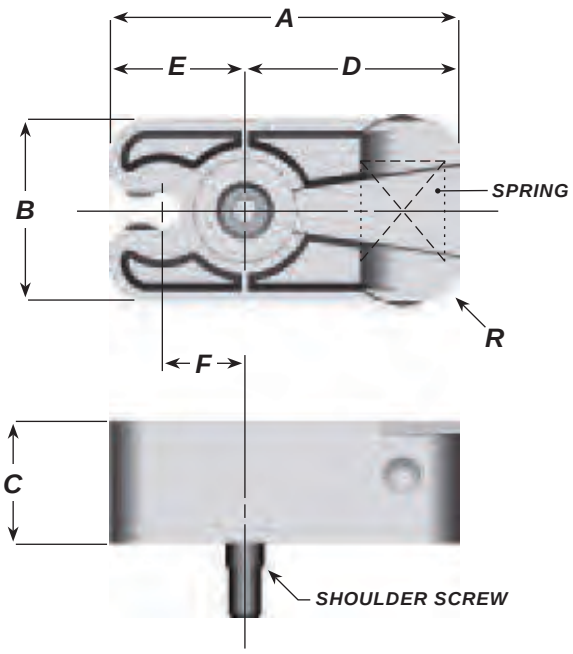
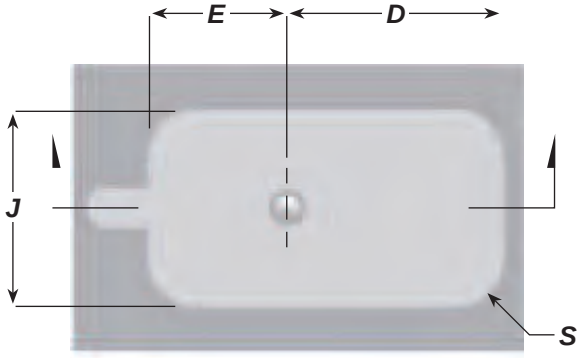
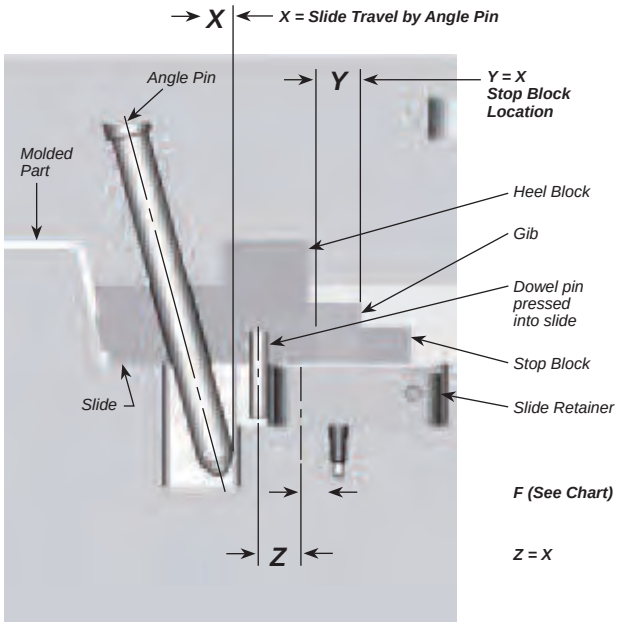
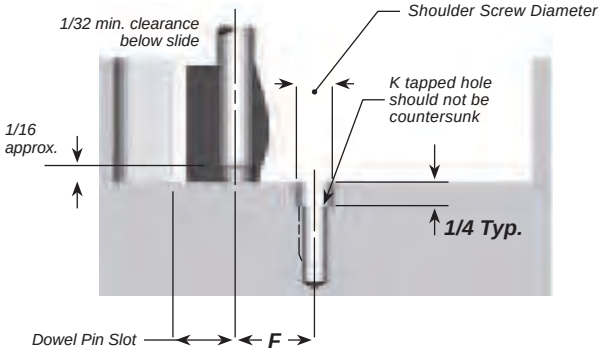
SLIDE RETAINERS
INCH





