

# MOLD ACTION

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# MOLD ACTION

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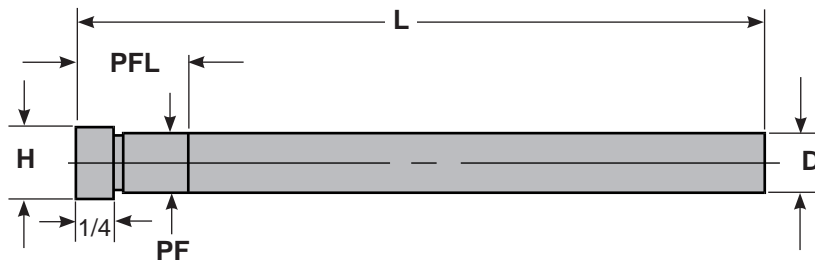
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## Standard Angle Pins

- Premium hot work steel
- Used with PCS lifters and slides
- Precision ground, nitrided



SPECIFICATIONS	
T Head Thickness	1/4
T Head Thickness Tolerance	+0.000 / -0.005
Core Hardness	35 - 40 Rc
Surface Hardness	65 - 74 Rc
Material Type	Hot Work Tool Steel
Unit of Measure	Inch



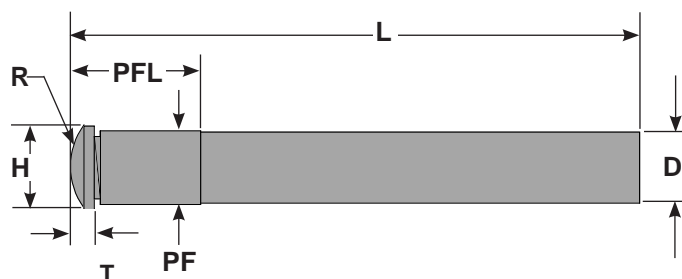
CATALOG NO.	NOMINAL PIN DIAMETER	D ACTUAL PIN DIAMETER +.0000 -.0005	PF PRESSFIT DIAMETER +.0005 -.0000	H HEAD DIAMETER +.000 -.010	PFL PRESSFIT LENGTH	L OVERALL LENGTH +.125 +.000
A25-L6	3/8	0.374	0.376	1/2	7/8	6
A25-L10	3/8	0.374	0.376	1/2	1-3/8	10
A33-L6	1/2	0.499	0.501	5/8	7/8	6
A33-L10	1/2	0.499	0.501	5/8	1-3/8	10
A37-L6	5/8	0.624	0.626	3/4	7/8	6
A37-L10	5/8	0.624	0.626	3/4	1-3/8	10
A41-L10	3/4	0.749	0.751	7/8	1-3/8	10

## Radius Angle Pins

- Pre-machined spherical radius on head
- Used with PCS lifters and slides
- Premium hot work steel
- Precision ground, nitrided



SPECIFICATIONS	
Core Hardness	35 - 40 Rc
Surface Hardness	65 - 74 Rc
Material Type	Hot Work Tool Steel
Unit of Measure	Inch



CATALOG NO.	NOMINAL PIN DIA.	D ACTUAL PIN DIA. +.0000 -.0005	PF PRESS FIT DIAMETER +.0005 -.0000	R HEAD RADIUS	H HEAD DIAMETER +.000 -.010	T HEAD THICKNESS +.000 -.005	PFL PRESSFIT LENGTH	L OVERALL LENGTH +.125 +.000
APR25-L5	3/8	0.374	0.376	3/8	1/2	1/4	7/8	5
APR25-L6	3/8	0.374	0.376	3/8	1/2	1/4	7/8	6
APR25-L7	3/8	0.374	0.376	3/8	1/2	1/4	1-3/8	7
APR25-L10	3/8	0.374	0.376	3/8	1/2	1/4	1-3/8	10
APR33-L5	1/2	0.499	0.501	1/2	5/8	1/4	7/8	5
APR33-L6	1/2	0.499	0.501	1/2	5/8	1/4	7/8	6
APR33-L7	1/2	0.499	0.501	5/8	5/8	1/4	1-3/8	7
APR33-L10	1/2	0.499	0.501	1/2	5/8	1/4	1-3/8	10
APR37-L6	5/8	0.624	0.626	5/8	3/4	1/4	7/8	6
APR37-L10	5/8	0.624	0.626	5/8	3/4	1/4	1-3/8	10
APR41-L7	3/4	0.749	0.751	3/4	7/8	1/4	1-3/8	7
APR41-L10	3/4	0.749	0.751	3/4	7/8	1/4	1-3/8	10
APR41-L14	3/4	0.749	0.751	3/4	7/8	1/4	1-3/8	14
APR47-L10	1	0.999	1.001	1	1-1/8	5/16	1-3/8	10
APR47-L14	1	0.999	1.001	1	1-1/8	5/16	1-3/8	14

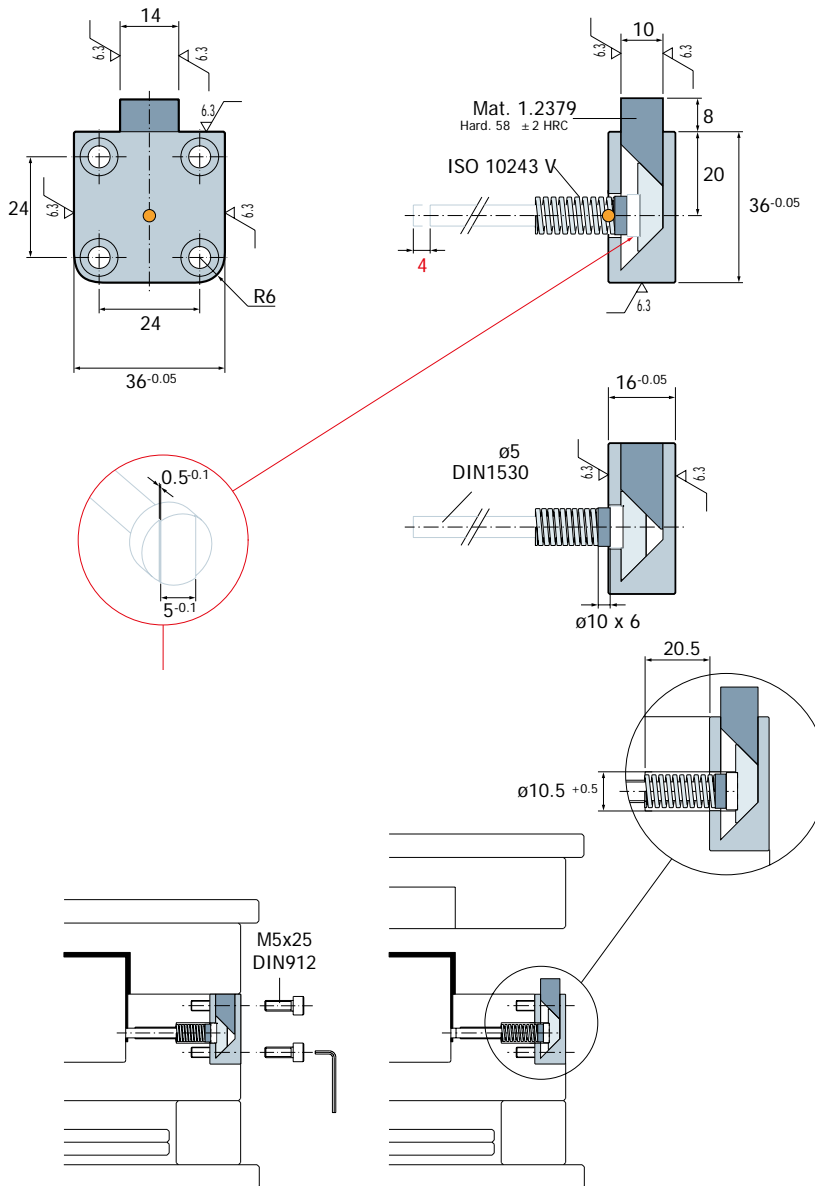
# PCS CUMSA™ Compact Coring Units (Limited Availability)

- Cores out holes with a maximum 4mm part thickness
- Easy to install from outside of the mold
- Installation contained on one half of the mold
- Pin not included

The Compact Coring Unit cores out holes with a maximum 4 mm part thickness. This unit is easy to install from outside of the mold as installation is contained on one half of the mold. This compact solution reduces the costs associated with machining and fitting.



SPECIFICATIONS	
Material Type	1.2344
Unit of Measure	Metric DIN



<b>CATALOG NO.</b>
UA 363616

## PCS CUMSA™ Flexible Cores (*Limited Availability*)

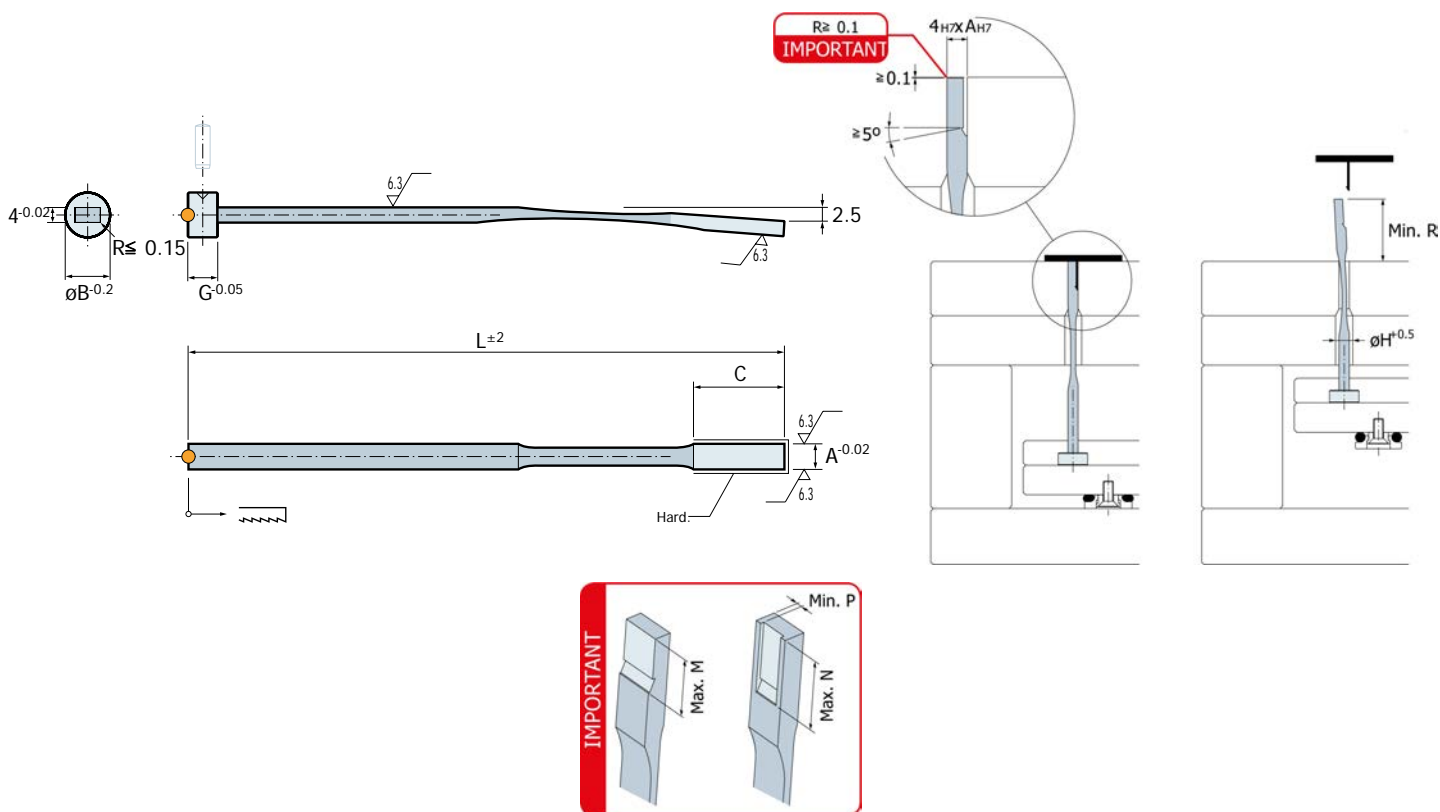


- Minimum space required for installation
- Includes simple adjustment system
- Ejects first then releases undercut

Flexible Cores are useful when releasing small undercuts ranging in thickness from 6 mm to 12 mm. These cores are easy to install and come ready to be machined. The need for slides can be eliminated when using the Flexible Core. For variations of undercuts, refer to the Tulip or Double Ejector.

### SPECIFICATIONS

Hardness	42 - 48 Rc
Material Type	1.2101
Unit of Measure	Metric DIN



CATALOG NO.	A	B	C	G	H	L	M	N	P	R	BALINIT C®
PF 044150	4	8	24	6	5	150	12	14	0.8	30	•
PF 054150	5	8	24	6	6	150	12	14	0.8	30	•
PF 064200	6	12	30	8	7	200	18	20	1	36	•
PF 0642WB	6	12	30	8	7	200	18	20	1	36	
PF 084200	8	14	30	8	9	200	18	20	1	36	•
PF 104200	10	16	30	8	11	200	18	20	1	36	•
PF 124200	12	18	30	8	13	200	18	20	1	36	•

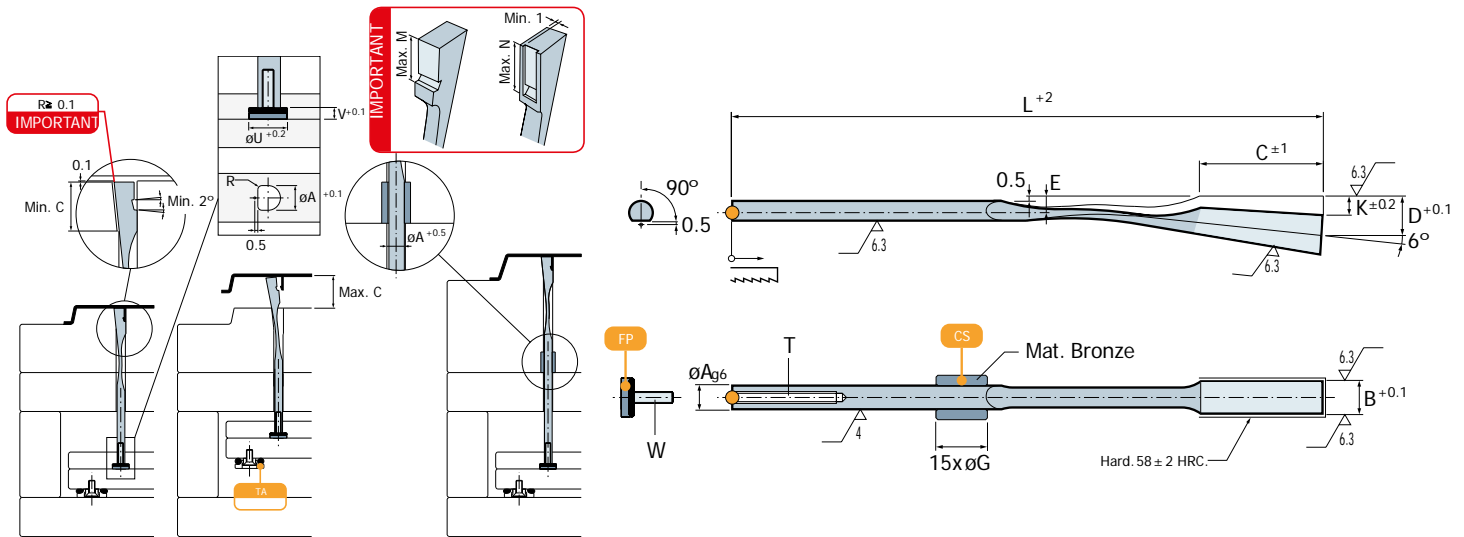
# PCS CUMSA™ Sprung Cores (Limited Availability)

- Minimum space required for installation
- Manufactured from spring steel
- Allows release of small undercuts
- Used for part ejections and activated by ejector plate

A Sprung Core is an excellent way to mold parts with undercuts without the need for a slide assembly. Manufactured from spring steel, the Sprung Core flexes away from the molded undercut in an arcing motion as the ejector plate(s) travel forward. The solid, one-piece, design allows for less machining and ease of installation.



SPECIFICATIONS	
Hardness	56 - 60 Rc
Material Type	1.8159
Unit of Measure	Metric DIN



CATALOG NO.	A	B	C	D	E	K	L	M	N	R	T	U	V	W	CS
PW060622	6	6.2	22	9	3.5	3.5	125	16	18	1.25	M4x36	12	5	M4x16	—
PW060630	6	6.2	30	10	3.5	4.5	175	20	26	1.25	M4x36	12	5	M4x16	•
PW060822	6	8.2	22	9	3.5	3.5	125	16	18	1.25	M4x36	12	5	M4x16	—
PW060830	6	8.2	30	10	3.5	4.5	175	20	26	1.25	M4x36	12	5	M4x16	•
PW080825	8	8.2	25	11.5	4.5	4.5	140	18	21	2	M5x36	14	6	M5x16	—
PW081025	8	10.2	25	11.5	4.5	4.5	140	18	21	2	M5x36	14	6	M5x16	—
PW081030	8	10.2	30	11.2	4.5	4.5	175	20	26	2	M5x36	14	6	M5x16	•
PW081225	8	12.2	25	11.5	4.5	4.5	140	18	21	2	M5x36	14	6	M5x16	—
PW081230	8	12.2	30	11.2	4.5	4.5	175	20	26	2	M5x36	14	6	M5x16	•
PW101430	10	14.2	30	13.6	5.5	5.5	175	20	26	2.5	M6x36	18	8	M6x16	•
PW101630	10	16.2	30	13.6	5.5	5.5	175	20	26	2.5	M6x36	18	8	M6x16	•
PW101830	10	18.2	30	13.6	5.5	5.5	175	20	26	2.5	M6x36	18	8	M6x16	•

## PCS CUMSA™ Double Ejectors (*Limited Availability*)

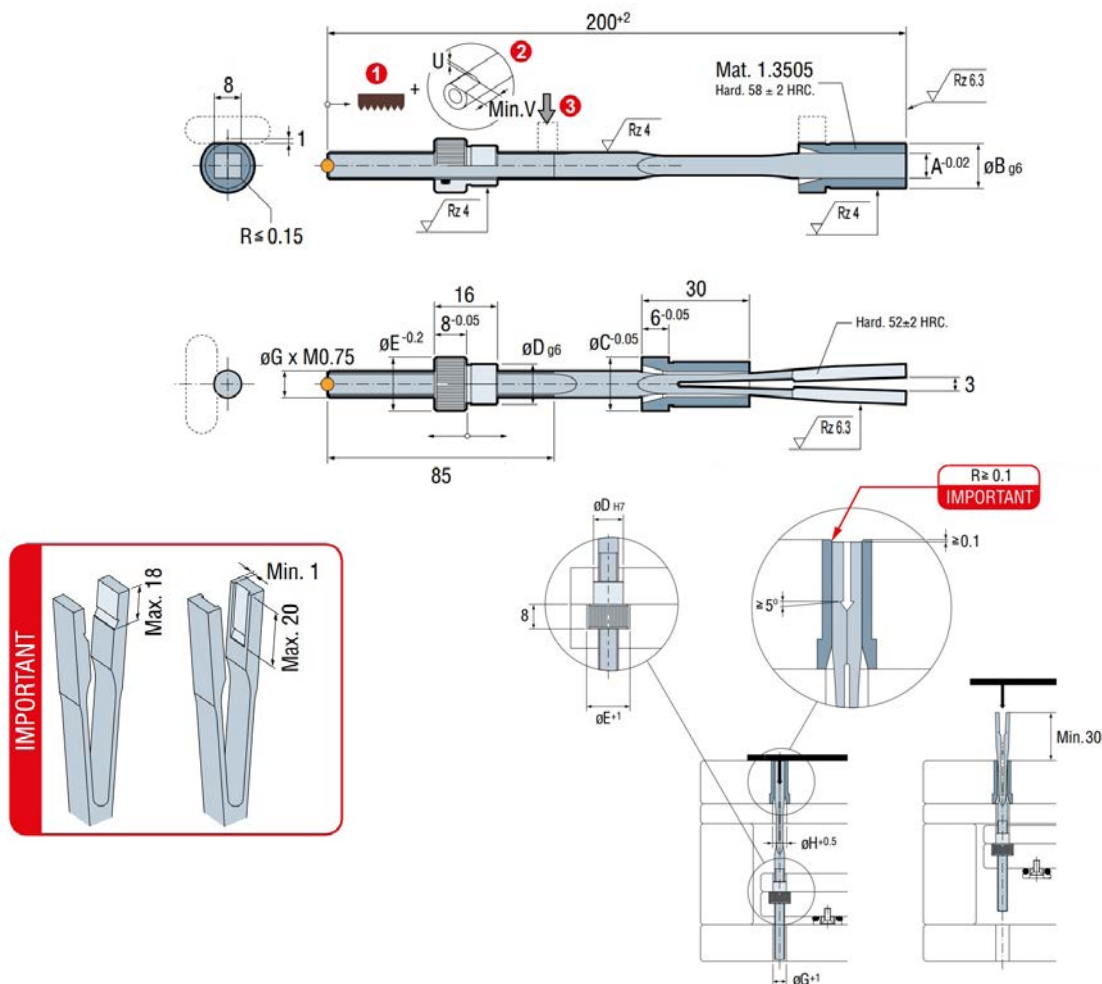
- Simple and easy to install
- Two separate movements in one component
- Minimal footprint
- No need for complex mechanical systems

Double Ejectors are useful when releasing undercuts ranging in thickness from 6 mm to 12 mm. These cores are easy to install and come ready to be machined. The need for slides can be eliminated when using the Double Ejector.



### SPECIFICATIONS

Hardness	42 - 48 Rc
Material Type	1.2101
Unit of Measure	Metric DIN



CATALOG NO.	A	B	C	D	E	G	H	U	V
ED 068200	6	12	14	10	14	6	10	0.5	10
ED 068350	6	12	14	10	14	6	10	0.5	10
ED 088200	8	14	16	12	16	8	12	0.5	10
ED 108200	10	16	18	14	18	8	14	0.5	15
ED 128200	12	16	18	16	20	8	15	0.5	15

Special lengths of 275 mm and 350 mm upon request



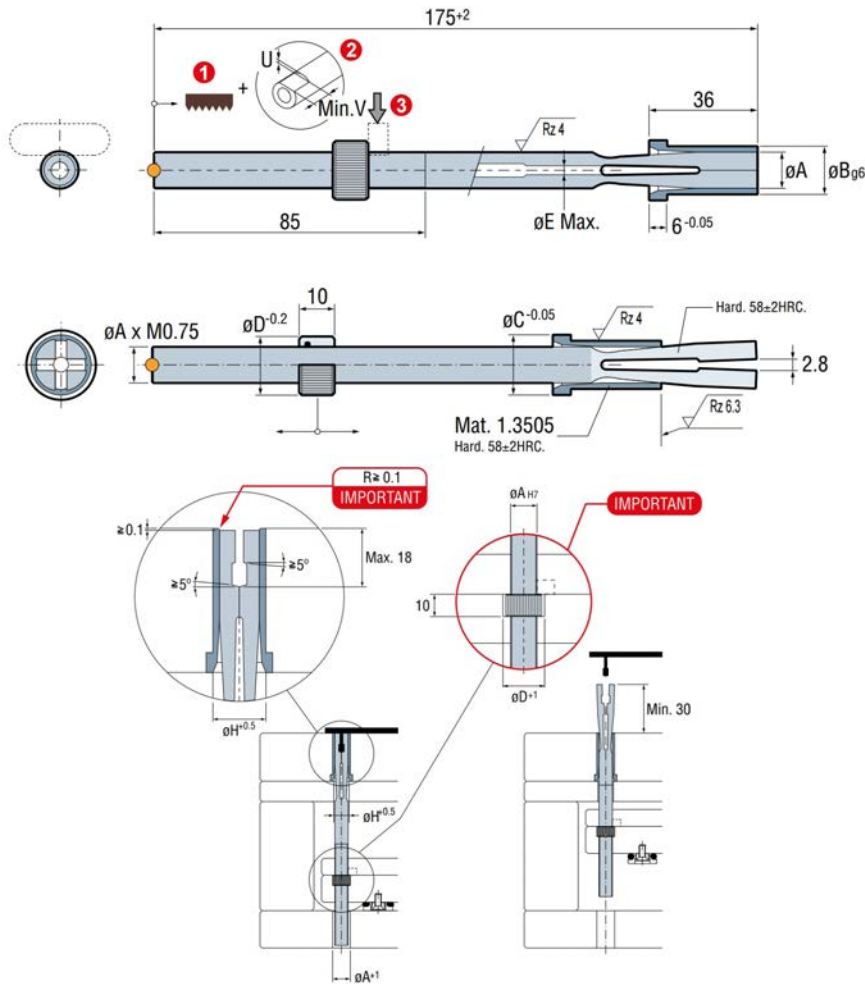
# PCS CUMSA™ Tulip Ejectors (Limited Availability)

- Simple and easy to install
- Four separate movements in one component
- Minimal footprint
- No need for complex mechanical systems



Tulips have four separate movements in one component and are useful when releasing undercuts ranging in thickness from 6 mm to 16 mm. These cores are easy to install and come ready to be machined. The need for slides can be eliminated when using the Tulip.

SPECIFICATIONS	
Hardness	42 - 48 Rc
Material Type	1.2101
Unit of Measure	Metric DIN



CATALOG NO.	A	B	C	D	E	H	U	V
EE 060175	6	10	12	12	-	9	0.5	10
EE 082175	8	12	14	14	2	11	0.5	10
EE 103175	10	14	16	16	3	13	0.5	15
EE 124175	12	16	18	18	4	15	0.5	15
EE 168175	16	20	22	22	8	19	1	20

Special lengths of 275 mm and 350 mm upon request

# E-Z Lifter Application Guide

## Choosing your E-Z Lifter System

### 1. Determine a Lifter Blank Size



A. MINI



B. STANDARD

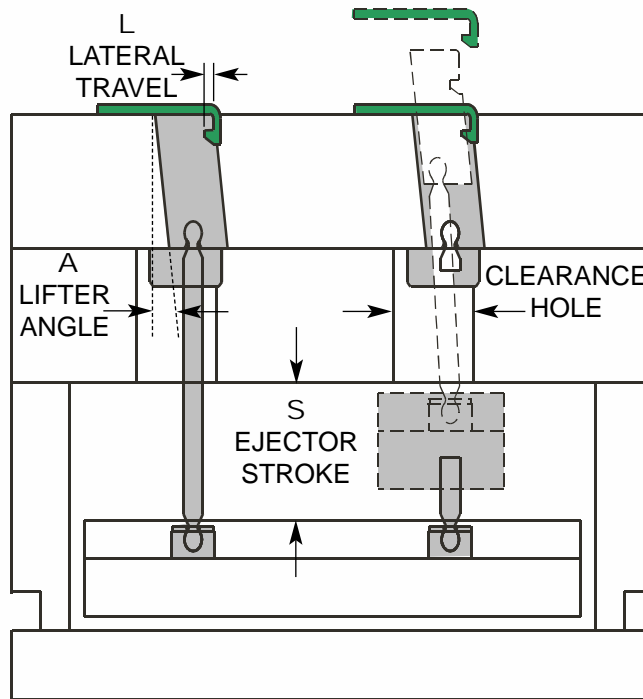


C. COMPACT



Patent No. 5,281,127

### 2. Determine / Calculate Angle



TYPICAL EXAMPLES							
EJECTION STROKE(S)	LIFTER ANGLE (A)						
	5°	6°	7°	8°	9°	10°	11°
.813	.071	.085	.100	.114	.129	.143	.158
1.063	.093	.112	.131	.149	.168	.187	.207
1.563	.137	.164	.192	.220	.248	.276	.304
2.063	.180	.217	.253	.290	.327	.364	.401
2.563	.224	.269	.315	.360	.406	.452	.498
3.063	.268	.322	.376	.430	.485	.540	.595

**TO DETERMINE ANGLE**

$L/S = \tan A$

**SEE CHART FOR REFERENCE**

# E-Z Lifter Application Guide

## Choosing your E-Z Lifter System

### 3. Choose Heel Plate Size & Position

A. Standard

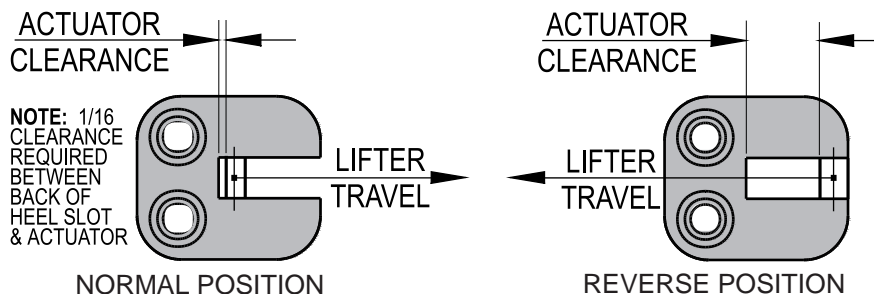


STANDARD

B. Mini / Compact



MINI / COMPACT



### 4. Determine Retainer Type



HEELED



BLIND POCKET



ROUND

### 5. Determine Actuator Length

A. Retainer type will determine the actuator length

B. Determine distance between the knuckle center line of the Lifter Blank to the knuckle centerline of the Retainer while the Lifter is in the retracted position



**NOTE:** Blank length, ejector plate thickness, or retainer position can be adjusted to accommodate standard actuator lengths.

