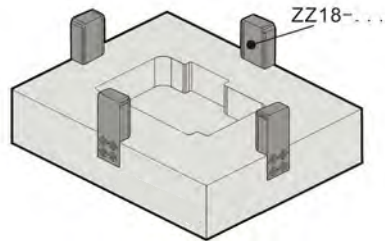
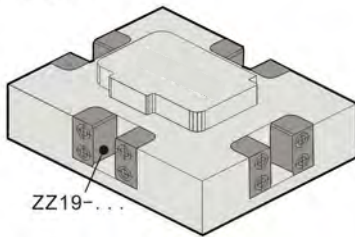
2D



ZZ19-18-18-27

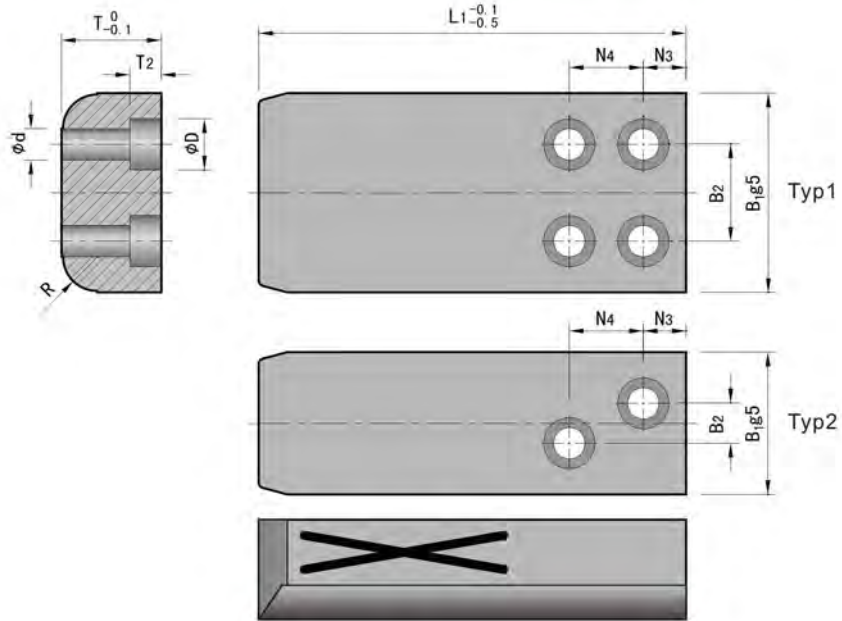
Code	R	T ₂	D	d	N ₃	L ₂	B ₁	T	L ₁	@ ¥ / P
ZZ19-18-18-27	6	5.7	10	5.5	8	12	18	18	27	
ZZ19-20-22-36		6.8	11	6.6	10	16	20	22	36	
ZZ19-25-30-46	8	9	15	9	11	24	25	30	46	
ZZ19-32-32-56	10						32	32	56	
Zz19-35-35-56	12	11	18	11	16	30	35	35		
ZZ19-40-50-76					17	40	40	50	76	
ZZ19-45-65-86	15	13	20	13.5	20	50	45	65	86	

Installation Diagram:



DIN
Square Interlocks

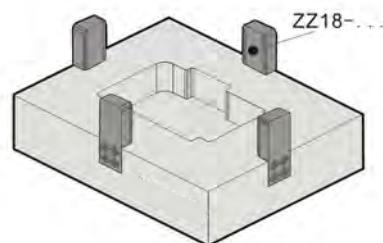
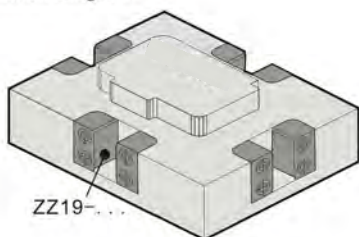
ZZ18



Order ZZ18-20-18-50

Code	B1	T	L1	D	d	B2	N4	N3	R	T2	Typ	@ ¥ /P
ZZ18- 20-18- 50	20	18	50	10	5.5	7	9	8	6	5.7	1	
ZZ18- 20-18- 75			75									
ZZ18- 20-18- 90			90									
ZZ18- 32-22- 70	32	22	70	11	6.6	14	18	9	6	6.8		
ZZ18- 32-22- 90			90									
ZZ18- 32-22-112			112									
ZZ18- 32-22-125	50	30	125	15	9	24	21	12	8	9		
ZZ18- 32-22-150			150									
ZZ18- 50-30- 90			90									
ZZ18- 50-30-125	63	32	125	18	11	30	26	15	10	11	2	
ZZ18- 50-30-150			150									
ZZ18- 50-30-175			175									
ZZ18- 50-30-200	80	35	200	20	13.5	44	32	18	12	13		
ZZ18- 63-32-112			112									
ZZ18- 63-32-150			150									
ZZ18- 63-32-175	100	50	175	20	13.5	55	35	20	15	13		
ZZ18- 63-32-200			200									
ZZ18- 63-32-250			250									
ZZ18- 80-35-112	120	65	112	20	13.5	75	35	20	15	13		
ZZ18- 80-35-150			150									
ZZ18- 80-35-175			175									
ZZ18- 80-35-200			200									
ZZ18- 80-35-250			250									
ZZ18-100-50-175			175									
ZZ18-100-50-200			200									
ZZ18-100-50-250			250									
ZZ18-120-65-200			200									
ZZ18-120-65-250			250									
ZZ18-120-65-300			300									

Installation Diagram:



DIN

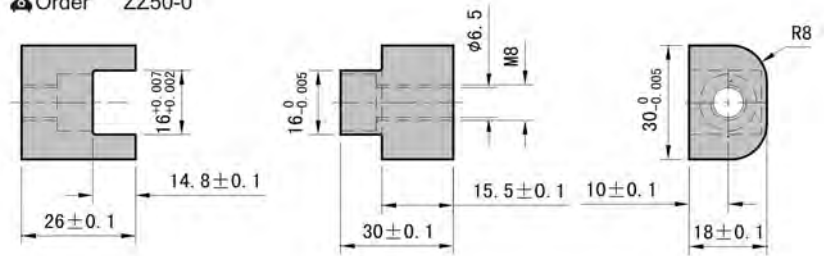
Square Interlocks

ZZ50

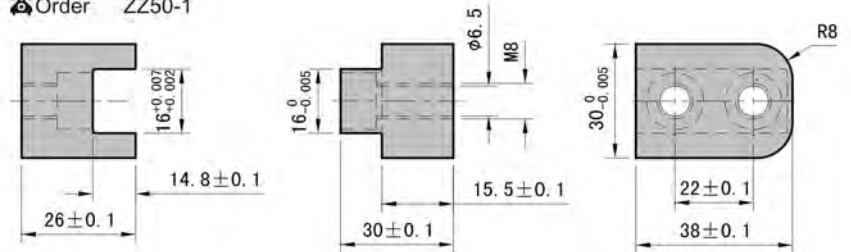
3D
2D



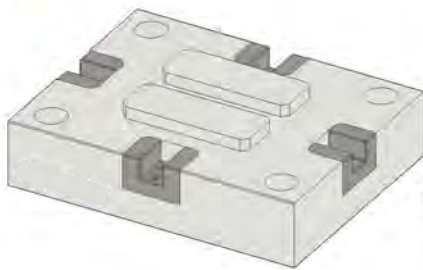
Order ZZ50-0



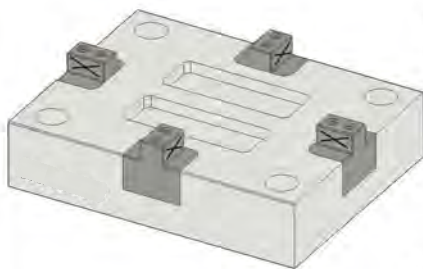
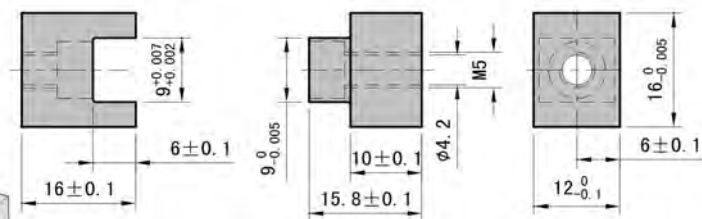
Order ZZ50-1



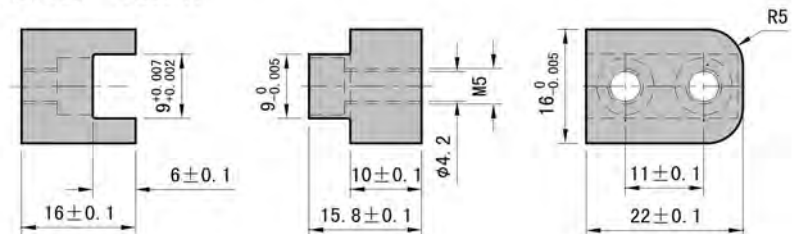
Installation Diagram:



Order ZZ50-02



Order ZZ50-05

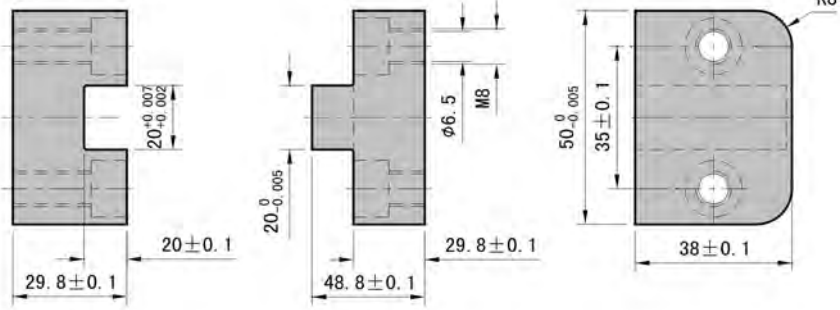


DIN
Square Interlocks

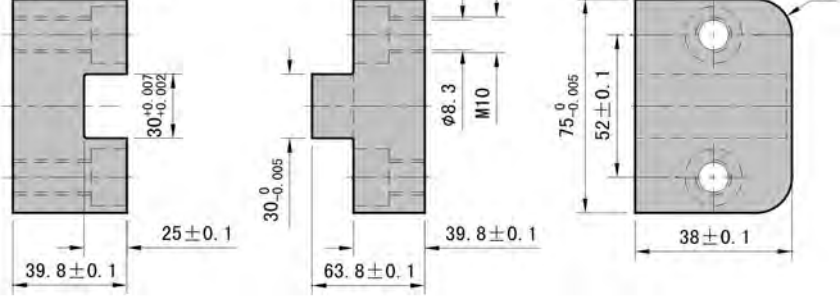
ZZ50



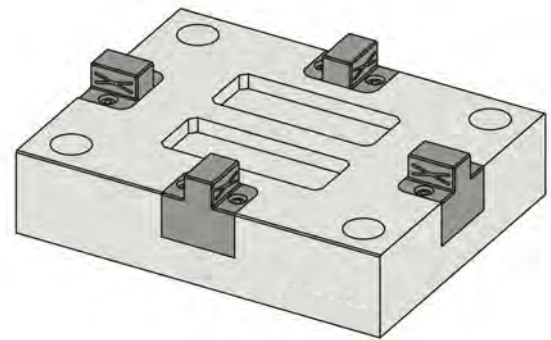
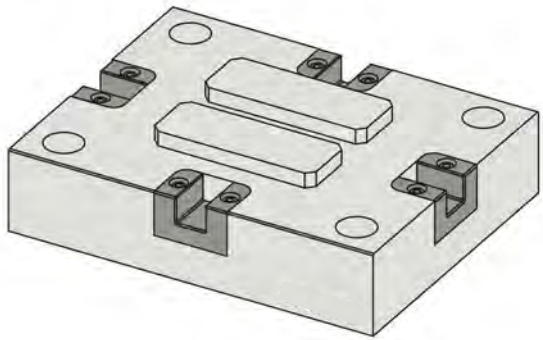
Order ZZ50-2



Order ZZ50-3



Installation Diagram:



- Exterior pins
- Exterior sleeves
- Slide rollers
- Launch locks
- Rolling gates
- Down stamps
- Air valves series
- Exterior series
- Coating elements
- Locating parts
- Sponges series
- Guide pins
- Guide bush
- Guide strips
- Wiper plate series
- Chuck series
- Mold accessories

DIN

Square Interlocks

ZZ51

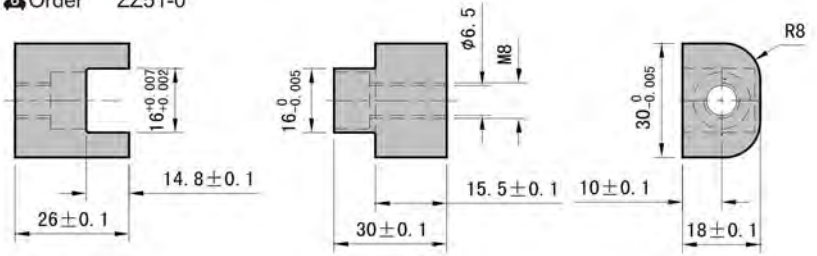
6.80
2D



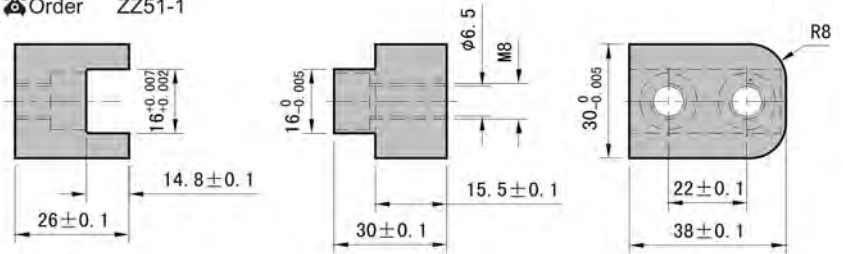
6.80
2D



Order ZZ51-0

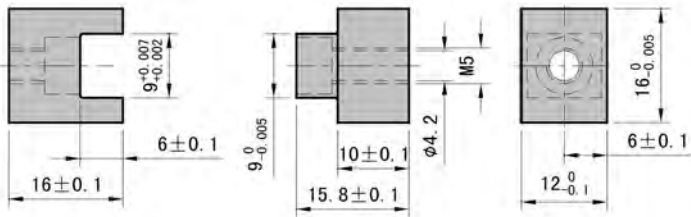


Order ZZ51-1

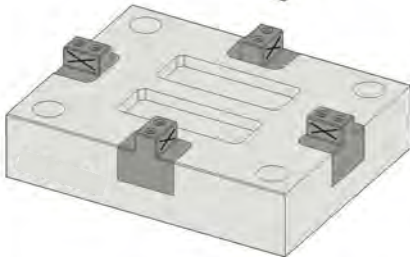
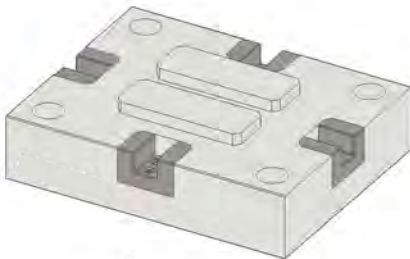
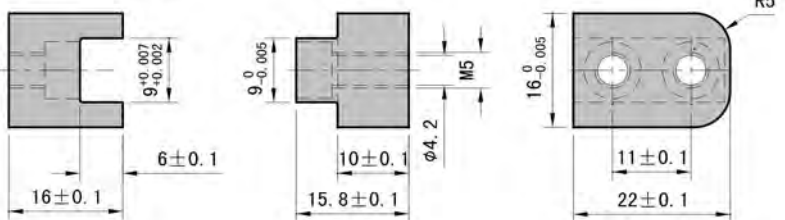


Installation Diagram:

Order ZZ51-02



Order ZZ51-05

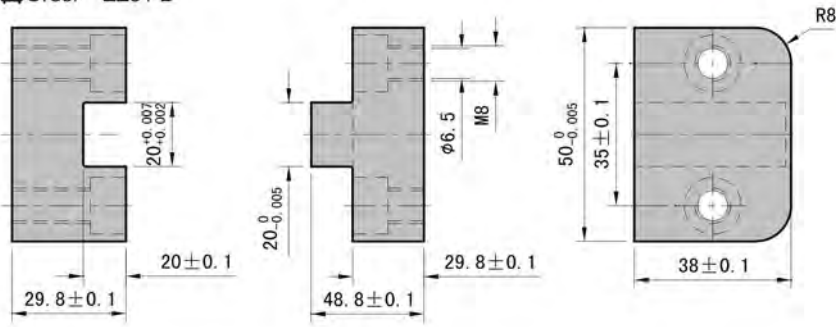


DIN
Square Interlocks

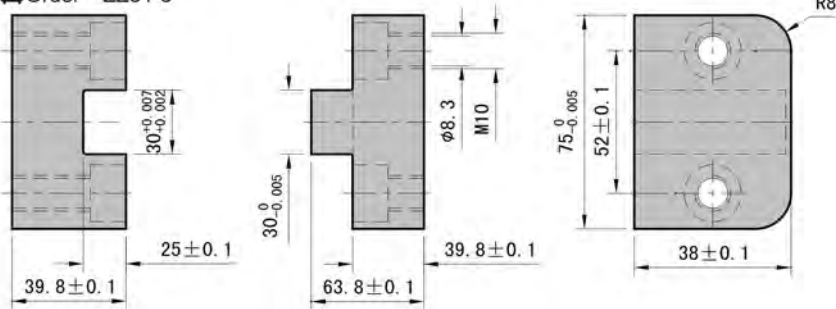
ZZ51



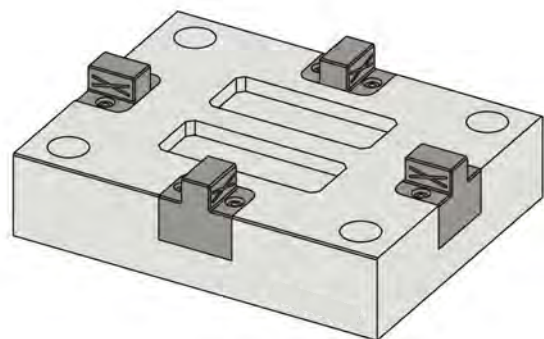
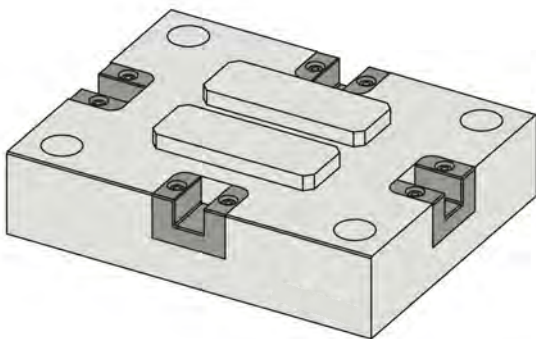
Order ZZ51-2



Order ZZ51-3



Installation Diagram:



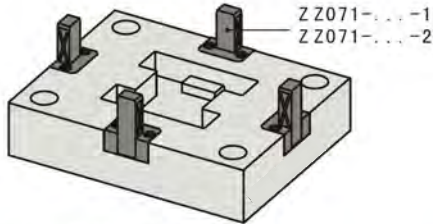
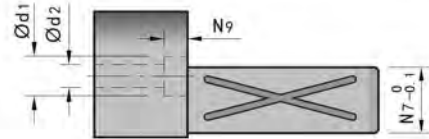
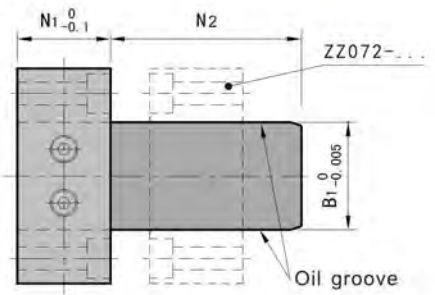
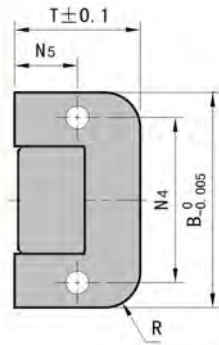
- Electric pins
- Electric sleeves
- Slide runners
- Slide series
- Latch locks
- Pushing gate
- Pushing gate series
- Date stamps
- Adv. valves series
- Explosor series
- Cooling elements
- Locating parts
- Series
- Springs series
- Guide pins
- Guide bush
- Guide pins
- Water plate series
- Chuck series
- Mold accessories

DIN

Square Interlocks

ZZ071-...-1

ISO 2D

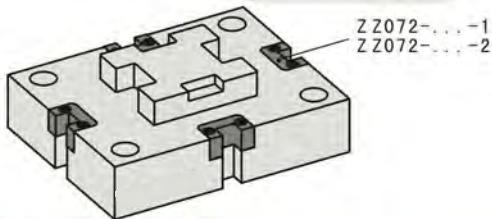
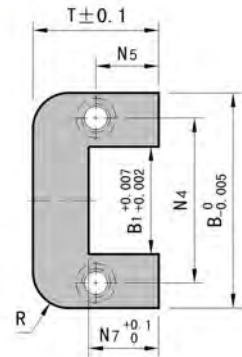
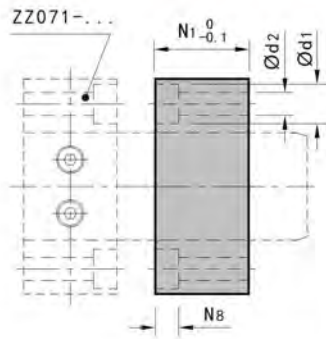


Order ZZ071-B1-N1-N2-Typ

B1	N1	N2	Typ	B	N4	N5	N7	N9	d1	d2	T	R	@ ¥/P	
20	22	22	1	47	34	13.5	13.5	6.8	11	6.6	27	6		
25	27	40		52	39	15	14.5							
32	36	63		67	49	20	19.5	9	15	9	40	8		
		40		80	88	63	27	22.5	11	18	11			50
40	46	50		100	100	75	27.5	24.5	13	20	14	55		10
50	56	56		112										

ZZ072-...-2

ISO 2D

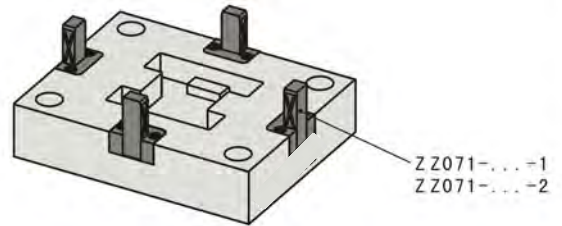
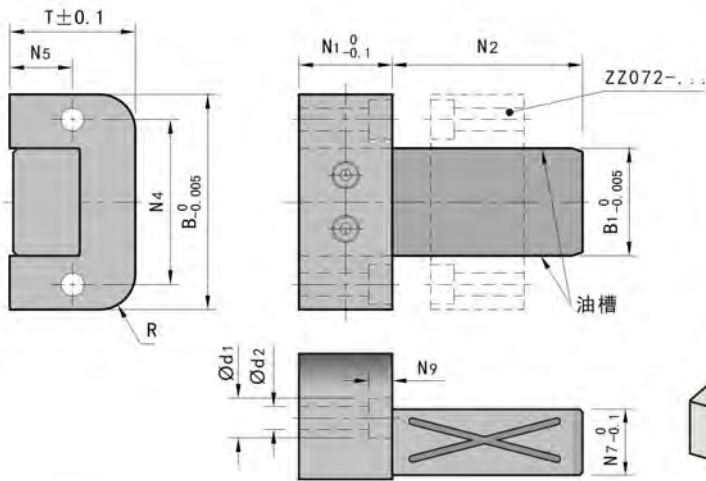


Order ZZ072-B1-N1-Typ

B1	N1	Typ	B	N4	N5	N7	N9	d1	d2	T	R	@ ¥/P	
20	22	2	47	34	13.5	13.5	6.8	11	6.6	27	6		
25	27		52	39	15	14.5							
32	36		67	49	20	19.5	9	15	9	40	8		
40	46		88	63	27	22.5	11	18	11	50			
40	46		100	100	75	27.5	24.5	13	20	14	55		10
50	56		112										

DIN
Square Interlocks

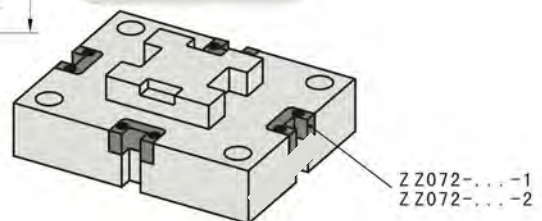
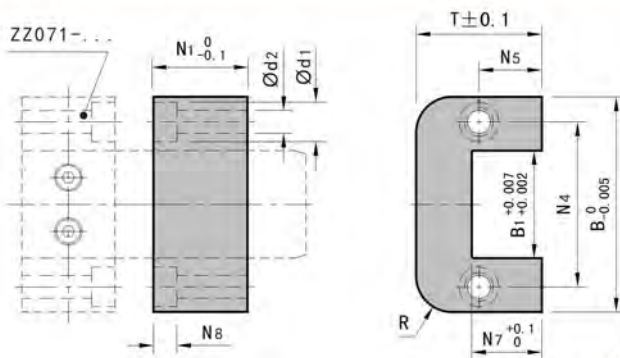
ZZ071-...-2



Order ZZ071-B1-N1-N2-Typ

B1	N1	N2	Typ	B	N4	N5	N7	N9	d1	d2	T	R	@ ¥ / P
20	22	22	2	47	34	13.5	13.5	6.8	11	6.6	27	6	
25	27	40		52	39	15	14.5						
32	36	63		67	49	20	19.5	9	15	9	40	8	
		40											
40	46	50		88	63	27	22.5	11	18	11	50	10	
		100											
50	56	56	100	75	27.5	24.5	13	20	14	55			
		112											

ZZ072-...-1



Order ZZ072-B1-N1-Typ

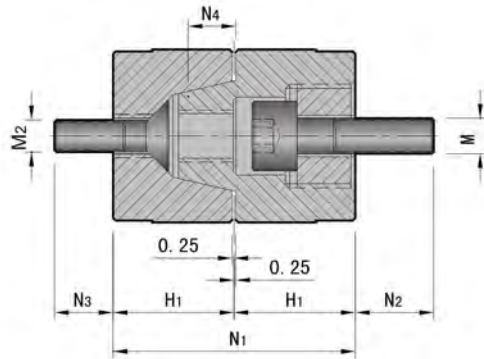
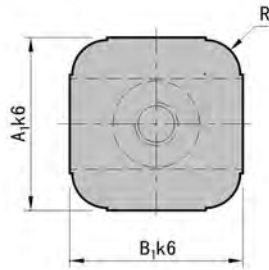
B1	N1	Typ	B	N4	N5	N7	N9	d1	d2	T	R	@ ¥ / P
20	22	1	47	34	13.5	13.5	6.8	11	6.6	27	6	
25	27		52	39	15	14.5						
32	36		67	49	20	19.5	9	15	9	40	8	
40	46		88	63	27	22.5	11	18	11	50	10	
50	56	100	75	27.5	24.5	13	20	14	55			

DIN

Square Interlocks

ZZ060

3D
2D

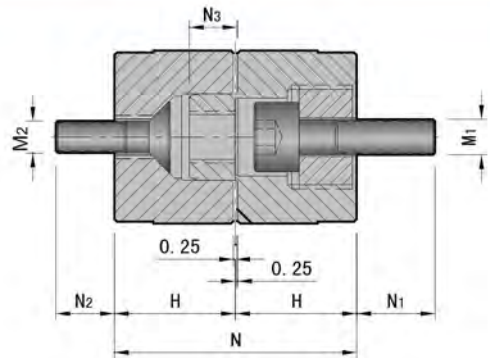
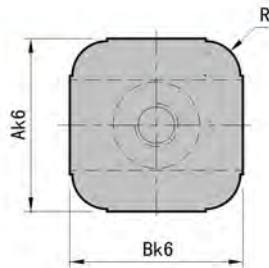


Order ZZ060-20x20

Code	R	H1	N1	N2	N3	N4	A1	B1	M	M2	@ ¥/P
ZZ060-20x20	4	14	28	12	4	5.5	20	20	M 5	M4	
ZZ060-25x25	5	16	32	13	8	7.5	25	25	M 6	M5	
ZZ060-32x32	6	18	36	15	12	9.5	32	32	M 8	M6	
ZZ060-40x40		22.5	45	17	10	11.5	40	40	M10	M8	

ZZ08

3D
2D

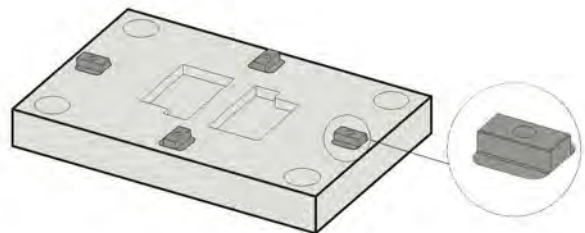
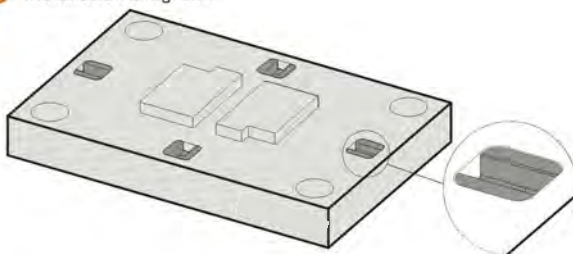


Order ZZ08-20x20

Code	R	N1	N2	N3	N	H	A	B	M1	M2	@ ¥/P
ZZ08-20x20	4	12	4	3.5	28	14	20	20	M 5	M4	
ZZ08-25x25	5	13	8	5.5	32	16	25	25	M 6	M5	
ZZ08-32x32	6	15	12	7.5	36	18	32	32	M 8	M6	
ZZ08-40x40		17	10	9.5	45	22.5	40	40	M10	M8	

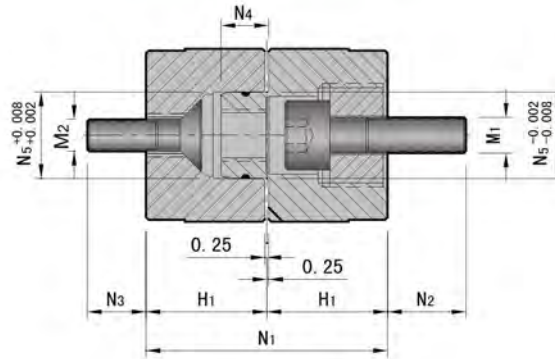
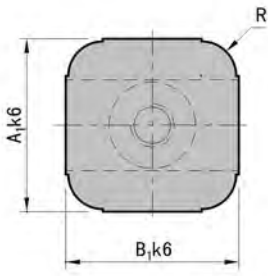


Installation Diagram:



DIN
Square Interlocks

ZZ080

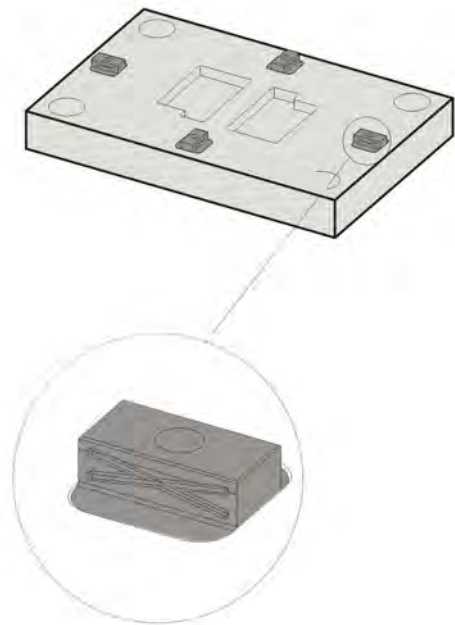
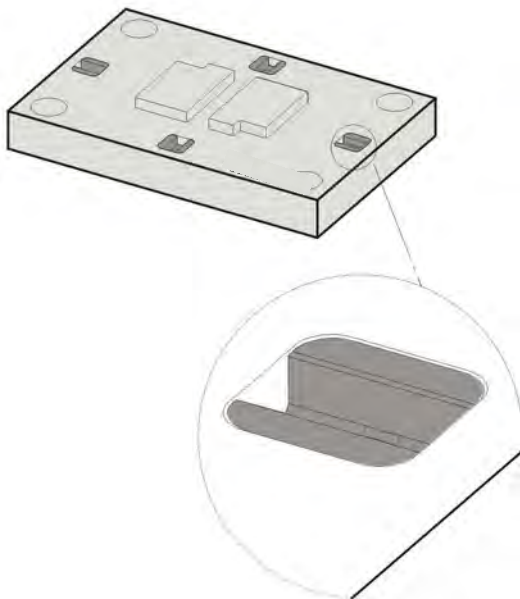


Order ZZ080-20x20

Code	R	H1	N1	N2	N3	N4	A1	B1	M1	M2	@ ¥ /P
ZZ080-20x20	4	14	28	12	4	5.5	20	20	M 5	M4	
ZZ080-25x25	5	16	32	13	8	7.5	25	25	M 6	M5	
ZZ080-32x32	6	18	36	15	12	9.5	32	32	M 8	M6	
ZZ080-40x40		22.5	45	17	10	11.5	40	40	M10	M8	



Installation Diagram:



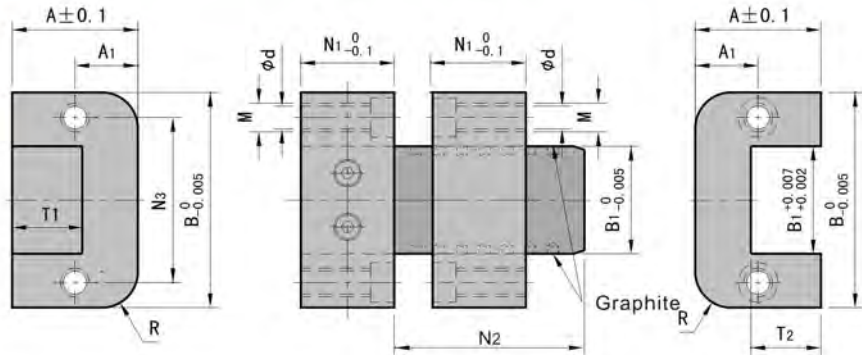
- Encoder pins series
- Encoder sleeves series
- Slide raileners series
- Latch locks series
- Pointing gates series
- Data stamps Air valves series
- Encoder series
- Cooling elements series
- Locating parts series
- Springs series
- Guide pins Guide bush series
- Guide strips Wear plate series
- Chuck series
- Mold accessories

DIN

Square Interlocks

ZZ48-S

ISO 2D

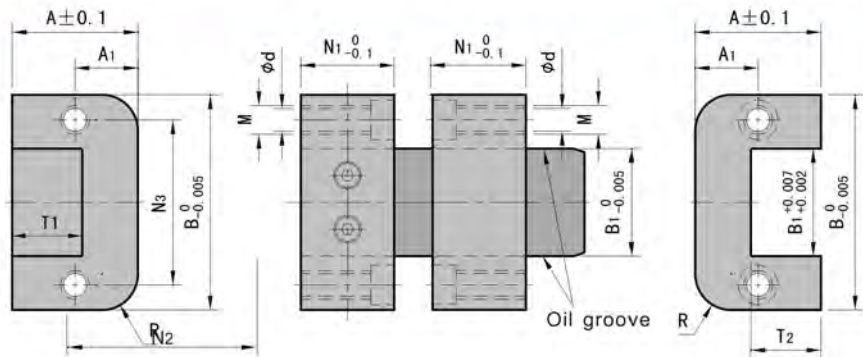


Order ZZ48-S-B1-N1-N2

B1	N1	N2	N3	A	B	d	A1	T1	T2	R	M	@ ¥/P
16	20	20 40	30	22	45	6.8	11	11.5	12	8	M 8	
30	26	40 63	46	35	60		17.5	19.5	20	10		
48	36	32 50 63	74	46	100	10.3	23	25.5	26	12.5	M12	
77	56	80 50 71 100	114	60	150	14	30	35.5	36	16	M16	

ZZ46-S

ISO 2D

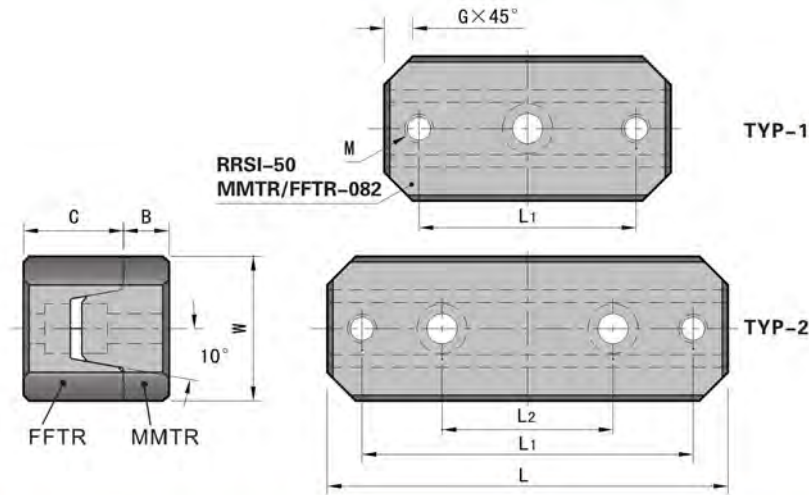


Order ZZ46-S-B1-N1-N2

B1	N1	N2	N3	A	B	d	A1	T1	T2	R	M	@ ¥/P
16	20	20 40	30	22	45	6.8	11	11.5	12	8	M 8	
30	26	40 63	46	35	60		17.5	19.5	20	10		
48	36	32 50 63	74	46	100	10.3	23	25.5	26	12.5	M12	
77	56	80 50 71 100	114	60	150	14	30	35.5	36	16	M16	

AISI
Square Interlocks

MMTR
FFTR
RRSI

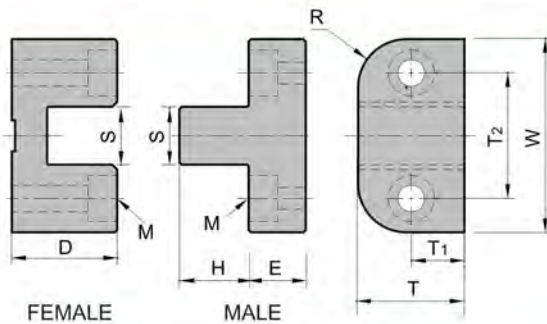


Order MMTR/FFTR-082

Code	Typ	G	L2 ^{+0.05}	L ₁ ^{+0.10}	W ^{+0.000} -0.001	MMTR B _{±0.005}	FFTR C _{±0.005}	M	L1	Mounting screws	@ ¥/P
MMTR/FFTR-082	1	-	-	1.980	0.999	0.312	0.69	1/ 4-20	1.50	NO.10-24	
MMTR/FFTR-104	2	0.2	2.500	3.980	1.249	0.375	0.87		3.38	1/ 4-20	
MMTR/FFTR-126			4.000	5.980	1.499	0.500	1.00	5/16-18	5.25	5/16-18	

Order RRSI-50

Code	L _{-0.1}	L1	L2	W _{-0.01}	B _{-0.01}	C _{-0.01}	G	M	@ ¥/P
RRSI- 50	50	36	-	25	8	17.5		M5	
RRSI-100	100	88	60	30	10	22	5	M6	
RRSI-150	150	132	100	40	13	25		M8	



TTL-P

Order TTL-P-100

Code	W ^{+0.000} -0.004	T _{-0.002}	H _{-0.010}	S _{TOTAL} ^{0.002}	D _{-0.002}	R _{RADIUS} ^{+0.010} -0.000	E _{-0.002}
TTL-P-100	1.0000	0.500	0.275	0.187	0.500	0.187	0.375
TTL-P-125	1.2500	0.625	0.375	0.250	0.625	0.250	0.500
TTL-P-150	1.5000	0.875	0.500	0.250	0.875	0.250	0.750
TTL-P-200	2.0000	1.000	0.625	0.375	1.125	0.375	0.750
TTL-P-300	3.0000	1.125	0.750	1.500	1.500	1.500	0.750

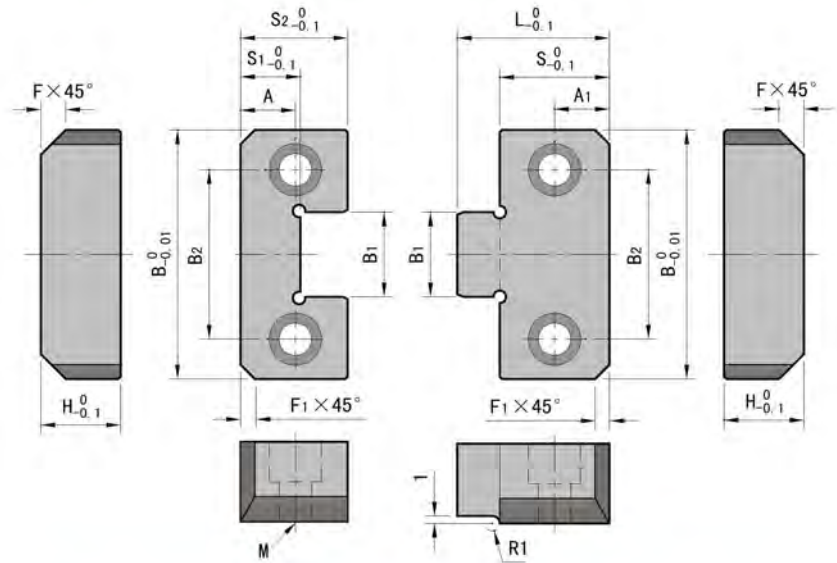
Code	OVERALL HEIGHT	T1	T2	M MALE(2)	M FEMALE(2)	@ ¥/P
TTL-P-100	0.875	0.250	0.688	6-32×1/2	6-32×5/8	
TTL-P-125	1.125	0.312	0.875			
TTL-P-150	1.625	0.437	1.000	8-32×3/4	8-32×3/4	
TTL-P-200	1.875	0.7500	1.375	10-32×3/4	10-32× 1	
TTL-P-300	2.250	1.1250	2.250	1/4-20×3/4	1/4-20×1-1/2	

AISI

Square Interlocks

FFW45

GAO
2D

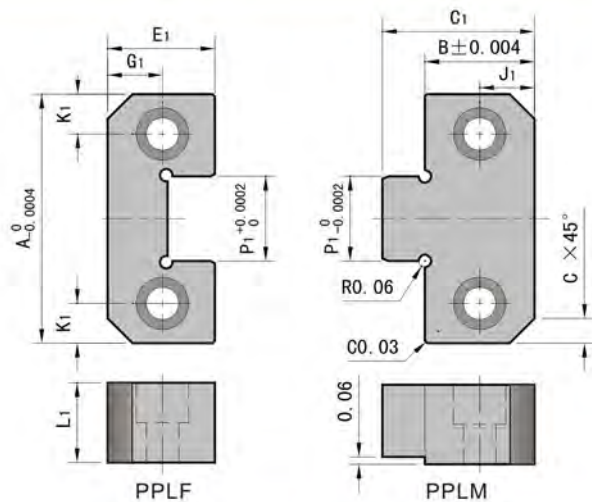
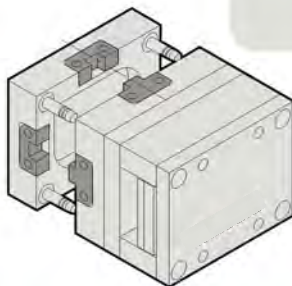


Order FFW45-40

Code	B	S	S1	S2	N	A	H	A1	B1	B2	F	F1	L	M
FFW45- 40	40	17	12	27	12	6	10	8.5	14	22	6.5x45°	2.5x45°	31	M 5
FFW45- 50	50		17	36	15	8.5	12.5	20	20	32		3 x45°	35	M 6
FFW45- 75	75	22	22	46	20	11	20	11	31.5	45	11 x45°		45	M10
FFW45-100	100	27	27	56	25	13.5	25	13.5	40	62	13 x45°	5 x45°	55	
FFW45-125	125	36	36	66		18	31.5	18	50	87			65	M12

PPLM
PPLF

GAO
2D



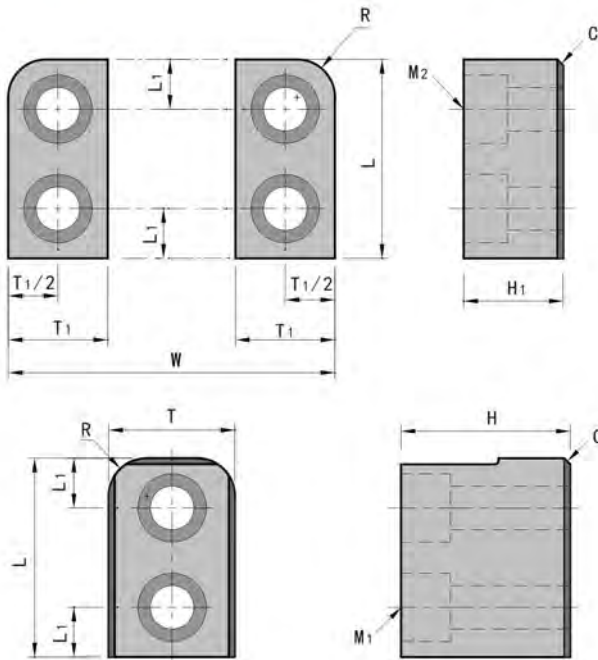
Order PPLM/PPLF-0001

Code	A	B	C1	P1	E1	Mounting screw	J1	K1	L1	C	@ ¥/P
PPLF-0001				0.5000	0.870	1/4-20x3/4	0.281	0.281	0.620		
PPLM-0001	1.5000	0.870	1.18	0.6800	0.870		0.437			0.19	
PPLM-0002	2.0000							0.375			
PPLF-0003		1.360	1.910	1.0000	1.370	3/8-16x1	0.688	0.688	0.745		
PPLM-0003	3.0000										
PPLM-0004	4.0000			1.3750				0.625			
PPLF-0004		1.870	2.640		1.870		0.875	0.875		0.50	
PPLF-0005						1/2-13x1 1/4			1.120		
PPLM-0005	5.0000			1.7500				0.750			

AISI
Square Interlocks

GGL
GGLM

CAD
2D



Order GGL-100-150

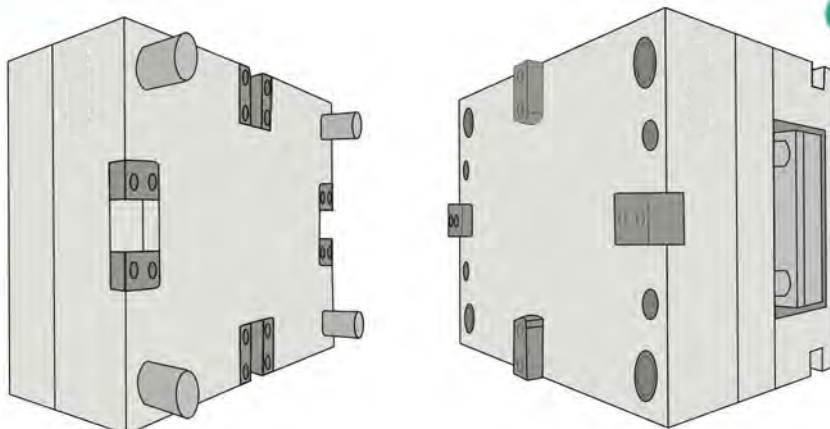
Code	L ^{+0.000} _{-0.010}	C ^{+0.0000} _{0.0003}	H1 ^{+0.000} _{0.005}	T ^{+0.0000} _{0.0003}	H ^{+0.00} _{-0.01}	S _{±0.01}	R ^{Pocket} Radius	C Chamfer	M1	M2	@ ¥ /P
GGL-100-150	1.000	0.500	0.500	0.500	0.85	0.25	0.187	0.03	#10-32×1"	#10-32×5/8"	
GGL-100-250	1.500	0.750	0.750	0.750	1.35	0.31	0.250	0.06	#1/4-20×1-1/2"	#1/4-20×7/8"	
GGL-100-350	2.000	1.000	1.000	1.000	1.73	0.44	0.375	0.06	#3/8-16×2"	#3/8-16×1-1/4"	
GGL-100-450	2.500	1.250	1.250	1.250	2.11	0.56	0.500	0.09	#1/2-13×2-1/4"	#1/2-13×1-1/2"	

Order GGLM25-45

Code	L ^{+0.00} _{-0.25}	W	L1 ^{+0.00} _{-0.01}	H1 ^{+0.00} _{-0.12}	T ^{+0.00} _{-0.01}	H ^{+0.0} _{-0.2}	L1±2	R ^{Pocket} Radius	C Chamfer	M1	M2	@ ¥ /P
GGLM-25-45	25	45	15	15	15	24	7	4	1	M:M4×25	F:M4×14	
GGLM-40-65	40	65	20	20	25	34				M:M5×35	F:M5×22	
GGLM-50-90	50	90	25	25	40	44	10	9	1.5	M:M6×45	F:M6×30	



Installation Diagram:



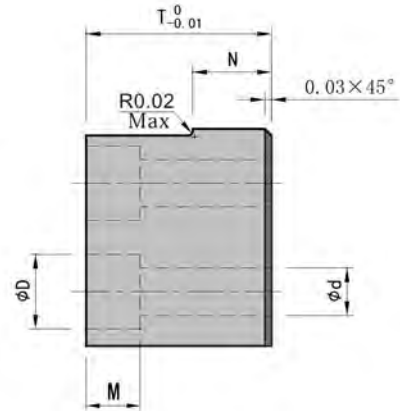
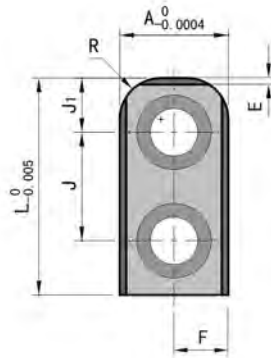
Installation Guidelines:

- Provides positive alignment for molds with interlocking cavities and core, Present the core of wear and damage in.
- Recommended 4sets per mold, mount on centerline on all four sides mold closed.



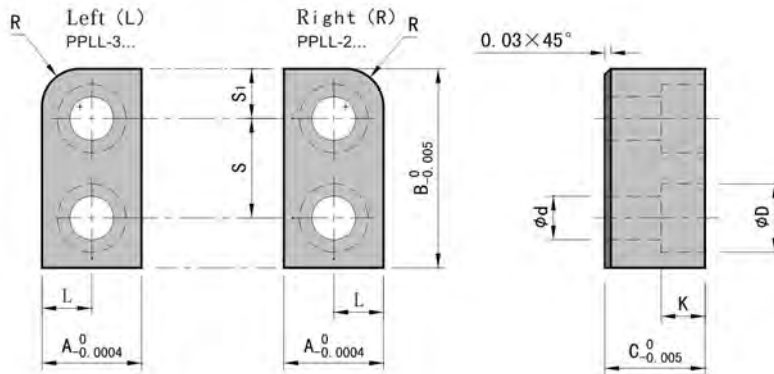
Square Interlocks

PPLL



Order PPLL-1001

Code	A	L	T	E	F	R	J1	J	d	D	M	N	@ ¥/P
PPLL-1001	0.4998	1.000	0.85	0.030	0.250	0.19	0.250	0.500	0.219	0.344	0.22	0.36	
PPLL-1002	0.9998	1.500	1.35	0.060	0.500	0.25	0.312	0.875	0.281	0.406	0.28	0.61	
PPLL-1003	1.4998	2.000	1.72	0.060	0.750	0.38	0.438	1.125	0.406	0.594	0.41	0.73	
PPLL-1004	1.9998	2.500	2.10	0.060	1.000	0.50	0.562	1.375	0.531	0.781	0.53	0.86	

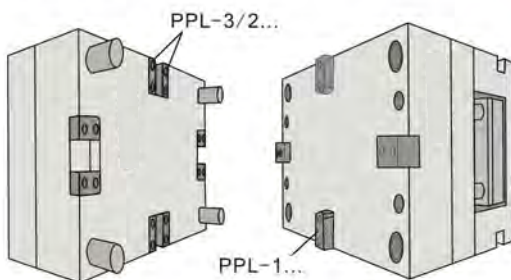


Order PPLL-3001/2001

Code	A	B	C	R	S1	S	d	D	K	L	@ ¥/P
PPLL-3001 PPLL-2001	0.5000	1.000	0.500	0.19	0.250	0.500	0.219	0.344	0.22	0.250	
PPLL-3002 PPLL-2002	0.7500	1.500	0.750	0.25	0.312	0.875	0.281	0.406	0.28	0.375	
PPLL-3003 PPLL-2003	1.0000	2.000	1.000	0.38	0.438	1.125	0.406	0.594	0.41	0.500	
PPLL-3004 PPLL-2004	1.2500	2.500	1.250	0.50	0.562	1.375	0.531	0.781	0.53	0.625	



Installation Diagram:



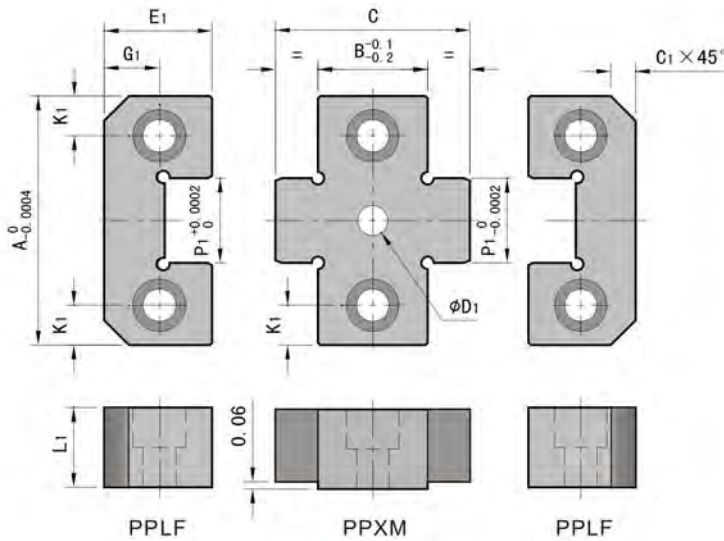
Installation Guidelines:

- Provides positive alignment for molds with interlocking cavities and core, Present the core of wear and damage in.
- Recommended 4sets per mold, mount on centerline on all four sides mold closed.

AISI
Square Interlocks

PPLF
PPXM

ASD
2D

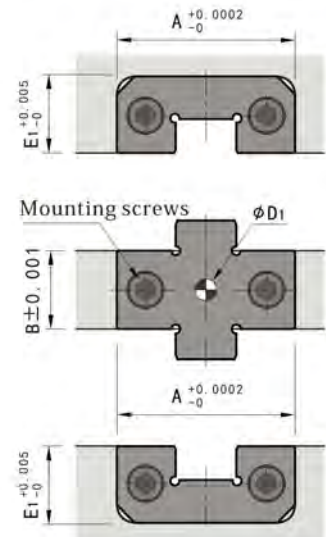
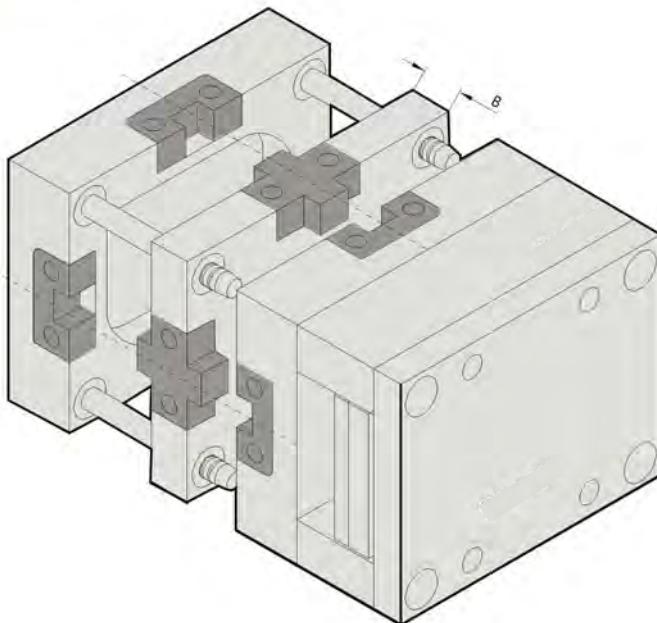


Order PPLF-0001/PPXM-1001

Code	B	A	C	P	E1	Mounting screws	G1	K1	L1	C1	ØD1	@ ¥/P
PPLF-0001 (2 REQ'D)	0.875	1.5000	1.470	0.5000	0.870	1/4-20×3/4	0.281	0.281	0.620	0.19	0.2500	
PPXM2001	1.375	1.970	0.6800									
PPLF-0002 (2 REQ'D)	0.875	2.0000	1.470	1.3750	1.370	3/8-16× 1	0.375	0.375	0.745		0.3750	
PPXM2002	1.375	1.970	1.7500									
PPLF-0003 (2 REQ'D)	0.875	3.0000	1.950	1.0000	1.870	1/2-13×1 1/4	0.688	0.625	1.120	0.50	0.5000	
PPXM2003	1.375	2.450	1.3750									
PPLF-0004 (2 REQ'D)	1.375	4.0000	2.890	1.7500			0.875	0.750				
PPXM3004	1.875	3.390										
PPLF-0005 (2 REQ'D)	1.375	5.0000	2.890	1.7500								
PPXM2005	1.875	3.390										



Installation Diagram:

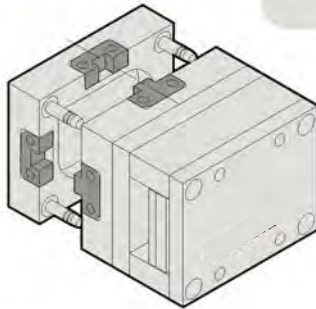
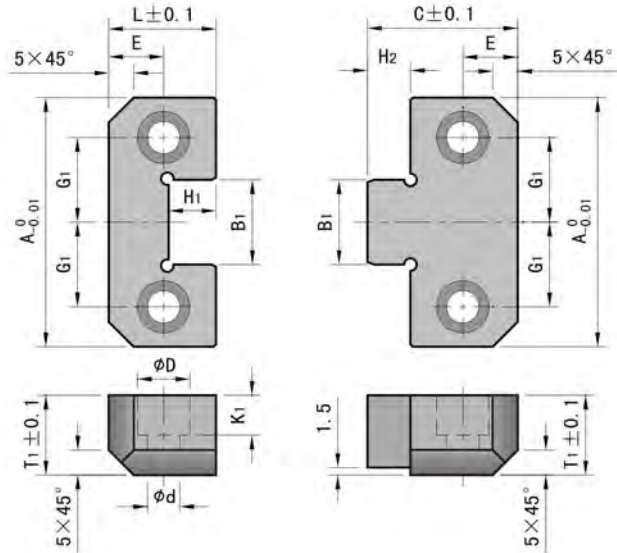


AISI

Square Interlocks

SSSI

CAD 2D

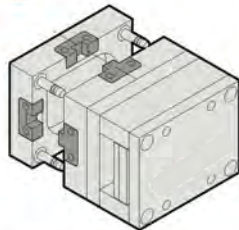
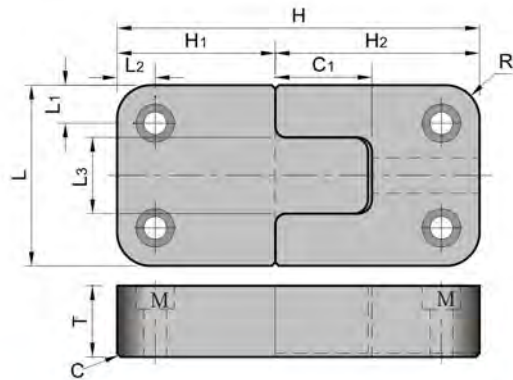


Order SSSI-50

Code	A	G1	E	L	T1	B1	C	d	D	H2	H1	K1	@ ¥/P
SSSI-50	50	17	11	21.5	16	17	30	6.5	10.5	8.5	9.5	8	
SSSI-75	75	25	18	36	19	25	50			14	15		
SSSI-100	100	35	22	45	25	35	65	10.5	16.5	20	21	12	
SSSI-125	125	42				45							

SSL
SSLM

CAD 2D



Order SSL-37-100

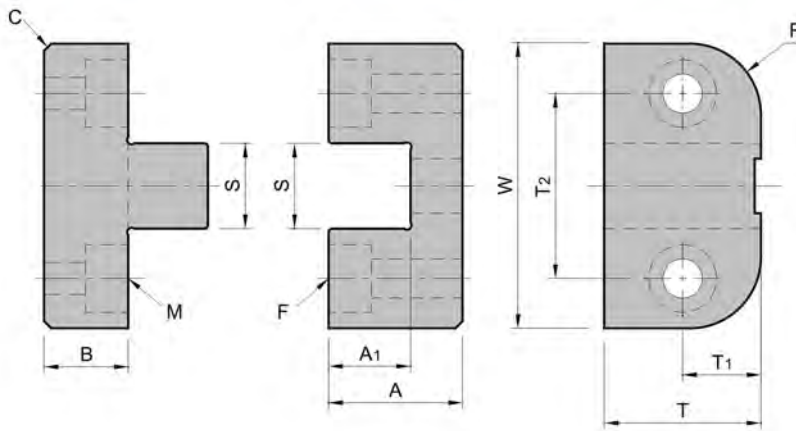
Code	T ^{+0.000} _{-0.002}	L ^{+0.000} _{-0.004}	H2 ^{+0.000} _{-0.002}	H1 ^{+0.000} _{-0.002}	C1	L3 ^{+0.001} _{-0.002}	H ^{+0.000} _{-0.004}	R ^{Pocket Radius}	L1/L2 ± 0.1	C ^{Chamfer}	Mounting screws	@ ¥/P
SSL-37-100	0.375	1.000	1.125		0.62	0.500	2.000				#10-32×1/2"	
SSL-50-125	0.490	1.250			0.68				0.250		# 8-32×5/8"	
SSL-50-150		1.500	0.875	0.875	0.56	0.563	1.750	0.187			# 8-32×5/8"	
SSL-50-200	0.500	2.000	1.375		0.86	0.750	2.250		0.312		#10-32×5/8"	
SSL-75-300	0.750	3.000	1.875		1.18	1.250	2.750	0.250	0.375	0.03	1/4-20×3/4"	
SSL-100-400	1.000	4.000	2.375		1.43	1.500	3.750		0.500		3/8-16×1"	
SSL-125-500	1.250	5.000	2.875	1.375	1.75	2.000		0.500			1/2-13×1-1/4"	
SSL-150-600	1.500	6.000			1.87	2.500	4.250		0.625		1/2-13×1-1/2"	

Order SSLM-16-50

Code	T ^{+0.00} _{-0.05}	L ^{+0.00} _{-0.01}	H2 ^{+0.00} _{-0.05}	H ^{+0.00} _{-0.05}	C1	L2 ^{+0.002} _{-0.005}	H ^{+0.00} _{-0.01}	C	R ^{Pocket Radius}	L1±.25	L2±.25	C	@ ¥/P
SSLM-16-50	16	50	21.5	21.5	13	17	43	6.5		8	11		
SSLM-19-75	19	75	36	36	22.5	25	72		5	12.5	18	0.8	
SSLM-19-100		100			30	35		10.5		15			
SSLM-25-125	25	125	45	45	28.7					20.5	22		

AISI
Square Interlocks

TTL
TTLM



Order TTL-62-125

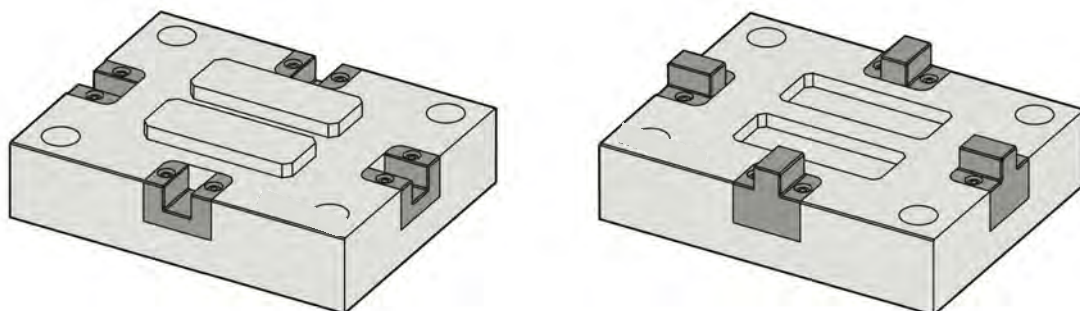
Code	T ⁺⁰ _{-0.002}	W ⁺⁰ _{-0.0004}	A ⁺⁰ _{-0.002}	B ^{+0.000} _{-0.002}	A1	S ^{0.0001} _{0.0002} Clearance for Slot	T1±.01	T2±.01	R Pocket Radius	C Chamfer	Mounting screws	@ ¥ /P
TTL- 62-125	0.625	1.250	0.625	0.500	0.41	0.438	0.312	0.875	0.250	0.03	M:# 6-32x5/8" F:# 6-32x3/4"	
TTL- 75-125	0.750				0.38		0.375				M:# 8-32x5/8" F:# 8-32x3/4"	
TTL- 87-150	0.875	1.500	0.875	0.750	0.57	0.500	0.437	1.000	0.375	0.04	M:# 8-32x7/8" F:# 8-32x1"	
TTL-100-150				0.375	0.50						M:#10-32x1/2" F:#10-32x1"	
TTL-100-200	1.000	2.000	1.125	0.750	0.75	0.750		1.375	0.500	0.06	M:#10-32x1" F:#10-32x1-1/8"	
TTL-112-200			0.875	0.625	0.50						M:#1/4-20x3/4" F:1/4-20x1"	
TTL-112-300	1.125	3.000	1.500	0.750	0.87	1.125	0.563	2.250	0.375	0.06	M:#1/4-20x7/8" F:1/4-20x1-5/8"	
TTL-150-250	1.500	2.500	1.375	0.625	0.85	1.000	0.750	1.750			M:#1/4-20x3/4" F:1/4-20x3/4"	
TTL-175-300	1.750	3.000	1.250	0.875	0.75	1.125	0.875	2.250	0.500	0.06	M:#5/16-18x 1" F:5/16-18x1-1/4"	
TTL-200-350	2.000	3.500	1.750	0.750	1.07	1.500	1.000	2.500			M:#3/8-16x7/8" F:3/8-16x2"	