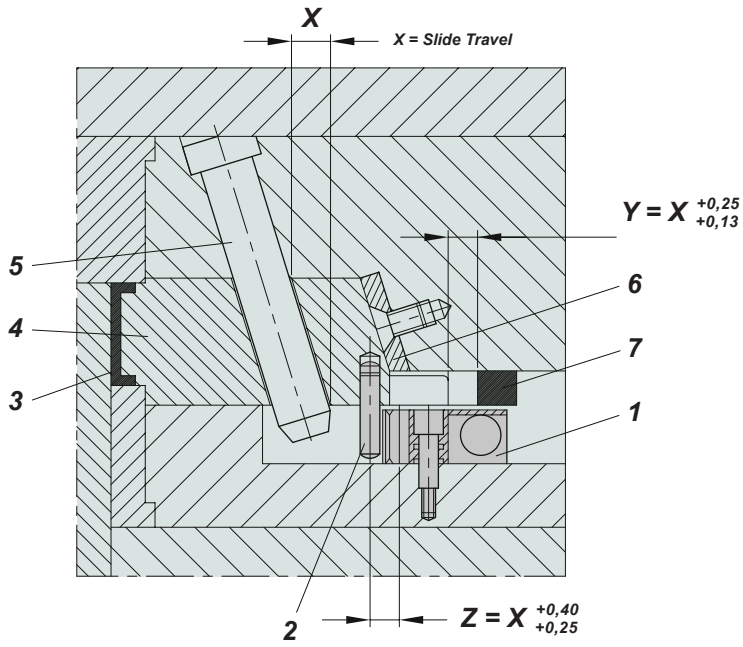




- A compact method of slide retention that eliminates the use of springs or costly hydraulic systems.
- Interference with machine tie bars or safety gates is eliminated because the slide retainer can be installed behind or below the slide.
- They can be used in multiples for larger or heavier slides.

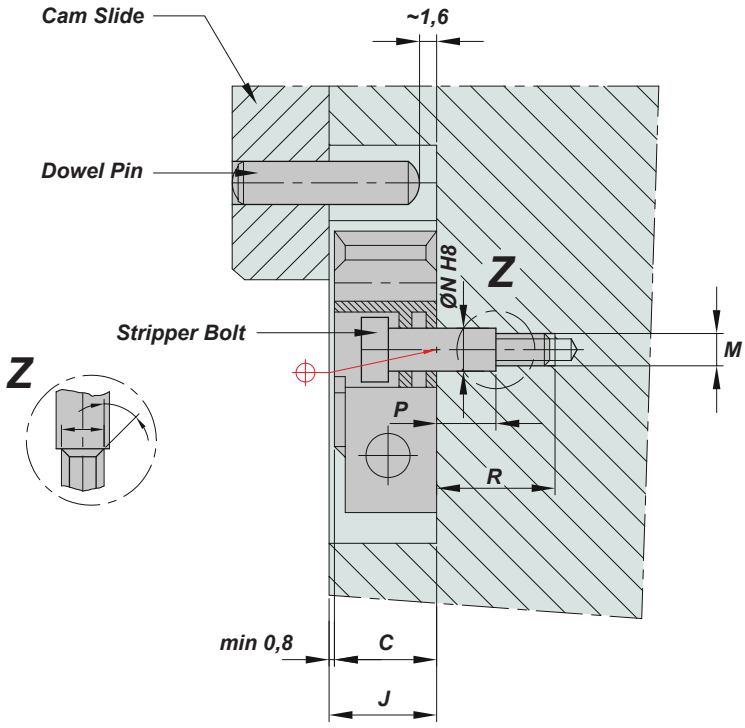
Catalog Number	A	B	C	D	E	F	R	Dowel Pin	Maximum Slide Weight	G	H	J	Tapped Hole K	Shoulder Screw	S
SRP-22	1-1/2	3/4	0.63	0.89	0.61	0.360	0.19	1/4 X 1-1/4	22 Pounds	0.73	1.01	1.00	10-24 X 1/2	1/4 X 5/8	0.31
SRP-44	2-1/8	1-1/4	0.79	1.31	0.81	0.500	0.25	5/16 X 1-1/2	44 Pounds	0.93	1.43	1.50	1/4-20 X 1/2	5/16 X 3/4	0.37
SRP-88	3-3/8	1-3/4	1.18	2.08	1.30	0.800	0.38	3/8 X 2-1/4	88 Pounds	1.42	2.20	2.20	5/16-18 X 5/8	3/8 X 1”	0.50