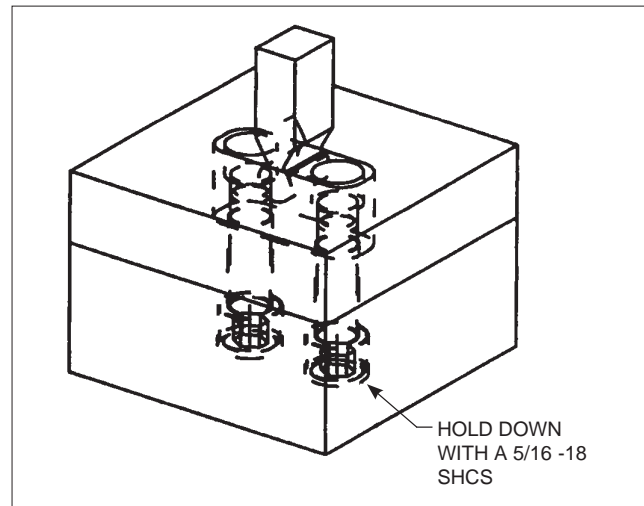
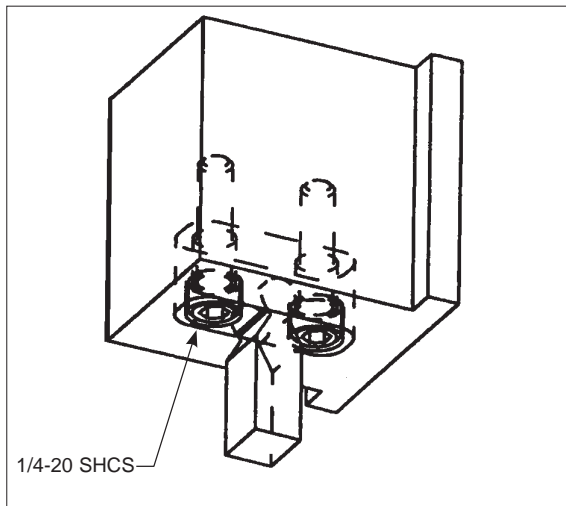
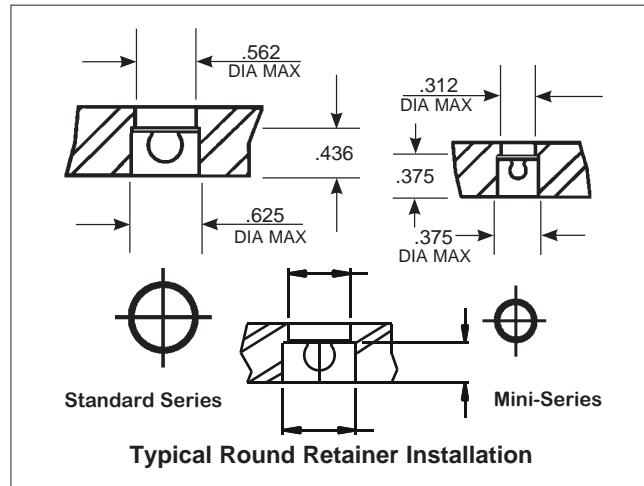
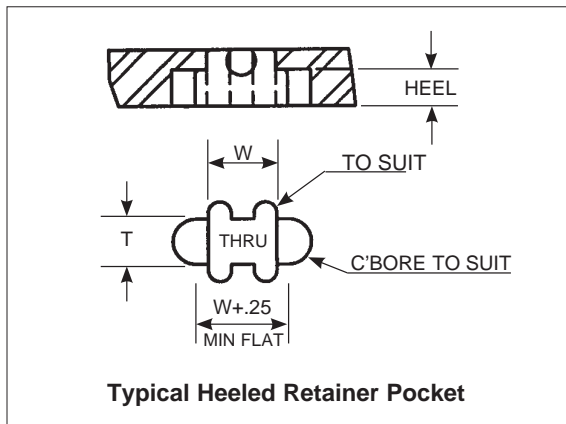
## E-Z Lifter Application Guide

### Retainer Pockets

Retainers come in three styles:

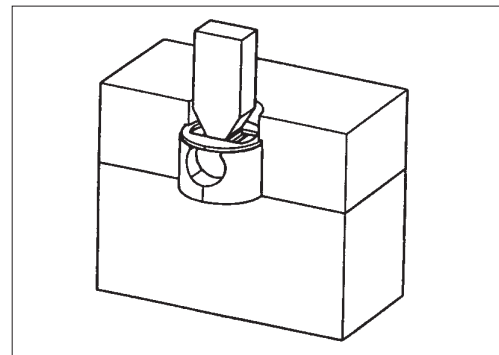
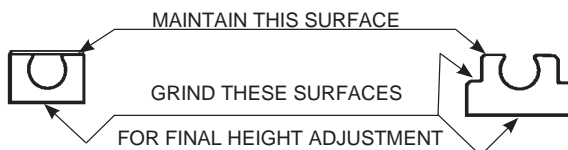
- Heeled
- Round
- Blind Pocket

Retainers secure the lower knuckle of the Actuator to the ejector assembly. Pocket machining details are shown for most standard mold base assemblies in the illustration below.



### Centering Washer

The centering washer with the round retainers is necessary to keep the axis of the Actuators centered in the round Retainer pocket. This washer in conjunction with the heel plate assures that the thrust will be along the axis of the Actuator. The illustration at the right is a typical installation of the round retainer with the centering washer. When adjusting final height on the retainer, grind only the bottom surface of the retainer as shown below.



## E-Z Lifter™ Compact Series

- Smooth pivoting motion inhibits galling and reduces wear
- Design eliminates blow back problems
- Heel plates stabilize actuator and act as a positive stop
- Heel plates stabilize actuator and act as a positive stop
- Pre-hardened Lifter blanks, no heat treat necessary
- No moving parts in ejector plate (no wear plate assemblies of sliding shoes)
- Simple stationary retainer installed between the ejector plates saves time and machining costs
- All E-Z Lifter™ components in stock
- **Patent No. 5,281,127**



### LIFTER BLANKS

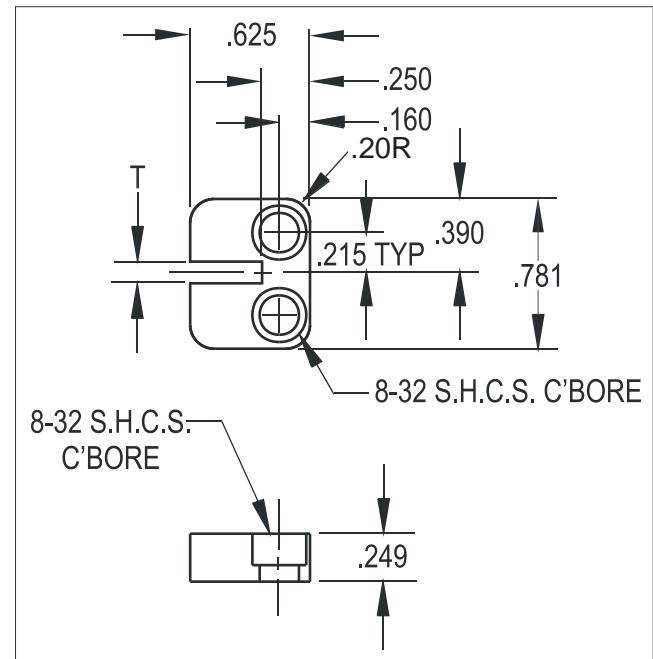
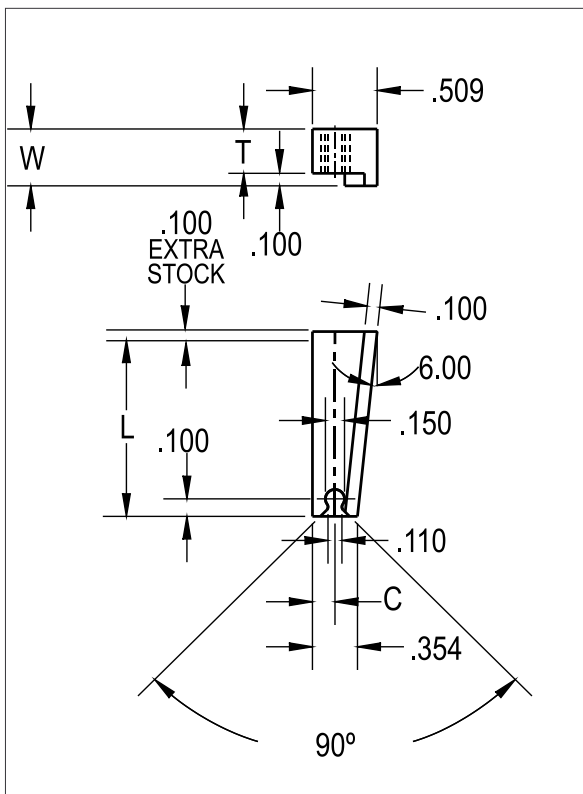
### HEEL PLATE

#### LIFTER BLANKS SPECIFICATIONS

Material Type	Pre-Hardened S-7 Steel
Surface Hardness	54 - 56 Rc
Unit of Measure	Inch

#### HEEL PLATE SPECIFICATIONS

Material Type	A-2
Surface Hardness	40 - 44 Rc
Unit of Measure	Inch



### LIFTER BLANKS

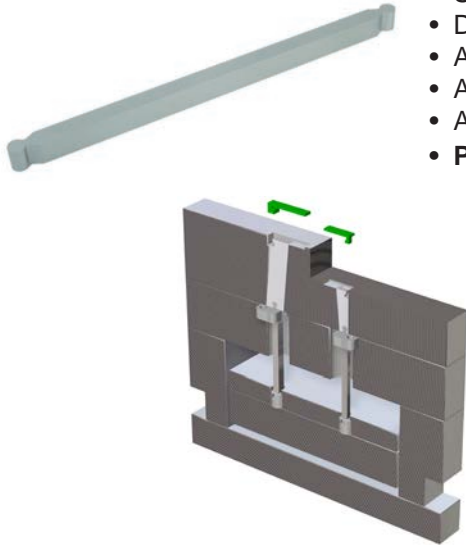
CATALOG NO.	T -.0005 -.001	W	L +.000 -.001	C	COMPATIBLE ACTUATOR
TL1*	.325	0.425	1.375	.145	AM20
TL2*	.483	0.583	1.375	.177	AM20

### HEEL PLATES

CATALOG NO.	T +.005 -.000
MHP-100	.103
MHP-200	.203

\*For mirrored lifter blanks, please add "L" to part # when ordering. (i.e. TL1-L)

## E-Z Lifter™ Compact Series



- Smooth pivoting motion inhibits galling and reduces wear
- Design eliminates blow back problems
- Actuators connect lifter blank with retainer
- Available in various lengths
- All E-Z Lifter™ components in stock
- **Patent No. 5,281,127**

### ACTUATORS

#### ACTUATORS SPECIFICATIONS

Material Type	O-1
Surface Hardness	50 - 52 Rc
Unit of Measure	Inch

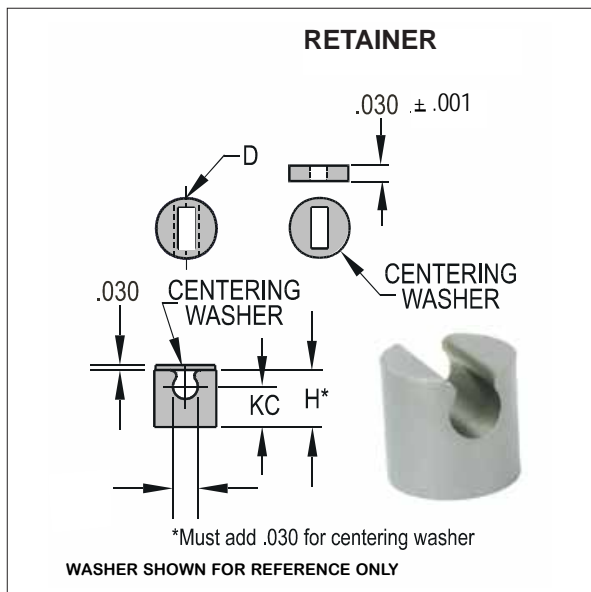
### ACTUATORS

CATALOG NO.	CENTER DISTANCE	L OVERALL LENGTH +.001 / -.001
AM20-269	2.542	2.692
AM20-319	3.042	3.192
AM20-369	3.542	3.692
AM20-419	4.042	4.192
AM20-469	4.542	4.692
AM20-519	5.042	5.192

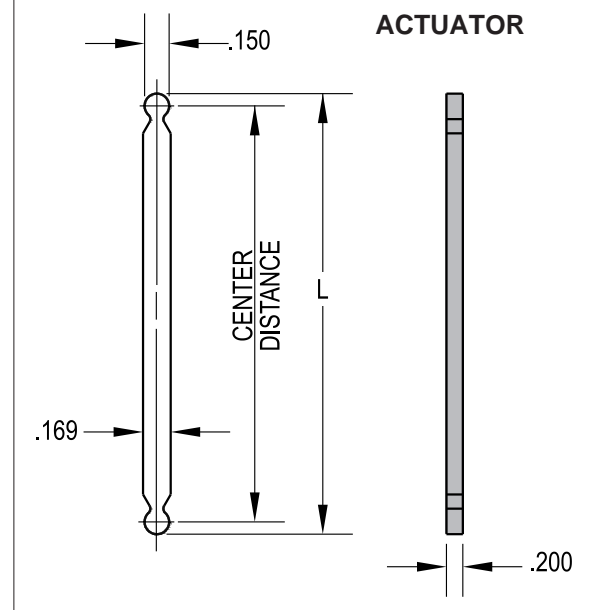
### RETAINERS

#### RETAINER SPECIFICATIONS

Material Type	Hot Work Tool Steel
Surface Hardness	50 - 52 Rc
Unit of Measure	Inch



### ACTUATOR



### RETAINER

CATALOG NO.	H +.002 -.002	KC +.002 -.002	D -.0005 -.0008
HR375RM	.345	.245	.375

### CENTERING WASHER

CATALOG NO.	SLOT SIZE
AM10 WASHER	.103 x .220
AM20 WASHER	.203 x .220

Included with actuator & retainer. Can be purchased separately.

## E-Z Lifter™ Mini Series

- Smooth pivoting motion inhibits galling and reduces wear
- Design eliminates blow back problems
- Heel plates stabilize actuator and act as a positive stop
- Pre-hardened Lifter blanks, no heat treat necessary
- No moving parts in ejector plate (no wear plate assemblies or sliding shoes)
- Simple stationary retainer installed between the ejector plates saves time and machining costs
- All E-Z Lifter™ components in stock
- **Patent No. 5,281,127**



### LIFTER BLANKS

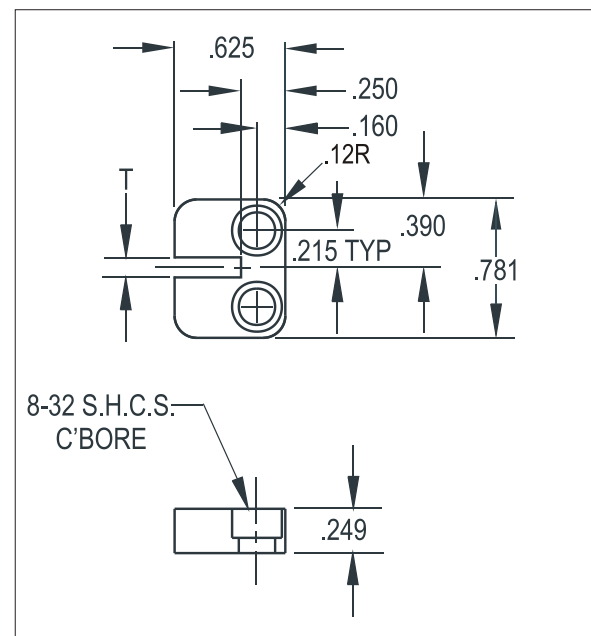
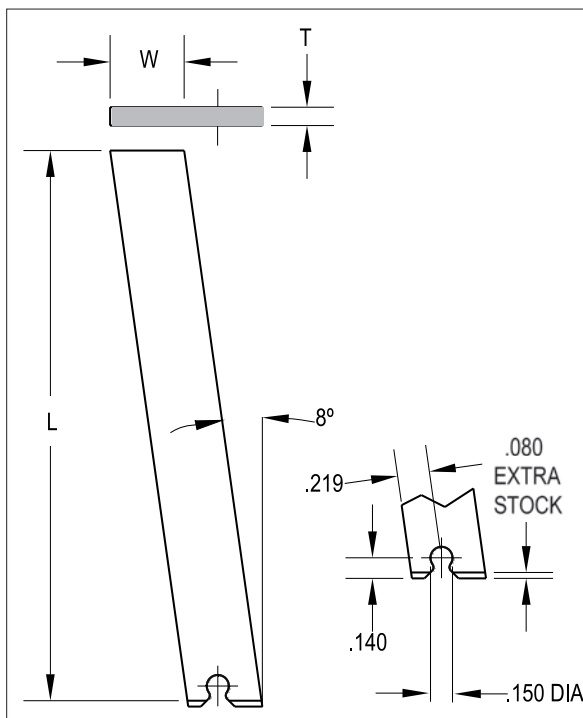
#### LIFTER BLANKS SPECIFICATIONS

Material Type	Pre-Hardened S-7 Steel
Surface Hardness	54 - 56 Rc
Unit of Measure	Inch

### HEEL PLATE

#### HEEL PLATE SPECIFICATIONS

Material Type	A-2
Surface Hardness	40 - 44 Rc
Unit of Measure	Inch



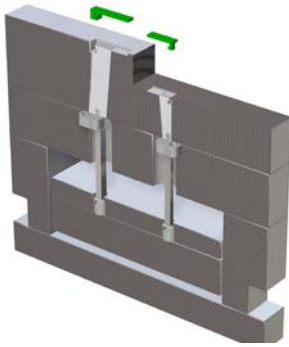
Drilled and counterbored for securing in recessed pocket

### LIFTER BLANKS

CATALOG NO.	T -.0005 -.001	W	L +.060 -.001	COMPATIBLE ACTUATOR
LR-01204M	.1250	.500	3.83	AM10
LR-01804M	.1875	.500	3.83	AM10
LR-02504M	.2500	.500	3.83	AM20

### HEEL PLATES

CATALOG NO.	T +.005 -.000
MHP-100	.103
MHP-200	.203



## E-Z Lifter™ Mini Series

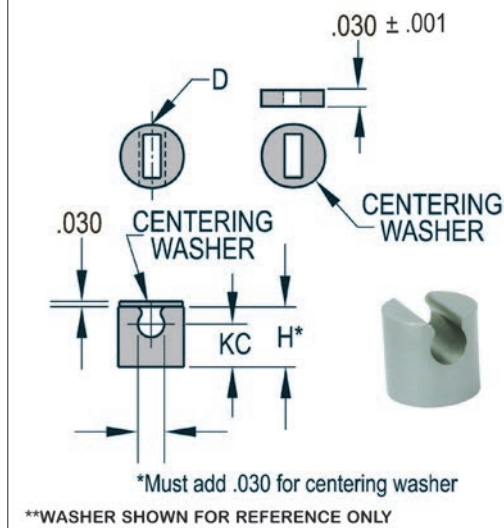
- Smooth pivoting motion inhibits galling and reduces wear
- Design eliminates blow back problems
- Actuators connect lifter blank with retainer
- Available in various lengths
- All E-Z Lifter™ components in stock
- Special actuators available upon request
- **Patent No. 5,281,127**

### RETAINERS

#### RETAINER SPECIFICATIONS

Material Type	Hot Work Tool Steel
Surface Hardness	50 - 52 Rc
Unit of Measure	Inch

### RETAINER



#### RETAINER

CATALOG NO.	H +.002 -.002	KC +.002 -.002	D -.0005 -.0008
HR375RM	.345	.245	.375

### ACTUATORS

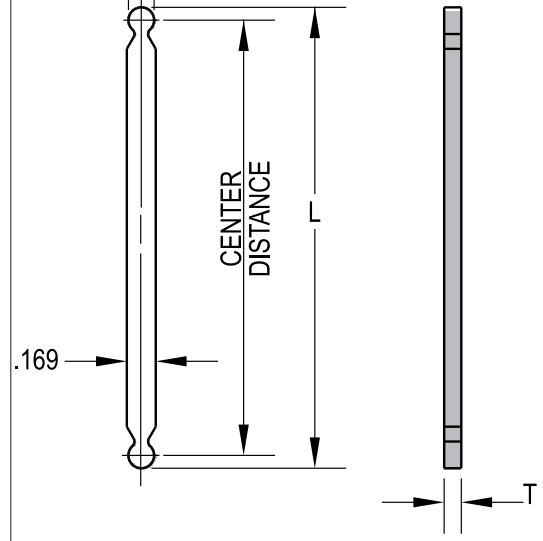
#### ACTUATORS SPECIFICATIONS

Material Type	O-1
Surface Hardness	50 - 52 Rc
Unit of Measure	Inch

#### ACTUATORS

CATALOG NO.		CENTER DISTANCE	L OVERALL LENGTH +.001 / -.001
T = .100	T = .200		
AM10-269	AM20-269	2.542	2.692
AM10-319	AM20-319	3.042	3.192
AM10-369	AM20-369	3.542	3.692
AM10-419	AM20-419	4.042	4.192
AM10-469	AM20-469	4.542	4.692
AM10-519	AM20-519	5.042	5.192

### ACTUATOR



#### CENTERING WASHER

CATALOG NO.	SLOT SIZE
AM10 WASHER	.103 x .220
AM20 WASHER	.203 x .220

Included with actuator & retainer. Can be purchased separately



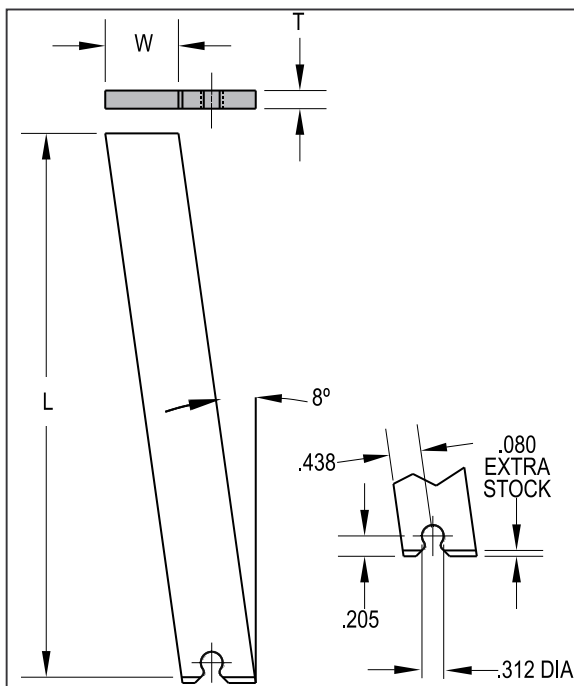
## E-Z Lifter™ Standard Series

- Smooth pivoting motion inhibits galling and reduces wear
- Design eliminates blow back problems
- Heel plates stabilize actuator and act as a positive stop
- Pre-hardened Lifter blanks, no heat treat necessary
- No moving parts in ejector plate (no wear plate assemblies of sliding shoes)
- Simple stationary retainer installed between the ejector plates saves time and machining costs
- All E-Z Lifter™ components in stock
- **Patent No. 5,281,127**



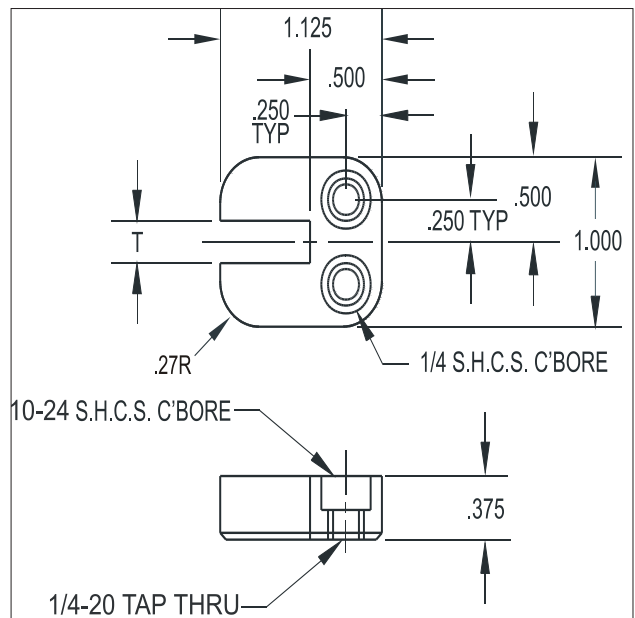
### LIFTER BLANKS

LIFTER BLANKS SPECIFICATIONS	
Material Type	Pre-Hardened S-7 Steel
Surface Hardness	54 - 56 Rc
Unit of Measure	Inch



### HEEL PLATE

HEEL PLATE SPECIFICATIONS	
Material Type	A-2
Surface Hardness	40 - 44 Rc
Unit of Measure	Inch



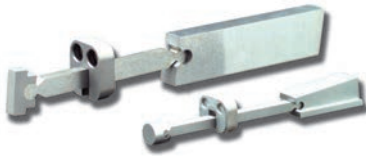
### LIFTER BLANKS

CATALOG NO.	T -.0005 -.001	W	L +.060 -.000	COMPATIBLE ACTUATOR
LR02504	.250	1.000	3.83	A25
LR03804	.375	1.000	3.83	A25
LR05004	.500	1.000	3.83	A25 & A50
LR06204	.625	1.000	3.83	A25 & A50
LR07504	.750	1.250	4.00	A50
LR10004	1.000	1.250	4.00	A50
LR15004	1.500	1.500	4.00	A50