Order TTLM-26-35

Code	W ⁺⁰ _{-0.01}	T ⁺⁰ _{-0.05}	A ⁺⁰ _{-0.05}	B ⁺⁰ _{-0.05}	A1	S ^{0.002} _{0.005} Clearance for Slot	T1±.25	T2±.25	R Pocket Radius	C Chamfer	Mounting screws	@ ¥ /P
TTLM-26- 35	35	26	25	15	17	11	13	23	8	1	M:M 5x16 F:M 5x25	
TTLM-30- 45	45	30				15	15	30			M:M 6x18 F:M 6x25	
TTLM-36- 55	55	36	30		21.5	20	18	37.5	1.5	1.5	M:M 8x22 F:M 8x35	
TTLM-36- 75	75	35	20	26	30	52					M:M10x25 F:M10x35	
TTLM-45-100	100	45	60	42	40	40	22.5	70			M:M10x25 F:M10x65	



Installation Diagram:



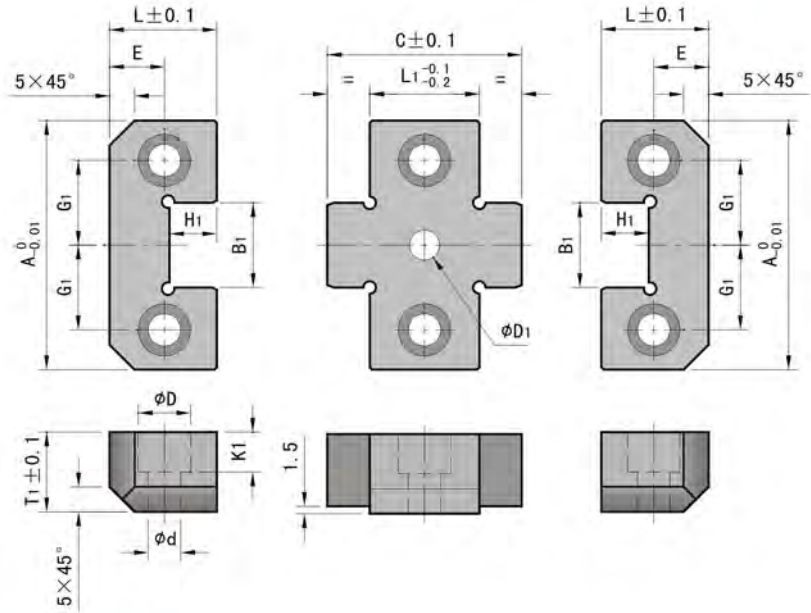
- ✖ Escrow pins series
- ✖ Side rollers series
- ✖ Latch locks series
- ✖ Pivoting gates series
- ✖ Data stamps Air valves series
- ✖ Escrow series
- ✖ Cooling elements series
- ✖ Locating parts series
- ✖ Springs series
- ✖ Guide pins Guide bush
- ✖ Guide stops V-belt plate series
- ✖ Chuck series
- ✖ Mold accessories

AISI

Square Interlocks

XXSI

2D

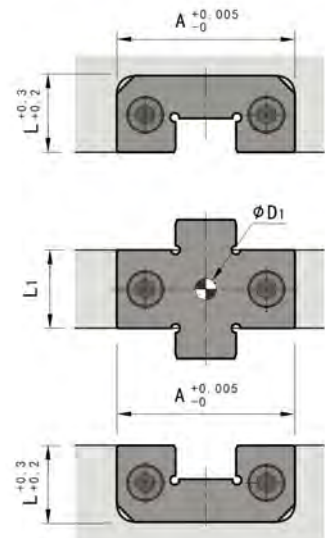
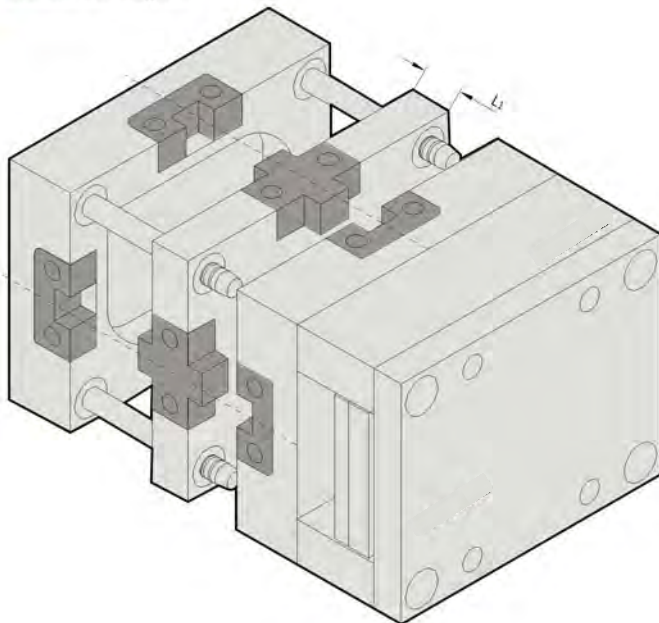


Order XXSI-5026

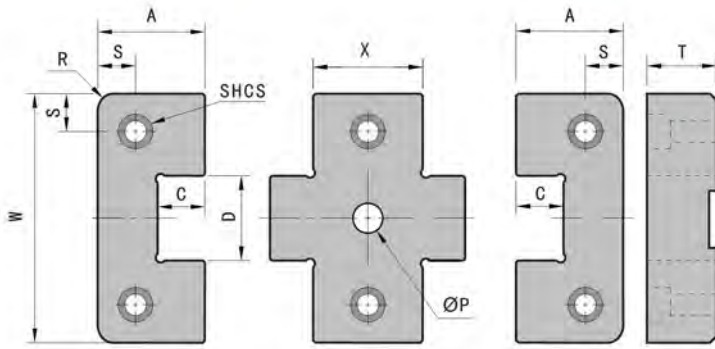
Code	A	L1	B1	C	D	d	E	G1	H1	K1	L	T1	φD1	@ ¥/P
XXSI- 5026	50	26	17	43	10.5	6.5	11	17	9.5	8	21.5	16	6	
XXSI- 5036		36		53										
XXSI- 7526	75	26	25	51										
XXSI- 7536		36		61										
XXSI-10036	100	46	35	71	16.5	10.5		35	21	12	45		10	
XXSI-10046				81										
XXSI-12536	125	36	45	71									12	
XXSI-12546		46		81										



Installation Diagram:

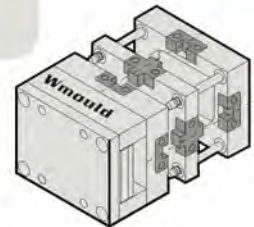


AISI
Square Interlocks



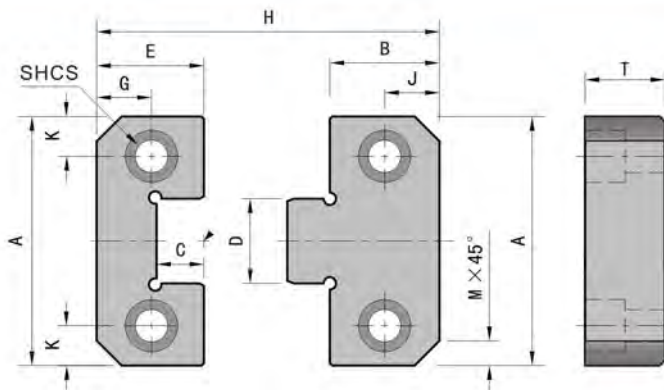
SSLX

CAO
2D



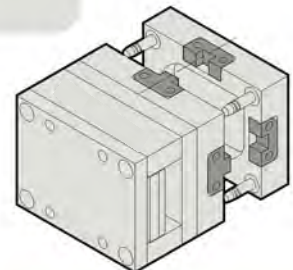
Order SSLX-50-87

Code	T ⁺⁰ _{-0.002}	W ⁺⁰ _{-0.0004}	X ⁺⁰ _{-0.005}	A ⁺⁰ _{-0.002}	C _{±0.01}	D ^{0.0001} _{0.0002}	R	S _{±0.01}	P ^{+0.001} ₋₀	SHCS	@ ¥/P
SSLX- 50- 87	0.500	2.000	0.875	1.375	0.65	0.75	0.187	0.312	0.250	#10-32×5/8"	
SSLX- 75-137	0.750	3.000	1.375	1.875	1.12	1.250	0.250	0.375	0.313	1/4-20×3/4"	
SSLX-100-137	1.000	4.000	1.375	2.375			0.500	0.500	0.375	3/8-16×1	



SSLS
SSLMS

CAO
2D



Order SSLS-62-150

Code	T ⁺⁰ _{-0.002}	A ⁺⁰ _{-0.0004}	E ⁺⁰ _{-0.0008}	B ⁺⁰ _{-0.0008}	C	D ^{0.0001} _{0.0002}	H ⁺⁰ _{0.002}	M	J _{±0.01}	G _{±0.01}	K _{±0.01}	SHCS	@ ¥/P
SSLS- 62-150	0.620	1.500	0.870	0.870	0.33	0.500	1.74	0.19	0.437	0.281	0.281	1/4-20×3/4"	
SSLS- 62-200		2.000				0.680				0.375	0.375		
SSLS- 75-300		3.000	1.370	1.360	0.57	1.000	2.73	0.38	0.688	0.688	0.375		
SSLS- 75-400	0.745	4.000				1.375					0.625	3/8-16×1"	
SSLS-112-500	1.120	5.000	1.870	1.870	0.79	1.750	3.74	0.50	0.875	0.875	0.750	1/2-13×1-1/4"	

Order SSLMS-13-38

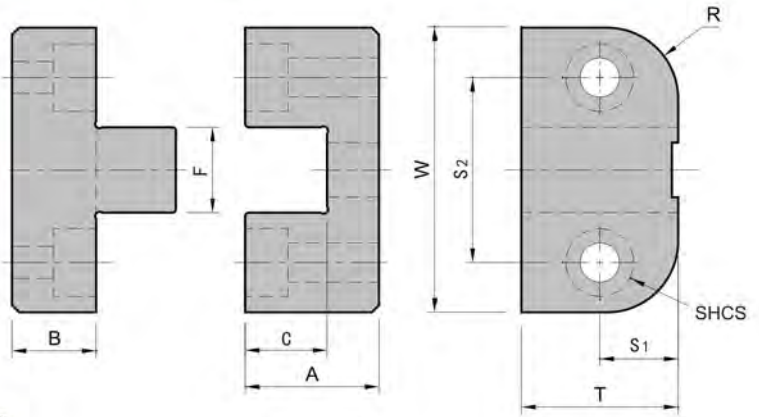
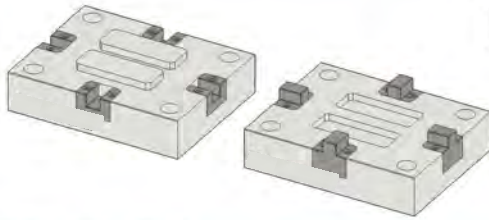
Code	T ⁺⁰ _{-0.05}	A ⁺⁰ _{-0.01}	E ⁺⁰ _{-0.02}	B ⁺⁰ _{-0.02}	C	D ^{0.002} _{0.005}	H ⁺⁰ _{-0.04}	M	J/G _{±0.2}	K _{±0.2}	SHCS	@ ¥/P
SSLMS-13- 38	13	38	22	22	8.5	12	44	5	7	8	M 5-0.8×15	
SSLMS-16- 50	16	50	21.5	21.5	9.5	17	43	5	11	8	M 6-1.0×18	
SSLMS-19- 75	19	75	36	36	15	25	72	8	18	12.5	M10-1.5×20	
SSLMS-19-100		100				35				15		
SSLMS-25-125	25	125	45	45	21	45	90	10	22	20.5	M10-1.5×25	

AISI

Square Interlocks

BBGT

CAO 2D

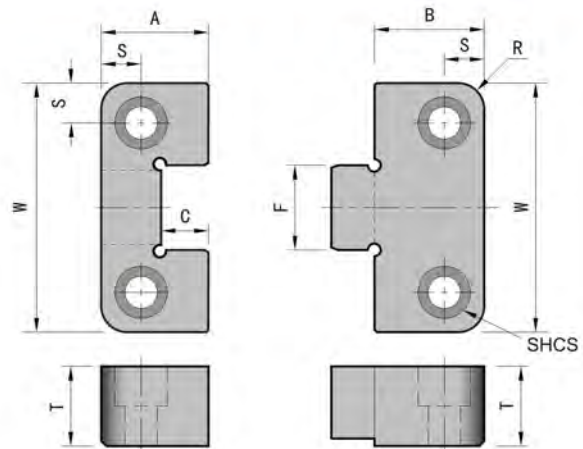
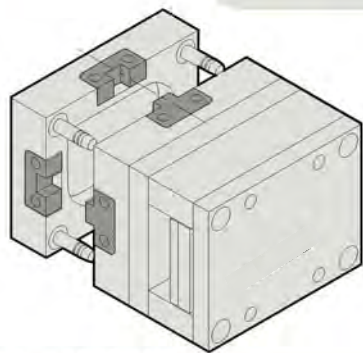


Order BBGT-1250

Code	W ⁺⁰ _{-0.0004}	A ⁺⁰ _{-0.002}	B ⁺⁰ _{-0.002}	C ⁺⁰ _{±0.01}	F ^{0.0001} _{0.0002}	T ⁺⁰ _{-0.002}	R	S1 ⁺⁰ _{±0.01}	S2 ⁺⁰ _{±0.01}	SHCS SIZES		@ ¥ /P
BBGT-1250	1.250	0.625	0.500	0.41	0.438	0.625	0.250	0.312	0.875	M# 6-32×5/8"	F# 6-32×3/4"	
BBGT-1500	1.500	0.875	0.500	0.53	0.500	0.875	0.437	1.000	1.375	M# 8-32×7/8"	F# 8-32×1"	
BBGT-2000	2.000	1.125	0.750	0.66	0.750	1.000	0.375	0.500	1.375	M#10-32×1"	F#10-32×1-1/4"	
BBGT-3000	3.000	1.500	0.78	0.78	1.125	1.125	0.562	0.562	2.250	M#1/4-20×1"	F#1/4-20×1-3/4"	
BBGT-3000S	3.000	1.250	0.875	0.75	1.750	1.750	0.875	0.875	2.250	M#5/16-18×1-1/8"	F#5/16-18×1-5/8"	
BBGT-3500	3.500	1.750	0.750	1.00	1.500	2.000	1.000	1.000	2.250	M#3/8-16×1"	F#3/8-16×2"	

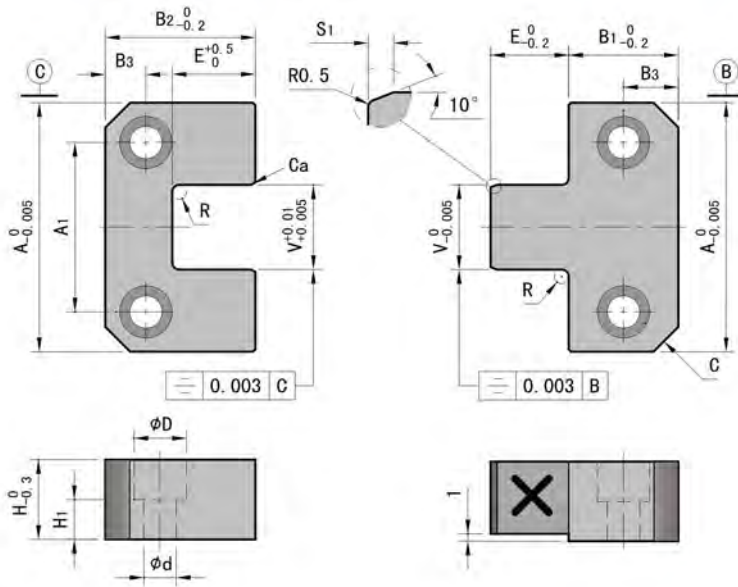
BBGS

CAO 2D



Order BBGS-1500

Code	W ⁺⁰ _{-0.0004}	A ⁺⁰ _{-0.002}	B ⁺⁰ _{-0.002}	C	F ^{0.0001} _{0.0002}	T ⁺⁰ _{-0.002}	R	S ⁺⁰ _{±0.01}	SHCS SIZES	@ ¥ /P
BBGS-1500	1.500	0.875		0.56	0.563	0.500	0.187	0.250	# 8-32×5/8"	
BBGS-2000	2.000	1.375	0.875	0.66	0.750	0.750	0.250	0.312	#10-32×5/8"	
BBGS-3000	3.000	1.875		1.13	1.250	1.000	0.250	0.375	1/4-20×3/4"	
BBGS-4000	4.000	2.375	1.375	1.25	1.500	1.000	0.500	0.500	3/8-16×1"	
BBGS-5000	5.000	2.875		1.63	2.000	1.250	0.500	0.625	1/2-13×1-1/4"	

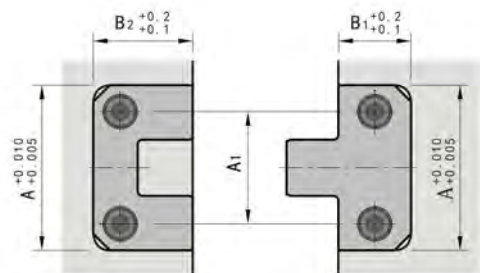
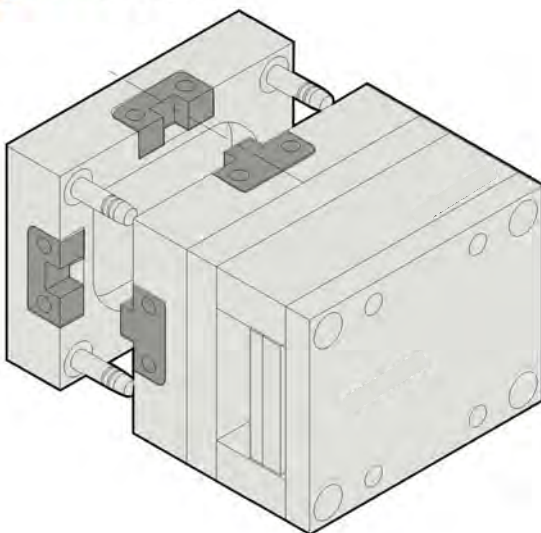


Order TTSSB-A-E

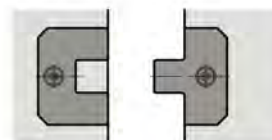
C	E	A	V	B1	B2	S1	R	Ca	A1	B3	D	d	H	H1	Mounting screws	@ ¥/P							
1	6	16 20 25	7 8 10	11	17 19 22	1	1	0.5	-	5	8	4.5	8	3	M 4								
	8	30	12		14				22 24 28							16	6	9.5	5.5	10	4	M 5	
	20	40	15		18				28 30 34							2	2	1	16	6	9.5	5.5	10
5	10	40	15	18	34 36 40	1	1	0.5	22	7	11	6.6	13	6	M 6								
	25				36				12							14	8.6	20	11	M 8			
	20	60	25	30	43 45 49	2	2	1	36	12	14	8.6	20	11	M 8								
	35				49				14							18	11	25	14	M10			
	30				50				14							18	11	25	14	M10			
45	80	30	40	85				52	14	18	11	25	14	M10									



Installation Diagram:



Note: When A=16, 1 mounting bolt hole, Reference the below drawings!



- Electric pins
- Electric jacks
- Slide rail series
- Latch lock
- Rolling gate series
- Data stamps
- Pin valves series
- Encoder series
- Cooling elements series
- Locating parts series
- Spacers series
- Guide pins
- Guide bush
- Guide strips
- Wear plate series
- Chuck series
- Mold accessories

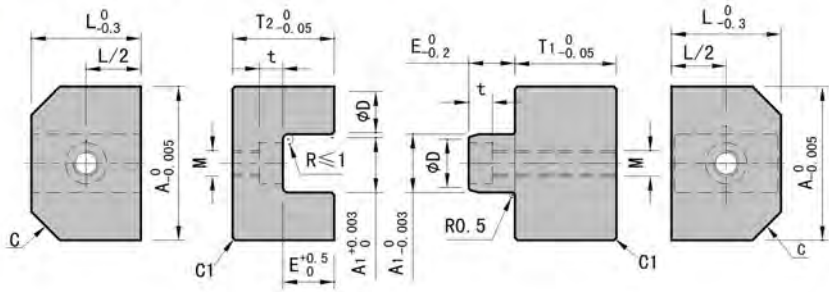
JIS

Square Interlocks

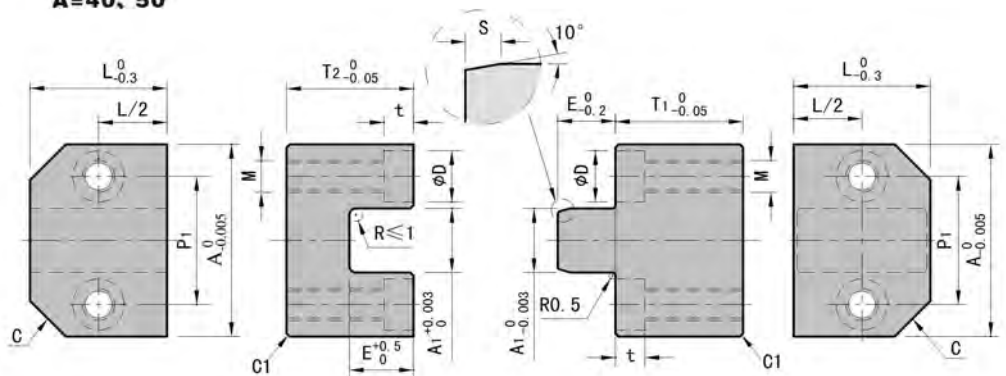
VVTTSB



A=20, 25, 30



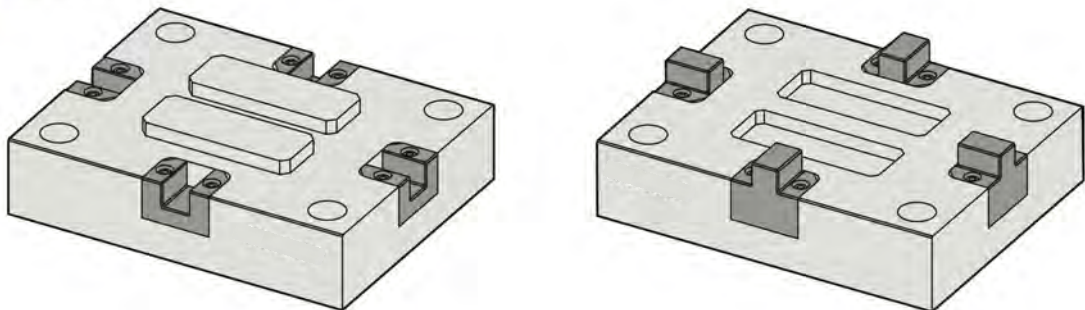
A=40, 50

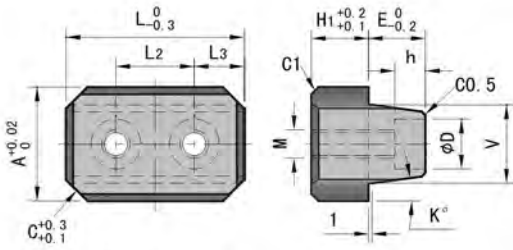
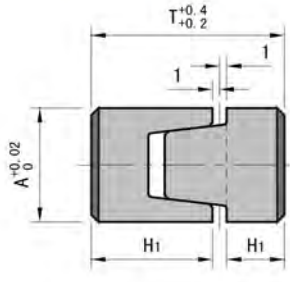


Order VVTTSB-A-E

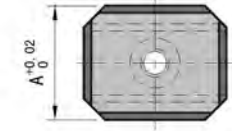
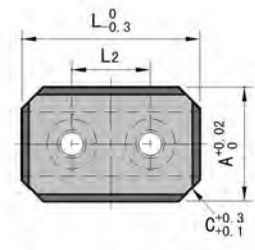
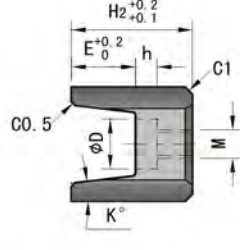
A	E	C	D	A1	L	t	T	T1	T2	S	P1	M	@ ¥/P
20	6	4	-	10	12	3.5	23	8	14	0.5	-	M4	
25	8	-	-	12	15	-	28	10	17	1	-	M5	
30	-	-	-	-	-	4.5	32	12	19	-	28	M5	
40	10	6	28	15	20	-	43	17	25	-	35	M6	
50	15	-	35	20	25	5.5	46	-	28	2	-	M6	

Installation Diagram:

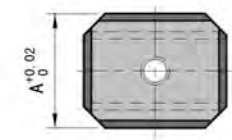
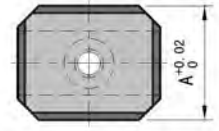
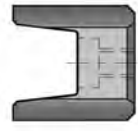




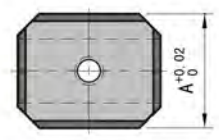
Typ 1



Typ 2



Typ 3



Note: When L ≥ 60, The tolerance is -0.2/-0.5

Order TTBS-A-L-K

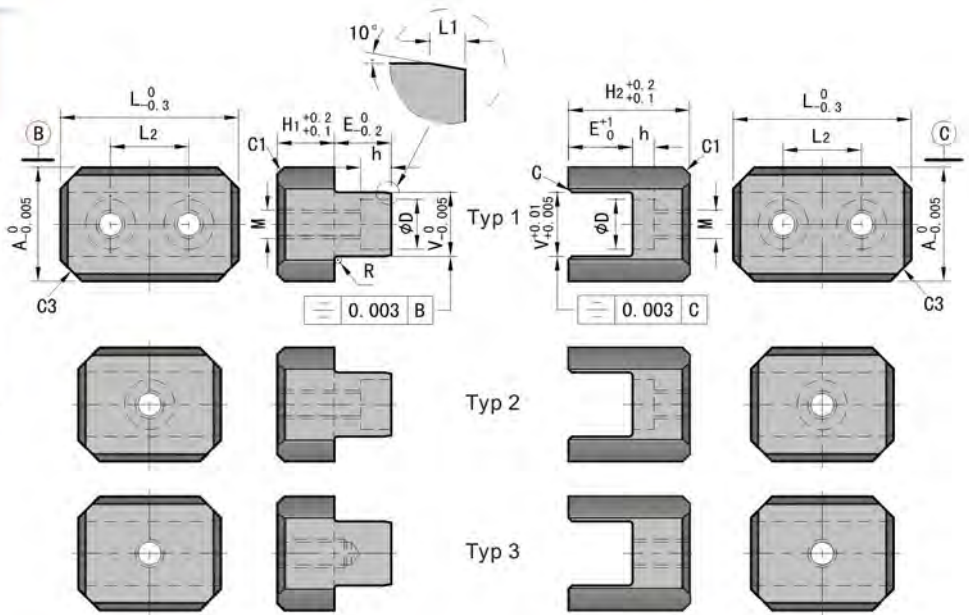
L	Typ	K°	C	V	E	H	H1	H2	L3	L2	D	h	A	Mounting screws	M	@ ¥ / P												
15	3	1	2	7	5								12	M3	M 3													
20				9										16	M4													
25																												
20	2	1	2	12	7	23	7	14	7.5	15	6.5	3.5	20	M3	M 4													
25																												
30	1	1	2	12	7	23	7	14	7.5	15	6.5	3.5	20	M3	M 4													
40																												
20	1	1	2	12	7	23	7	14	7.5	15	6.5	3.5	20	M3	M 4													
25																												
30																												
25	3	3	3	15	8	28	9	17	7.5	15	8	5	25	M4	M 5													
40																												
25	5	3	3	17	8	32	10	20	7.5	15	9	6	30	M5	M 6													
30																												
40	1	1	2	20	10	35	11	22	10	20	11	7	35	M6	M 8													
30																												
40																												
50	3	3	3	25	15	45	14	29	17.5	40	14	9	45	M6	M 8													
75																												
100	5	5	3	35	20	60	19	39	20	60	14	9	65	M8	M10													
60																												
90																												
120																												

JIS

Square Interlocks

TTBSF

CAD 2D



Order TTBSF-A-L-E

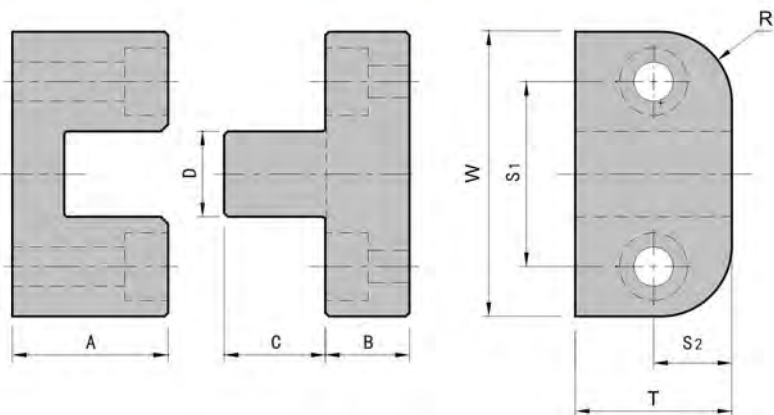
L	Typ	E	V	H	H1	H2	L1	R	C	L2	D	h	A	M	Mounting screws	@ ¥ / P
16	3	8	9	26	8	17	1	0.5	0.5	-	-	-	16	M4	M4bolt	
20		12		30		21										
25	2	8	12	26	10	17	2	1	1	15	6.5	3.5	20	M4	M3bolt	
		12		30		21										
30	1	8	15	26	12	17	2	1	1	15	8	5	25	M5	M4bolt	
		12		30		21										
25	2	10	17	32	12	21	1	0.5	0.5	-	8	5	25	M5	M4bolt	
		15		37		26										
30	1	10	20	32	12	21	2	1	1	15	9.5	6	30	M6	M5bolt	
		15		37		26										
40	1	12	20	36	12	23	1	0.5	0.5	20	11	7	35	M8	M6bolt	
		20		44		31										
50	1	15	25	41	12	28	2	1	1	30	11	7	35	M8	M6bolt	
		25		51		38										



Installation Diagram:

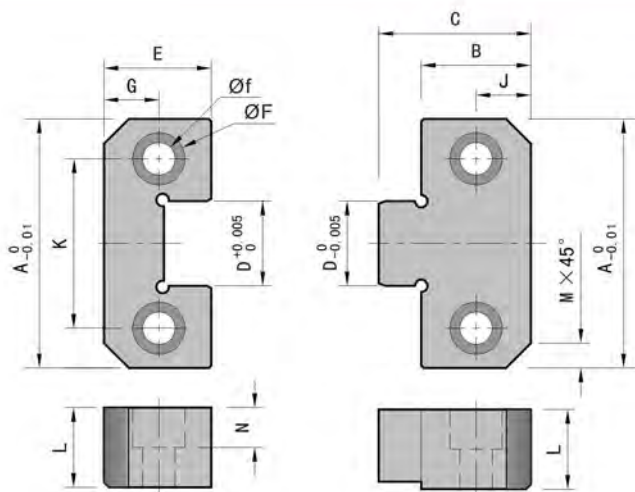


When a convex side and concave side knock against each other, It cause damage, Please open about 1mm and use it. As shown in the figure above!

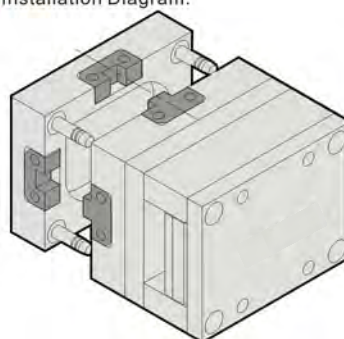


Order TTL-L-035

Code	W ⁺⁰ _{-0.01}	T	A	B	C	D _{0.01}	R	S1	S2	Male screws	Female screws	@ ¥/P
TTL-L-035	35	20	20	15	10	13	6	24	10	M4×16	M4×20	
TTL-L-050	50	25	30	20	15	18	8	34	12.5	M5×20	M5×30	
TTL-L-075	75	30	40	20	20	28	10	52	15	M6×20	M6×40	



Installation Diagram:



Order PL-38

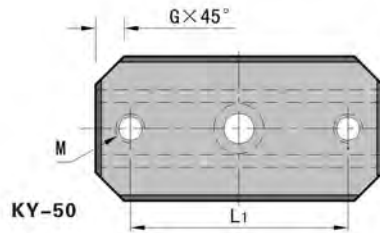
Code	A	B	C	D	F	f	K	J	G	M	L	N	E	@ ¥/P
PL- 38	38	22	30	12	10	6.5	22	7	7	5	13	8	22	
PL- 50	50	21.5	50	17	11	6.5	34	11	11	8	16	12	21.5	
PL- 75	75	36	65	25	17	11	50	18	18	10	19	12	36	
PL-100	100	45	70	35			70	22	22		25			
PL-125	125		84	45			84						45	

TAIWAN

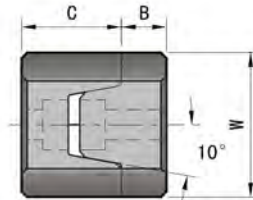
Square Interlocks

KY

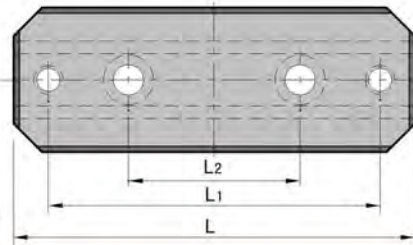
0.80
2D



KY-50



KY-100/150

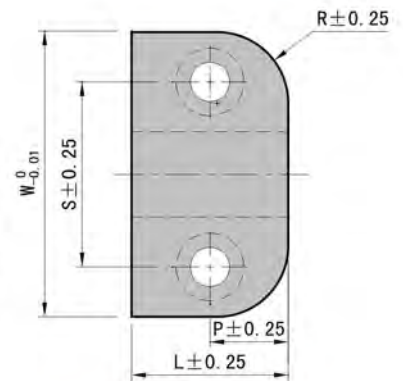
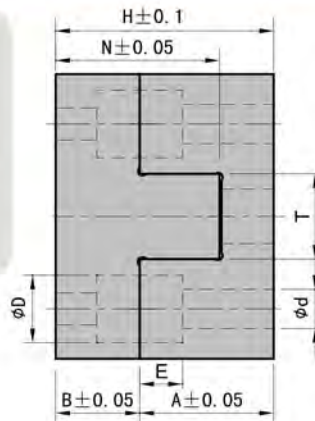
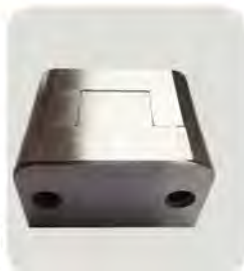


Order KY-50

Code	L	L1	L2	W	B	C	G	M	@ ¥/P
KY- 50	50	36	-	25	8	17.5		M5	
KY-100	100	88	60	30	10	22	5	M6	
KY-150	150	132	100	40	13	25		M8	

LK

0.80
2D

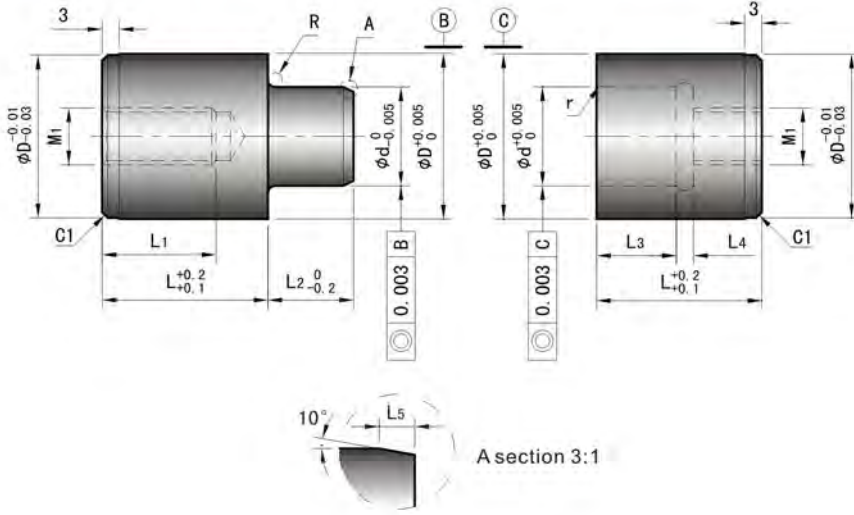


Order LK-15

Code	W	L	A	B	N	T	S	R	P	D	d	E	H	Mounting screws	@ ¥/P
LK-15	38.1	24.5	22.17	9.47	22.1	12.7	25.4	7	12.7	10.5	6	7	31.64	M5	
LK-25	63.5	38.1	34.87	15.82	34.8	25.4	44.45	8.5	19.5	12	7.2	8	50.69	M6	
LK-35	88.9	50.8	44.4	19	44.2	36.58	63.5	9.5	25.4	15.5	10.5	11	63.4	M8	

JIS
Square Interlocks

TTPNF

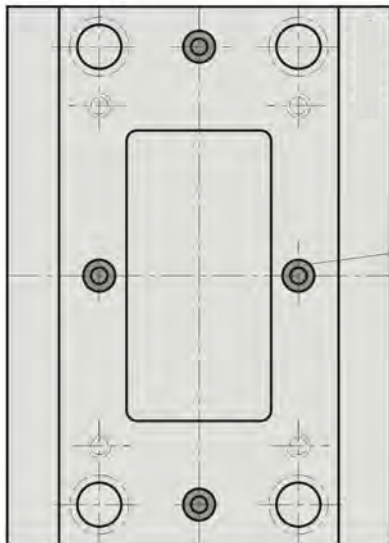


Order TTPNF-D-L2

D	L2	L	L1	L3	L4	L5	d	r	R	M1	@ ¥/P
10	7	14.5		5	2.5		5				
	13	19.5			8.5						
13	7	14.5	10	11	2.5	1	7	0.5	0.8	M 4	
	16	24.5			5.5						
16	7	14.5		5	2.5		10			M 5	
	16	24.5			5.5						
20	8	14.5	12	6	2.5		13			M 6	
	11	19.5			9						
20	16	29		14	6.5	2		1	1.5	M 8	
	20	29.5			9						
25	11	19.5	16	11	2.5	1	16	0.5	0.8	M 8	
	13	24.5			2.5						
25	20	34		18	7.5			1	1.5	M 10	
	20	34			2						
30	25	39	20	23	2.5		20				

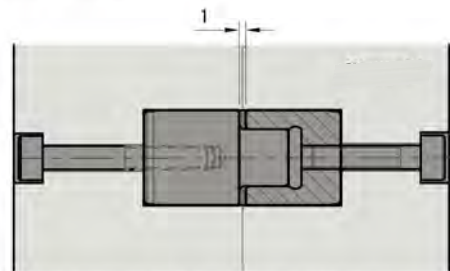


Installation Diagram:



TTPNF-...

How to mount:



When a convex side and concave side knock against each other, it causes damage. Please open about 1mm and use it. As shown in the figure above!

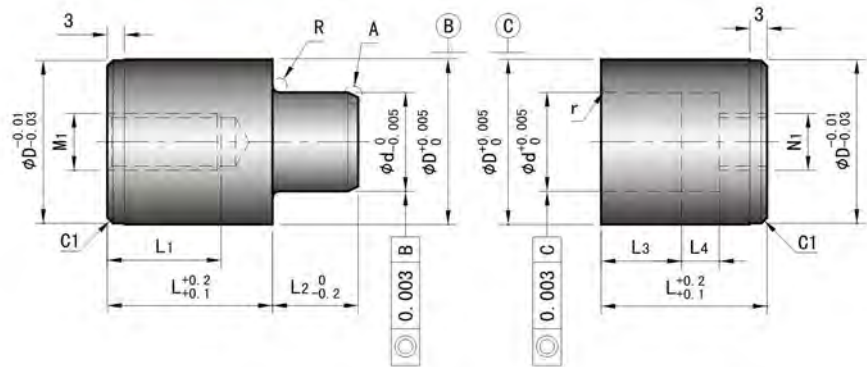
- Episcor pins series
- Episcor sleeves series
- Slide rail pins series
- Slide rail sleeves series
- Latch locks series
- Pinning gates series
- Pinning gates Air vent series
- Date stamps series
- Date stamps Air vent series
- Episcor series
- Cooling elements series
- Locating parts series
- Springs series
- Guide pins series
- Guide pins Guide bush series
- Guide stops series
- Wear plate series
- Chuck series
- Mold accessories series

JIS

Square Interlocks

TTPNFC

CAD 2D



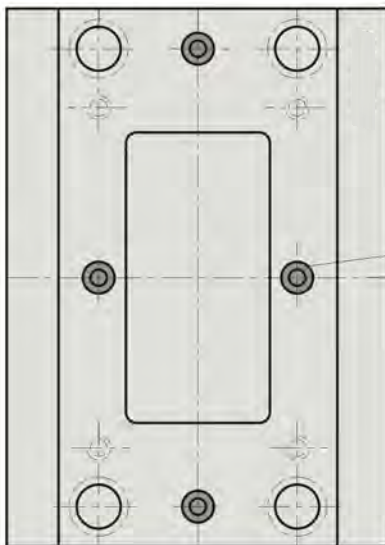
A section: 3:1

TTPNFC-D-L2

D	L2	L	L1	L3	L4	L5	M1	d	r	R	N1	@ ¥/P
13	7	14.5		6	5		4	7			M 5	
16			10	9	6	1	5	10	0.5	0.8	M 6	
20	10	19.5		11	8		6	13			M 8	
25	12	24.5	12	17	11		8	16			M10	
30	18	34	18			2		20	1	1.5		

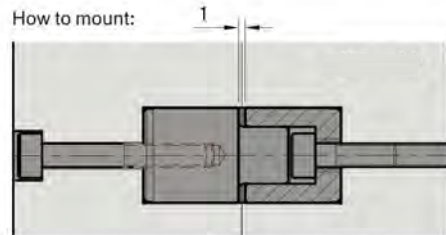


Installation Diagram:



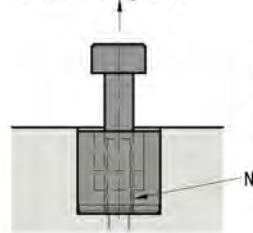
TTPNFC-...

How to mount:



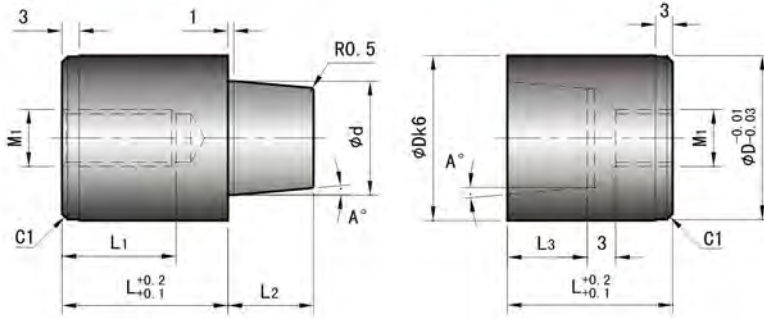
When a convex side and concave side knock against each other, it causes damage. Please open about 1mm and use it. As shown in the figure above!

Disassembling chart:



As shown in the figure above, the bushing can be easily removed by screwing a bolt into its (N1) and extracting it.

TTPN
TTPNV



D	L	d	L1	L2	L3	M1
8	13	5	7.5			M 3
10						
13	14	7	10	6	5	M 4
16						
20	19	10	12	9	8	M 5
25	24	13	16	12	11	M 6
30	29	16	20	15	14	M 8
32						M10
35	34	20	24	18	17	M12
42	39	24		24	23	

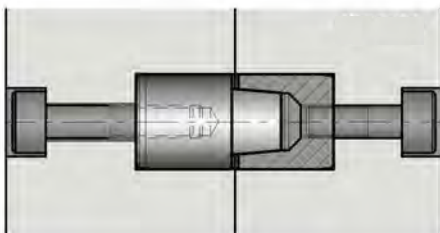
Order TTPN-D-A°

Code	D	A°	Dk6	@ ¥ /P
TTPN	13	1	13	Standard
	16		16	
	20		20	
	25	3	25	
	30		30	
	32	5	32	
	35		35	
42	10	42		

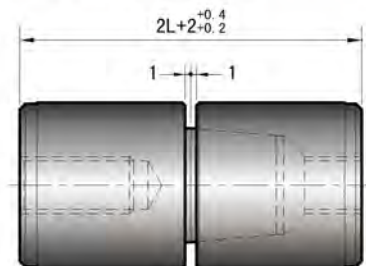
Order TTPNV-D-A°

Code	D	A°	Dk6	@ ¥ /P
TTPNV	13	1	13	Component concentricity 0.01mm or less
	16		16	
	20		20	
	25	3	25	
	30		30	
	32	5	32	
	35		35	

Installation Diagram:



Dimensions when combined:



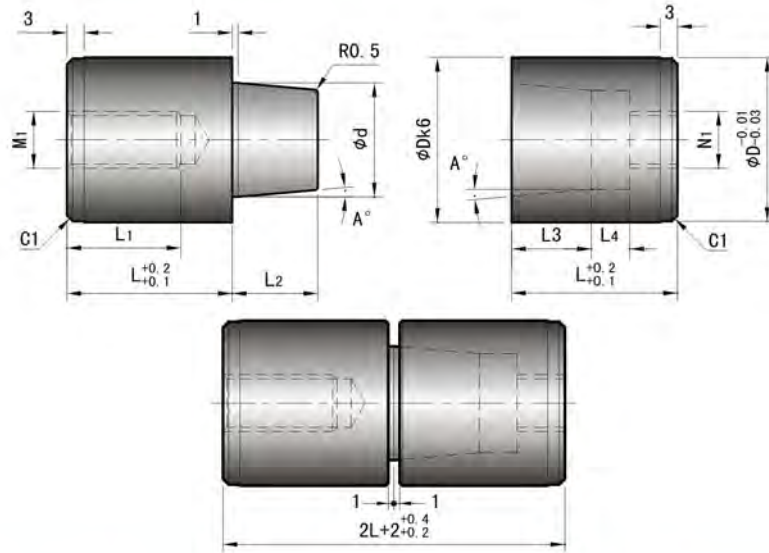
- Exciter pins
- Exciter sleeves
- Slide reducers
- Slide series
- Latch locks
- Pointing gates
- Pointing series
- Data stamps
- Adv valves series
- Exciter series
- Cooling elements
- Cooling series
- Locating parts
- Locating series
- Spacers series
- Guide pins
- Guide bush
- Guide stops
- Water plate series
- Chuck series
- Mold accessories

JIS

Square Interlocks

TTPNC
TTPV

GRO
2D



D	L	d	L1	L2	L3	L4	M1	N1
13	14	7	6	6	5	3.3	M 3	M 4
16		10	10			5.3	M 5	M 6
20	19	13	12	7	7	7	M 6	M 8
25	24	16	16	10	10	9	M 8	M10
30								
32	29	20	20	13	13	11	M10	M12
35	34	24		16	16			
42	39	30	24	21	21	13	M12	M14

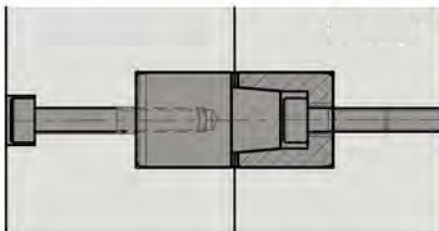
Order TTPNC-D-A°

Code	D	A°	Dk6	@ ¥ / P	
TTPNC	13	1	13	Standard	
	16		+ 0.012		
	20		+ 0.001		
	25	3	25		+ 0.015
	30		+ 0.002		
	32	10	32		0.01mm以内
	35		+ 0.018		
	42		+ 0.002		

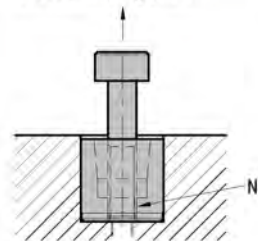
Order TTPV-D-A°

Code	D	A°	Dk6	@ ¥ / P	
TTPV	13	1	13	0.01mm以内	
	16		+ 0.012		
	20		+ 0.001		
	25	3	25		+ 0.015
	30		+ 0.002		
	32	5	32		0.01mm以内
	35		+ 0.018		
			+ 0.002		

Installation Diagram:



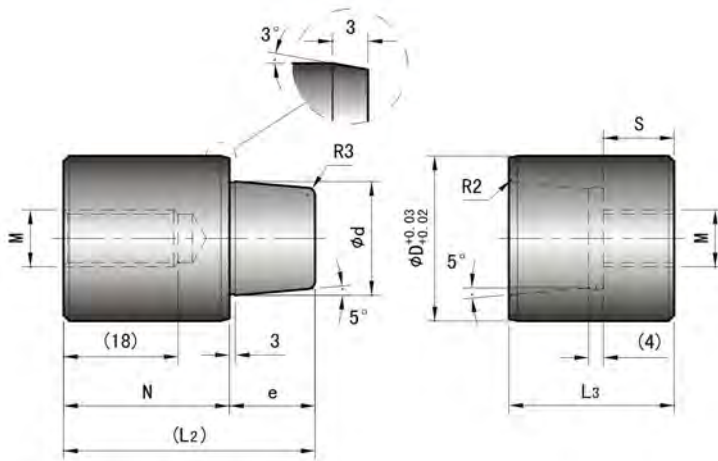
Disassembling chart:



* As shown in the figure above, The bushing can be easily removed by screwing a bolt into its(N1) and extracting it.

TTP-T

CRD 2D

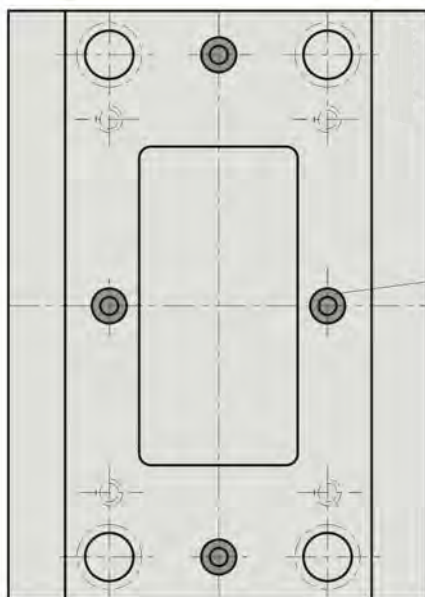


Order TTP-T-d

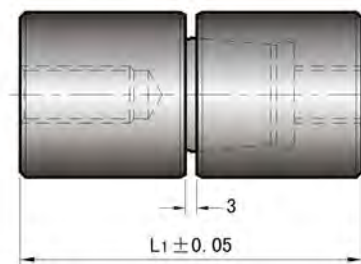
ϕd	ϕD	$L1$	$L2$	$L3$	N	e	S	M	@ ¥ / P
14	20 $\pm 0.03 / 0.02$	43 ± 0.05	30		15	15	5	8	
16	25 $\pm 0.03 / 0.02$	52 ± 0.05	41	25	24	17	6		
20	30 $\pm 0.03 / 0.02$	62 ± 0.05	49	30	29	20	8	10	
25	35 $\pm 0.03 / 0.02$	72 ± 0.05	59	35	34	25			



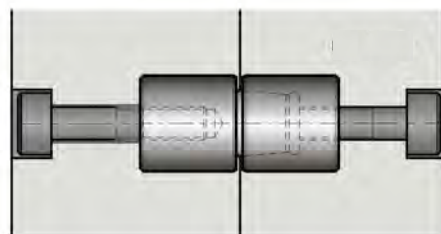
Installation Diagram:



Dimensions when combined:



How to mount:



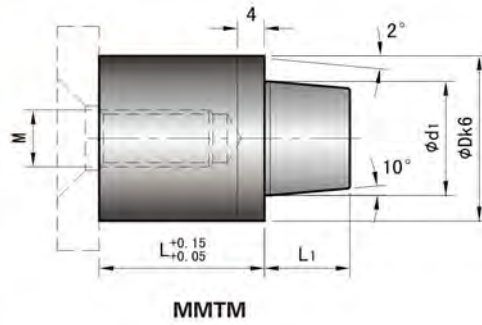
- Encoder pins
- Encoder sleeves
- Slide rail/rollers series
- Limit blocks
- Positioning series
- Pointing gates series
- Data stamps
- Air valves series
- Encoder series
- Cooling elements series
- Locating parts series
- Springs series
- Guide pins
- Guide bush
- Guide strips
- Wear plate series
- Chuck series
- Mold accessories

AISI

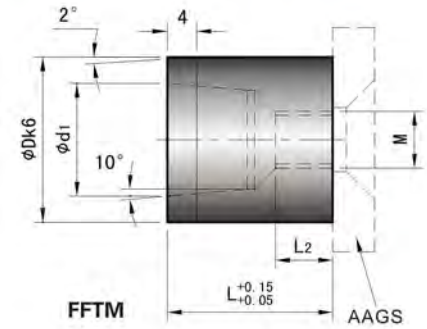
Square Interlocks

MMTM
FFTM

CA/D
2D



MMTM



FFTM

AAGS

Order MMTM-D-L

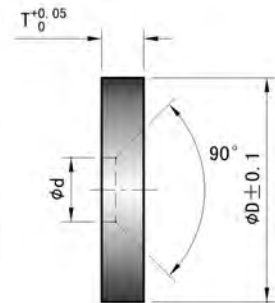
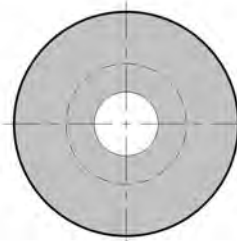
Code	D	L	d1	L1	M	@ ¥/P
MMTM-12-15	12	15	7	7	M5	
MMTM-20-21	20	21	13	11	M6	
MMTM-20-31	20	31				
MMTM-25-21	25	21			M8	
MMTM-25-31	25	31	16	12		
MMTM-25-41		41				
MMTM-32-30	32	30	20	15	M8	
MMTM-32-50	32	50				
MMTM-42-30	42	30	30	17		
MMTM-42-50	42	50				

Order FFTM-D-L

Code	D	L	d1	L2	M	@ ¥/P
FFTM-12-15	12	15	7	12	M5	
FFTM-20-21	20	21	13	20	M6	
FFTM-20-31	20	31				
FFTM-25-21	25	21			M8	
FFTM-25-31	25	31	16	25		
FFTM-25-41		41				
FFTM-32-30	32	30	20	32	M8	
FFTM-32-50	32	50				
FFTM-42-30	42	30	30	42		
FFTM-42-50	42	50				

AAGS

CA/D
2D



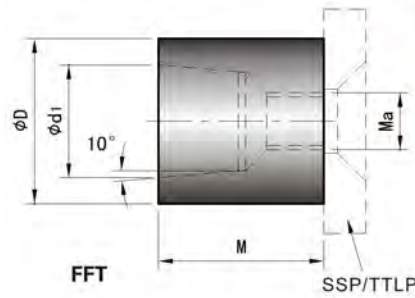
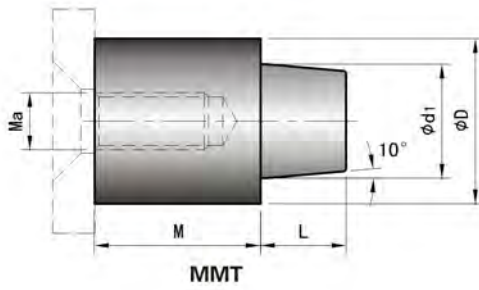
Order AAGS12

Code	Ød	ØD	T _d ^{+0.05}	FOR	@ ¥/P
AAGS12	5.5	16	5	FFT12 MMT12	
AAGS20	6.6	25		FFT20 MMT20	
AAGS25		30		FFT25 MMT25	
AAGS32	9	37	6	FFT32 MMT32	
AAGS42		47		FFT42 MMT42	

AISI
Square Interlocks

MMT
FFT

CAD
2D

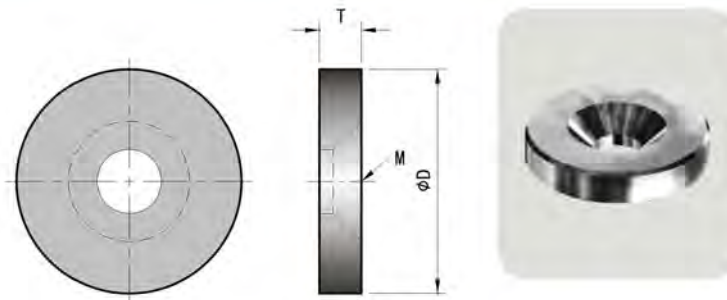


Order MMT-0411

Code	D ⁺ .0000 D ⁻ .0005	d1 ⁺ .000 d1 ⁻ .001	Ma	M ⁺ .000 M ⁻ .005	@ ¥ /P
MMT-0411				11/16	
MMT-0414	1/2	5/16	#10-24	7/8	
MMT-0419				1 3/16	
MMT-0422				1 3/8	
MMT-0611				11/16	
MMT-0614	3/4	1/2		7/8	
MMT-0619				1 3/16	
MMT-0622			1/ 4-20	1 3/8	
MMT-0811				11/16	
MMT-0814	1"	5/8		7/8	
MMT-0819				1 3/16	
MMT-0822				1 3/8	
MMT-1218				1 1/8	
MMT-1222	1 1/2	1"		1 3/8	
MMT-1226				1 5/8	
MMT-1618			5/16-18	1 1/8	
MMT-1622	2"	1 1/2		1 3/8	
MMT-1626				1 5/8	

Order FFT-0411

Code	D ⁺ .0000 D ⁻ .0005	d1 ⁺ .000 d1 ⁻ .001	Ma	M ⁺ .000 M ⁻ .005	@ ¥ /P
FFT-0411				11/16	
FFT-0414	1/2	5/16	#10-24	7/8	
FFT-0419				1 3/16	
FFT-0422				1 3/8	
FFT-0611				11/16	
FFT-0614	3/4	1/2		7/8	
FFT-0619				1 3/16	
FFT-0622			1/ 4-20	1 3/8	
FFT-0811				11/16	
FFT-0814	1"	5/8		7/8	
FFT-0819				1 3/16	
FFT-0822				1 3/8	
FFT-1218				1 1/8	
FFT-1222	1 1/2	1"		1 3/8	
FFT-1226				1 5/8	
FFT-1618			5/16-18	1 1/8	
FFT-1622	2"	1 1/2		1 3/8	
FFT-1626				1 5/8	



SSP

CAD
2D

Order SSP-04

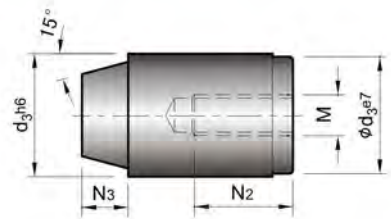
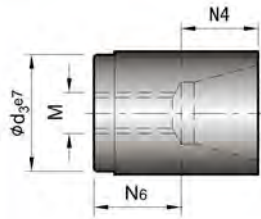
Code	MALE OR FEMALE O.D.	φD	T	M	@ ¥ /P
SSP-04	1/2	11/16		#10-24	
SSP-06	3/4	1"	11/16		
SSP-08	1"	1 3/16		1/ 4-20	
SSP-12	1 1/2	1 11/16			
SSP-16	2"	2 3/16	1/ 4	5/16-18	

DIN

Square Interlocks

ZZ05

2D

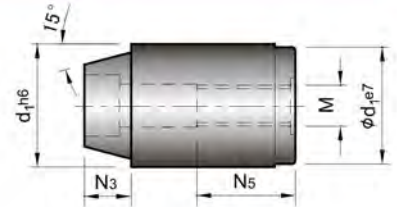
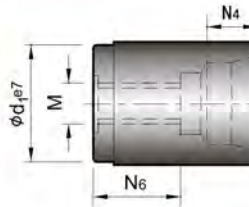


Order ZZ05-12

Code	N4	N3	N2	S1	d3	M	@ ¥ / P
ZZ05-12		5	10		12	M 4	
ZZ05-14	8	7	11	17	14	M 5	
ZZ05-16		10			16		
ZZ05-20		11	15		20		
ZZ05-25	13	10		27	25	M 8	
ZZ05-26		14			26		
ZZ05-30		18		36	30		
ZZ05-32	20				32	M10	
ZZ05-42	25			46	42		

ZZ051

2D

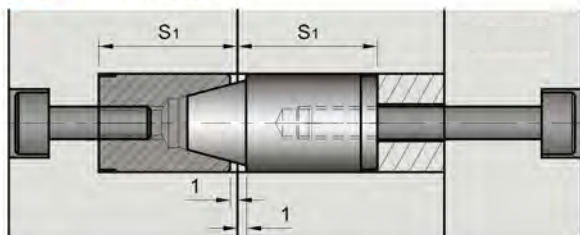


Order ZZ051-12

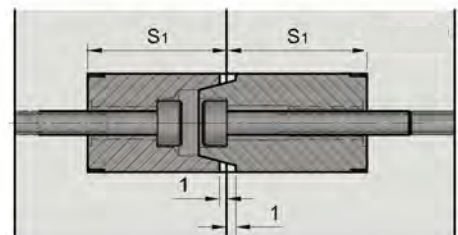
Code	N8	N7	N6	N5	N4	N3	S1	d1	M	Mounting screws	Mounting screws	@ ¥ / P
ZZ051-12	7.5	8	8.5	9.6	5	4.5	17	12	M 4	M3×16	M3×25	
ZZ051-14	8	7.5	6	5.8	12.4	7	6	14	M 5	M4×14	M4×25	
ZZ051-16			10.6		10	9		16				
ZZ051-20	9.5	12		19.7	10	9	27	20	M 8	M6×20	M6×40	
ZZ051-25	11	11	9.2		11	10		25				
ZZ051-26			12.2	25	16	14	36	26				
ZZ051-30		15			16	14		30				
ZZ051-32	13				18	14	36	32	M10	M8×25	M8×55	
ZZ051-42		16	16	27	20	18	46	42		M8×30		



Installation Diagram:



ZZ05



ZZ051

INTEGRITY



Springs Series





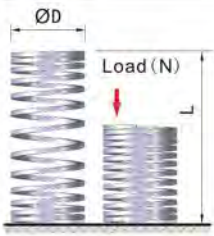
JIS		JIS		JIS		JIS		JIS	
Springs		Springs		Springs		Springs		Springs	
DSWR	P480	DSWS	P484	DSWF	P488	DSWL	P495	DSWM	P498

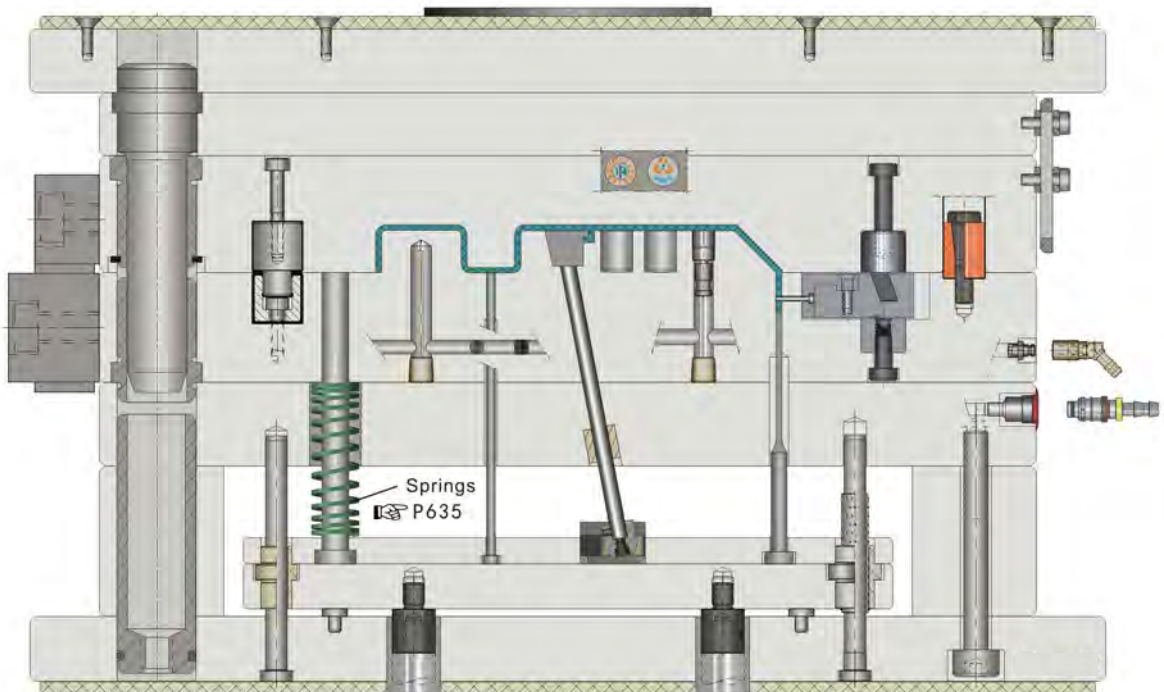


JIS		JIS	
Springs		Springs	
DSWH	P503	DSWB	P508



Products Summary

		JIS	JIS	JIS	JIS	JIS	JIS	JIS	
Type		High deflection coil springs	Middle deflection coil springs	Light load coil springs	Light load coil springs	Middle load coil springs	High load coil springs	Extra heavy load coil springs	
Color		White	Orange	Yellow	Blue	Red	Green	Brown	
Code		DSWR	DSWS	DSWF	DSWL	DSWM	DSWH	DSWB	
Page		P479	P484	P488	P495	P498	P503	P508	
Outer diameter	Min	10.5	10.5	6	6	6	6	6	
	Max	50	52	70	70	70	70	70	
Free length L	Min	15	20	15	15	10	10	10	
	Max	400	300	500	350	350	350	350	
Lifespan: 1000000	Max compression ratio	50%	40%	40%	32%	25.6%	19.2%	16%	
	Load N	Min	78.5	86.3	47.1	62.8	78.5	109.8	141.2
		Max	1323.9	1569.1	3138.1	4785.6	6668.5	10199	14122
Lifespan: 1000000	Max compression ratio	55%	45%	50%	40%	32%	24%	20%	
	Load N	Min	86.3	97.1	58.8	78.5	98.1	137.3	176.5
		Max	1456.3	1765.2	3922.6	5982	8335.6	12749	17652