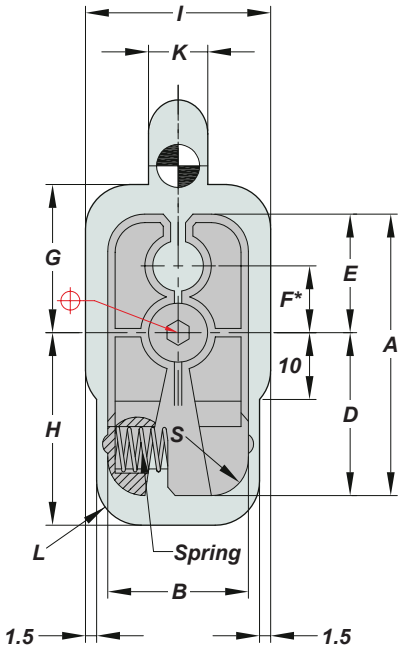
SLIDE RETAINERS
METRIC



REF	Slide Retainer							RETAINER POCKETS IN MOLD										MAX. SLIDE WEIGHT (KG)
	A	B	C	D	E	F*	S	G	H	I	J	K	L	M	N	P	R	
MRT-10M	38	19	16	22	16	9,1	5	19	26	25	17	8	6	M5	6	6	15,5	10
MRT-20M	54	32	20	33	21	12,7	6	24	36	38	21	10	8	M6	8	8,5	20,5	20
MRT-40M	86	45	30	53	33	20,3	10	36	56	51	31	12	11	M8	10	10	25,0	40

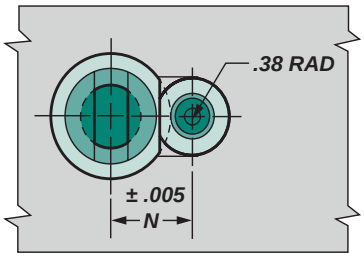
The distance from the center of the dowel pin to the center of the stripper bolt is critical.



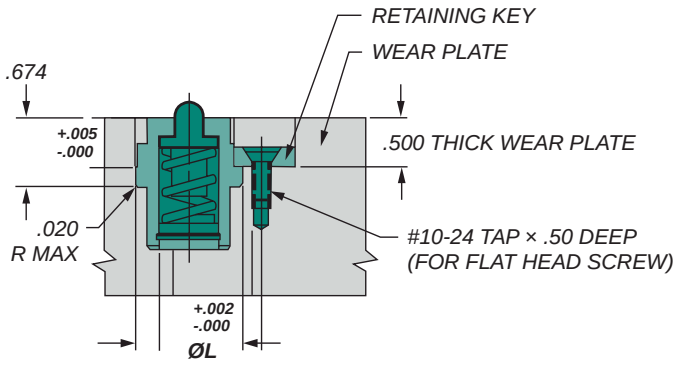


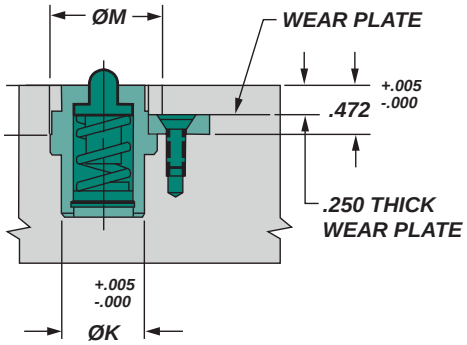
MINIATURE SLIDE RETAINERS

Catalog Number	Ø K	Ø L	Ø M	N DIM
SPSR 1000	0.625	0.869	0.94	0.670
SPSR 2000	0.750	0.987	1.06	0.715
SPSR 4000	0.875	1.105	1.19	0.763



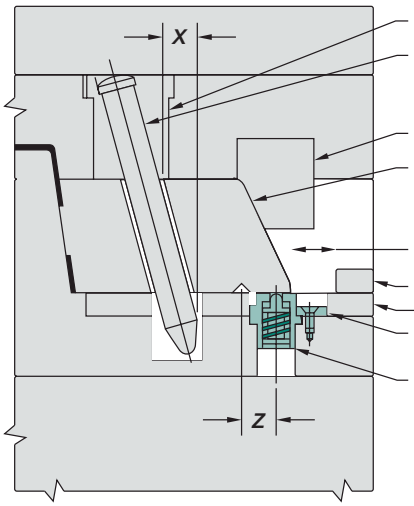
NOTE: .500 thick wear plate can also be used to key and retain Mini-Might slide retainer instead of retaining key. Mold maker to machine to suit.