### HEEL PLATES

CATALOG NO.	T +.005 -.000
HP-100	.250
HP-200	.500

# E-Z Lifter™ Standard Series



## ACTUATORS

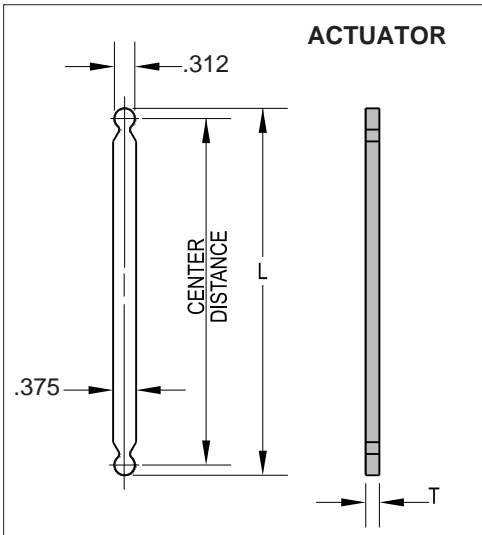
### ACTUATORS SPECIFICATIONS

Material Type	O-1
Surface Hardness	50-52 Rc
Unit of Measure	Inch

### ACTUATORS

CATALOG NO.		CENTER DISTANCE	L OVERALL LENGTH +.001 / -.001
T = .240	T = .490		
A25-325	A50-325*	2.938	3.250
A25-375	A50-375*	3.438	3.750
A25-400	A50-400*	3.688	4.000
A25-425	A50-425*	3.938	4.250
A25-450	A50-450*	4.188	4.500
A25-475	A50-475*	4.438	4.750
A25-525	A50-525*	4.938	5.250

### ACTUATOR



\*Centering washer not used with A50 series actuator

### BLIND POCKET RETAINER

- Designed to be fastened from top with 1/4 SHCS or from the bottom with 5/16 SHCS
- Adjustments may be made by grinding the bottom of retainer

### ROUND RETAINER

- Simplest installation requiring only a drilled and counterbored hole
- ONLY HR625R supplied with a .030" thick centering washer
- Centering washer slot size is .253 x .377
- HR750R Retainer to be used with A50 Actuator

### HEELED RETAINERS

- No fasteners are required - only a heel pocket is necessary for installation

## RETAINERS

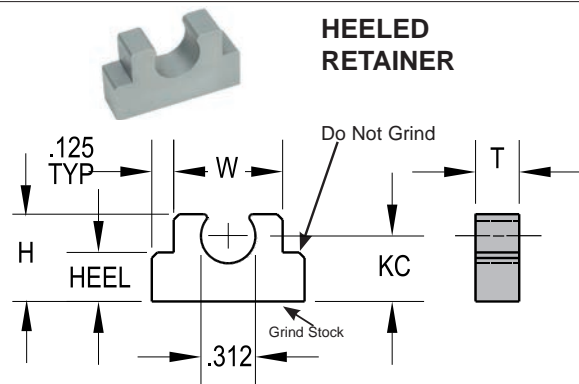
### RETAINER SPECIFICATIONS

Material Type	Hot Work Tool Steel
Surface Hardness	50-52 Rc
Unit of Measure	Inch

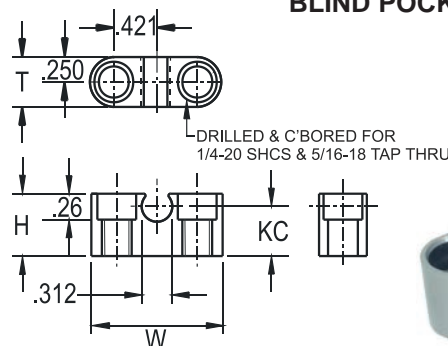
### RETAINER

CATALOG NO.	H +.002 -.002	HEEL	W +.000 -.002	KC +.002 -.002	T +.000 -.002	D -.0005 -.0008
BP-50	.625	-	1.375	.500	.500	-
HR-25	.500	.281	.625	.375	.250	-
HR-50	.625	.406	.750	.500	.500	-
HR625R	.406	-	-	.281	-	.625
HR750R	.406	-	-	.281	-	.750

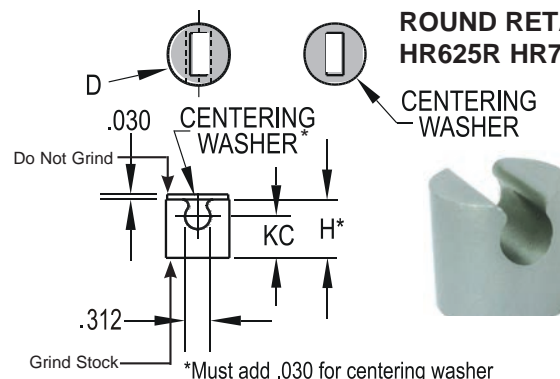
### HEELED RETAINER



### BLIND POCKET RETAINER BP-50



### ROUND RETAINER HR625R HR750R



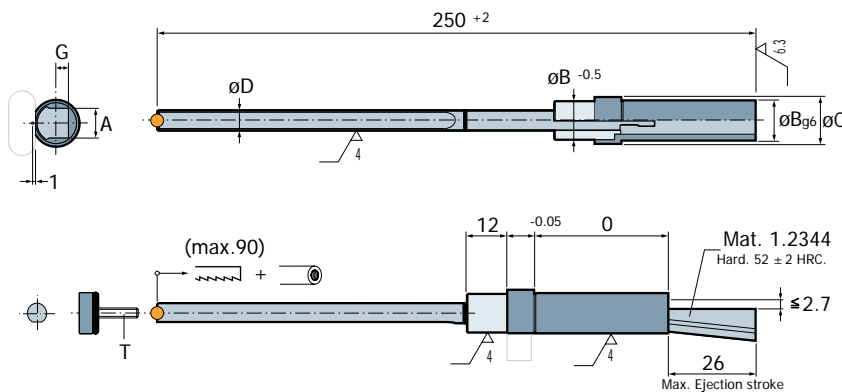
# PCS CUMSA™ Compact Housing Lifters (Limited Availability)

- Used to release small undercuts
- Pre-adjusted base unit and slides
- Undercut and ejection are in the same direction

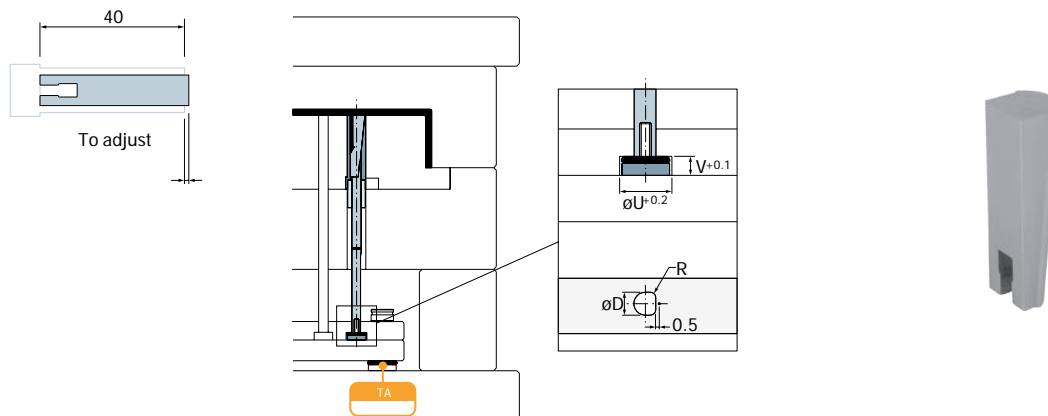
Compact Housing Lifters are used to release small undercuts. This unit is completely pre-adjusted and easy to install. With the vertical movement being perpendicular to the ejector plates, minimum space is required for installation.



SPECIFICATIONS	
Material Type	1.4034
Surface Hardness	48-52 Rc
Unit of Measure	Metric DIN



CATALOG NO.	A	B	C	D	G	T	U	V	R
PS 062250	6.2	10	12	6	3.4	M4X16	12	5	1.25
PS 082250	8.2	12	14	6	4	M4X16	12	5	1.25
PS 102250	10.2	14	16	8	4.2	M5X16	14	6	2
PS 122250	12.2	16	18	8	4.2	M5X17	14	6	2

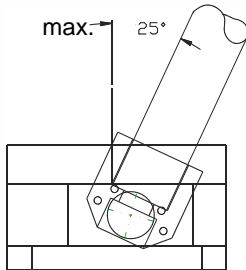


LIFTER REPLACEMENT	FOR
RP 064000	PS 062250
RP 084000	PS 082250
RP104000	PS 102250
RP124000	PS122250

# Trunnion - Lifter Base

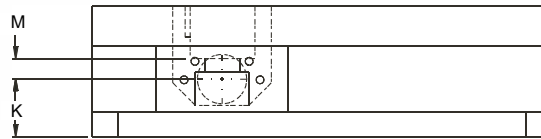
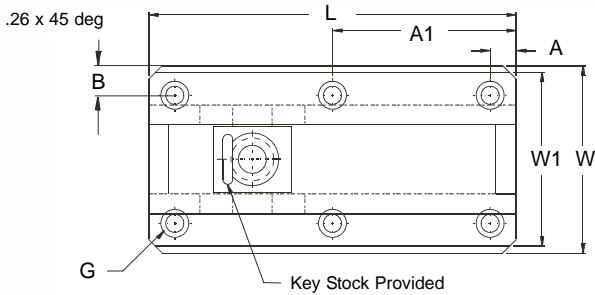
- Grease grooves standard
- Bearing block C954 material
- Designed to be used with PCS Trunnion lifter rods

PCS Trunnion Lifters assist in accommodating movement or action within the mold. Trunnion Lifters reduce the amount of complex machining needed to incorporate a slide, lifter or cam into the mold.

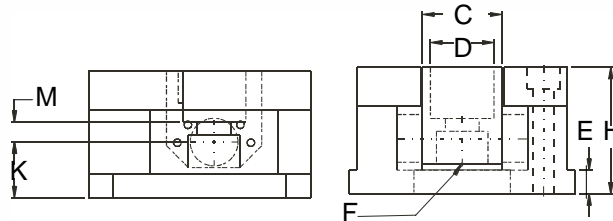
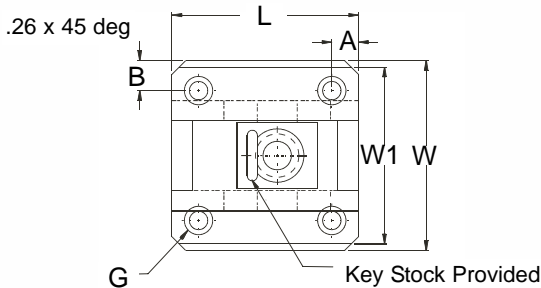


SPECIFICATIONS	
A	0.5
E	0.375
A Tolerance	+ .005 / - .005
E Tolerance	+ .000 / - .005
Material Type	Bearing Block: C954, All other: P20 Steel
Unit of Measure	Inch

REPLACEMENT BEARING BLOCKS	
Assembly	Grease Grooves
TLB-050	BBP-050
TLB-075	BBP-075
TLB-100	BBP-100



Longer travel set



CATALOG NO.	W +.000 -.010	L +.000 -.010	H +.000 -.100	W1 +.000 -.010	A1 +.005 -.005	B +.005 -.005	C	D	F	G	K	M	STROKE
TLB-050	2.190	3.000	1.500	1.940	-	.343	.625	1/2	1/4	10-24	.734	.265	1.5
TLB-075	2.888	3.250	1.750	2.702	-	.363	.875	3/4	3/8	1/4-20	.859	.241	1.5
TLB-075-L	2.888	5.000	1.750	2.700	2	.363	.875	3/4	3/8	1/4-20	.859	.241	3.25
TLB-075-XL	2.888	7.000	1.750	2.700	3.5	.363	.875	3/4	3/8	1/4-20	.859	.241	5.25
TLB-100	3.562	3.500	2.000	3.312	-	.438	1.250	1	1/2	5/16-18	.875	.313	1.5
TLB-100-L	3.562	5.000	2.000	3.312	2.5	.438	1.250	1	1/2	5/16-18	.875	.313	3
TLB-100-XL	3.562	7.000	2.000	3.312	3	.438	1.250	1	1/2	5/16-18	.875	.313	5

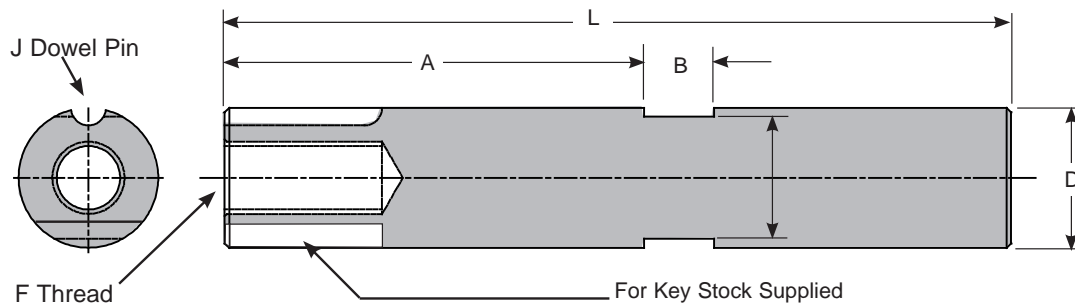
## Trunnion - Lifter Rod

- Hardened steel material
- Designed to be used with PCS Trunnion lifter base

PCS Trunnion Lifters assist in accommodating movement or action within the mold. Trunnion Lifters reduce the amount of complex machining needed to incorporate a slide, lifter or cam into the mold.



SPECIFICATIONS	
Coating	Nitride
Material Type	P20 Steel
Surface Hardness	65 -74 Rc
Unit of Measure	Inch

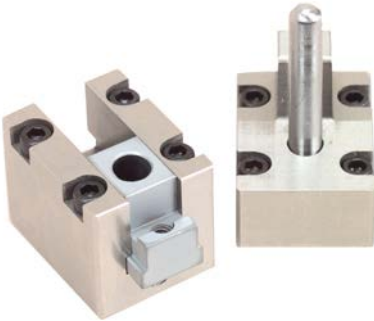


Material: P20 Nitrided

CATALOG NO.	NOMINAL DIAMETER	L +.06 -.00	D +.000 -.001	A +.010 -.010	B +.005 -.0000	C	F	J
LR050-12	1/2	12	.499	2	3/8	3/8	1/4-20	1/8
LR050-18	1/2	18	.499	2	3/8	3/8	1/4-20	1/8
LR075-06	3/4	6	.749	2.5	1/2	5/8	3/8-16	1/4
LR075-12	3/4	12	.749	2.5	1/2	5/8	3/8-16	1/4
LR075-18	3/4	18	.749	2.5	1/2	5/8	3/8-16	1/4
LR075-30	3/4	30	.749	2.5	1/2	5/8	3/8-16	1/4
LR100-06	1	6	.999	3	1/2	7/8	1/2-13	1/4
LR100-12	1	12	.999	3	1/2	7/8	1/2-13	1/4
LR100-24	1	24	.999	3	1/2	7/8	1/2-13	1/4
LR100-36	1	36	.999	3	1/2	7/8	1/2-13	1/4

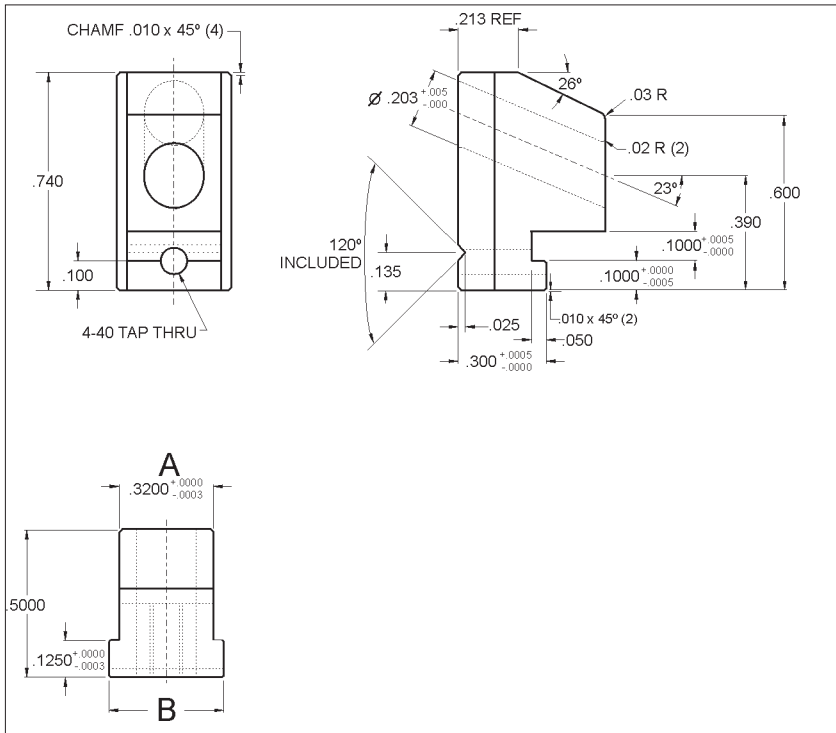
# 100 Series Ready Slide Assemblies

- Armorclad surface treatment on slide
- Reduces lead time
- Easy installation
- Mounting screws provided
- The lubricious properties of the armor coating treatment combined with the qualities of graphitic tool steel (0-6) provide a smooth acting slide system
- Units are finished with grind stock on overall width, bottom of guide shoe, and wedge angle

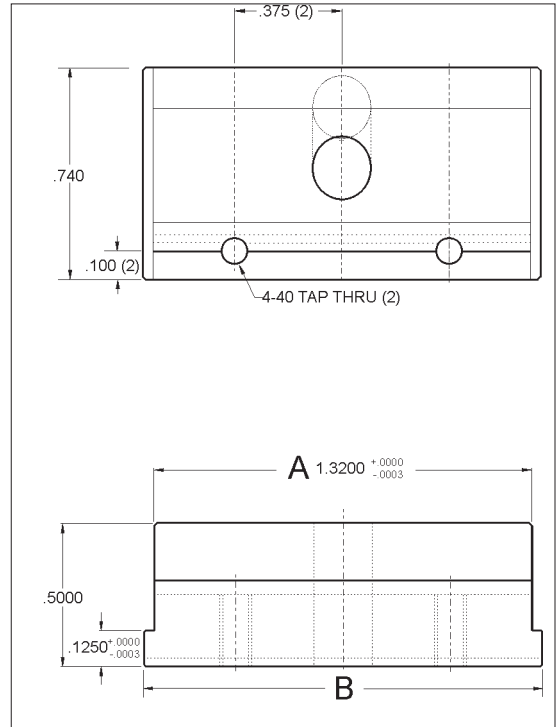


SLIDE SPECIFICATIONS	
Surface Treatment	Armor Coated
Hardness	50 - 52 Rc
Material Type	Hot Work Tool Steel Hardened & Ground
Unit of Measure	Inch

**RSA-101**



**RSA-102**



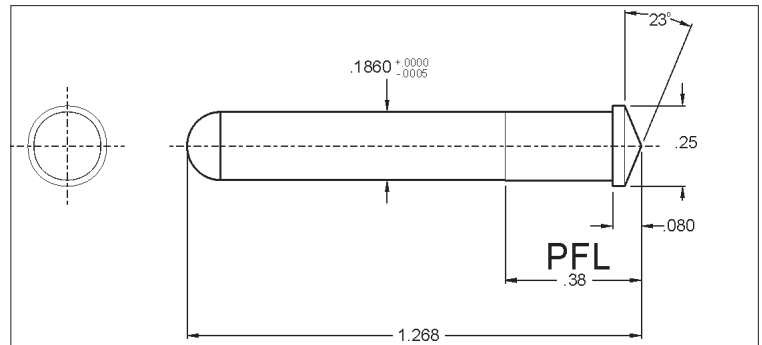
READY SLIDE ASSEMBLY				
CATALOG NO.	OVERALL WIDTH	OVERALL HEIGHT	MAX CAM STROKE	SLIDE HEIGHT
RSA-101	.760	1.190	.250	.500
RSA-102	1.760	1.190	.250	.500

ANGLE PIN	SLIDE			WEDGE				GUIDE SHOE			
CATALOG NO.	CATALOG NO.	A	B	CATALOG NO.	C	D	E	CATALOG NO.	G	H	J
RSA-100-AP	RSA-101-SL	.3200	.390	RSA-101-W	.760	.305	.280	RSA-101-SH	.760	.400	.280
	RSA-102-SL	1.3200	1.390	RSA-102-W	1.760	1.305	.781	RSA-102-SH	1.760	1.400	.781

# 100 Series Ready Slide Assemblies

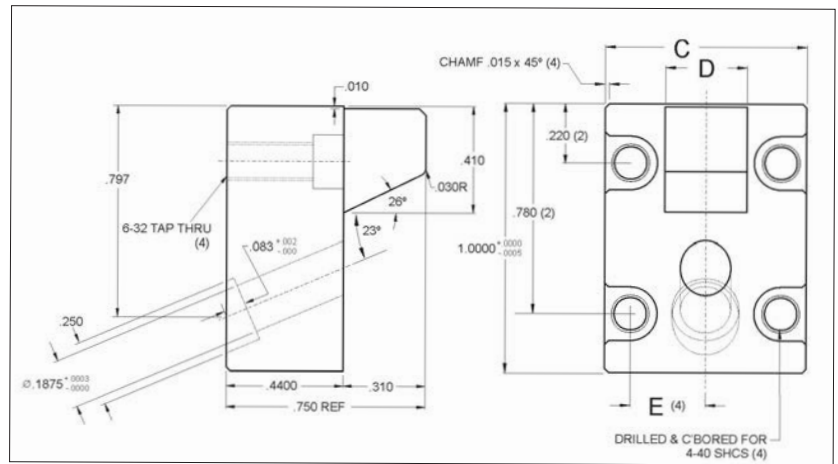
## ANGLE PIN SPECIFICATIONS

Hardness	50 - 52 Rc
Material Type	Hot Work Tool Steel Hardened & Ground
Unit of Measure	Inch



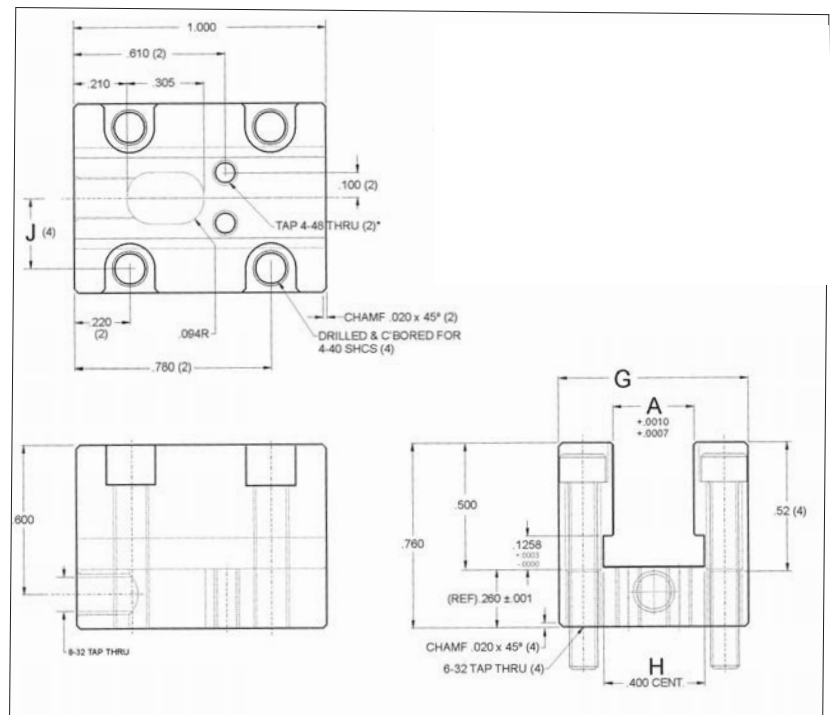
## WEDGE SPECIFICATIONS

Hardness	54 - 56 Rc
Material Type	S-7 Hardened & Ground
Unit of Measure	Inch



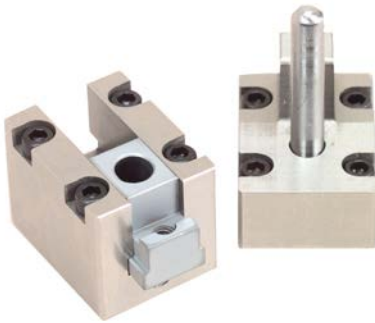
## GUIDE SHOE SPECIFICATIONS

Hardness	54 - 56 Rc
Material Type	06 Hardened & Ground
Unit of Measure	Inch



Note: 4-48 (4) on RSA-102 for spring plunger set screws (provided)

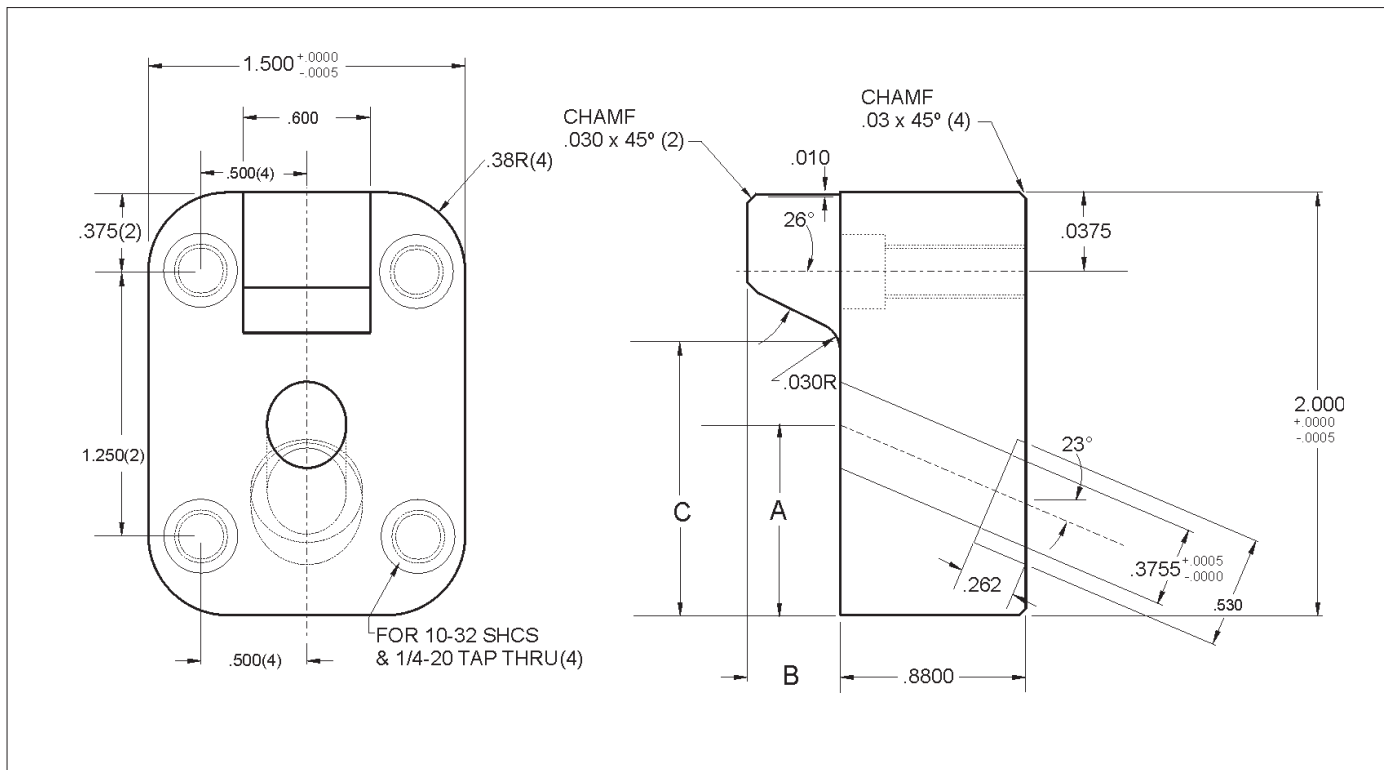
## 200 Series Ready Slide Assemblies



- Armorclad surface treatment on slide
- Reduces lead time
- Easy installation
- Mounting screws provided
- The lubricious properties of the armor coating treatment combined with the qualities of graphitic tool steel (0-6) provide a smooth acting slide system
- Units are finished with grind stock on overall width, bottom of guide shoe, and wedge angle