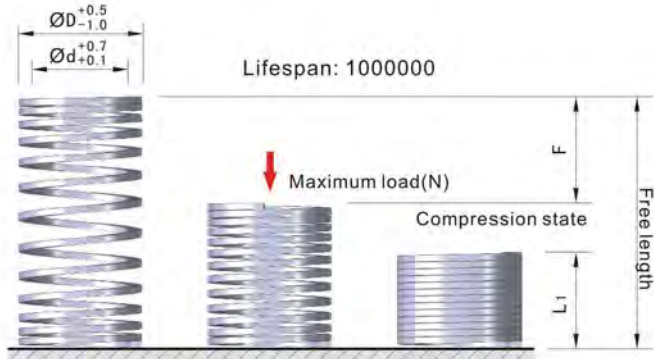


- ✚ Ejector pins series
- ✚ Slide rollers series
- ✚ Latch locks series
- ✚ Pinning gates series
- ✚ Pinning gates Air valves series
- ✚ Ejector series
- ✚ Cooling elements series
- ✚ Locating parts series
- ✚ Springs series
- ✚ Guide pins Guide push series
- ✚ Guide strips Wear plate series
- ✚ Chuck series
- ✚ Mold processors

JIS

High deflection coil springs

DSWR



Maximum load calculate method:

Maximum load=compression×spring constant

$N = F \text{ mm} \times N/\text{mm} \text{ (kgf} = N \times 0.101972)$

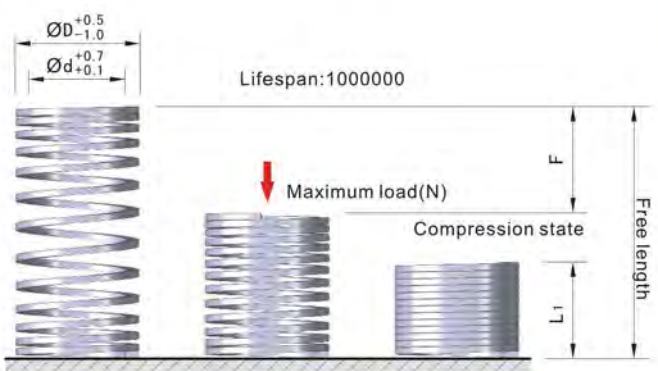
If $L \leq 50$, Tolerance $L \pm 0.5$

If $L \geq 55$, Tolerance $L \pm 1.5\% \times L$

Order DSWR-D-L

D	L	d	Spring Constant N/mm	Solid height(mm)	F=L×50%		@ ¥ /P
					F mm	Load N	
10.5	15	6	10.46	6	7.5	78.5	
	20		7.84	8	10		
	25		6.27	10	12.5		
	30		5.19	12	15		
	35		4.5	14	17.5		
	40		3.92	16	20		
	45		3.53	18	22.5		
	50		3.14	20	25		
	55		2.84	22	27.5		
	60		2.65	24	30		
	65		2.45	26	32.5		
	70		2.25	28	35		
	75		2.06	30	37.5		
	80		1.96	32	40		
12.5	15	7	11.77	6	7.5	88.3	
	20		8.82	8	10		
	25		7.06	10	12.5		
	30		5.88	12	15		
	35		5.04	14	17.5		
	40		4.41	16	20		
	45		3.92	18	22.5		
	50		3.53	20	25		
	55		3.2	22	27.5		
	60		2.94	24	30		
	65		2.71	26	32.5		
	70		2.52	28	35		
	75		2.35	30	37.5		
	80		2.21	32	40		
90	1.96	36	45				
100	1.77	40	50				
14.5	15	8.5	17	6	7.5	127.5	
	20		12.7	8	10		
	25		10.19	10	12.5		
	30		8.53	12	15		
	35		7.25	14	17.5		
	40		6.37	16	20		
	45		5.68	18	22.5		
	50		5.09	20	25		
	55		4.6	22	27.5		
	60		4.21	24	30		

High deflection coil springs



DSWR

Order DSWR-D-L

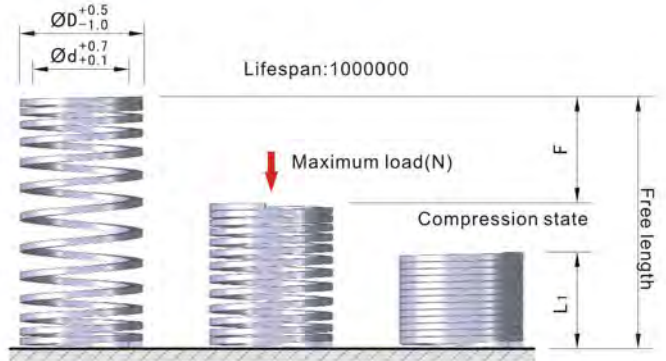
D	L	d	Spring Constant N/mm	Solid height(mm)	F=L×50%		@ ¥ /P
					F mm	Load N	
14.5	65	8.5	3.92	26	32.5	127.5	
	70		3.62	28	35		
	75		3.43	30	37.5		
	80		3.23	32	40		
	90		2.84	36	45		
	100		2.54	40	50		
	125		2.05	50	62.5		
	150		1.7	60	75		
	20		19.61	8	10		
	25		15.69	10	12.5		
17	30	10.5	13.04	12	15	196.1	
	35		11.17	14	17.5		
	40		9.8	16	20		
	45		8.72	18	22.5		
	50		7.84	20	25		
	55		7.15	22	27.5		
	60		6.57	24	30		
	65		6.08	26	32.5		
	70		5.58	28	35		
	75		5.19	30	37.5		
21	80	13.5	4.9	32	40	294.2	
	90		4.31	36	45		
	100		3.92	40	50		
	125		3.13	50	62.5		
	150		2.64	60	75		
	175		2.24	70	87.5		
	25		23.54	10	12.5		
	30		19.61	12	15		
	35		16.76	14	17.5		
	40		14.7	16	20		
26	45	16.5	13.04	18	22.5	392.3	
	50		11.76	20	25		
	55		10.68	22	27.5		
	60		9.8	24	30		
	65		9.02	26	32.5		
	70		8.43	28	35		
	75		7.84	30	37.5		
	80		7.35	32	40		
	90		6.57	36	45		
	100		5.88	40	50		
26	110	16.5	5.39	44	55	392.3	
	120		4.9	48	60		
	125		4.7	50	62.5		
	130		4.51	52	65		
	140		4.21	56	70		
	150		3.92	60	75		
	175		3.36	70	87.5		
	200		2.94	80	100		
	30		26.18	12	15		
	35		22.45	14	17.5		
40	19.61	16	20				
45	17.45	18	22.5				
50	15.69	20	25				
55	14.21	22	27.5				
60	13.04	24	30				
65	12.06	26	32.5				
70	11.17	28	35				
75	10.49	30	37.5				
80	9.8	32	40				
90	8.72	36	45				

- Expander pins series
- Expander sleeves series
- Side rollers series
- Latch locks series
- Pumping gates series
- Data stamps Air valves series
- Expander series
- Cooling elements series
- Locating parts series
- Springs series**
- Guide pins Guide bush
- Guide strips Wear plate series
- Chuck series
- Mold accessories

JIS

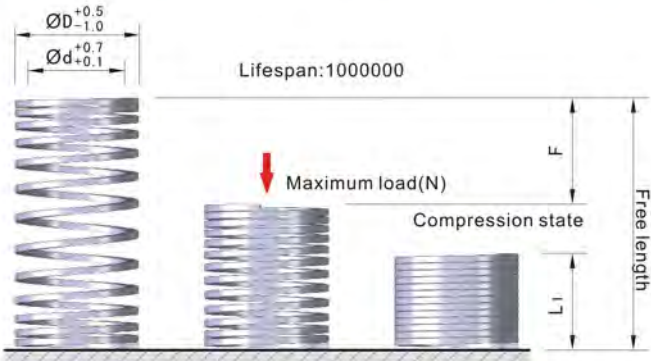
High deflection coil springs

DSWR



Order DSWR-D-L

D	L	d	Spring Constant N/mm	Solid height(mm)	F=L*50%		@ ¥/P
					F mm	Load N	
26	100	16.5	7.84	40	50	392.3	
	110		7.15	44	55		
	120		6.57	48	60		
	125		6.27	50	62.5		
	130		6.08	52	65		
	140		5.58	56	70		
	150		5.19	60	75		
	175		4.51	70	87.5		
	200		3.92	80	100		
	225		3.49	90	112.5		
	250		3.14	100	125		
	31		35	21	28.02		
40		24.51	16		20		
45		21.77	18		22.5		
50		19.61	20		25		
55		17.83	22		27.5		
60		16.37	24		30		
65		15.09	26		32.5		
70		14.02	28		35		
75		13.08	30		37.5		
80		12.25	32		40		
90		10.88	36		45		
100		9.8	40		50		
110	8.92	44	55				
120	8.13	48	60				
125	7.84	50	62.5				
130	7.55	52	65				
140	6.96	56	70				
150	6.57	60	75				
160	6.17	64	80				
170	5.78	68	85				
175	5.58	70	87.5				
180	5.49	72	90				
190	5.19	76	95				
200	4.9	80	100				
250	3.92	100	125				
300	3.23	120	150				
37	40	26	29.41	16	20	588.4	
	45		26.18	18	22.5		
	50		23.53	20	25		
	55		21.4	22	27.5		
	60		19.61	24	30		
	65		18.1	26	32.5		
	70		16.76	28	35		
	75		15.69	30	37.5		
	80		14.7	32	40		
	90		13.04	36	45		
	100		11.76	40	50		
	110		10.68	44	55		
120	9.8	48	60				
125	9.41	50	62.5				
130	9.02	52	65				
140	8.43	56	70				
150	7.84	60	75				
160	7.35	64	80				
170	6.96	68	85				
175	6.76	70	87.5				
180	6.57	72	90				
190	6.17	76	95				
200	5.88	80	100				



Order DSWR-D-L

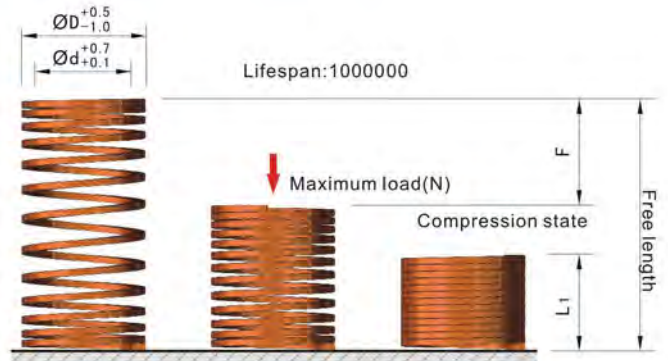
D	L	d	Spring Constant N/mm	Solid height(mm)	F=L×50%		@ ¥ /P
					F mm	Load N	
37	250	26	4.7	100	125	588.4	
	300		3.92	120	150		
	50		33.34	20	25		
	60		27.79	24	30		
	70		23.82	28	35		
	80		20.84	32	40		
	90		18.52	36	45		
	100		16.67	40	50		
	110		15.16	44	55		
	120		13.89	48	60		
43	130	31	12.82	52	65	833.6	
	140		11.91	56	70		
	150		11.11	60	75		
	160		10.42	64	80		
	170		9.81	68	85		
	180		9.26	72	90		
	190		8.77	76	95		
	200		8.34	80	100		
	225		7.41	90	112.5		
	250		6.67	100	125		
46	275	33	6.06	110	137.5	1078.7	
	300		5.56	120	150		
	50		43.14	20	25		
	60		35.99	24	30		
	70		30.79	28	35		
	80		26.96	32	40		
	90		23.92	36	45		
	100		21.57	40	50		
	110		19.61	44	55		
	120		17.94	48	60		
50	125	36	17.25	50	62.5	1323.9	
	130		15.57	52	65		
	140		15.39	56	70		
	150		14.41	60	75		
	175		12.35	70	87.5		
	200		10.78	80	100		
	225		9.61	90	112.5		
	250		8.62	100	125		
	275		7.84	110	137.5		
	300		7.15	120	150		
50	50	36	52.96	20	25	1323.9	
	60		44.13	24	30		
	70		37.83	28	35		
	80		33.1	32	40		
	90		29.42	36	45		
	100		26.48	40	50		
	110		24.07	44	55		
	120		22.06	48	60		
	130		20.37	52	65		
	140		18.91	56	70		
50	150	36	17.65	60	75	1323.9	
	175		15.13	70	87.5		
	200		13.24	80	100		
	225		11.77	90	112.5		
	250		10.59	100	125		
	275		9.63	110	137.5		
	300		8.83	120	150		
	350		7.57	140	175		
	400		6.62	160	200		

- Excitor pins series
- Excitor sleeves series
- Side rollers series
- Latch locks series
- Packing gates series
- Data stamps Air valves series
- Excitor series
- Cooling elements series
- Locating parts series
- Springs series
- Guide pins Guide bush series
- Guide strips V-belt plate series
- Chuck series
- Mold accessories

JIS

Middle deflection coil springs

DSWS

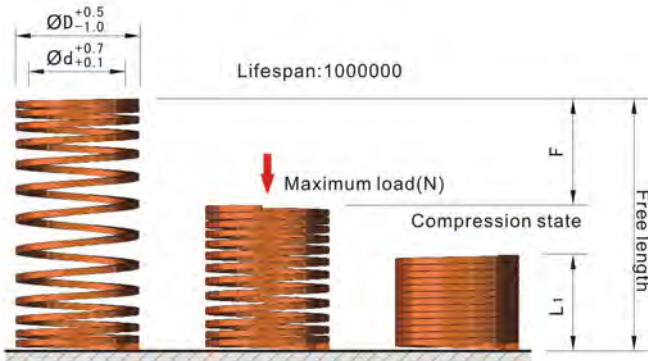


Maximum load calculate method:
 Maximum load=compression*spring constant
 $N = F \text{ mm} \times N/\text{mm}$ (kgf=N*0.101972)
 Maximum load Deviation:+20% to -10%

Order DSWS-D-L

D	L	d	Spring Constant N/mm	Solid height(mm)	F=L*50%		@ ¥/P
					F mm	Load N	
10.5	20	5.5	10.9	10	8	86.3	
	25		8.72	12.5	10		
	30		7.26	15	12		
	35		6.23	17.5	14		
	40		5.45	20	16		
	45		4.84	22.5	18		
	50		4.36	25	20		
	55		3.96	27.5	22		
	60		3.63	30	24		
	65		3.35	32.5	26		
12.5	70	6.5	3.11	35	28	121.6	
	75		2.91	37.5	30		
	80		2.72	40	32		
	20		15.25	10	8		
	25		12.2	12.5	10		
	30		10.17	15	12		
	35		8.72	17.5	14		
	40		7.63	20	16		
	45		6.78	22.5	18		
	50		6.1	25	20		
14.5	55	8.5	5.55	27.5	22	196.1	
	60		5.08	30	24		
	65		4.69	32.5	26		
	70		4.36	35	28		
	75		4.07	37.5	30		
	80		3.81	40	32		
	20		24.51	10	8		
	25		19.61	12.5	10		
	30		16.37	15	12		
	35		14.02	17.5	14		
40	12.25	20	16				
45	10.88	22.5	18				
50	9.8	25	20				
55	8.92	27.5	22				
60	8.13	30	24				
65	7.55	32.5	26				
70	6.96	35	28				
75	6.57	37.5	30				
80	6.17	40	32				
90	5.49	45	36				

Middle deflection coil springs



Order DSWS-D-L

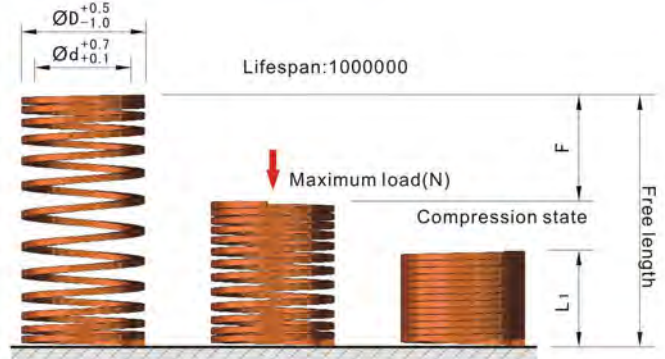
D	L	d	Spring Constant N/mm	Solid height(mm)	F=L×50%		@ ¥ /P
					F mm	Load N	
14.5	100	8.5	4.9	50	40	196.1	
	125		3.92	62.5	50		
	150		3.27	75	60		
	25		29.41	12.5	10		
	30		24.51	15	12		
17	35	10.5	20.98	17.5	14	294.2	
	40		18.43	20	16		
	45		16.37	22.5	18		
	50		14.7	25	20		
	55		13.33	27.5	22		
	60		12.25	30	24		
	65		11.27	32.5	26		
	70		10.49	35	28		
	75		9.8	37.5	30		
	80		9.21	40	32		
21	90	13.5	8.13	45	36	421.7	
	100		7.35	50	40		
	125		5.88	62.5	50		
	150		4.9	75	60		
	30		35.1	15	12		
	35		30.1	17.5	14		
	40		26.37	20	16		
	45		23.43	22.5	18		
	50		21.08	25	20		
	55		19.12	27.5	22		
	60		17.55	30	24		
	65		16.18	32.5	26		
	70		15.1	35	28		
	75		14.02	37.5	30		
	80		13.14	40	32		
90	11.66	45	36				
100	10.59	50	40				
110	9.61	55	44				
120	8.82	60	48				
125	8.43	62.5	50				
130	8.13	65	52				
140	7.55	70	56				
150	7.06	75	60				
175	6.02	87.5	70				
200	5.27	100	80				
26	30	16.5	47.36	15	12	568.8	
	35		40.59	17.5	14		
	40		35.59	20	16		
	45		31.57	22.5	18		
	50		28.43	25	20		
	55		25.88	27.5	22		
	60		23.63	30	24		
	65		21.86	32.5	26		
	70		20.29	35	28		
	75		18.92	37.5	30		
	80		17.75	40	32		
	90		15.78	45	36		
	100		14.21	50	40		
	110		12.94	55	44		
	120		11.86	60	48		
125	11.37	62.5	50				
130	10.98	65	52				
140	10.19	70	56				
150	9.51	75	60				
175	8.13	87.5	70				

- Excitor pins series
- Excitor sleeves series
- Side rollers series
- Latch locks series
- Pouring gates series
- Data stamps series
- Excitor series
- Cooling elements series
- Locating parts series
- Springs series
- Guide pins series
- Guide pins series
- Guide pins series
- Guide pins series
- Chuck series
- Mold accessories



Middle deflection coil springs

DSWS



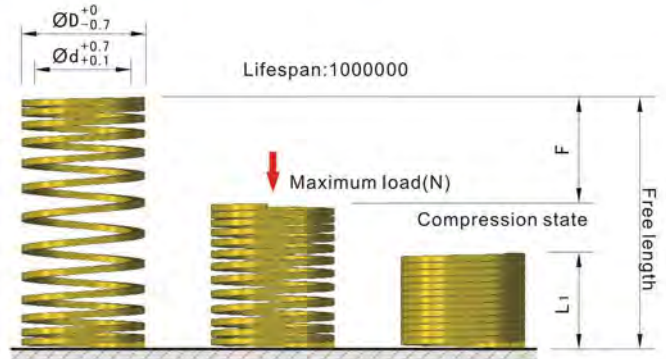
Order DSWS-D-L

D	L	d	Spring Constant N/mm	Solid height(mm)	F=L*50%		@ ¥/P
					F mm	Load N	
26	200	16.5	7.15	100	80	568.8	
	225		6.32	112.5	90		
	250		5.69	125	100		
	40		49.03	20	16		
	45		43.54	22.5	18		
	50		39.22	25	20		
	55		35.66	27.5	22		
	60		32.65	30	24		
	65		30.17	32.5	26		
	70		28.04	35	28		
31	75	26.15	37.5	30	784.5		
	80	24.51	40	32			
	90	21.77	45	36			
	100	19.61	50	40			
	110	17.84	55	44			
	120	16.37	60	48			
	125	15.69	62.5	50			
	130	15.1	65	52			
	140	14.02	70	56			
	150	13.04	75	60			
37	160	12.25	80	64	833.6		
	170	11.57	85	68			
	175	11.17	87.5	70			
	180	10.88	90	72			
	190	10.29	95	76			
	200	9.8	100	80			
	250	7.84	125	100			
	300	6.57	150	120			
	40	52.07	20	16			
	45	46.28	22.5	18			
50	41.67	25	20				
55	37.89	27.5	22				
60	34.71	30	24				
65	32.06	32.5	26				
70	29.81	35	28				
75	27.79	37.5	30				
80	26.08	40	32				
90	23.14	45	36				
100	20.88	50	40				
110	18.92	55	44				
120	17.35	60	48				
125	16.67	62.5	50				
130	15.98	65	52				
140	14.9	70	56				
150	13.92	75	60				
160	13.04	80	64				
170	12.25	85	68				
175	11.86	87.5	70				
180	11.57	90	72				
190	10.98	95	76				
200	10.39	100	80				
250	8.33	125	100				
300	6.96	150	120				
50	50.01	25	20				
60	41.68	30	24				
70	35.72	35	28				
80	31.26	40	32				
90	27.79	45	36				
100	25.01	50	40				
110	22.73	55	44				
44.5		31			1000.3		

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Light Load Coil Springs

DSWF



Maximum load calculate method:

Maximum load=compression×spring constant

$$N = F \text{ mm} \times N/\text{mm} \text{ (kgf} = N \times 0.101972)$$

Maximum load Deviation: ±10%

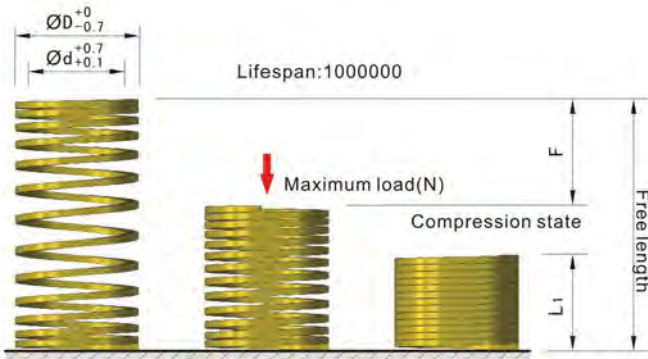
If $D \leq 70$, Tolerance $D: \begin{matrix} +0 \\ -1 \end{matrix}$

If $D \leq 50$, Tolerance $L \pm 0.5$

If $D \geq 55$, Tolerance $L \pm 1\% \times L$

Order DSWF-D-L

D	L	d	Spring Constant N/mm	Solid height (mm)	F=L×40%		F=L×45%		F=L×50%		@ ¥/P
					F mm	Load N	F mm	Load N	F mm	Load N	
6	15	3	7.85	7.1	6	47.1	6.8	53	7.5	58.5	
	20		5.88	9.5	8		9		10		
	25		4.71	11.9	10		11.3		12.5		
	30		3.92	14.2	12		13.5		15		
	35		3.33	16.6	14		15.8		17.5		
	40		2.94	19	16		18		20		
8	15	4	10.8	6.8	6	58.8	6.8	68.6	7.5	78.5	
	20		7.8	9	8		9		10		
	25		6.28	11.3	10		11.2		12.5		
	30		5.2	13.5	12		13.5		15		
	35		4.51	15.8	14		15.7		17.5		
	40		3.92	18	16		18		20		
	45		3.53	20.3	18		20.2		22.5		
	50		3.14	22.5	20		22.5		25		
	55		2.84	24.8	22		24.7		27.5		
	60		2.26	27	24		27		30		
10	15	5	13.1	6.8	6	78.5	6.8	88.3	7.5	98.1	
	20		9.8	9	8		9		10		
	25		7.8	11.3	10		11.2		12.5		
	30		6.9	13.5	12		13.5		15		
	35		5.9	15.8	14		15.7		17.5		
	40		4.9	18	16		18		20		
	45			20.3	18		20.2		22.5		
	50		3.9	22.5	20		22.5		25		
	55			24.8	22		24.7		27.5		
	60			27	24		27		30		
12	15	6	2.9	31.5	28	107.9	31.5	127.5	35	137.3	
	20			33.8	30		33.7		37.5		
	25			36	32		36		40		
	30		2.2	40.5	36		40.5		40.5		
	35		13.7	9	8		9		10		
	40		10.8	11.3	10		11.2		12.5		
	45		8.8	13.5	12		13.5		15		
	50		7.8	15.8	14		15.7		17.5		
	55			18	16		18		20		
	60		6.9								



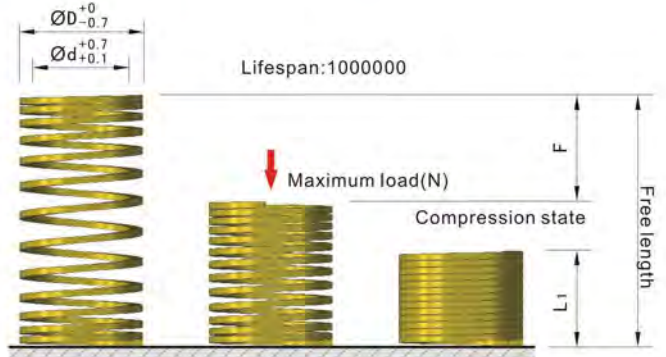
Order DSWF-D-L

D	L	d	Spring Constant N/mm	Solid height (mm)	F=L×40%		F=L×45%		F=L×50%		@ ¥ /P
					F mm	Load N	F mm	Load N	F mm	Load N	
12	45	6	5.9	20.3	18	107.9	20.2	127.5	22.5	137.3	
	50			22.5	20						22.5
	55		4.9	24.8	22		24.7		27.5		
	60			27	24		27		30		
	65		3.9	29.3	26		29.2		32.5		
	70			31.5	28		31.5		35		
	75		33.8	30	33.7		37.5				
	80		2.9	36	32		36		40		
	90		3.1	40.5	36		40.5		45		
	25		7	13.7	11.3		10		11.2		12.5
30	11.8	13.5		12	13.5	15					
35	9.8	15.8		14	15.7	17.5					
40	8.8	18		16	18	20					
45	7.8	20.3		18	20.2	22.5					
50	6.9	22.5		20	22.5	25					
55	5.9	24.8		22	24.7	27.5					
60		27		24	27	30					
65	29.3	26		29.2	32.5						
70	31.5	28		31.5	35						
75	33.8	30	33.7	37.5							
80	36	32	36	40							
90	40.5	36	40.5	45							
100	45	40	45	50							
14	25	8	16.7	11.3	10	11.2	12.5				
	30		13.7	13.5	12	13.5	15				
	35		11.8	15.8	14	15.7	17.5				
	40		10.8	18	16	18	20				
	45		8.8	20.3	18	20.2	22.5				
	50		7.8	22.5	20	22.5	25				
	55		6.9	24.8	22	24.7	27.5				
	60			27	24	27	30				
	65		29.3	26	29.2	32.5					
	70		31.5	28	31.5	35					
75	33.8	30	33.7	37.5							
80	36	32	36	40							
90	40.5	36	40.5	45							
100	45	40	45	50							
16	25	9	16.7	11.3	10	11.2	12.5				
	30		13.7	13.5	12	13.5	15				
	35		11.8	15.8	14	15.7	17.5				
	40		10.8	18	16	18	20				
	45		8.8	20.3	18	20.2	22.5				
	50		7.8	22.5	20	22.5	25				
	55		6.9	24.8	22	24.7	27.5				
	60			27	24	27	30				
	65		29.3	26	29.2	32.5					
	70		31.5	28	31.5	35					
75	33.8	30	33.7	37.5							
80	36	32	36	40							
90	40.5	36	40.5	45							
100	45	40	45	50							
18	25	10	16.7	11.3	10	11.2	12.5				
	30		13.7	13.5	12	13.5	15				
	35		11.8	15.8	14	15.7	17.5				
	40		10.8	18	16	18	20				
	45		8.8	20.3	18	20.2	22.5				
	50		7.8	22.5	20	22.5	25				
	55		6.9	24.8	22	24.7	27.5				
	60			27	24	27	30				
	65		29.3	26	29.2	32.5					
	70		31.5	28	31.5	35					
75	33.8	30	33.7	37.5							
80	36	32	36	40							
90	40.5	36	40.5	45							
100	45	40	45	50							
20	25	11	16.7	11.3	10	11.2	12.5				
	30		13.7	13.5	12	13.5	15				
	35		11.8	15.8	14	15.7	17.5				
	40		10.8	18	16	18	20				
	45		8.8	20.3	18	20.2	22.5				
	50		7.8	22.5	20	22.5	25				
	55		6.9	24.8	22	24.7	27.5				
	60			27	24	27	30				
	65		29.3	26	29.2	32.5					
	70		31.5	28	31.5	35					
75	33.8	30	33.7	37.5							
80	36	32	36	40							
90	40.5	36	40.5	45							
100	45	40	45	50							
125	3.9	56.3	50	56.3	62.5						

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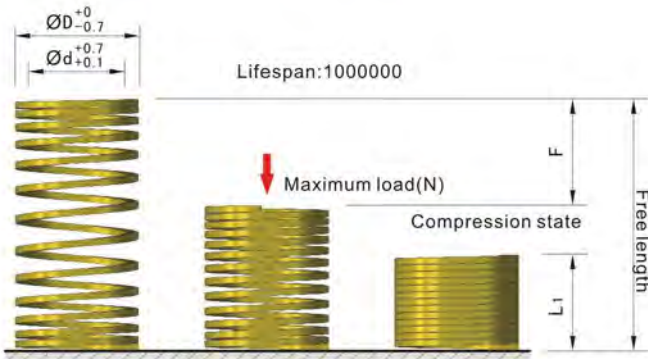
Light Load Coil Springs

DSWF



Order DSWF-D-L

D	L	d	Spring Constant N/mm	Solid height (mm)	F=L×40%		F=L×45%		F=L×50%		@ ¥ /P		
					Load N	F mm	Load N	F mm	Load N	F mm			
20	55	11	11.8	24.8	255	24.7	27.5	284.4	313.8				
	60		10.8	27							27	30	
	65		9.8	29.3							26	29.2	32.5
	70		8.8	31.5							28	31.5	35
	75		8.8	33.8							30	33.7	37.5
	80		7.8	36							32	36	40
	90		6.9	40.5							36	40.5	45
	100		5.9	45							40	45	50
	125		4.9	56.3							50	56.2	62.5
	150		3.9	67.5							60	67.5	75
22	25	11	31.4	11.3	313.8	11.2	12.5	353	392.3				
	30		26.5	13.5							12	13.5	15
	35		22.6	15.8							14	15.7	17.5
	40		19.6	18							16	18	20
	45		17.7	20.3							18	20.2	22.5
	50		15.7	22.5							20	22.5	25
	55		14.7	24.8							22	24.7	27.5
	60		12.7	27							24	27	30
	65		11.8	29.3							26	29.2	32.5
	70		10.8	31.5							28	31.5	35
25	75	13.5	10.8	33.8	392.3	33.7	37.5	441.3	490.3				
	80		9.8	36							32	36	40
	90		8.8	40.5							36	40.5	45
	100		7.8	45							40	45	50
	125		5.9	56.3							50	56.2	62.5
	150		4.9	67.5							60	67.5	75
	25		39.2	11.3							10	11.2	12.5
	30		32.4	13.5							12	13.5	15
	35		28.4	15.8							14	15.7	17.5
	40		24.5	18							16	18	20
27	45	13.5	21.6	20.3	470.7	20.2	22.5	529.6	588.4				
	50		19.6	22.5							20	22.5	25
	55		17.7	24.8							22	24.7	27.5
	60		16.7	27							24	27	30
	65		14.7	29.3							26	29.2	32.5
	70		13.7	31.5							28	31.5	35
	75		12.7	33.8							30	33.7	37.5
	80		11.8	36							32	36	40
	90		10.8	40.5							36	40.5	45
	100		9.8	45							40	45	50
27	125	13.5	8.8	56.3	470.7	56.2	62.5	529.6	588.4				
	150		7.8	67.5							60	67.5	75
	175		5.9	78.8							70	78.7	87.5
	200		4.9	90							80	90	100
	25		47.1	11.3							10	11.2	12.5
	30		39.2	13.5							12	13.5	15
	35		33.3	15.8							14	15.7	17.5
	40		29.4	18							16	18	20
	45		26.5	20.3							18	20.2	22.5
	50		23.5	22.5							20	22.5	25



Order DSWF-D-L

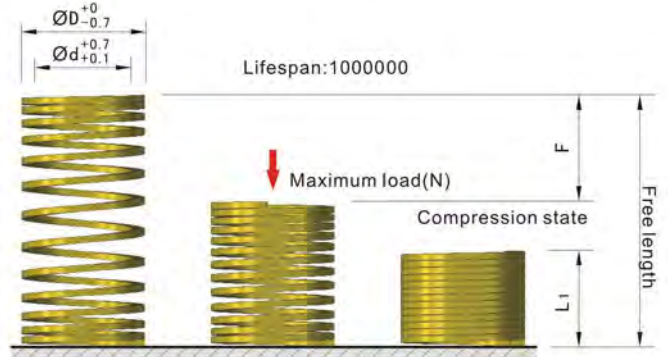
D	L	d	Spring Constant N/mm	Solid height (mm)	F=L×40%		F=L×45%		F=L×50%		@ ¥ /P
					F mm	Load N	F mm	Load N	F mm	Load N	
27	150	13.5	7.8	67.5	60		67.5		75		
	175		6.9	78.8	70	470.7	78.7	529.6	87.5	588.4	
	200		5.9	90	80		90		100		
	25		56.9	11.3	10		11.2		12.5		
	30		47.1	13.5	12		13.5		15		
	35		40.2	15.8	14		15.7		17.5		
	40		35.3	18	16		18		20		
	45		31.4	20.3	18		20.2		22.5		
	50		28.4	22.5	20		22.5		25		
	55		25.5	24.8	22		24.7		27.5		
30	60	23.5	27	24		27		30			
	65	21.6	29.3	26	568.8	29.2	637.4	32.5	706.1		
	70	20.6	31.5	28		31.5		35			
	75	18.6	33.8	30		33.7		37.5			
	80	17.7	36	32		36		40			
	90	15.7	40.5	36		40.5		45			
	100	13.7	45	40		45		50			
	125	11.8	56.3	50		56.2		62.5			
	150	9.8	67.5	60		67.5		75			
	175	7.8	78.8	70		78.7		87.5			
35	200	6.9	90	80		90		100			
	40	48.1	18	16		18		20			
	45	42.2	20.3	18		20.2		22.5			
	50	38.2	22.5	20		22.5		25			
	55	34.3	24.8	22		24.7		27.5			
	60	32.3	27	24		27		30			
	65	29.4	29.3	26		29.2		32.5			
	70	27.5	31.5	28		31.5		35			
	75	25.5	33.8	30	764.9	33.7	863	37.5	961.1		
	80	24.5	36	32		36		40			
40	90	21.6	40.5	36		40.5		45			
	100	19.6	45	40		45		50			
	125	14.7	56.3	50		56.2		62.5			
	150	12.7	67.5	60		67.5		75			
	175	10.8	78.8	70		78.7		87.5			
	200	9.8	90	80		90		100			
	40	62.8	18	16		18		20			
	45	55.6	21.3	18		20.2		22.5			
	50	50	22.5	20		22.5		25			
	55	45.5	26.1	22		24.8		27.5			
50	60	42.2	27	24		27		30			
	65	38.5	30.8	26		29.3		32.5			
	70	36.3	31.5	28		31.5		35			
	75	33.3	35.6	30	1000.3	33.8	1127.8	37.5	1255.3		
	80	31.4	36	32		36		40			
	90	27.5	40.5	36		40.5		45			
	100	25.5	45	40		45		50			
	125	19.6	56.3	50		56.2		62.5			
	150	16.7	67.5	60		67.5		75			
	175	14.7	78.8	70		78.7		87.5			
50	200	12.4	90	80		90		100			
	225	11.2	101	90		101.3		112.5			
	250	9.8	112.5	100		112.5		125			
	275	9.1	124	110		123.8		137.5			
	300	8.3	142.2	120		135		150			
	50	78.5	22.5	20		22.5		25			
	55	71.3	24.8	22	1569.1	24.8	1765.2	27.5	1961.3		
	60	65.7	27	24		27		30			
	65	60.3	29.3	26		29.3		32.5			

- Expander pins series
- Side rollers series
- Latch locks series
- Pumping gates series
- Data stamps Anvil series
- Expander series
- Cooling elements series
- Locating parts series
- Springs series
- Guide pins Guide bush
- Guide strips V-belt plate series
- Chuck series
- Mold accessories

JIS

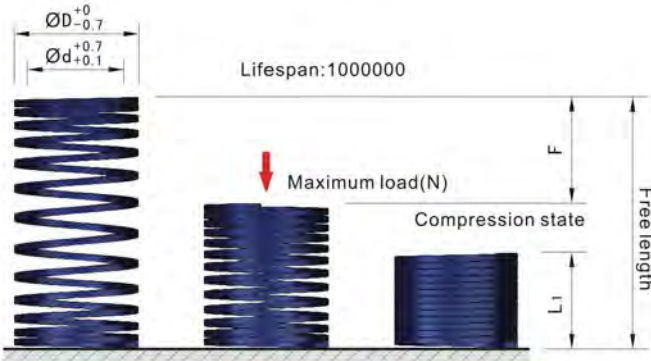
Light Load Coil Springs

DSWF



Order DSWF-D-L

D	L	d	Spring Constant N/mm	Solid height (mm)	F=L×40%		F=L×45%		F=L×50%		@ ¥ /P
					Load N	F mm	Load N	F mm	Load N	F mm	
50	70	27.5	11.8	31.5	28	31.5	35	1569.1	1765.2	1961.3	
	75		10.8	33.8	30	33.8	37.5				
	80		9.8	36	32	36	40				
	90		8.8	40.5	36	40.5	45				
	100		8.8	45	40	45	50				
	125		7.8	56.3	50	56.2	62.5				
	150		6.9	67.5	60	67.5	75				
	175		5.9	78.8	70	78.7	87.5				
	200		4.9	90	80	90	100				
	225		3.9	101	90	101.3	112.5				
	250		3.1	112.5	100	112.5	125				
	275		2.6	124	110	123.8	137.5				
	300		2.2	135	120	135	150				
	350		1.9	165.9	140	157.5	175				
	400		1.7	189.6	160	180	200				
450	1.5	213.3	180	202.5	225						
500	1.4	237	200	225	250						
60	60	33	12.7	27	24	27	30	2255.5	2539.9	2824.3	
	70		11.8	31.5	28	31.5	35				
	80		10.8	36	32	36	40				
	90		9.8	40.5	36	40.5	45				
	100		9.8	45	40	45	50				
	125		8.8	56.3	50	56.2	62.5				
	150		7.8	67.5	60	67.5	75				
	175		5.9	78.8	70	78.7	87.5				
	200		4.9	90	80	90	100				
	250		3.9	112.5	100	112.5	125				
	300		3.2	135	120	135	150				
	350		2.8	165.9	140	157.5	175				
	400		2.4	189.6	160	180	200				
	450		2.1	213.3	180	202.5	225				
	500		1.9	237	200	225	250				
70	70	38.5	17.7	33.2	28	31.5	35	3138.1	3530.4	3922.6	
	80		16.7	37.9	32	36	40				
	90		14.7	42.7	36	40	45				
	100		13.7	47.4	40	45	50				
	125		12.7	59.3	50	56.2	62.5				
	150		11.8	71.1	60	67.5	75				
	175		10.8	83	70	78.7	87.5				
	200		9.8	94.8	80	90	100				
	250		8.8	118.5	100	112.5	125				
	300		7.8	142.2	120	135	150				
	350		5.9	165.9	140	157.5	175				



Maximum load calculate method:
 Maximum load=compression×spring constant
 $N = F \text{ mm} \times N/\text{mm} \text{ (kgf} = N \times 0.101972)$
 Maximum load Deviation: $\pm 10\%$
 If $D = 70$, Tolerance $D: \begin{matrix} +0 \\ -1 \end{matrix}$
 If $D \leq 50$, Tolerance $L \pm 0.5$
 If $D \geq 55$, Tolerance $L \pm 1\% \times L$

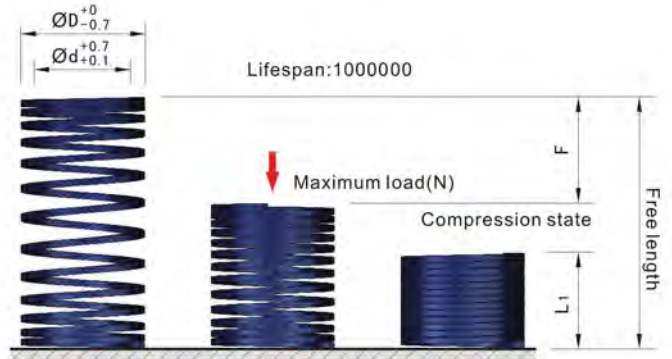
Order DSWL-D-L

D	L	d	Spring Constant N/mm	Solid height (mm)	F=L×40%		F=L×45%		F=L×50%		@ ¥/P
					F mm	Load N	F mm	Load N	F mm	Load N	
6	15	3	13.04	8.6	4.8	62.8	5.4	70.6	6	78.5	
	20		9.81	11.5	6.4		7.2		8		
	25		7.85	14.4	8		9		10		
	30		6.57	17.2	9.6		10.8		12		
	35		5.59	20.1	11.2		12.6		14		
	40		4.9	23	12.8		14.4		16		
8	15	4	16.7	8.1	4.8	78.5	5.4	88.3	6	98.1	
	20		12.7	10.8	6.4		7.2		8		
	25		9.8	13.5	8		9		10		
	30		7.8	16.2	9.6		10.8		12		
	35		6.9	18.9	11.2		12.6		14		
	40		5.9	21.6	12.8		14.4		16		
	45		4.9	24.3	14.4		16.2		18		
	50		3.9	27	16		18		20		
	55		3.9	29.7	17.6		19.8		22		
	60		3.77	32.4	19.2		21.6		24		
10	65	5	3.77	37.3	20.8	107.9	23.4	127.5	26	137.3	
	70		3.5	40.2	22.4		25.2		28		
	75		3.3	43.1	24		27		30		
	80		3.1	45.9	25.6		28.8		32		
	15		22.9	8.1	4.8		5.4		6		
	20		17.7	10.8	6.4		7.2		8		
	25		13.7	13.5	8		9		10		
	30		11.8	16.2	9.6		10.8		12		
	35		9.8	18.9	11.2		12.6		14		
	40		8.8	21.6	12.8		14.4		16		
12	45	6	7.8	24.3	14.4	166.7	16.2	186.3	18	205.9	
	50		6.8	27	16		18		20		
	55		5.9	29.7	17.6		19.8		22		
	60		5.9	32.4	19.2		21.6		24		
	65		4.9	35.1	20.8		23.4		26		
	70		4.9	37.8	22.4		25.2		28		
	75		4.9	40.5	24		27		30		
	80		3.9	43.2	25.6		28.8		32		
	90		3.8	48.6	28.8		32.4		36		
	20		25.5	6.4	6.4		7.2		8		
25	20.6	8	8	9	10						
30	17.7	9.6	9.6	10.8	12						
35	14.7	11.2	11.2	12.6	14						
40	12.7	12.8	12.8	14.4	16						

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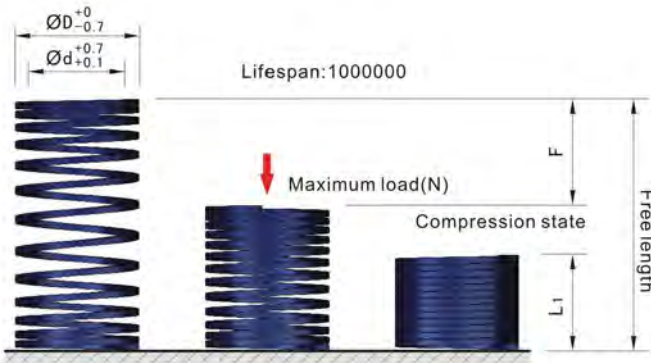
Light Load Coil Springs

DSWL



Order DSWL-D-L

D	L	d	Spring Constant N/mm	Solid height (mm)	F=L×40%		F=L×45%		F=L×50%		@ ¥/P
					F mm	Load N	F mm	Load N	F mm	Load N	
12	45	6	11.8	24.3	14.4	16.2	18	18	20	205.9	
	50		10.8	27	16	18	20	22			
	55		9.8	29.7	17.6	19.8	24	26			
	60		8.8	32.4	19.2	21.6	26	28			
	65		7.8	35.1	20.8	23.4	28	30			
	70		6.8	37.8	22.4	25.2	30	32			
	75		5.7	40.5	24	27	32	36			
	80		27.5	43.2	25.6	28.8	36	40			
	90		22.6	48.6	28.8	32.4	40	45			
	100		19.6	54	32	36	45	50			
14	25	7	13.5	8	9	10.8	12	14	274.6		
	30		12.7	9.6	10.8	12	14				
	35		11.2	10.8	12.6	14	16				
	40		10.8	12.8	14.4	16	18				
	45		9.6	14.4	16.2	18	20				
	50		8.8	16	18	20	22				
	55		7.8	17.6	19.8	22	24				
	60		6.8	19.2	21.6	24	26				
	65		5.7	20.8	23.4	26	28				
	70		4.8	22.4	25.2	28	30				
16	75	8	40.5	24	27	30	32	343.2			
	80		37.8	25.6	28.8	32	36				
	90		35.1	28.8	32.4	36	40				
	100		32.4	32	36	40	45				
	125		24.3	40	45	50	55				
	150		16.2	50	55	60	65				
	175		11.2	60	65	70	75				
	200		8.8	70	75	80	85				
	225		6.8	80	85	90	95				
	250		5.7	90	95	100	105				
18	30	9	16.2	9.6	10.8	12	14	421.7			
	35		15.7	11.2	12.6	14	16				
	40		14.4	12.8	14.4	16	18				
	45		13.5	14.4	16.2	18	20				
	50		12.7	16	18	20	22				
	55		11.2	17.6	19.8	22	24				
	60		10.8	19.2	21.6	24	26				
	65		9.6	20.8	23.4	26	28				
	70		8.8	22.4	25.2	28	30				
	75		8	24	27	30	32				
20	80	10	43.2	25.6	28.8	32	36	529.6			
	90		40.5	28.8	32.4	36	40				
	100		37.8	32	36	40	45				
	110		35.1	40	45	50	55				
	120		32.4	50	55	60	65				
	130		29.7	60	65	70	75				
	140		27	70	75	80	85				
	150		24.3	80	85	90	95				
	160		21.6	90	95	100	105				
	170		18.9	100	105	110	115				



Order DSWL-D-L

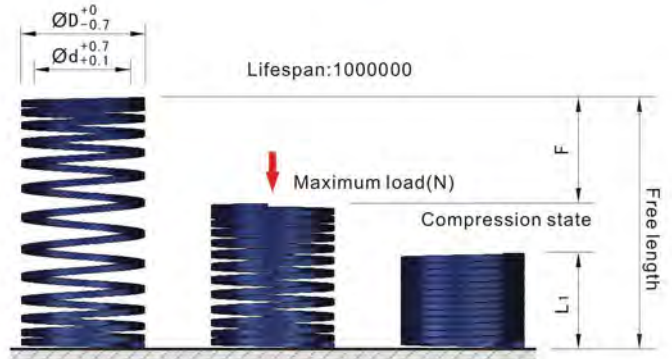
D	L	d	Spring Constant N/mm	Solid height (mm)	F=L×40%		F=L×45%		F=L×50%		@ ¥ /P
					F mm	Load N	F mm	Load N	F mm	Load N	
20	55	10	23.5	29.7	17.6	421.7	19.8	470.7	22	529.6	
	60		21.6	32.4	19.2		24				
	65		20.6	35.1	20.8		23.4		26		
	70		18.6	37.8	22.4		25.2		28		
	75		17.7	40.5	24		27		30		
	80		16.7	43.2	25.6		28.8		32		
	90		14.7	48.6	28.8		32.4		36		
	100		12.7	54	32		36		40		
	125		10.8	67.5	40		45		50		
	150		8.8	81	48		54		60		
22	25	11	66.7	13.5	8	529.6	9	588.4	10	657	
	30		54.9	16.2	9.6		10.8		12		
	35		47.1	18.9	11.2		12.6		14		
	40		41.2	21.6	12.8		14.4		16		
	45		37.3	24.3	14.4		16.2		18		
	50		33.3	27	16		18		20		
	55		30.4	29.7	17.6		19.8		22		
	60		27.5	32.4	19.2		21.6		24		
	65		25.5	35.1	20.8		23.4		26		
	70		23.5	37.8	22.4		25.2		28		
25	75	12.5	21.6	40.5	24	657	27	735.5	30	823.8	
	80		20.6	43.2	25.6		28.8		32		
	90		18.6	48.6	28.8		32.4		36		
	100		16.7	54	32		36		40		
	125		12.7	67.5	40		45		50		
	150		10.8	81	48		54		60		
	25		82.4	13.5	8		9		10		
	30		68.6	16.2	9.6		10.8		12		
	35		58.8	18.9	11.2		12.6		14		
	40		51	21.6	12.8		14.4		16		
27	45	13.5	46.1	24.3	14.4	784.5	16.2	882.6	18	980.7	
	50		41.2	27	16		18		20		
	55		37.3	29.7	17.6		19.8		22		
	60		34.3	32.4	19.2		21.6		24		
	65		31.4	35.1	20.8		23.4		26		
	70		29.4	37.8	22.4		25.2		28		
	75		27.5	40.5	24		27		30		
	80		25.5	43.2	25.6		28.8		32		
	90		22.6	48.6	28.8		32.4		36		
	100		20.6	54	32		36		40		
27	125	13.5	16.7	67.5	40	784.5	45	882.6	50	980.7	
	150		13.7	81	48		54		60		
	175		11.8	94.5	56		63		70		
	200		10.3	108	64		72		80		
	25		98.1	13.5	8		9		10		
	30		81.4	16.2	9.6		10.8		12		
	35		69.6	18.9	11.2		12.6		14		
	40		61.8	21.6	12.8		14.4		16		
	45		54.9	24.3	14.4		16.2		18		
	50		49	27	16		18		20		

- Excitor pins series
- Excitor sleeves series
- Side rollers series
- Latch locks series
- Pouring gates series
- Data stamps Air valves series
- Excitor series
- Cooling elements series
- Locating parts series
- Spring series
- Guide pins Guide bush series
- Guide strips Wear plate series
- Chuck series
- Mold accessories

JIS

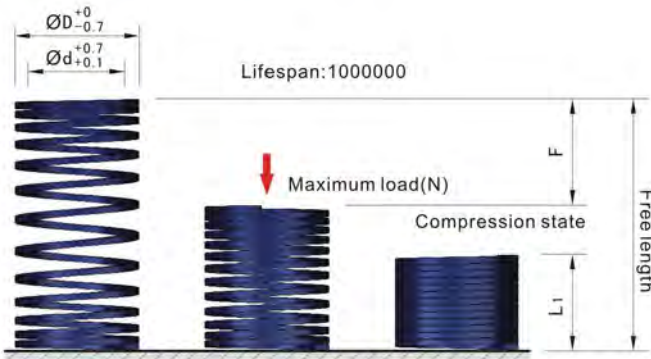
Light Load Coil Springs

DSWL



Order DSWL-D-L

D	L	d	Spring Constant N/mm	Solid height (mm)	F=L×40%		F=L×45%		F=L×50%		@ ¥/P
					F mm	Load N	F mm	Load N	F mm	Load N	
27	150	13.5	16.7	81	48	54	22				
	175		13.7	94.5	56	63	24				
	200		12.3	108	64	72	26				
	25		118.7	13.5	8	9	28				
	30		99	16.2	9.6	10.8	30				
	35		85.3	18.9	11.2	12.6	32				
	40		74.5	21.6	12.8	14.4	36				
	45		65.7	24.3	14.4	16.2	40				
	50		59.8	27	16	18	50				
	55		53.9	29.7	17.6	19.8	60				
30	60	49	32.4	19.2	21.6	10					
	65	46.1	35.1	20.8	23.4	12					
	70	42.2	37.8	22.4	25.2	14					
	75	39.2	40.5	24	27	16					
	80	37.3	43.2	25.6	28.8	18					
	90	33.3	48.6	28.8	32.4	20					
	100	29.4	54	32	36	22					
	125	23.5	67.5	40	45	24					
	150	19.6	81	48	54	26					
	175	16.7	94.5	56	63	28					
35	200	14.7	108	64	72	30					
	40	101	21.6	12.8	14.4	32					
	45	90.2	24.3	14.4	16.2	36					
	50	81.4	27	16	18	40					
	55	73.5	29.7	17.6	19.8	50					
	60	67.7	32.4	19.2	21.6	60					
	65	61.8	35.1	20.8	23.4	10					
	70	57.9	37.8	22.4	25.2	12					
	75	53.9	40.5	24	27	14					
	80	51	43.2	25.6	28.8	16					
40	90	45.1	48.6	28.8	32.4	18					
	100	40.2	54	32	36	20					
	125	32.4	67.5	40	45	22					
	150	27.5	81	48	54	24					
	175	23.5	94.5	56	63	26					
	200	20.6	108	64	72	28					
	40	132.4	21.6	12.8	14.4	30					
	45	117.8	24.3	14.4	16.2	32					
	50	105.9	27	16	18	36					
	55	96.4	29.7	17.6	19.8	40					
50	60	88.3	32.4	19.2	21.6	50					
	65	81.6	35.1	20.8	23.4	60					
	70	75.5	37.8	22.4	25.2	70					
	75	70.7	40.5	24	27	80					
	80	66.7	43.2	25.6	28.8	10					
	90	58.8	48.6	28.8	32.4	12					
	100	53	54	32	36	14					
	125	42.2	67.5	40	45	16					
	150	35.3	81	48	54	18					
	175	30.4	94.5	56	63	20					
50	200	26.5	108	64	72	22					
	225	23.5	122	72	81	24					
	250	21.6	135	80	90	26					
	275	19.3	149	88	99	28					
	300	17.7	172.2	96	108	30					
	50	165.7	27	16	18	32					
	55	150.7	29.7	17.6	19.8	36					
	60	138.3	32.4	19.2	21.6	40					
	65	127.5	35.1	20.8	23.4	50					



Order DSWL-D-L

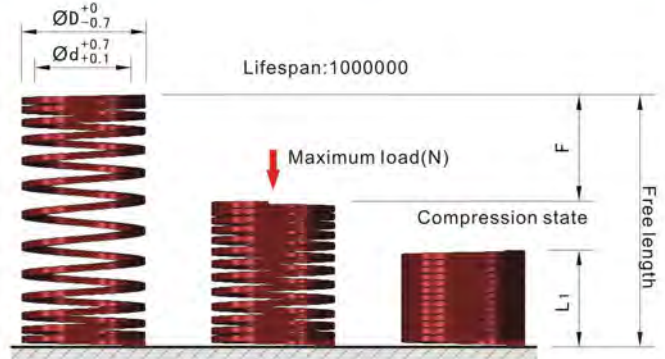
D	L	d	Spring Constant N/mm	Solid height (mm)	F=L×40%		F=L×45%		F=L×50%		@ ¥/P				
					F mm	Load N	F mm	Load N	F mm	Load N					
50	70	25	118.7	37.8	22.4	2647.8	25.2	2981.2	28	3314.6					
	75		110.5	40.5	24										
	80		104	43.2	25.6										
	90		92.2	48.6	28.8										
	100		83.4	54	32										
	125		66.7	67.5	40										
	150		54.9	81	48										
	175		47.1	94.5	56										
	200		41.2	108	64										
	225		26.8	122	72										
	250		33.3	135	80										
	275		30.1	149	88										
	300		27.5	162	96										
	350		23.6	200.9	112										
60	60	30	199.1	32.4	19.2	3814.8	21.6	4285.5	24	4766					
	70		170.6	37.8	22.4										
	80		149.1	43.2	25.6										
	90		132.4	48.6	28.8										
	100		119.6	54	32										
	125		95.1	67.5	40										
	150		79.4	81	48										
	175		67.7	94.5	56										
	200		59.8	108	64										
	250		48.1	135	80										
	300		40.2	162	96										
	350		34.1	200.9	112										
	70		70	38.5	213.7		40.2		22.4		4785.6	25.2	5383.8	28	5982
			80		186.9		45.9		25.6						
90		166.2	51.7		28.8										
100		149.6	57.4		32										
125		119.6	71.8		40										
150		99.7	86.1		48										
175		85.5	100.5		56										
200		74.8	114.8		64										
250		59.8	143.5		80										
300		49.9	172.2		96										
350		42.7	200.9		112										

- Encoder pins
- Encoder sleeves
- Slide rail/liners
- Series
- Limit blocks
- Series
- Positioning gates
- Series
- Data stamps
- Air valves
- Series
- Encoder series
- Cooling elements
- Series
- Locating parts
- Series
- Springs series
- Guide pins
- Guide bush
- Guide strips
- Wear plate series
- Chuck series
- Mold accessories

JIS

Middle Load Coil springs

DSWM



Maximum load calculate method:

Maximum load=compression×spring constant

$N = F \text{ mm} \times \text{N/mm}$ (kgf= $N \times 0.101972$)

Maximum load Deviation: $\pm 10\%$

If $D \geq 70$, Tolerance $D: \begin{matrix} +0 \\ -1 \end{matrix}$

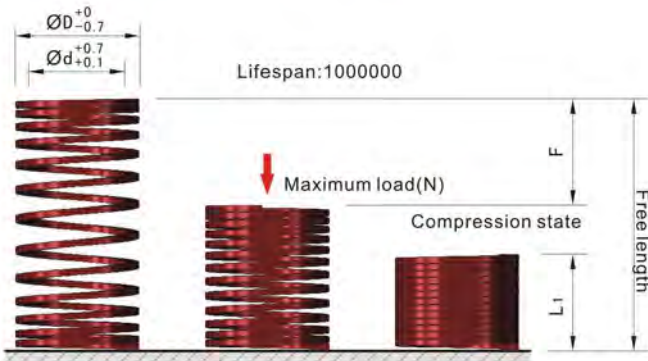
If $D \leq 50$, Tolerance $L \pm 0.5$

If $D \geq 55$, Tolerance $L \pm 1\% \times L$

Order DSWM-D-L

D	L	d	Spring Constant N/mm	Solid height (mm)	F=L×40%		F=L×45%		F=L×50%		@ ¥/P
					F mm	Load N	F mm	Load N	F mm	Load N	
6	15	3	20.4	9.8	3.8	4.3	4.3	4.8	4.8		
	20		15.3	13.1	5.1	5.8	5.8	6.4	6.4		
	25		12.26	16.4	6.4	7.2	7.2	8	8		
	30		10.2	19.6	7.7	8.6	8.6	9.6	9.6		
	35		8.73	22.9	9	10.1	10.1	11.2	11.2	98.1	
	40		7.65	26.2	10.2	11.5	11.5	12.8	12.8		
	45		6.77	29.4	11.5	13	13	14.4	14.4		
	50		6.18	32.7	12.8	14.4	14.4	16	16		
	55		5.59	36	14.1	15.8	15.8	17.6	17.6		
	60		5.1	39.2	15.4	17.3	17.3	19.2	19.2		
8	10	4	42.9	6.6	2.6	2.9	2.9	3.2	3.2		
	15		28.4	9.4	3.8	4.3	4.3	4.8	4.8		
	20		20.6	12.5	5.1	5.8	5.8	6.4	6.4		
	25		17.7	15.7	6.4	7.2	7.2	8	8		
	30		14.7	18.8	7.7	8.6	8.6	9.6	9.6		
	35		12.7	21.9	9	10.1	10.1	11.2	11.2		
	40		10.8	25	10.2	11.5	11.5	12.8	12.8		
	45		8.8	28.2	11.5	13	13	14.4	14.4	137.3	
	50		7.8	31.3	12.8	14.4	14.4	16	16		
	55		6.9	34.4	14.1	15.8	15.8	17.6	17.6		
10	60	5	6.9	37.6	15.4	17.3	17.3	19.2	19.2		
	65		6.5	42.5	16.6	18.7	18.7	20.8	20.8		
	70		6	45.8	17.9	20.2	20.2	22.4	22.4		
	75		5.6	49.1	19.2	21.6	21.6	24	24		
	80		5.3	52.3	20.5	23	23	25.6	25.6		
	10		61.3	6.6	2.6	2.9	2.9	3.2	3.2		
	15		40.9	9.8	3.8	4.3	4.3	4.8	4.8		
	20		30.4	12.5	5.1	5.8	5.8	6.4	6.4		
	25		24.5	15.7	6.4	7.2	7.2	8	8		
	30		20.6	18.8	7.7	8.6	8.6	9.6	9.6		
10	35	5	17.7	21.9	9	10.1	10.1	11.2	11.2		
	40		15.7	25	10.2	11.5	11.5	12.8	12.8	196.1	
	45		13.7	28.2	11.5	13	13	14.4	14.4		
	50		12.7	31.3	12.8	14.4	14.4	16	16		
	55		10.8	34.4	14.1	15.8	15.8	17.6	17.6		
	60		9.8	37.6	15.4	17.3	17.3	19.2	19.2		
	65		8.8	40.7	16.6	18.7	18.7	20.8	20.8		
	70		8.8	43.8	17.9	20.2	20.2	22.4	22.4		
	75		7.8	47	19.2	21.6	21.6	24	24		
	80		7.8	50.1	20.5	23	23	25.6	25.6		
90	6.8	56.3	23	25.9	25.9	28.8	28.8				

Middle Load Coil springs



Order DSWM-D-L

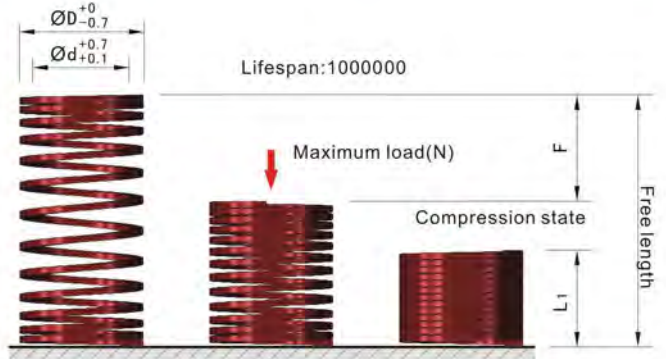
D	L	d	Spring Constant N/mm	Solid height (mm)	F=L×40%		F=L×45%		F=L×50%		@ ¥/P
					F mm	Load N	F mm	Load N	F mm	Load N	
12	15	6	59.3	9.8	3.8		4.3		4.8		
	20		44.1	12.5	5.1		5.8		6.4		
	25		35.3	15.7	6.4		7.2		8		
	30		29.4	18.8	7.7		8.6		9.6		
	35		25.5	21.9	9		10.1		11.2		
	40		22.6	25	10.2		11.5		12.8		
	45		19.6	28.2	11.5		13		14.4		
	50		17.7	31.3	12.8	225.6	14.4	255	16	284.4	
	55		15.7	34.4	14.1		15.8		17.6		
	60		14.7	37.6	15.4		17.3		19.2		
	65		13.7	40.7	16.6		18.7		20.8		
	70		12.7	43.8	17.9		20.2		22.4		
	75		11.8	47	19.2		21.6		24		
	80		10.8	50.1	20.5		23		25.6		
	90		9.9	56.3	23		25.9		28.8		
	14		20	7	59.8	13.1	5.1		5.8		
25		48.1	15.7		6.4		7.2		8		
30		40.2	18.8		7.7		8.6		9.6		
35		34.3	21.9		9		10.1		11.2		
40		29.4	25		10.2		11.5		12.8		
45		26.5	28.2		11.5		13		14.4		
50		23.5	31.3		12.8		14.4		16		
55		21.6	34.4		14.1	304	15.8	343.2	17.6	382.5	
60		19.6	37.6		15.4		17.3		19.2		
65		18.6	40.7		16.6		18.7		20.8		
70		16.7	43.8		17.9		20.2		22.4		
75		15.7	47		19.2		21.6		24		
80		14.7	50.1		20.5		23		25.6		
90		12.7	56.3		23		25.9		28.8		
100		12	62.6		25.6		28.8		32		
16		20	8		78.2	13.1	5.1		5.8		6.4
	25	62.8		15.7	6.4		7.2		8		
	30	52		18.8	7.7		8.6		9.6		
	35	45.1		21.9	9		10.1		11.2		
	40	39.2		25	10.2		11.5		12.8		
	45	34.3		28.2	11.5		13		14.4		
	50	31.4		31.3	12.8		14.4		16		
	55	28.4		34.4	14.1	402.1	15.8	451.1	17.6	500.1	
	60	26.5		37.6	15.4		17.3		19.2		
	65	24.5		40.7	16.6		18.7		20.8		
	70	22.6		43.8	17.9		20.2		22.4		
	75	20.6		47	19.2		21.6		24		
	80	19.6		50.1	20.5		23		25.6		
	90	17.7		56.3	23		25.9		28.8		
	100	15.7		62.6	25.6		28.8		32		
	18	20		9	99.6	13.1	5.1		5.8		6.4
25		74.9	15.7		6.4		7.2		8		
30		66.7	18.8		7.7		8.6		9.6		
35		56.9	21.9		9		10.1		11.2		
40		50	25		10.2		11.5		12.8		
45		44.1	28.2		11.5		13		14.4		
50		40.2	31.3		12.8		14.4		16		
55		36.3	34.4		14.1	509.9	15.8	568.8	17.6	637.4	
60		33.3	37.6		15.4		17.3		19.2		
65		30.4	40.7		16.6		18.7		20.8		
70		28.4	43.8		17.9		20.2		22.4		
75		26.5	47		19.2		21.6		24		
80		24.5	50.1		20.5		23		25.6		
90		22.6	56.3		23		25.9		28.8		
100		19.6	62.6		25.6		28.8		32		

- Excitor pins series
- Excitor sleeves series
- Side rollers series
- Latch locks series
- Pulling gates series
- Data stamps Ad valves series
- Excitor series
- Cooling elements series
- Locating parts series
- Spring series
- Guide pins Guide bush
- Guide strips Wear plate series
- Chuck series
- Mold accessories