NOTE: Use .028 thick spacer under retaining key when mold has been machined for .500 thick wear plate. Mold maker to machine to suit.

Typical Application of Miniature Slide Retainers



ANGLE PIN INSERT
ANGLE PIN*
(HORN PIN)
HEEL BLOCK
SLIDE
Y=X +.010 to +.020
STOP BLOCK
WEAR PLATE
RETAINING KEY
MSR ASSEMBLY

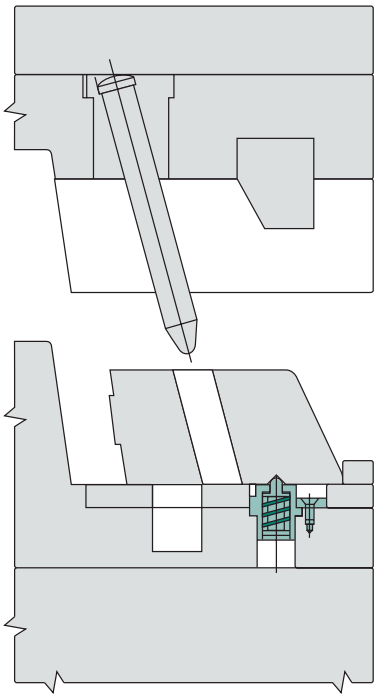
X = SLIDE TRAVEL CAUSED BY ANGLE PIN

Z = V-GROOVE LOCATION IN SLIDE FROM CENTERLINE OF SLIDE RETAINER

X = ***Z***

Y = STOP BLOCK LOCATION

MOLD CLOSED



MOLD OPEN

NOTES:

1. Lubricate all metal-to-metal contact areas before first use and every 100,000 cycles (or more frequently as required.) Use a good grade of moldmakers' non-melting type grease rated for the operating temperature to be encountered.
2. Replace compression spring every 1,000,000 cycles or as required.
3. Do not operate at temperatures exceeding 250°F.

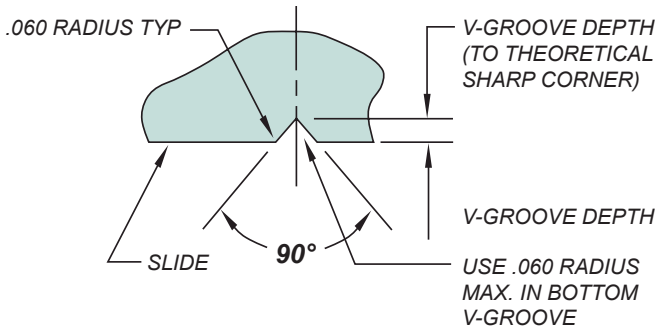
MINIATURE SLIDE RETAINERS

(U.S. Patent No. 5,397,226)

- Three sizes with slide ratings for 22, 44, and 88 lbs.
- Small in size, yet strong holding capacity.
- Self-contained product design facilitates easy installation.
- Slide can be removed without removing the slide retainer from the mould.