### WEDGE SPECIFICATIONS

Hardness	54 - 56 Rc
Material Type	S-7 Hardened & Ground
Unit of Measure	Inch



### READY SLIDE ASSEMBLY

### WEDGE

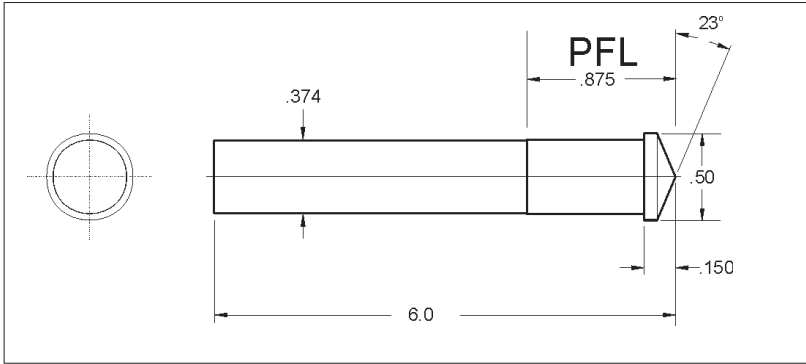
CATALOG NO.	OVERALL WIDTH	OVERALL HEIGHT	MAX CAM STROKE	SLIDE HEIGHT	CATALOG NO.	A	B	C
RSA-201	1.500	1.765	.500	.625	RSA-201-W	.900	.440	1.625
RSA-202	1.500	2.265	.600	.625	RSA-223-W	.690	.620	1.115
RSA-203	1.500	2.765	.600	.625	RSA-223-W	.690	.620	1.115



## 200 Series Ready Slide Assemblies

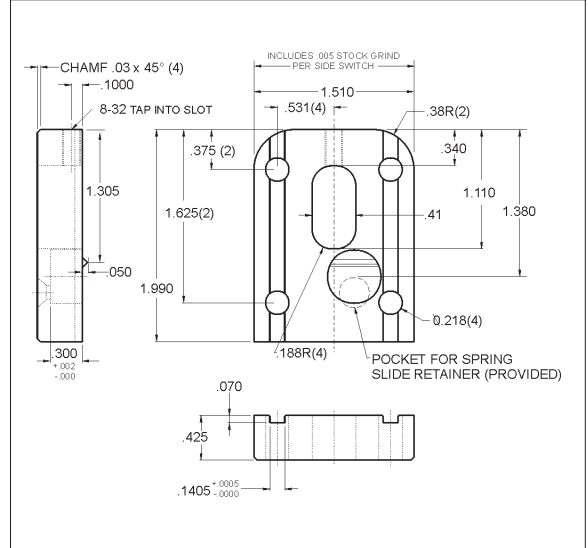
### ANGLE PIN SPECIFICATIONS

Hardness	40 - 42 Rc
Material Type	Hot Work Tool Steel Hardened & Ground
Unit of Measure	Inch



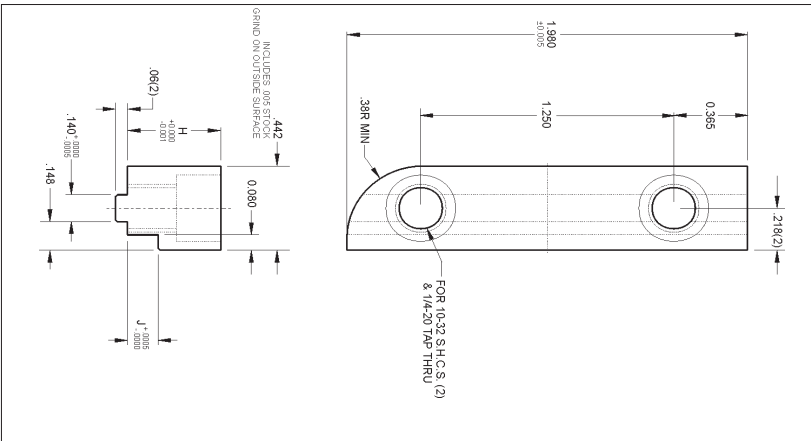
### WEAR PLATE SPECIFICATIONS

Hardness	54 - 56 Rc
Material Type	06 Hardened & Ground
Unit of Measure	Inch



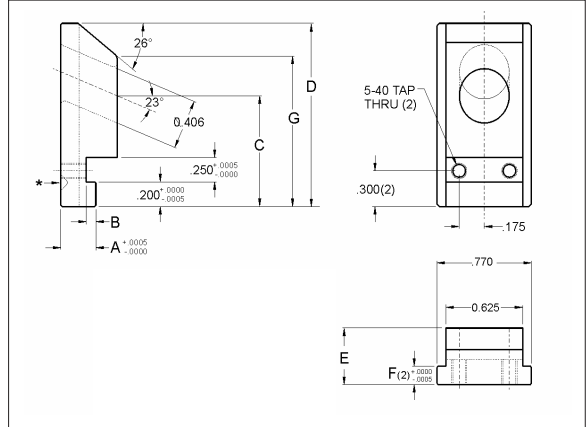
### GUIDE SPECIFICATIONS

Hardness	54 - 56 Rc
Material Type	06 Hardened & Ground
Unit of Measure	Inch



### SLIDE SPECIFICATIONS

Hardness	50 - 52 Rc
Material Type	Hot Work Tool Steel Hardened & Ground
Unit of Measure	Inch



READY SLIDE ASSEMBLY	GUIDE			
	CATALOG NO.		H	J
CATALOG NO.	LEFT GIB	RIGHT GIB		
RSA-201	RSA-201-GL	RSA-201-GR	.460	.151
RSA-202	RSA-202-GL	RSA-202-GR	.960	.188
RSA-203	RSA-203-GL	RSA-203-GR	1.460	.188

READY SLIDE ASSEMBLY	ANGLE PIN	SLIDE	WEAR PLATE							
			CATALOG NO.	A	B	C	D	E	F	G
RSA-201	RSA-200-AP	RSA-201-SL	.285	.080	.900	1.490	.460	.150	1.335	RSA-200-WP
RSA-202		RSA-202-SL	.610	.100	.690	1.390	.960	.187	1.125	
RSA-203		RSA-203-SL	.850	.100	.690	1.390	1.460	.187	1.125	

All mounting screws provided

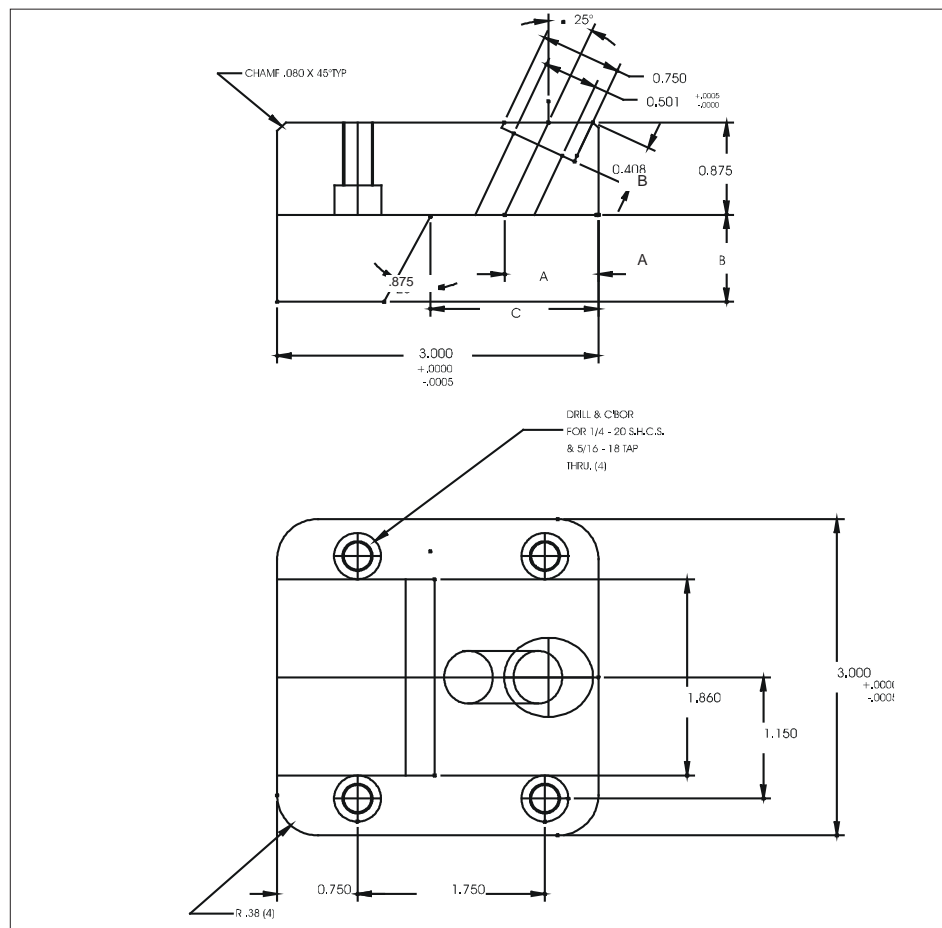
## 300 Series Ready Slide Assemblies



- Armorclad surface treatment on slide
- Reduces lead time
- Easy installation
- Mounting screws provided
- The lubricious properties of the armor coating treatment combined with the qualities of graphitic tool steel (0-6) provide a smooth acting slide system
- Longer guides and wear plate available for longer slide stroke
- Units are finished with grind stock on overall width, bottom of guide shoe, and wedge angle

### WEDGE SPECIFICATIONS

Hardness	54 - 56 Rc
Material Type	S-7 Hardened & Ground
Unit of Measure	Inch

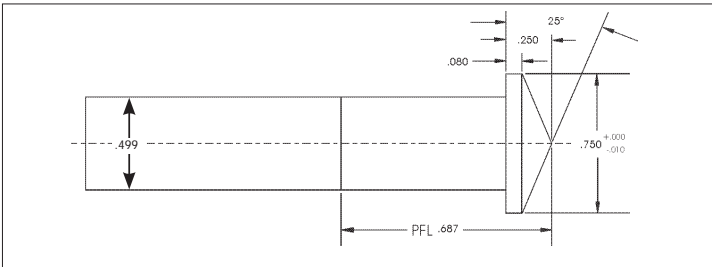


READY SLIDE ASSEMBLY					WEDGE			
CATALOG NO.	OVERALL WIDTH	OVERALL HEIGHT	MAX CAM STROKE	SLIDE HEIGHT	CATALOG NO.	A	B	C
RSA-301	3.000	1.680	1.125	2.000	RSA-301-W	.500	.630	1.660
RSA-302	3.000	2.430	1.000	2.000	RSA-323-W	.820	.880	1.550
RSA-303	3.000	2.930	1.000	2.000	RSA-323-W	.820	.880	1.550

# 300 Series Ready Slide Assemblies

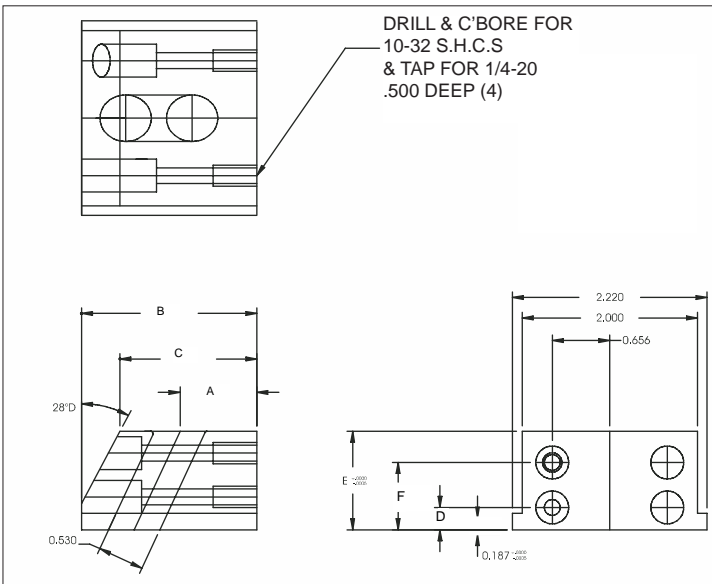
## ANGLE PIN SPECIFICATIONS

Hardness	40 - 42 Rc
Material Type	Hot Work Tool Steel Hardened & Ground
Unit of Measure	Inch



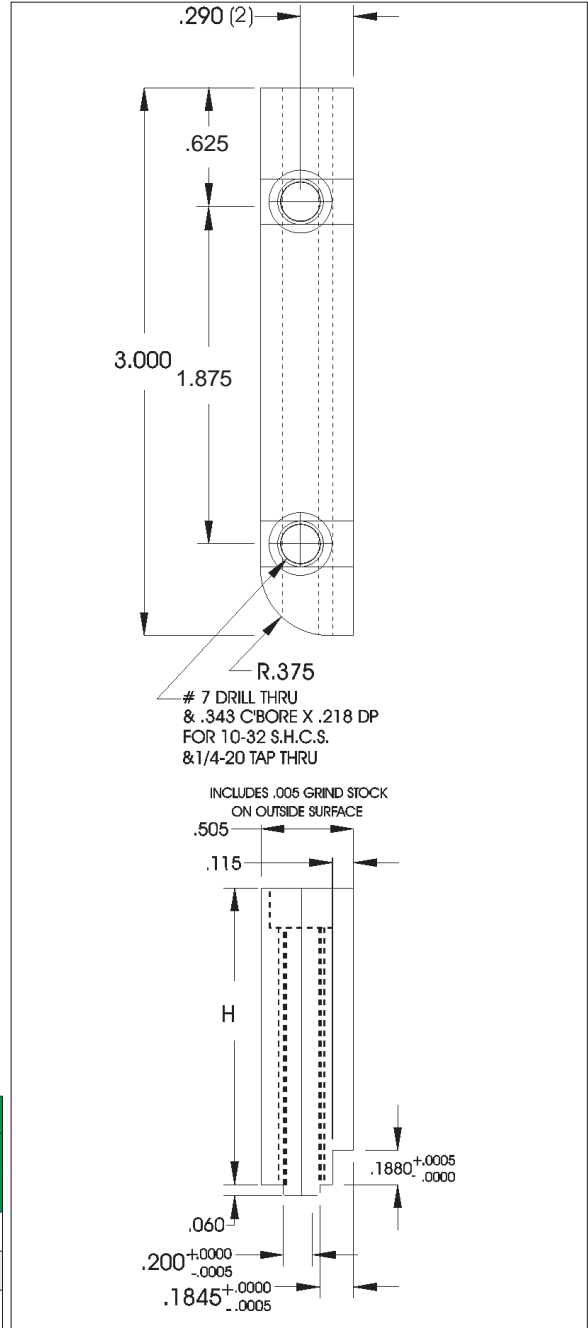
## SLIDE SPECIFICATIONS

Surface Treatment	Armor Coating
Hardness	50 - 52 Rc
Material Type	Hot Work Tool Steel Hardened & Ground
Unit of Measure	Inch



## GUIDE SPECIFICATIONS

Hardness	54 - 56 Rc
Material Type	06 Hardened & Ground
Unit of Measure	Inch



READY SLIDE ASSEMBLY CATALOG NO.	GUIDE CATALOG NO.		H
	LEFT GIB	RIGHT GIB	
RSA-301	RSA-301-GL	RSA-301-GR	.625
RSA-302	RSA-302-GL	RSA-302-GR	1.125
RSA-303	RSA-303-GL	RSA-303-GR	1.625

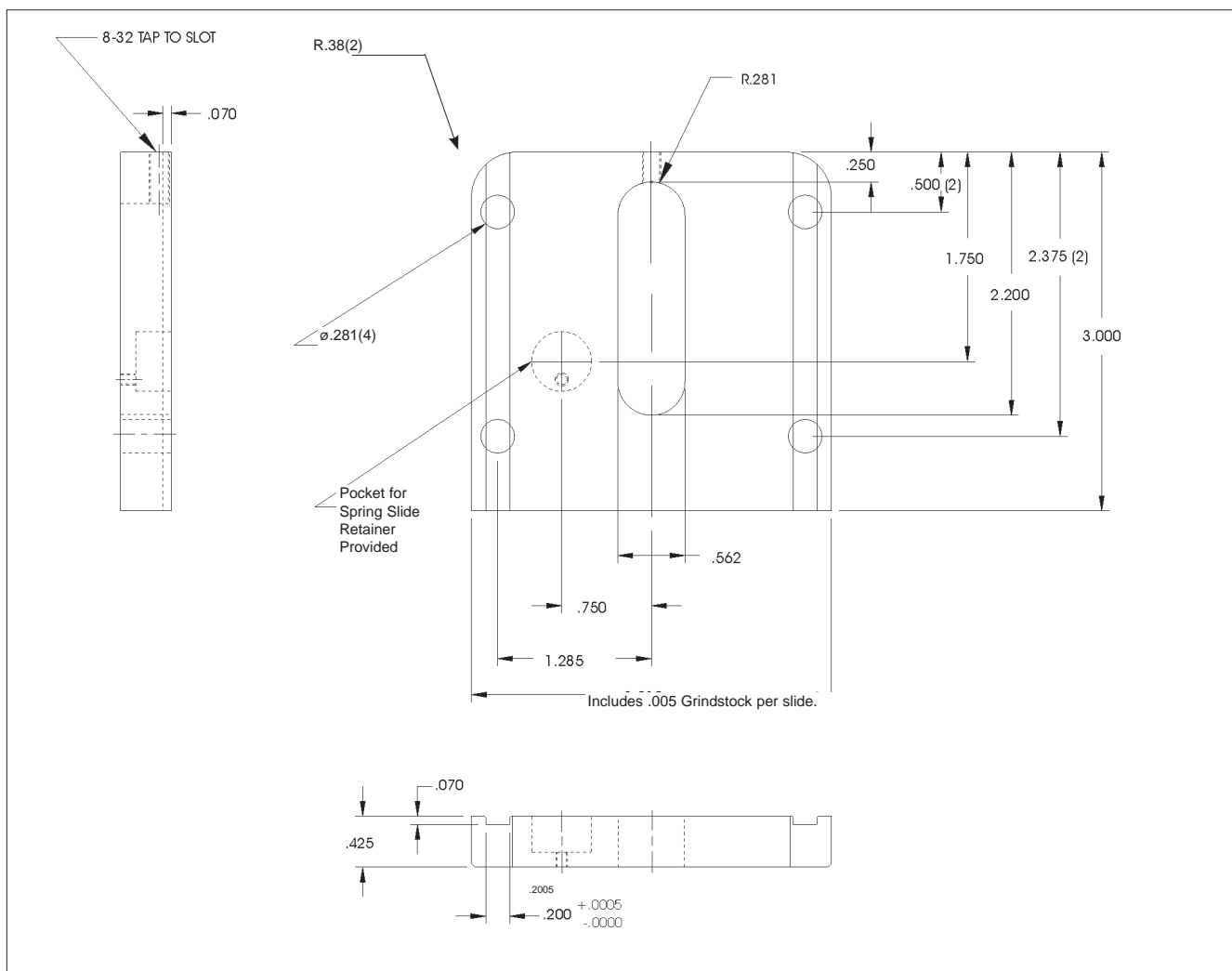
READY SLIDE ASSEMBLY CATALOG NO.	ANGLE PIN CATALOG NO.	SLIDE CATALOG NO.	A	B	C	D	E	F
			RSA-301	RSA-300-AP	RSA-301-SL	.875	1.875	1.671
RSA-302	RSA-302-SL	.875	2.000		1.562	.375	1.125	.875
RSA-303	RSA-303-SL	.875	2.000		1.562	.531	1.625	1.225

All mounting screws provided

# 300 Series Ready Slide Assemblies



WEAR PLATE SPECIFICATIONS	
Hardness	54 - 56 Rc
Material Type	06 Hardened & Ground
Unit of Measure	Inch



READY SLIDE ASSEMBLY	WEAR PLATE
CATALOG NO.	CATALOG NO.
RSA-301	RSA-300-WP
RSA-302	
RSA-303	

All mounting screws provided

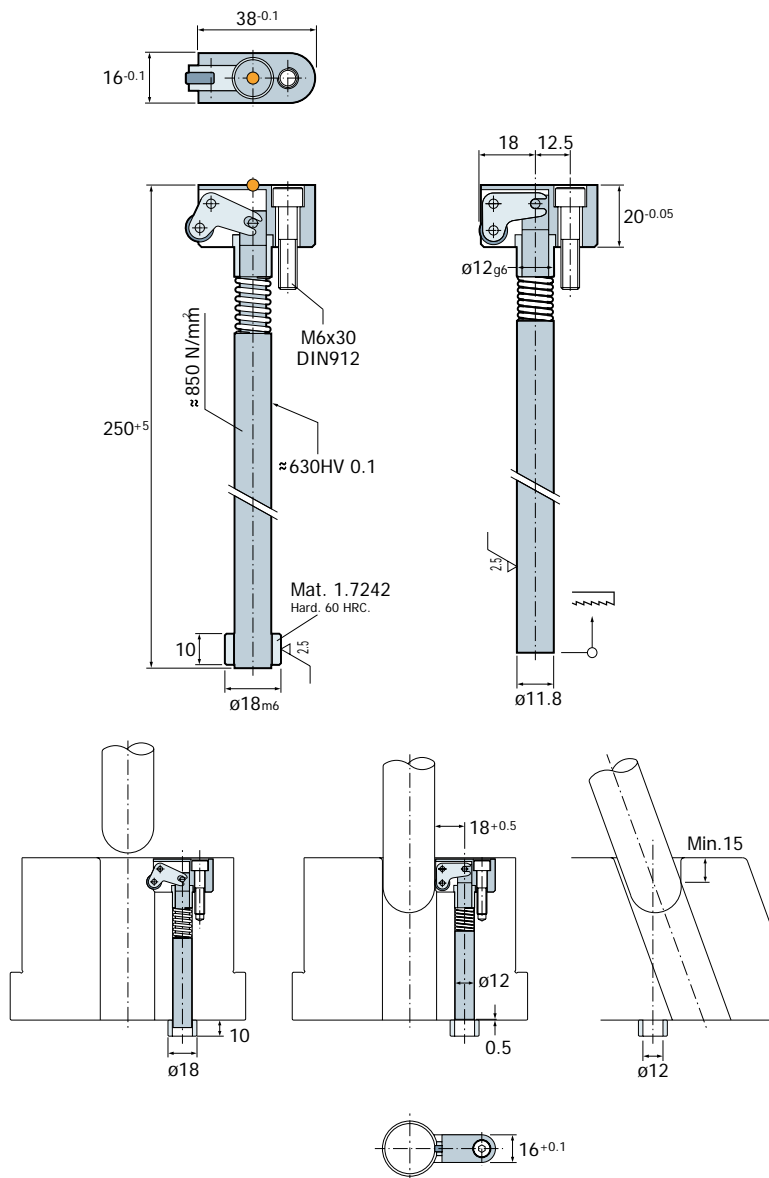
# PCS CUMSA™ Auto Slide Retainer (Limited Availability)

- Reduce costs in machining and fitting
- Retention of cam slides up to 2.000 Kg
- Offers a standard solution for molders

The Auto Slide Retainer eliminates the need for complex retaining and expensive hydraulic systems. This retainer is for large slides and is actuated by the angle pin, ensuring smooth and easy movement with no excess force required.



SPECIFICATIONS	
Hardness	54 - 58 HRC
Material Type	1.2510
Unit of Measure	Metric DIN



CATALOG NO.
RA 163812

Note: Cut the rod 0.5 mm shorter than the slide height

Phone: 800-521-0546 E-mail: sales@pcs-company.com Fax: 800-505-3299  
www.pcs-company.com

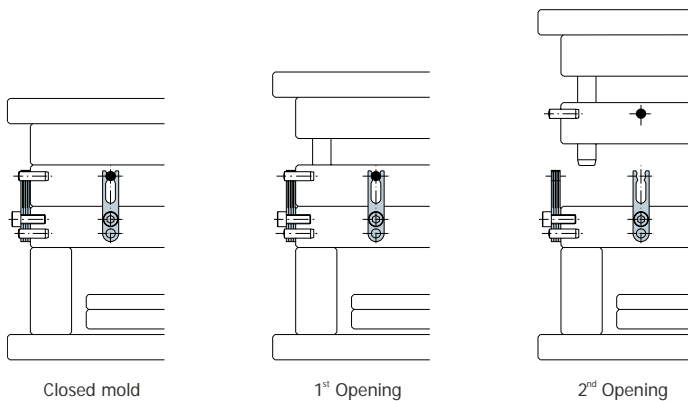
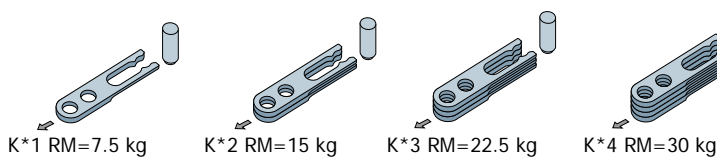
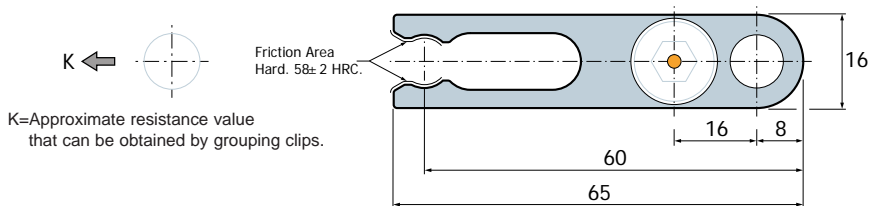
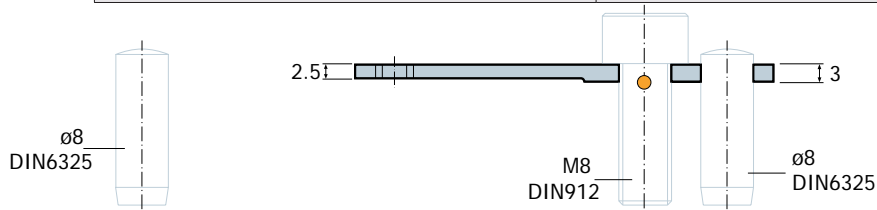
# PCS CUMSA™ Modular Retainers (*Limited Availability*)



- No pocket machining required
- Minimum space required for installation
- Reduces costs compared to conventional mechanisms
- Clip grouping allows for increased resistance

The Modular Retainer assists in proper mold opening when a floating plate is present. As the mold opens, increased resistance is added to the floating plate to facilitate proper mold opening. Multiple Modular Retainers can be used to add even more resistance.

SPECIFICATIONS	
Approximate Resistance Value	7.5 kg / 16.5 lb
Hardness	42 - 48 Rc
Material Type	1.8159
Unit of Measure	Metric DIN



CATALOG NO.	K1	K2	K3	K4
RM 651608	7.5 kg	15 kg	22.3 kg	30 kg

## Slide Retainers

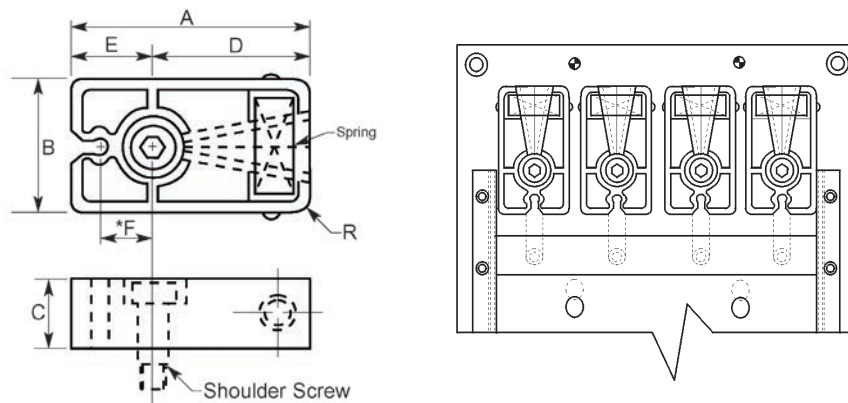
- Compact, economical and positive acting slide retention
- Can be installed in new molds or retrofitted to existing molds
- Installed behind or below slide, eliminating interference with machine tie bars or safety gates
- Multiple units can be used for large or heavy slides

PCS Slide Retainers are compact and provide positive acting slide retention. Slide Retainers are installed behind or below the slide which eliminates interference with machine tie bars. Multiple units can be used together to provide retention for larger slides.