JIS

Middle Load Coil springs

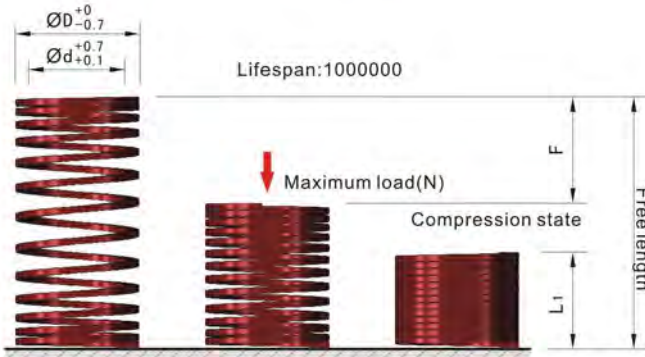
DSWM



Order DSWM-D-L

D	L	d	Spring Constant N/mm	Solid height (mm)	F=L×40%		F=L×45%		F=L×50%		@ ¥/P	
					F mm	Load N	F mm	Load N	F mm	Load N		
20	20	10	122.6	13.1	5.1		5.8		6.4			
	25		98.1	15.7	6.4		7.2		8			
	30		81.4	18.8	7.7		8.6		9.6			
	35		69.6	21.9	9		10.1		11.2			
	40		61.8	25	10.2		11.5		12.8			
	45		54.9	28.2	11.5		13		14.4			
	50		49	31.3	12.8		14.4		16			
	55		44.1	34.4	14.1		15.8		17.6			
	60		41.2	37.6	15.4	627.6	17.3	706.1	19.2	784.5		
	65		37.3	40.7	16.6		18.7		20.8			
	70		35.3	43.8	17.9		20.2		22.4			
	75		32.4	47	19.2		21.6		24			
	80		30.4	50.1	20.5		23		25.6			
	90		27.5	56.3	23		25.9		28.8			
	100		24.5	62.6	25.6		28.8		32			
125	19.6	78.3	32		36		40					
150	16.7	93.9	38.4		43.2		48					
22	25	11	118.7	15.7	6.4		7.2		8			
	30		99	18.8	7.7		8.6		9.6			
	35		85.3	21.9	9		10.1		11.2			
	40		74.5	25	10.2		11.5		12.8			
	45		65.7	28.2	11.5		13		14.4			
	50		59.8	31.3	12.8		14.4		16			
	55		53.9	34.4	14.1		15.8		17.6			
	60		50	37.6	15.4	755.1	17.3	853.2	19.2	951.2		
	65		46.1	40.7	16.6		18.7		20.8			
	70		42.2	43.8	17.9		20.2		22.4			
	75		39.2	47	19.2		21.6		24			
	80		37.3	50.1	20.5		23		25.6			
	90		33.3	56.3	23		25.9		28.8			
	100		29.4	62.6	25.6		28.8		32			
	125		23.5	78.3	32		36		40			
150	19.6	93.9	38.4		43.2		48					
25	25	12.5	153	15.7	6.4		7.2		8			
	30		127.5	18.8	7.7		8.6		9.6			
	35		109.8	21.9	9		10.1		11.2			
	40		96.1	25	10.2		11.5		12.8			
	45		85.3	28.2	11.5		13		14.4			
	50		76.5	31.3	12.8		14.4		16			
	55		69.6	34.4	14.1		15.8		17.6			
	60		63.7	37.6	15.4		17.3		19.2			
	65		58.8	40.7	16.6	980.7	18.7	1098.3	20.8	1225.8		
	70		54.9	43.8	17.9		20.2		22.4			
	75		51	47	19.2		21.6		24			
	80		48.1	50.1	20.5		23		25.6			
	90		42.2	56.3	23		25.9		28.8			
	100		38.2	62.6	25.6		28.8		32			
	125		30.4	78.3	32		36		40			
150	25.5	93.9	38.4		43.2		48					
175	19.6	109.6	44.8		50.4		56					
27	25	13.5	179.5	15.7	6.4		7.2		8			
	30		149.1	18.8	7.7		8.6		9.6			
	35		127.5	21.9	9		10.1		11.2			
	40		111.8	25	10.2		11.5		12.8			
	45		99	28.2	11.5	1147.4	13	1284.7	14.4	1431.8		
	50		89.2	31.3	12.8		14.4		16			
	55		81.4	34.4	14.1		15.8		17.6			
	60		74.5	37.6	15.4		17.3		19.2			
65	68.6	40.7	16.6		18.7		20.8					

Middle Load Coil springs



Order DSWM-D-L

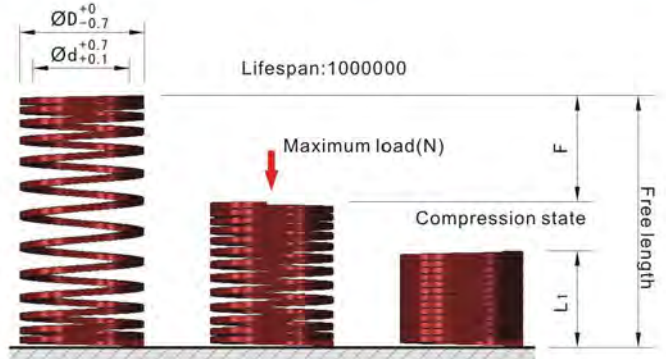
D	L	d	Spring Constant N/mm	Solid height (mm)	F=L×40%		F=L×45%		F=L×50%		@ ¥/P
					F mm	Load N	F mm	Load N	F mm	Load N	
27	70	13.5	63.7	43.8	17.9	1147.4	20.2	1284.7	22.4	1431.8	
	75		59.8	47	19.2		21.6		24		
	80		55.9	50.1	20.5		23		25.6		
	90		50	56.3	23		25.9		28.8		
	100		45.1	62.6	25.6		28.8		32		
	125		36.3	78.3	32		36		40		
	150		29.4	93.9	38.4		43.2		48		
	175		25.5	109.6	44.8		50.4		56		
	25		200.6	15.7	6.4		7.2		8		
	30		184.4	18.8	7.7		8.6		9.6		
35	157.9	21.9	9	10.1	11.2						
40	138.3	25	10.2	11.5	12.8						
45	122.6	28.2	11.5	13	14.4						
50	110.8	31.3	12.8	14.4	16						
55	100	34.4	14.1	15.8	17.6						
60	92.2	37.6	15.4	17.3	19.2						
65	85.3	40.7	16.6	18.7	20.8						
70	78.5	43.8	17.9	20.2	22.4						
75	73.5	47	19.2	21.6	24						
80	68.6	50.1	20.5	23	25.6						
90	61.8	56.3	23	25.9	28.8						
100	54.9	62.6	25.6	28.8	32						
125	44.1	78.3	32	36	40						
150	37.3	93.9	38.4	43.2	48						
175	31.4	109.6	44.8	50.4	56						
200	27.5	125.2	51.2	57.6	64						
30	40	15	187.3	25	10.2	1412.2	11.5	1578.9	12.8	1765.2	
	45		166.7	28.2	11.5		13		14.4		
	50		150	31.3	12.8		14.4		16		
	55		136.3	34.4	14.1		15.8		17.6		
	60		125.5	37.6	15.4		17.3		19.2		
	65		115.7	40.7	16.6		18.7		20.8		
	70		106.9	43.8	17.9		20.2		22.4		
	75		100	47	19.2		21.6		24		
	80		94.1	50.1	20.5		23		25.6		
	90		83.4	56.3	23		25.9		28.8		
100	75.5	62.6	25.6	28.8	32						
125	59.8	78.3	32	36	40						
150	50	93.9	38.4	43.2	48						
175	43.1	109.6	44.8	50.4	56						
200	37.3	125.5	51.2	57.6	64						
35	40	17.5	246.1	25	10.2	1912.3	11.5	2157.5	12.8	2402.6	
	45		218.3	28.2	11.5		13		14.4		
	50		196.1	31.3	12.8		14.4		16		
	55		178	34.4	14.1		15.8		17.6		
	60		162.8	37.6	15.4		17.3		19.2		
	65		151.2	40.7	16.6		18.7		20.8		
	70		140.2	43.8	17.9		20.2		22.4		
	75		130.8	47	19.2		21.6		24		
	80		122.6	50.1	20.5		23		25.6		
	90		108.9	56.3	23		25.9		28.8		
100	98.1	62.6	25.6	28.8	32						
125	78.5	78.3	32	36	40						
150	65.7	93.9	38.4	43.2	48						
175	55.9	109.6	44.8	50.4	56						
200	49	125.5	51.2	57.6	64						
225	43.6	141	57.6	64.8	72						
250	39.2	156.5	64	72	80						
275	35.7	172	70.4	79.2	88						
300	32.7	196.2	76.8	86.4	96						
40	40	20	246.1	25	10.2	2510.5	11.5	2824.3	12.8	3138.1	
	45		218.3	28.2	11.5		13		14.4		
	50		196.1	31.3	12.8		14.4		16		
	55		178	34.4	14.1		15.8		17.6		
	60		162.8	37.6	15.4		17.3		19.2		
	65		151.2	40.7	16.6		18.7		20.8		
	70		140.2	43.8	17.9		20.2		22.4		
	75		130.8	47	19.2		21.6		24		
	80		122.6	50.1	20.5		23		25.6		
	90		108.9	56.3	23		25.9		28.8		
100	98.1	62.6	25.6	28.8	32						
125	78.5	78.3	32	36	40						
150	65.7	93.9	38.4	43.2	48						
175	55.9	109.6	44.8	50.4	56						
200	49	125.5	51.2	57.6	64						
225	43.6	141	57.6	64.8	72						
250	39.2	156.5	64	72	80						
275	35.7	172	70.4	79.2	88						
300	32.7	196.2	76.8	86.4	96						

- Excitor pins
- Excitor sleeves
- Slide rollers
- Series
- Latch locks
- Series
- Pulling gates
- Series
- Data stamps
- Adv. valves series
- Excitor series
- Cooling elements
- Series
- Locating parts
- Series
- Springs series
- Guide pins
- Guide bush
- Guide strips
- View plate series
- Chuck series
- Series
- Mold accessories

JIS

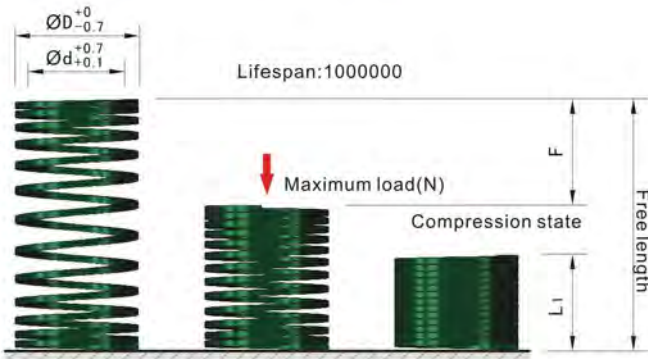
Middle Load Coil springs

DSWM



Order DSWM-D-L

D	L	d	Spring Constant N/mm	Solid height (mm)	F=L×40%		F=L×45%		F=L×50%		@ ¥/P	
					F mm	Load N	F mm	Load N	F mm	Load N		
50	50	25	306.9	31.3	12.8		14.4		16			
	55		278.6	34.4	14.1		15.8		17.6			
	60		255	37.6	15.4		17.3		19.2			
	65		235.7	40.7	16.6		18.7		20.8			
	70		218.7	43.8	17.9		20.2		22.4			
	75		204.3	47	19.2		21.6		24			
	80		191.2	50.1	20.5		23		25.6			
	90		170.6	56.3	23		25.9		28.8			
	100		153	62.6	25.6	3922.7	28.8	4413	32	4903.3		
	125		122.6	78.3	32		36		40			
	150		102	93.9	38.4		43.2		48			
	175		87.3	109.6	44.8		50.4		56			
	200		76.5	125.2	51.2		57.6		64			
	225		68.1	141	57.6		64.8		72			
	250		60.8	156.5	64		72		80			
275	55.7	172	70.4		79.2		88					
300	51	187.8	76.8		86.4		96					
350	43.8	228.9	89.6		100.8		112					
60	60	30	365.8	37.6	15.4		17.3		19.2			
	70		314.8	43.8	17.9		20.2		22.4			
	80		275.6	50.1	20.5		23		25.6			
	90		245.2	56.3	23		25.9		28.8			
	100		220.6	62.6	25.6		28.8		32			
	125		176.5	78.3	32	5638.8	36	6354.7	40	7060.8		
	150		147	93.9	38.4		43.2		48			
	175		126.5	109.6	44.8		50.4		56			
	200		110.8	125.2	51.2		57.6		64			
	250		88.3	156.5	64		72		80			
	300		73.5	187.8	76.8		86.4		96			
	350		62.9	228.9	89.6		100.8		112			
	70		372.2	45.8	17.9		20.2		22.4			
	80		325.6	52.3	20.5		23		25.6			
	90		289.9	58.9	23		25.9		28.8			
100	260.5	65.4	25.6		28.8		32					
125	208.4	81.8	32		36		40					
150	173.7	98.1	38.4	6668.5	43.2	7502.1	48	8335.6				
175	148.9	114.5	44.8		50.4		56					
200	130.2	130.8	51.2		57.6		64					
250	104.2	163.5	64		72		80					
300	86.8	196.2	76.8		86.4		96					
350	74.4	228.9	89.6		100.8		112					



Maximum load calculate method:

Maximum load=compression×spring constant

$N = F \text{ mm} \times N/\text{mm} \text{ (kgf} = N \times 0.101972)$

Maximum load Deviation: $\pm 10\%$

If $D \leq 70$, Tolerance $D: \begin{matrix} +0 \\ -1 \end{matrix}$

If $D \leq 50$, Tolerance $L \pm 0.5$

If $D \geq 55$, Tolerance $L \pm 1\% \times L$

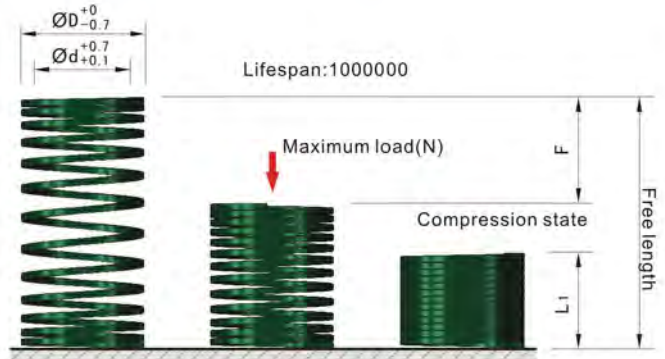
Order DSWH-D-L

D	L	d	Spring Constant N/mm	Solid height (mm)	F=L×40%		F=L×45%		F=L×50%		@ ¥/P
					F mm	Load N	F mm	Load N	F mm	Load N	
10	10	5	122.6	7.4	1.9	235.4	2.2	264.8	2.4	294.2	
	15		81.4	11	2.9						
	20		61.8	14.4	3.8						
	25		49	18	4.8						
	30		41.2	21.6	5.8						
	35		35.3	25.2	6.7						
	40		30.4	28.8	7.7						
	45		27.5	32.4	8.6						
	50		24.5	36	9.6						
	55		22.6	39.6	10.6						
	60		20.6	43.2	11.5						
	65		18.6	46.8	12.5						
	70		17.7	50.4	13.4						
	75		16.7	54	14.4						
	80		15.7	57.6	15.4						
90	13.6	64.8	17.3								
12	15	6	117.1	11	2.9	333.4	3.2	372.7	3.6	421.7	
	20		88.3	14.4	3.8						
	25		70.6	18	4.8						
	30		58.8	21.6	5.8						
	35		50	25.2	6.7						
	40		44.1	28.8	7.7						
	45		39.2	32.4	8.6						
	50		35.3	36	9.6						
	55		32.4	39.6	10.6						
	60		29.4	43.2	11.5						
	65		26.5	46.8	12.5						
	70		24.5	50.4	13.4						
	75		23.5	54	14.4						
	80		21.6	57.6	15.4						
	90		19.5	64.8	17.3						
14	20	7	120.5	14.7	3.8	460.9	4.3	519.8	4.8	578.6	
	25		96.1	18	4.8						
	30		80.4	21.6	5.8						
	35		68.6	25.2	6.7						
	40		59.8	28.8	7.7						
	45		53.9	32.4	8.6						
	50		48.1	36	9.6						
55	44.1	39.6	10.6								
60	40.2	43.2	11.5								

JIS

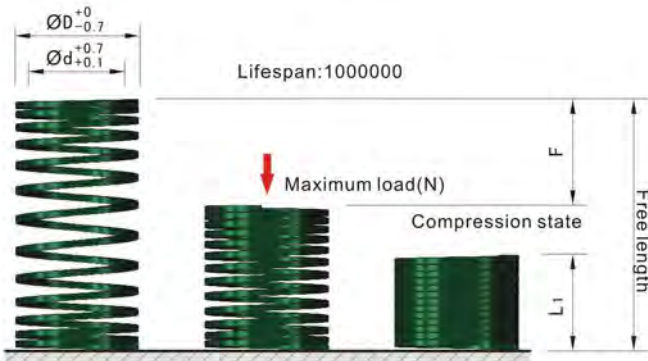
High Load Coil springs

DSWH



Order DSWH-D-L

D	L	d	Spring Constant N/mm	Solid height (mm)	F=L×40%		F=L×45%		F=L×50%		@ ¥ /P
					F mm	Load N	F mm	Load N	F mm	Load N	
14	65	7	37.3	46.8	12.5	14	15.6	16.8	578.6		
	70		34.3	50.4	13.4	15.1	16.8				
	75		32.4	54	14.4	16.2	18				
	80		30.4	57.6	15.4	17.3	19.2				
	90		26.5	64.8	17.3	19.4	21.6				
	100		24.1	72	19.2	21.6	24				
	20		157.3	14.7	3.8	4.3	4.8				
	25		125.5	18	4.8	5.4	6				
	30		104.9	21.6	5.8	6.5	7.2				
	35		90.2	25.2	6.7	7.5	8.4				
16	40	8	78.5	28.8	7.7	8.6	9.6	755.1			
	45		69.6	32.4	8.6	9.7	10.8				
	50		62.8	36	9.6	10.8	12				
	55		56.9	39.6	10.6	11.8	13.2				
	60		52	43.2	11.5	13	14.4				
	65		48.1	46.8	12.5	14	15.6				
	70		45.1	50.4	13.4	15.1	16.8				
	75		42.2	54	14.4	16.2	18				
	80		39.2	57.6	15.4	17.3	19.2				
	90		35.3	64.8	17.3	19.4	21.6				
18	100	9	31.4	72	19.2	21.6	24	951.2			
	20		198.2	14.7	3.8	4.3	4.8				
	25		158.9	18	4.8	5.4	6				
	30		132.4	21.6	5.8	6.5	7.2				
	35		112.8	25.2	6.7	7.5	8.4				
	40		99	28.8	7.7	8.6	9.6				
	45		88.3	32.4	8.6	9.7	10.8				
	50		79.4	36	9.6	10.8	12				
	55		71.6	39.6	10.6	11.8	13.2				
	60		65.7	43.2	11.5	13	14.4				
20	65	10	60.8	46.8	12.5	14	15.6	1176.8			
	70		56.9	50.4	13.4	15.1	16.8				
	75		53	54	14.4	16.2	18				
	80		50	57.6	15.4	17.3	19.2				
	90		44.2	64.8	17.3	19.4	21.6				
	100		39.2	72	19.2	21.6	24				
	20		245.2	14.7	3.8	4.3	4.8				
	25		196.1	18	4.8	5.4	6				
	30		163.8	21.6	5.8	6.5	7.2				
	35		140.2	25.2	6.7	7.5	8.4				
22	40	11	122.6	28.8	7.7	8.6	9.6	1422			
	45		108.9	32.4	8.6	9.7	10.8				
	50		98.1	36	9.6	10.8	12				
	55		89.2	39.6	10.6	11.8	13.2				
	60		81.4	43.2	11.5	13	14.4				
	65		75.5	46.8	12.5	14	15.6				
	70		69.6	50.4	13.4	15.1	16.8				
	75		65.7	54	14.4	16.2	18				
	80		61.8	57.6	15.4	17.3	19.2				
	90		54.9	64.8	17.3	19.4	21.6				
22	100	11	49	72	19.2	21.6	24	1422			
	125		39.2	90	24	27	30				
	150		32.4	108	28.8	32.4	36				
	25		237.2	18	4.8	5.4	6				
	30		197.1	21.6	5.8	6.5	7.2				
22	35	11	169.7	25.2	6.7	7.5	8.4	1422			
	40		148	28.8	7.7	8.6	9.6				
	45		131.4	32.4	8.6	9.7	10.8				
	50		118.7	36	9.6	10.8	12				



Order DSWH-D-L

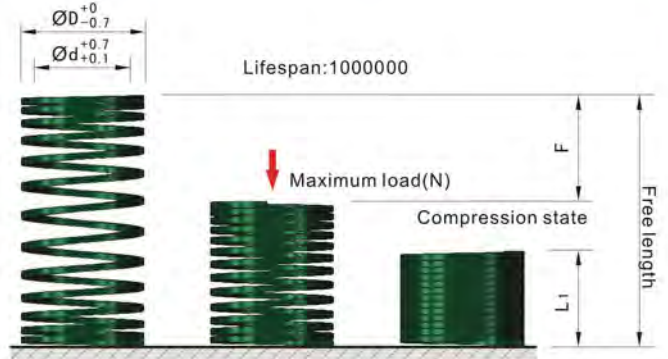
D	L	d	Spring Constant N/mm	Solid height (mm)	F=L×40%		F=L×45%		F=L×50%		@ ¥ /P	
					F mm	Load N	F mm	Load N	F mm	Load N		
22	55	11	107.9	39.6	10.6		11.9		13.2			
	60		99	43.2	11.5		13		14.4			
	65		91.2	46.8	12.5		14		15.6			
	70		84.3	50.4	13.4		15.1		16.8			
	75		79.4	54	14.4		16.2		18			
	80		74.5	57.6	15.4	1137.6	17.3	1274.9	19.2	1422		
	90		65.7	64.8	17.3		19.4		21.6			
	100		58.9	72	19.2		21.6		24			
	125		47.1	90	24		27		30			
	150		39.2	108	28.8		32.4		36			
25	25	12.5	306	18	4.8		5.4		6			
	30		255	21.6	5.8		6.5		7.2			
	35		218.7	25.2	6.7		7.5		8.4			
	40		191.2	28.8	7.7		8.6		9.6			
	45		169.7	32.4	8.6		9.7		10.8			
	50		153	36	9.6		10.8		12			
	55		139.3	39.6	10.6		11.9		13.2			
	60		127.5	43.2	11.5		13		14.4			
	65		117.7	46.8	12.5	1471	14	1657.3	15.6	1833.8		
	70		108.9	50.4	13.4		15.1		16.8			
27	75	13.5	102	54	14.4		16.2		18			
	80		95.1	57.6	15.4		17.3		19.2			
	90		85.3	64.8	17.3		19.4		21.6			
	100		76.5	72	19.2		21.6		24			
	125		60.8	90	24		27		30			
	150		51	108	28.8		32.4		36			
	175		44.1	126	33.6		37.8		42			
	25		357.9	18	4.8		5.4		6			
	30		298.1	21.6	5.8		6.5		7.2			
	35		255.9	25.2	6.7		7.5		8.4			
30	40	15	223.6	28.8	7.7		8.6		9.6			
	45		199.1	32.4	8.6		9.7		10.8			
	50		179.5	36	9.6		10.8		12			
	55		162.8	39.6	10.6		11.9		13.2			
	60		149.1	43.2	11.5		13		14.4			
	65		137.3	46.8	12.5	1716.2	14	1931.9	15.6	2147.7		
	70		127.5	50.4	13.4		15.1		16.8			
	75		119.6	54	14.4		16.2		18			
	80		111.8	57.6	15.4		17.3		19.2			
	90		99	64.8	17.3		19.4		21.6			
30	100	15	89.2	72	19.2		21.6		24			
	125		71.6	90	24		27		30			
	150		59.8	108	28.8		32.4		36			
	175		51	126	33.6		37.8		42			
	25		441.3	18	4.8		5.4		6			
	30		367.7	21.6	5.8		6.5		7.2			
	35		314.8	25.2	6.7		7.5		8.4			
	40		257.6	28.8	7.7		8.6		9.6			
	45		245.2	32.4	8.6		9.7		10.8			
	50		220.6	36	9.6		10.8		12			
30	55	15	201	39.6	10.6		11.9		13.2			
	60		184.4	43.2	11.5	2118.2	13	2383	14.4	2647.8		
	65		169.7	46.8	12.5		14		15.6			
	70		157.9	50.4	13.4		15.1		16.8			
	75		147.1	54	14.4		16.2		18			
	80		138.3	57.6	15.4		17.3		19.2			
	90		122.6	64.8	17.3		19.4		21.6			
	100		110.8	72	19.2		21.6		24			
	125		88.3	90	24		27		30			

- Excitor pins series
- Excitor sleeves series
- Side rollers series
- Latch locks series
- Pulling gates series
- Data stamps Air valves series
- Excitor series
- Cooling elements series
- Locating parts series
- Springs series
- Guide pins Guide bush series
- Guide strips Wear plate series
- Chuck series
- Mold accessories



High Load Coil springs

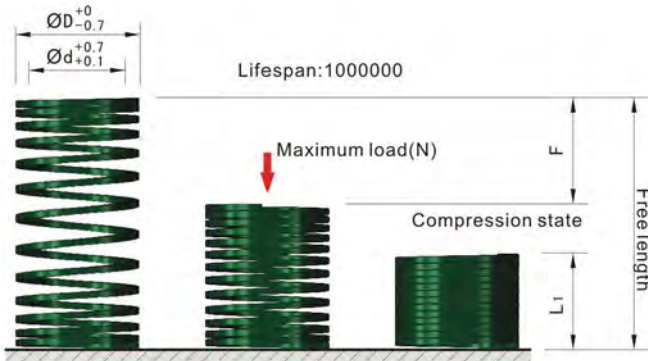
DSWH



Order DSWH-D-L

D	L	d	Spring Constant N/mm	Solid height (mm)	F=L×40%		F=L×45%		F=L×50%		@ ¥/P
					F mm	Load N	F mm	Load N	F mm	Load N	
30	150	15	73.5	108	28.8		32.4		36		
	175		62.8	126	33.6	2118.2	37.8	2383	42	2647.8	
	200		54.9	144	38.4		43.2		48		
	40		374.6	28.8	7.7		8.6		9.6		
	45		333.4	32.4	8.6		9.7		10.8		
	50		300.1	36	9.6		10.8		12		
	55		272.6	39.6	10.6		11.9		13.2		
	60		250.1	43.2	11.5		13		14.4		
	65		230.5	46.8	12.5		14		15.6		
	70		213.8	50.4	13.4		15.1		16.8		
35	75	17.5	200.1	54	14.4		16.2		18		
	80		187.3	57.6	15.4	2873.3	17.3	3236.2	19.2	3599	
	90		166.7	64.8	17.3		19.4		21.6		
	100		150	72	19.2		21.6		24		
	125		119.6	90	24		27		30		
	150		100	108	28.8		32.4		36		
	175		85.3	126	33.6		37.8		42		
	200		74.5	144	38.4		43.2		48		
	40		490.3	28.8	7.7		8.6		9.6		
	45		437.8	32.4	8.6		9.7		10.8		
40	50	20	392.3	36	9.6		10.8		12		
	55		355.3	39.6	10.6		11.9		13.2		
	60		326.6	43.2	11.5		13		14.4		
	65		301.3	46.8	12.5		14		15.6		
	70		280.5	50.4	13.4		15.1		16.8		
	75		261.5	54	14.4		16.2		18		
	80		245.2	57.6	15.4		17.3		19.2		
	90		217.7	64.8	17.3	3765.8	19.4	3765.8	21.6	4707.2	
	100		196.1	72	19.2		21.6		24		
	50		125	25	156.9	90	24		27		30
150		130.4	108		28.8		32.4		36		
175		111.8	126		33.6		37.8		42		
200		98.1	144		38.4		43.2		48		
225		87.2	162		43.2		48.6		54		
250		78.5	180		48		54		60		
275		71.3	198		52.8		59.4		66		
300		65.4	220.2		57.6		64.8		72		
50		612.9	36		9.6		10.8		12		
55		557.2	39.6		10.6		11.9		13.2		
60	60	30	510.9	43.2	11.5		13		14.4		
	65		471.5	46.8	12.5		14		15.6		
	70		437.4	50.4	13.4		15.1		16.8		
	75		408.6	54	14.4		16.2		18		
	80		383.4	57.6	15.4		17.3		19.2		
	90		340.3	64.8	17.3		19.4		21.6		
	100		306.9	72	19.2	5884	21.6	5884	24	7355	
	125		245.2	90	24		27		30		
	150		204	108	28.8		32.4		36		
	60		175	30	175.5	126	33.6		37.8		42
200		153	144		38.4		43.2		48		
225		136.2	162		43.2		48.6		54		
250		122.6	180		48		54		60		
275		111.4	198		52.8		59.4		66		
300		102	216		57.6		64.8		72		
350		87.6	256.9		67.2		75.6		84		
60		735.5	43.2		11.5		13		14.4		
70		630.6	50.4		13.4		15.1		16.8		
80		552.1	57.6		15.4	8472.9	17.3	9541.9	19.2	10591.2	
90	490.3	64.8	17.3		19.4		21.6				

JIS
High Load Coil springs



Order DSWH-D-L

D	L	d	Spring Constant N/mm	Solid height (mm)	F=L×40%		F=L×45%		F=L×50%		@ ¥ /P
					F mm	Load N	F mm	Load N	F mm	Load N	
60	100	30	441.3	72	19.2	8472.9	21.6	9541.9	24	10591.2	
	125		353	90	24		27		30		
	150		294.2	108	28.8		32.4		36		
	175		252	126	33.6		37.8		42		
	200		220.6	144	38.4		43.2		48		
	250		176.5	180	48		54		60		
	300		147.1	216	57.6		64.8		72		
350	126.1	256.9	67.2	75.6	84						
70	70	38.5	747.2	51.4	13.4	10199	15.1	11473	16.8	12749	
	80		653.8	58.7	15.4		17.3		19.2		
	90		581.1	66.1	17.3		19.4		21.6		
	100		531.2	72	19.2		21.6		24		
	125		425	90	24		27		30		
	150		354.1	108	28.8		32.4		36		
	175		303.5	126	33.6		37.8		42		
	200		265.6	144	38.4		43.2		48		
250	212.5	180	48	54	60						
300	177.1	216	57.6	64.8	72						
350	151.8	252	57.6	75.6	84						

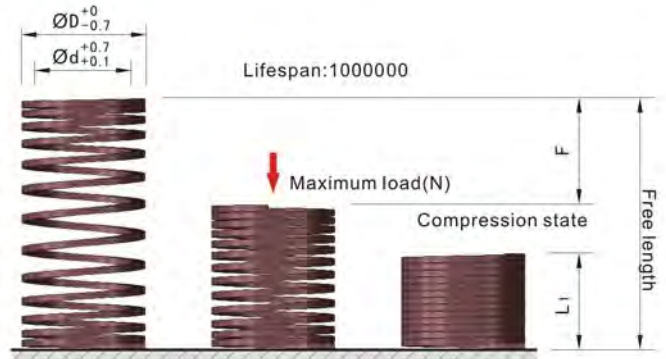


- Excitor pins series
- Excitor sleeves series
- Slide retainers series
- Latch locks series
- Pouring gates series
- Date stamps Air valves series
- Excitor series
- Cooling elements series
- Locating parts series
- Springs series
- Guide pins Guide bush
- Guide strips Wear plate series
- Chuck series
- Mold accessories

JIS

Extra heavy load coil springs

DSWB



Maximum load calculate method:

Maximum load=compression×spring constant

$N = F \text{ mm} \times N/\text{mm} \text{ (kgf} = N \times 0.101972)$

Maximum load Deviation: ±10%

If $D \geq 70$, Tolerance $D: \begin{matrix} +0 \\ -1 \end{matrix}$

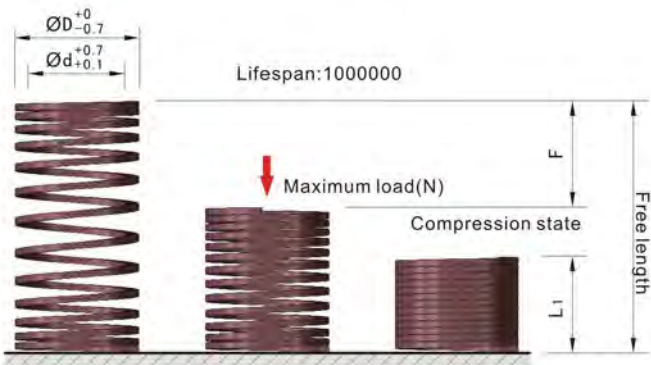
If $D \leq 50$, Tolerance $L \pm 0.5$

If $D \geq 55$, Tolerance $L \pm 1\% \times L$

Order DSWB-D-L

D	L	d	Spring Constant N/mm	Solid height (mm)	F=L×40%		F=L×45%		F=L×50%		@ ¥ /P	
					F mm	Load N	F mm	Load N	F mm	Load N		
6	15	3	58.84	11.6	2.4		2.7		3			
	20		44.13	15.5	3.2		3.6		4			
	25		35.3	19.4	4		4.5		5			
	30		29.42	23.2	4.8		5.4		6			
	35		25.2	27.1	5.6	141.2	6.3	158.9	7	176.5	7	
	40		22.06	31	6.4		8		8			
	45		19.61	34.8	7.2		9		9			
	50		17.65	38.7	8		10		10			
	55		16.08	42.6	8.8		11		11			
	60		14.71	46.4	9.6		12		12			
10	161.8	7.7	1.6	2	2							
15	105.9	11.4	2.4	3	3							
20	79.4	15.2	3.2	4	4							
25	63.7	19	4	5	5							
8	30	4	53	22.8	4.8	255	5.4	294.2	6	323.6		
	35		45.1	26.6	5.6		6.3		7			
	40		40.2	30.4	6.4		7.2		8			
	45		35.3	34.2	7.2		8.1		9			
	50		32.4	38	8		9		10			
	55		29.4	41.8	8.8		9.9		11			
	60		26.5	45.6	9.6		10.8		12			
	65		24.5	50.3	10.4		11.7		13			
	70		22.8	54.2	11.2		12.6		14			
	75		21.2	58.1	12		13.5		15			
10	80	5	19.9	61.9	12.8	353	14.4	402.1	16	441.3		
	10		220.6	7.7	1.6		2		2			
	15		147.1	11.6	2.4		3		3			
	20		110.8	15.2	3.2		4		4			
	25		88.3	19	4		4.5		5			
	30		73.6	22.8	4.8		5.4		6			
	35		62.8	26.6	5.6		6.3		7			
	40		54.9	30.4	6.4		7.2		8			
	45		49	34.2	7.2		8.1		9			
	50		44.1	38	8		9		10			
10	55	5	40.2	41.8	8.8	353	9.9	402.1	11	441.3		
	60		37.3	45.6	9.6		10.8		12			
	65		34.3	49.4	10.4		11.7		13			
	70		31.4	53.2	11.2		12.6		14			
	75		29.4	57	12		13.5		15			
	80		27.5	60.8	12.8		14.4		16			

Extra heavy load coil springs



DSWB

Order DSWB-D-L

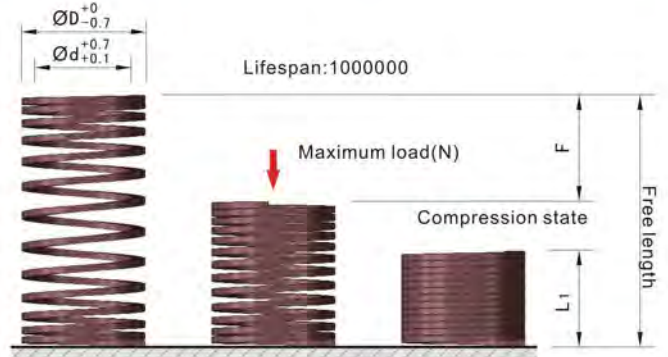
D	L	d	Spring Constant N/mm	Solid height (mm)	F=L×40%		F=L×45%		F=L×50%		@ ¥ /P
					F mm	Load N	F mm	Load N	F mm	Load N	
10	90	5	24.5	68.4	14.4	353	16.2	402.1	18	441.3	
	15		189.3	11.6	2.4	2.7	3				
	20		142.2	15.2	3.2	3.6	4				
	25		113.8	19	4	4.5	5				
	30		95.1	22.8	4.8	5.4	6				
	35		81.4	26.6	5.6	6.3	7				
	40		71.6	30.4	6.4	7.2	8				
	45		62.8	34.2	7.2	8.1	9				
	50		56.9	38	8	9	10				
	55		52	41.8	8.8	9.9	11				
12	60	6	47.1	45.6	9.6	451.1	10.8	509.9	12	568.8	
	65		43.1	49.4	10.4	11.7	13				
	70		40.2	53.2	11.2	12.6	14				
	75		38.2	57	12	13.5	15				
	80		35.3	60.8	12.8	14.4	16				
	90		31.6	68.4	14.4	16.2	18				
	20		183.9	15.5	3.2	3.6	4				
	25		142.2	19	4	4.5	5				
	30		122.6	22.8	4.8	5.4	6				
	35		104.9	26.6	5.6	6.3	7				
14	40	7	92.2	30.4	6.4	588.4	7.2	666.9	8	735.5	
	45		81.4	34.2	7.2	8.1	9				
	50		73.5	38	8	9	10				
	55		66.7	41.8	8.8	9.9	11				
	60		61.8	45.6	9.6	10.8	12				
	65		56.9	49.4	10.4	11.7	13				
	70		53	53.2	11.2	12.6	14				
	75		49	57	12	13.5	15				
	80		46.1	60.8	12.8	14.4	16				
	90		41.2	68.4	14.4	16.2	18				
100	36.8	76	16	18	20						
16	20	8	245.2	15.5	3.2	784.5	3.6	882.6	4	980.7	
	25		196.1	19	4	4.5	5				
	30		163.7	22.8	4.8	5.4	6				
	35		140.2	26.6	5.6	6.3	7				
	40		122.6	30.4	6.4	7.2	8				
	45		108.9	34.2	7.2	8.1	9				
	50		98.1	38	8	9	10				
	55		89.2	41.8	8.8	9.9	11				
	60		81.4	45.6	9.6	10.8	12				
	65		75.5	49.4	10.4	11.7	13				
18	70	9	69.6	53.2	11.2	980.7	12.6	1108.2	14	1225.8	
	75		65.7	57	12	13.5	15				
	80		61.8	60.8	12.8	14.4	16				
	90		54.9	68.4	14.4	16.2	18				
	100		49	76	16	18	20				
	20		306.5	15.5	3.2	3.6	4				
	25		245.2	19	4	4.5	5				
	30		204	22.8	4.8	5.4	6				
	35		175.5	26.6	5.6	6.3	7				
	40		153	30.4	6.4	7.2	8				
45	136.3	34.2	7.2	8.1	9						
50	122.6	38	8	9	10						
55	111.8	41.8	8.8	9.9	11						
60	102	45.6	9.6	10.8	12						
65	94.1	49.4	10.4	11.7	13						
70	87.3	53.2	11.2	12.6	14						
75	81.4	57	12	13.5	15						
80	76.5	60.8	12.8	14.4	16						

- Excitor pins series
- Side rollers series
- Latch locks series
- Pulling gates series
- Data stamps Ad valves series
- Excitor series
- Cooling elements series
- Locating parts series
- Springs series**
- Guide pins Guide bush
- Guide plates V-belt plate series
- Chuck series
- Mold accessories

JIS

Extra heavy load coil springs

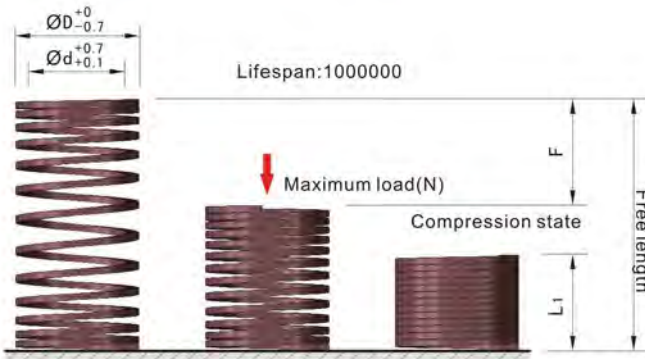
DSWB



Order DSWB-D-L

D	L	d	Spring Constant N/mm	Solid height (mm)	F=L×40%		F=L×45%		F=L×50%		@ ¥/P
					F mm	Load N	F mm	Load N	F mm	Load N	
18	90	9	67.7	68.4	14.4	16.2	16.2	1108.2	18	1225.8	
	100		61.8	11.6	16	18	18	20			
	20		392.3	15.5	3.2	3.6	4				
	25		313.8	19	4	4.5	5				
	30		261.8	22.8	4.8	5.4	6				
	35		224.6	26.6	5.6	6.3	7				
	40		196.1	30.4	6.4	7.2	8				
	45		174.6	34.2	7.2	8.1	9				
	50		156.9	38	8	9	10				
	55		142.2	41.8	8.8	9.9	11				
20	60	10	130.4	45.6	9.6	10.8	1412.2	12	1569.1		
	65		120.6	49.4	10.4	11.7	13				
	70		111.8	53.2	11.2	12.6	14				
	75		104.9	57	12	13.5	15				
	80		98.1	60.8	12.8	14.4	16				
	90		87.3	68.4	14.4	16.2	18				
	100		78.5	76	16	18	20				
	125		62.8	95	20	22.5	25				
	150		52	114	24	27	30				
	22		25	11	382.5	19	4	4.5	5		
30		318.7	22.8		4.8	5.4	6				
35		273.6	26.6		5.6	6.3	7				
40		239.3	30.4		6.4	7.2	8				
45		212.8	34.2		7.2	8.1	9				
50		191.2	38		8	9	10				
55		173.6	41.8		8.8	9.9	11				
60		159.8	45.6		9.6	10.8	12	1912.3			
65		147.1	49.4		10.4	11.7	13				
70		136.3	53.2		11.2	12.6	14				
25	75	12.5	127.5	57	12	13.5	15				
	80		119.6	60.8	12.8	14.4	16				
	90		105.9	68.4	14.4	16.2	18				
	100		96.1	76	16	18	20				
	125		76.5	95	20	22.5	25				
	150		63.7	114	24	27	30				
	25		480.6	19	4	4.5	5				
	30		400.1	22.8	4.8	5.4	6				
	35		343.2	26.6	5.6	6.3	7				
	40		300.1	30.4	6.4	7.2	8				
27	45	13.5	266.7	34.2	7.2	8.1	9				
	50		240.3	38	8	9	10				
	55		218.7	41.8	8.8	9.9	11				
	60		200.1	45.6	9.6	10.8	12				
	65		184.4	49.4	10.4	11.7	13	2402.6			
	70		171.6	53.2	11.2	12.6	14				
	75		159.8	57	12	13.5	15				
	80		150	60.8	12.8	14.4	16				
	90		133.4	68.4	14.4	16.2	18				
	100		120.6	76	16	18	20				
27	125	13.5	96.1	95	20	22.5	25				
	150		80.4	114	24	27	30				
	175		68.6	133	28	31.5	35				
	25		568.8	19	4	4.5	5				
	30		473.7	22.8	4.8	5.4	6				
	35		406	26.6	5.6	6.3	7				
27	40	13.5	356	30.4	6.4	7.2	8	2843.9			
	45		315.8	34.2	7.2	8.1	9				
	50		284.4	38	8	9	10				
	55		258.9	41.8	8.8	9.9	11				

Extra heavy load coil springs



Order DSWB-D-L

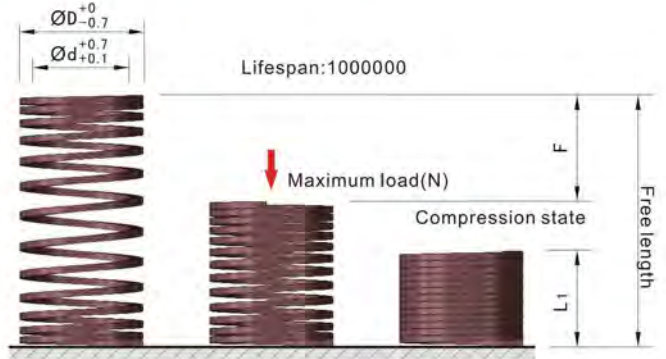
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					F mm	Load N	F mm	Load N	F mm	Load N		
27	60	13.5	237.3	45.6	9.6		10.8		12			
	65		218.7	49.4	10.4		11.7		13			
	70		203	53.2	11.2		12.6		14			
	75		189.3	57	12		13.5		15			
	80		177.5	60.8	12.8		14.4		16			
	90		157.9	68.4	14.4	2275.1		16.2	2559.5	18	2843.9	
	100		142.2	76	16		18		20			
	125		113.8	95	20		22.5		25			
	150		95.1	114	24		27		30			
	175		81.4	133	28		31.5		35			
30	25	15	706.1	19	4		4.5		5			
	30		588.4	22.8	4.8		5.4		6			
	35		504.1	26.6	5.6		6.3		7			
	40		441.3	30.4	6.4		7.2		8			
	45		392.3	34.2	7.2		8.1		9			
	50		353	38	8		9		10			
	55		320.7	41.8	8.8		9.9		11			
	60		294.2	45.6	9.6		10.8		12			
	65		271.6	49.4	10.4	2824.3		11.7	3177.4	13	3530.4	
	70		252	53.2	11.2		12.6		14			
35	75	17.5	235.4	57	12		13.5		15			
	80		220.6	60.8	12.8		14.4		16			
	90		196.1	68.4	14.4		16.2		18			
	100		176.5	76	16		18		20			
	125		141.2	95	20		22.5		25			
	150		117.7	114	24		27		30			
	175		101	133	28		31.5		35			
	200		88.3	152	32		36		40			
	40		601.1	30.4	6.4		7.2		8			
	40		45	20	533.5	34.2	7.2		8.1		9	
50		480.5	38		8		9		10			
55		436.4	41.8		8.8		9.9		11			
60		400.1	45.6		9.6		10.8		12			
65		369.7	49.4		10.4		11.7		13			
70		343.2	53.2		11.2		12.6		14			
75		320.7	57		12	3844.2		13.5	4324.7	15	4805.3	
80		300.1	60.8		12.8		14.4		16			
90		266.7	68.4		14.4		16.2		18			
100		240.3	76		16		18		20			
40	125	20	192.2	95	20		22.5		25			
	150		159.8	114	24		27		30			
	175		137.3	133	28		31.5		35			
	200		120.6	152	32		36		40			
	40		784.5	30.4	6.4		7.2		8			
	45		697.4	34.2	7.2		8.1		9			
	50		627.6	38	8		9		10			
	55		570.6	41.8	8.8		9.9		11			
	60		522.7	45.6	9.6		10.8		12			
	65		482.3	49.4	10.4		11.7		13			
40	70	20	448.2	53.2	11.2		12.6		14			
	75		418.4	57	12		13.5		15			
	80		392.3	60.8	12.8		14.4		16			
	90		349.1	68.4	14.4	5021		16.2	5648.6	18	6276.3	
	100		313.8	76	16		18		20			
	125		251.1	95	20		22.5		25			
	150		208.9	114	24		27		30			
	175		179.5	133	28		31.5		35			
	200		156.9	152	32		36		40			
	225		139.5	171	36		40.5		45			

- Excitor pins series
- Excitor sleeves series
- Side rollers series
- Latch locks series
- Pouping gates series
- Data stamps series
- Excitor series
- Cooling elements series
- Locating parts series
- Spring series
- Guide pins series
- Guide strips series
- Chuck series
- Mold accessories

JIS

Extra heavy load coil springs

DSWB



Order DSWB-D-L

D	L	d	Spring Constant N/mm	Solid height (mm)	F=L×40%		F=L×45%		F=L×50%		@ ¥/P
					F mm	Load N	F mm	Load N	F mm	Load N	
40	250	20	125.5	190	40		45		50		
	275		115.9	209	44	5021	49.5	5648.6	55	6276.3	
	300		104.6	232.2	48		54		60		
	50		980.7	38	8		9		10		
	55		891.5	41.8	8.8		9.9		11		
	60		816.9	45.6	9.6		10.8		12		
	65		754.4	49.4	10.4		11.7		13		
	70		700.2	53.2	11.2		12.6		14		
	75		653.8	57	12		13.5		15		
	80		612.9	60.8	12.8		14.4		16		
50	90	545.2	68.4	14.4		16.2		18			
	100	490.3	76	16		18		20			
	125	392.3	95	20	7845.3	22.5	8826	25	9806.7		
	150	326.6	114	24		27		30			
	175	280.4	133	28		31.5		35			
	200	245.2	152	32		36		40			
	225	217.9	171	36		40.5		45			
	250	196.1	190	40		45		50			
	275	178.3	209	44		49.5		55			
	300	163.8	228	48		54		60			
60	350	140.1	270.9	56		63		70			
	60	1176.8	45.6	9.6		10.8		12			
	70	1009.1	53.2	11.2		12.6		14			
	80	882.6	60.8	12.8		14.4		16			
	90	784.5	68.4	14.4		16.2		18			
	100	706.1	76	16		18		20			
	125	564.9	95	20	11297.3	22.5	12709.4	25	14121.6		
	150	470.7	114	24		27		30			
	175	403.1	133	28		31.5		35			
	200	353	152	32		36		40			
70	250	282.4	190	40		45		50			
	300	235.4	228	48		54		60			
	350	201.7	270.9	56		63		70			
	70	1218.9	54.2	11.2		12.6		14			
	80	1066.5	61.9	12.8		14.4		16			
	90	948	69.7	14.4		16.2		18			
	100	882.6	76	16		18		20			
	125	706.1	95	20	14122	22.5	15887	25	17652		
	150	588.4	114	24		27		30			
	175	504.3	133	28		31.5		35			
200	441.3	152	32		36		40				
250	353	190	40		45		50				
300	294.2	228	48		54		60				
350	252.2	266	56		63		70				

Guide Pins & Guide Bush Series





DIN		DIN		DIN		DIN		DIN	
Guide pins		Guide pins		Guide pins		Guide pins		Guide pins	
ZZ03	P520	ZZ04	P524	ZZ00	P527	ZZ012	P531	ZZ01	P532



DIN		DIN		DIN		DIN		DIN	
Guide pins		Guide pins		Guide pins		Guide pins		Guide pins	
ZZ013	P532	ZZ011	P533	ZZ144	P534	ZZ02	P535	EE1060	P536



DIN		DIN		JIS		JIS		JIS	
Guide pins		Guide pins		Guide pins		Guide pins		Guide pins	
EE1035	P537	EE1040	P537	SSPP	P538	SSPPZ	P784	SSPP-OC	P539



JIS		JIS		JIS		JIS		JIS	
Guide pins		Guide pins		Guide pins		Guide pins		Guide pins	
SSPPZ-OC	P538	GGPSL	P540	GGPOL	P540	GGPHL	P541	EEGH	P542



JIS		JIS		JIS		TAIWAN		TAIWAN	
Guide pins		Guide pins		Guide pins		Guide pins		Return pins	
GGPHLSP	P543	GGPSOT	P543	GGPBL	P546	GGP	P547	EP	P544



TAIWAN		TAIWAN		DIN		DIN		DIN	
Angle guide pins		Angle guide pins		Angle guide pins		Angle guide pins		Angle guide pins	
AMP	P544	AAP	P544	GGI	P545	ZZ016	P545	ZZ010	P548



JIS		JIS		JIS		JIS		JIS	
Angle guide pins		Angle guide pins		Angle guide pins		Angle guide pins		Angle guide pins	
DAP	P550	DAPS	P550	AAPZS	P551	AAPU	P551	AAPHX	P551



JIS		JIS		JIS		JIS		JIS	
Angle guide pins		Angle guide pins		Angle guide pins		Angle guide pins		Angle guide pins	
AAPUS	P552	AAPHXS	P552	AAPX	P552	AAPXS	P552	AAPM	P553



JIS		AISI		AISI		JIS		JIS	
Angle guide pins		Guide pins		Guide bush		Guide bush		Guide bush	
AAPMS	P553	GLL	P554	GGBE	P554	GBB	P555	EEGBH	P555



JIS		JIS		JIS		JIS		JIS	
Guide bush		Guide bush		Guide bush		Guide bush		Guide bush	
GGBS	P556	GGBSE	P556	GGBHE	P557	GGBH	P557	EEGBZS	P558



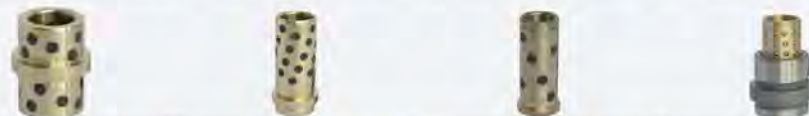
DIN		DIN		DIN		DIN		DIN	
Guide bush		Guide bush		Guide bush		Guide bush		Guide bush	
ZZ10	P559	ZZ4079	P560	ZZ4085	P560	ZZ75	P561	ZZ78	P562



DIN		DIN		DIN		DIN		DIN	
Guide bush		Guide bush		Guide bush		Guide bush		Guide bush	
EE1140	P562	ZZ4486	P563	ZZ81-S	P564	WW30	P565	ZZ76	P566



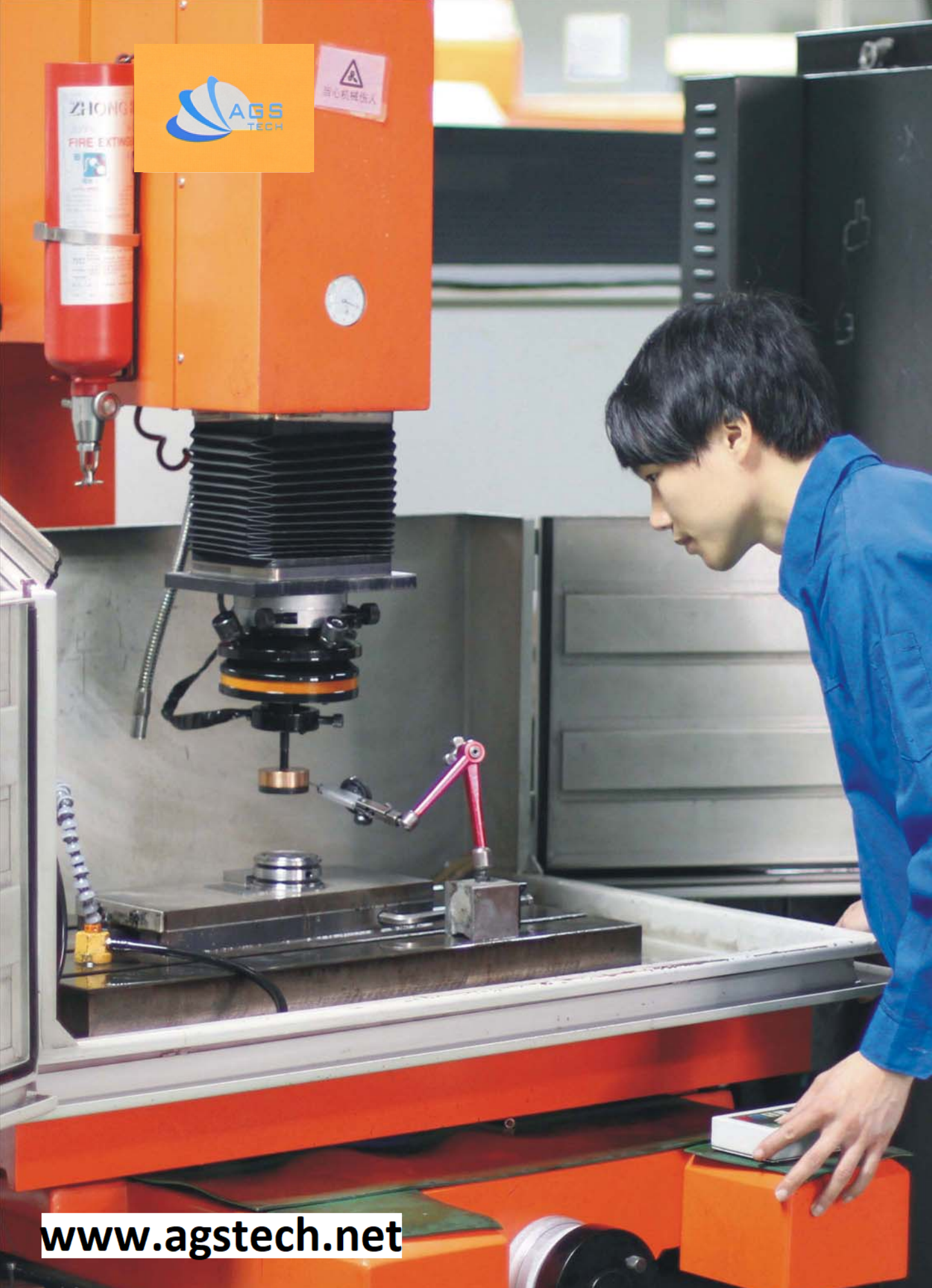
DIN		DIN		DIN		DIN		DIN	
Guide bush		Guide bush		Guide bush		Guide bush		Guide bush	
ZZ11	P567	EE1110	P568	ZZ11W	P569	ZZ10W	P570	ZZ13W	P571



DIN		DIN		DIN		DIN	
Guide bush		Guide bush		Guide bush		Steel ball guide bush	
ZZ14W	P571	ZZ1000W	P572	ZZ1100W	P573	ZZ12	P574












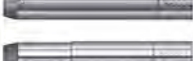








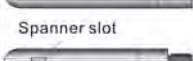



当心机械伤人











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Products Summary

Picture	Type		Standard	Code	Page		
 Oil groove type	Guide pin	Shoulder type					
 Screw oil groove type			Oil groove type	/	DIN	ZZ011	P533
				/	TAIWAN	GGP	P547
			Screw oil groove type	/	JIS	GGPHLSP	P543
				/	/	/	/
 Oil groove type			Oil groove type	/	DIN	ZZ03	P520
 Screw oil groove type			Screw oil groove type	/	JIS	GGPBL	P546
				/	/	/	/
				/	/	/	/
 Without oil groove type			Without oil groove type	/	DIN	ZZ04	P524
 Oil groove type			Oil groove type	/		ZZ00	P527
				/	/	/	/
				/	/	/	/
 Without close-fitting type			Without oil groove type	Without oil groove type	DIN	EE1035	P537
 Without close-fitting type				Without close-fitting type		ZZ012	P531
				Without close-fitting type		ZZ01	P532
				Without oil groove type		JIS	GGPHL
				Imperial system	AISI	GLL	P554
 Without oil groove type	Without oil groove type	Close-fitting tolerance K6	JIS	SSPP	P538		
 Oil groove type		Close-fitting tolerance M5		SSPPZ	P538		
		Close-fitting tolerance K6		SSPP-0C	P538		
		Close-fitting tolerance M5		SSPPZ-0C	P539		
 Without close-fitting type	Without shoulder type	Without oil groove type	DIN	EE1040	P537		
 With close-fitting bit				Without close-fitting type	ZZ013	P532	
 Step type			Close-fitting tolerance M5	JIS	GGPSL	P540	
 Oil groove type			Without close-fitting type		EEGH	P542	
			Step type	GGPSOT	P543		
			Close-fitting tolerance M5	GGPOL	P540		
 With spanner slot	Without oil groove type	Through-hole type	DIN	EE1060	P536		
 Through-hole type		With spanner slot		ZZ144	P534		
		With spanner slot		ZZ02	P535		
 Standard type	Shoulder type	Standard type	TAIWAN	AAP	P544		
 Pitch type		Pitch type	DIN	ZZ016	P545		
 Standard type+step		Pitch type	JIS	DAP	P550		
 Taper type		Step type		DAPS	P550		
 Taper type+step		Step type		AAPZS	P551		
 Angular pin/angle pin	Angular pin/angle pin	Without shoulder type	TAIWAN	AMP	P544		
				Internal thread fixed type	DIN	ZZ010	P548
			Internal thread fixed type	Without wrench bit			
			Internal thread fixed type	Hexagon socket wrench bit			
			Internal thread fixed type	With spanner slot			
			Internal thread fixed type	Hexagon socket wrench bit			
			Internal thread fixed+setp	With spanner slot	JIS	AAPU	P551
			Internal thread fixed+setp	Hexagon socket wrench bit		AAPHX	P551
			Internal thread fixed+setp	With spanner slot		AAPUS	P552
			Internal thread fixed+setp	Hexagon socket wrench bit		AAPHXS	P552
	Bolt fixed type	Without wrench bit	AAPX	P552			
	Bolt fixed type	Without wrench bit	AAPXS	P552			
	Internal thread fixed type	With spanner slot	AAPM	P553			
	Internal thread fixed+setp	With spanner slot	AAPMS	P553			

Products Summary

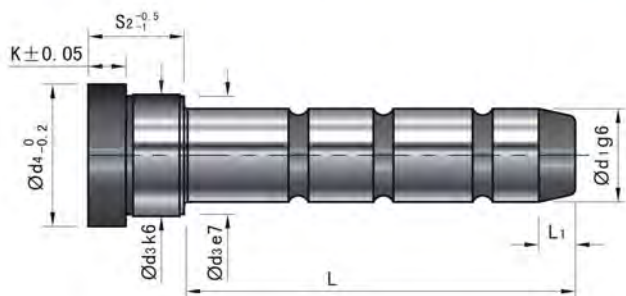
Picture	Type			Standard	Code	Page
 Without oil groove type	Steel	Shoulder Bushings	Middle shoulder type	Oil groove type	JIS	EEGBH P555
				Without oil groove type	DIN	ZZ10 P559
Screw oil groove type				ZZ75 P561		
Screw oil groove type				ZZ78 P562		
Without oil groove type				EE1140 P562		
 Oil groove type		Shoulder Bushings	Shoulder type	Oil groove type	JIS	GGBHE P557
				Oil groove type	GGBH P554	
				Oil groove+ annular groove	DIN	ZZ76 P566
Without oil groove type		ZZ11 P567				
 With snap ring				With snap ring		EE1110 P568
 Oil groove type	Straight Bushings	/	Without oil groove type	JIS	GBB P555	
			Oil groove type		GGBS P556	
Oil groove type			GGBSE P556			
 Without oil groove type			/	Without oil groove type	DIN	ZZ4486 P563
				Oil groove type		
 Without graphite type			Brass	Shoulder Bushings	Middle shoulder type	Imperial system
	Without graphite type	DIN				ZZ4079 P560
	Self-lubricating type					ZZ10W P570
	Self-lubricating type					ZZ13W P571
	Self-lubricating type					ZZ14W P571
	Self-lubricating type					ZZ1000W P572
	Self-lubricating type	JIS				EEGBZS P558
 Self-lubricating+ annular groove	Shoulder type	Self-lubricating+ annular groove		DIN	ZZ11W P569	
		Self-lubricating+ annular groove			ZZ1100W P573	
 Self-lubricating+ annular groove	/	/			DIN	ZZ12 P574



DIN

Guide pins

ZZ03



Order ZZ03-S2-d1-L Material:SUJ2 Hardness:58-62HRC

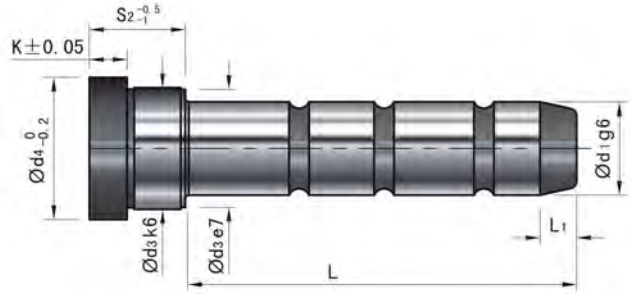
S2	d1	L	L1	d3	d4	K	@ ¥ / P
9		20					
		35					
		50					
		25					
12		45					
		65					
17	9	20	4	14	16	3	
		30					
22	10	25					
		35					
27		55					
		30					
36		50					
		25					
46		45					
		30					
56		45					
		60					
66		35					
		65					
		75					
		95					
17		20					
		35					
		55					
		75					
22		95					
		20					
		35					
		40					
		45					
		50					
		55					
		65					
70							
27	14	90	7	20	25	6	
		110					
		20					
		35					
		40					
		45					
		55					
		65					
36		85					
		105					
		20					
		35					
		40					
		45					
46		55					
		65					
		75					
		95					
		20					
		35					
56		45					
		65					
		85					
		105					
		20					
		35					
		55					
		75					
		95					

- Extractor pins
- Extractor sleeves
- Slide rail/liners
- liners
- Linch bolts
- liners
- Rolling gate
- liners
- Die stamps
- Air valves series
- Extractor series
- Cooling elements
- liners
- Locating pins
- liners
- Springs series
- Guide pins
- Guide pins
- Guide strips
- V-block plate series
- Chuck series
- Mold
- accessories

DIN

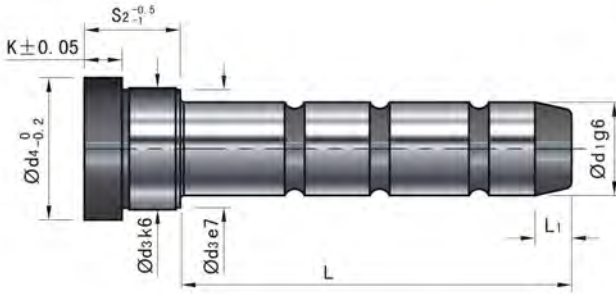
Guide pins

ZZ03



Order ZZ03-S2-d1-L Material:SUJ2 Hardness:58-62HRC

S2	d1	L	L1	d3	d4	K	@ ¥/P	
66	14	15		20	25			
								55
								65
76	14	15		20	25			
								55
								95
86	14	15		20	25			
								55
								95
96	14	15		20	25			
								55
								95
116	14	15		20	25			
								55
								75
17	14	15		20	25			
								35
								55
22	14	15		20	25			
								75
								95
								20
								35
								40
								45
								50
								55
								60
								65
								70
27	18	20	7	26	31	6		
								80
								85
								115
								20
								35
								40
								45
								50
								55
								60
								65
70								
36	18	20		26	31	6		
								85
								105
								125
								20
								35
								40
								45
								50
								55
								60
								65
70								
46	18	20		26	31	6		
								75
								80
								95
								115
								135
								20
								45
								65
								85
								105
								135
165								



Order ZZ03-S2-d1-L Material:SUJ2 Hardness:58-62HRC

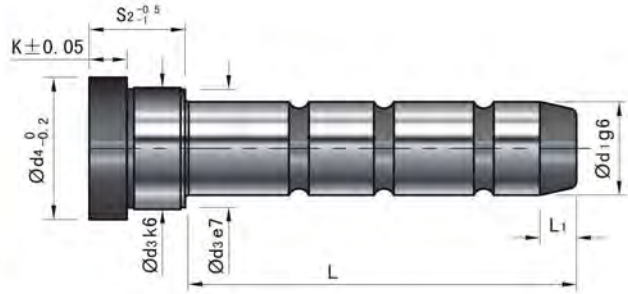
S2	d1	L	L1	d3	d4	K	@ ¥/P	
56		20						
		35						
		55						
		75						
		95						
66		55						
		75						
		95						
76	18	20		26	31			
								55
								75
86								
								95
								55
96								
								95
								55
116								
								95
								115
136								
								135
								35
17								
								55
								75
								35
								55
22								
								75
								55
								105
								130
27			7			6		
								25
								45
								50
								60
								65
								70
								80
								85
								105
								125
36	22	24						
								165
								25
								45
								50
								55
								60
								70
								75
								80
								95
46								
								115
								135
								165
								25
								45
								50
								60
								65
								70
								80
85								
105								
125								
165								