Installation Dimensions for Machining V-Groove in Slide

Catalog Number	V-Groove Depth
SPSR 1000	0.091
SPSR 2000	0.153
SPSR 4000	0.194



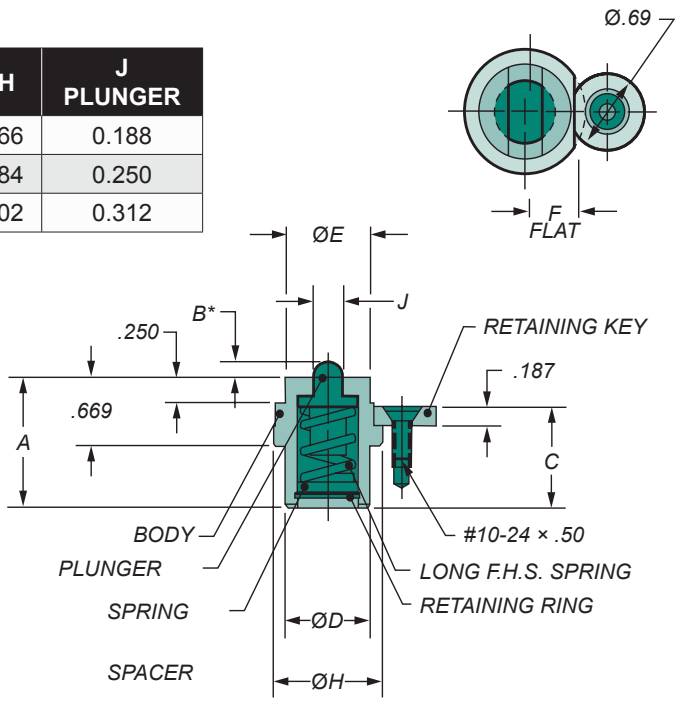
Dimensional Information for Miniature Slide Retainers

Material: Hardened H-13 Steel (Body and Plunger)

Catalog Number	A	B	C	Ø D	Ø E	F Flat	Ø H	J PLUNGER
SPSR 1000	1.08	0.072	0.795	0.620	0.630	0.375	0.866	0.188
SPSR 2000	1.32	0.121	1.035	0.740	0.748	0.420	0.984	0.250
SPSR 4000	1.26	0.149	0.975	0.870	0.866	0.468	1.102	0.312

Catalog Number	MAXIMUM RECOMMENDED HOLDING WEIGHT
SPSR 1000	10 POUNDS
SPSR 2000	20 POUNDS
SPSR 4000	40 POUNDS

† Each includes: slide retainer assembly, retaining key, and #10-24 × .50 long flat head screw. Replacement parts are special order.



*V-groove in slide will compress plunger approx. .01 to .03.

NOTE: See "Pocket Dimensions" for additional information.

SLIDE RETAINERS
RECTANGULAR INCH

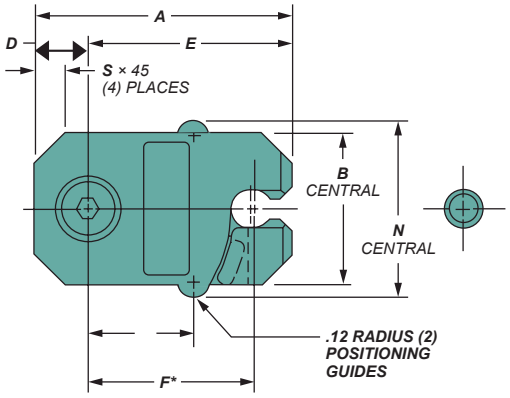
- Three sizes with slide ratings for 22, 44, and 88 lbs.
- Small in size, yet strong holding capacity.
- Provides a compact and economical means of slide retention.
- Suitable for new tooling design or retrofitting existing molds.
- Can be used in single or multiple configuration for heavier slides.

(U.S. Patent No. 4,961,702)

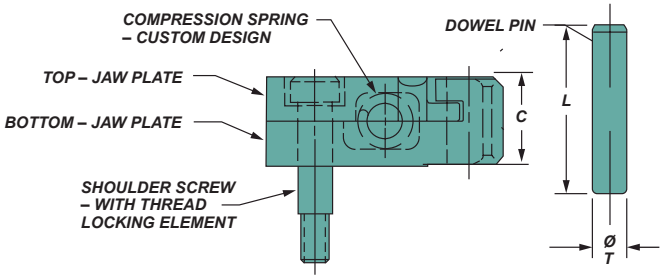
RECTANGULAR Slide Retainer – PPSL

Material: Investment Cast steel
Hardness: Case-Hardened 58-62 HRC

Catalog Number	A	B	C	D	E	F*	N	P	S	T	L
PPSL 0001	1.50	0.76	0.63	0.27	1.23	0.980	0.94	0.61	0.14	0.250	1.25
PPSL 0002	2.13	1.26	0.79	0.44	1.69	1.375	1.44	0.88	0.25	0.312	1.50
PPSL 0003	3.38	1.76	1.18	0.75	2.63	2.125	1.94	1.57	0.38	0.375	2.25