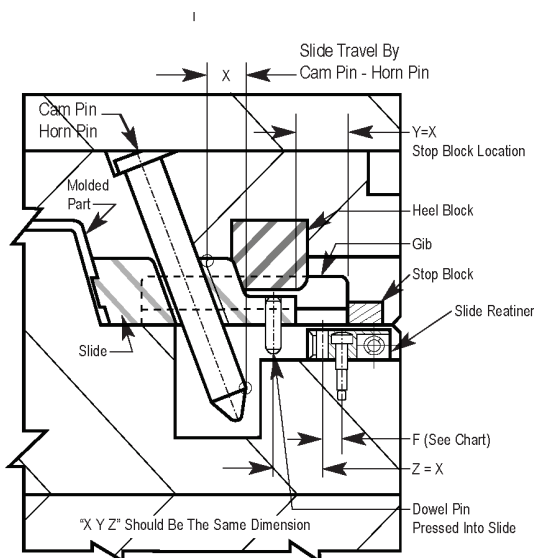
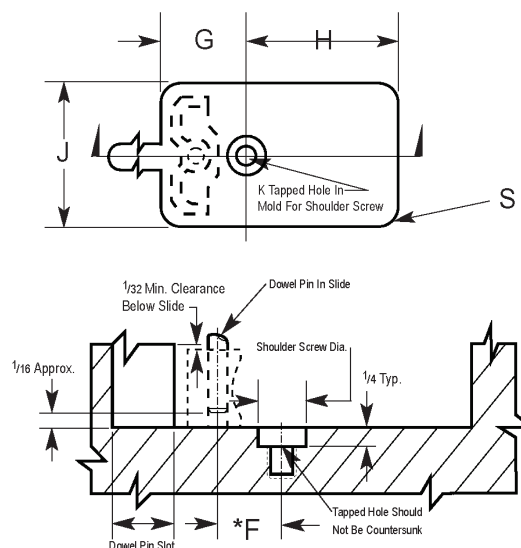


SPECIFICATIONS	
Material Type	8620 Alloy
Unit of Measure	Inch

QTY.	SLIDE RETAINER	SLIDE WEIGHT
1	SRP-22	22 LBS
2	SRP-22	44 LBS
1	SRP-44	44 LBS
2	SRP-44	88 LBS
1	SRP-88	88 LBS
2	SRP-88	176 LBS
4	SRP-88	352 LBS



### MOLD POCKET



Important: The "F" dimension is the distance from the center line of the dowel pin to the center line of the shoulder screw.

CATALOG NO.	A LENGTH	B WIDTH	C HEIGHT	D	E	*F	DOWEL PIN	G	H	J	K TAPPED HOLE	SHOULDER SCREW	S
SRP-22	1-1/2	3/4	.63	.89	.61	.360	1/4 X 1-1/4	.73	1.01	1.00	10-24 X 1/2	1/4 X 5/8	0.19
SRP-44	2-1/8	1-1/4	.79	1.31	.81	.500	5/16 X 1-1/2	.93	1.50	1.50	1/4-20 X 1/2	5/16 X 3/4	0.25
SRP-88	3-3/8	1-3/4	1.18	2.08	1.3	.800	3/8 X 2-1/4	1.42	2.20	2.00	5/16-18 X 5/8	3/8 X 1	0.38

## PCS CUMSA™ Slide Retainers (*Limited Availability*)

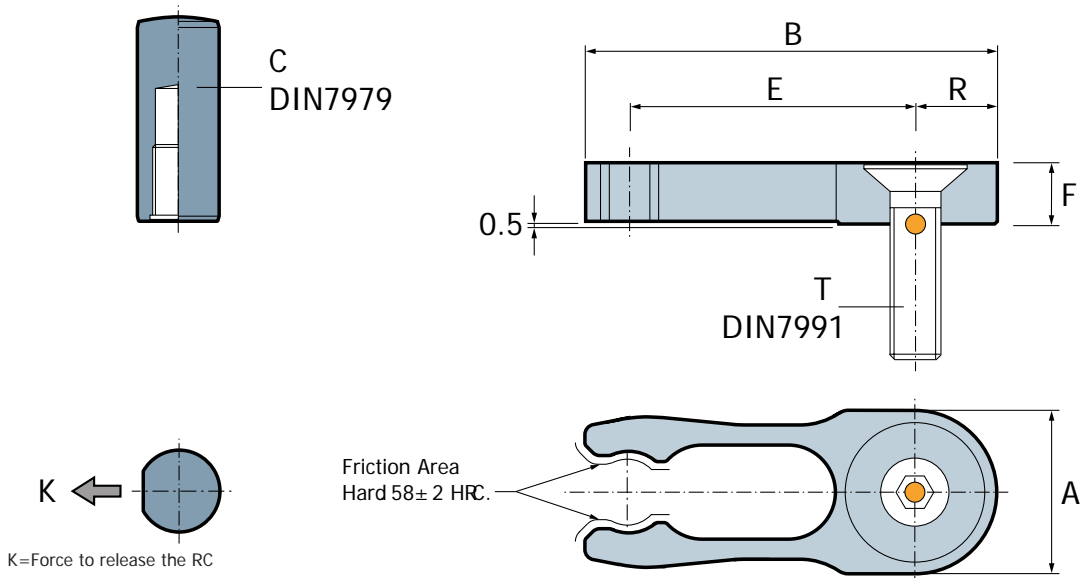
- Simple Compact Design
- Easy Installation
- Minimal space required for installation and access
- Maximum working temperature of 150°C



CUMSA Slide Retainers mechanically hold a slide in the retracted position upon mold opening. Less machining is required for installation when compared with similar products, reducing costs and downtime.

### SPECIFICATIONS

Hardness	42 - 48 Rc
Material Type	1.8159
Unit of Measure	Metric DIN



CATALOG NO.	A	B	C	E	F	G	H	K	MAX WEIGHT	R	T
RC 123006	12	30	6 X 20	21	5	4	16	5 Kg.	4 Kg.	6	M5 X 0.80 X 0.16"
RC 164008	16	40	8 X 20	28	6	5	15	7 Kg.	6 Kg.	8	M6 X 1.00 X 0.25"
RC 205010	20	50	10 X 24	34	8	6	17	14 Kg.	12 Kg.	10	M8 X 1.25 X 0.30"
RC 246012	24	60	12 X 32	42	10	7	23	21 Kg.	18 Kg.	12	M10 X 1.50 X 0.40"
RC 328012	32	80	16 X 40	56	12	9	27	28 Kg.	25 Kg.	16	M12 X 1.75 X 0.50"
RC 328016	32	80	16 X 40	56	16	9	25	38 Kg.	32 Kg.	16	M12 X 1.75 X 0.50"



## Slide Latch

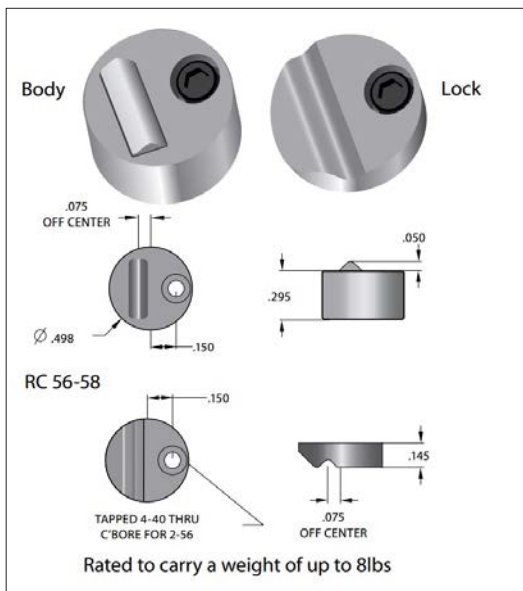
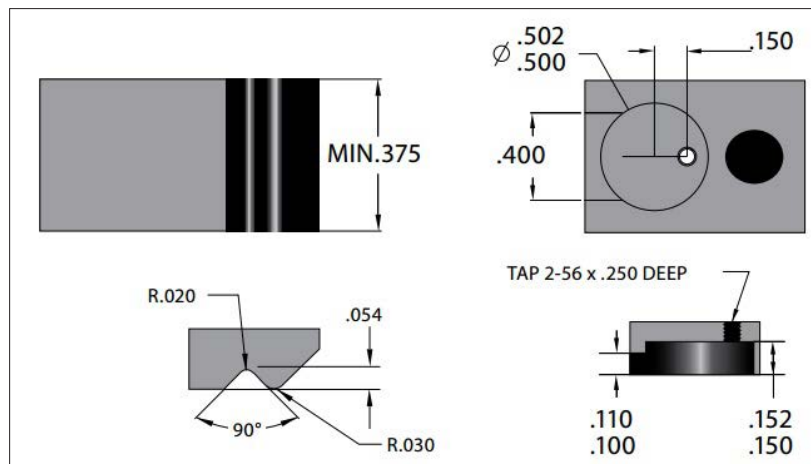
- Designed to prevent slipping of slide within the mold base
- Small footprint
- Holds rated weight without the use of hydraulics
- Provides slide retention
- Easily retrofitted into molds with existing slides
- 3 sizes available

The Slide Latch is designed to provide slide retention within the mold base. Three sizes are available, each holding its rated weight without the use of hydraulics. The Slide Latch can be used within new molds as well as retrofitted into molds with existing slides.

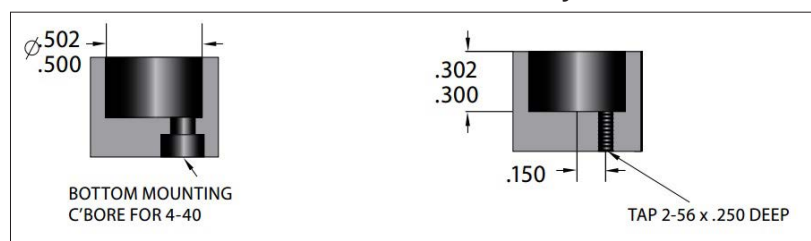


SPECIFICATIONS	
Material Type	D-2
Hardness	56 - 58 Rc
Unit of Measure	Inch

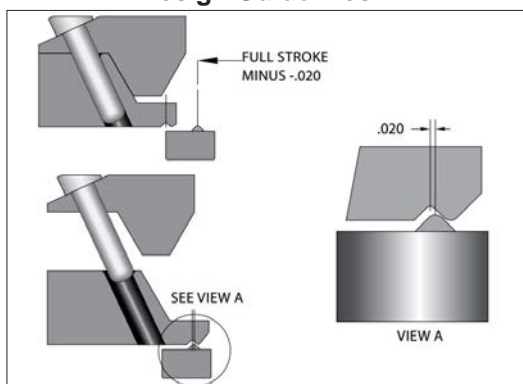
### Installation Instructions- Lock



### Installation Instructions- Body



### Design Guidelines



CATALOG NO.	DESCRIPTION
SLK-8A	Complete Assembly
SLK-8SP	Replacement Spring

Continued on next page

# Slide Latch

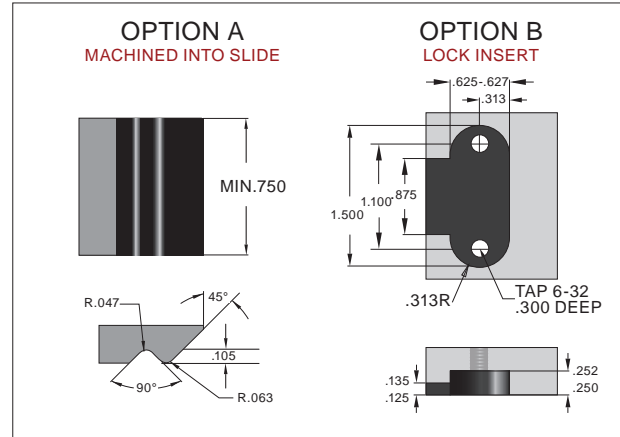
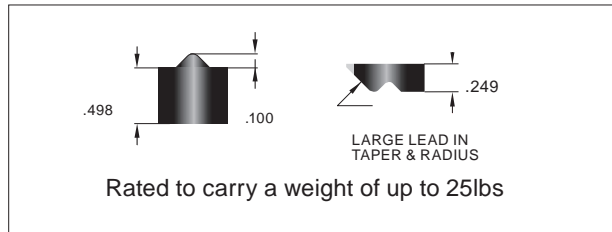


- Designed to prevent slipping of slide within the mold base
- Small footprint
- Holds rated weight without the use of hydraulics
- Provides slide retention
- Easily retrofitted into molds with existing slides
- 3 sizes available

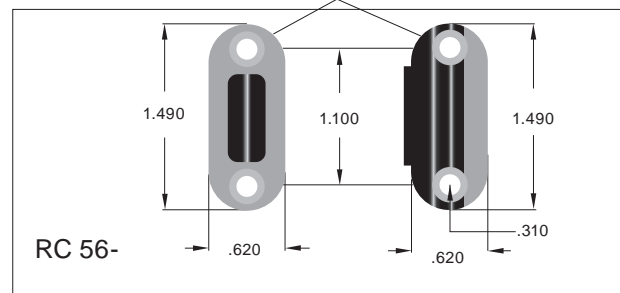
The Slide Latch is designed to provide slide retention within the mold base. Three sizes are available, each holding its rated weight without the use of hydraulics. The Slide Latch can be used within new molds as well as retrofitted into molds with existing slides.

SPECIFICATIONS	
Material Type	D-2
Hardness	56 - 58 Rc
Unit of Measure	Inch

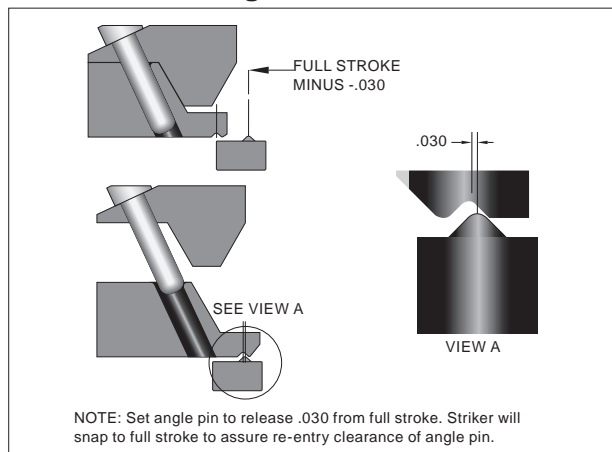
## Installation Instructions - Lock



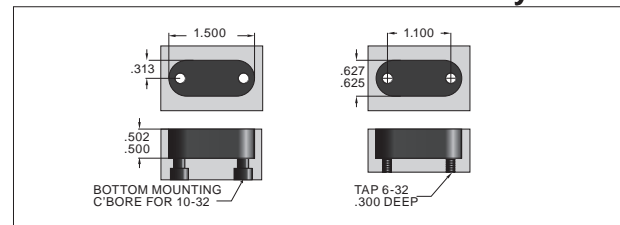
TAPPED 10-32 FOR BOTTOM MOUNTING  
C'BORE 6-32 SHCS FOR TOP MOUNTING



## Design Guidelines



## Installation Instructions - Body



CATALOG NO.	DESCRIPTION
SLK-25A	Complete Assembly
SLK-25SP	Replacement Spring

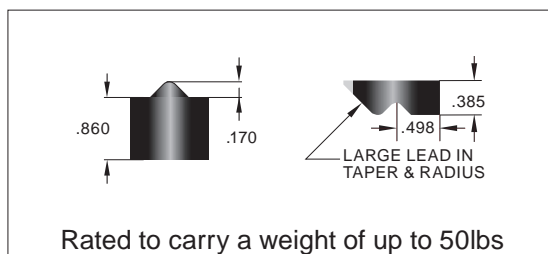
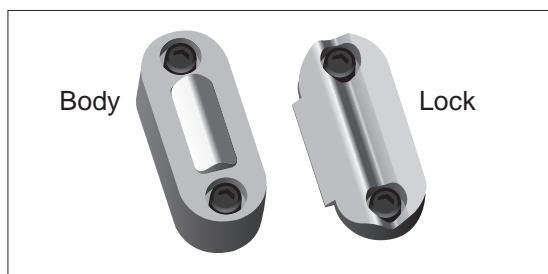
## Slide Latch

- Designed to prevent slipping of slide within the mold base
- Small footprint
- Holds rated weight without the use of hydraulics
- Provides slide retention
- Easily retrofitted into molds with existing slides
- 3 sizes available

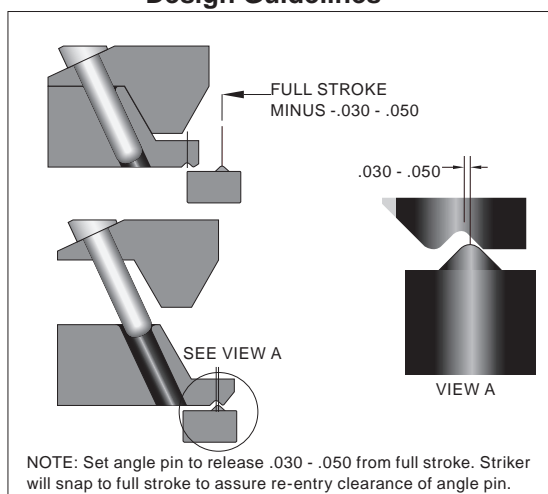
The Slide Latch is designed to provide slide retention within the mold base. Three sizes are available, each holding its rated weight without the use of hydraulics. The Slide Latch can be used within new molds as well as retrofitted into molds with existing slides.



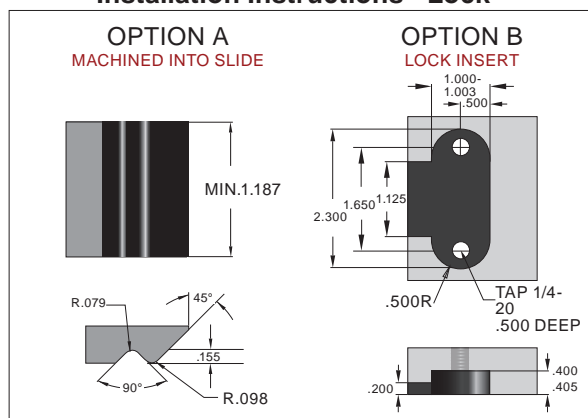
SPECIFICATIONS	
Material Type	D-2
Hardness	56 - 58 Rc
Unit of Measure	Inch



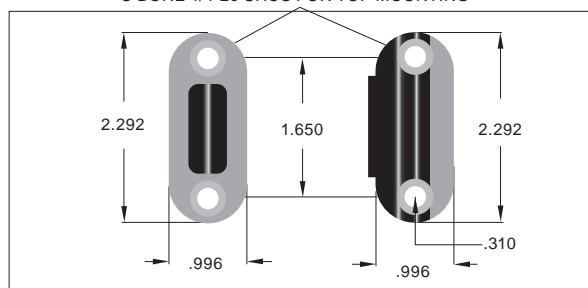
### Design Guidelines



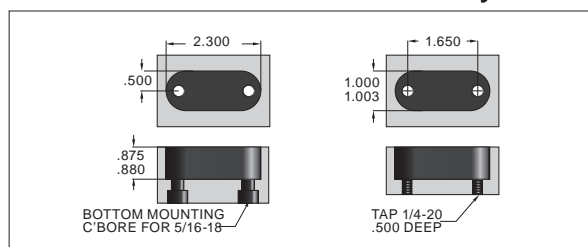
### Installation Instructions - Lock



TAPPED 5/16-18 FOR BOTTOM MOUNTING  
C'BORE 1/4-20 SHCS FOR TOP MOUNTING



### Installation Instructions - Body



CATALOG NO.	DESCRIPTION
SLK-50A	Complete Assembly
SLK-50SP	Replacement Spring

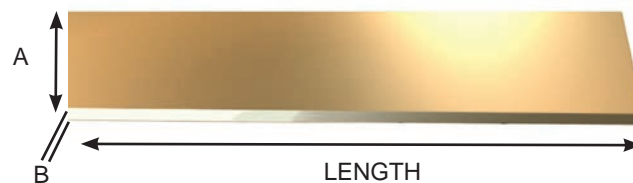
## Bronze Plated Wear Plate - Inch

- Ground top & bottom
- Machined edges
- Cut to Length - 1/2" increments
- Priced per inch
- In order to be flat this material must be fastened down to a flat mounting surface
- Exact lengths available up to 48"
- Not available for purchase online



Bronze Plated Wear Plate is used to reduce wear and give added support to moving components within a mold. PCS Bronze Plated Wear Plate is sold by the inch and cut to customer specified lengths up to 48".

SPECIFICATIONS	
Bronze Plating Thickness	.008 - .010
Material Type	Bronze Plated Steel
Unit of Measure	Inch



A WIDTH +.000 -.060	B THICKNESS +.002 / -.002								
	1/8"	3/16"	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	1"
1	FP09-1000	FP13-1000	FP17-1000	FP21-1000	FP25-1000	FP33-1000	FP37-1000	FP41-1000	FP47-1000
1-1/4	FP09-1250	FP13-1250	FP17-1250	FP21-1250	FP25-1250	FP33-1250	FP37-1250	FP41-1250	FP47-1250
1-1/2	FP09-1500	FP13-1500	FP17-1500	FP21-1500	FP25-1500	FP33-1500	FP37-1500	FP41-1500	FP47-1500
1-3/4	FP09-1750	FP13-1750	FP17-1750	FP21-1750	FP25-1750	FP33-1750	FP37-1750	FP41-1750	FP47-1750
2	FP09-2000	FP13-2000	FP17-2000	FP21-2000	FP25-2000	FP33-2000	FP37-2000	FP41-2000	FP47-2000
2-1/2	FP09-2500	FP13-2500	FP17-2500	FP21-2500	FP25-2500	FP33-2500	FP37-2500	FP41-2500	FP47-2500
3	FP09-3000	FP13-3000	FP17-3000	FP21-3000	FP25-3000	FP33-3000	FP37-3000	FP41-3000	FP47-3000
3-1/2	FP09-3500	FP13-3500	FP17-3500	FP21-3500	FP25-3500	FP33-3500	FP37-3500	FP41-3500	FP47-3500
4	FP09-4000	FP13-4000	FP17-4000	FP21-4000	FP25-4000	FP33-4000	FP37-4000	FP41-4000	FP47-4000
4-1/2	FP09-4500	FP13-4500	FP17-4500	FP21-4500	FP25-4500	FP33-4500	FP37-4500	FP41-4500	FP47-4500
5	FP09-5000	FP13-5000	FP17-5000	FP21-5000	FP25-5000	FP33-5000	FP37-5000	FP41-5000	FP47-5000
6	FP09-6000	FP13-6000	FP17-6000	FP21-6000	FP25-6000	FP33-6000	FP37-6000	FP41-6000	FP47-6000
8		FP13-8000	FP17-8000	FP21-8000	FP25-8000	FP33-8000	FP37-8000	FP41-8000	FP47-8000
10			FP17-10000	FP21-10000	FP25-10000	FP33-10000	FP37-10000	FP41-10000	FP47-10000
12			FP17-12000	FP21-12000	FP25-12000	FP33-12000	FP37-12000	FP41-12000	FP47-12000

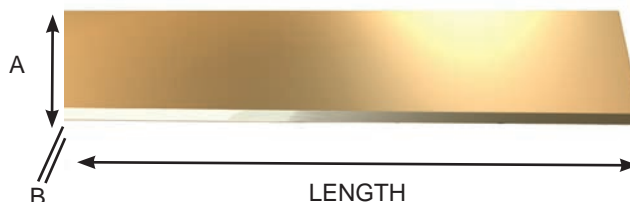
## Bronze Plated Wear Plate - Metric

- Ground top & bottom
- Machined edges
- Cut to Length - 1/2" increments
- Priced per inch
- In order to be flat this material must be fastened down to a flat mounting surface.
- Exact lengths available up to 1219 mm (48")
- Not available for purchase online



Metric Bronze Plated Wear Plate is used to reduce wear and give added support to moving components within a mold. PCS Metric Bronze Plated Wear Plate is sold by the inch and cut to customer specified lengths up to 48".

SPECIFICATIONS	
Bronze Plating Thickness	0.20 - 0.25 mm
Material Type	Bronze Plated Steel
Unit of Measure	Metric DIN



A WIDTH +.000 -1.524	B THICKNESS +.000 / -.051 MM						
	4 MM	5 MM	6 MM	8 MM	10 MM	12 MM	15 MM
25 mm (.981)	FPM4-25	FPM5-25	FPM6-25	FPM8-25	FPM10-25		
30 mm (1.181)		FPM5-30	FPM6-30		FPM10-30		
35 mm (1.377)	FPM4-35		FPM6-35		FPM10-40		
40 mm (1.574)	FPM4-40	FPM5-40	FPM6-40		FPM10-50		
50 mm (1.968)			FPM6-50		FPM10-60		
60 mm (2.362)	FPM4-60		FPM6-60	FPM8-60	FPM10-75		
75 mm (2.952)		FPM5-75	FPM6-75	FPM8-75	FPM10-100	FPM12-75	
100 mm (3.937)	FPM4-100	FPM5-100		FPM8-100	FPM10-125	FPM12-100	
125 mm (4.921)				FPM8-125	FPM10-150	FPM12-125	FPM15-125
150 mm (5.905)						FPM12-150	
200 mm (7.874)						FPM12-200	

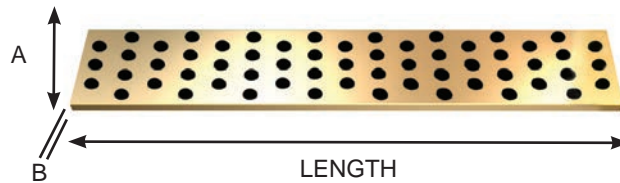
## Self-Lubricating Wear Plate - Inch

- Ground top & bottom
- Machined edges
- Cut to Length - 1/2" increments
- Priced per inch
- Greaseless applications
- In order to be flat this material must be fastened down to a flat mounting surface.
- Exact lengths available up to 48"
- Not available for purchase online



Self-Lubricating Bronze Plated Wear Plate contains graphite plugs and is used to reduce wear and give added support to moving components within a mold. PCS Self-Lubricating Bronze Plated Wear Plate is sold by the inch and cut to customer specified lengths up to 48".

SPECIFICATIONS	
Bronze Plating Thickness	.008 - .010
Material Type	Solid Bronze with graphite plugs
Unit of Measure	Inch



A WIDTH +.000 -.060	B THICKNESS +.002 / -.002				
	1/4"	3/8"	1/2"	3/4"	1"
1	SLFP17-1000	SLFP25-1000	SLFP33-1000	SLFP41-1000	SLFP47-1000
1-1/2	SLFP17-1500	SLFP25-1500	SLFP33-1500	SLFP41-1500	SLFP47-1500
2	SLFP17-2000	SLFP25-2000	SLFP33-2000	SLFP41-2000	SLFP47-2000
2-1/2	SLFP17-2500	SLFP25-2500	SLFP33-2500	SLFP41-2500	SLFP47-2500
3	SLFP17-3000	SLFP25-3000	SLFP33-3000	SLFP41-3000	SLFP47-3000
4	SLFP17-4000	SLFP25-4000	SLFP33-4000	SLFP41-4000	SLFP47-4000
5	SLFP17-5000	SLFP25-5000	SLFP33-5000	SLFP41-5000	SLFP47-5000
6	SLFP17-6000	SLFP25-6000	SLFP33-6000	SLFP41-6000	SLFP47-6000

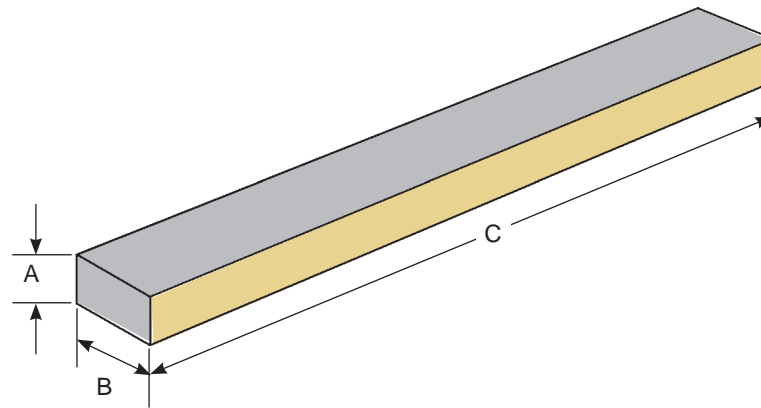
## Side Plates

- Exact lengths available up to 96"
- Cut to Length - 1/2" increments
- Not available for purchase online
- Priced per inch

Side Plates are bronze plated and ground top and bottom. These plates are sold by the inch and cut to customer specified lengths.