- Excitor pins series
- Excitor sleeves series
- Side rollers series
- Latch locks series
- Pouring gate series
- Data stamps Ad-valves series
- Excitor series
- Cooling elements series
- Locating parts series
- Spacers series
- Guide pins
- Guide strips V-lead plate series
- Chuck series
- Mold accessories

DIN

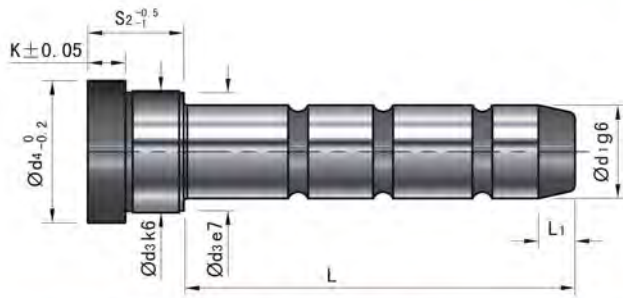
Guide pins

ZZ03



Order ZZ03-S2-d1-L Material:SUJ2 Hardness:58-62HRC

S2	d1	L	L1	d3	d4	K	@ ¥ /P	
56		25						
		45						
		55						
		75						
		95						
		115						
66		165						
		55						
		75						
		95						
		25						
		45						
76	22	24		30	35			
								55
								75
								95
								115
								55
86								
								75
								95
								55
								75
								95
96								
								55
								75
								95
								75
								95
116								
								115
								155
								135
								155
								35
22			7			6		
								75
								130
								45
								65
								105
27								
								165
								55
								75
								95
								115
36								
								155
								45
								65
								85
								105
46	30	32		42	47			
								125
								165
								55
								75
								95
56								
								115
								135
								175
								55
								75
66								
								95
								115
								135
								175
								55
76								
								75
								95
								115
								155
								155



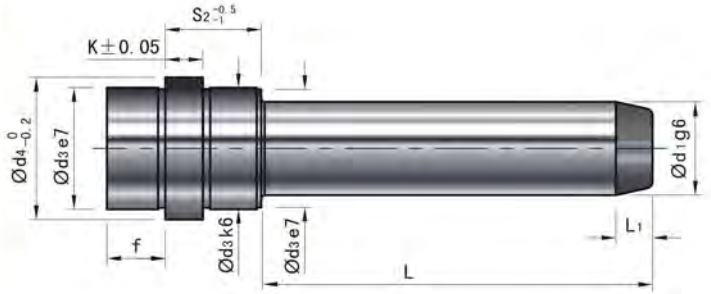
Order ZZ03-S2-d1-L Material:SUJ2 Hardness:58-62HRC

S2	d1	L	L1	d3	d4	K	@ ¥/P
86		55					
		75					
		95					
		115					
		155					
96	30	55		42	47	6	
		75					
		95					
		115					
		155					
116		75					
		95					
		115					
		155					
136		75					
		95					
		115					
		155					
156		75					
		95					
		115					
		155					
176		75					
		95					
		115					
		155					
196		75					
		95					
		115					
		155					
36		75					
		95					
		115					
		155					
46		75	7				
		95					
		115					
		155					
56		75					
		95					
		115					
		155					
66		75					
		95					
		115					
		155					
76		75					
		95					
		115					
		155					
86		75					
		95					
		115					
		155					
96	40	75		54	60	10	
		95					
		115					
		155					
116		75					
		95					
		115					
		155					
136		75					
		95					
		115					
		155					
156		75					
		95					
		115					
		155					
176		75					
		95					
		115					
		155					
196		75					
		95					
		115					
		155					
96		75					
116	50	75		66	72		
		95					
		115					
		155					
136		75					
		95					
		115					
		155					
156	60	75		80	86	20	
		95					
		115					
		155					
196		75					
		95					
		115					
		155					
246		75					
		95					
		115					
		155					

DIN

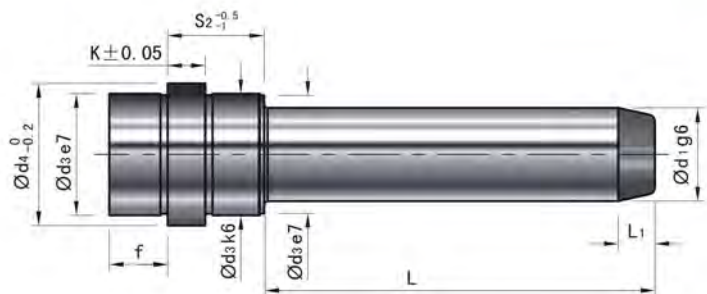
Guide pins

ZZ04



Order ZZ04-S2-d1-L Material:SUJ2 Hardness:58-62HRC

S2	d1	L	L1	d3	d4	f	K	@ ¥/P
22	9	10	25	4	14	3	3	
27			30					
36			35					
			45					
			50					
22	14	15	25	20	25	3	3	
27			30					
			35					
			45					
			50					
			55					
			65					
			75					
			85					
			95					
36	18	20	35	26	31	9	6	
46			45					
			55					
			65					
			75					
			85					
			95					
			105					
			115					
			135					
56	22	24	35	30	35	9	6	
66			45					
76			55					
86			65					
			75					
27	22	24	85	30	35	9	6	
			95					
			105					
			125					
			165					
			205					



Order ZZ04-S2-d1-L Material:SUJ2 Hardness:58-62HRC

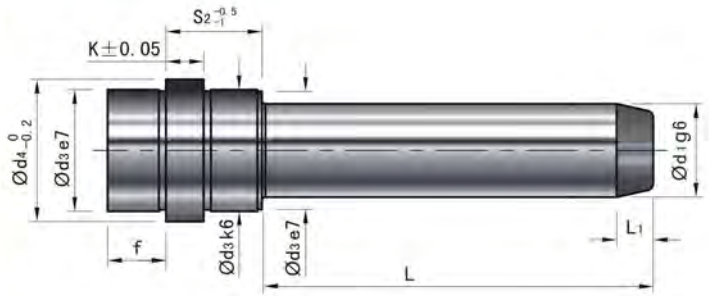
S2	d1	L	L1	d3	d4	f	K	@ ¥/P
36		35						
		55						
		75						
		95						
		115						
		135						
46		165						
		205						
		35						
		45						
		65						
		85						
56		105						
		135						
		165						
		35						
		55						
		75						
66	22	24						
		35						
		55						
		75						
		95						
		115						
76		165	7					
		205						
		35						
		55						
		75						
		95						
86		115						
		145						
		55						
		75						
		95						
		135						
96		55						
		75						
		95						
		125						
		75						
		115						
116		155						
		55						
		75						
		155						
		245						
		65						
156		85						
		105						
		125						
		165						
		245						
		55						
36		75						
		155						
		245						
		65						
		85						
		105						
46	30	32						
		125						
		165						
		245						
		55						
		75						
56		95						
		135						
		175						
		245						
		55						
		75						

- Electric pins series
- Slide rail pins series
- Launch tools series
- Pointing guide series
- Date stamps Ad-valves series
- Explosive series
- Cooling elements series
- Locating parts series
- Spacers series
- Guide pins
- Guide stops V-Block plate series
- Chuck series
- Mold accessories

DIN

Guide pins

ZZ04



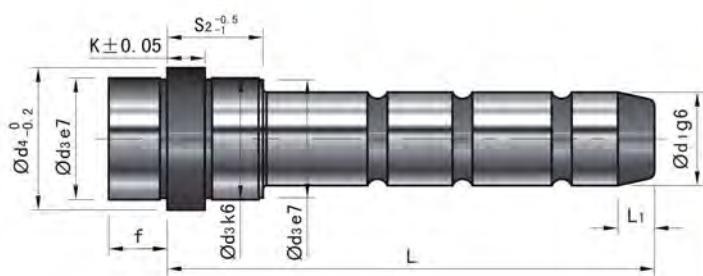
Order ZZ04-S2-d1-L Material:SUJ2 Hardness:58-62HRC

S2	d1	L	L1	d3	d4	f	K	@ ¥/P	
66		55							
		75							
		95							
		115							
		175							
76		295							
		55							
		75							
		95							
		115							
86		155							
		225							
		75							
		95							
		115							
96	30	32	7	42	47	9	6		
									95
									115
									155
									205
116		75							
		115							
		155							
		95							
		115							
136		115							
		155							
		95							
		115							
		115							
156		155							
		196							
		76							
		96							
		116							
196	40	42		54	60	12	10		
									115
									155
									135
									155
196									

DIN

Guide pins

ZZ00



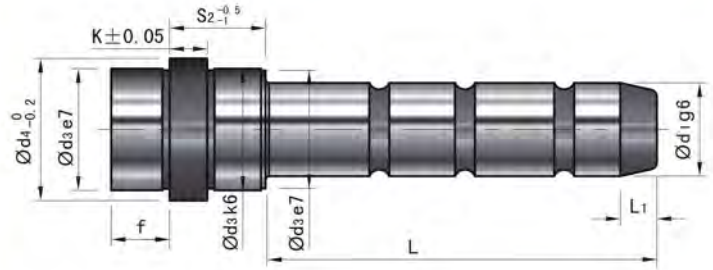
Order ZZ00-S2-d1-L Material:SUJ2 Hardness:58-62HRC

S2	d1	L	L1	f	K	d3	d4	@ ¥/P
12		25						
		45						
		65						
17		20						
		30						
		50						
22	9-10	70	4	3	3	14	16	
		25						
		35						
27		55						
		75						
		95						
36		20						
		30						
		50						
46		70						
		90						
		25						
56		45						
		65						
		85						
66		30						
		45						
		60						
17	14-15	35	7	9	6	20	25	
		55						
		75						
22		95						
		30						
		50						
27		70						
		90						
		110						
36		125						
		150						
		30						
46		45						
		65						
		85						
56		105						
		125						
		145						
17		165						
		35						
		55						
22		75						
		95						
		125						
27		155						
		35						
		45						
36		65						
		85						
		105						
46		125						
		145						
		35						
56		55						
		75						
		95						
		135						

DIN

Guide pins

ZZ00



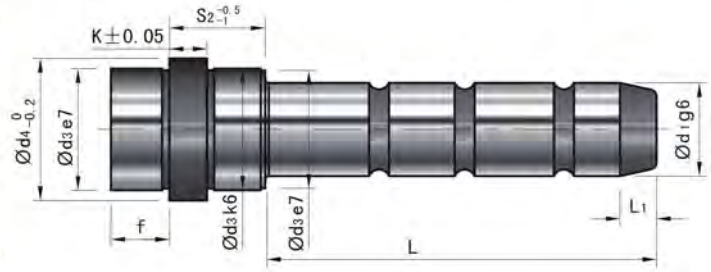
Order ZZ00-S2-d1-L Material:SUJ2 Hardness:58-62HRC

S2	d1	L	L1	f	K	d3	d4	@ ¥/P							
66	14-15	55				20	25								
		65													
		95													
		125													
76		55													
		95													
86	55														
	95														
96	55														
	95														
116	75														
	35														
17	55														
	75														
	120														
	35														
	45														
	65														
22	85														
	115														
	35														
	45														
	65														
	85														
27	85														
	105														
	125														
	165														
	225														
	245														
36	35	7		9	6	26	31								
	55														
	75														
	95														
	115														
	135														
46	18-20	165													
	225														
	255														
	35														
	45														
	65														
	85														
	105														
	135														
	165														
	245														
	35														
	55														
56	75														
	95														
	155														
	35														
	55														
	75														
66	95														
	145														
	55														
	75														
76	95														
	135														
	55														
	75														
86	95														
	125														

DIN

Guide pins

ZZ00



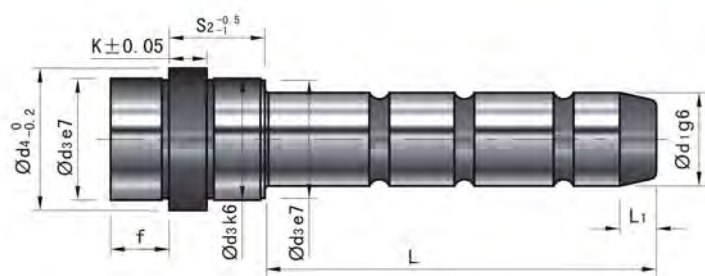
Order ZZ00-S2-d1-L Material:SUJ2 Hardness:58-62HRC

S2	d1	L	L1	f	K	d3	d4	@ ¥/P
96	22-24	95	7	9	6	30	35	
116		125						
		75						
		115						
136		155						
156	95							
	135							
	155							
	45							
27	85							
	105							
	165							
	185							
	245							
	285							
	55							
	75							
36	30-32	95	7	9	6	42	47	
		115						
		155						
		245						
		285						
		45						
		65						
46		85						
		105						
		125						
		165						
		245						
		285						
		55						
		75						
56	95	7	9	6	42	47		
	135							
	175							
	245							
	295							
	55							
	75							
	95							
66	115							
	135							
	175							
	245							
	295							
	55							
	75							
	95							
76	115	7	9	6	42	47		
	155							
	225							
	55							
	75							
	95							
	115							
86	155							
	225							
	55							
	75							
	95							
	115							
	155							
	205							
96		75						

DIN

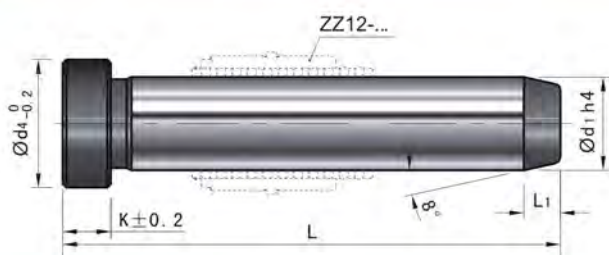
Guide pins

ZZ00



Order ZZ00-S2-d1-L Material:SUJ2 Hardness:58-62HRC

S2	d1	L	L1	f	K	d3	d4	@ ¥/P							
116	30-32	115	7	9	6	42	47								
		155													
		95													
		115													
		155													
136		115													
		155													
		115													
156		155													
196		195													
		95													
46	40-42	165	7	9	6	54	60								
		75													
		115													
		155													
		195													
56									75						
									135						
									75						
76									115						
									175						
86		75													
		135													
		75													
96		115													
		155													
		95													
116		135													
		195													
		95													
136		135													
		215													
		115													
156		155													
		215													
		155													
196		195													
		235													
		165													
246		245													



ZZ012

Order ZZ012-d1-L Material:SUJ2 Hardness:58-62HRC

d1	L1	d4	K	@ ¥/P						
				L40	L50	L60	L80	L100	L120	L140
12	4	16	4							
18	6	22	7							
30		36								

DIN

Guide pins

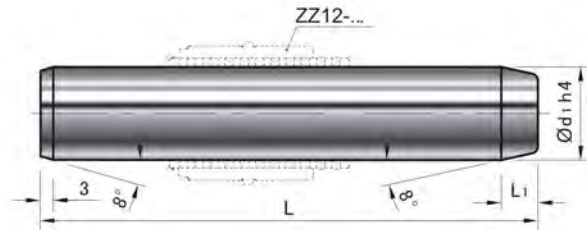
ZZ01



Order ZZ01-d1-L Material:SUJ2 Hardness:58-62HRC

d1	d4	M	H	K	L1
8	10	M4	8	3	4
9	12	M5	10		
10	12	M5	10		
12	16	M6	12	6	7
14	18	M8	16		
15	18				
16	20	M10	20		
18	22				
20	24	M12	24		
22	26				
24	28	M16	32		
30	36				
32	36	15	32		
40	48				
50	58				

ZZ013



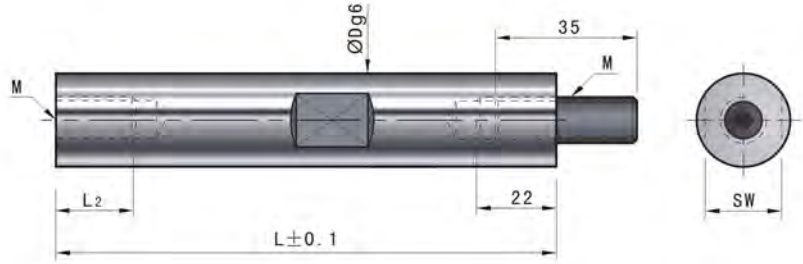
Order ZZ013-d1-L Material:SUJ2 Hardness:58-62HRC

d1	L1	@ ¥ / P			
		L100	L125	L160	L240
4	12				
7	18				
	30				

DIN

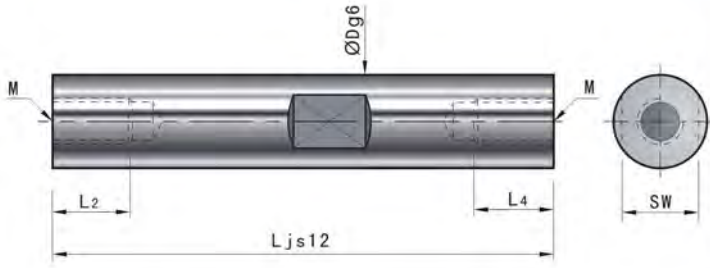
Guide pins

ZZ144



Order ZZ144-D-L Material:SUJ2 Hardness:≥58HRC

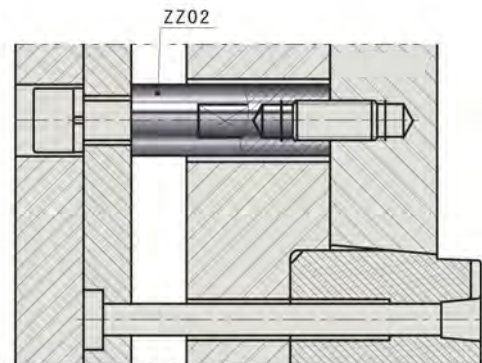
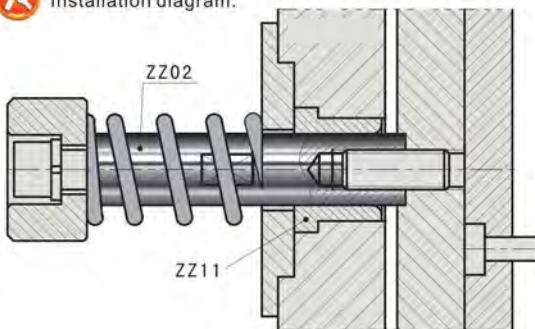
D	L	L1	SW	M	@ ¥/P
10	50	20	9	M 6	
	60				
	70				
	80				
	100				
14	120	16	12	M 8	
	140				
	160				
	180				
	200				
16	80	35	13	M10	
	100				
	125				
	140				
	160				
18	180	20	14	M12	
	200				
	220				
	240				
	260				
19	100	40	17	M16	
	125				
	140				
	160				
	180				
24	200	25	19	M20	
	240				
	280				
	320				
	360				
25	125	55	22	M24	
	140				
	160				
	180				
	200				
32	160		27	M30	
	200				
	250				
	300				
	315				



Order ZZ02-D-L Material:SUJ2 Hardness:≥58HRC

D	L	L2	L4	SW	M	@ ¥/P
10	60	16	9	9	M 6	
	70					
	80					
	100					
	120					
14	140	16	11	12	M 8	
	160					
	180					
	100					
	120					
	140					
18	160	20	12	14	M10	
	180					
	200					
	220					
	240					
	100					
20	120	25	14	16	M12	
	140					
	160					
	180					
	200					
	220					
24	240	30	16	19	M16	
	120					
	140					
	160					
	180					
30	200	30	16	24	M16	
	240					
	260					
	220					
	300					

Installation diagram:

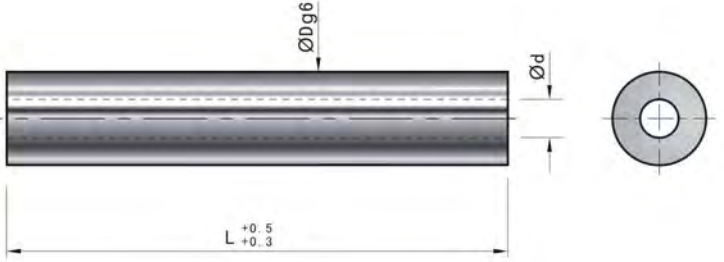


- Exactor pins
- Exactor sleeves
- Slide railiners
- slides
- Launch locks
- Launch locks
- Pointing gates
- series
- Date stamps
- Air valves series
- Exactor series
- Exactor series
- Cooling elements
- series
- Locating parts
- series
- Spacers series
- series
- Guide pins
- Guide pins
- Guide strips
- Wear plate series
- Chuck series
- Mold
- accessories



Guide pins

EE1060



Order EE1060-D-L Material:SUJ2 Hardness:58-62HRC

D	d	@ ¥ / P						
		L20	L30	L40	L60	L80	L100	L120
10	6.2							
14	8.5	-	-	-	-	-	-	-
18	10.5	-	-	-	-	-	-	-
24	13	-	-	-	-	-	-	-
30	17	-	-	-	-	-	-	-

D	d	@ ¥ / P						
		L140	L160	L180	L200	L220	L240	L280
10	6.2		-	-	-	-	-	-
14	8.5	-	-	-	-	-	-	-
18	10.5	-	-	-	-	-	-	-
24	13	-	-	-	-	-	-	-
30	17	-	-	-	-	-	-	-



Installation diagram:

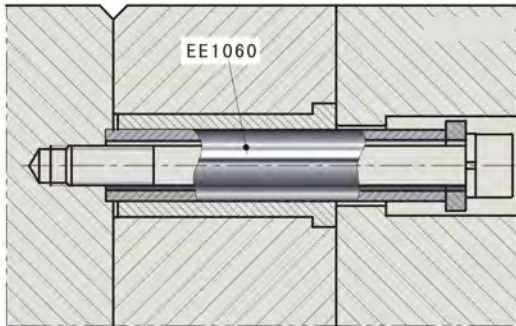


Diagram1

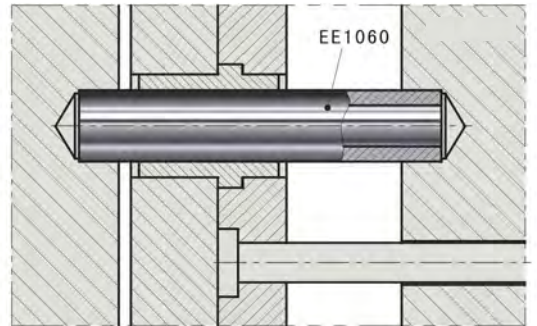
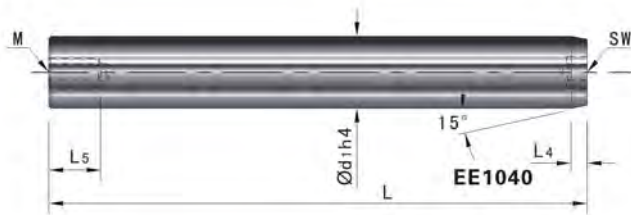
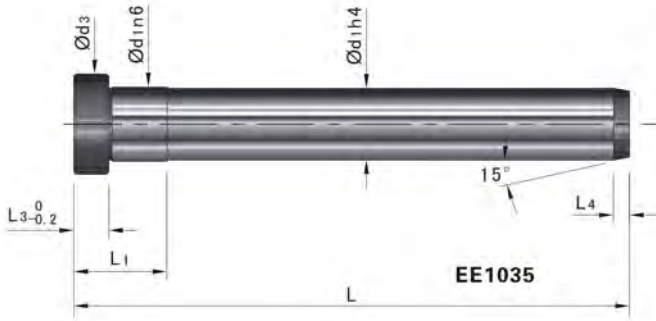


Diagram2



EE1035
EE1040



Order EE1035/1040-d1-L Material:SUJ2 Hardness:58-62HRC

d1	L	L4	Code	L1	L3	d3	@ ¥/P	Code	SW	L5	M	@ ¥/P								
12	80	4	EE1035	17	4	15		EE1035	5	17	M 8									
	100																			
	120																			
	140																			
	160																			
18	80	5		EE1035	22	6			21		EE1035		6	20	M10					
	100																			
	120																			
	140																			
	160																			
24	80	6			EE1035	27			6				27		EE1035		8	25	M12	
	100																			
	120																			
	140																			
	160																			
30	80	7	EE1035			36	6	35				EE1035	8				30	M16		
	100																			
	120																			
	140																			
	160																			
180																				
200																				
250																				

Installation diagram:

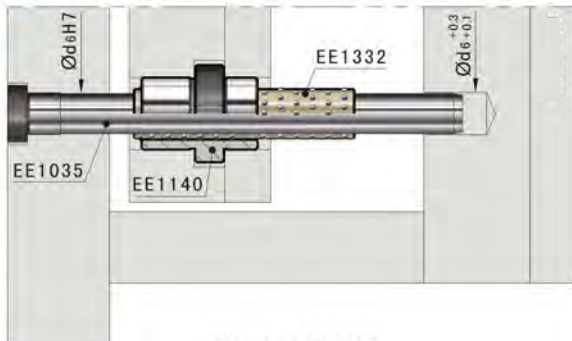


Diagram1 EE1035

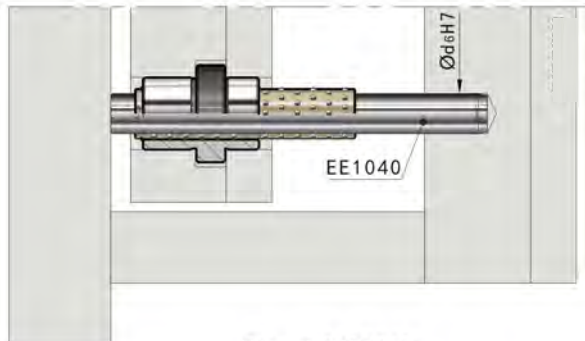


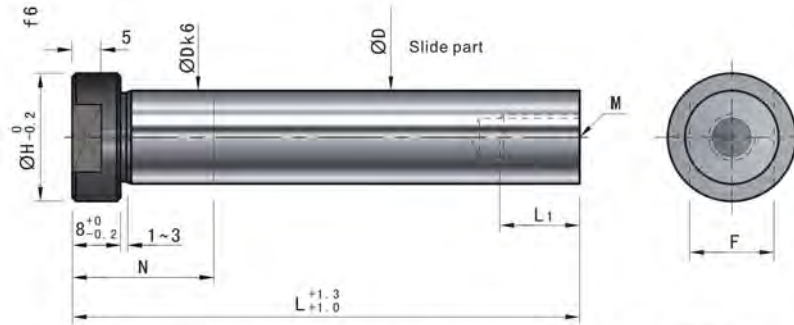
Diagram2 EE1040

- Extractor pins
- Extractor sleeves
- Slide rail/rollers
- Series
- Latch locks
- Series
- Pointing gates
- Series
- Data stamps
- Ad. valves series
- Extractor series
- Cooling elements
- Series
- Locating parts
- Series
- Spacers series
- Series
- Guide pins
- Series
- Guide plates
- Wear plate series
- Chuck series
- Series
- Mold accessories



Guide pins

SSPP

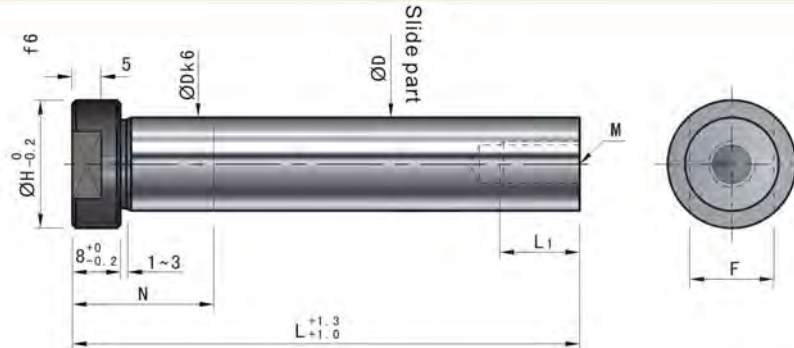


The cooperating gab between precision support pin and precision class guide pin is verysmall, suggest to be used below 80 degrees centigrade (for reference)

Order SSPP-D-L-N Material:SUJ2 Hardness:≥58HRC

Slide part	Df6	Press-inpart	Dk6	Designated unit N	F	H	M(Coarse thread)	
							M×Pitch	L1
13	-0.016	13	+0.012	8-60	12	16	M 6×1	12
16	-0.027	16	+0.001		14	19	M10×1.5	20
20		20			19	23	M12×1.75	24
25	-0.020	25	+0.015		22	28		
30	-0.033	30	+0.002		29	35		
35	-0.025	35	+0.018		32	40	M16×2	32
40	-0.041	40	+0.002		36	45		

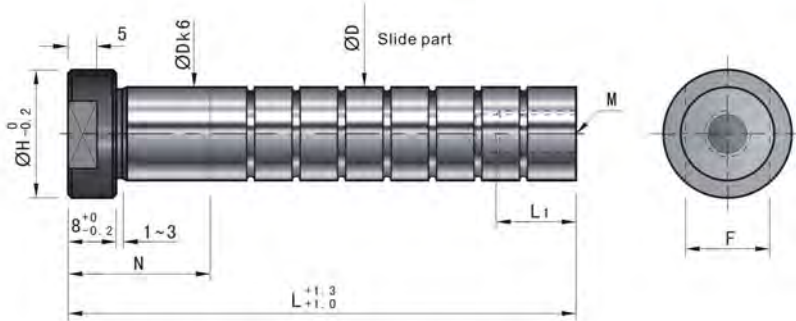
SSPPZ



The cooperating gab between precision support pin and precision class guide pin is verysmall, suggest to be used below 80 degrees centigrade (for reference)

Order SSPPZ-d-L-N Material:SUJ2 Hardness:≥58HRC

Slide part	Df6	Press-inpart	Dk6	Designated unit N	F	H	M(Coarse thread)	
							M×Pitch	L1
13	-0.020	13	+0.015	8-60	12	16	M 6×1	12
16	-0.025	16	+0.007		14	19	M10×1.5	20
20		20			19	23	M12×1.75	24
25	-0.025	25	+0.017		22	28		
30	-0.030	30	+0.008		29	35		
35	-0.030/-0.035	35	+0.020		32	40	M16×2	32
40	-0.030/-0.040	40	+0.009		36	45		



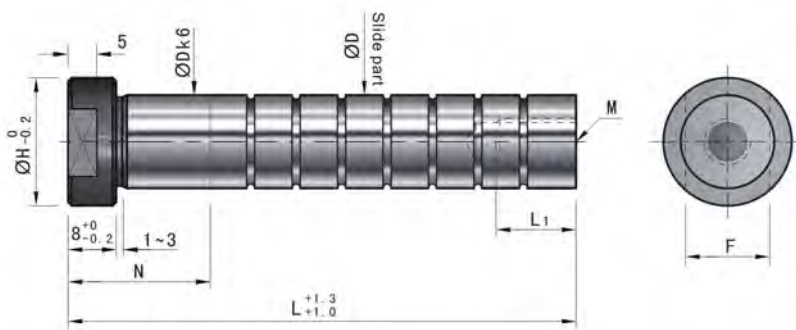
The cooperating gab between precision support pin and precision class guide pin is verysmall, suggest to be used below 80 degrees centigrade (for reference)

SPP-OC



Order SPP-OC-D-L-N Material:SUJ2 Hardness:≥58HRC

Slide part	Df6	Press-inpart	Dk6	Designated unit N	F	H	M(Coarse thread)	
							M×Pitch	L1
13	-0.016	13	+0.012	8-30	12	16	M 6×1	12
16	-0.027	16	+0.001		14	19	M10×1.5	20
20	-0.020	20	+0.015	8-40	19	23	M12×1.75	24
25	-0.033	25	+0.002		22	28	M16×2	32
30	-0.025	30	+0.018	29	35			
35	-0.041	35	+0.002	32	40			
40	-0.041	40	+0.002	8-60	36	45		



The cooperating gab between precision support pin and precision class guide pin is verysmall, suggest to be used below 80 degrees centigrade (for reference)

SPPZ-OC



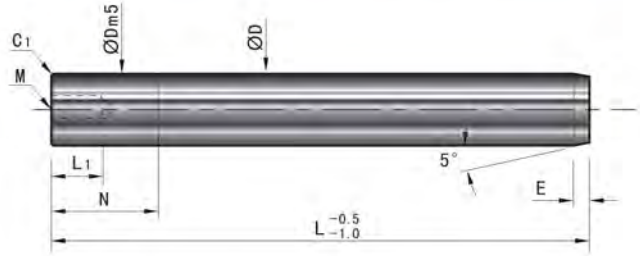
Order SPPZ-D-L-N Material:SUJ2 Hardness:≥58HRC

Slide part	Df6	Press-inpart	Dk6	Designated unit N	F	H	M(Coarse thread)	
							M×Pitch	L1
13	-0.020	13	+0.015	8-30	12	16	M 6×1	12
16	-0.025	16	+0.007		14	19	M10×1.5	20
20	-0.025	20	+0.017	8-40	19	23	M12×1.75	24
25	-0.030	25	+0.008		22	28	M16×2	32
30	-0.030	30	+0.020	29	35			
35	-0.030/-0.035	35	+0.009	32	40			
40	-0.030/-0.040	40	+0.009	8-60	36	45		



Guide pins

GGPSL

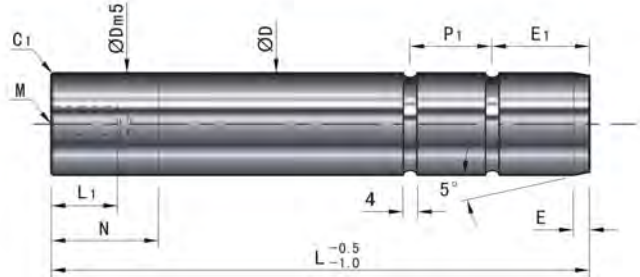


The cooperating gab between precision support pin and precision class guide pin is verysmall, suggest to be used below 80 degrees centigrade (for reference)

Order GGPSL-D-L-N Material:SUJ2 Hardness:58-62HRC

Slide part D		Press-in part Tolerance		N (Designated unit 1mm)	L1	E	M	
8	-0.015	8	+0.012	0- 40	10	3	M 5×0.8	
10	-0.020	10	+0.006			4		
12		12						
13	-0.020	13	+0.015	0-100	12	5	M 6×1	
16	-0.025	16	+0.007			16	M 8×1.25	
20		20				24	M12×1.75	
25	-0.025	25	+0.017	0-120	32	8	M16×2	
30	-0.030	30	+0.008					40
35	-0.030/-0.035	35	+0.020					
40	-0.030	40	+0.009	0-200	40		M20×2.5	
50	-0.040	50						
60	-0.030/-0.050	60	+0.024/+0.011					

GGPOL

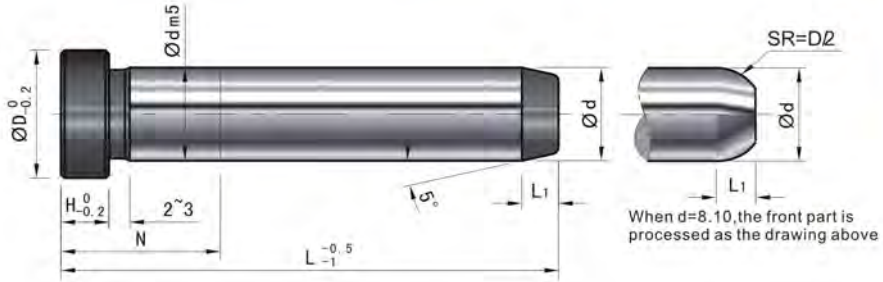


The cooperating gab between precision support pin and precision class guide pin is verysmall, suggest to be used below 80 degrees centigrade (for reference)

Order GGPOL-D-L-N Material:SUJ2 Hardness:58-62HRC

Slide part D		Press-in part Dm5		N (Designated unit 1mm)	L1	E	E1	P1	Number of oil groove	M
35	-0.030 -0.035	35		0- 60	32	8	14	12	2	M16×2
				0- 80			15	13		
				0- 60			16	14		
40	-0.030 -0.040	40	+0.020 +0.009	0- 80	32	8	26	24	2	M16×2
				0- 80			28	26		
				0-100			30	28		
50	-0.030 -0.040	50		0-100	40		28	26	2	M16×2
				0-100			30	28		
				0-100			32	30		
60	-0.030 -0.050	60	+0.024 +0.011	0-120	40		34	32	2	M20×2.5
				0-120			30	28		
				0-120			32	30		

GGPHL



The cooperating gab between precision support pin and precision class guide pin is verysmall, suggest to be used below 80 degrees centigrade (for reference)



Order GGPHL-d-L-N Material:SUJ2 Hardness:58-62HRC

d	d	H	D	L1
8	8	5	11	3
10	10		13	4
12	12		17	
13	13		18	
16	16	8	21	5
20	20		25	
25	25		30	
30	30		35	
35	35	10	40	8
40	40		45	
50	50		55	
60	60		65	

D	L5mm	N1mm	@ ¥/P
8	30- 40	5- 60	
	45- 50		
	55- 80		
10	30- 40	5- 80	
	45- 50		
	55- 80		
12	30- 40	6- 80	
	45- 80		
	85-120		
13	125-160	6- 100	
	165-200		
	205-250		
16	30- 40	8- 120	
	45- 80		
	85-120		
20	125-160	10- 200	
	165-200		
	205-250		
25	30- 50	12- 200	
	55- 90		
	95-150		

D	L5mm	N1mm	@ ¥/P
30	50- 60	8- 130	
	65-100		
	105-160		
35	165-200	10- 200	
	205-260		
	265-300		
40	305-350	12- 200	
	365-400		
	405-450		
50	60-100	15- 200	
	100-150		
	145-100		
60	195-240		
	245-300		
	305-360		

- Excise pins series
- Single reference series
- Launch tools series
- Pointing guide series
- Date stamps series
- Excise series
- Clamping elements series
- Locating pins series
- Stamp series
- Code part series
- Guide stamp series
- Clutch series
- Mold accessories

JIS

Guide pins

EEGH

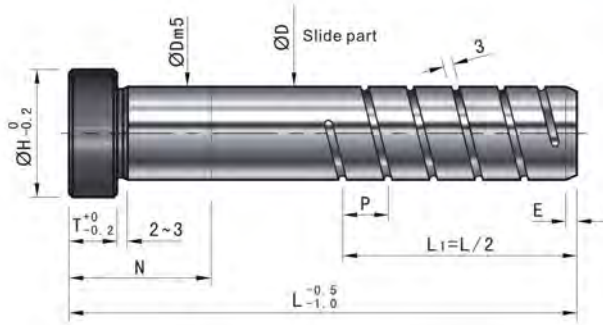


Order EEGH-D-L Material:SUJ2 Hardness:58-62HRC

D	L 5mm	L1	M Pitch	@ ¥ /P
6	-0.010 -0.015	8	30- 70	M 4×0.7
			75- 80	
8	-0.015 -0.020	10	30- 70	M 5×0.8
			75-100	
10	-0.020 -0.025	12	30- 70	M 6×1.0
			75-100	
12	-0.025 -0.030	16	40- 70	M 8×1.25
			75-100	
13	-0.020 -0.025	12	105-125	M 6×1.0
			130-150	
16	-0.025 -0.030	16	40- 70	M 8×1.25
			75-100	
20	-0.025 -0.030	20	105-125	M10×1.5
			130-150	
25	-0.025 -0.030	20	40- 70	M10×1.5
			75- 90	
30	-0.025 -0.030	20	95-110	M10×1.5
			115-130	
30	-0.025 -0.030	20	135-150	M10×1.5
			155-170	
30	-0.025 -0.030	20	175-200	M10×1.5
			205-225	
30	-0.025 -0.030	20	230-250	M10×1.5
			255-275	
30	-0.025 -0.030	20	280-300	M10×1.5
			305-325	

D	L 5mm	L1	M Pitch	@ ¥ /P
35	-0.025 -0.030	20	50- 70	M10×1.5
			75- 90	
40	-0.025 -0.030	20	95-110	M10×1.5
			115-130	
40	-0.025 -0.030	20	135-150	M10×1.5
			155-170	
50	-0.025 -0.030	20	175-200	M10×1.5
			205-225	
50	-0.025 -0.030	20	230-250	M10×1.5
			255-275	
50	-0.025 -0.030	20	280-300	M10×1.5
			305-325	
50	-0.025 -0.030	20	330-350	M10×1.5
			350-370	

GGPHLSP



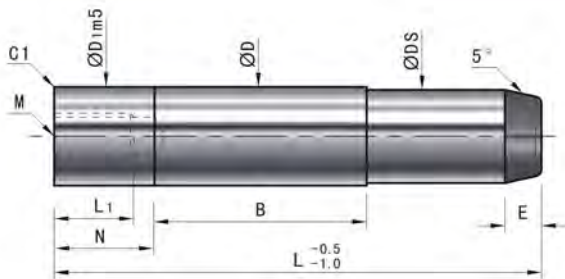
The cooperating gap between precision support pin and precision class guide pin is very small, suggest to be used below 80 degrees centigrade (for reference)

Features of spiral oil groove: compared to annular groove, spiral oil groove can prevent sintering phenomenon more effectively, because when guide pillar works in accord with guide bush the lubricating oil flows through the spiral groove and it makes the guide pillar surface be average lubricated.

Order GGPHLSP-D-L-N Material:SUJ2 Hardness:58-62HRC

Slide part D		Press-in part Dm5		N(Designated unit:1mm)	T	H	E	L	P
20	-0.025	20	+0.017	$8 \leq N < L/2$	8	25	5	60- 70	10
25	-0.030	25	+0.008					80-120	15
30	-0.030	30	+0.008	$10 \leq N < L/2$	10	45	8	130-180	20
40	-0.030	40	+0.020					190-300	25
50	-0.040	50	+0.009					310-360	30

When D=20-30,P=23



GGPSOT

Order GGPSOT-D-L-N-B-DS Material:SUJ2 Hardness:58-62HRC

D	D1	N(Designated unit:1mm)	B	DS _{0.01} ⁰	E	L1	M
16	-0.020/-0.025	16	5- 50	15.8-16	5	12	M 6×1
20	-0.025	20	5- 80	19.8-20		16	M 8×1.25
25	-0.030	25	5-130	24.8-25		24	M12×1.75
30	-0.030	30		29.8-30			

TAIWAN

Guide pins/Return pins

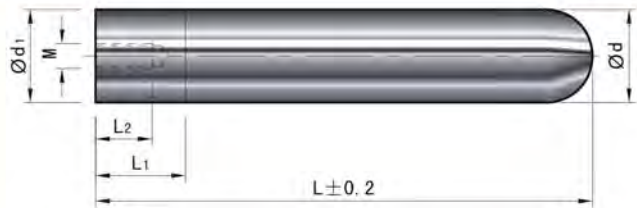
EP



Order EP-d-L Material:SUJ2 Hardness:58-62HRC

d		D		H
Size	Tolerance			
8	-0.013	12		
10	-0.022	15		4
12	-0.016	17		
15	-0.027	20		6
20		25		
25	-0.020	30		8
30	-0.033	35		
35	-0.025	40		10
40	-0.041	45		

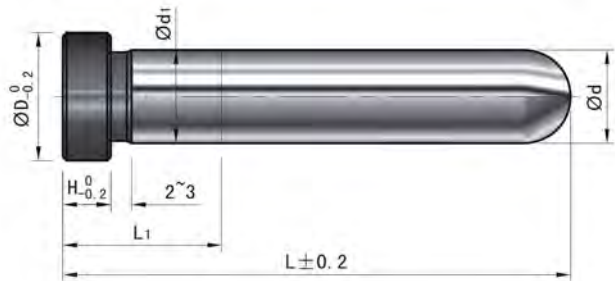
AMP



Order AMP-d-L Material:SUJ2 Hardness:58-62HRC

d		d1		L1	M	L2
Size	Tolerance	Size	Tolerance			
10	-0.013 / -0.022	10	+0.015 / +0.006	19	6	15
13	-0.016	13	+0.018	24	8	20
16	-0.027	16	+0.006	29	10	25
20	-0.020	20	+0.021	39	12	30
25	-0.033	25	+0.008	49		

AAP



Order AAP-d-L

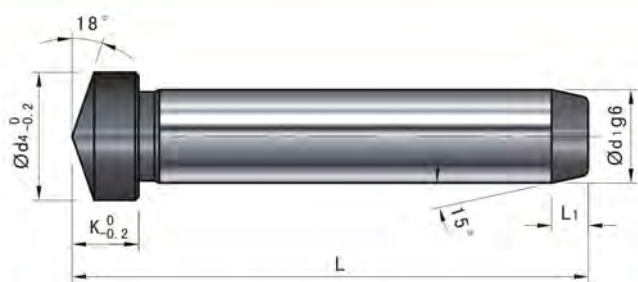
d		d1		L1	D	H
Size	Tolerance	Size	Tolerance			
10	-0.013 / -0.022	10	+0.015 / +0.006	19	13	8
13	-0.016	13	+0.018	24	17	10
16	-0.027	16	+0.006	29	20	12
20	-0.020	20	+0.021	39	25	15
25	-0.033	25	+0.008	49	30	



Apply to GGR BBG series

Order GGI-D-L-N-A Material:SUJ2 Hardness:58-62HRC

D	L	N	A	R	L1	@ ¥/P
4	75	90	105	≈25	10	5
	95	110	130	≈30	12	6
	115	135	160	≈35	16	8
6	140	165	190	≈40	20	10
	170	195	220	≈45	24	12
	200	225	250	≈50	28	14



Order ZZ016-d1-L Material:SUJ2 Hardness:58-62HRC

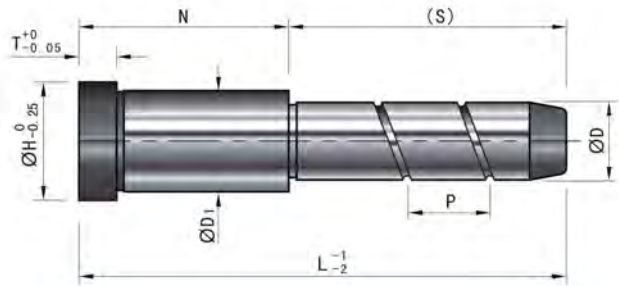
d1	L	d4	L1	K	@ ¥/P
10	40	12	4	3	
	60				
	80				
	100				
	120				
12	60	16		6	
	80				
	100				
	120				
	140				
14	60	18			
	80				
	100				
	120				
	140				
16	60	20	7	8	
	80				
	100				
	120				
	140				
18	160	22			
	180				
	200				
	240				
	100				
20	120	24			
	140				
	160				
	180				
	200				

- Extractor pins
- Extractor sleeves
- Slide rollers
- Spacers
- Latch locks
- Pointing gauges
- Pin valves series
- Data stamps
- Pin valves series
- Extractor series
- Cooling elements
- Locating parts
- Spacers series
- Coast pins
- Guide stops
- Wear plate series
- Chuck series
- Mold accessories

JIS

Guide pins

GGPBL

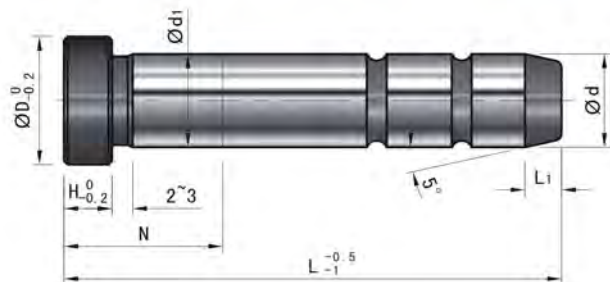


Order GGPBL-D-L-N Material:SUJ2 Hardness:≥58HRC

D	D1	H	T
16	-0.015	25	+0.020
20	-0.020	30	+0.015
25	-0.020	35	+0.025
30	-0.025	42	+0.020

D	L	N
16	50	24 29
	60	24 29 34 39
	70	24 29 34 39 44 49
	80	29 34 39 44 49
	90	29 34 39 44 49 54 59
	100	24 29
20	50	24 29 34 39
	60	24 29 34 39
	70	24 29 34 39
	80	24 29 34 39
	90	24 29 34 39 44 49 54 59
	100	24 29 34 39 44 49 54 59
	110	24 29 34 39 44 49 54 59
	120	24 29 34 39 44 49 54 59
	130	24 29 34 39 44 49 54 59
	140	24 29 34 39 44 49 54 59
25	150	29 34 39 44 49 54 59
	160	29 34 39 44 49 54 59
	170	29 34 39 44 49 54 59
	180	29 34 39 44 49 54 59
	60	24 29 34 39
	70	24 29 34 39
	80	24 29 34 39
	90	24 29 34 39
	100	24 29 34 39 44 49
	110	24 29 34 39 44 49
	120	24 29 34 39 44 49
	130	24 29 34 39 44 49
30	140	29 34 39 44 49 54 59
	150	29 34 39 44 49 54 59
	160	29 34 39 44 49 54 59 69
	170	29 34 39 44 49 54 59 69
	180	29 34 39 44 49 54 59 69
	80	24 29 34 39 44 49 59
	90	24 29 34 39 44 49 59
	100	24 29 34 39 44 49 59
	110	24 29 34 39 44 49 59
	120	24 29 34 39 44 49 59 64
	130	69 74 79 84 89
	140	69 74 79 84 89
	150	69 74 79 84 89
	160	69 74 79 84 89
170	69 74 79 84 89	
180	69 74 79 84 89	
190	24 29 34 39 44 49 59 64	
200	69 74 79 84 89 94 99	
210	69 74 79 84 89 94 99	
220	69 74 79 84 89 94 99	
230	69 74 79 84 89 94 99	

S	P
- 31	13
- 41	15
- 51	17
- 61	18
- 71	19
- 81	20
- 91	21
-101	22
-111	23
-121	24
-131	25
-141	26
-151	27
-161	28
-171	30
-181	33
-201	34



Order GGP-d-L Material:SUJ2 Hardness:58-62HRC

d		d1		D	H
Size	Tolerance	Size	Tolerance		
12	-0.016	12	+0.018	17	5
16	-0.027	16	+0.007	20	6
20	-0.020	20	+0.021	25	8
25	-0.033	25	+0.008	30	
30	-0.020	30	+0.025	35	
35	-0.025	35	+0.009	40	
40	-0.040	40	+0.025	45	10
50	-0.030 / -0.049	50	+0.030 / +0.011	55	12
60	-0.030 / -0.049	60	+0.030 / +0.011	66	15

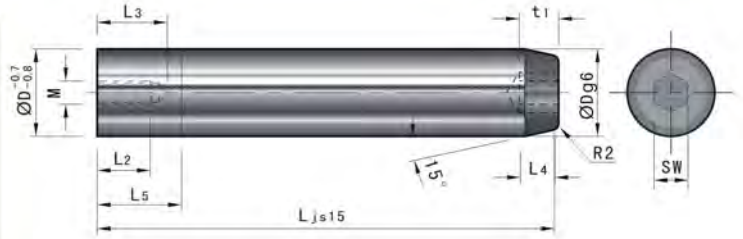
L	N	d								
		d12	d16	d20	d25	d30	d35	d40	d50	d60
50					19	-	-	-		
60										
70		19	19	19		19				
80							34			
90						24		34		
100					24					
110										
120		24		24			39			
130										
140						29				
150			24					39	59	
160										
170									59	79
180										
190						39		49	59	79
200				34					59	79
210										
220								49	59	79
230			29							
240									59	79
250										
260									69	
270										
280				39					69	79
290										
300						49			69	
320										
330										
340					49					
350							59	59		
360										
370										
380										
390										
400										
410										
420									79	99
430										
440										
450										
460										
470										
480							69	69		
490										
500										
510										
520										

- Excess pins series
- Slide rail series
- Locking pins series
- Rolling gate series
- Date stamps Ad valves series
- Exisor series
- Cooling elements series
- Locating pins series
- Springs series
- Coast pins
- Guide pins Vee plate series
- Chuck series
- Mold accessories

DIN

Guide pins

ZZ010



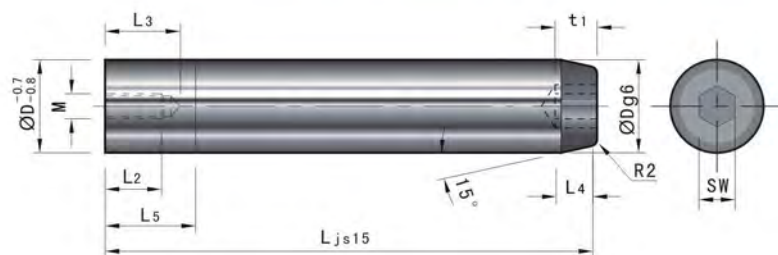
Order ZZ010-D-L Material:SUJ2 Hardness:58-62HRC

D	L	L2	L3	L4	L5	t1	SW	M	@ ¥/P
10	60								
	80								
	100								
12	60								
	80								
	100								
14	50					5	5	M 6	
	60								
	67	10	15	4	5				
	70								
	75								
	80								
15	90								
	100								
	50								
	60								
	70								
16	80								
	90								
	100					6	6	M 8	
	118	12	18		5.5				
18	120								
	132								
	140								
	160								
	60								
	70								
	80								
20	90				6				
	100								
	125								
	140								
	150								
	170								
	60			7					
	70								
	80								
	90								
22	100	15	22			8	8	M10	
	120								
	140								
	150								
	160								
	170								
	180								
22	190				7				
	210								
	70								
	80								
22	90								
	100								
	120								

DIN

Guide pins

ZZ010



Order ZZ010-D-L Material:SUJ2 Hardness:58-62HRC

D	L	L2	L3	L4	L5	t1	SW	M	@ ¥/P
24	70	18	25	7	7	10	10	M16	
	80								
	90								
	100								
	120								
	140								
30	160								
	180								
	200								
	220								
32	80								
	90								
	100								
	120								
	140								

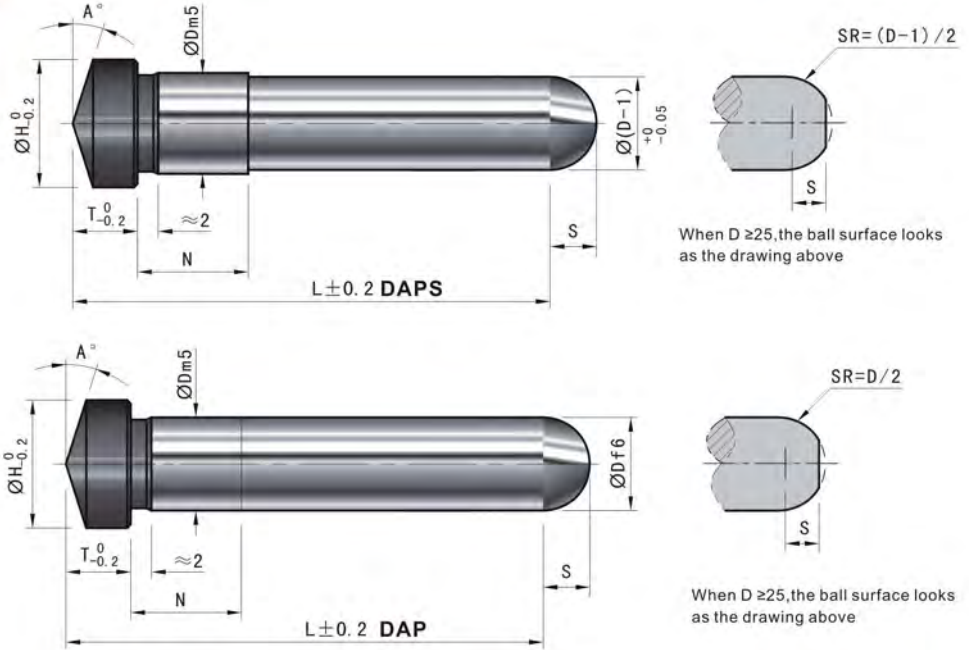


- Epicyclic pins
- Epicyclic sleeves
- Side retainers series
- Latch locks series
- Pointing gates series
- Date stamps
- Air valves series
- Epicyclic series
- Cooling elements series
- Locating parts series
- Springs series
- Guide pins
- Guide bush
- Guide strips
- Wear plate series
- Chuck series
- Mold accessories

JIS

Guide pins

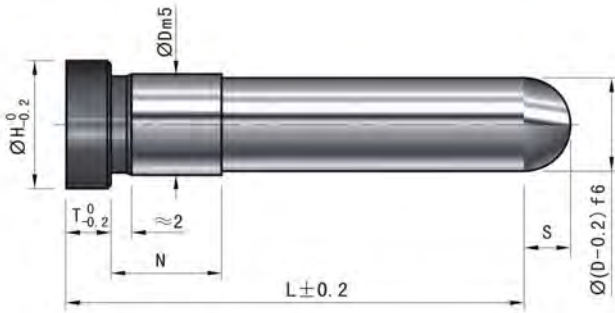
DAP
DAPS



Order DAP/DAPS-D-L-N-A Material:SUJ2 Hardness:58-62HRC

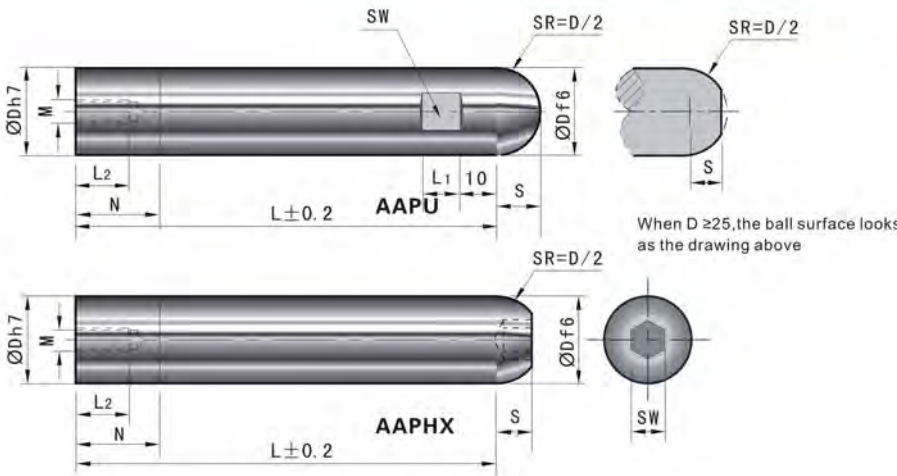
D	N(Designated 0.1mm)	A(Designated 1mm)	m5	f6(AP)	H	T	S DAP	@ ¥/P	S DAPS	@ ¥/P
4	2sN NsL-T-1 or N=0 (Without press-in part)	0-30	+0.009	-0.010	7	5	2		1.5	
5			+0.004	-0.018	8		2.5		2	
6				9	3		2.5			
8			+0.012	-0.013	11	10	4	3.5		
10			+0.006	-0.022	13		5	4.5		
12				15	6		5.5			
13				16	6.5		6			
15			+0.015	-0.016	18	13	7.5	7		
16			+0.007	-0.027	19		8	7.5		
20				23	8		9.5			
25			+0.017	-0.020	28	15	10		10	
30			+0.008	-0.033	35					
35				40						
40			+0.020	-0.025	45					
50			+0.009	-0.041	55	20				





Order AAPZS-D-L-N Material:SUJ2 Hardness:58-62HRC

D	N(Designated 0.1mm)	m5	f6	H	T	S	@ ¥ / P
8	2sN	+0.012	-0.013	11	5	3.9	
10		+0.006	-0.022	13		4.9	
12	NsL-T-1			15	10	5.9	
13				16		6.4	
15	or N=0 (Without press-in part)	+0.015	-0.016	18	13	7.4	
16		+0.007	-0.027	19		7.9	
20		+0.017/+0.008	-0.020/-0.033	23		9.9	



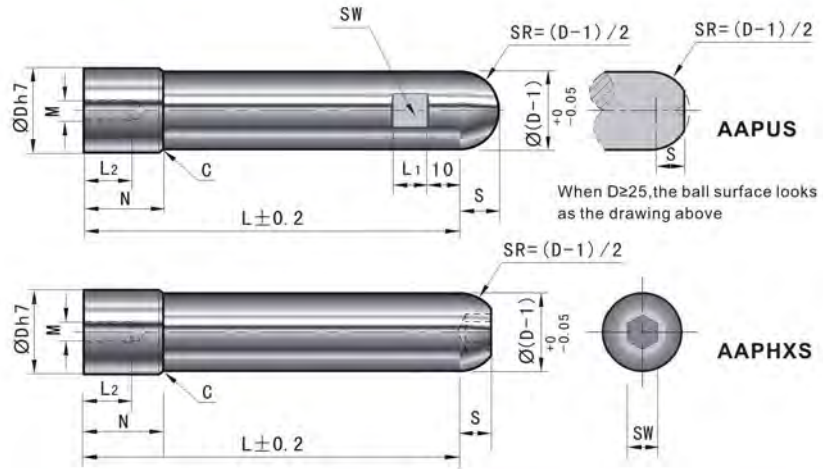
Order AAPU-D-L-N Material:SUJ2 Hardness:58-62HRC

D	N(Designated 0.1mm)	h7	f6	M	L1 AAPU	L2	S AAPU	S AAPHX	SW AAPU	BAAPHX (Hexagon Hole)	
10	L > N ≥ 0	0/-0.015	-0.013/-0.022	6	8	15	5	3.5	7	5	
13		0	-0.016	8	10	20	6.5	5	10	(EDM)	
16		-0.018	-0.027	10	10	25	8	7	13		
20				12	12	30		6	17	6(Screw)	
25		0	-0.120	12	12				22	M12-L15	
30		-0.021	-0.033				10	10	27		
35				16	18	40			32	8(Screw)	
35		0	-0.025	-0.041	20				32	M16-L20	
40			-0.025					15	15	36	

JIS

Guide pins

AAPUS
AAPXS

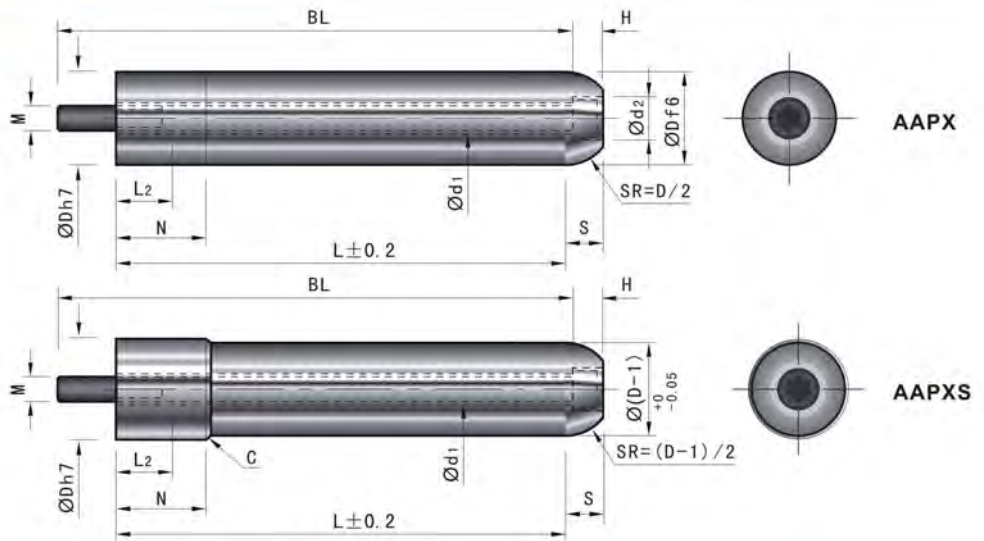


When $D \geq 25$, the ball surface looks as the drawing above

Order AAPXS-D-L-N Material:SUJ2 Hardness:58-62HRC

D	N(Designated unit 0.1mm)	h7	f6	M	L1 AAPUS	L2	S AAPUS	S AAPXS	SW AAPUS	BAAPXS (Hexagon Hole)	
10	L > N ≥ 0	0/-0.015	-0.013/-0.022	6	8	15	4.5	3	7	5 (EDM)	
13		0	-0.016	8	10	20	6	4	10		
16		0/-0.018	-0.027	10	10	25	7.5		13		
20									6		
25		0	-0.021	-0.120	12	12	30	10		17	6(Screw) M12-L15
30				-0.033						22	
35		0	-0.025	-0.025	16	18	40	10	10	27	8(Screw) M16-L20
40				-0.041	20			15	15	32	

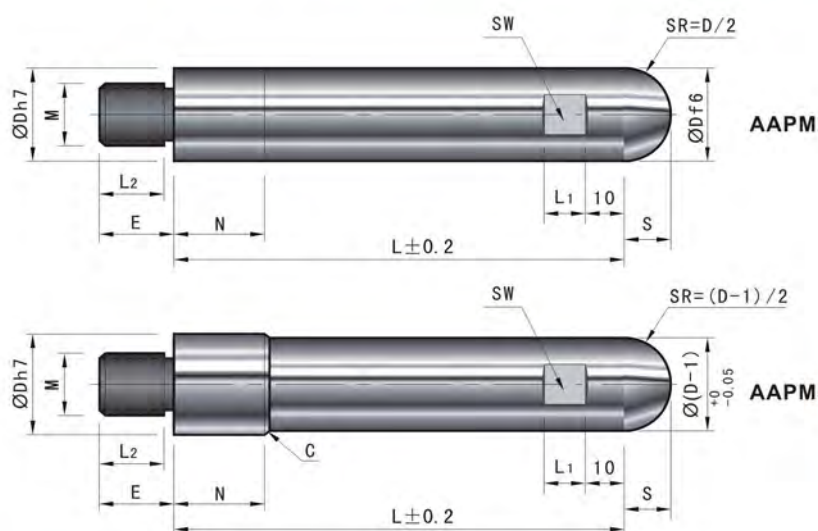
AAPX
AAPXS



Order AAPXS-D-L-N-BL Material:SUJ2 Hardness:58-62HRC

D	N(Designated unit 0.1mm)	h7	f6	BL(Designated unit 5mm)	BL(Designated unit 10mm)	d1	d2	M	H	S	
13	L > N ≥ 0	0	-0.016	60-95	100-210	5.5	9.5	5	5.5	4	
16		0/-0.018	-0.027			7	11	6	6.5	5	
20						9	14	8	9	6	
25		0	-0.020			11	17	10	11	8	
30		0/-0.021	-0.033			14	19	12	13	10	
32						18	25	16	17	14	
35		0	-0.025			-0.025	-0.041				
40						-0.041					