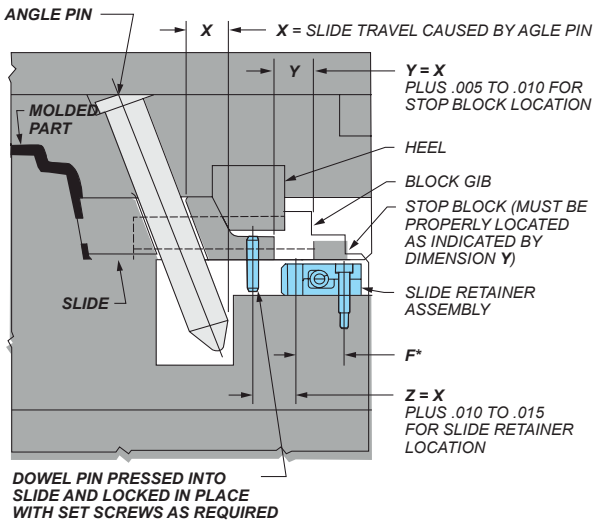
Catalog Number	MAXIMUM RECOMMENDED SLIDE HOLD WEIGHT
PPSL 0001	22 POUNDS
PPSL 0002	44 POUNDS
PPSL 0003	88 POUNDS



* Dimension F, the distance from dowel pin centerline at end of slide travel and centerline of shoulder screw, is important.

Overtravel of dowel pin beyond pin clearance provided at back of jaw area could result in damage to retainer.

† Includes compression spring, shoulder screw and dowel pin.



RECTANGULAR Slide Retainer – PPSL Application

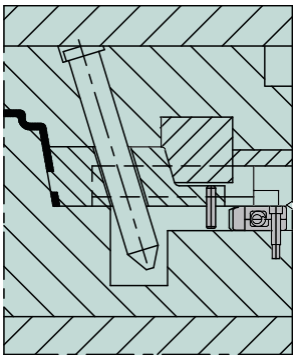
The PPSL is designed to be mounted behind and below the slide (see drawing left), and is a compact unit that can be entirely contained within the mold. Interference with tie bars or safety gates is no longer a problem. (It can even be installed completely underneath the slide if space is limited.)

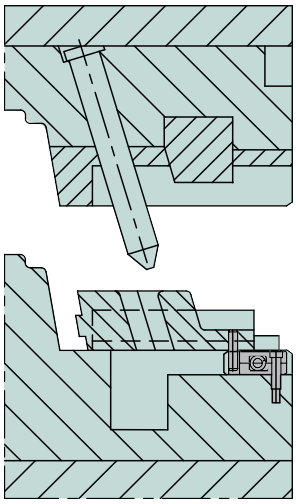
As the mold opens, the dowel pin installed in the slide positively locks into the PPSL until disengaged by the mold's closing action. The spring placed crossway in the retainer maintains the force required to keep the dowel pin in the jaws when the mold is open.

The PPSL is designed with a lead-in at the jaw opening so the dowel pin will enter the jaws even if there is a slight misalignment between the retainer and the pin.

NOTE: To prevent the dowel pin from contacting and applying pressure against the back of the retainer jaw (which could cause shearing of the dowel pin or shoulder screw) the installation dimensions shown on these pages are recommended.

SLIDE RETAINERS
PPSM





REF	CAM SLIDE									RETAINER POCKETS IN MOULD									Max. slide weight (kg)
	A	B	C	D	E	F*	G	H	I	J	K	L	M	N	O	P	Q	R	
PPSM 0001	38	19	16	7	31,5	24,89	24,0	15,5	25,5	17,5	8	10,0	34,5	8	8,5	6	20	M5	10
PPSM 0002	54	32	20	11	43,0	34,93	36,5	22,5	38,0	21,5	10	14,5	46,0	10	10,5	8	25	M6	20
PPSM 0003	86	45	30	19	67,0	53,98	49,5	40,0	51,0	31,5	12	22,5	70,0	12	17,0	10	35	M8	40

› The distance from the center of the dowel pin to the center of the stripper bolts is critical.