SPECIFICATIONS	
Material Type	Bronze Plated Steel
Unit of Measure	Inch



B WIDTH +.000 -.005	A THICKNESS -.018 / -.020						
	1/2"	5/8"	3/4"	1"	1-1/4"	1-1/2"	2"
1	SP33-1000	SP37-1000	SP41-1000				
1-1/2	SP33-1500		SP41-1500	SP47-1500			
2		SP37-2000	SP41-2000	SP47-2000	SP125-2000	SP150-2000	SP200-2000
2-1/2							
3				SP47-3000	SP125-3000		

## Standard L-Gibs

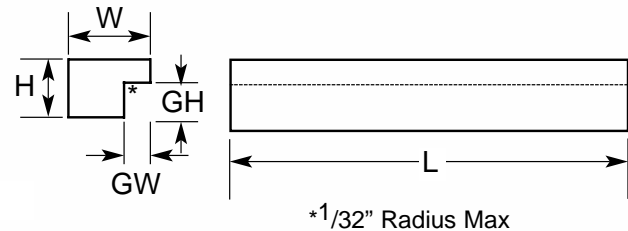
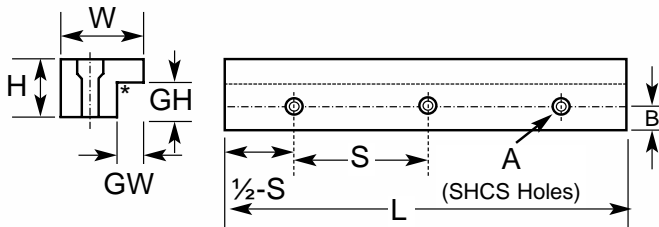
- One-piece construction
- 7 Sizes available
- Available with or without mounting holes

PCS L-Gibs are used to make custom cams and slides. These L-Gibs are made from steel and have been electroplated with bronze. The bronze electroplating gives these components exceptional strength and lubricity.



### SPECIFICATIONS

Plating Thickness	.008 - .010
Material Type	Bronze Plated Steel
Unit of Measure	Inch



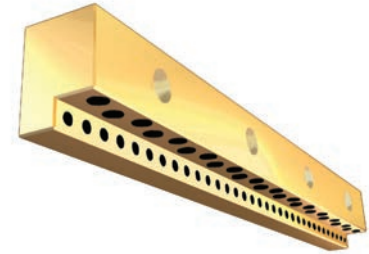
CATALOG NO.	GW GIB WIDTH	GH GIB HEIGHT	W OVERALL WIDTH	H OVERALL HEIGHT	L OVERALL LENGTH	S MOUNTING HOLE SPREAD	NO. OF SCREW HOLES	A MOUNTING HOLE CLEARANCE DIAMETER	B MOUNTING HOLE LOCATION OFF EDGE
L-4-6-3	.1875 (4.76mm)	.3125 (7.94mm)	.750 (19.05mm)	.485 (12.32mm)	5.25 (133mm)	1.75 (44.5mm)	3	.25 (M6)	.28 (7.1mm)
L-4-6-4					7.0 (178mm)		4		
L-4-6-5					8.75 (222mm)		5		
L-4-6-5-NH					8.75 (222mm)	No Mounting Holes			
L-5-8-3	.250 (6.35mm)	.375 (9.53mm)	1.000 (25.4mm)	.610 (15.5mm)	6 (152mm)	2.00 (50.8mm)	3	.31 (M8)	.38 (9.7mm)
L-5-8-5-NH					10 (254mm)				
L-7-10-3	.375 (9.53mm)	.500 (12.7mm)	1.25 (31.75mm)	.860 (21.8)	7.5 (190mm)	2.50 (63.5mm)	3	.39 (M10)	.44 (11.2mm)
L-7-10-5-NH					12.5 (317mm)				
L-10-12-5-NH	.500 (12.70mm)	.750 (19.05mm)	1.500 (38.1mm)	1.235 (31.4mm)	15 (381mm)	No Mounting Holes			



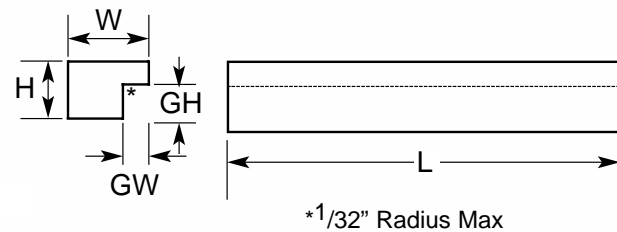
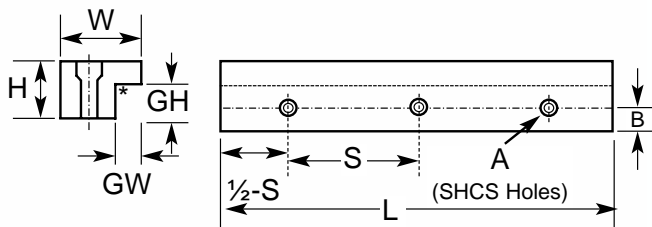
## Self-Lubricating L-Gibs

- One-piece construction
- 7 Sizes available
- Available with or without mounting holes
- Graphite plugs for greaseless applications

PCS Self-Lubricating L-Gibs are used to make custom cams and slides. These L-Gibs are made of solid bronze and contain graphite plugs. The graphite plugs eliminate the need for grease which makes these L-Gibs perfect for medical, food grade or high speed applications.



SPECIFICATIONS	
Plating Thickness	.008 - .010
Material Type	Solid Bronze with graphite plugs
Unit of Measure	Inch

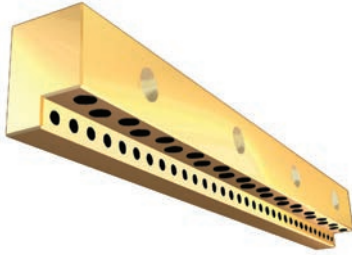


CATALOG NO.	GW GIB WIDTH	GH GIB HEIGHT	W OVERALL WIDTH	H OVERALL HEIGHT	L OVERALL LENGTH	S MOUNTING HOLE SPREAD	NO. OF SCREW HOLES	A MOUNTING HOLE CLEARANCE DIAMETER	B MOUNTING HOLE LOCATION OFF EDGE
SLL-4-6-5	.1875 (4.76mm)	.3125 (7.94mm)	.750 (19.05mm)	.485 (12.32mm)	8.75 (222mm)	1.75 (44.5mm)	5	.25 (M6)	.28 (7.1mm)
SLL-4-6-5-NH					8.75 (222mm)	No Mounting Holes			
SLL-5-8-5	.250 (6.35mm)	.375 (9.53mm)	1.000 (25.4mm)	.610 (15.5mm)	6 (152mm)	2.00 (50.8mm)	5	.31 (M8)	.38 (9.7mm)
SLL-5-8-5-NH					10 (254mm)	No Mounting Holes			
SLL-7-10-5	.375 (9.53mm)	.500 (12.7mm)	1.25 (31.75mm)	.860 (21.8)	7.5 (190mm)	2.50 (63.5mm)	3	.39 (M10)	.44 (11.2mm)
SLL-7-10-5-NH					12.5 (317mm)	No Mounting Holes			
SLL-10-12-5	.500 (12.70mm)	.750 (19.05mm)	1.500 (38.1mm)	1.235 (31.4mm)	15 (381mm)	3.00 (76.2mm)	5	.39 (M10)	.50 (12.7mm)
SLL-10-12-5-NH						No Mounting Holes			
SLL-12-16-6	.625 (15.88mm)	.875 (22.23mm)	2.000 (50.8mm)	1.470 (37.3mm)	16.0 (406mm)	4.00 (101.6mm)	6	.50 (M12)	.69 (17.5mm)
SLL-12-16-6-NH					16.0 (406mm)	No Mounting Holes			
SLL-16-20-8-NH	.750 (19.05mm)	1.250 (31.75mm)	2.500 (63.5mm)	1.470 (37.3mm)	32.0 (813mm)	No Mounting Holes			
SLL-20-24-8	1.000 (25.40mm)	1.500 (38.10mm)	3.000 (76.2mm)	2.470 (62.74mm)	24.0 (610mm)	6.00 (152.4mm)	8	.62 (M16)	1.0 (25.4mm)
SLL-20-24-8-NH					48.0 (1219mm)	No Mounting Holes			

## L-Gib for Gib Assemblies

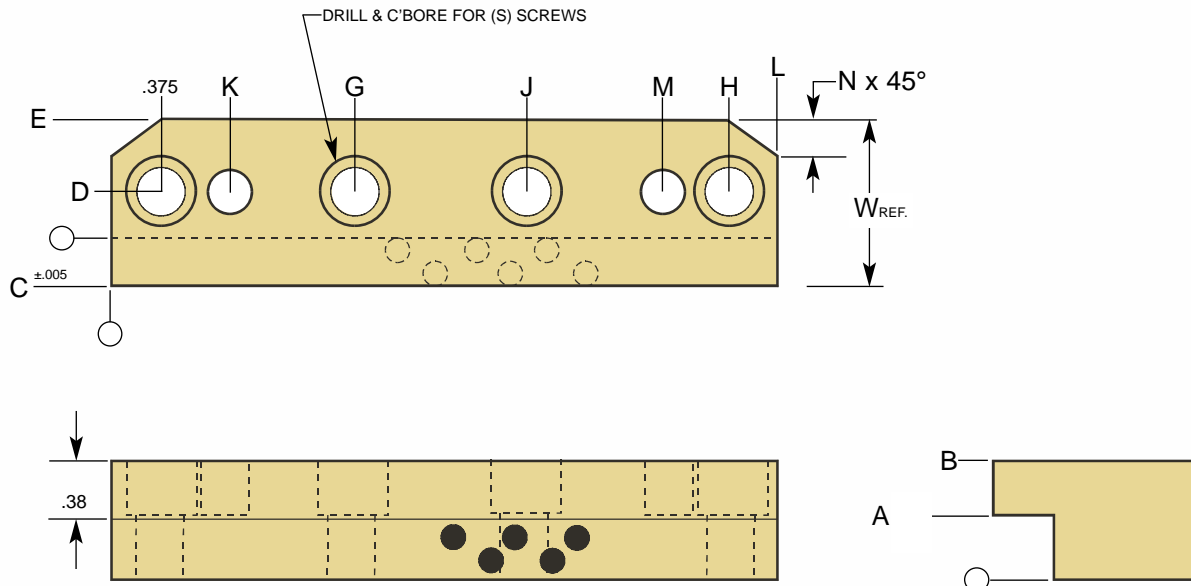
- Used with standard gib assemblies
- Graphite plugs for greaseless applications
- L-gibs are provided with screw holes and are spot drilled for dowels

PCS L-Gibs for Gib Assemblies are used to make custom cams and slides.



### SPECIFICATIONS

Material Type	Solid Bronze with graphite plugs
Unit of Measure	Inch

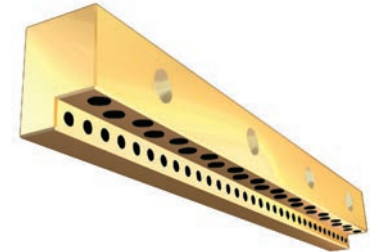


CATALOG NO.	L +.010 -.010	W +.00 -.005	A +.001 -.000	B +.010 -.010	C +.010 -.010	D +.005 -.005	E +.005 -.005	G	H +.005 -.005	K +.005 -.005	M +.005 -.005	N	HOLES	S
2GAL16GT	2.00	0.750	0.312	0.75	0.188	0.28	0.56	—	1.625	1.00	—	0.26	2	1/4 or M6
2GAL24GT	3.00	0.750	0.312	0.75	0.188	0.28	0.56	—	2.625	0.88	2.12	0.26	2	
2GAL32GT	4.00	0.750	0.312	0.75	0.188	0.28	0.56	2.00	3.625	0.88	3.12	0.26	3	
3GAL32GT	4.00	1.000	0.375	0.75	0.250	0.37	0.75	2.00	3.625	0.88	3.12	0.26	3	5/16 OR M8
3GAL40GT	5.00	1.000	0.375	0.75	0.250	0.37	0.75	2.50	4.625	0.88	4.12	0.26	3	5/16 OR M8
4GAL32GT	4.00	1.255	0.500	0.88	0.375	0.37	0.88	2.00	3.625	0.88	3.12	0.32	3	
4GAL40GT	5.00	1.255	0.500	0.88	0.375	0.37	0.88	2.50	4.625	0.88	4.12	0.32	3	
4GAL48GT	6.00	1.255	0.500	0.88	0.375	0.37	0.88	2.12	5.625	0.88	5.12	0.32	4	5/16 OR M8
6GAL32GT	4.00	1.500	0.750	1.25	0.500	0.44	1.00	2.00	3.625	0.88	3.12	0.32	3	

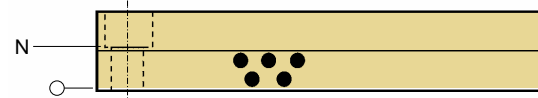
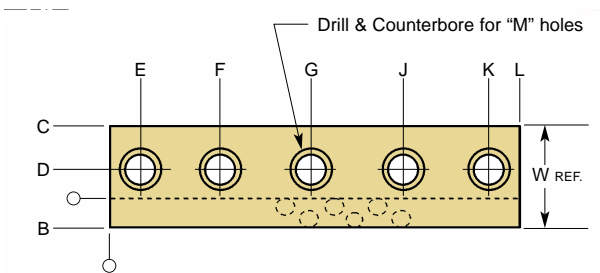
## L-Gib for Gib Assemblies

- Used with standard gib assemblies
- Graphite plugs for greaseless applications
- L-gibs are provided with screw holes and are spot drilled for dowels

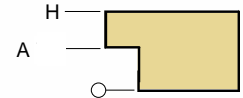
PCS L-Gibs for Gib Assemblies are used to make custom cams and slides.



SPECIFICATIONS	
Material Type	Solid Bronze with graphite plugs
Unit of Measure	Inch



Hole locations are +/- .005



CATALOG NO.		L	W	A	B	C	D	E	G	H	K	M	N	
DRILLED	NOT DRILLED	+0.01 -0.01	+0.00 -0.005	+0.001 -0.000	+0.010 -0.010	+0.010 -0.010	+0.005 -0.005	+0.005 -0.005		+0.005 -0.005	+0.005 -0.005	+0.005 -0.005		
2LG42G	2LG42NG	5.25	.75	.312	.18	.56	.28	.88	2.62	.75	4.38	3	1/4 OR M6	.25
2LG56G	2LG56NG	7.00	.75	.312	.18	.56	.28	.88	—	.75	6.12	4		
2LG70G	2LG70NG	8.75	.75	.312	.18	.56	.28	.88	4.38	.75	7.88	5		
3LG48G	3LG48NG	6.00	1.00	.375	.25	.75	.38	1.00	3.00	.75	5.00	3	5/16 OR M8	.31
3LG64G	3LG64NG	8.00	1.00	.375	.25	.75	.38	1.00	—	.75	7.00	4		
3LG80G	3LG80NG	10.00	1.00	.375	.25	.75	.38	1.00	5.00	.75	9.00	5		
4LG48G	4LG48NG	6.00	1.25	.500	.38	.88	.44	1.00	3.00	.88	5.00	3	3/8 OR M10	.50
4LG60G		7.50	1.25	.500	.38	.88	.44	1.25	3.75	.88	6.75	3		
4LG80G	4LG80NG	10.00	1.25	.500	.38	.88	.44	1.25	—	.88	8.75	4		
4LG100G	4LG100NG	12.50	1.25	.500	.38	.88	.44	1.25	6.25	.88	11.25	5		
6LG48G	6LG48NG	6.00	1.50	.750	.50	1.00	.50	1.00	3.00	1.25	5.00	3	3/8 OR M10	.75
6LG96G	6LG96NG	12.00	1.50	.750	.50	1.00	.50	1.50	—	1.25	1.50	4		
6LG72G	6LG72NG	9.00	1.50	.750	.50	1.00	.50	1.50	4.50	1.25	7.50	3		
	6LG120NG	15.00	1.50	.750	.50	1.00	.50	1.50	7.50	1.25	13.50	5		
7LG64G	7LG64NG	8.00	2.00	.875	.62	1.37	.68	1.00	—	1.50	7.00	4	1/2 OR M12	.75
7LG96G	7LG96NG	12.00	2.00	.875	.62	1.37	.68	1.50	—	1.50	1.50	4		
7LG128G		16.00	2.00	.875	.62	1.37	.68	2.00	—	1.50	14.00	4		
	10LG96NG	12.00	2.5	1.25	.75	1.75	.88	1.50	—	2.00	1.50	4	5/8 OR M16	1.25
10LG144G		18.00	2.5	1.25	.75	1.75	.88	2.25	—	2.00	15.75	4		
10LG192G		24.00	2.5	1.25	.75	1.75	.88	3.00	—	2.00	21.00	4		

## Standard Gib Assemblies

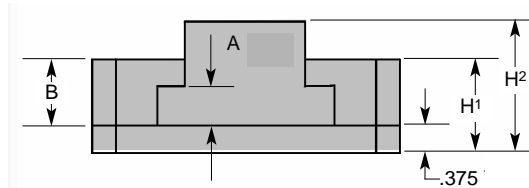
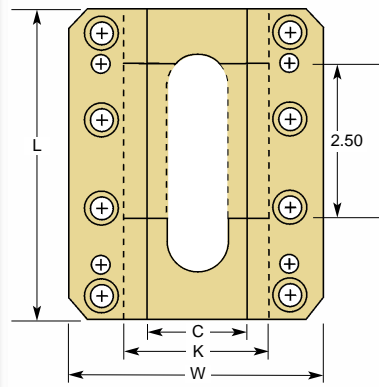
- Includes 2 Legs , 1 Base Plate , 1 T-Slide (T-Slide Optional)
- Pre-drilled screw and dowel holes
- Base plate thru holes allow for easy assembly
- Graphite plugs for greaseless applications



PCS Standard Gib Assemblies are used to make custom cams and slides and have a solid bronze construction.

### SPECIFICATIONS

Material Type	Solid Bronze with graphite plugs
Unit of Measure	Inch



CATALOG NO.			L +.010 -.010	W +.010 -.010	A +.010 -.010	B +.010 -.010	C +.010 -.010	H1 +.010 -.010	H2 +.010 -.010	K +.010 -.010
GIB ASSEMBLY DRILLED WITH T-SLIDE	GIB ASSEMBLY NOT DRILLED WITH T-SLIDE	GIB ASSEMBLY DRILLED WITHOUT T-SLIDE								
2GA16GTS		2GA16GT	2.00	2.62	.312	.75	1.12	1.12	1.62	1.50
2GA24GTS	2GA24NGTS	2GA24GT	3.00							
2GA32GTS		2GA32GT	4.00							
3GA24GTS	3GA24NGTS	3GA24GT	3.00	3.12	.38	.75	1.12	1.12	1.62	1.62
3GA32GTS	3GA32NGTS	3GA32GT	4.00							
3GA40GTS	3GA40NGTS	3GA40GT	5.00							
4GA24GTS		4GA24GT	3.00	4.12	.50	.88	1.62	1.25	1.75	2.36
4GA32GTS		4GA32GT	4.00							
4GA40GTS	4GA40NGTS	4GA48GT	5.00							
4GA48GTS			6.00							
6GA32GTS			4.00	4.62	.75	1.25	1.62	1.62	2.12	2.62
6GA40GTS			5.00							
		6GA48GT	6.00							

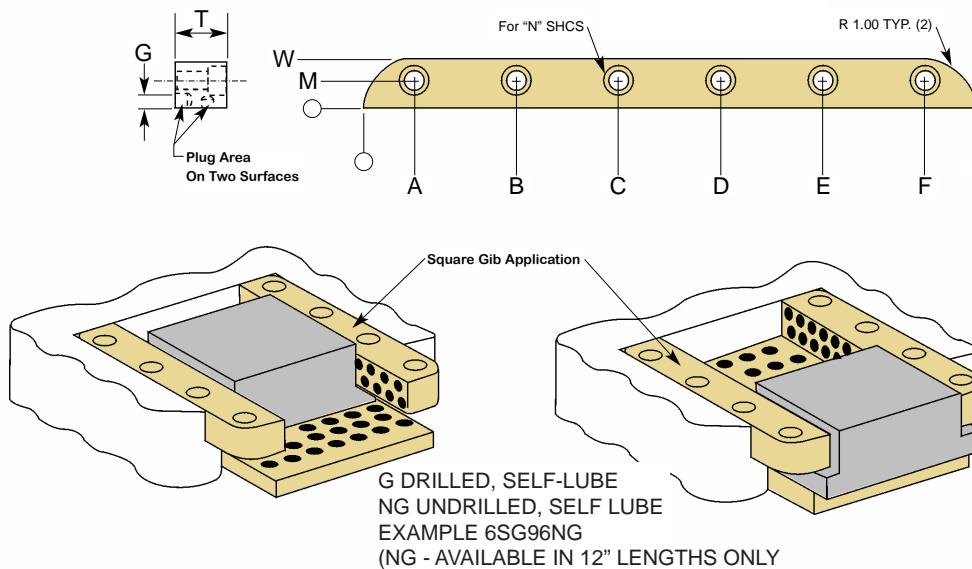
## Self-Lubricating Square Gibs

- Pre-drilled screw and dowel holes
- Plugs cover 25-30% of the wear surface
- Graphite plugs for greaseless applications

PCS Self-Lubricating Square Gibs are manufactured in inch sizes from 1" to 2" wide and lengths up to 12". They come standard with mounting holes for ease of assembly. The 12" lengths are available with or without mounting holes.



SPECIFICATIONS	
Material Type	Solid Bronze with graphite plugs
Unit of Measure	Inch



CATALOG NO.	L +.010 -.010	W +.010 -.010	T +.010 -.010	A +.010 -.010	B +.010 -.010	C	D +.010 -.010	E +.010 -.010	F +.010 -.010	M +.010 -.010	N SCREW SIZE	G +.010 -.010	
6SG32G	4	1.00	0.75	1	2.00	3.00				0.625	3/8	0.39	
6SG40G	5				2.50	4.00							
6SG48G	6				3.00	5.00							
6SG48NG	6			-	-	-					-		-
6SG64G	8			3.00	5.00	7.00				0.625	3/8		
6SG80G	10			3.00	5.00	7.00	9.00						
6SG96G	12			3.00	5.00	7.00	9.00	11.00					
6SG96NG	12			-	-	-					-		-
8SG32G	4	1.25	1.00	1	2.00	3.00				0.875	3/8	0.62	
8SG40G	5				2.50	4.00							
8SG48G	6				3.00	5.00							
8SG64G	8				3.00	5.00	7.00						
8SG80G	10				3.00	5.00	7.00	9.00					
8SG96G	12				3.00	5.00	7.00	9.00	11.00				
8SG96NG	12			-	-	-				-	-		
12SG96NG	12	2.00	1.50	-	-	-			-	-	0.86		

## T-Slides for Gib Assemblies

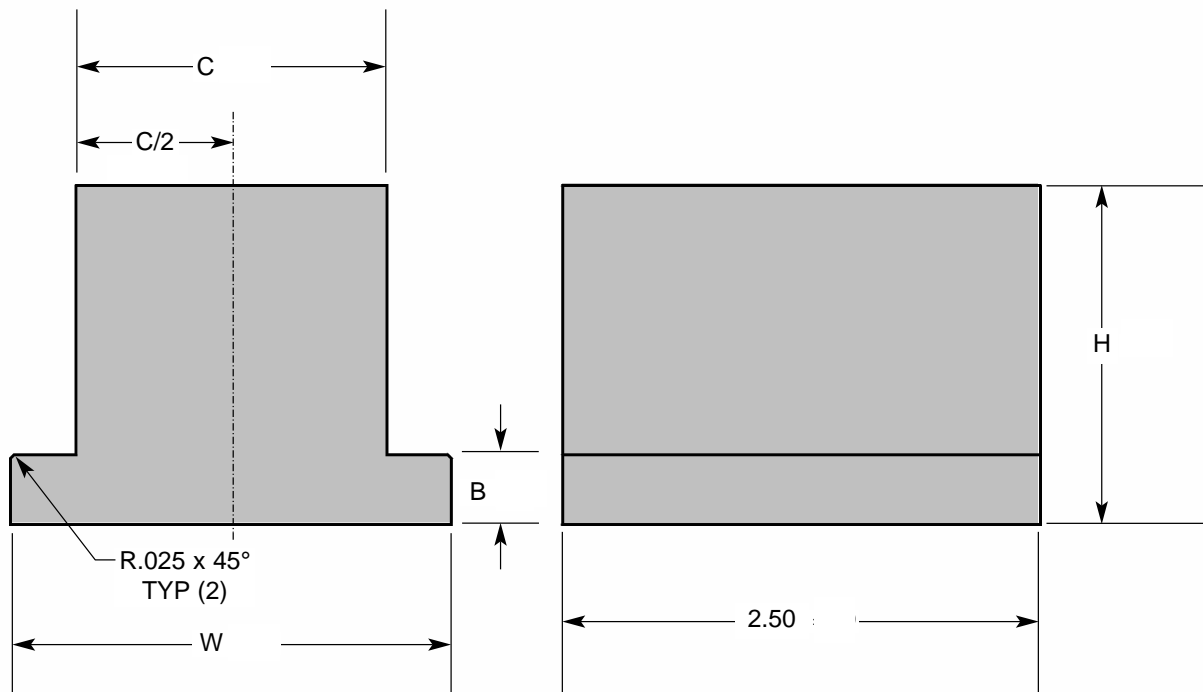
- Available in four standard sizes
- Works with any standard or square gib assembly
- Break all sharp corners



PCS T-Slides are used to make custom cams and slides.