AAPM
AAPMS



Order AAPMS-D-L-N Material:SUJ2 Hardness:58-62HRC

D	N(Designated unit 0.1mm)	h7	f6	M	E	L1	L2	SW	S AAPM	S AAPMS	
8	L>N≥0	0	-0.013	6	12	8	10	7	4	3.5	
10		-0.015	-0.022		17		15		5	4.5	
13		0	-0.016	8	22	10	20	10	6.5	6	
16		-0.018	-0.027	12	27		25		13	8	7.5
20		0/-0.021	-0.020/-0.033	16	32	12	30	17	10	10	9.5

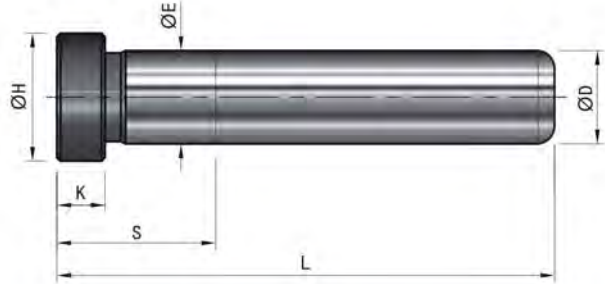


- Ejector pins
- Ejector sleeves
- Slide retainers series
- Launch locks
- Pointing gates series
- Date stamps
- Air valves series
- Ejector series
- Cooling elements
- Locating parts
- Springs series
- Guide pins
- Guide bush
- Guide strips
- Wear plate series
- Chuck series
- Mold accessories

AISI

Guide pins Guide bush

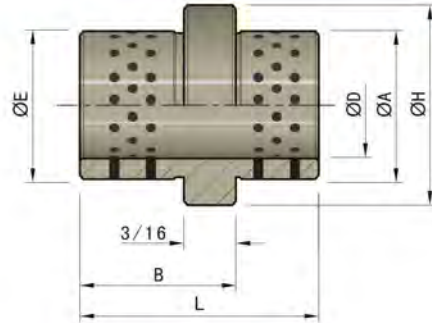
GLL



Order GLL-5004 Material:SUJ2 Hardness:58-62HRC

Tolerance dimension	ØD ^{+0.000} / _{-0.0005}		ØH (Max.)	K	ØE ^{+0.0005} / _{0.000}		L ^{+0.00} / _{-0.06}	ØD=3/4 I.D. 0.749		ØD=7/8 I.D. 0.874		ØD=1" I.D. 0.999		ØD=1 1/4 I.D. 1.249		ØD=1 1/2 I.D. 1.499	
	Code	S	Code		S	Code	S	Code	S	Code	S	Code	S	Code	S		
3/4	0.749	0.99	3/16	0.751	3 3/4	GLL-5004		GLL-5103		GLL-5202		GLL-5302		GLL-5402			
7/8	0.874	1.115	1/4	0.876	4 1/4	PFGLL-5005		PFGLL-5104		PFGLL-5203		PFGLL-5303	7/8	PFGLL-5403			
1"	0.999	1.24		1.001	4 3/4	PFGLL-5006	7/8	PFGLL-5105	7/8	PFGLL-5204	7/8	PFGLL-5304		PFGLL-5404			
1 1/4	1.249	1.49		1.251	5 1/4	PFGLL-5007		PFGLL-5106		PFGLL-5205		PFGLL-5305		PFGLL-5405			
1 1/2	1.499	1.74	5/16	1.501	5 3/4	PFGLL-5008		PFGLL-5107		PFGLL-5206		PFGLL-5306	1 3/8	PFGLL-5406			
-	-	-	-	-	6 1/4	-	-	-	-	-	-	PFGLL-5307		PFGLL-5407			

GGBE

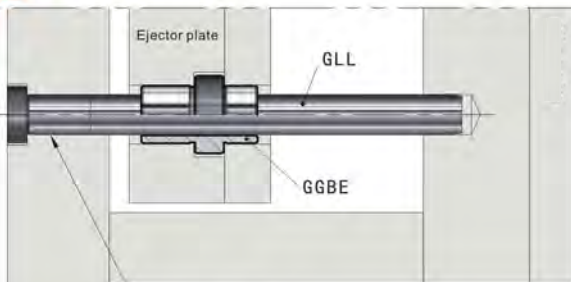


Order GGBE-0750 Material:brass+graphite

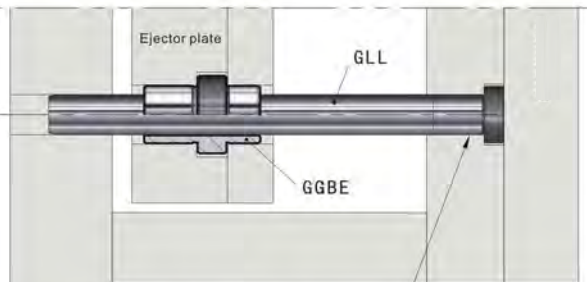
Code	Tolerance dimension	ØD ^{+0.0005} / _{-0.000}	ØE ^{+0.0005} / _{-0.000}	ØA ^{+0.000} / _{-0.001}	ØH ^{+0.000} / _{-0.030}	L ^{+0.00} / _{-0.05}	B	@ ¥ /P
GGBE-0750	3/4	0.751	1.1255	1.124	1.302	1.5	1	
GGBE-0875	7/8	0.876	1.2505	1.249	1.427			
GGBE-1000	1"	1.001	1.3755	1.374	1.552			
GGBE-1250	1 1/4	1.251	1.6255	1.624	1.802	1.75	1.12	
GGBE-1500	1 1/2	1.501	2.0005	1.999	2.177			
GGBE-2000	2"	2.001	2.5005	2.499	2.687	2.25	1.62	



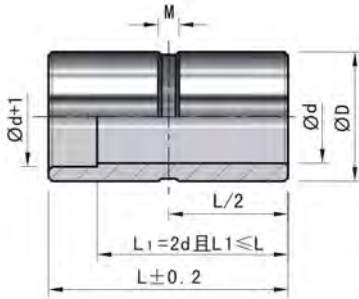
Installation diagram:



Installation method1
Close fit here and install it according to the direction which is perpendicular to the ejector plate moving direction

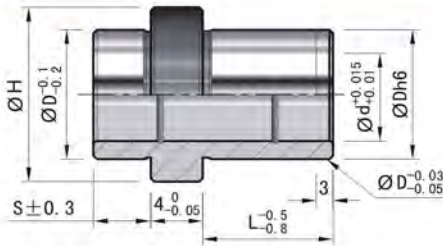


Installation method2
Close fit here and install it according to the direction which is perpendicular to the ejector plate moving direction



Order GBB-d-L Material:SUJ2 Hardness:58-62HRC

Size	Tolerance	Size	Tolerance	L1
10	+0.009 / 0	14	+0.018	10
12	+0.017	18	+0.007	13
16	+0.008	25	+0.021	16
20		30	+0.008	20
25	+0.020	35		25
30	+0.007	42	+0.025	
35		48	+0.009	
40	+0.025	55		20
50	+0.009	70	+0.030	
60	+0.030 / +0.010	80	+0.011	



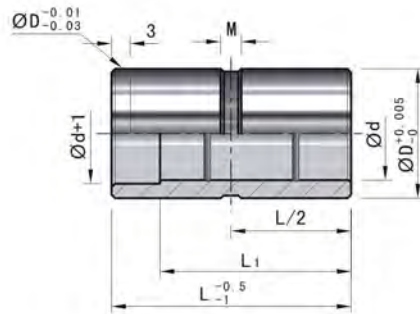
EEGBH-d-L Material:SUJ2 Hardness:58-62HRC

d	L	S	H	Dh6	@ ¥ / P
8	10-13 15		19	16	
10	10-13	8	21	18	0 -0.011
12	15-20		23	20	
13	10-13 10 13 15		25	22	
16	20-25 10 13 15	10	28	25	0 -0.013
20	20-25 10 13 15		33	30	
25	20-30 13 15-30		38	35	
30	20-30		43	40	0 -0.016
32	15-30	15	45	42	
35			48	45	
40	20-30	20	55	52	0 -0.019
50	25-30		65	62	

JIS

Guide bush

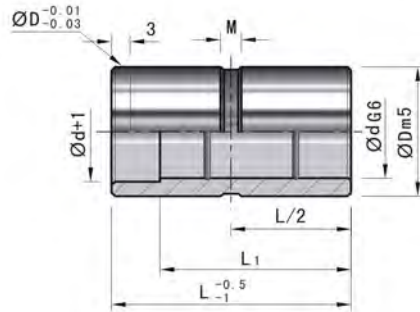
GGBS



Order GGBS-d-L Material:SUJ2 Hardness:58-62HRC

d	D	M	L1 @ ¥ / P											
			L10	L15	L20	L25	L30	L35	L40	L50	L60	L70	L80	
8	0	12												
10	-0.005	14												
12	-0.005	18												
13	-0.010	20												
16		25												
20		30												
25	-0.010	35												
30	-0.015	42												

GGBSE



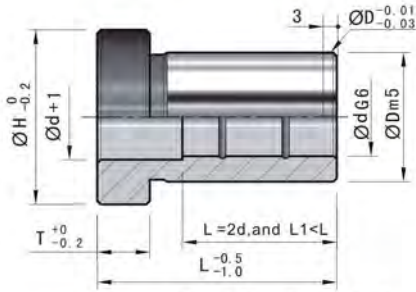
Order GGBSE-d-L Material:SUJ2 Hardness:58-62HRC

dG6	M	Dm5	@ ¥ / P							
			L10	L15	L20	L25	L30	L35	L40	
8	+0.014	12								
10	+0.005	14								
12	+0.017	18								
13	+0.006	20								
16		25								
20		30								
25	+0.020	35								
30	+0.007	42								
35		48								
40	+0.025	55								
50	+0.009	70								
60	+0.029/+0.010	80								

JIS

Guide bush head type

GGBHE

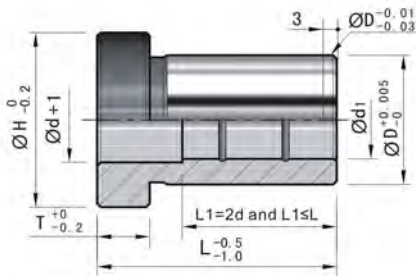


When d=8, L≥15, the L1=15



Order GGBHE-d-L Material:SUJ2 Hardness:58-62HRC

dG6	T	Dm5	H	@ ¥ / P					
				L15	L20	L25	L30	L35	L40
8	+0.014	12	14						
10	+0.005	14	16						
12		18	22						
13	+0.017	20	25						
16	+0.006	25	30						
20		30	35	-					
25	+0.020	35	40	-					
30	+0.007	42	47	-	-				
35		48	54	-	-	-			
40	+0.025	55	60	-	-	-	-		
50	+0.009	70	75	-	-	-	-	-	
60	+0.029/+0.010	80	86	-	-	-	-	-	-



GGBH



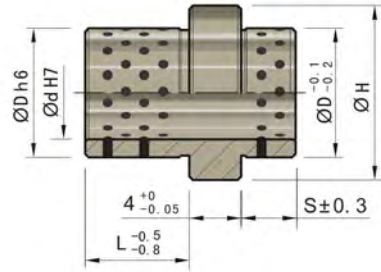
Order GGBH-d-L Material:SUJ2 Hardness:58-62HRC

d	T	D	H
8	0	12	14
10	-0.005	14	16
12		18	22
13	-0.005	20	25
16	-0.010	25	30
20		30	35
25	-0.010	35	40
30	-0.015	42	47

JIS

Self-lubricating guide bush

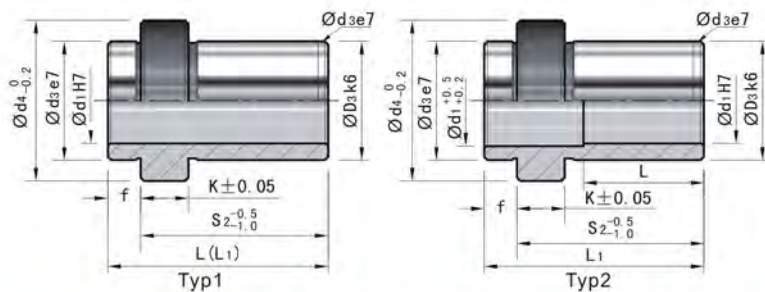
EGBZS



Order EGBZS-d-L Material: Brass+Graphite

d	L	S	H	Dh6	@ ¥ / P
13	10 13-15		25	22	
16	13-15 20		28	25	0 -0.013
20	13-15 20	10	33	30	
25	15 20-25		38	35	0 -0.016
30	15-25	15	43	40	
35	20-25		48	45	
40	20-30	20	55	52	0 -0.019
50	25-30		65	62	





Order ZZ10-d1-S2 Material:SUJ2 Hardness:58-62HRC

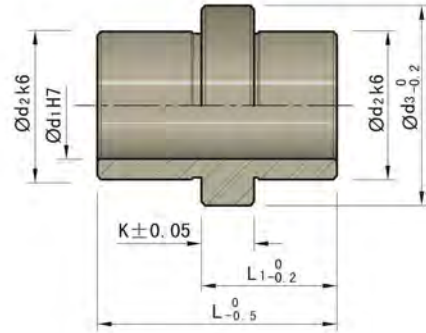
d1	S2	Typ	L	L1	f	K	d3	d4	@ ¥ /P
9-10	12	1	15	15	3	3	14	16	
	17		20	20					
	22		25	25					
	27		30	30					
	36		39	39					
	46		49	49					
14-15	56	2	46	49			20	25	
	66		59	69					
	17		26	26					
	22		31	31					
	27		36	36					
	36		45	45					
18-20	46	1	55	55			26	31	
	56		65	65					
	66		75	75					
	76		85	85					
	86		95	95					
	96		105	105					
22-24	116	2	125	125	9	6	30	35	
	17		26	26					
	22		31	31					
	27		36	36					
	36		45	45					
	46		55	55					
30-32	56	1	65	65			42	47	
	66		75	75					
	76		85	85					
	86		95	95					
	96		105	105					
	116		125	125					
40-42	136	2	145	145	12	10	54	60	
	156		165	165					
	196		205	205					
	46		58	58					
	56		68	68					
	66		78	78					
	76	1	88	88					
	86		98	98					
	96		108	108					
	116		128	128					
	136		148	148					
	156		168	168					
	196	2	208	208					
	246		258	258					

- Extractor pins series
- Extractor sleeves series
- Side runners series
- Launch locks series
- Pointing gates series
- Data stamps Air valves series
- Extractor series
- Cooling elements series
- Locating parts series
- Spacers series
- Guide pins
- Guide strips V-belt plate series
- Chuck series
- Mold accessories

DIN

Guide bush

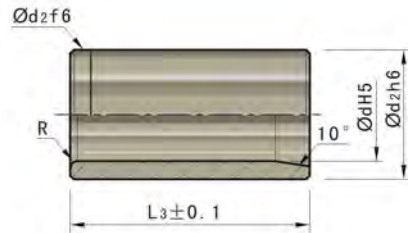
ZZ4079



Order ZZ4079-d1-L Material: Brass

d1	L	L1	d2	d3	K	@ ¥/P
10	14	7	14	17	3	
	20	12				
16	28	16	22	26		
	39	27				
20	28	16	28	32	6	
	39	27				
25	30	18	32	36		
	39	27				
32	39	22	40	45	8	
	47	27				

ZZ4085



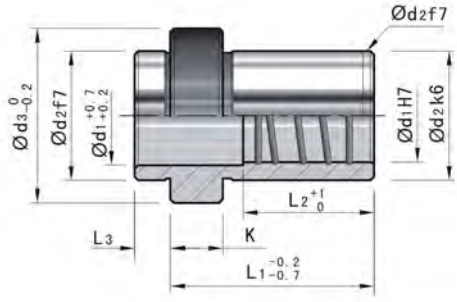
Order ZZ4085-d-L3 Material: brass

d	L3	d2	R	@ ¥/P
10	14	14	1	
12	20	17	1.5	
16	25	22	2	
	32			

DIN

Guide bush

ZZ75



Order ZZ75-d1-L1 Material:SUJ2 Hardness:58-62HRC

d1	L1	L2	L3	d2	d3	K	@ ¥/P
9/10	16	L1		14	17	4	
	21						
	26						
	36						
	46						
11/12	56	L1	5	18	22	4	
	16						
	21						
	26						
	36						
15/16	46	L1	6	24	28	6	
	56						
	66						
	76						
	86						
19/20	96	L1	8	28	32	8	
	16						
	21						
	26						
	36						
25/26	46	L1		34	38	8	
	56						
	66						
	76						
	86						

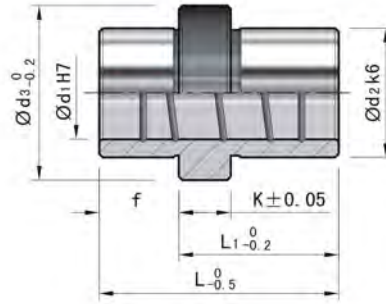
d1	L1	L2	L3	d2	d3	K	@ ¥/P
25/26	46	L1		34	38	8	
	56						
	66						
	76						
	86						
30/32	96	L1	8	42	46	8	
	116						
	136						
	156						
	176						
38/40	46	L1	10	50	54	10	
	56						
	66						
	76						
	86						
48/50	96	L1	10	63	70	10	
	116						
	136						
	156						
	176						

- Exterior pins series
- Side rollers series
- Limit blocks series
- Pointing gate series
- Data stamps Air valves series
- Exterior series
- Cooling elements series
- Locating parts series
- Spacers series
- Guide pins Guide bush
- Guide strips Vee-plate series
- Chuck series
- Mold accessories

DIN

Guide bush

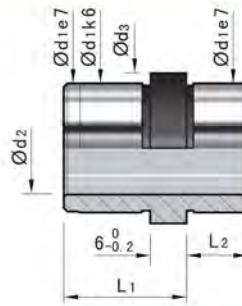
ZZ78



Order ZZ78-d1-L Material:SUJ2 Hardness:58-62HRC

d1	L	L1	d2	d3	K	@ ¥/P
16	28 39	18	24	28	6	
20	28 39	25	28	32	8	
25	49		34	36		

EE1140



Order EE1140-d2 Material:SUJ2 Hardness:58-62HRC

d2	L1	L2	d1	d3	@ ¥/P
17	17	9	22	25	
24	22	12	30	33	
30	27	17	38	41	
38	32	22	46	49	



Installation diagram

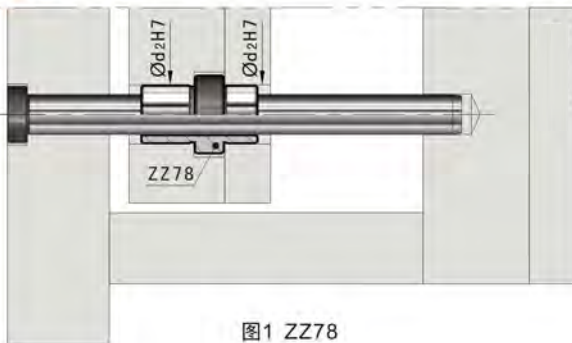


图1 ZZ78

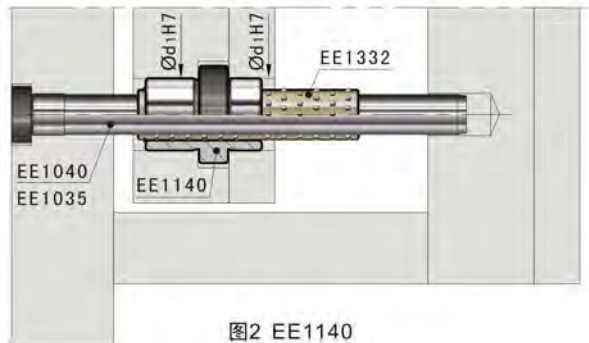
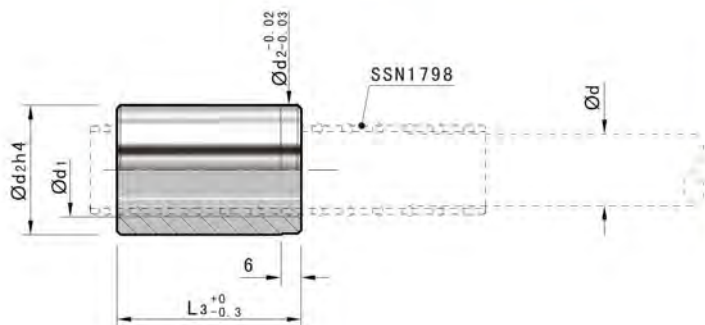


图2 EE1140

DIN

Guide bush

ZZ4486



Order ZZ4486-d-L3 Material:SUJ2 Hardness:58-62HRC

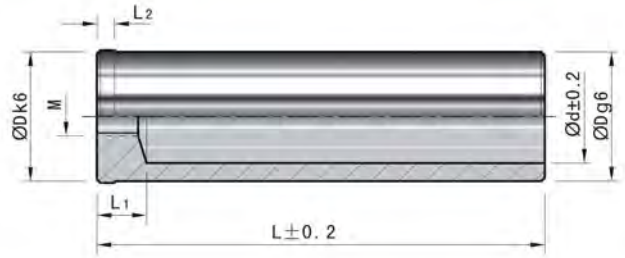
d	L3	d1	d2	@ ¥ /P
10/12	23	15/17	22	
	30			
	37			
15/16	23	21/22	28	
	30			
	37			
	47			
	60			
19/20	23	25/26	32	
	30			
	37			
	47			
	60			
24/25	23	30/31	40	
	30			
	37			
	47			
	60			
30/32	23	38/40	48	
	30			
	37			
	47			
	60			
38/40	23	46/48	58	
	30			
	37			
	47			
	60			
48/50	23	56/58	70	
	30			
	37			
	47			
	60			
60/63	23	70/73	85	
	30			
	37			
	47			

- Extractor pins series
- Side rollers series
- Latch tools series
- Pointing gates series
- Data stamps Ad valves series
- Extractor series
- Cooling elements series
- Locating parts series
- Spacers series
- Guide bush**
- Guide strips Vee-plate series
- Chuck series
- Mold accessories

DIN

Guide bush

ZZ81-S

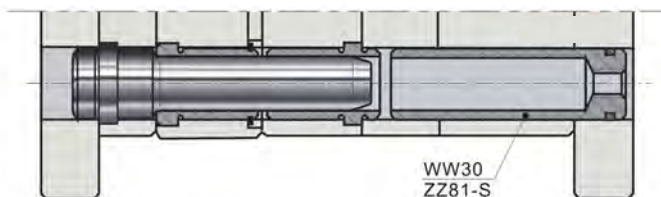


Order ZZ81-S-D-L Material:SUJ2 Hardness:58-62HRC

D	L	L1	L2	d	M	@ ¥/P
18	40	10	2	13	M 8	
	50					
	60					
	70					
	80					
	90					
	100					
24	45	12	2.5	17	M10	
	55					
	65					
	75					
	85					
	95					
	105					
28	115	14	2.5	21	M12	
	125					
	135					
	40					
	60					
	80					
	100					
34	120	15	2.5	27	M12	
	140					
	60					
	80					
	100					
	120					
	160					
42	200	17	4.5	34	M16	
	60					
	90					
	110					
	130					
	150					
	200					
50	60	20	4.5	44	M16	
	90					
	110					
	130					
	150					
	200					
	60					
63	90	20	4.5	52	M16	
	110					
	130					
	150					
	200					
	60					
	90					



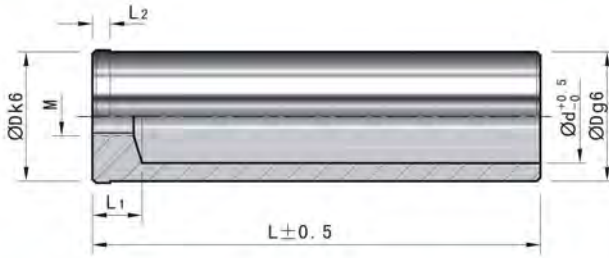
Installation diagram



DIN

Guide bush

WW30

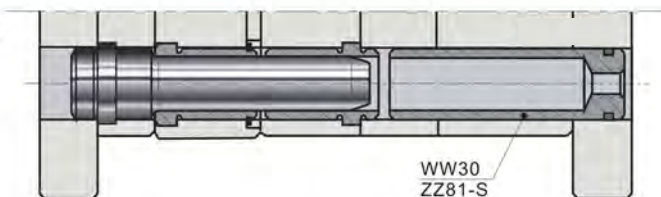


Order WW30-D-L Material:SUJ2 Hardness:58-62HRC

D	L	L1	L2	d	M	@ ¥ /P
14	20	8	2	11	M 8	
	30					
	40					
	50					
	60					
	70					
20	80	13	2.5	16	M12	
	100					
	120					
	140					
	160					
	180					
26	200	4.5	43	21		
	240					
	260					
	280					
	300					
	320					
30	340			25		
	360					
	380					
	400					
	420					
	440					
42	460			33		
	480					
	500					
	520					
	540					
	560					
54	580			43		
	600					
	620					
	640					
	660					
	680					



Installation diagram



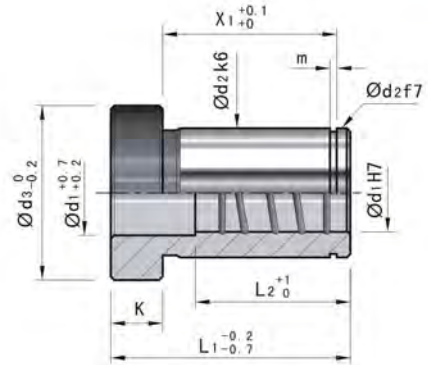
WW30
ZZ81-S

- Extractor pins
- Extractor sleeves
- Slide rail/liners
- Series
- Linch locks
- Series
- Pulling gates
- Series
- Data stamps
- Air valves series
- Extractor series
- Cooling elements
- Series
- Locating parts
- Series
- Spacers series
- Series
- Guide pins
- Guide bush
- Guide strips
- Wear plate series
- Chuck series
- Series
- Mold processors

DIN

Guide bush

ZZ76



Order ZZ76-d1-L1 Material:SUJ2 Hardness:58-62HRC

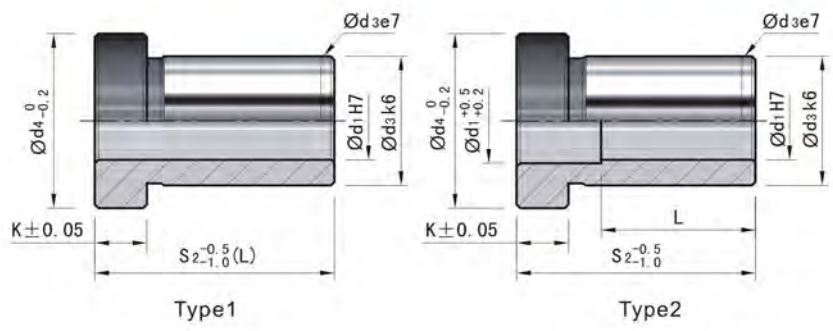
d1	L1	L2	d2	d3	K	X1	m	@ ¥/P
9-10	16					9.2		
	21					14.2		
	26	L1	14	17		19.2	1.1	
	36					29.2		
	46					39.2		
	56	50				49.2		
11/12	16				4	8.6		
	21					13.6		
	26	L1	18	22		18.6		
	36					28.6		
	46					38.6		
	56	51				48.6		
15/16	16					6.4	1.3	
	21					11.4		
	26					16.4		
	36					26.4		
	46		24	28		36.4		
	56					46.4		
19/20	16				6	6		
	21					11		
	26					16		
	36					26		
	46	L1	28	32		36		
	56					46		
25/26	16					8.5	1.6	
	21					13.5		
	26					18.5		
	36					23.5		
	46					33.5		
	56		34	38	8	43.5		
	66					53.5		
	76					63.5		
	86					73.5		
	96					83.5		
	116	106				103.5		

d1	L1	L2	d2	d3	K	X1	m	@ ¥/P
30/32	36					22.3		
	46					32.3		
	56	L1	42	46		42.3	1.85	
	66					52.3		
	76					62.3		
	86					72.3		
38/40	96					82.3		
	116					102.3		
	136	120				122.3		
	156	150			8	142.3		
	176					162.3		
	46					31.6		
48/50	56					41.6		
	66	L1	50	54		51.6	21.5	
	76					61.6		
	96					81.6		
	116					101.6		
	136	130				121.6		
63	156	150				141.6		
	176					161.6		
	56					39.6		
	66	L1	63	70	10	49.6		
	76					59.6		
	86					69.6		
	96					79.6		
	116					99.6		
	136					119.6		
	156	150				139.6		
	176					159.6		
	196					176.3		

DIN

Guide bush head type

ZZ11



Order ZZ11-d1-S2 Material:SUJ2 Hardness:58-62HRC

d1	S2	L	Typ	K	d3	d4	@ ¥ /P
9-10	9	9	1	3	14	16	
	12	12					
	17	17					
	22	22					
	27	27					
10-11	36	36	2				
	46	46					
	56	56					
	66	66					
12	17	17	1		18	23	
	22	22					
	27	27					
	36	36					
	46	46					
14-15	56	56	1				
	12	12					
	17	17					
	22	22					
	27	27					
11-15	36	36			20	25	
	46	46					
	56	56					
	66	66					
14-15	76	76	2				
	86	86					
	96	96					
	116	116					
16	17	17	1	6	22	27	
	22	22					
	27	27					
	36	36					
	46	46					
18-20	56	56	1		26	31	
	17	17					
	22	22					
	27	27					
	36	36					
	46	46					
	56	56					
66	66						
14-15	76	76	2				
	86	86					
	96	96					
	116	116					
22-24	17	17	1		30	35	
	22	22					
	27	27					
	36	36					

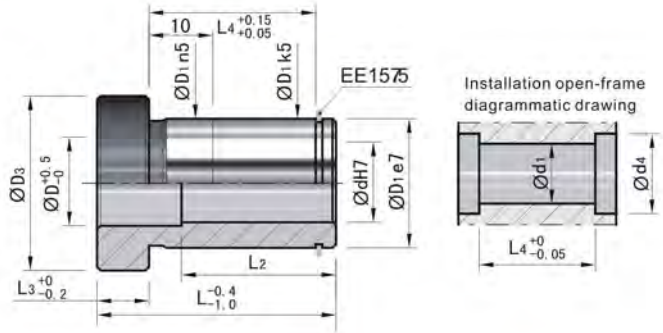
d1	S2	L	Typ	K	d3	d4	@ ¥ /P					
22-24	36	36	1		30	35						
	46	46										
	56	56										
	66	66										
	76	76										
	86	86										
	96	96										
30-32	116	96	2	6	42	47						
	136	96										
	27	27										
	36	36										
	46	46										
	56	56										
40-42	66	66	1		54	60						
	76	76										
	86	86										
	96	96										
	116	116										
	136	136										
	156	156										
50	46	46	2									
	56	56										
	66	66										
	76	76										
	86	86										
	96	96										
	116	116										
60	116	116	1		80	86						
	136	136										
	156	156										
	196	196										
	246	246										
	76	76						2				
	96	96										

- Exciter pins series
- Exciter sleeves series
- Side rollers series
- Launch locks series
- Pointing gates series
- Data stamps Ad valves series
- Exciter series
- Cooling elements series
- Locating parts series
- Spindles series
- Coast parts series
- Guide strips V-belt plate series
- Chuck series
- Mold accessories

DIN

Guide bush

EE1110



Order EE1110-d-L Material:SUJ2 Hardness:58-62HRC

D1	D4
14	22
18	26.8
20	29
22	30.8
26	35.5

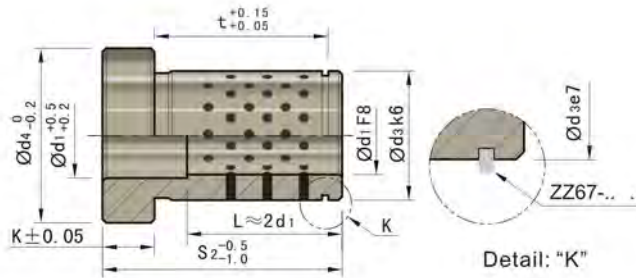
D1	D4
30	40.5
42	55.7
54	69.2
66	81.4

d	L	L2	L3	L4	D1	D3	@ ¥/P
9	10	12	3	5.5	14	16	
		17		10.5			
		22		15.5			
		27		20.5			
		36		29.5			
		46		39.5			
56	49.5						
12	-	22	-	7	18	23	
		27		12			
		36		17			
		46		26			
		56		36			
		66		46			
14	15	22	-	7	20	25	
		27		12			
		36		17			
		46		26			
		56		36			
		66		46			
16	-	22	6	7	22	27	
		27		12			
		36		17			
		46		26			
		56		36			
		66		46			
18	20	22	-	7	26	31	
		27		12			
		36		17			
		46		26			
		56		36			
		66		46			
22	24	22	-	11	30	35	
		27		16			
		36		25			
		46		35			

d	L	L2	L3	L4	D1	D3	@ ¥/P
22	24	56	-	45	30	35	
		66		55			
		76		65			
		86		75			
		96		85			
		116		105			
30	32	76	6	125	42	47	
		136		145			
		156		163			
		176		183			
		196		203			
		216		223			
40	42	96	-	143	54	59	
		116		163			
		136		183			
		156		203			
		176		223			
		196		243			
50	52	116	10	256	66	71	
		136		276			
		156		296			
		176		316			
		196		336			
		216		356			

DIN

Self-lubricating guide bush



Order ZZ11W-S2-d1 Material:brass+graphite

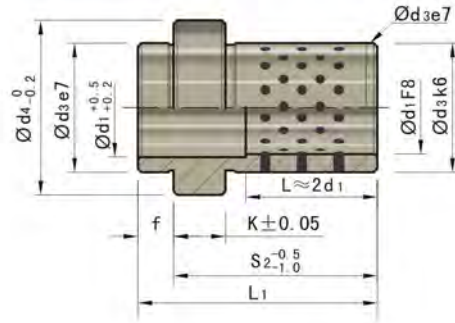
d1	S2	t	K	d3	d4	@ ¥ /P
9-10	12	6.6	3	14	16	
	17	11.6				
	22	16.6				
	27	21.6				
	36	30.6				
12	46	40.6				
	56	50.6				
	17	8.3				
	22	13.3				
	27	18.3				
14-15	36	27.3		20	25	
	46	37.3				
	56	47.3				
	17	8.3				
	22	13.3				
16	27	18.3		22	27	
	36	27.3				
	46	37.3				
	56	47.3				
	17	8.3				
18-20	22	13.3	6	26	31	
	27	18.3				
	36	27.3				
	46	37.3				
	56	47.3				
22-24	66	57.3		30	35	
	76	67.3				
	22	12.6				
	27	17.6				
	36	26.6				
30-32	46	36.6		42	47	
	56	46.6				
	66	56.6				
	76	66.6				
	86	76.6				
40-42	96	86.6	10	54	60	
	27	15.9				
	36	24.9				
	46	34.9				
	56	44.9				
	66	54.9				
	76	64.9				
	86	74.9				
	96	84.9				
	116	104.9				
	46	30.2				
	56	40.2				
	66	50.2				
	76	60.2				
	86	70.2				
	96	80.2				
	116	100.2				
	136	120.2				

- Exciter parts series
- Slide rail series
- Latch lock series
- Rolling gate series
- Data stamps Air valve series
- Exciter series
- Cooling elements series
- Locating parts series
- Spring series
- Coast part
- Guide strips V-belt plate series
- Chuck series
- Mold accessories

DIN

Self-lubricating guide bush

ZZ10W

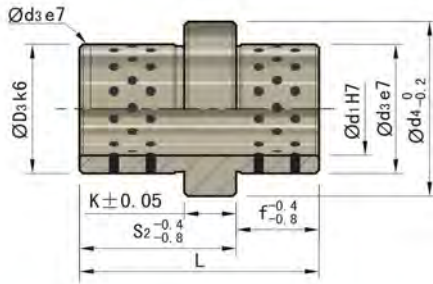


Order ZZ10W-d1-S2 Material: brass+graphite

d1	S2	L1	f	K	d3	d4	@ ¥/P
9-10	12	17	5	3	14	16	
	17	22					
	22	27					
	27	32					
	36	41					
	46	51					
14-15	56	61	6		20	25	
	66	71					
	17	23					
	22	28					
	27	33					
	36	42					
18-20	46	52			26	31	
	56	62					
	66	72					
	76	82					
	86	92					
	17	25					
22-24	22	30	8	6	30	35	
	27	35					
	36	44					
	46	54					
	56	64					
	66	74					
30-32	76	84			42	47	
	86	94					
	96	104					
	116	124					
	136	144					
	156	164					
40-42	27	35	10	10	54	60	
	36	44					
	46	54					
	56	64					
	66	74					
	76	84					
	86	94					
	96	104					
	116	124					
	136	144					
	156	166					
	196	206					

DIN

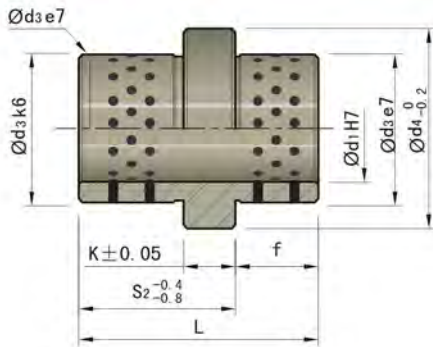
Self-lubricating guide bush



ZZ13W

Order ZZ13W-d1-S2 Material:brass+graphite

d1	S2	L	f	K	d3	d4	@ ¥/P
14-15	17	26	9	6	20	25	
18-20	22	39	17		26	31	
22-24	27	49	22		30	35	
30-32	36	63	27		42	47	



ZZ14W

Order ZZ14W-d1-S2-f Material:brass+graphite

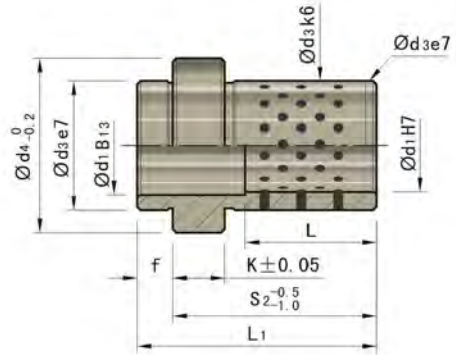
d1	S2	f	L	K	d3	d4	@ ¥/P
24	17	9	26	6	30	35	
		12	29				
36	22	9	26		44	49	
		17	39				
48	27	22	49	58	63		

- Exciter pins series
- Side rollers series
- Limit locks series
- Pointing gate series
- Data stamps series
- Exciter series
- Cooling elements series
- Locating parts series
- Spacers series
- Guide pins series
- Guide strips series
- Chuck series
- Mold accessories



Self-lubricating guide bush

ZZ1000W



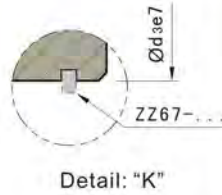
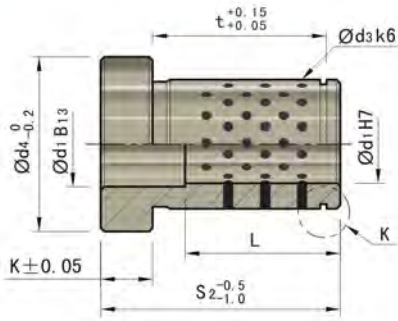
Order ZZ1000W-S2-d1 Material:brass+graphite

S2	d1	L	d3	d4	K	L1	f	@ ¥ /P	d1	@ ¥ /P
12		-				17				
17						22				
22						27				
27	9		14	16	3	32	5		10	
36		20				41				
46						51				
56						61				
66						71				
17		-				23				
22						28				
27						33				
36	14	28				42	6		15	
46			20	25		52				
56		30				62				
66						72				
76						82				
86						92				
17		-				25				
22						30				
27						35				
36	18	30				44			20	
46			26	31		54				
56		40				64				
66						74				
76						84				
86						94				
96						104	8		24	
116						124				
22		-			6	30				
27						35				
36		36				44				
46						54				
56	22		30	35		64				
66		49				74				
76						84				
86						94				
96						104				
116						124				
136						144				
156						164				
27		-				35				
36						44				
46						54				
56	30	54	42	47		64			32	
66						74				
76		64				84				
86						94				
96						104				
116						124				
136						144				
46		-				56				
56						66				
66						76				
76						86				
86	40	76	54	60	10	96	10		42	
96						106				
116						126				
136						146				
156		80				166				
196						206				

DIN

Self-lubricating guide bush

ZZ1100W



Order ZZ1100W-S2-d1 Material: brass+graphite

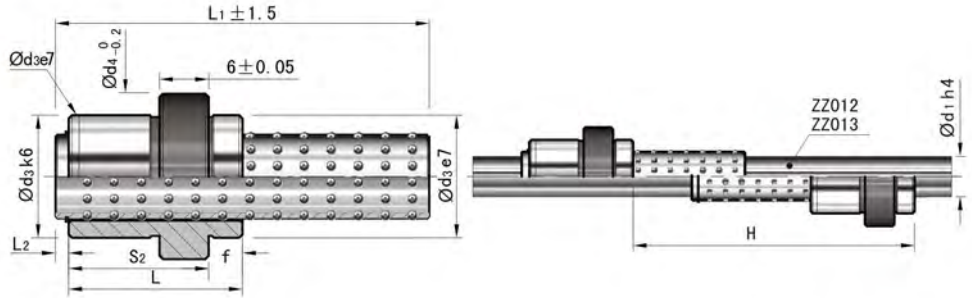
S2	d1	L	d3	d4	K	t	ZZ67/...	@ ¥/P	d1	@ ¥/P
12	9	20	14	16	3	6.6	ZZ67-14-1		10	
17						11.6				
22						16.6				
27						21.6				
36						30.6				
46	40.6									
56	50.6									
17	12	24	18	23		8.3	ZZ67-18-1.2		15	
22						13.3				
27						18.3				
36						27.3				
46						37.3				
56	47.3									
17	14	28	20	25		8.3	ZZ67-20-1.2		20	
22						13.3				
27						18.3				
36						27.3				
46						37.3				
56	47.3									
22	16	30	22	27		13.3	ZZ67-22-1.2		24	
27						18.3				
36						27.3				
46						37.3				
56						47.3				
17	18	40	26	31	6	8.3	ZZ67-26-1.2		32	
22						13.3				
27						18.3				
36						27.3				
46						37.3				
56	47.3									
66	57.3									
76	67.3									
22	22	36	30	35		12.6	ZZ67-30-1.5		42	
27						17.6				
36						26.6				
46						36.6				
56						46.6				
66	56.6									
76	66.6									
86	76.6									
96	86.6									
27	30	54	42	47		15.85	ZZ67-42-1.75		48	
36						24.85				
46						34.85				
56						44.85				
66						54.85				
76	64.85									
86	74.85									
96	84.85									
116	104.85									
46	40	76	54	60	10	30.15	ZZ67-54-2		60	
56						40.15				
66						50.15				
76						60.15				
86						70.15				
96	80.15									
116	100.15									
136	120.15									

- Exciter pins series
- Exciter sleeves series
- Slide rollers series
- Limit locks series
- Pointing gates series
- Rolling gates series
- Data stamps series
- Exciter series
- Cooling elements series
- Locating parts series
- Springs series
- Guide pins series
- Guide plates series
- Chucks series
- Mold accessories series

DIN

Steel ball guide bush

ZZ12



Order ZZ12-d1-L1 Material:SUJ2 Hardness:58-62HRC

d1	L1	L	L2	d3	d4	S2	f	Hmax	@ ¥ /P
12	40	24	2.1	22	26	18	6	50	
	56							82	
	45							44	
18	56	34	3	30	35	23	11	66	
	71							96	
	56							32	
30	75	54	4.8	46	52	33	21	70	
	95							110	



Guide strips & wear plate Series





DIN		DIN		DIN		DIN		Wmould	
Guide strips		Guide strips		Guide strips		Guide strips		Guide strips	
ZZ4240	P579	ZZ4248	P580	ZZ4244	P580	ZZ4242	P582	DT1481	P583



Wmould		Wmould		Wmould		Wmould		Wmould	
Guide strips		Guide strips		Guide strips		Guide strips		Guide strips	
DT1482	P584	DT1483	P585	DT1484	P586	DT1485	P587	DT1486	P588



Wmould		Wmould		Wmould		Wmould		Wmould	
Guide strips		Guide strips		Guide strips		Guide strips		Guide strips	
DT1471	P589	DT1472	P590	DT1473	P591	DT1474	P592	DT1475	P593



Wmould		Wmould		Wmould		Wmould		Wmould	
Guide strips		Guide strips		Guide strips		Guide strips		Wear plates	
DT1461	P594	DT1462	P595	DT1463	P596	DT1464	P597	DT1451	P598



Wmould		DIN		DIN		JIS		JIS	
Wear plates		Guide rail		Guide rail		Guide rail		Guide rail	
DT1452	P599	SSN4185	P600	SSN4186	P600	CCBG	P601	CCBP	P601



JIS		JIS		JIS		JIS		JIS	
Inclined wedge active block		Reset block		Inclined wedge active block		Inclined wedge active block		Inclined wedge active block	
CCKF	P602	CCKB	P602	CCS30W	P603	CCS30F	P603	CCS15W	P604



JIS		JIS		JIS		JIS		JIS	
Inclined wedge active block		Wear plates		Wear plates		Guide strips		Guide strips	
CCS15F	P604	SSAS	P605	SSASM	P605	GGT5S	P606	GGT8S	P606



JIS		JIS		JIS		JIS		JIS	
Guide strips		Guide strips		Guide strips		Guide strips		Guide strips	
GGT5SM	P607	GGT8SM	P607	GGRS	P608	GGRSM	P609	GGR5SC	P610



JIS		JIS		JIS		JIS		JIS	
Guide strips		Guide strips		Guide strips		Guide strips		Guide strips	
GGR5S	P610	GGR8S	P610	GGR15S	P610	GGR5SCM	P611	GGR5SM	P611



JIS		JIS	
Guide strips		Guide strips	
CCGSM	P612	CCGS	P612

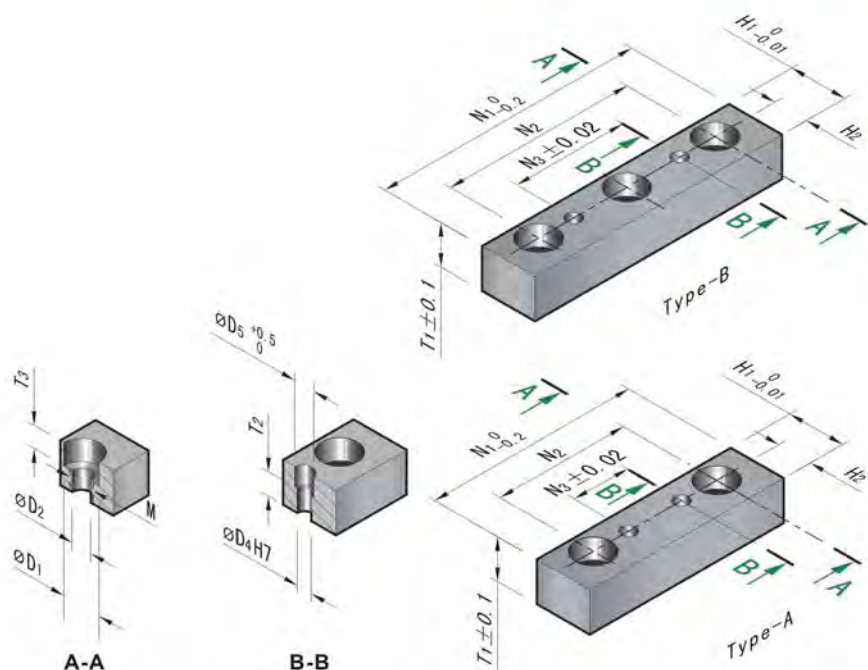


Products Summary

	Shape	Material	Type		Standard	Coce	Page
A 	A	SKD11	With mounting bolt hole +Dowel hole	Without graphite	DIN	ZZ4240	P579
				Without graphite		ZZ4248	P580
B 	A	Brass	With mounting bolt hole	With graphite	AGS	DT1481	P583
				Oil steel		With graphite	DT1482
		Oil steel	With mounting bolt hole	With graphite		DT1483	P585
				Brass		With graphite	DT1484
		P20	With mounting bolt hole	Without graphite		DT1485	P587
				With graphite		DT1486	P588
C 	A	Oil steel	With mounting bolt hole	Without oil groove	JIS	CCGS	P612
				Without oil groove		CCGSM	P612
		With mounting bolt hole	With oil groove	GGRS		P608	
			With oil groove	GGRSM		P609	
		SKD11	With mounting bolt hole	Without graphite		DT1471	P589
				Without graphite		DT1472	P590
D 	B	Brass	With mounting bolt hole	With graphite	AGS	DT1474	P592
				Without mounting bolt hole		With graphite	DT1473
		P20	With mounting bolt hole	Without graphite		DT1475	P593
				Without mounting bolt hole		Without graphite	DT1475
E 	B	Oil steel	With mounting bolt hole	Without oil groove	JIS	GGR5SC	P610
				Without oil groove		GGR5S	P610
		With mounting bolt hole	With graphite	GGR5SCM		P611	
						GGR5SM	P611
F 	C	Oil steel	With mounting bolt hole +Dowel hole	With graphite	AGS	DT1461	P594
				With mounting bolt hole		With graphite	DT1463
		Brass	With mounting bolt hole +Dowel hole	With graphite		DT1462	P595
				With mounting bolt hole		With graphite	DT1464
G 	D	Oil steel	S=8	Without oil groove	JIS	GGT5S	P606
				With graphite		GGT5SM	P607
		S=11	Without oil groove	GGT8S		P606	
			With graphite	GGT8SM		P607	
E 	E	SKD11	/	Without graphite	DIN	SSN4185	P600
		Brass	/	With graphite	JIS	CCBG	P601
F 	F	Brass	/		DIN	SSN4186	P601
		S45C	/	Without graphite	JIS	CCBP	P601
G 	G	Brass	/	Without graphite	AGS	DT1451	P598
				With graphite		DT1452	P599
		Oil steel	/	With graphite		SSASM	P605
				Without oil groove		SSAS	P605
H 	H	Brass	/	With graphite	JIS	CCS30W	P603
				With graphite		CCS15W	P604
		S45C	/	With graphite		CCS30F	P603
				With graphite		CCS15F	P604
H 	H						

DIN
Guide strips

ZZ4240



Order ZZ4240-H1-T1-N1 Material:SKD11 Hardness:58±2HRC

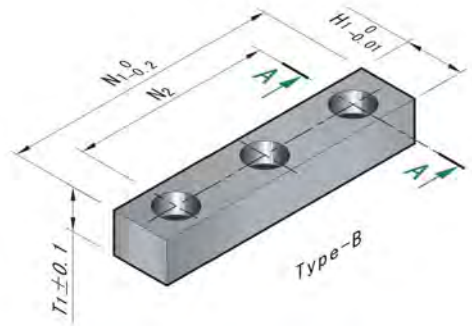
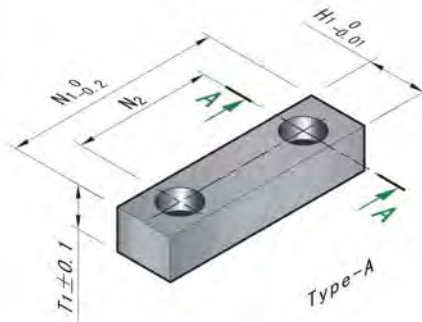
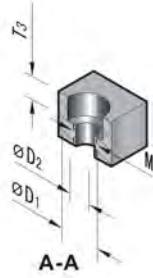
H1	T1	N1	Type	H2	T2	T3	N2	N3	D1	D2	D4	D5	M	@ ¥/P
15	11	50	A	9	-	5.7	30	10	10	5.3	4	-	M 6	
		60					20							
		70	30											
		75	40											
		80	40											
18	22	80	A	11	12	6.8	70	50	11	6.4	6	7	M 8	
		90					32							
		100	52											
		120	72											
		140	92											
24	36	100	A	15	18	9	136	112	15	8.5	8	9	M10	
		120					36							
		140	56											
		160	76											
		180	96											
30	50	120	A	18	18	11	80	40	18	10.5	10	11	M12	
		140					60							
		160	80											
		180	100											
		200	120											
36	63	140	A	22	18	13	92	44	20	12.5	12	13	M14	
		160					64							
		180	84											
		200	104											
		220	124											

- Excitor pins series
- Excitor sleeves series
- Slide railways series
- Linch locks series
- Pointing gates series
- Data stamps Ad valves series
- Excitor series
- Cooling elements series
- Locating parts series
- Spacers series
- Guide pins Guide bush series
- Guide strips Wear plate series
- Chuck series
- Mold accessories

DIN

Guide strips

ZZ4248



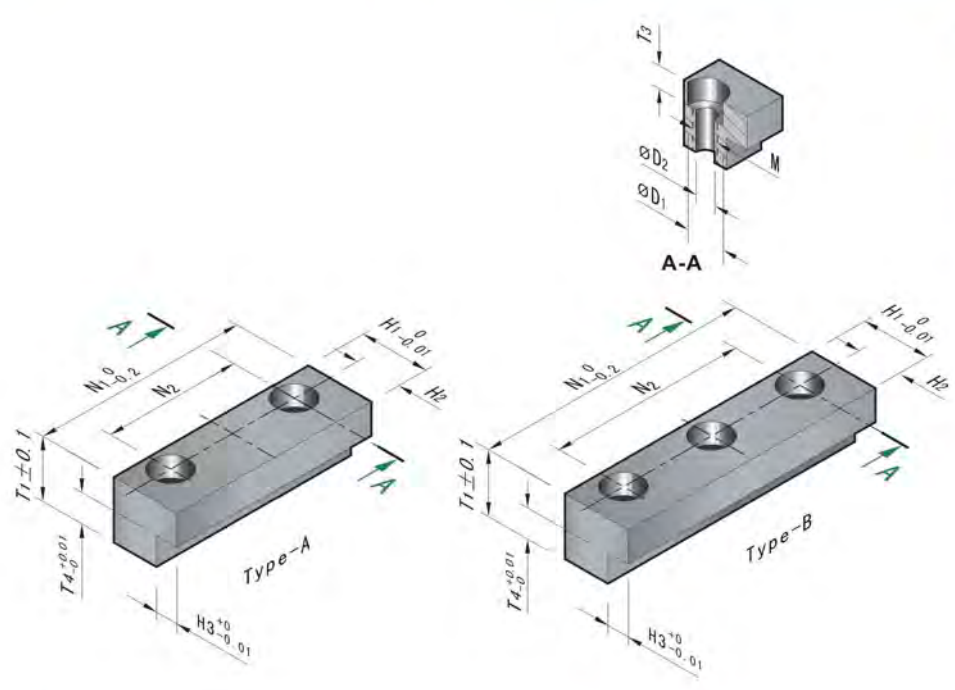
Order ZZ4248-H1-T1-N1 Material:SKD11 Hardness:58±2HRC

H1	T1	N1	N2	Type	T3	D1	D2	M	@ ¥/P
12	11	50	30	A	5.7	10	5.3	M6	
		60	40						
		70	50						
		75	60						
		80	60						
		90	70						
12	16	100	80	B	5.7	10	5.3	M6	
		120	100						
		140	120						
		160	140						
		180	160						
		100	76						
18	16	120	96	A	6.8	11	6.4	M8	
		140	116						
		160	136						
		180	156						
		140	116						
		160	136						
24	21	180	156	B	6.8	11	6.4	M8	
		200	176						
		180	156						
		220	196						

DIN

Guide strips

ZZ4244



Order ZZ4244-H1-T1-N1 Material:SKD11 Hardness:58±2HRC

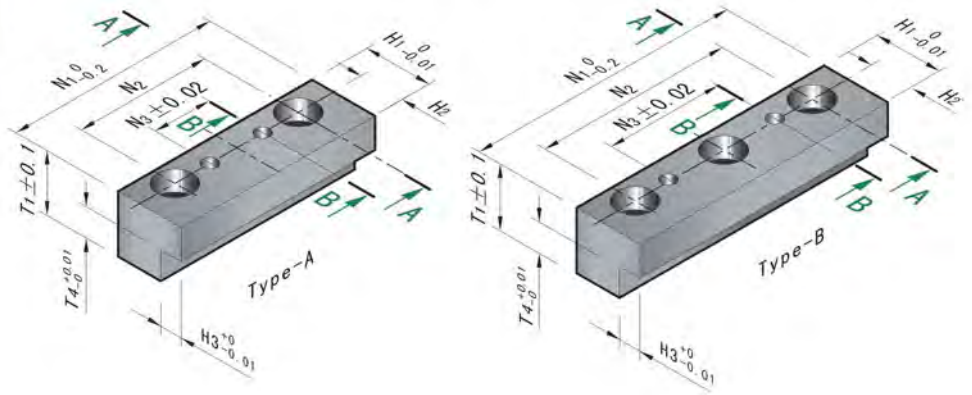
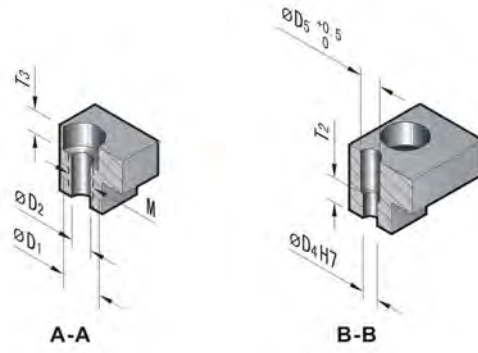
H1	T1	N1	Type	H2	H3	T3	T4	N2	D1	D2	M	@ ¥/P
15	21	50	A	9	3	5.7	10	30	10	5.3	M 6	
		60						40				
		70						50				
		75	B					60				
		80						70				
18	35	80	A	11	4	6.8	13	56	11	6.4	M 8	
		90						60				
		100						76				
		120	B					96				
		140						116				
24	51	160	A	15	6	9	51	136	15	8.5	M10	
		100						68				
		120						88				
		140	B					108				
		160						128				
30	65	180	A	18	6	11	65	148	18	10.5	M12	
		120						80				
		140						100				
		160	B					120				
		180						140				
		200						160				

- Excitor pins series
- Excitor sleeves series
- Side rollers series
- Launch tools series
- Pouring gates series
- Data stamps series
- Excitor series series
- Cooling elements series
- Locating parts series
- Spacers series
- Guide pins series
- Guide bush series
- Guide strips series
- Chuck series
- Mold accessories series

DIN

Guide strips

ZZ4242



Order ZZ4242-H1-T1-N1 Material:SKD11 Hardness:58±2HRC

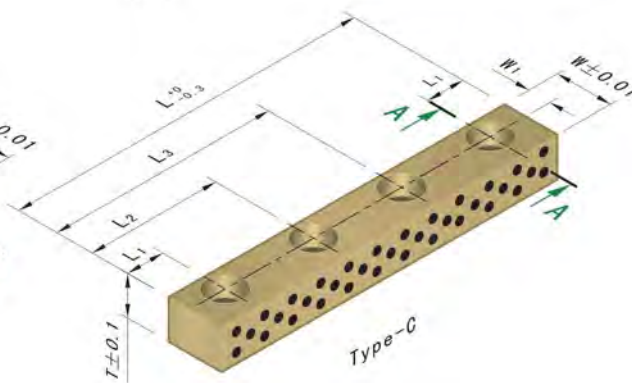
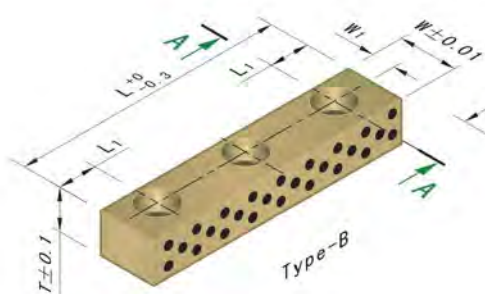
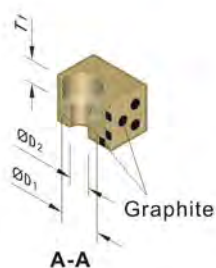
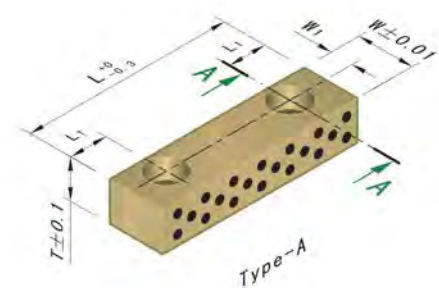
H1	T1	N1	Type	H2	H3	T2	T3	T4	N2	N3	D1	D2	D4	D5	M	@ ¥ / P
15	16	50	A	9	3	-	5.7	5	30	10	10	5.3	4	-	M 6	
		60							20							
		70	30													
		75	40													
		80	40													
18	30	90	B	11	4	-	6.8	8	60	40	11	6.4	6	7	M 8	
		80							50							
		100	32													
		120	52													
		140	72													
24	46	160	A	15	6	12	9	10	96	72	15	8.5	8	9	M10	
		140							92							
		100	112													
		120	68													
		160	36													
180	88	56	108	76	128	96	148	116								

Guide strips
Wear plate series

Chuck series

Mold
accessories

DT1481



Order DT1481-W-T-L Material: Brass+graphite

W	T	D1	D2	T1	W1	Type	L1	L2	L3	@ ¥ / P
										L
12.5	10	8	4.5	5	5	A	7.5	-	-	40
	15					B		-	-	50-70
	20					C		30	50	80-100
15	10	9.5	5.5	6	6	A	7.5	32.5	57.5	80-100
	15					B		35	65	70-120
	20					C		40	90	130-150
	25					-		45	95	-
20	15	11	6.5	7	9	A	10	53	97	100-150
	20					B		-	-	40-90
	25	C	55	105	100-150					
	30	-	60	120	160-200					
25	20 25 30	14	9	9	10	A	10	70	130	160-200
	20					B		-	-	40-90
	25					C		55	105	100-150
	30					-		60	120	160-200
30	30	17	11.5	11	11	B	12	70	130	160-200
	35					C		-	-	120-160
	-					-		60	120	180-200

- Extruder pins
- Extruder sleeves
- Slide railiners
- Slide series
- Launch tools
- Launch series
- Pouring gates
- Series
- Date stamps
- AD valves series
- Extruder series
- Extruder series
- Cooling elements
- Series
- Locating parts
- Series
- Spacers series
- Series
- Guide pins
- Guide bush
- Guide strips
- Wear plate series
- Chuck series
- Series
- Mold accessories

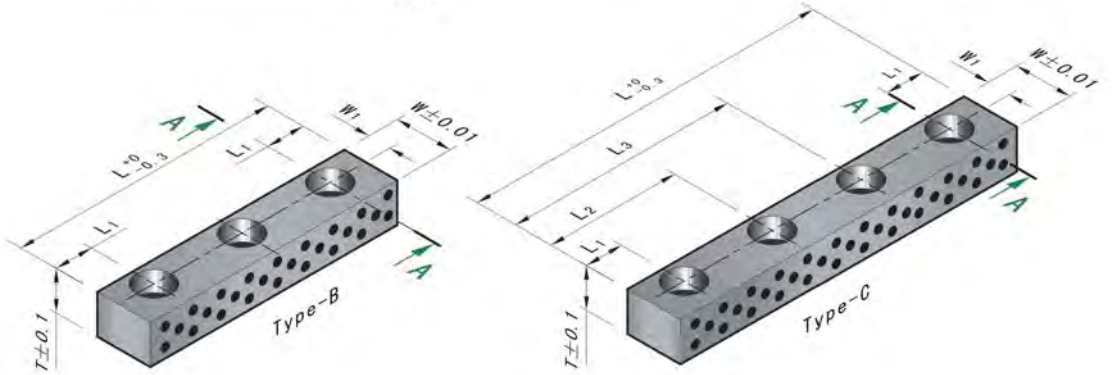
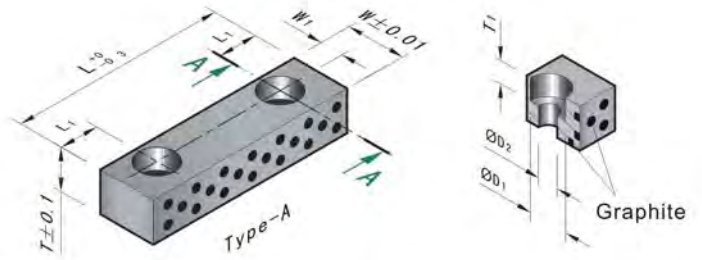


Oil-free plain guide strips

DT1482



A-A



Order DT1482-W-T-L **M** Material: Oil steel+graphite **H** Hardness: 53-58HRC

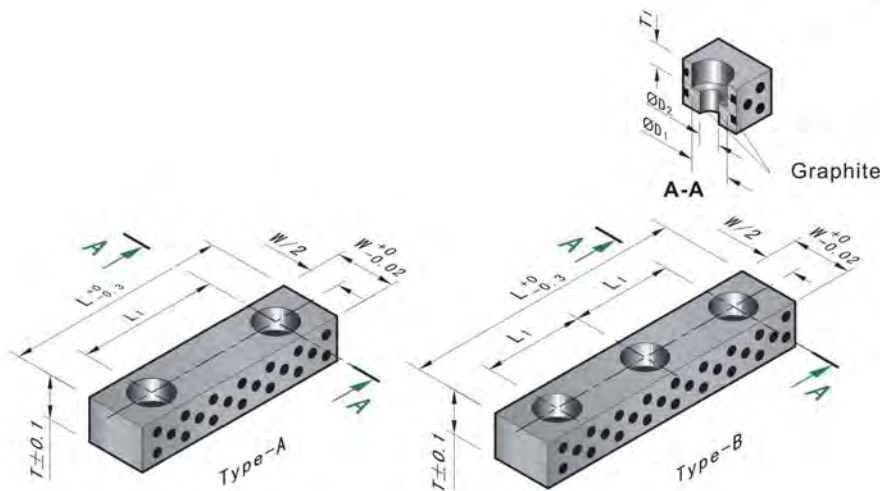
W	T	D1	D2	T1	W1	Type	L1	L2	L3	@ ¥/P L
15	10	9.5	5.5	6	6	A	7.5	-	-	40- 60
	15					-		-	70-120	
	20					40		90	130-150	
20	25	11	6.5	7	9	C	10	45	95	130-150
	20					53		97	40- 90	
	25	14	9	9	A	55		105	100-150	
	30				60	120		160-200		
25	20	14	9	9	10	C	12	70	130	160-200
	25					-		-	40- 90	
	30					55		105	100-150	
	35					60		120	160-200	
						70		130	160-200	
30	30	17	11.5	11	11	B	12	-	-	120-160
	35					60		120	180-200	
						C		70	130	180-200

Guide strips
Wear plate series

Chuck series

Mold
Accessories

DT1483



Order DT1483-W-T-L Material: Oil steel+graphite Hardness: 53-58HRC

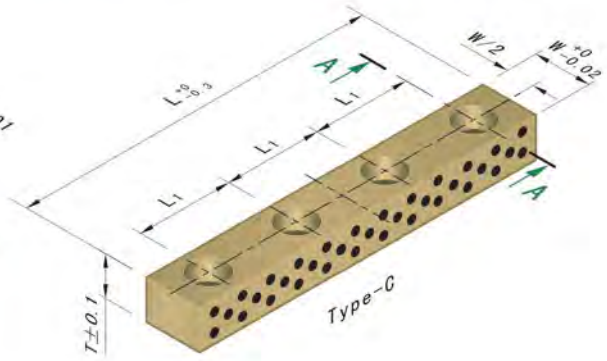
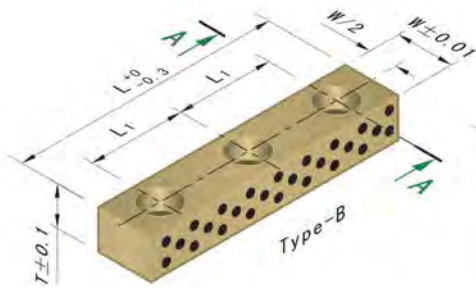
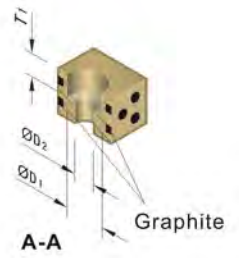
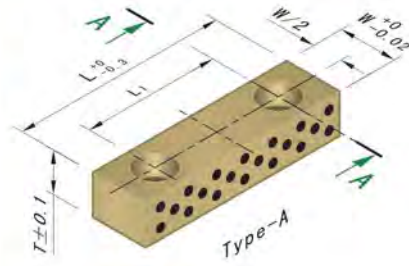
W	T	L	Type	L1	T1	D1	D2	@ ¥/P		
12	16	40	A	24	5	8	4.5			
		50		34						
		63		47						
16	20	50	B	34	6	9.5	5.5			
		63		47						
		80		32						
	20	16	50	A	34	7	11	6.5		
			63		47					
			80		32					
25		20	100	B	40	9	14	9		
			63		43					
			80		60					
	32	25	100	A	40	11	17	11		
			63		56					
			80		76					
40		25	100	B	50.5	11	17	11		
			80		56					
			100		76					
	25	32	100	A	50.5	11	17	11		
			125		50.5					
			80		76					
		40	40	125	B	50.5	11	17	11	
				160		68				
				100		76				
	50		50	125	A	46.5	11	17	11	
				160		64				
				200		84				

- Excisor pins series
- Side rollers series
- Latch locks series
- Pouring gates series
- Data stamps Anvil series
- Excisor series
- Cooling inserts series
- Locating parts series
- Spacers series
- Guide pins Guide bush series
- Guide strips Wear plate series
- Chuck series
- Mold accessories



Oil-free plain guide strips

DT1484



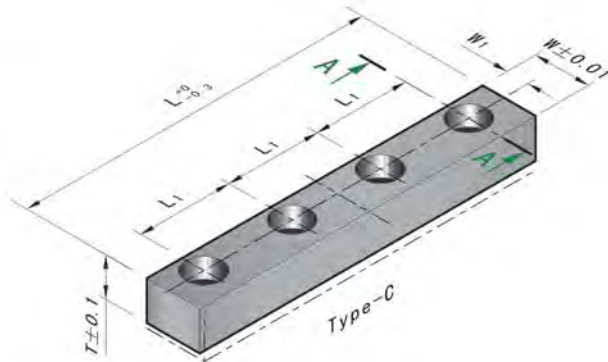
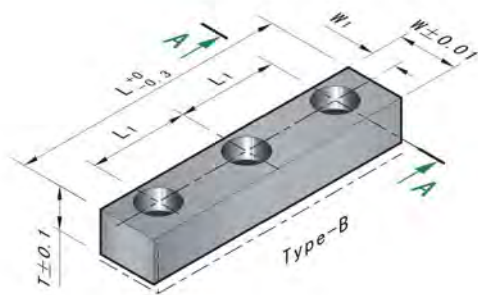
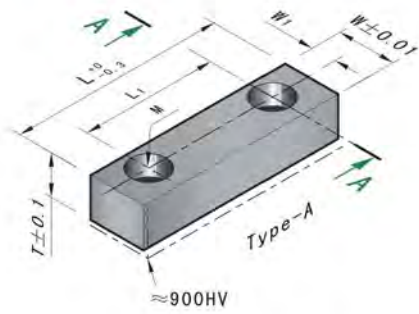
Order DT1484-W-T-L Material: Brass+graphite

W	T	L	Type	L1	T1	D1	D2	@ ¥/P
12	16	40	A	24	5	8	4.5	
		50		34				
		63		47				
16	20	50	A	34	6	9.5	5.5	
		63		47				
		80		32				
20	16	80	A	60	7	11	6.5	
		100		40				
		63		43				
20	20	80	A	60	7	11	6.5	
		100		40				
		63		56				
25	25	80	A	76	9	14	9	
		100		50.5				
		125		68				
32	25	100	A	76	9	14	9	
		125		50.5				
		160		68				
32	32	100	A	76	9	14	9	
		125		50.5				
		160		68				



Guide strips

DT1485



O Order DT1485-W-T-L **M** Material:P20 **H** Hardness:≈900HV

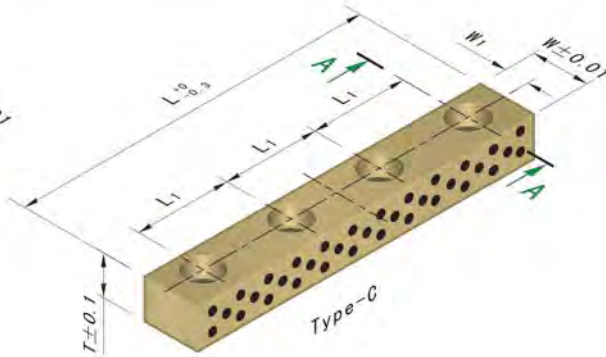
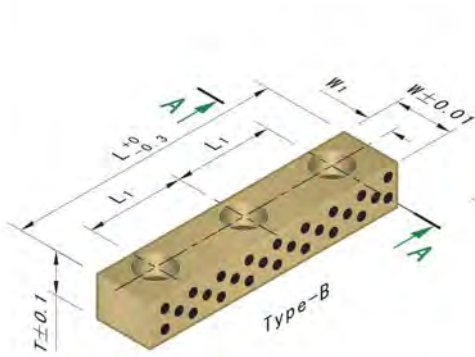
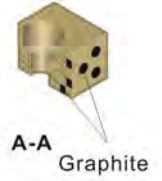
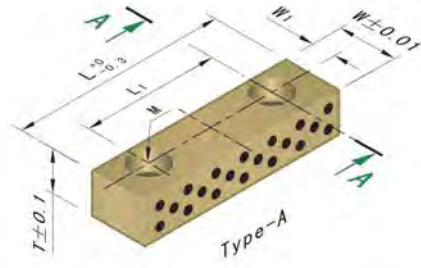
W	T	L	Type	L1	W1	M	@ ¥/P				
16	6	40	A	24	6	M 5					
		50		34							
		63		47							
		80		32							
20	8	50	A	34							
		63		47							
		80		32							
		100		42							
		63		A				43			
		80						60			
25	12	100	B	40				9	M 6		
		125		52.5							
		80		A	60						
		100			40						
		125		B	52.5						
		160			70						
32	16	100	A	76	11	M 8					
		125		50.5							
		160		68							
		200		58							
		125		B							50.5
		160									68
32	22	200	C	58				14	M10		
		250		74							
		160		B							64
		200									84
		250		C							72
		315									93

- Exciter pins series
- Side rollers series
- Latch locks series
- Polishing guides series
- Data stamps Air valves series
- Exciter series
- Cooling elements series
- Locating parts series
- Spacers series
- Guide pins Guide bush
- Guide strips Wear plate series
- Chuck series
- Mold accessories



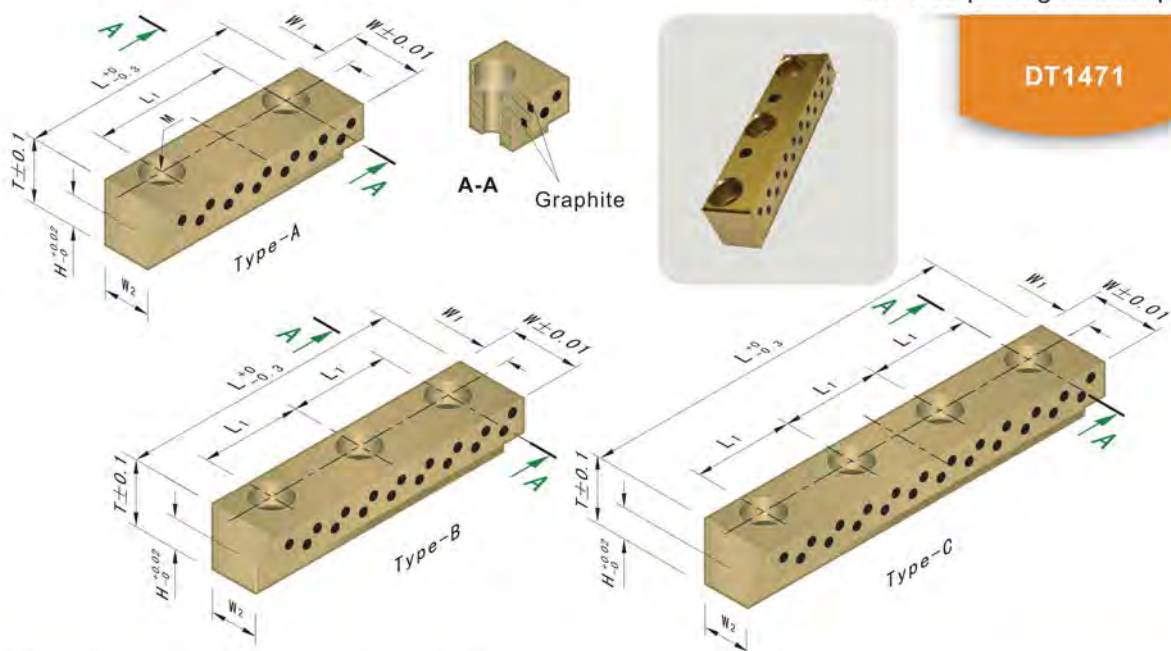
Oil-free plain guide strips

DT1486



Order DT1486-W-T-L Material: Brass+graphite

W	T	L	Type	L1	W1	M	@ ¥/P				
16	6	40	A	24	6	M 5					
		50		34							
		63		47							
	8	80	B	32							
		50	A	34							
		63	A	47							
20	12	80	B	32	9	M 6					
		100	A	42							
		63	A	43							
	16	80	A	60							
		100	B	40							
		125	B	52.5							
	25	22	160	A				70	11	M 8	
			100					76			
			125					B			
30		160	B	68							
		200	C	58							
		125	B	50.5							
32	38	160	B	64	14	M10					
		200		84							
		250		C				72			
	315	C	93								



DT1471-T-H-L

Material: Brass+graphite

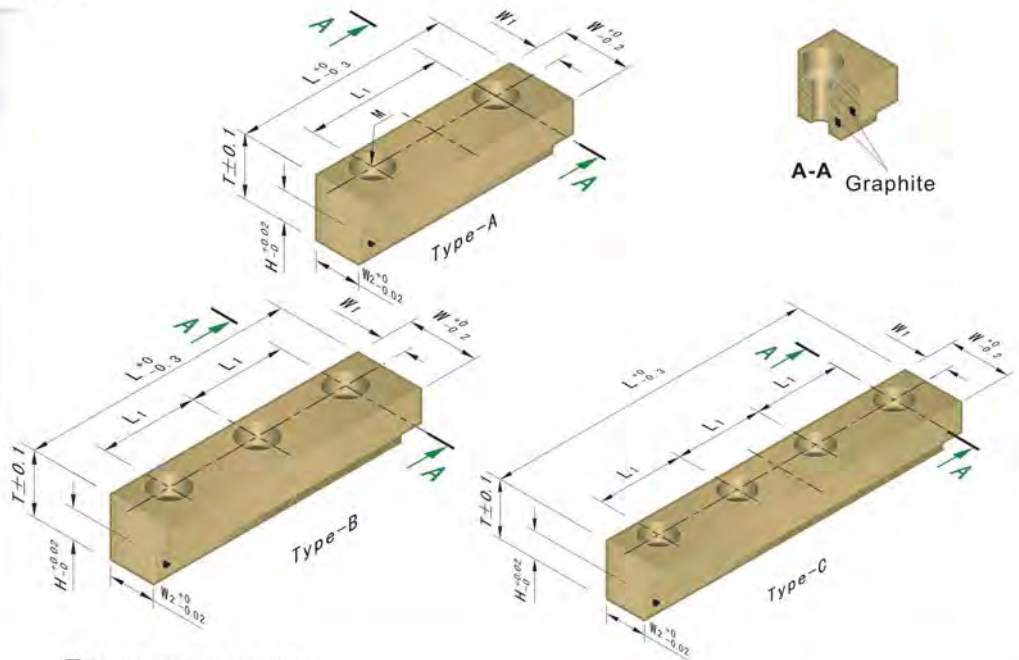
T	H	L	Type	L1	W	W1	W2	M	@ ¥ / P
12	6	40	A	24	16	6	12	M 5	
		50		34					
		63		47					
16	8	50	B	32	20	9	15	M 6	
		63		47					
		80		32					
20	11	100	A	42	25	11	19	M 8	
		63		43					
		80		60					
25	13	100	B	40	32	14	24	M10	
		125		52.5					
		63		43					
32	16	80	A	60	40	16	12	M 5	
		100		40					
		125		52.5					
40	20	160	B	70	50	20	15	M 6	
		80		60					
		100		40					
50	25	125	A	52.5	63	25	19	M 8	
		160		68					
		200		58					
50	32	100	B	76	80	32	24	M10	
		125		50.5					
		160		68					
50	40	160	C	74	100	40	15	M 6	
		200		58					
		250		74					
50	50	125	A	50.5	125	50	19	M 8	
		160		68					
		200		58					
50	60	160	B	68	160	60	24	M10	
		200		84					
		250		72					
50	70	160	C	93	200	70	24	M10	
		200		84					
		250		72					
50	80	160	A	64	250	80	24	M10	
		200		84					
		250		72					
50	90	160	B	64	300	90	24	M10	
		200		84					
		250		72					
50	100	160	C	93	350	100	24	M10	
		200		84					
		250		72					

- Ejector pins series
- Ejector sleeves series
- Slide railers series
- Latch locks series
- Pouring gates series
- Date stamps series
- Ad valves series
- Ejector series
- Cooling elements series
- Locating parts series
- Spacers series
- Guide pins series
- Guide bush series
- Guide strips series
- Chuck series
- Mold accessories



Oil-free plain guide strips

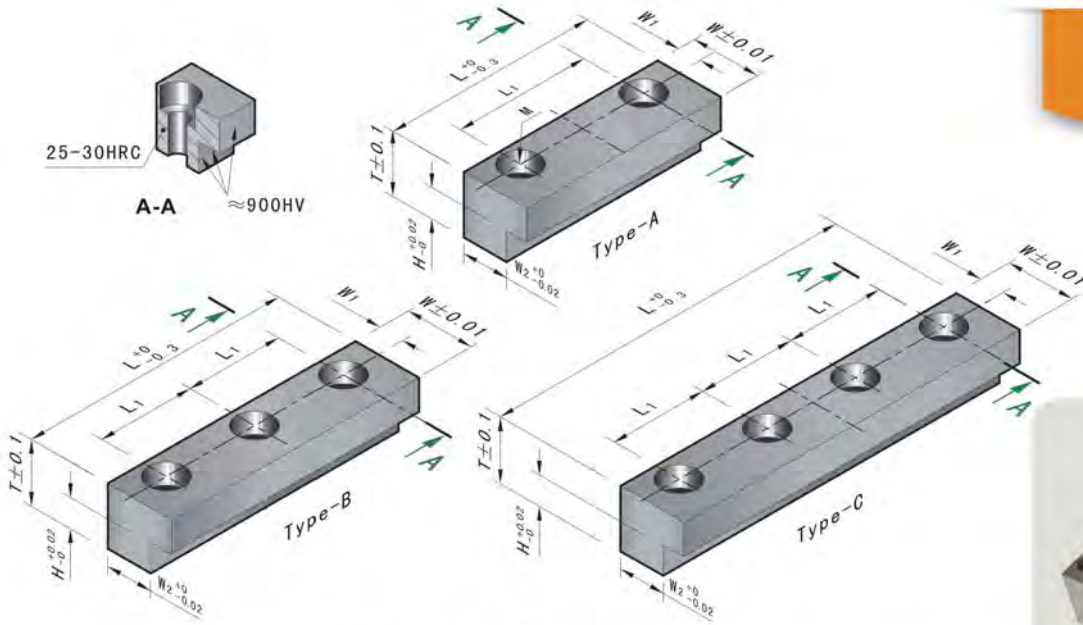
DT1472



Order DT1472-T-H-L

Material: Brass+graphite

T	H	L	Type	L1	W	W1	W2	M	@ ¥/P
12	6	40	A	24	16	6	12	M 5	
		50		34					
		63		47					
16	8	50	A	34	20	9	15	M 6	
		63		47					
		80		32					
20	11	100	B	42	25	11	19	M 8	
		63		43					
		80		60					
25	8	100	A	40	32	14	24	M 10	
		125		52.5					
		63		43					
32	13	80	A	60	40	15	15	M 6	
		100		40					
		125		52.5					
40	10	160	B	70	50	11	19	M 8	
		80		60					
		100		40					
50	16	125	A	50.5	68	14	24	M 10	
		160		76					
		200		58					
50	20	100	A	76	84	14	24	M 10	
		125		50.5					
		160		68					
50	12	200	B	58	93	14	24	M 10	
		250		74					
		160		64					
50	20	200	B	64	84	14	24	M 10	
		250		72					
		315		93					
50	20	160	B	64	84	14	24	M 10	
		200		84					
		250		72					
50	20	200	B	84	93	14	24	M 10	
		250		72					
		315		93					



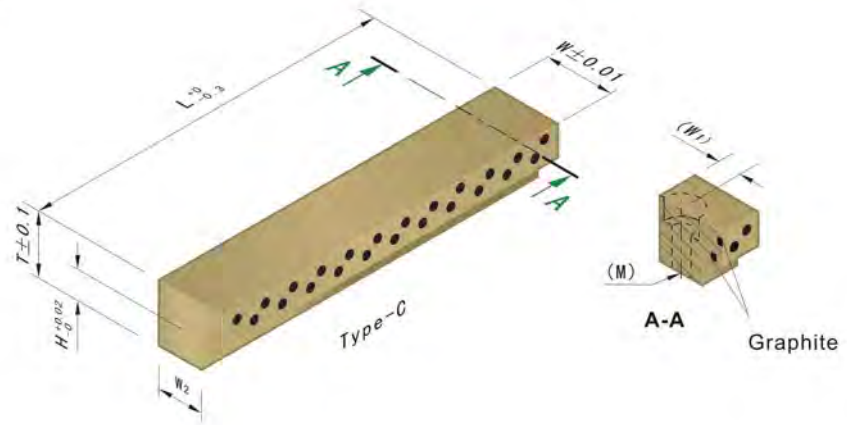
Order DT1473-T-H-L Material:P20 Hardness:≈900HV

T	H	L	Type	L1	W	W1	W2	M	@ ¥/P
12	6	40	A	24	16	6	12	M 5	
		50		34					
		63		47					
16	8	50	B	32	20	9	15	M 6	
		80		34					
		100		42					
20	11	63	A	43	25	11	19	M 8	
		80		60					
		100		40					
25	13	125	B	52.5	32	14	24	M 10	
		63		43					
		80		60					
32	16	100	A	40	40	16	20	M 8	
		125		52.5					
		160		70					
40	20	100	B	50.5	50	20	25	M 10	
		125		68					
		160		58					
50	25	125	C	74	64	24	32	M 12	
		160		50.5					
		200		68					
50	32	125	B	50.5	84	28	40	M 14	
		160		64					
		200		84					
50	40	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	50	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	60	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	70	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	80	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	90	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	100	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	110	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	120	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	130	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	140	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	150	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	160	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	170	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	180	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	190	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	200	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	210	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	220	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	230	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	240	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	250	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	260	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	270	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	280	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	290	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	300	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	315	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	330	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	345	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	360	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	375	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	390	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	405	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	420	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	435	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	450	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	465	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	480	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	495	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	510	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	525	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	540	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	555	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	570	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	585	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	600	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	615	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	630	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	645	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	660	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	675	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	690	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	705	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	720	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	735	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	750	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	765	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	780	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	795	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	810	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	825	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	840	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	855	125	B	50.5	93	32	48	M 16	
		160		64					
		200		84					
50	870	125	C	72	93	32	48	M 16	
		160		64					
		200		84					
50	885	125	B	50.5	93	32	48	M 16	
		160		64					



Oil-free plain guide strips

DT1474



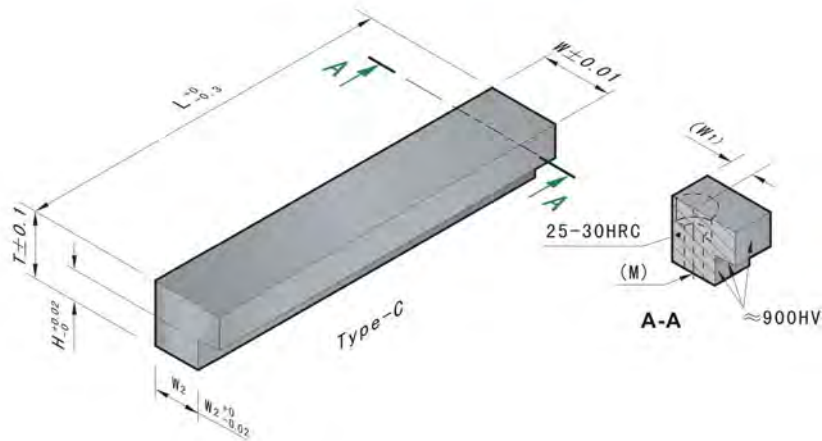
Order DT1474-T-H-L **M** Material: Brass+graphite

T	H	L	W	W1	W2	M	@ ¥ /P
12	6	40	16	6	12	M 5	
		50					
		63					
16	8	80	20	9	15	M 6	
		50					
		63					
20	11	80	25	11	19	M 8	
		100					
		125					
25	8	63	32	14	24	M10	
		80					
		100					
32	10	100	32	14	24	M10	
		125					
		160					
40	16	80	32	14	24	M10	
		100					
		125					
50	20	160	32	14	24	M10	
		200					
		250					
50	20	160	32	14	24	M10	
		200					
		250					
50	20	315	32	14	24	M10	
		160					
		200					



Guide strips

DT1475



Order DT1475-T-H-L **M** Material:P20 **H** Hardness:≈900HV

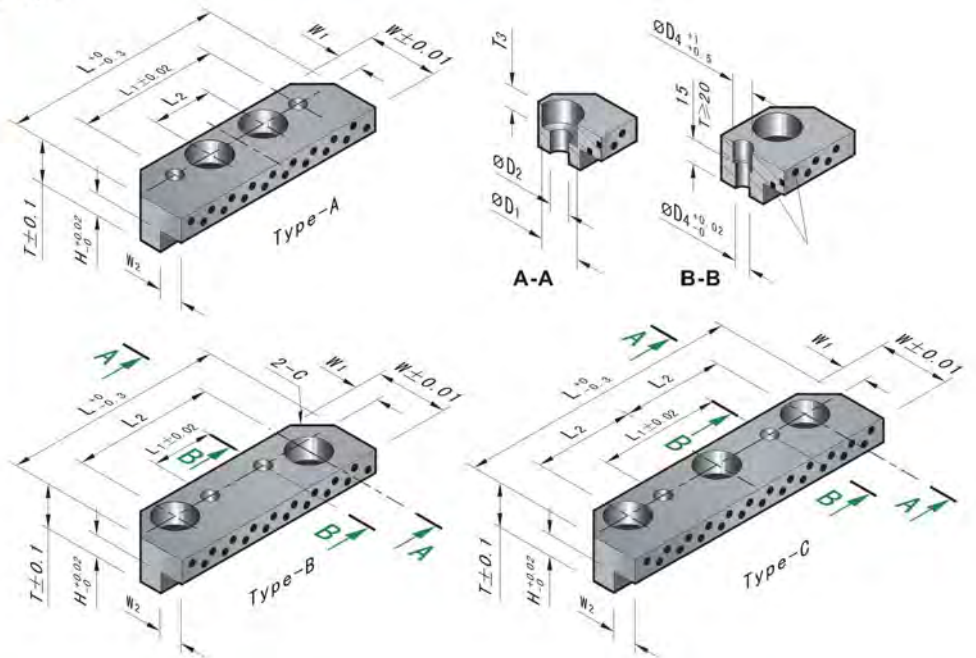
T	H	L	W	W1	W2	M	@ ¥/P
12	6	40	16	6	12	M 5	
		50					
		63					
		80					
16	8	50	20	9	15	M 6	
		63					
		80					
20	11	100	25	11	19	M 8	
		63					
		80					
		100					
25	13	125	32	14	24	M10	
		63					
		80					
		100					
32	16	160	32	14	24	M10	
		80					
		100					
		125					
40	10	160	32	14	24	M10	
		200					
		250					
		315					
50	20	160	32	14	24	M10	
		200					
		250					
		315					

- Extruder pins
- Extruder sleeves
- Slide rail/liners series
- Launch tools
- Pouring gates series
- Date stamps
- AD valves series
- Extruder series
- Cooling elements series
- Locating parts series
- Spacers series
- Guide pins
- Guide bush
- Guide strips
- Wear plate series
- Chuck series
- Mold accessories



Oil-free plain guide strips

DT1461



Order DT1461-W-L Material: Oil steel+graphite Hardness: 53-58HRC

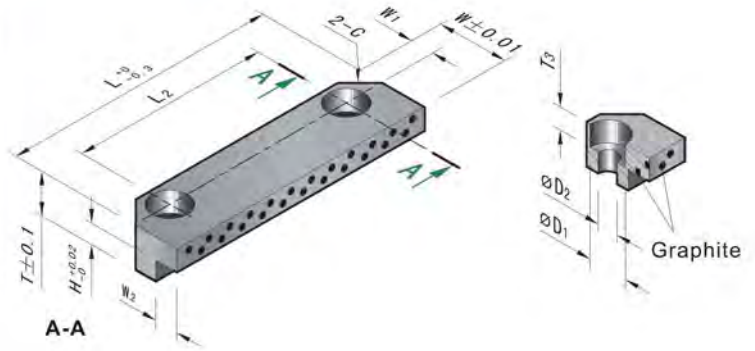
W	L	Type	H	W1	W2	L1	L2
15	60	A	8	6	4.5	40	20
	80	B				35	55
	100	A				55	75
20	60	A	10	9	5.5	40	20
	80	B				20	50
	100	C				40	70
25	80	A	15	11	7.5	60	45
	100	B				20	65
	120	C				40	42.5
30	140	C	15	11	11	80	52.5
	120					40	40
	140					60	50
	160					80	60
	180					100	70

D1	D2	D4	C	T	T3	@ ¥/P
9.5	5.5	6	9	15	6	
11	6.5		11	20	7	
14	9	8	13	25	9	
18	11		16	30	11	



Oil-free plain guide strips

DT1463



Order DT1463-W-L Material: Oil steel+graphite Hardness: 53-58HRC

W	L	H	W1	W2	L2
15	60	8	6	4.5	20
	80				55
	100				75
20	60	10	9	5.5	20
	80				50
	100				70
25	120	15	11	11	45
	80				65
	100				42.5
	120				52.5
30	120	16	11	11	40
	140				50
	140				60
	160				70
180					

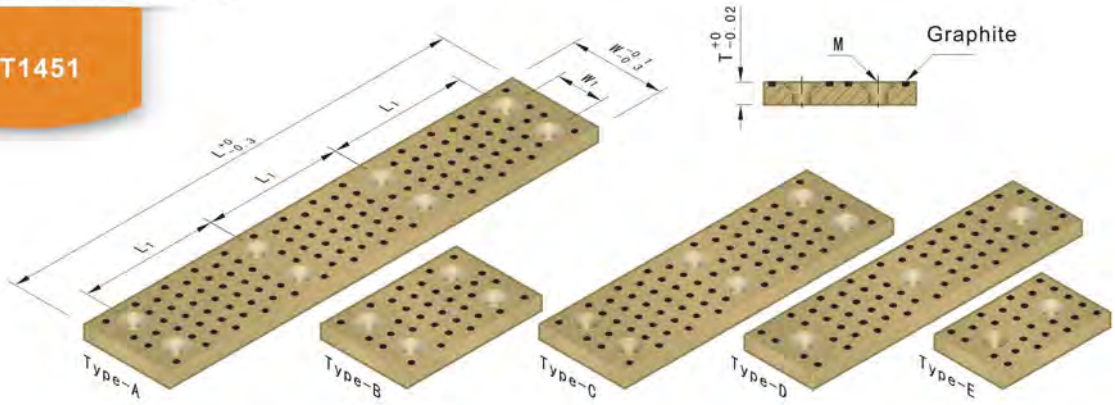
D1	D2	C	T	T3	@ ¥/P
9.5	5.5	9	15	6	
11	6.5	11	20	7	
14	9	13	25	9	
18	11	16	30	11	

- Erector pins
- Erector sleeves
- Slide railers
- Slide railers series
- Latch locks
- Latch locks series
- sliding plates
- sliding plates series
- Date stamps
- Date stamps series
- Ejector series
- Ejector series
- Cooling elements
- Cooling elements series
- Locating parts
- Locating parts series
- Springs series
- Springs series
- Guide pins
- Guide pins series
- Guide strips
- Guide strips series
- Wear plate series
- Wear plate series
- Chuck series
- Chuck series
- Mold
- Mold accessories



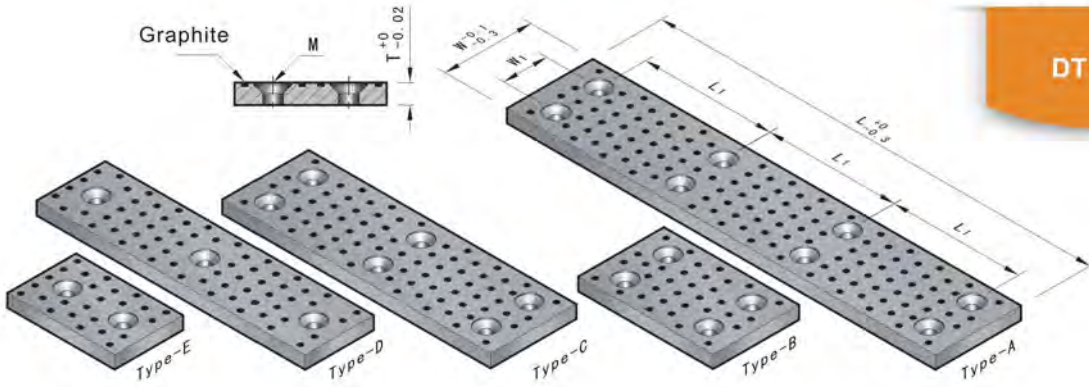
Oil-free plain guide strips

DT1451



Order DT1451-W-T-L Material: Brass+graphite

W	T	L	Type	L1	W1	M	@ ¥/P
12	5	32	E	16			
		40		24			
		50		34			
		63		47			
		80		32			
16	5	32	E	16		M4	
		40		24			
		50		34			
		63		47			
		80		32			
20	6	100	D	42			
		40		20			
		50		30			
		63		43			
		80		60			
25	6	100	D	40			
		40		20			
		50		26			
		63		39			
		80		56			
32	6	100	E	76		M5	
		125		50.5			
		50		26			
		63		39			
		80		56			
40	8	160	D	68	20		
		63		39			
		80		56			
		100		76			
		125		50.5			
50	8	160	C	68	24		
		200		58			
		80		56			
		100		76			
		125		50.5			
63	8	250	A	74	35	M6	
		100		76			
		125		50.5			
		160		68			
		200		58			
80	8	250	A	72	50		
		315		93			
		125		50.5			
		160		68			
		200		58			
		250		72			
		315		93			



Order DT1452-W-T-L **M** Material: Oil steel+graphite **H** Hardness: 53-58HRC

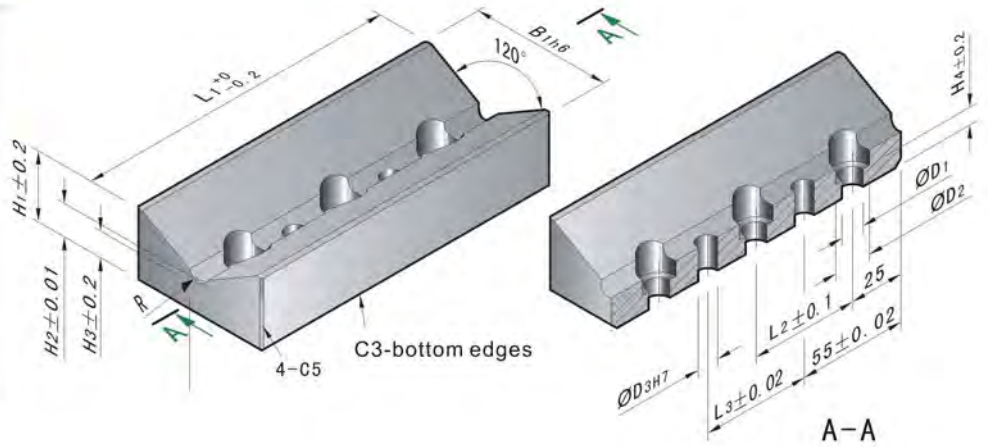
W	T	L	Type	L1	W1	M	@ ¥/P
12	5	32	E	16		M4	
		40		24			
		50		34			
		63		47			
		80		32			
16	5	32	E	16		M4	
		40		24			
		50		34			
		63		47			
		80		32			
20	6	100	D	42		M5	
		40		20			
		50		30			
		63		43			
		80		60			
25	6	100	D	40		M5	
		40		20			
		50		26			
		63		39			
		80		56			
32	6	100	D	76		M5	
		125		50.5			
		50		26			
		63		39			
		80		56			
40	8	100	B	76	20	M6	
		125		50.5			
		160		68			
		63		39			
		80		56			
50	8	100	C	76	24	M6	
		125		50.5			
		160		68			
		200		58			
		250		74			
63	8	100	B	76	35	M6	
		125		50.5			
		160		68			
		200		58			
		250		72			
80	8	315	A	93	50	M6	
		125		50.5			
		160		68			
		200		58			
		250		72			
		315		93			

- Exciter pins series
- Exciter sleeves series
- Side raileners series
- Latch locks series
- Pointing gates series
- Data stamps Ad valves series
- Exciter series
- Cooling elements series
- Locating parts series
- Spacers series
- Guide pins Guide bush series
- Guide strips Wear plate series
- Chuck series
- Mold accessories

JIS

Guide strips

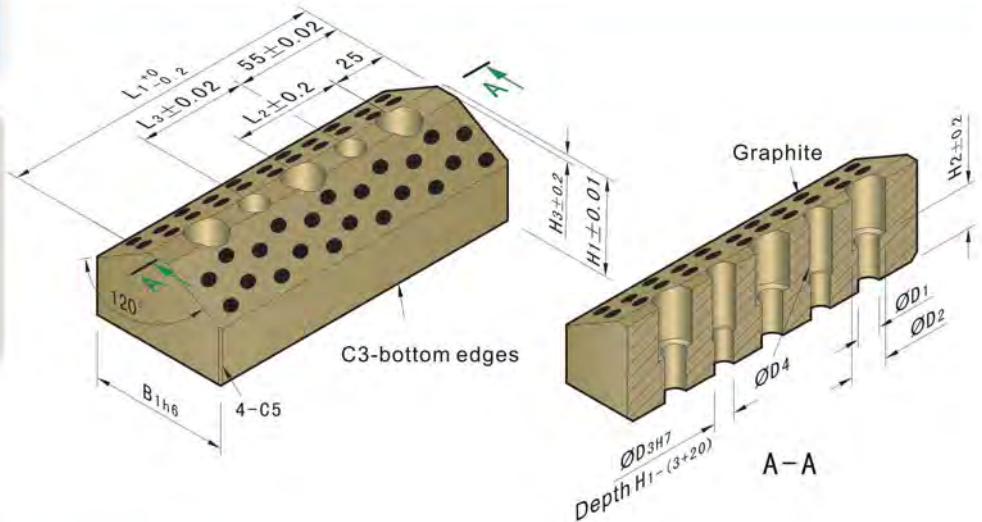
SSN4185



Order SSN4185 Material:SKD11 Hardness:58-62HRC

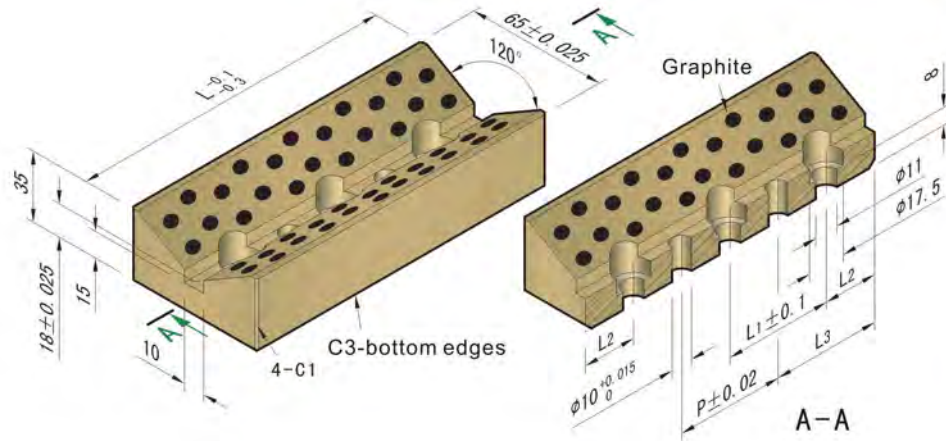
B1	H1	H2	H3	H4	D	D1	D2	D3	L1	L2	L3	Hole count	@ ¥ /P
65	35	18	17	8	5	13.5	20	12	150	100	45	2	
									200	150	95		
									250	100	145		
									300	125	195	3	
									150	100	45		
125	60	33	32	15	17.5	26	16	200	150	95	2		
								250	150	145			
								300	125	195	3		
								150	100	45			

SSN4186



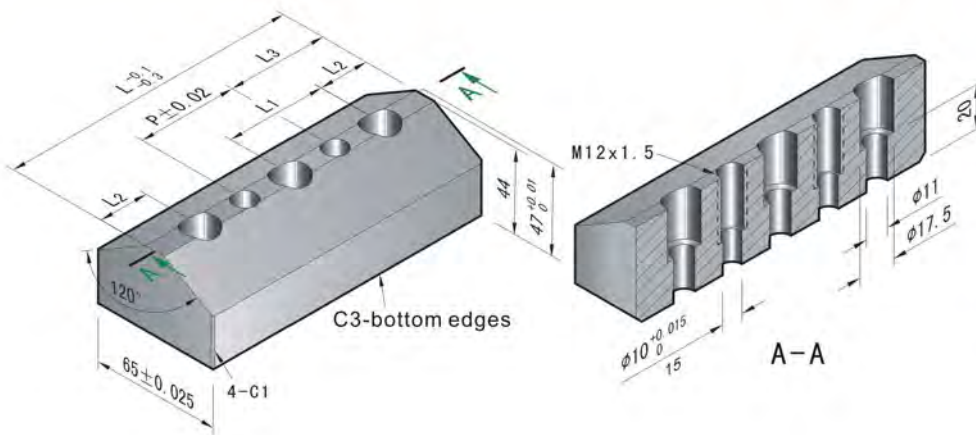
Order SSN4186 Material:Brass+graphite

B1	H1	H2	H3	D1	D2	D3	D4	L1	L2	L3	Hole count	@ ¥ /P
65	47	20	3	13.5	20	12	14	150	100	45	2	
								200	150	95		
								250	100	145		
								300	125	195	3	
								150	100	45		
125	57	15	5	17.5	26	16	18	200	150	95	2	
								250	150	145		
								300	125	195	3	
								150	100	45		



Order CCBG-L Material: Brass+graphite

P	L	L1	L2	L3	Hole count	@ ¥ /P
20	100	60	20	40	2	
50	150				3	
100	200	50	25	50	4	
150	250				5	
200	300				6	



Order CCBP-L Material: S45C Hardness: 40-45HRC

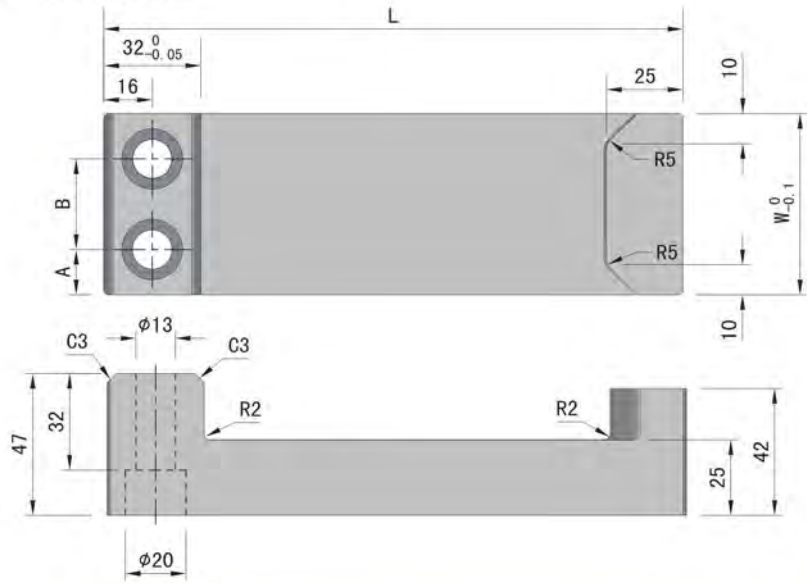
P	L	L1	L2	L3	Hole count	@ ¥ /P
20	100	60	20	40	2	
50	150				3	
100	200	50	25	50	4	
150	250				5	
200	300				6	

- Ejector pins
- Ejector sleeves
- Slide railiners
- Slide rails
- Latch locks
- Pointing gates
- Ad valves series
- Date stamps
- Ad valves series
- Ejector series
- Cooling elements
- Locating parts
- Spring series
- Guide pins
- Guide bush
- Guide strips
- Wear plate series
- Chuck series
- Mold accessories

JIS

Inclined wedge active block/Reset block

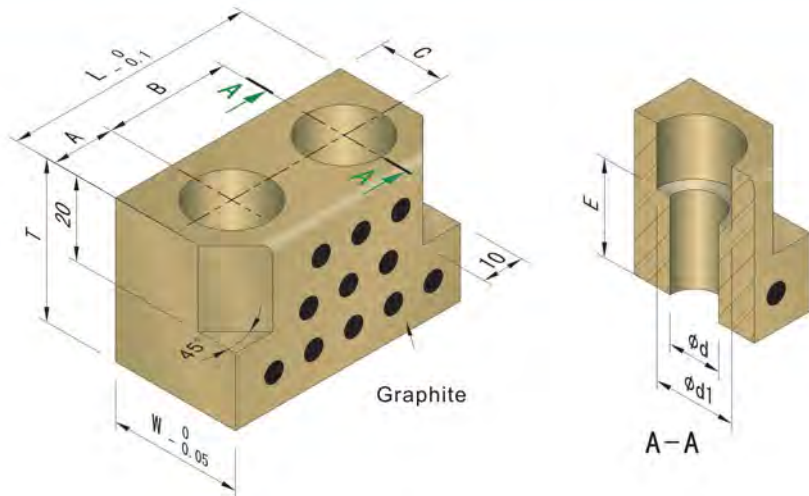
CCKF



Order CCKF-W-L Material: S45C Hardness: 40-45HRC

W	L	A	B	@ ¥/P
60	171	15	30	
80	171	20	40	

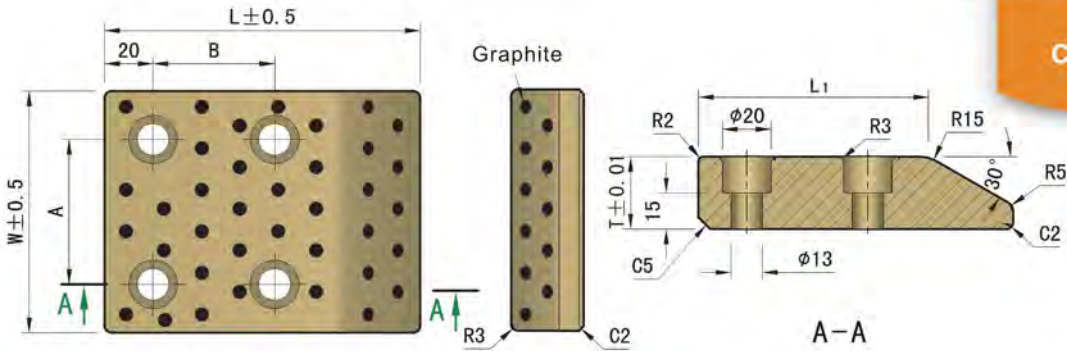
CCKB



Order CCKB-W-L Material: Brass+graphite

W	L	A	B	C	E	T	d	d1	@ ¥/P
25	60	15	30	11	18	30	11	17.5	
32	80	20	40	16	23	38	13	20	

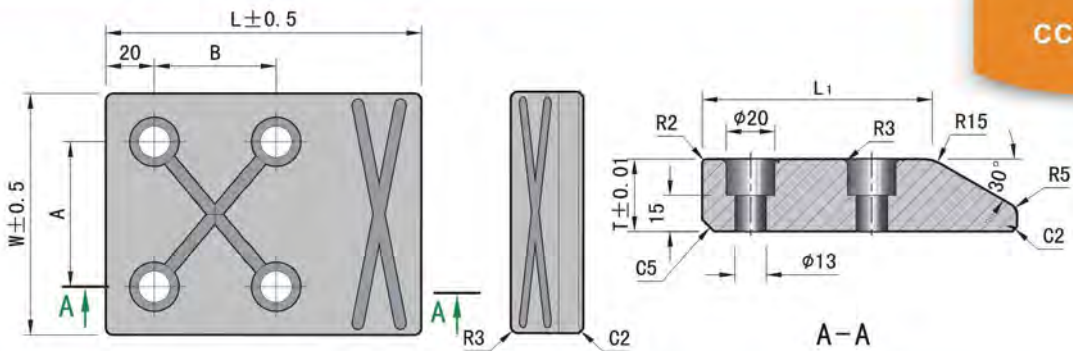
CCS30W



Order CCS30W-W-L Material: Brass+graphite

W	L	L1	T	a	b	@ ¥/P
75	130	95	30	40	50	
	150		45			
	170	90	60			
	200	120	60			
100	130	95	30	60	50	
	150		45			
	170	90	60			
	200	120	75			
125	130	95	30	85	50	
	150		45			
	170	90	60			
	200	120	75			
150	130	95	30	110	50	
	150		45			
	170	90	60			
	200	120	75			

CCS30F



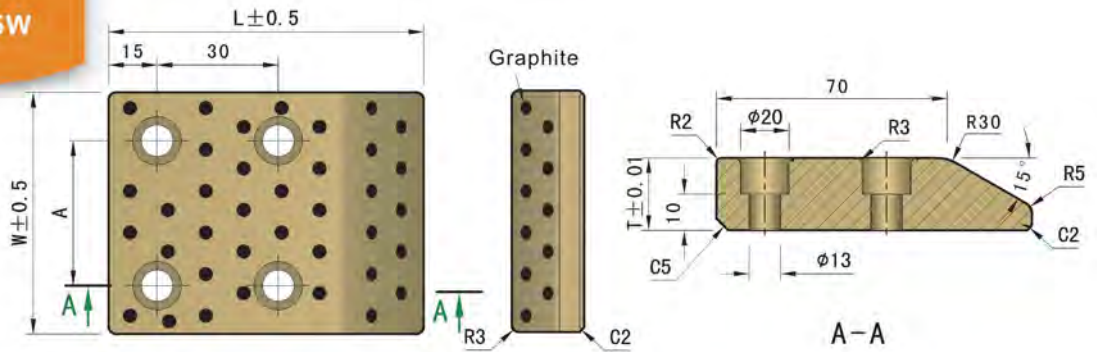
Order CCS30F-W-L Material: S45C Hardness: 40-45HRC

W	L	L1	T	a	b	@ ¥/P
75	130	95	30	40	50	
	150		45			
	170	90	60			
	200	120	75			
100	130	95	30	60	50	
	150		45			
	170	90	60			
	200	120	75			
125	130	95	30	85	50	
	150		45			
	170	90	60			
	200	120	75			
150	130	95	30	110	50	
	150		45			
	170	90	60			
	200	120	75			

JIS

Inclined wedge active block

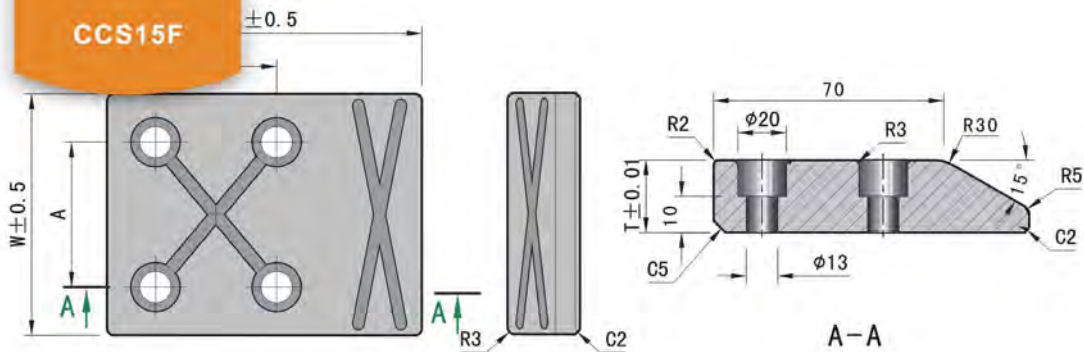
CCS15W



Order CCS15W-W-L Material: Brass+graphite

W	L	a	T	@ ¥/P
50	110	-	25	
	130		30	
	150		35	
75	110	40	25	
	130		30	
	150		35	
100	110	60	25	
	130		30	
	150		35	

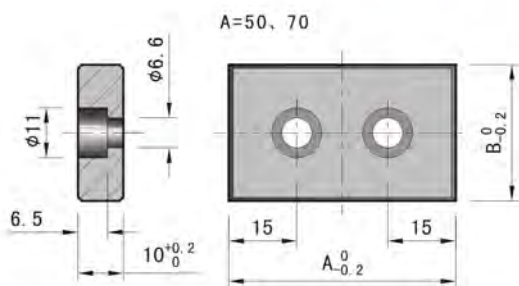
CCS15F



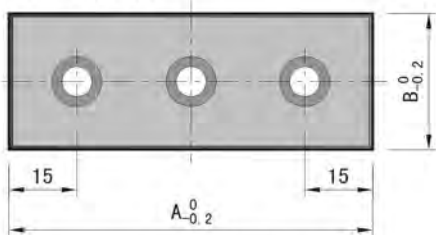
Order CCS15F-W-L Material: S45C Hardness: 40-45HRC

W	L	a	T	@ ¥/P
50	110	-	25	
	130		30	
	150		35	
75	110	40	25	
	130		30	
	150		35	
100	110	60	25	
	130		30	
	150		35	

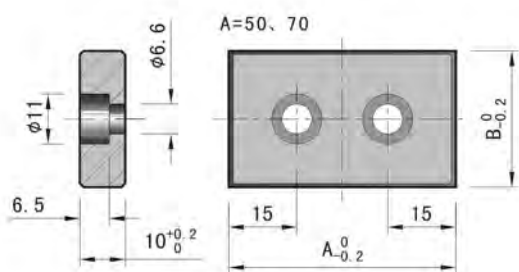
SSAS
SSASM



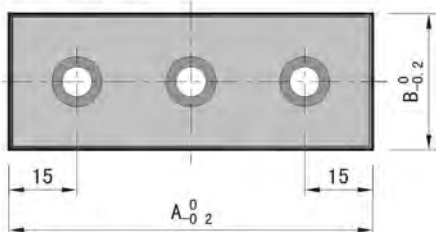
A=80, 100, 120



SSAS(without oil groove)



A=80, 100, 120

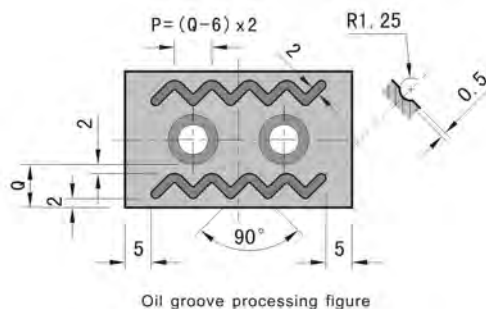


SSASM(with oil groove)



Order SSAS-A-B Material:Oil steel Hardness:52-56HRC

A	B	@ ¥ /P
50	30	
	40	
70	30	
	40	
	50	
80	30	
	40	
	50	
	60	
100	40	
	50	
	60	
120	40	
	50	
	60	



Oil groove processing figure

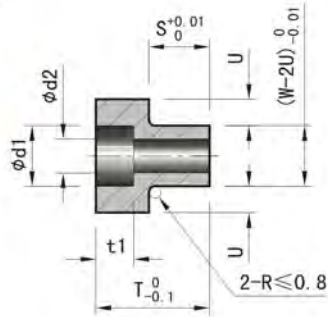
Order SSASM-A-B Material:Oil steel Hardness:52-56HRC

A	B	Q	P	@ ¥ /P
50	30	9.5	7	
	40	14.5	17	
70	30	9.5	7	
	40	14.5	17	
	50	19.5	27	
80	30	9.5	7	
	40	14.5	17	
	50	19.5	27	
	60	24.5	37	
100	40	14.5	17	
	50	19.5	27	
	60	24.5	37	
120	40	14.5	17	
	50	19.5	27	
	60	24.5	37	

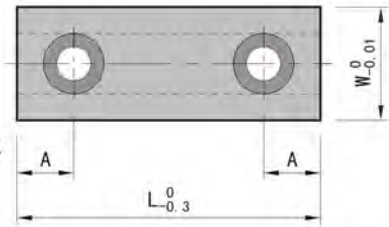
JIS

Guide strips

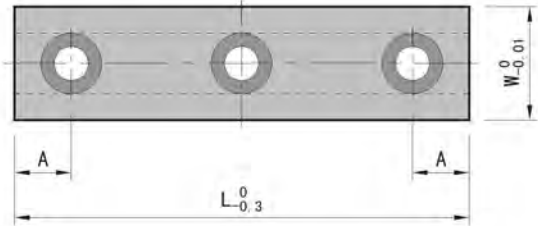
GGT5S
GGT8S



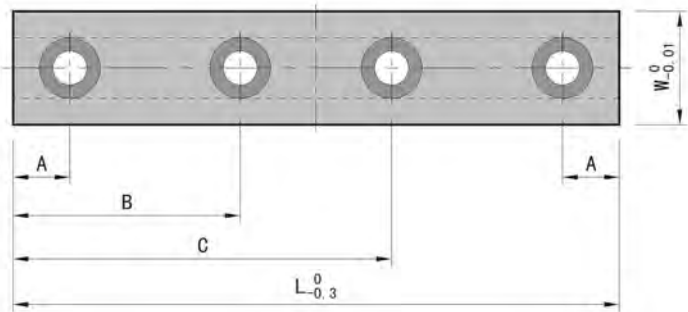
Typ-A



Typ-B



Typ-C

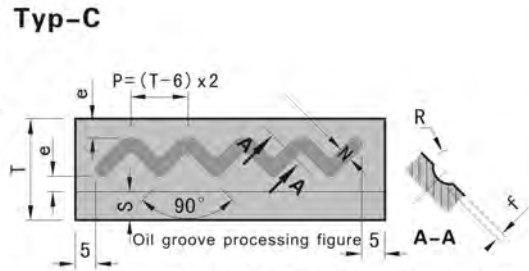
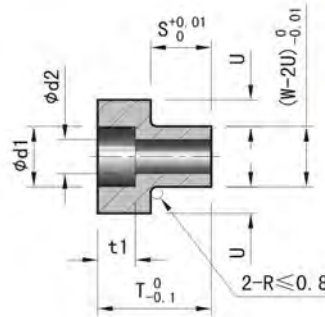
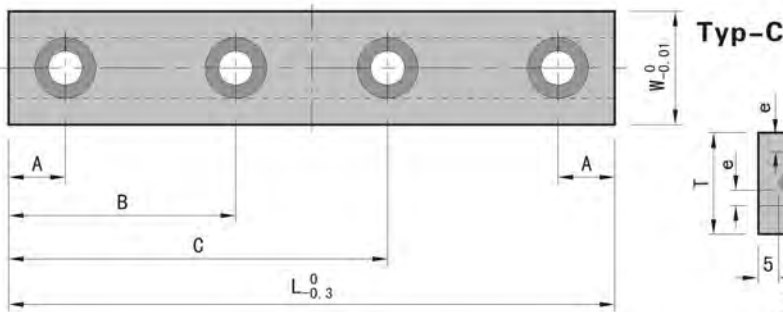
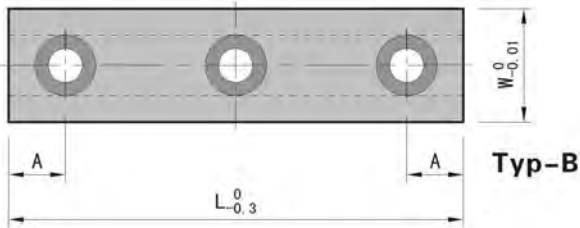
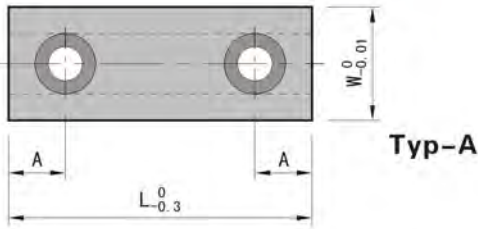


Order GGT5S-W-L Material: Oil steel Hardness: 52-56HRC

Code	S Heel height	U Heel width
GGT5S	8	3.5
GGT8S	11	4.5

W	T	d1	d2	t1	A	B	C	Typ	@ ¥ / P
									L
15	15	8	4.5	5	7.5	-	-	A	40
						30	50	B	50-70
						32.5	57.5	C	80-100
						35	65		
18	20	9.5	5.5	6	7.5	-	-	A	40
						30	50	B	50-70
						32.5	57.5	C	80-100
						35	65		
22	20	11	6.5	7	10	-	-	A	40-60
						40	90	B	70-120
						45	95		
						53	97		
32	25	17	11.5	11	10	-	-	A	50-90
						55	105	B	100-150
						60	120		
						70	130		

GGT5SM
GGT8SM



Please note that if $L \leq P \times 10$, There is the possibility that (10 pitch) of oil groove can not be cut.

Order GGT5SM-W-T-L Material: Oil steel Hardness: 52-56HRC

Oil groove pitch								
T-S	9	10	12	15	18	20	22	25
P	6	8	12	18	24	28	32	38

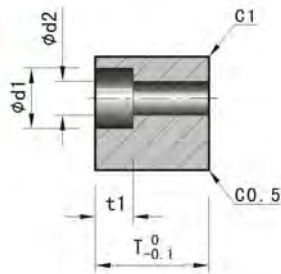
Code	S Heel height	U Heel width
GGT5SM	8	3.5
GGT8SM	11	4.5

W	T	d1	d2	t1	A	B	C	Typ	@ ¥ / P
									L
15	15	8	4.5	5	7.5	-	-	A	40
						-	-	B	50- 70
						30	50	C	80-100
						32.5	57.5	C	80-100
18	20	9.5	5.5	6	7.5	-	-	A	40
						-	-	B	50- 70
						30	50	C	80-100
						32.5	57.5	C	80-100
22	20	11	6.5	7	10	-	-	A	40- 60
						40	90	B	70-120
						45	95	C	130-150
						53	97	C	130-150
32	25	17	11.5	11	10	-	-	A	50- 90
						55	105	B	100-150
						60	120	C	160-200
						70	130	C	160-200

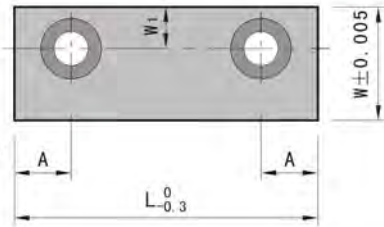
JIS

Guide strips

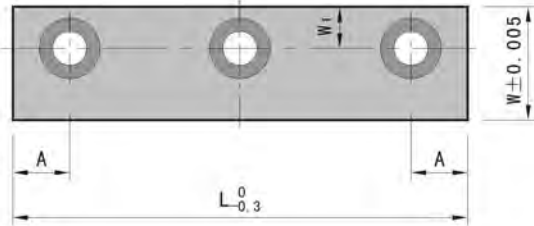
GGRS



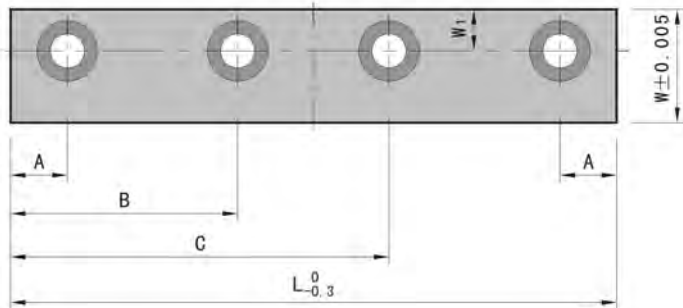
Typ-A



Typ-B



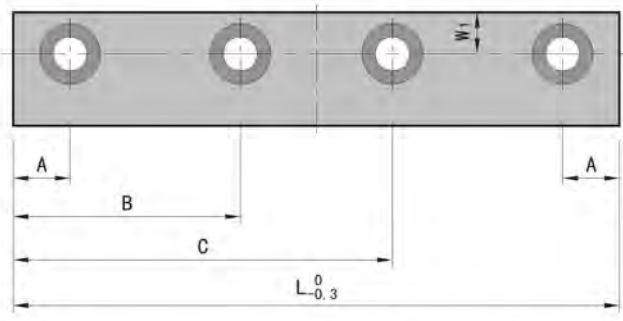
Typ-C



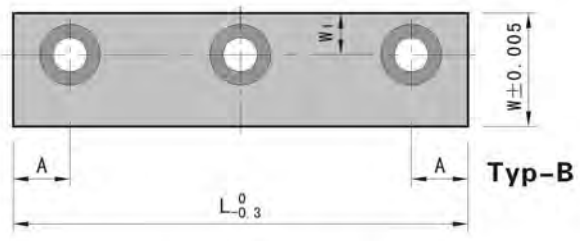
Order GGRS-W-T-L M Material: Oil steel H Hardness: 52-56HRC

W	T	d1	d2	t1	W1	A	B	C	Typ	@ ¥/P
										L
10	10	8	4.5	5	4.5	7.5	-	-	A	35-40
							-	50	B	50-70
	32.5						57.5	C	80-100	
	35						65			
12.5	10	9.5	5.5	6	6	7.5	-	-	A	35-40
							-	-	B	50-70
	30						50	C	80-100	
	32.5						57.5			
35	65									
15	15	11	6.5	7	9	10	40	90	A	40-60
							45	95	C	130-150
	53						97			
	-						-	A	40-90	
20	20	14	9	9	9	10	55	105	B	100-150
							60	120		
	70						130	C	160-200	
	-						-			A
25	25	14	9	9	10	10	55	105	B	100-150
							60	120		
	70						130	C	160-200	
	-						-			A

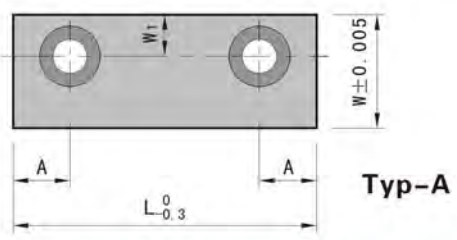
Note: When W=20, T=15, 20, then d1=11 d2=6.5 t1=7 When W=20, T=25, 30, Then d1=14 d2=9 t1=9



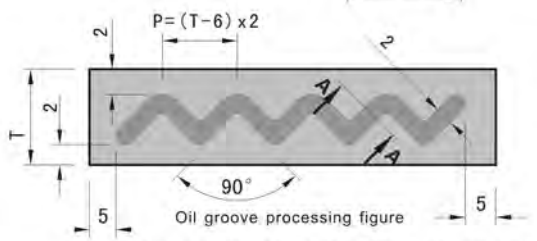
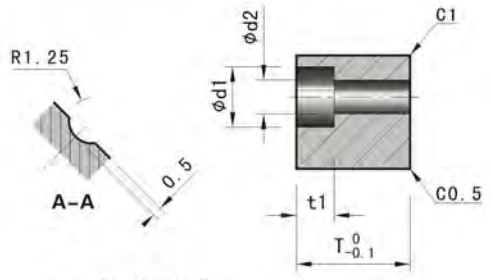
Typ-C



Typ-B



Typ-A



Oil groove processing figure
Please note that if $L \leq P + 10$, There is the possibility that (10 pitch) of oil groove can not be cut.