### SPECIFICATIONS

Material Type	4140
Unit of Measure	Inch

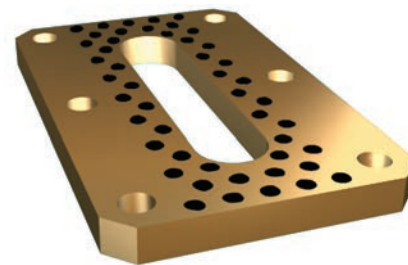


CATALOG NO.	W +.002 -.002	B +.003 -.000	C +.005 -.005	C/2 +.002 -.002	H +.010 -.010
2GASLIDE	1.493	0.038	1.110	0.555	1.25
3GASLIDE	1.617	0.371	1.110	0.555	1.25
4GASLIDE	2.367	0.496	1.610	0.805	1.38
6GASLIDE	2.617	0.746	1.610	0.805	1.75

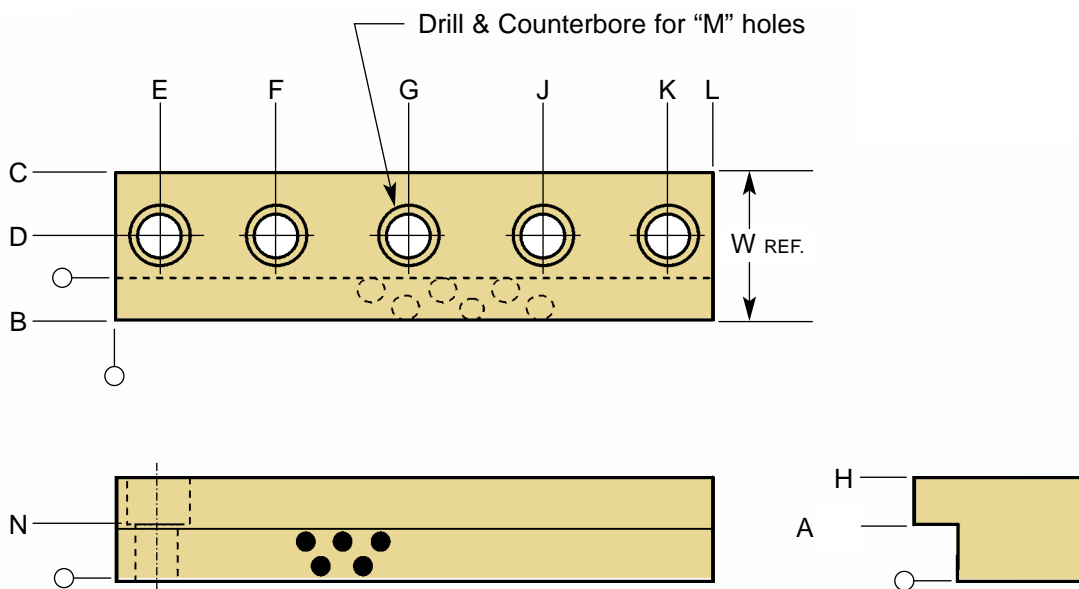
## Gib Base Plates

- Graphite plugs for greaseless applications
- Used in gib assemblies
- Can be ordered individually

PCS Gib Base Plates are used to make custom cams and slides. These Gib Base Plates have a solid bronze construction.



SPECIFICATIONS	
Material Type	Solid Bronze with graphite plugs
Unit of Measure	Inch



Hole locations are +/- .005

CATALOG NO.	L +.010 -.010	W +.000 -.005	A +.010 -.010	B +.010 -.010	C +.010 -.010	D +.010 -.010	E +.010 -.010	G	H +.010 -.010	M +.010 -.010	N +.005 -.005	NO. OF HOLES	S +.005 -.005
2GAB16GT	2.00	2.6200	0.69	1.31	0.38	0.26	1.50	—	1.625	0.28	2.34	4	0.28
2GAB24GT	3.00	2.6200	0.88	2.12	0.38	0.26	1.50	—	2.625	0.28	2.34	6	0.28
2GAB32GT	4.00	2.6200	1.00	3.00	0.38	0.26	1.50	2.000	3.625	0.28	2.34	6	0.28
3GAB32GT	4.00	3.1200	1.00	3.00	0.50	0.26	1.68	2.000	3.625	0.38	2.74	6	0.38
3GAB40GT	5.00	3.1200	1.00	4.00	0.50	0.26	1.68	2.500	4.625	0.38	2.74	6	0.38
4GAB24G	3.00	4.1200	1.00	2.00	0.50	0.32	2.44	—	2.625	0.50	3.62	4	0.38
4GAB32GT	4.00	4.1200	1.00	3.00	0.50	0.32	2.44	2.000	3.625	0.50	3.62	6	0.38
6GAB40GT	5.00	4.6200	1.00	4.00	0.50	0.32	2.75	2.500	4.625	0.56	4.06	6	0.38

## Self-Lubricating Solid Bronze Wear Strips

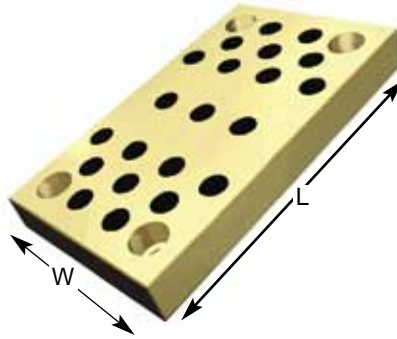
- Width and length of wearstrip determines hole pattern regardless of thickness
- Greaseless applications
- Protects mold from damage due to high wear conditions



Self-Lubricating Solid Bronze Wear Strip is used to reduce wear and give added support to moving components within a mold. PCS Self-Lubricating Solid Bronze Wear Strip is available in many thickness, width and length combinations.

### SPECIFICATIONS

Material Type	Solid Bronze with graphite plugs
Thickness Tolerance	±.001
Width Tolerance	+ .01 / - .080
Length Tolerance	+ .062 / - .000
Unit of Measure	Inch



THICKNESS 1/4" (.250 +/- .001)			
CATALOG NO.		WIDTH	LENGTH
DRILLED	NOT DRILLED		
28-32G		1	4
28-40G	28-40NG	1	5
28-48G	28-48NG	1	6
28-64G	28-64NG	1	8
28-80G		1	10
28-96G	28-96NG	1	12
212-32G	212-32NG	1.5	4
212-40G	212-40NG	1.5	5
212-48G	212-48NG	1.5	6
212-64G	212-64NG	1.5	8
212-80G	212-80NG	1.5	10
216-32G	216-32NG	2	4
216-40G	216-40NG	2	5
216-48G		2	6
216-64G	216-64NG	2	8
216-80G	216-80NG	2	10
216-96G	216-96NG	2	12

For drilled hole location patterns see page C55

THICKNESS 1/4" (.250 +/- .001)			
CATALOG NO.		WIDTH	LENGTH
DRILLED	NOT DRILLED		
220-32G	220-32NG	2.5	4
220-40G	220-40NG	2.5	5
	220-48NG	2.5	6
220-64G	220-64NG	2.5	8
220-80G	220-80NG	2.5	10
220-96G	220-96NG	2.5	12
224-32G	224-32NG	3	4
	224-40NG	3	5
	224-48NG	3	6
224-64G	224-64NG	3	8
	224-80NG	3	10
224-96G	224-96NG	3	12
232-32G	232-32NG	4	4
232-40G	232-40NG	4	5
232-48G	232-48NG	4	6
232-64G	232-64NG	4	8
232-80G	232-80NG	4	10
232-96G	232-96NG	4	12

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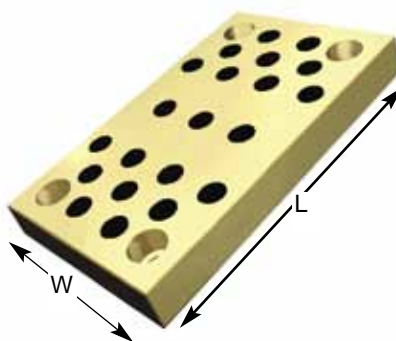
## Self-Lubricating Solid Bronze Wear Strips

- Width and length of wearstrip determines hole pattern regardless of thickness
- Greaseless applications
- Protects mold from damage due to high wear conditions

Self-Lubricating Solid Bronze Wear Strip is used to reduce wear and give added support to moving components within a mold. PCS Self-Lubricating Solid Bronze Wear Strip is available in many thickness, width and length combinations.



SPECIFICATIONS	
Material Type	Solid Bronze with graphite plugs
Thickness Tolerance	±.001
Width Tolerance	+.01 / -.080
Length Tolerance	+.062 / -.000
Unit of Measure	Inch



THICKNESS 3/8" (.375 +/- .001)			
CATALOG NO.		WIDTH	LENGTH
DRILLED	NOT DRILLED		
	38-32NG	1	4
	38-48NG	1	6
38-64G	38-64NG	1	8
38-80G	38-80NG	1	10
	38-96NG	1	12
	312-32NG	1.5	4
	312-48NG	1.5	6
312-64G	312-64NG	1.5	8
312-80G		1.5	10
312-96G		1.5	12
	316-32NG	2	4
	316-40NG	2	5
316-48G		2	6
316-64G	316-64NG	2	8
316-80G	316-80NG	2	10
	316-96NG	2	12
320-32G	320-32NG	2.5	4

THICKNESS 3/8" (.375 +/- .001)			
CATALOG NO.		WIDTH	LENGTH
DRILLED	NOT DRILLED		
320-40G	320-40NG	2.5	5
	320-48NG	2.5	6
	320-64NG	2.5	8
320-80G		2.5	10
320-96G		2.5	12
	324-24NG	3	3
324-32G	324-32NG	3	4
324-48G	324-48NG	3	6
324-64G	324-64NG	3	8
324-80G	324-80NG	3	10
324-96G	324-96NG	3	12
332-32G	332-32NG	4	4
332-40G	332-40NG	4	5
332-48G	332-48NG	4	6
332-64G	332-64NG	4	8
332-80G	332-80NG	4	10
332-96G	332-96NG	4	12

For drilled hole location patterns see page C55

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## Self-Lubricating Solid Bronze Wear Strips

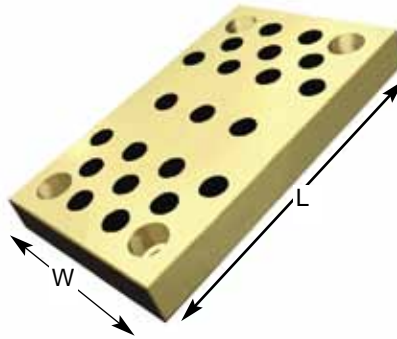
- Width and length of wearstrip determines hole pattern regardless of thickness
- Greaseless applications
- Protects mold from damage due to high wear conditions



Self-Lubricating Solid Bronze Wear Strip is used to reduce wear and give added support to moving components within a mold. PCS Self-Lubricating Solid Bronze Wear Strip is available in many thickness, width and length combinations.

### SPECIFICATIONS

SPECIFICATIONS	
Material Type	Solid Bronze with graphite plugs
Thickness Tolerance	±.001
Width Tolerance	+ .01 / - .080
Length Tolerance	+ .062 / - .000
Unit of Measure	Inch



THICKNESS 1/2" (.500 +/- .001)			
CATALOG NO.		WIDTH	LENGTH
DRILLED	NOT DRILLED		
	412-24NG	1.5	3
	412-32NG	1.5	4
412-48G		1.5	6
	412-64NG	1.5	8
416-24G		2	3
416-48G		2	6
	416-64NG	2	8
416-96G		2	12
420-24G		2.5	3
420-32G	420-32NG	2.5	4
	420-40NG	2.5	5
420-64G	420-64NG	2.5	8
424-24G		3	3
	424-40NG	3	5
424-48G		3	6
424-64G		3	8
424-80G		3	10

THICKNESS 5/8" (.625 +/- .001)			
CATALOG NO.		WIDTH	LENGTH
DRILLED	NOT DRILLED		
424-96G	424-96NG	3	12
432-32G		4	4
	432-48NG	4	6
432-64G	432-64NG	4	8
432-80G	432-80NG	4	10
	432-96NG	4	12
	512-48NG	1.5	6
	516-32NG	2	4
	516-48NG	2	6
516-64G		2	8
	516-96NG	2	12
	524-40NG	3	5
532-32G		4	4
	532-40NG	4	5

For drilled hole location patterns see page C55

## Solid Bronze Wear Strips

- Width and length of wearstrip determines hole pattern regardless of thickness
- Protects mold from damage due to high wear conditions

Solid Bronze Wear Strip is used to reduce wear and give added support to moving components within a mold. PCS Solid Bronze Wear Strip is available in many thickness, width and length combinations.

SPECIFICATIONS	
Material Type	Solid Bronze
Thickness Tolerance	±.001
Width Tolerance	+ .01 / - .080
Length Tolerance	+ .062 / - .000
Unit of Measure	Inch



THICKNESS 1/4" (.250 +/- .001)			
CATALOG NO.		WIDTH	LENGTH
DRILLED	NOT DRILLED		
28-32N		1	4
28-40N		1	5
28-48	28-48N	1	6
28-64	28-64N	1	8
28-80	28-80N	1	10
28-96	28-96N	1	12
212-32	212-32N	1.5	4
	212-40N	1.5	5
	212-48N	1.5	6
212-64	212-64N	1.5	8
	212-80N	1.5	10
212-96	212-96N	1.5	12
216-32	216-32N	2	4
	216-40N	2	5
	216-48N	2	6
216-64	216-64N	2	8
216-80	216-80N	2	10
216-96	216-96N	2	12

THICKNESS 1/4" (.250 +/- .001)			
CATALOG NO.		WIDTH	LENGTH
DRILLED	NOT DRILLED		
220-32	220-32N	2.5	4
220-40	220-40N	2.5	5
220-64	220-64N	2.5	8
	220-80N	2.5	10
220-96	220-96N	2.5	12
224-32	224-32N	3	4
224-40	224-40N	3	5
224-48	224-48N	3	6
224-64	224-64N	3	8
224-80	224-80N	3	10
	224-96N	3	12
	232-32N	4	4
232-40	232-40N	4	5
232-48	232-48N	4	6
	232-64N	4	8
232-80	232-80N	4	10
232-96	232-96N	4	12

For drilled hole location patterns see page C55

Continued on next page

## Solid Bronze Wear Strips

- Width and length of wearstrip determines hole pattern regardless of thickness
- Protects mold from damage due to high wear conditions

Solid Bronze Wear Strip is used to reduce wear and give added support to moving components within a mold. PCS Solid Bronze Wear Strip is available in many thickness, width and length combinations.



SPECIFICATIONS	
Material Type	Solid Bronze
Thickness Tolerance	±.001
Width Tolerance	+.01 / -.080
Length Tolerance	+.062 / -.000
Unit of Measure	Inch



THICKNESS 3/8" (.375 +/- .001)			
CATALOG NO.		WIDTH	LENGTH
DRILLED	NOT DRILLED		
	38-32N	1	4
	38-40N	1	5
	38-48N	1	6
	38-80N	1	10
	38-96N	1	12
312-32	312-32N	1.5	4
	312-40N	1.5	5
312-48	312-48N	1.5	6
312-64	312-64N	1.5	8
316-32	316-32N	2	4
316-40	316-40N	2	5
316-48	316-48N	2	6
316-64	316-64N	2	8
	316-80N	2	10
316-96	316-96N	2	12
320-32	320-32N	2.5	4
	320-40N	2.5	5
320-48		2.5	6
320-64	320-64N	2.5	8
	320-80N	2.5	10
	320-96N	2.5	12

THICKNESS 3/8" (.375 +/- .001)			
CATALOG NO.		WIDTH	LENGTH
DRILLED	NOT DRILLED		
324-32	324-32N	3	4
324-40	324-40N	3	5
324-48	324-48N	3	6
324-64	324-64N	3	8
324-80	324-80N	3	10
324-96	324-96N	3	12
332-32	332-32N	4	4
332-40	332-40N	4	5
332-48	332-48N	4	6
332-64	332-64N	4	8
332-80	332-80N	4	10
332-96	332-96N	4	12

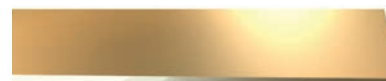
For drilled hole location patterns see page C55

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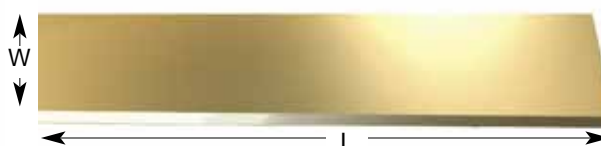
## Solid Bronze Wear Strips

- Width and length of wearstrip determines hole pattern regardless of thickness
- Protects mold from damage due to high wear conditions

Solid Bronze Wear Strip is used to reduce wear and give added support to moving components within a mold. PCS Solid Bronze Wear Strip is available in many thickness, width and length combinations.



SPECIFICATIONS	
Material Type	Solid Bronze
Thickness Tolerance	±.001
Width Tolerance	+ .01 / - .080
Length Tolerance	+ .062 / - .000
Unit of Measure	Inch



THICKNESS 1/2" (.500 +/- .001)			
CATALOG NO.		WIDTH	LENGTH
DRILLED	NOT DRILLED		
412-24	412-24N	1.5	3
	412-32N	1.5	4
	412-40N	1.5	5
	412-48N	1.5	6
	412-64N	1.5	8
	412-80N	1.5	10
	412-96N	1.5	12
416-24	416-24N	2	3
416-32	416-32N	2	4
416-40	416-40N	2	5
416-48	416-48N	2	6
416-64	416-64N	2	8
416-80	416-80N	2	10
416-96	416-96N	2	12
	420-24N	2.5	3
	420-32N	2.5	4
	420-40N	2.5	5
	420-48N	2.5	6
	420-64N	2.5	8
420-80	420-80N	2.5	10
420-96	420-96N	2.5	12

THICKNESS 1/2" (.500 +/- .001)			
CATALOG NO.		WIDTH	LENGTH
DRILLED	NOT DRILLED		
424-24	424-24N	3	3
424-32	424-32N	3	4
424-40	424-40N	3	5
424-48	424-48N	3	6
424-64	424-64N	3	8
432-32	432-32N	4	4
	432-40N	4	5
432-48	432-48N	4	6
432-64	432-64N	4	8
432-80	432-80N	4	10
432-96	432-96N	4	12

For drilled hole location patterns see page C55

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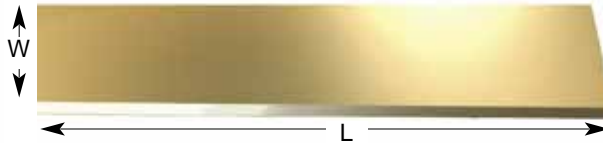
## Solid Bronze Wear Strips

- Width and length of wearstrip determines hole pattern regardless of thickness
- Protects mold from damage due to high wear conditions

Solid Bronze Wear Strip is used to reduce wear and give added support to moving components within a mold. PCS Solid Bronze Wear Strip is available in many thickness, width and length combinations.



SPECIFICATIONS	
Material Type	Solid Bronze
Thickness Tolerance	±.001
Width Tolerance	+ .01 / - .080
Length Tolerance	+ .062 / - .000
Unit of Measure	Inch



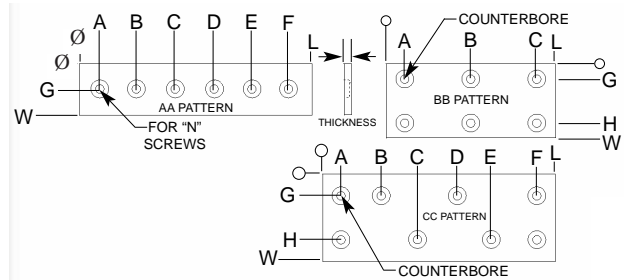
THICKNESS 5/8" (.625 +/- .001)			
CATALOG NO.		WIDTH	LENGTH
DRILLED	NOT DRILLED		
512-24	512-24N	1.5	3
512-32	512-32N	1.5	4
	512-40N	1.5	5
	512-48N	1.5	6
	512-64N	1.5	8
	512-80N	1.5	10
	512-96N	1.5	12
	516-24N	2	3
	516-32N	2	4
	516-40N	2	5
	516-80N	2	10
	524-32N	3	4
	532-32N	4	4
	532-40N	4	5
	532-48N	4	6
	532-64N	4	8
	532-80N	4	10

For drilled hole location patterns see page C55

# Wearstrips Hole Locations

- Material: Solid Bronze with or without graphite plugs
- Width and length of wearstrip determines hole pattern regardless of thickness

THICKNESS		N
1/4	.250	For 1/4" Flat Head Screw
3/8	.375	For 1/4" Socket Head Screw
1/2	.500	For 5/16" Socket Head Screw
5/8	.625	For 5/16" Socket Head Screw



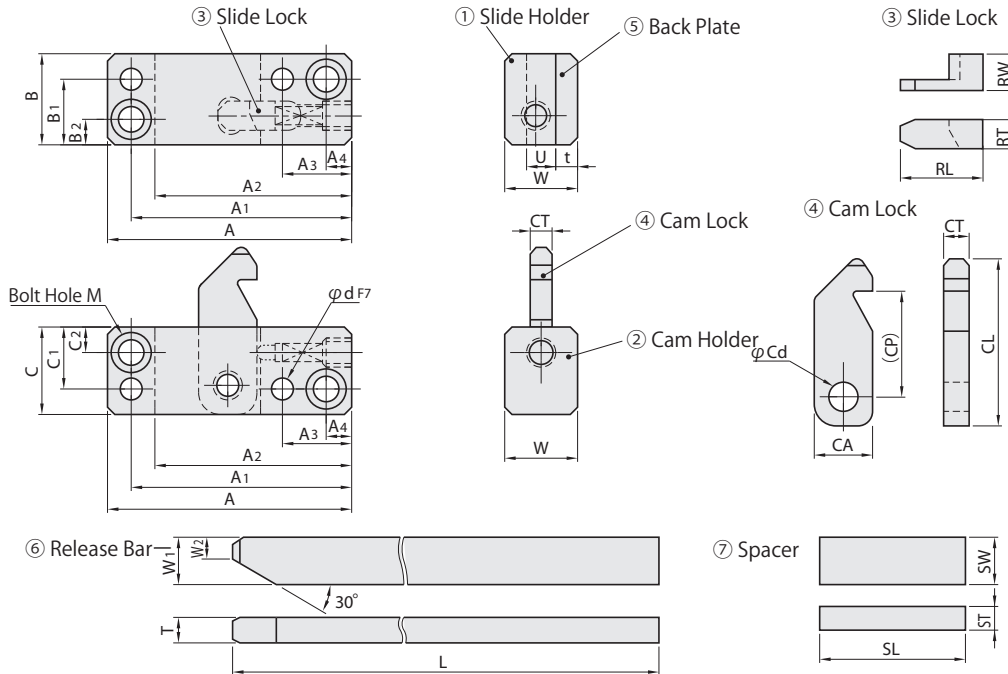
W WIDTH	L LENGTH	SCREW HOLES		HOLE LOCATION							
		AMT.	PATT.	A	B	C	D	E	F	G	H
*1.00	4.00	2	AA	1.00	3.00	-	-	-	-	0.50	-
*1.00	5.00	3	AA	0.50	2.50	4.50	-	-	-	0.50	-
*1.00	6.00	3	AA	1.00	3.00	5.00	-	-	-	0.50	-
*1.00	8.00	4	AA	1.00	3.00	5.00	7.00	-	-	0.50	-
*1.00	10.00	5	AA	1.00	3.00	5.00	7.00	9.00	-	0.50	-
*1.00	12.00	6	AA	1.00	3.00	5.00	7.00	9.00	11.00	0.50	-
1.50	3.00	2	AA	0.50	2.50	-	-	-	-	0.75	-
1.50	4.00	2	AA	1.00	3.00	-	-	-	-	0.75	-
1.50	5.00	3	AA	0.50	2.50	4.50	-	-	-	0.75	-
1.50	6.00	3	AA	1.00	3.00	5.00	-	-	-	0.75	-
1.50	8.00	4	AA	1.00	3.00	5.00	7.00	-	-	0.75	-
1.50	10.00	5	AA	1.00	3.00	5.00	7.00	9.00	-	0.75	-
1.50	12.00	6	AA	1.00	3.00	5.00	7.00	9.00	11.00	0.75	-
2.00	3.00	2	AA	0.50	2.50	-	-	-	-	1.00	-
2.00	4.00	2	AA	1.00	3.00	-	-	-	-	1.00	-
2.00	5.00	3	AA	0.50	2.50	4.50	-	-	-	1.00	-
2.00	6.00	3	AA	1.00	3.00	5.00	-	-	-	1.00	-
2.00	8.00	4	AA	1.00	3.00	5.00	7.00	-	-	1.00	-
2.00	10.00	5	AA	1.00	3.00	5.00	7.00	9.00	-	1.00	-
2.00	12.00	6	AA	1.00	3.00	5.00	7.00	9.00	11.00	1.00	-
2.50	3.00	2	AA	0.50	2.50	-	-	-	-	1.25	-
2.50	4.00	2	AA	1.00	3.00	-	-	-	-	1.25	-
2.50	5.00	3	AA	0.50	2.50	4.50	-	-	-	1.25	-
2.50	6.00	3	AA	1.00	3.00	5.00	-	-	-	1.25	-
2.50	8.00	4	AA	1.00	3.00	5.00	7.00	-	-	1.25	-
2.50	10.00	5	AA	1.00	3.00	5.00	7.00	9.00	-	1.25	-
2.50	12.00	6	AA	1.00	3.00	5.00	7.00	9.00	11.00	1.25	-
3.00	3.00	4	BB	0.50	2.50	-	-	-	-	0.50	2.50
3.00	4.00	4	BB	1.00	3.00	-	-	-	-	0.50	2.50
3.00	5.00	4	BB	0.50	4.50	-	-	-	-	0.50	2.50
3.00	6.00	4	BB	1.00	5.00	-	-	-	-	0.50	2.50
3.00	8.00	6	CC	1.00	3.00	5.00	-	-	7.00	0.50	2.50
3.00	10.00	6	BB	1.00	5.00	9.00	-	-	-	0.50	2.50
3.00	12.00	8	CC	1.00	3.00	5.00	7.00	9.00	11.00	0.50	2.50
4.00	4.00	4	BB	1.00	3.00	-	-	-	-	1.00	3.00
4.00	5.00	4	BB	0.50	4.50	-	-	-	-	1.00	3.00
4.00	6.00	4	BB	1.00	5.00	-	-	-	-	1.00	3.00
4.00	8.00	6	CC	1.00	3.00	5.00	-	-	7.00	1.00	3.00
4.00	10.00	6	BB	1.00	5.00	9.00	-	-	-	1.00	3.00
4.00	12.00	8	CC	1.00	3.00	5.00	7.00	9.00	11.00	1.00	3.00

# Latch Lock Sets - For Light, Medium & Heavy Load



- Compact and easy to Mount
- Enables Accurate mold opening movement with no reaction
- Can be used for low pressure molding as it imposes little load when locking
- Function regardless of the order of the mold closing process
- Slide Lock retreats if the runner stopper side closes before the parting line

Latch Locks provide plate sequence control to mechanically draw floating plates and inserts. Floating plates are secured in place during mold opening and closing to prevent damage to the mold. Latch Locks are externally mounted which leaves more real estate available within the mold.



ITEM	① SLIDE HOLDER	② CAM HOLDER	③ SLIDE LOCK	④ CAM LOCK	⑤ BACK PLATE	⑥ RELEASE BAR	⑦ SPACER
Material type	Tool Steel H13	Tool Steel H13	SKD11	SKD11	SK	S45C	S45C
Hardness	50-55 Rc	50-55 Rc	58 Rc	58 Rc	50 Rc	45 Rc	N/A

ASSEMBLY CATALOG NO.	① SLIDE HOLDER ② CAM HOLDER														③ SLIDE LOCK			
	A	A1	A2	A3	A4	B	B1	B2	C	C1	C2	W	U	Bolt hole M	d	RL	RT	RW
PL0068	68	61.5	55	19	7	26	19	7	24	17	7	20	8	For M6	φ 6	18	7	11
PL0088	88	79	70	24	9	38	29	9	30	21	9	30	12	For M8	φ 8	20	9	16
PL0104	104	93	82	27	11	48	37	11	38	27	11	45	20	For M10	φ10	24	12	26

ASSEMBLY CATALOG NO.	④ CAM LOCK				⑤ t	⑥ RELEASE BAR				⑦ SPACER			ACCESSORIES			
	CL	CP	CA	CT		Cd	W1	W2	T	L	SW	ST	SL	BOLT 4 PCS.	DOWEL PIN 4 pcs.	SPRING 2 PCS.
PL0068	45	28	16	7.5	8	6	13	5.9	7	250	13	6.5	40	PLF0003	PLD0001	PS0001
PL0088	64	41	20	10	10	7	16	8	10	300	16	8	50	PLF0008	PLD0002	PS0002
PL0104	84	53.5	25	18	13	8	20	9.5	15.5	350	20	10.2	55	PLF0011	PLD0003	PS0002



## Latch Lock Sets - For Light, Medium & Heavy Load

- Compact and easy to mount
- Enables accurate mold opening movement with no reaction
- Can be used for low pressure molding as it imposes little load when locking
- Function regardless of the order of the mold closing process
- Slide Lock retreats if the runner stripper side closes before the parting line

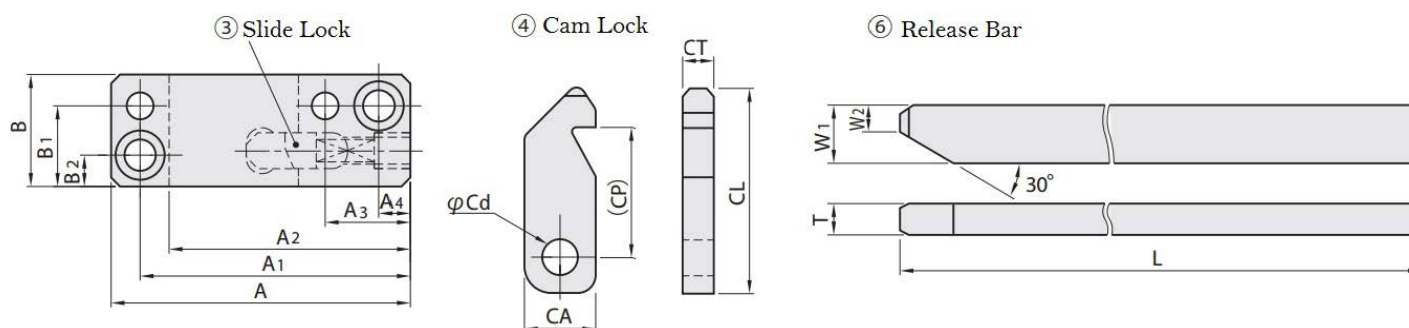


Latch Locks provide plate sequence control to mechanically draw floating plates and inserts. Floating plates are secured in place during mold opening and closing to prevent damage to the mold. Latch Locks are externally mounted which leaves more real estate available within the mold.