Order GGRSM-W-T-L Material: Oil steel Hardness: 52-56HRC

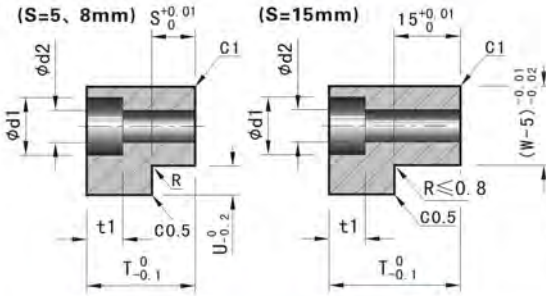
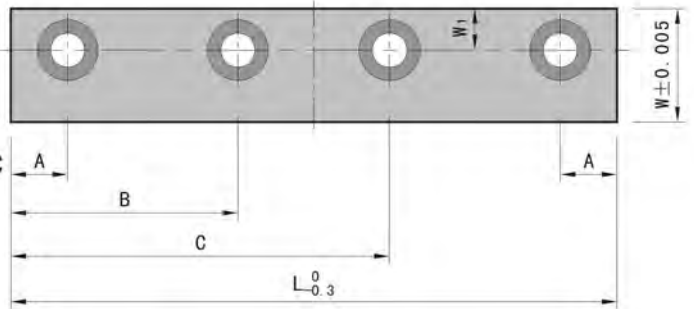
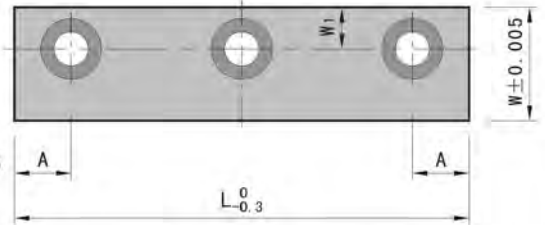
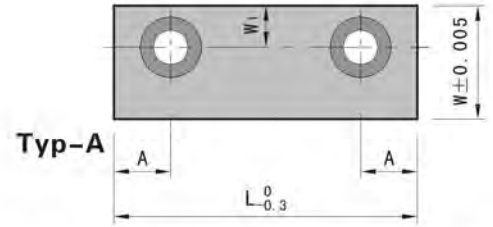
W	T	d1	d2	t1	W1	A	B	C	Typ	@ ¥/P
										L
10	10	8	4.5	5	4.5	7.5	30	50	A	35- 40
									B	50- 70
									C	80-100
12.5	10	9.5	5.5	6	6	7.5	30	50	A	35- 40
									B	50- 70
									C	80-100
15	15	11	6.5	7	9	10	40	90	A	40- 60
									B	70-120
									C	130-150
20	20	14	9	9	11	12	55	105	A	40- 90
									B	100-150
									C	160-200
25	25	17	11.5	11	11	12	60	120	A	40- 90
									B	100-150
									C	160-200
30	30	17	11.5	11	11	12	70	130	A	40- 90
									B	100-150
									C	160-200

Note: When W=20, T=15, 20, then d1=11 d2=6.5 t1=7 When W=20, T=25, 30, Then d1=14 d2=9 t1=9

JIS

Guide strips

GGR5SC
GGR5S
GGR8S
GGR15S



Code	S Heel height	U Heel width
GGR5SC	5	2.5
GGR5S	5	3.5
GGR8S	8	4.5
GGR15S	15	-

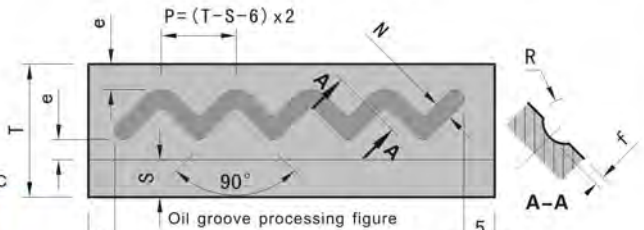
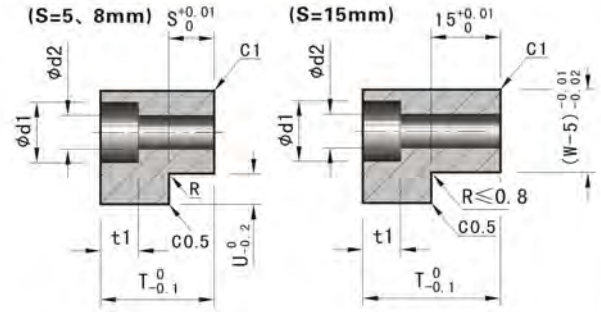
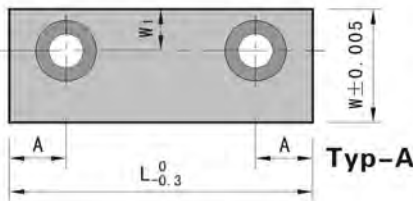
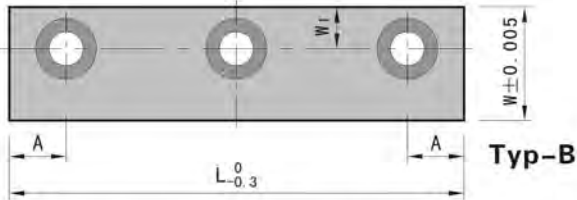
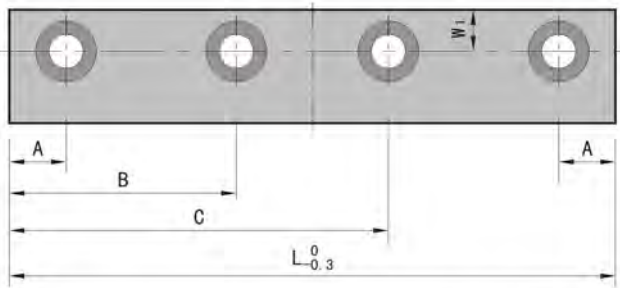
Order GGR5SC-W-T-L Material: Oil steel Hardness: 52-56HRC

Code	W	T	d1	d2	t1	W1	A	B	C	Typ	@ ¥/P	
											L	
GGR5SC	10	12.5(-1) 15	8	4.5	5	4.5	7.5	-	-	A	35-40	
								30	50	B	50-70	
								32.5	57.5	C	80-100	
	12.5	12.5(-2) 15 20	9.5	5.5	6	6	6	7.5	-	-	A	35-40
									30	50	B	50-70
									32.5	57.5	C	80-100
GGR5S GGR8S	15	12.5(-2) 15 20 25	11	6.5	7	9	10	-	-	A	40-60	
								40	90	B	70-120	
								45	95	C	130-150	
	20	20 25 30	14	9	9	9	10	10	-	-	A	40-90
									60	120	B	100-150
									70	130	C	160-200
GGR15S	20	29 34	17	11.5	11	12	10	-	-	A	40-90	
								60	120	B	110-150	
								70	130	C	160-200	
	25	29 34	17	11.5	11	12	10	10	-	-	A	60-90
									60	120	B	100-160
									70	130	C	170-200
35	34 39	17	11.5	11	12	12	10	-	-	A	60-100	
								60	120	B	110-160	
								70	130	C	170-200	

*1 only applicable to GGR5SC , *2 only applicable to GGR5S and GGR5SM

Note: When w=20、T=15, 20, Then d1=11 d2=6.5 t1=7
When w=20、T=25, 20, Then d1=14 d2=9 t1=9

GGR5SCM
GGR5SM
GGR8SM
GGR15SM



Please note that if $L \leq P + 10$, There is the possibility that (10 pitch) of oil groove can not be cut.

Order GGR5SCM-W-T-L Material: Oil steel Hardness: 52-56HRC

Oil groove pitch

T-S	7	7.5	10	12	14	15	17	19	20	22	24	25
P	2	3	8	12	18	22	28	32	38			

Code	W	T	d1	d2	t1	W1	A	B	C	Typ	@ ¥/P L	
GGR5SCM Heel height 5mm	10	12.5(-1) 15				4.5		-	-	A	35-40	
								30	50	B	50-70	
								32.5	57.5	C	80-100	
	12.5	12.5 15 15 20	8	4.5	5	5	7.5	-	-	A	35-40	
								30	50	B	50-70	
								32.5	57.5	C	80-100	
GGR5SM Heel height 5mm	15	12.5(-2) 15 20 25	9.5	5.5	6	6		-	-	A	40-60	
								40	90	B	70-120	
								45	95	C	130-150	
	20	15(-2) 20 25 30	11	6.5	7	7	9		-	-	A	40-90
									55	105	B	100-150
									60	120	C	160-200
25	20 25 30	14	9	9	9	10	10	70	130	C	160-200	
								-	-	A	40-90	
								55	105	B	110-150	
GGR8SM Heel height 8mm	20	15(-2) 20 25 30	11	6.5	7	7	9		-	-	A	40-90
									55	105	B	100-150
									60	120	C	160-200
	25	20 25 30	14	9	9	9	10	10	70	130	C	160-200
									-	-	A	40-90
									55	105	B	110-150
GGR15SM Heel height 15mm	25	29 34	14	9	9	10	10	-	-	A	60-90	
								60	120	B	100-160	
								70	130	C	170-200	
	35	34 39	17	11.5	11	11	12	10	-	-	A	60-100
									60	120	B	110-160
									70	130	C	170-200

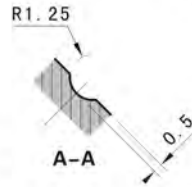
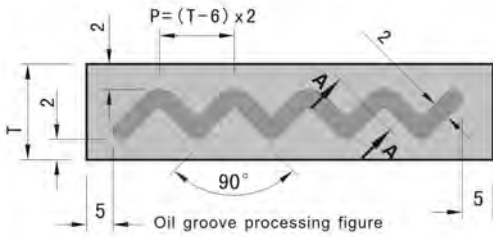
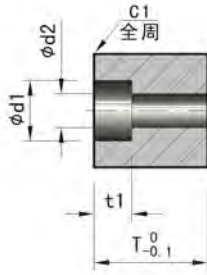
*1 only applicable to GGR5SC , *2 only applicable to GGR5S and GGR5SM

Note: When $w=20$, $T=15, 20$, Then $d1=11$ $d2=6.5$ $t1=7$
When $w=20$, $T=25, 20$, Then $d1=14$ $d2=9$ $t1=9$

JIS

Guide strips

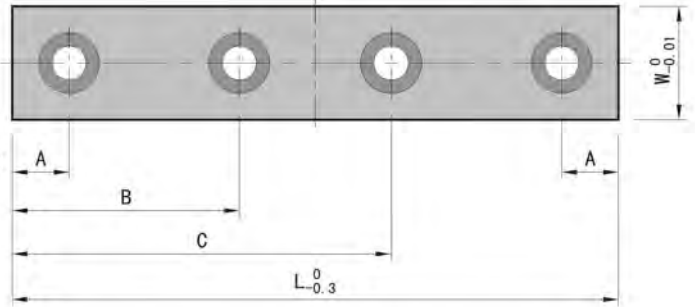
CCGSM
CCGS



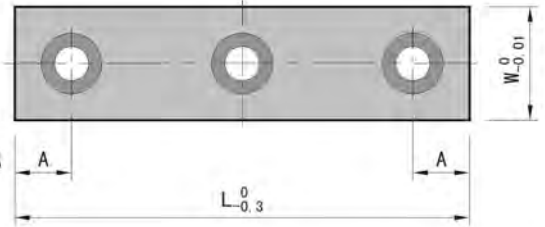
Oil groove processing figure Please note that if $L \leq P + 10$, There is the possibility that (10 pitch) of oil groove can not be cut.

2. Double-sided processing oil groove

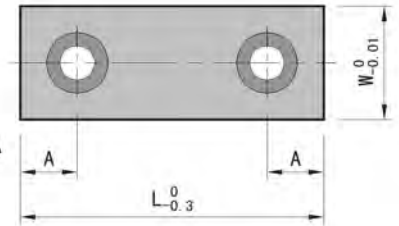
Typ-C



Typ-B



Typ-A



Order CCGSM-W-T-L Material: Oil steel Hardness: 52-56HRC

Oil groove pitch			
T	10	15	20
P	8	18	28

Code	
CCGSM	with oil groove
CCGS	without oil groove

W	T	d1	d2	t1	A	B	C	Typ	L
12	10	8	4.5	5	7.5	-	-	A	40
						30	50	B	50 60 70
						32.5	57.5	C	80
						35	65	C	90
15	15	9.5	5.5	6	10	-	-	A	40 50 60
						-	-	B	70 80 90 100
20	20	11	6.5	7	10	-	-	A	50 60 70 80 90
						-	-	B	100 110
									120 130 140 150

Order CCGS-W-T-L Material: Oil steel Hardness: 52-56HRC

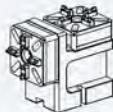
W	T	d1	d2	t1	A	B	C	Typ	L
12	10	8	4.5	5	7.5	-	-	A	40
						30	50	B	50 60 70
						32.5	57.5	C	80
						35	65	C	90
15	15	9.5	5.5	6	10	-	-	A	40 50 60
						-	-	B	70 80 90 100
20	20	11	6.5	7	10	-	-	A	50 60 70 80 90
						-	-	B	100 110
									120 130 140 150

Chuck Series





Chuck	Chuck	Chuck	Chuck	Chuck
AS-QK01-C1 P616	AS-QK01-C2 P616	AS-QK01-C3 P617	AS-QK01-C4 P617	AS-QK01-C6 P618



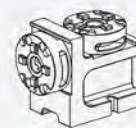
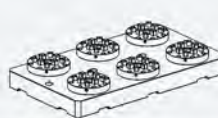
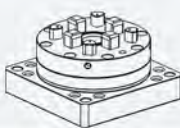
Chuck	Chuck	Chuck	Chuck	Chuck
AS-QK01-E110 P619	AS-QK02-T2 P619	AS-SK04-H4-C P619	AS-SK04-14 P620	AS-SK04-15 P620



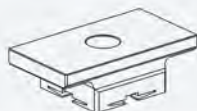
Chuck	Chuck	Chuck	Chuck	Chuck
AS-SK04-J150 P621	AS-Q01 P621	AS-Q04 P622	AS-F01 P622	AS-F02 P622



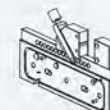
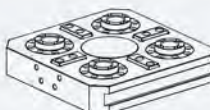
Chuck	Chuck	Chuck	Chuck	Chuck
AS-F10 P623	AS-F11 P623	AS-JP50 P624	AS-JP90G P624	AS-JD21 P624



Chuck	Chuck	Chuck	Chuck	Chuck
AS-JU21 P625	AS-J-SK25-15 P625	AS3-QK100 P626	AS3-QK100-C6 P626	AS3-SK80-T2 P627



Chuck	Chuck	Chuck	Chuck	Chuck
AS3-Q01 P627	AS3-Q04 P628	AS3-F-LG1 P628	AS3-F-LG2 P628	AS3-JP54 P629



Chuck	Chuck	Chuck	Chuck	Chuck
AS3-JD21 P628	AS-JU31 P630	AS-U-MK P630	AS-U-TL P631	AS-W10 P631

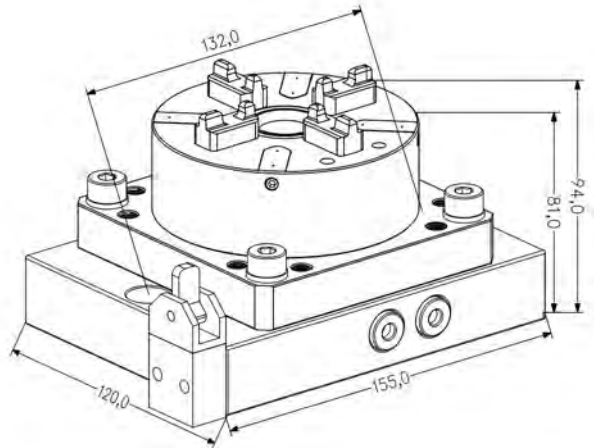
Chuck

AS-QK01-C1

Single benchmarks pneumatic chuck



Description: A single benchmarks ;
 Can be install directly;
 Base with fine-tuning
 the installation;
 8000N locking force;
 Automatic jet cleaning;
 For CNC machining;



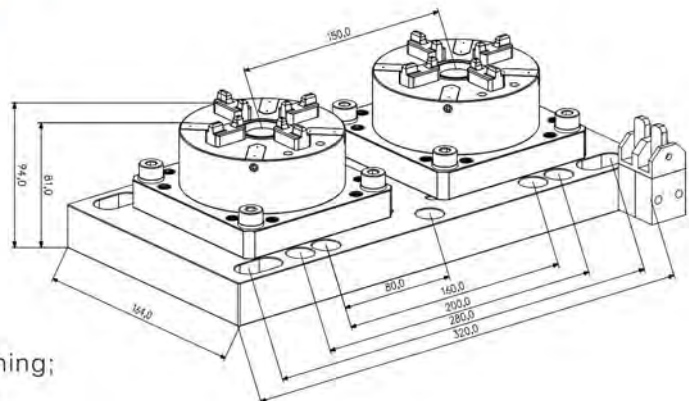
Size : 150X100X93
Material: Powder made of steel quenching;
Apply: Standard pressure 6Pa ± 0.5

AS-QK01-C2

Two benchmarks pneumatic chuck



Description: Two benchmarks center;
 Base with fine-tuning
 the installation 130mm;
 Center spacing
 8000N locking force;
 Automatic jet cleaning;
 For CNC machining;



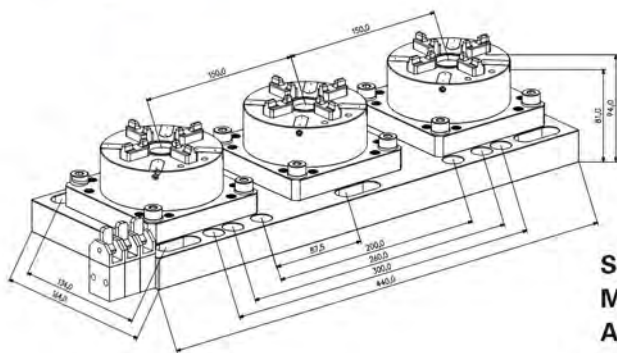
Size : 260X160X93
Material: Powder made of steel quenching;
Apply: Standard pressure 6Pa ± 0.5

Three benchmarks pneumatic chuck 100

AS-QK01-C3



Description: Tetrad benchmarks center;
Base with fine-tuning
the installation 130mm;
Center spacing
8000N locking force;
Automatic jet cleaning;
For CNC machining;



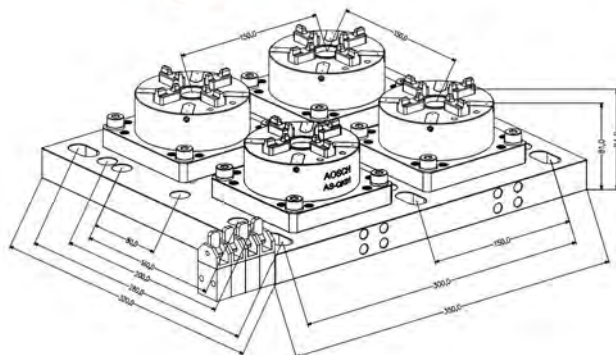
Size : 380X160X93
Material: Powder made of steel quenching;
Apply: Standard pressure 6Pa ± 0.5

Tetrad benchmarks pneumatic chuck

AS-QK01-C4



Description: Tetrad benchmarks center;
Base with fine-tuning
The installation;
Center spacing 130mm;
8000N locking force;
Automatic jet cleaning;
For CNC machining;



Size : 290X250X93
Material: Powder made of steel quenching;
Apply: Standard pressure 6Pa ± 0.5

Ejector pins
Ejector sleevesSlide rail/liners
seriesLunch locks
seriesPolishing guides
seriesDate stamps
Air valves series

Ejector series

Cooling elements
seriesLocating parts
series

Springs series

Guide pins
Guide bushGuide strips
Vibr. plate series

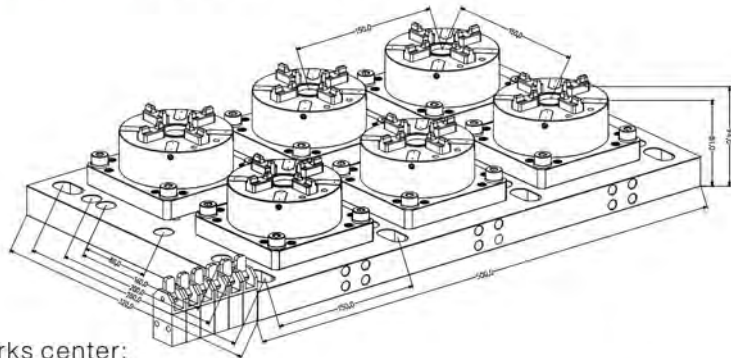
Chuck series

Mold
accessories

Chuck

AS-QK01-C6

Six benchmarks pneumatic chuck



Description: Six benchmarks center;
Base with fine-tuning
the installation 130mm;
Center spacing
8000N locking force;
Automatic jet cleaning;
For CNC machining;



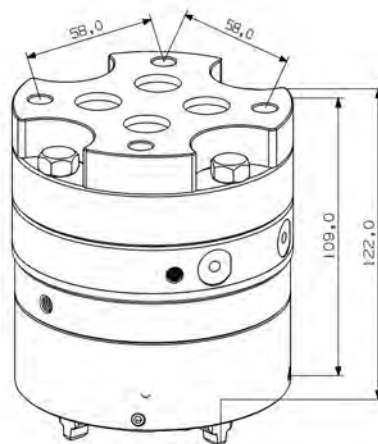
Size : 380X290X93
Material: Powder made of steel quenching;
Apply: Standard pressure 6Pa ± 0.5

AS-QK01-E110

EDM pneumatic chuck

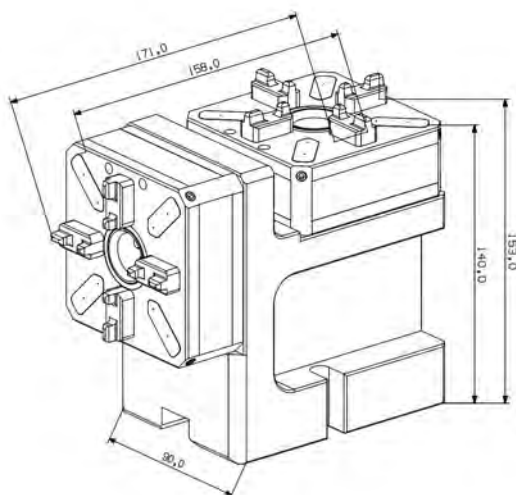
Description: Base with insulating
fine-tuning;
EDM using;

Size : $\Phi 102 \times 110$
Material: Powder made of steel quenching;
Apply: Standard pressure 6Pa ± 0.5



AS-QK02-T2

P tooth 100 pneumatic chuck



Description: Forward and lateral to the
Installation of a chuck;
Fixed benchmarks ;
For processing of polyhedron;

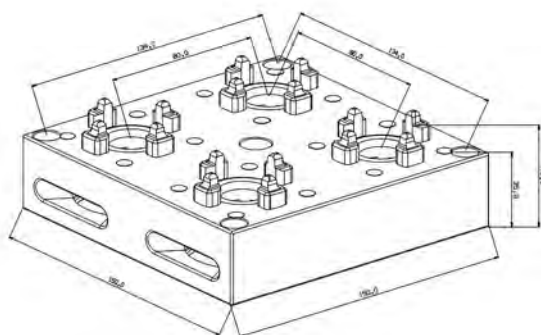
Size : 190X90X150

Material: Powder made of steel quenching;

Apply: Standard pressure 6Pa ± 0.5

AS-SK04-H4-C

With backplane 4 in 1 chuck



Description: Single fastener ;
Parallel arrange tetrad benchmarks;
Center spacing 80mm;
Installation the backplane;

Size : 200X150X85

Material: Powder made of steel quenching;

Mixer pins

Circle reference

Launch lock

Pulping guide

Diam. Vanturi

Escale series

Cochon series

Locating pins

Springs

Guide pins

Chuck series

Mold accessories

Chuck series

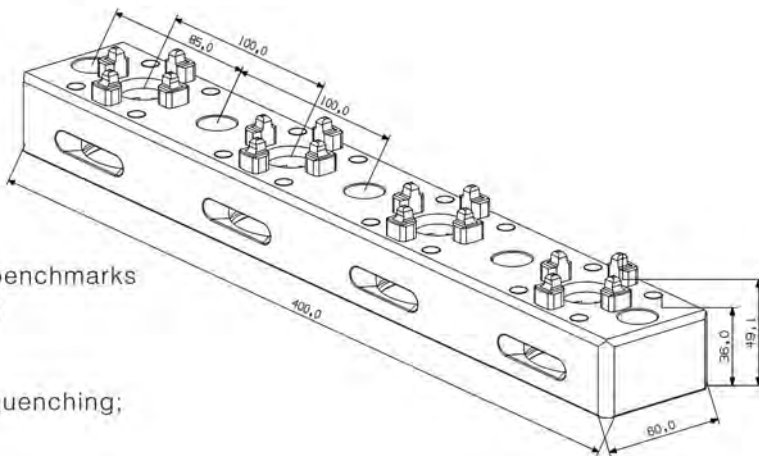
Mold accessories

Mold accessories

Chuck

AS-SK04-14

Bar 4 in 1 Small chuck



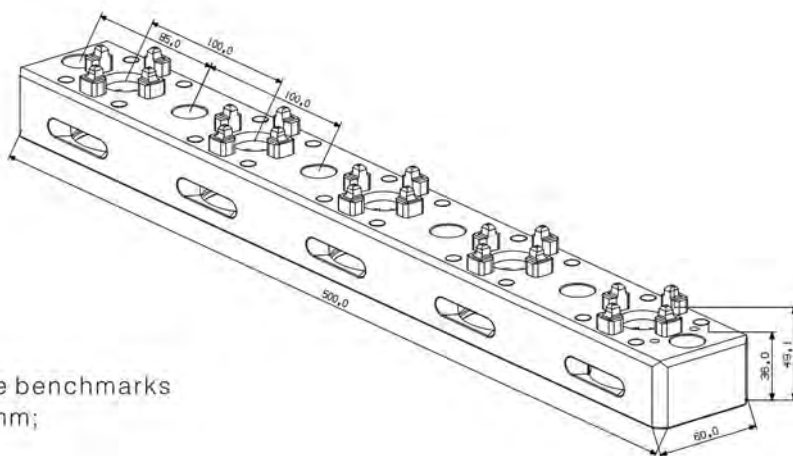
Description: Single fastener ;
Linear arrangement of four benchmarks
center spacing 100mm;

Size : 400X60X49

Material: Powder made of steel quenching;

AS-SK04-15

Bar 5 in 1 Small chuck



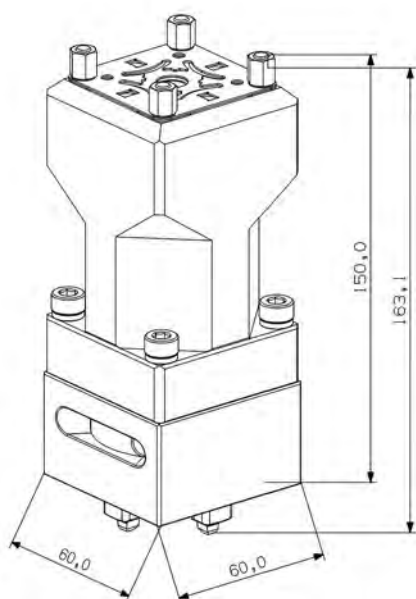
Description: Single fastener ;
linear arrangement of five benchmarks
center spacing 100mm;

Size : 500X60X49

Material: Powder made of steel quenching;

AS-SK04-J150

Elongated quick chuck



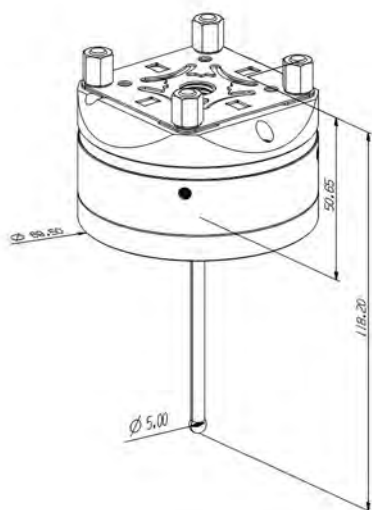
Description: Single fastener ;
Quick locking;
Vertical extended 100mm;
Keep center invariant;

Size : 60X60X113

Material: Powder made of steel quenching;

AS-Q01

In min utensil



Description: For EDM crawl center;
Φ5 ball;

Size : Φ70X125

Material: Powder made of steel quenching;

Electric pins series
Side rollers series
Latch locks series
Pointing gates series
Data stamps Air valves series
Episcor series
Cooling elements series
Locating parts series
Springs series
Guide pins
Guide bush
Guide strips
Wear plate series
Chuck series
Mold accessories

Chuck

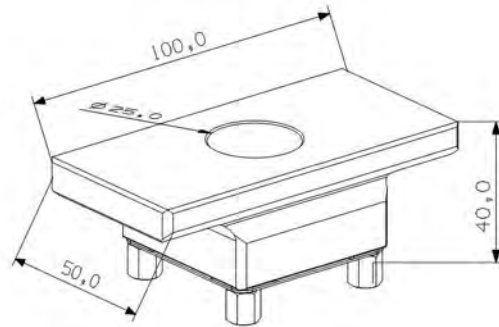
AS-Q04

Calibration block long

Description: When installation more benchmarks;
Usually also used as gauging chuck;

Size : 100X50X40

Material: Powder made of steel quenching;



AS-F01

Manipulator lever

Material: SUS 420

Size : $\Phi 20 \times 45$

Apply: For fixture between chuck and join;
Apply manipulator;



AS-F02

Manual drawbars

Material: SUS 420

Size : $\Phi 20 \times 45$

Apply: For fixture between chuck and join;
Does not apply to manipulator;



Chuck

AS-F10



Support arm

Material: Stainless steel;
Size : 118X118X120
Apply: Traditional methods use of;
Used to modify the model
without clamp electrode;

AS-F11

Touch stick



Material: Stainless steel;
Size : Φ 118X30
Apply: Apply to EDM machine;
Installed directly on the support arm;

Ejector pins
Ejector sleeves

Slide rail/liners
series

Latch locks
series

Pouring gates
series

Date stamps
Air valves series

Ejector series

Cooling elements
series

Locating parts
series

Springs series

Guide pins
Guide bush

Guide strips
Wear plate series

Chuck series

Mold
accessories

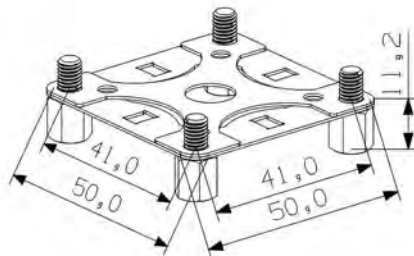
Chuck

AS-JP50

Centering plate 50

Material: Stainless steel;

Size : 50X50X11.2

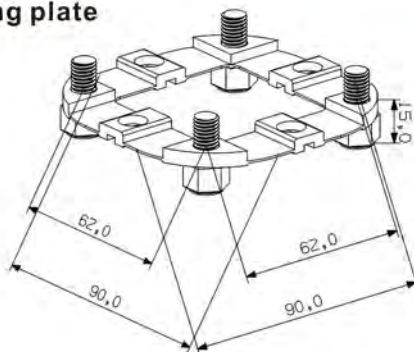


AS-JP90G

G type centering plate

Material: Stainless steel;

Size : 90X90X11.2

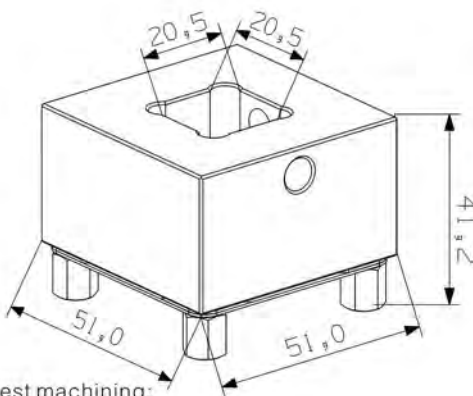


AS-JD21

Material: copper □ brass
steel □ S136H, HRC35 ± 2
aluminium □ 6061 aluminium
anode treatment

Size : 51X51X40; 21X21X12

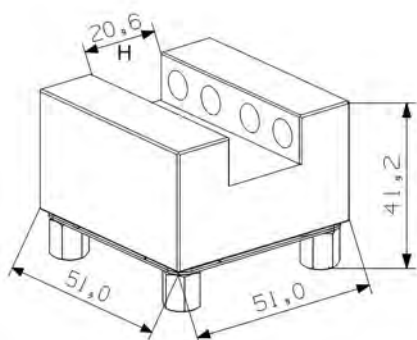
Apply: Electrode machining;
Too available stay smallest smallest machining;



Chuck

AS-JU21

Electro pins series
Electro sleeves series
Side reducers series
Locks tools series
Polishing gates series
Date stamps Air valves series
Episcor series
Cooling elements series
Locating parts series
Spacers series
Guide pins Guide bush
Guide stops Viper plate series
Chuck series
Mold accessories

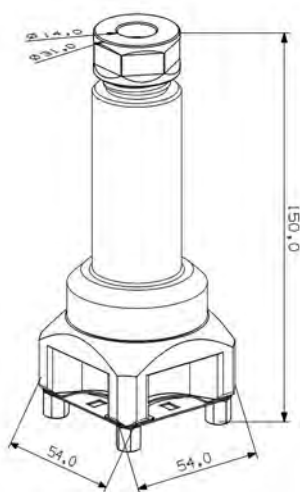


Material: copper□brass
 steel□S136H,HRC35±2
 aluminium□6tie aluminium
 anode treatment

Size : 51X51X40; 51X21X12

Apply: Electrode machining;
 Too available stay smallest smallest machining;

AS-J-SK25-15



SKS20 clamping cylinders-longer

Material: Powder made of steel quenching;

Size : 54X54X100

Apply: For a variety of shapes nozzle;
 Circular electrode process;
 Distribution cable 4.6.8.10.12tsui;

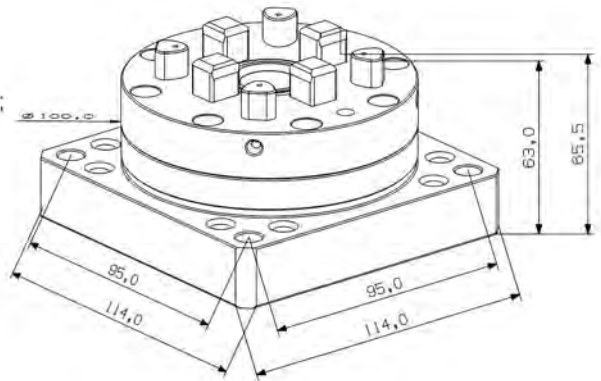
Chuck

AS3-QK100

Pneumatic chuck 100

Description: Base with fine-tuning the installation;
 Fixture screws M8;
 8000N locking;
 Automatic jet function;
 For CNC machining;

Size : 114X114X66
Material: Powder made of steel quenching;
Apply: Standard pressure 6Pa ± 0.5

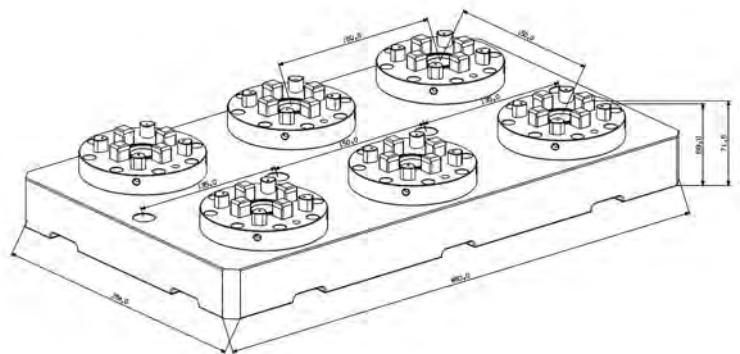


AS3-QK100-C6

Six benchmarks pneumatic chuck

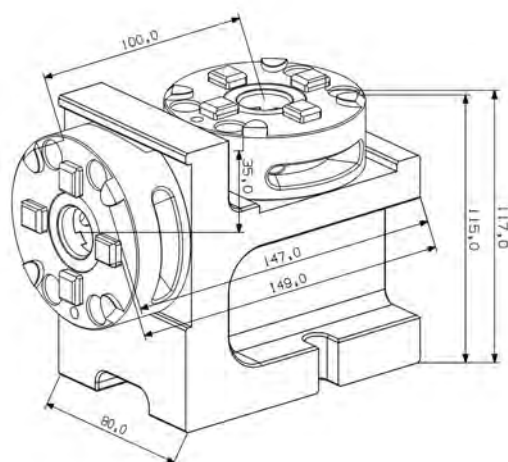
Description: Six benchmarks center;
 Base with fine-tuning the installation;
 Center spacing 130mm;
 8000N locking;
 Automatic jet cleaning;
 For CNC machining;

Size : 460X264X72
Material: Powder made of steel quenching;
Apply: Standard pressure 6Pa ± 0.5



Quick Chuck Stereo

AS3-SK80-T2



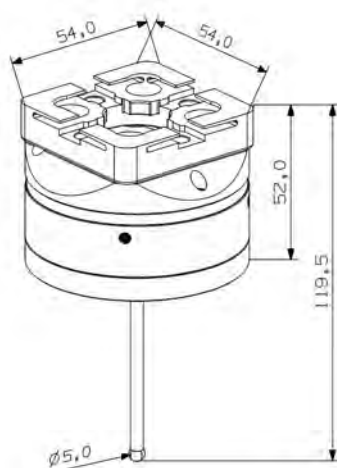
Description: two lateral vertical installation; generally used for processing of three-dimensional electrode;

Size : 149X80X117

Material: Powder made of steel quenching;

In Min utensil

AS3-Q01



Description: For EDM crawl center; $\phi 5$ ball;

Size : 54X54X120

Material: Powder made of steel quenching;

Escar series

Cicle rollers series

Launch tools series

Polishing guide series

Diam. Múltiplos de Vitec series

Escar series

Coating series

Locating pins series

Springs series

Guide pins (Guide bush)

Chuck series (Vitec plate series)

Chuck series

Mold accessories

Chuck

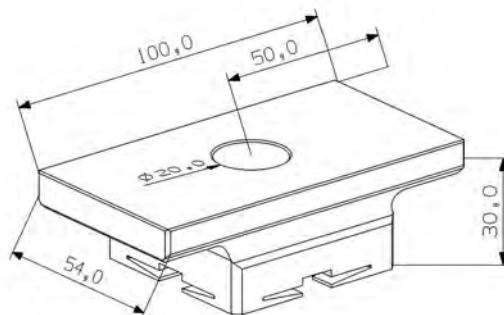
AS3-Q04

Calibration block long

Description: When installation more benchmarks;
Usually also used as gauging chuck;

Size : 100X54X30

Material: Powder made of steel quenching;



AS3-F-LG1

Manipulator drawbars

Material: SUS 420

Size : $\Phi 20 \times 45$

Apply: For fixture between chuck and join;
apply manipulator;



AS3-F-LG2

Manual drawbars

Material: SUS 420

Size : $\Phi 20 \times 45$

Apply: For fixture between chuck and join;
Does not apply to manipulator;

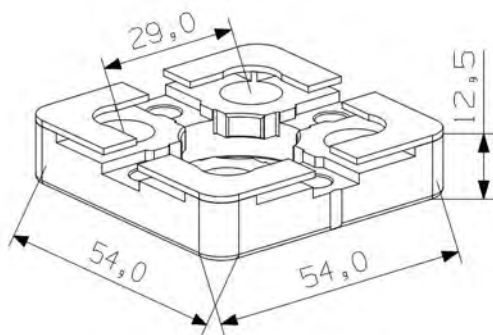


Chuck

AS3-JP54

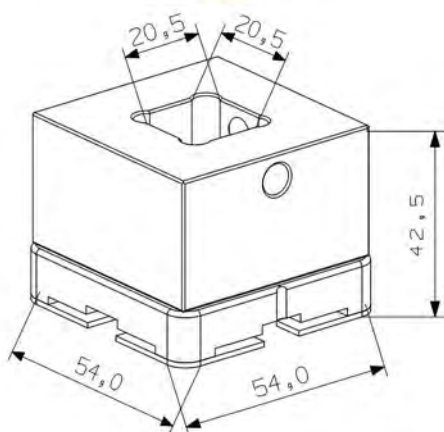


Position films 54



Material: Stainless steel;
Size : 54X54X12.5

AS3-JD21



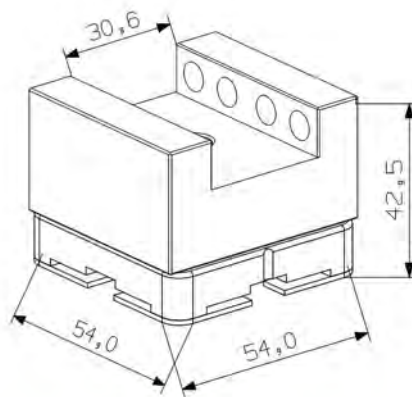
Material: copper□brass
steel□S136H,HRC35 ± 2
aluminium□6tie aluminium
anode treatment

Size : 54X54X43; 21X21X12
Apply: Electrode machining;
Too available stay smallest
Smallest machining;

Extractor pins series
Extractor sleeves series
Side railiners series
Latch locks series
Pouring gates series
Date stamps series
Ad valves series
Extractor series
Cooling elements series
Locating parts series
Spring series
Guide pins series
Guide bush series
Guide strips series
View plate series
Chuck series
Mold accessories

Chuck

AS-JU31



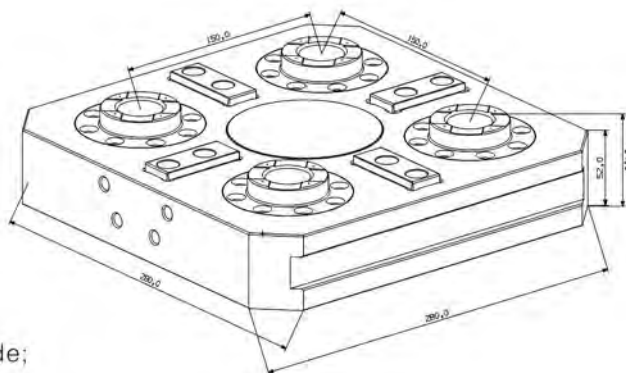
Material: copper □ brass
 steel □ S136H, HRC35 ± 2
 aluminium □ 6tie aluminium
 anode treatment

Size : 54X54X43; 54X31X12

Apply: Electrode machining;
 Too available stay smallest
 Smallest machining;

AS-U-MK

Four in one combination of base



Material: Powder made of steel quenching;

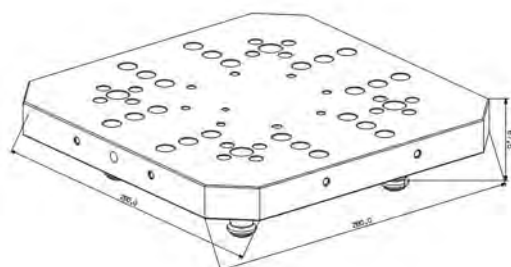
Size : 320X300X65

Connections: Through the base and on the side;

Apply: Chuck high machining forces
 during chip removal;
 On milling, grinding and drilling
 Centers and in production lines.;

AS-U-TL

Pallet aluminium



Material: 6 series aluminum anodized aluminum brushed chrome;

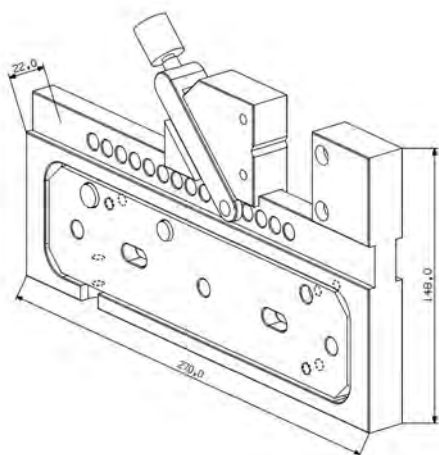
Size : 320X320X40

Apply: Basis for gauges and workpieces;
Aluminum with 50mm pattern boreholes,
Centering segments and chucking spigots fitted;

Please note: The AS-U-LT version is not suited for use in EDM machines;

Three to Vise fine -tuning

AS-W10



Description: Used alone;
For fast workpieces;

Size : 60X60X150

Material: Powder made of steel quenching;

Ejector pins

Circle rollers

Launch tools

Polishing disks

Dress, turning

Ejector series

Chuck to estimate

Locating pins

Springs series

Guide pins

Guide strips

Chuck series

Mold

Mold accessories Series





<i>AISI</i>		<i>Would</i>		<i>JIS</i>		<i>Would</i>		<i>Would</i>	
Limit switch		Screw driver		Tool safety devices		Tool safety devices		Tool safety devices	
TSW2220	P634	MSD	P635	ZZ73	P635	ZZ73A	P636	ZZ73B	P637



<i>JIS</i>		<i>JIS</i>		<i>AISI</i>		<i>AISI</i>		<i>Would</i>	
Tool safety devices		Tool safety devices		Mold counter		Mold counter		Heat-resistant mould counter	
OOPS	P638	DDPS	P638	CPL	P639	CPM	P639	CPH	P540



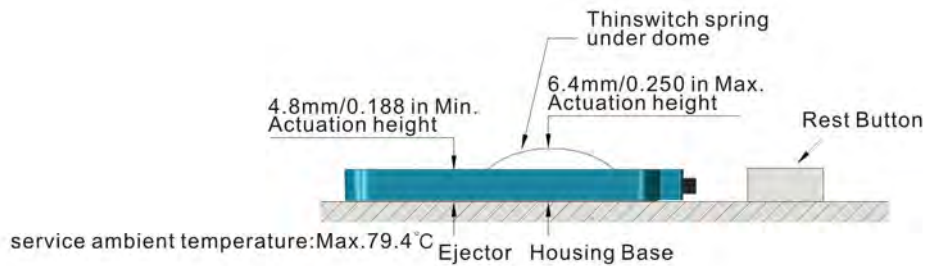
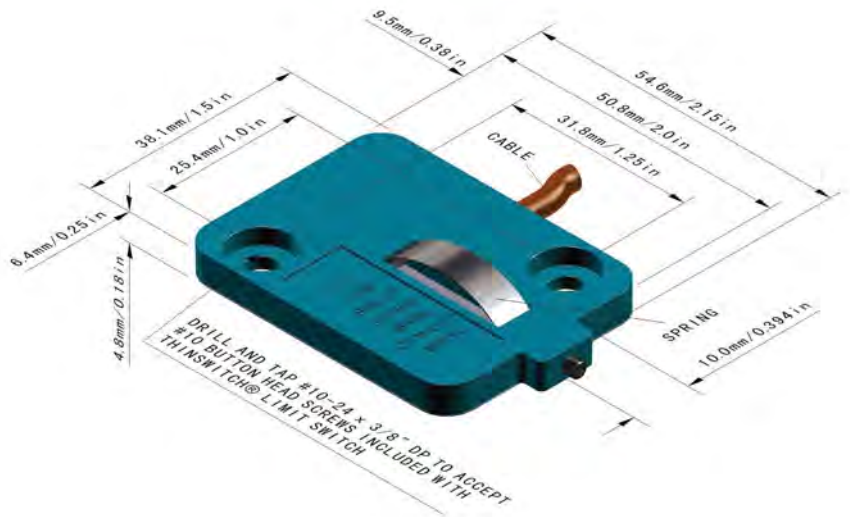
<i>AISI</i>	
Round mold counter	
CVR	P641



AISI

Limit switch

TSW2220



Thinswitch limit switch includes :

1. Thinswitch limit switch : 1Pcs ; 4-40Allen wrench : 1Pcs (for height adjustment) ;
Screws : 4Pcs (#10-24×1/2" button head) ; Wire clamps : 2Pcs (0.5"×0.82"×0.5" with 0.213" mounting hole) ;
2. Instruction sheet cable : 1Pcs.

Order TSW2220

Rated current VS. steel temperature								
TSW2220				HT291				
Amps	°F	°C	@ ¥ / P	Amps	°F	°C	@ ¥ / P	
5	85	29.4		5	100	37.7		
4	120	49		4.5	155	68.3		
3	155	68.3		4	210	98.8		
2	175	79.4		3.5	250	121.1		



Function chart:

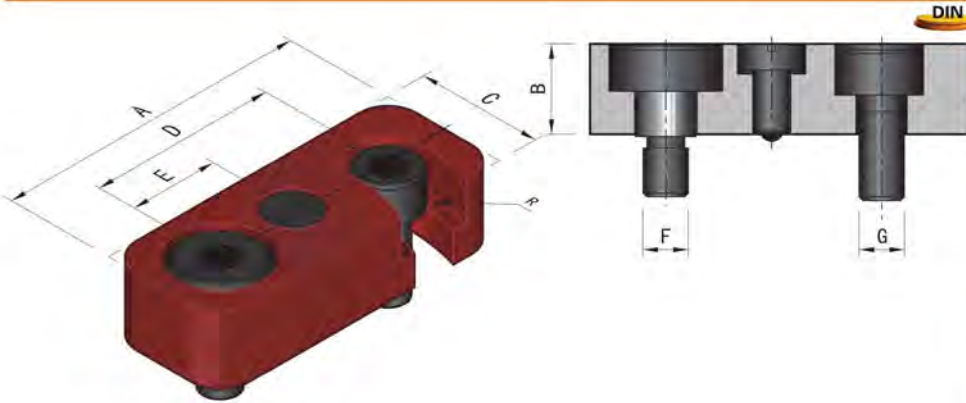


MSD

1. MSD is combination with screwdriver, which is for 1.4, 1.8, 2.4, 3, can be special use for different date stamps.
2. As right picture, press on the head of screwdriver with forefinger, Clamp screwdriver rod with other fingers to rotate and adjust the arrow.

MSD

Code	D	Applicable date stamp specification	Q'ty(Pcs)	@ ¥ /P
MSD	1.4	Ø3	1	
	1.8	Ø4-Ø5	1	
	2.4	Ø6	1	
	3.0	Ø8-Ø16	1	



DIN

ZZ73



1. This ZZ73 is used for mold keeping or moving.
2. Its application is flexible and easy by the Shoulder screws and Spring plunger.
3. If forget to open the ZZ73 tool safety device when mold moving, the front hook or the screw can break first, to protect the Mold base and the bolts.

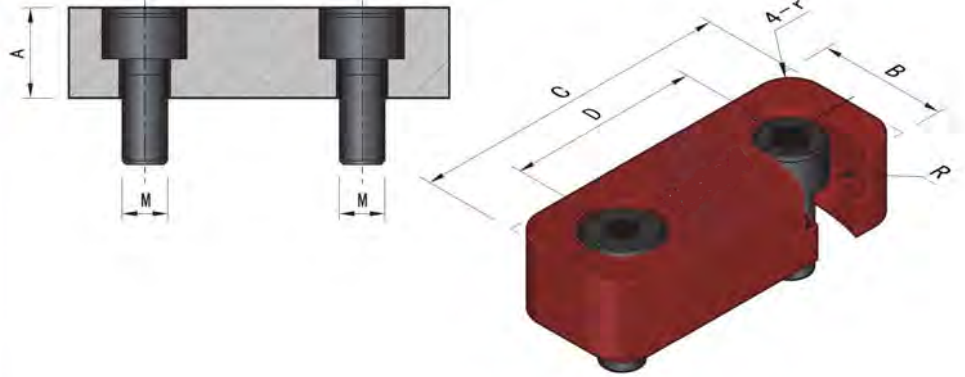
Order ZZ73×12

Code	A	B	C	D	E	R	F	G	@ ¥ /P
ZZ73×12	50	12	20	30	14	30	M 6	M 6	
ZZ73×16	63	16	25	38	17	38	M 8	M 8	
ZZ73×20	80	20	32	48	20	48	M10	M10	



Tool safety devices

ZZ73A

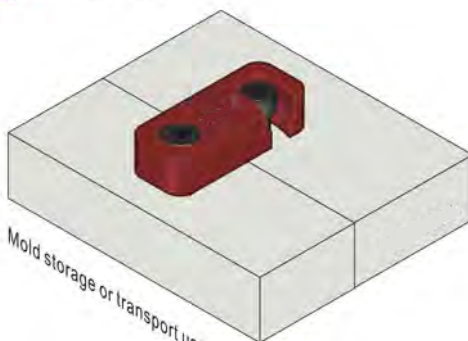


1. Precision alloy casting, economic and durable.
2. Its application is flexible and easy by the Shoulder screws and Spring plunger.
3. To protect the mold base and the bolts, do not forget to open the ZZ73A tool safety devices when mold moving. Otherwise, the front hook or the screws would break first.

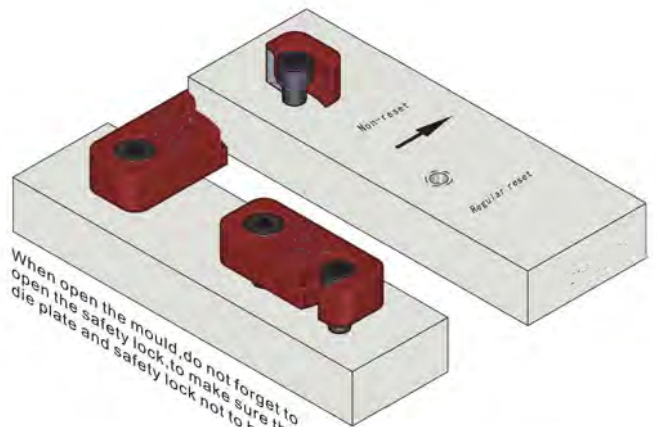
Order ZZ73A×12

Code	A	B	C	D	R	r	M	@¥/P
ZZ73A×12	12	20	52	30	30		M 6	
ZZ73A×16	16	25	63	38	38	5	M 6	
ZZ73A×20	20	32	80	48	48		M10	

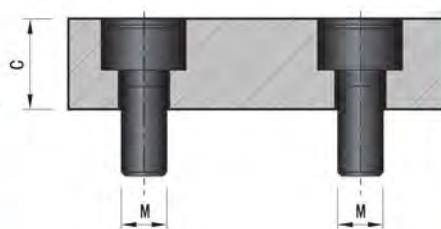
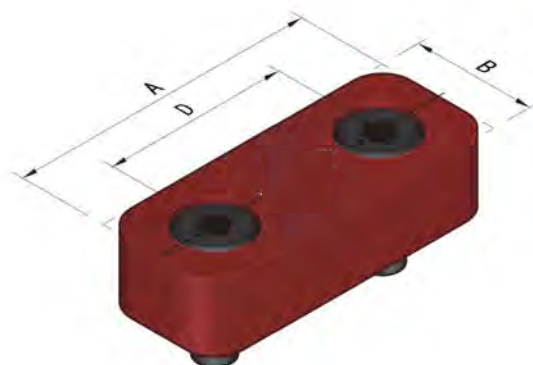
Function chart:



Mold closed



Mold opened



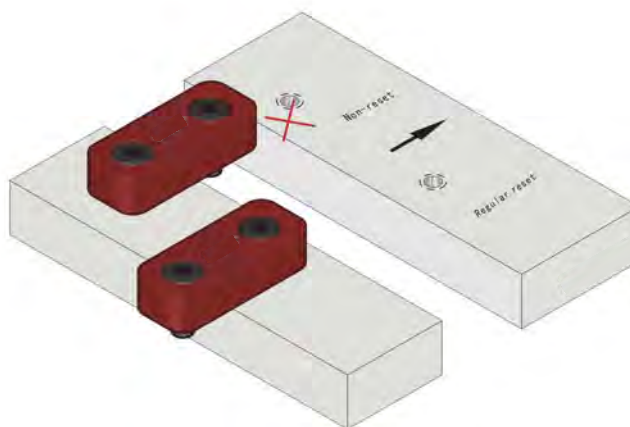
1. Precision alloy casting, economic and durable.
2. To protect the mold base and bolt, do not forget to open the ZZ73A tool safety devices when mold moving. Otherwise, the front hook or the screws would break first.

Order ZZ73B×12

Code	A	B	C	D	M	@ ¥/P
ZZ73B×12	50	20	12	30	M 6-16	
ZZ73B×16	63	25	16	38	M 6-20	
ZZ73B×20	80	32	20	48	M10-25	


Function chart:


Mold closed



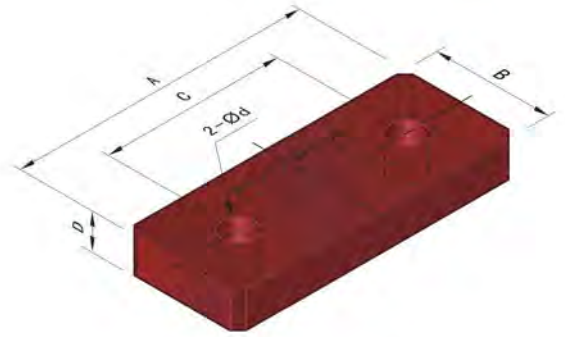
Mold opened

- ✓ Ejector pins series
- ✓ Ejector sleeves series
- ✓ Side runners series
- ✓ Latch locks series
- ✓ Pouring gates series
- ✓ Date stamps series
- ✓ Date stamps series
- ✓ Ejector series
- ✓ Cooling elements series
- ✓ Locating parts series
- ✓ Springs series
- ✓ Guide pins series
- ✓ Guide pins series
- ✓ Guide strips series
- ✓ Chuck series
- ✓

JIS

Tool safety devices

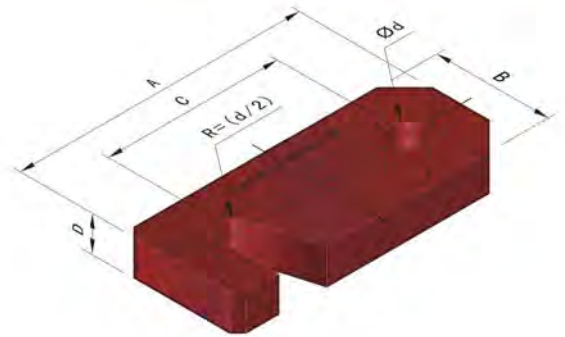
OOPS



Order OOPS-D-A-C

Code	D	B	Ød	A	C	@ ¥/P
OOPS	12	25	6.5	40 50 60 70 80	20 25 30 40 50	
	16	38	8.5	90 100 110 120 130	60 70 80 90 100	

DDPS



Order DDPS-D-A-C

Code	D	B	Ød	A	C	@ ¥/P
DDPS	12	25	8.5	65 75 85 95 105 115	40 50 60 70 80	
	16	38	12.5	125 135	90 100	
			21	145 155 165	110 120 130	

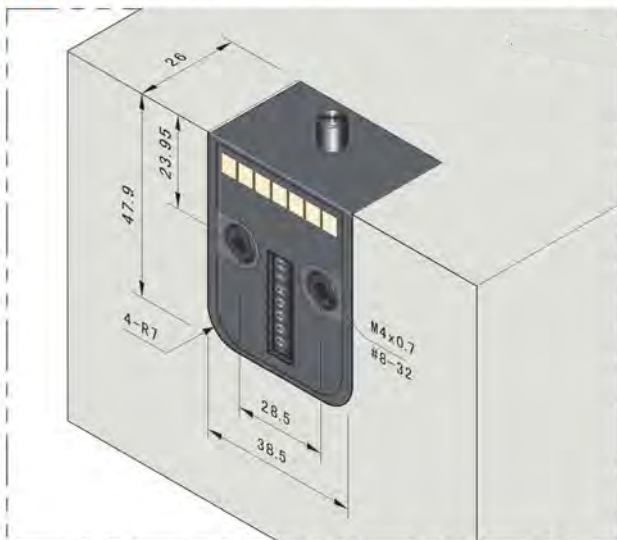
CPL
CPM



1. The counters are installed in the plates in the case of having enough installation location.
2. If the temperature is too high, use the mold counter with insulating plate and install outside the mold. (it can not influence mold inner structure after blocking).
3. Max. working temperature 120°C.



Installation Diagram:



Order CPL/CPM

Code	Equipped screw(2 pcs)	@ ¥ /P
CPL(Inch)	#8-32x1	
CPM(Metric)	M4x0.7x25	

Work temperature below 120 degrees

- Electric pins
- Electric sleeves
- Slide rail series
- Latch lock
- Pointing gate
- Data stamps
- Air valves series
- Escisor series
- Cooling elements
- Locating parts
- Spacers series
- Guide pins
- Guide bush
- Guide strips
- Wear plate series
- Chuck series



Hrat-resistant mold counter

CPH



Order CPH-01

Code	Inner-hexagon	@ ¥ /P
CPH-01	M4×25(2pcs)	
CPH-02	M4×25(4pcs)	

The highest application temperature is 180 degrees

high temperature resistant mould counter, test mould's service life precisely, there are two optional specifications, it's easy and convenient to install.

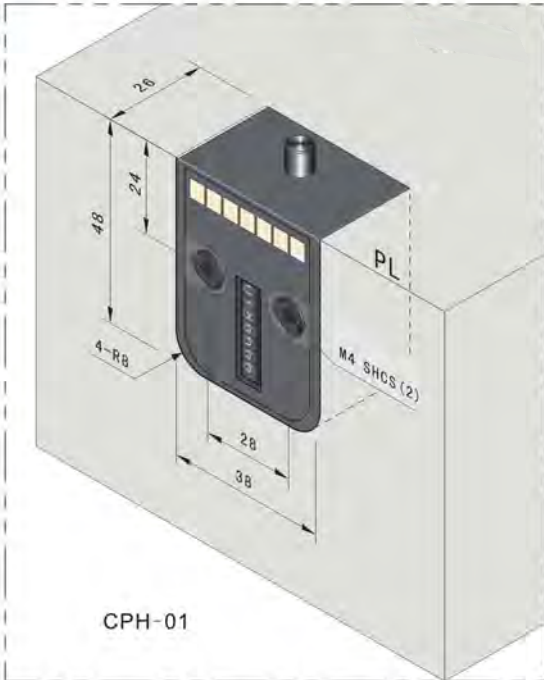
Material: nylon with fiberglass

The highest application temperature is 180 degrees

7 digits (million times counting), mechanical, can not return to zero

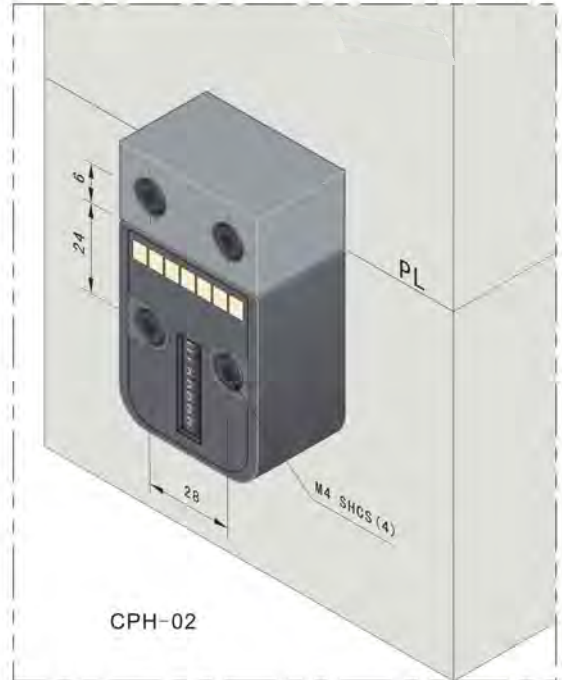


Installation Diagram:



CPH-01

CPH-01 embedded structure: simple and scientific operation
 Material: nylon with fiberglass
 Accessories: inner-hexagon screw (M4x25) 2pcs

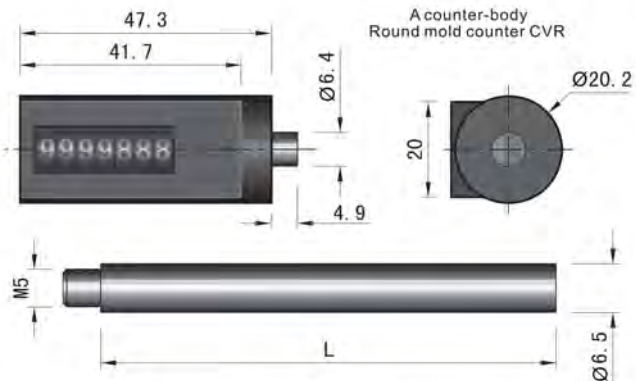


CPH-02

CPH-02 outboard structure: no need to open holes
 The material of the dam board: iron dyed black
 Accessories: inner-hexagon screw (M4x25) 4pcs



Round mold counter



C lengthen the size of the ejector rod L can be processed according to practical situation



Order CVR

Code	@ ¥/P
CVR	

Used below 120 degrees

Lengthened type open-frame drawing A Installation suggestions

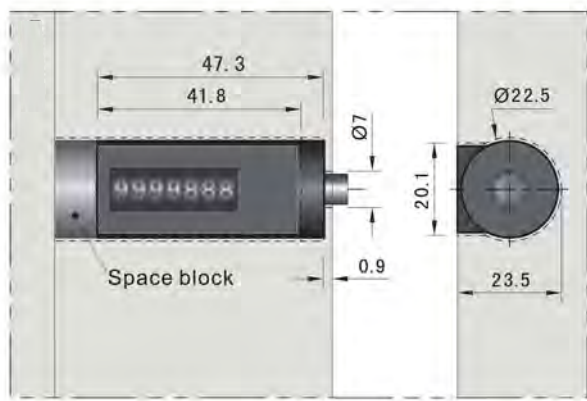
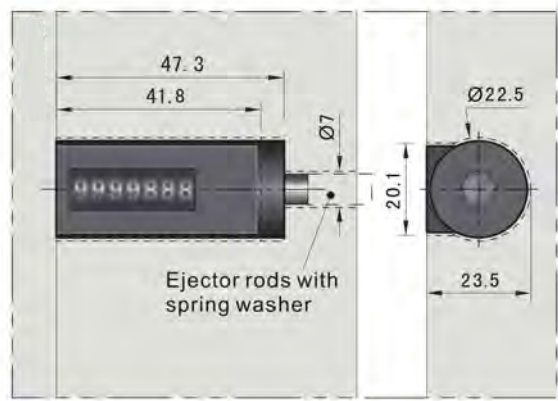
1. When used in circumstance of plate B is thick, it needs to lengthen the ejector rod.
2. When open frame in underside of plate B, it requires to fix the counter by using the open frame's arc area and the die tie-plate.

Regular installation open-frame drawing(A+B)

1. When used in circumstance of plate B is not thick, it needn't to use the lengthened ejector rod.
2. The method of fixing the counter is same as above, if the depth of open-frame is greater than 47.5mm, it can be padded with hard objects, to make the counter's contactor has enough length to protrude from the mould joint.



Installation Diagram:



- Ejector pins series
- Slide runners series
- Launch hooks series
- Pushing gates series
- Die stamps Air valves series
- Die stamps series
- Cooling systems series
- Locating parts series
- Spring series
- Guide pins series
- Guide pins series
- Guide pins series
- Chuck series
- ...