### Components (Single Items)

Consumable components-cam locks, slide locks and release bars can be purchased independently.

ASSEMBLY CATALOG NO.	SLIDE LOCK ONLY	CAM LOCK ONLY	RELEASE BAR ONLY
For PL0068	PLS0001	PLK0001	PLR0001
For PL0088	PLS0002	PLK0002	PLR0002
For PL0104	PLS0003	PLK0003	PLR0003



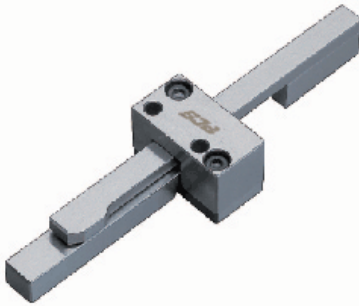
### Components (Unit)

Use when a cam holder unit is necessary, such as during two-color molding or insert molding, or when a lock set with a long release bar is necessary.

ASSEMBLY CATALOG NO.	SLIDE HOLDER UNIT ① ③ ⑤+ACCESSORIES	CAM HOLDER UNIT ② ④+ACCESSORIES	(L: 300MM) RELEASE BAR LONG TYPE
PL0068	PLH0001	PLC0011	PLR0011
PL0088	PLH0002	PLC0012	N/A

When PL0068 with a long release bar is necessary, use PLH0001, PLC0011 and PLR0011.

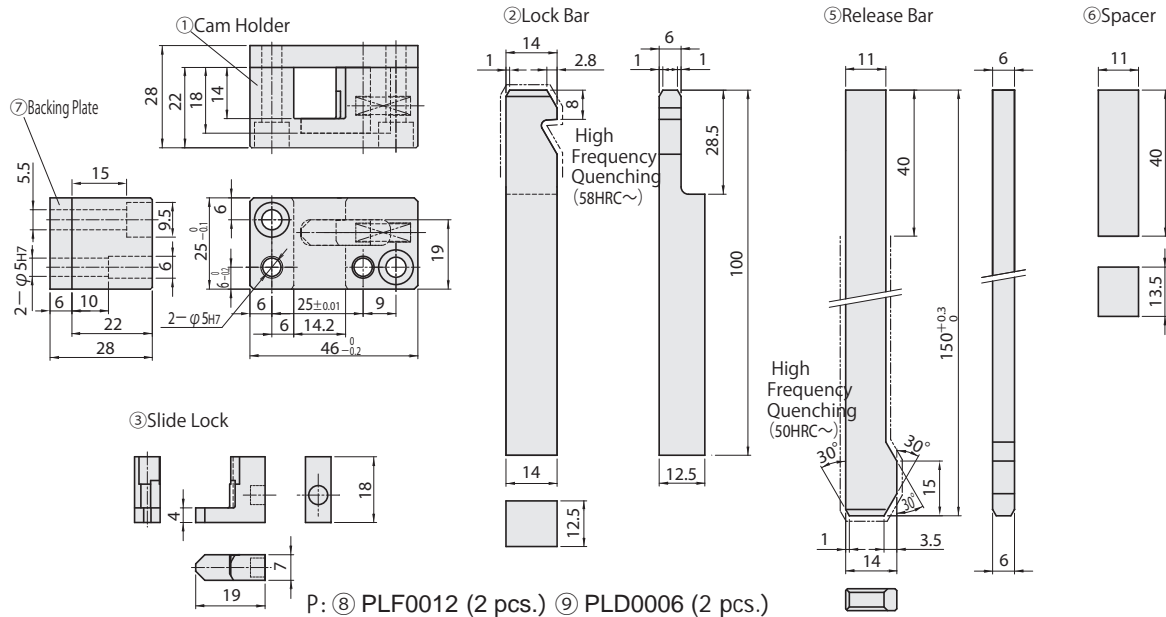
## Latch Lock Sets - For Compact Load



- Compact and easy to mount
- Enables accurate mold opening movement with no reaction
- Can be used for low pressure molding as it imposes little load when locking
- Function regardless of the order of the mold closing process
- Space saving--the lock bar and release bar are constructed in such a way that they overlap when operating, thus realizing compactness (width is 46 mm).

Latch Locks provide plate sequence control to mechanically draw floating plates and inserts. Floating plates are secured in place during mold opening and closing to prevent damage to the mold. Latch Locks are externally mounted which leaves more real estate available within the mold.

SPECIFICATIONS		
ITEMS	MATERIAL TYPE	HARDNESS
① Cam holder	SKD61	50-55 Rc
② Lock bar	SKS3	58 Rc (High frequency quenching)
③ Slide lock	SKD11	58-60 Rc
④ Spring	SUS631	
⑤ Release bar	SKS3	50 Rc (High frequency quenching)
⑥ Spacer	S45C	
⑦ Backing plate	SKS3	50 Rc



### Parting Lock Set

COMPONENTS	CATALOG NO.
①-⑦ Sets	PL0046

### Cam holder unit

COMPONENTS	CATALOG NO.
①③④⑦+Accessories	PLC0013

### Release bar long type

COMPONENTS	CATALOG NO.
⑤ (Length: 250 mm) ⑥	PLR0021

### Components (Single Items)

COMPONENTS	CATALOG NO.
② Lock bar	PLL0001
③ Slide lock	PLS0004
⑤ Release bar	PLR0004

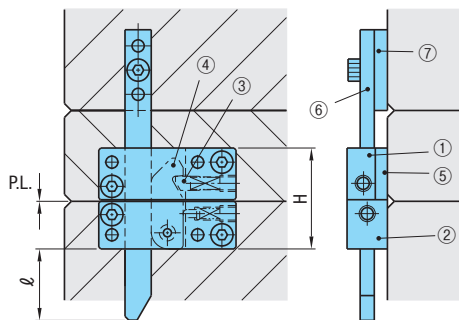
If a lock set with long release bar is necessary, use PLC0013H, PLR0021 and PLL0001.

Consumable components-lock bars, slide locks and release bars can be purchased independently.

# Latch Lock -Installation Guide

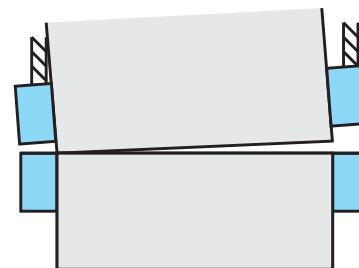
## Notes

1. Always use 2 or more sets on a mold.
2. Use this parting lock set within the following load limits:
  - PL0068/PL0046 - 1 ton or less per mold (when 2 sets are used)
  - PL0088 - 1.8 tons or less per mold (when 2 sets are used)
  - PL0104 - 4 tons or less per mold (when 2 sets are used)
3. Maintain proper alignment of the right and left release points to avoid uneven contact and resultant breakage.

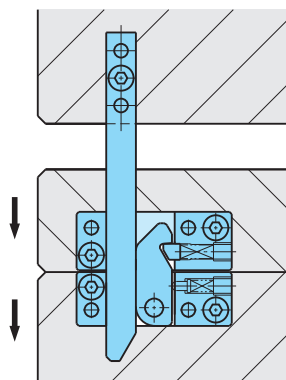


(Fig. 1) Mold closed

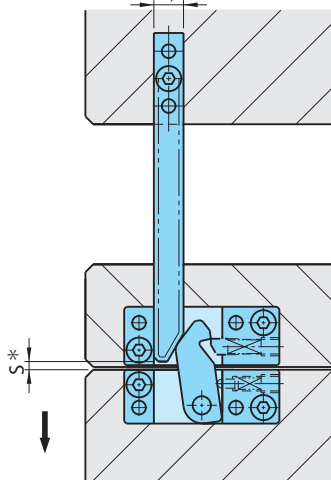
ASSEMBLY CATALOG NO.	H
PL0068	50
PL0088	68
PL0104	86



The release bar's sliding face has been reinforced up to 45 Rc or higher through induction hardening. The side faces have been under 30 Rc for drilling of mounting holes.



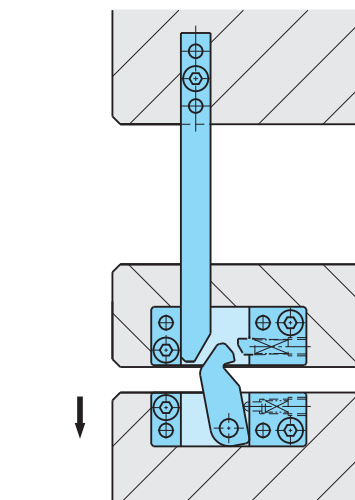
(Fig. 2) Mold opened



(Fig. 3) Release point of the cam lock

The release point is where the release bar's end comes above the S (mm) cam holder's top surface.

Use the S (mm) values shown in the table as reference only. Make sure to check the actual release timing on the site.



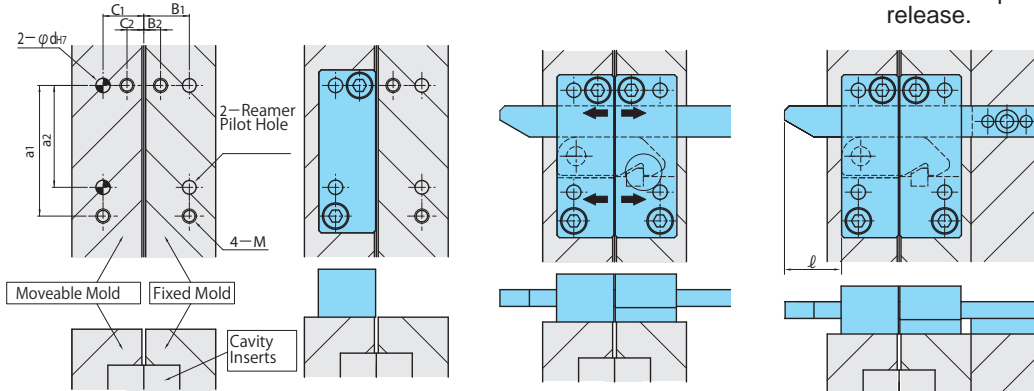
(Fig. 4) Parting Line is released

ASSEMBLY CATALOG NO.	S (mm)
PL0068	Approx. 2
PL0088	Approx. 11
PL0104	Approx. 15

# Latch Lock - Installation Guide

## Method of installing the parting

- ① Form bolt holes and reamer holes in the mold parallel to the parting line face to a pitch accuracy within  $\pm 0.01$ . If the pitch accuracy is within  $\pm 0.02$ , form the holes to the reamer pilot hole dimension. (Machine the holes while taking into consideration the clearance between the insert and the mold.)
- ② Install the cam holder on the movable mold.
- 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. In this condition, confirm that the release bar operates smoothly, and then tighten the slide holder with the bolts.
- ④ Install the mold 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 of the parting lock, and then ream the holes and press-fit the dowel pins. Make the overhang length  $l$  of each release bar the same in order to equalize the timing of the release.



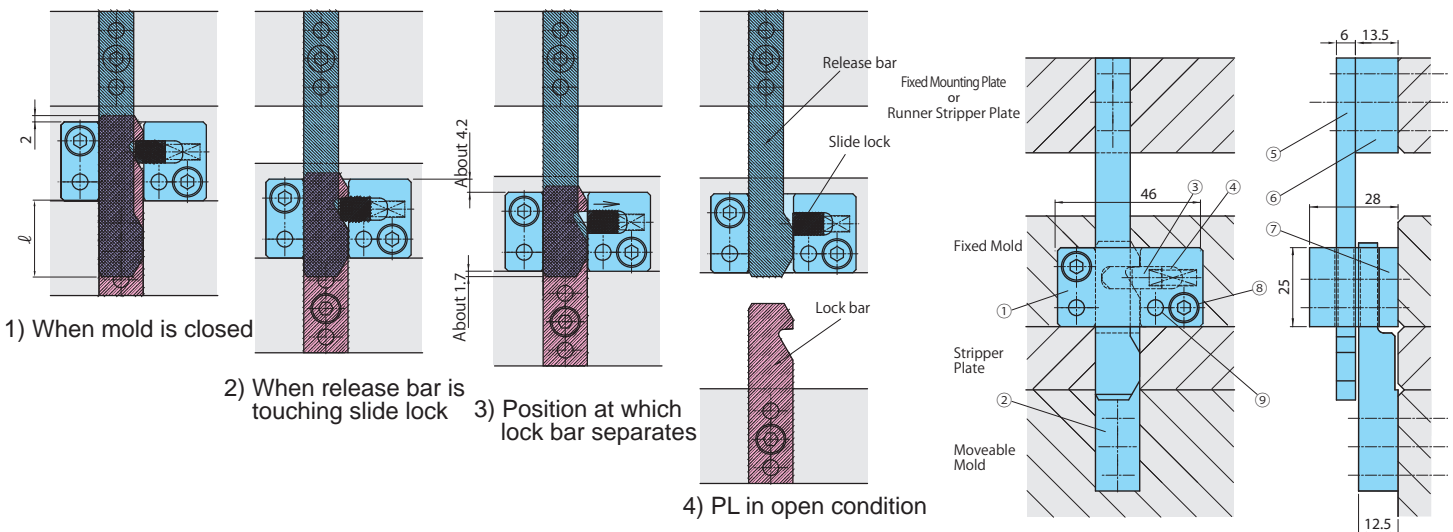
CATALOG NO.	a1	a2	C1	C2	B1	B2	M	dH7	Reamer pilot hole M0.3
PL0068	54.5	42.5	17	7	19	7	M 6	6	φ5.7
PL0088	70	55	21	9	29	9	M 8	8	φ7.7
PL0104	82	66	27	11	37	11	M10	10	φ9.7

## Precautions

If you form the dowel pin hole of the parting lock set by NC machining, the following trouble will occur.

- 1) The positions of the cam lock and slide lock will become misaligned, making it difficult to insert the slide bar. This in turn may result in damage to the cam lock or another part.
- 2) A clearance will occur between the cam lock and the slide lock, resulting in defective molding. For the above reasons, carry out position adjustment by matching with the actual part.

## Example of PL0046 operation



## How to Mount

- 1) Form bolt holes and reamer holes using NC machining, and install the cam holder parallel to the PL face.
- 2) 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.
- 3) Cut the release bar to the necessary length, and install it perpendicular to the mold. Make the overhang length  $l$  of each release bar the same in order to equalize the release points.

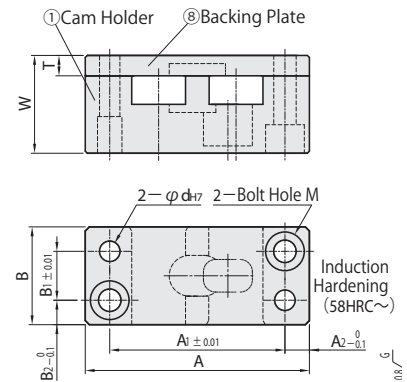
## Latch Locks - Mold Opening/Closing Type

- Compact and easy to mount
- Enables accurate mold opening movement with no reaction
- Can be used for low pressure molding as it imposes little load when locking
- Function regardless of the order of the mold closing process
- Slide Lock retreats if the runner stopper side closes before the parting line

Latch Locks provide plate sequence control to mechanically draw floating plates and inserts. Floating plates are secured in place during mold opening and closing to prevent damage to the mold. Latch Locks are externally mounted which leaves more real estate available within the mold.



SPECIFICATIONS		
NAME	MATERIAL TYPE	HARDNESS
① Cam holder	Alloy tool steel	50 - 55 Rc
② Lock bar		58 Rc
③ Lock pin		58 - 60 Rc
④ Slide Lock		58 - 60 Rc
⑤ Spring	SUS631	
⑥ Release bar	Alloy tool steel	58 Rc
⑦ Spacer	S45C	
⑧ Backing plate	Alloy tool steel	50 Rc
⑨ SHCS	SCM435	38 - 43 Rc
⑩ Dowel pin	SUJ2	45 - 50 Rc

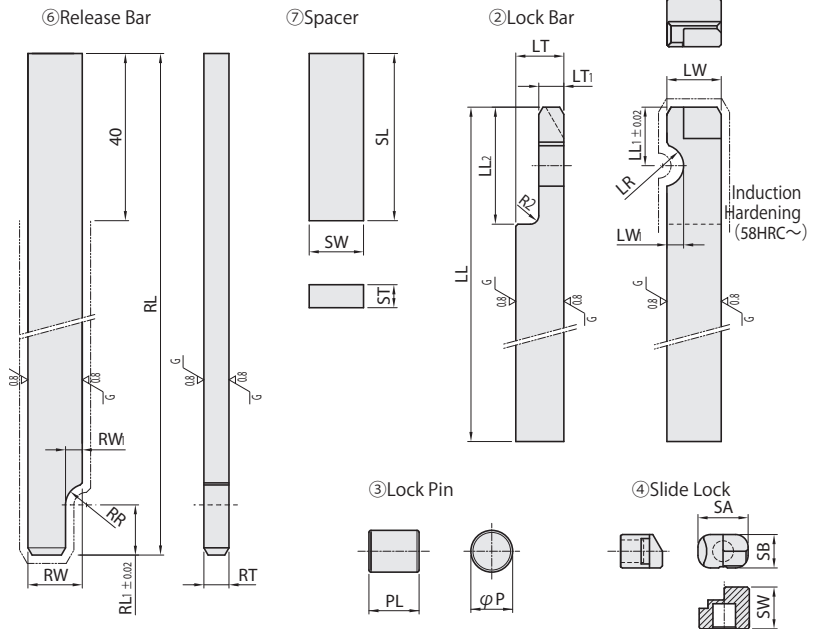


### Set

COMPONENTS	CATALOG NO.
①-⑩ Set	PL0055 PL0067

### Components (Single Items)

COMPONENTS	USE WITH	CATALOG NO.
② Lock bar	PL0055	PLL0002
	PL0067	PLL0003
④ Slide lock	PL0055	PLS0005
	PL0067	PLS0006
⑥ Release bar	PL0055	PLR0005
	PL0067	PLR0006



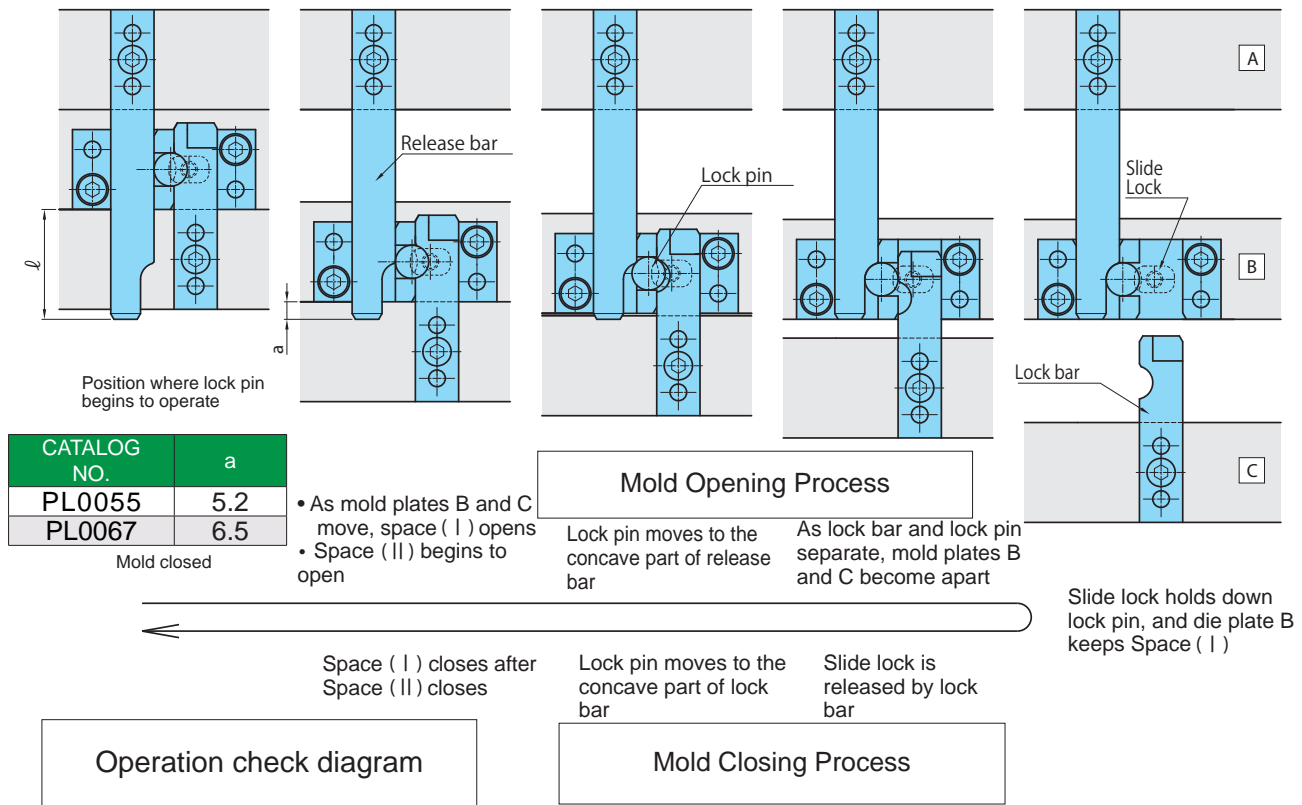
CATALOG NO.	① CAM HOLDER ⑧ BACKING PLATE											② LOCK BAR						
	A	A1	A2	B	B1	B2	d	M	W	T	LW	LW1	LR	LL	LL1	LL2	LT	LT1
PL0055	55	43	6	24	12	6	5	5	24	5	13	4	5	100	14	28	11.5	6
PL0067	67	53	7	32	16	8	6	6	32.5	6	18	5	6	150	18	36	16.5	10

CATALOG NO.	③ LOCK PIN		④ SLIDE LOCK			⑤ SPRING	⑥ RELEASE BAR					⑦ SPACER			ACCESSORIES		
	P	PL	SA	SB	SW		RW	RW1	RR	RL	RL1	RT	SW	SL	ST	⑨ BOLT	⑩ DOWEL PIN
PL0055	10	12	12	8	10	PS0003	13	4	5	150	12	6	13	40	5.5	PLF0001	PLD0003
PL0067	12	17	16	10	13	PS0004	16	5	6	200	16	10	16	50	6.6	PLF0005	PLD0004

## Latch Locks - Installation Guide

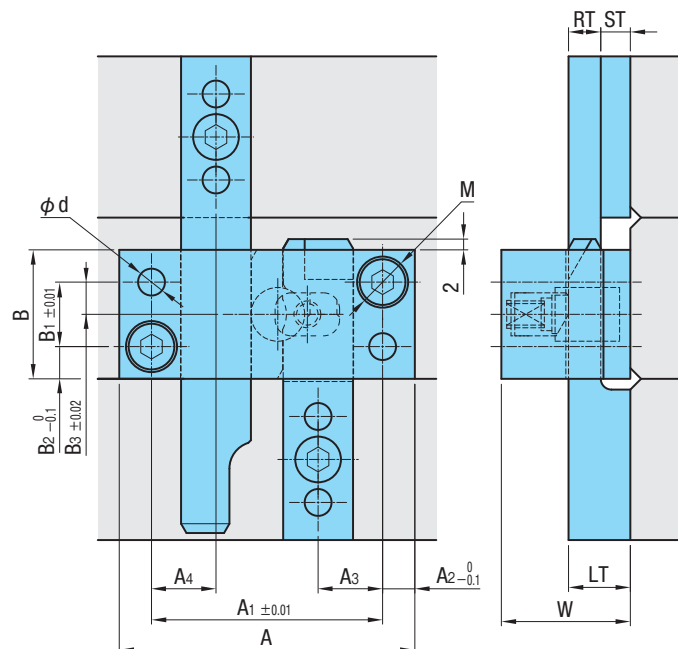
### Notes

- Mold closing control (closing PL surface after closing the stripper plate, etc.), which was not possible with the conventional latch lock sets (PL0068 and PL0046), is now possible.
- The lock bar is long, so it can also be used for thrusting out the stripper plate.
- Enables accurate mold opening and closing movement with no reaction.



### Mounting

- (1) Mount 2 or more parting lock sets at symmetrical positions on the mold. PL0055 : 10KN or less for 1 mold/when mounting 2 sets, PL0067 : 20KN or less for 1 mold/when mounting 2 sets
- (2) Form bolt holes and reamer holes using NC machining, and install the cam holder parallel to the PL face.
- (3) Cut the lock bar 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.
- (4) Cut the release bar to the necessary length, and install it perpendicularly to the mold. Make the 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.)



## Roller Pulling Assemblies - Standard/Long Type

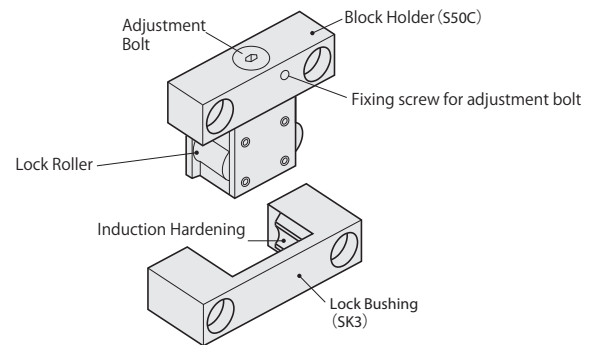
- Enables well-balanced mold opening/closing through its mechanism composed of a Belleville spring, internal rollers and lock rollers.
- The lock bushing's vertically symmetrical design allows a worn piece to be reused by reinstalling it in reverse.
- The lock holder's back recess enables it to be used even on a stepped mold plates.
- For heat resistant type, the adjusting bolt differs from standard type for identification. (Standard type: black oxide coated, Heat resistant type: Trivalent Chromate coated)

### Load Adjustment and Load Characteristics

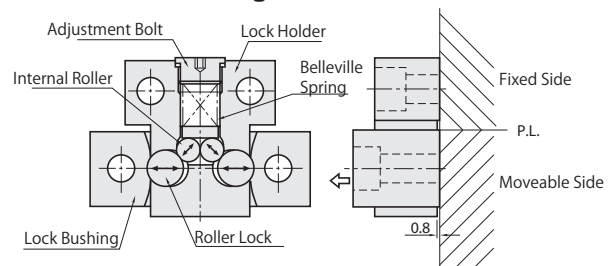
- Opening/closing load can be adjusted using an Allen wrench. The load is maximum when the adjustment bolt is fully tightened, 50% when it is loosened a half rotation, 0 when it is loosened 1 rotation or more. \*For PLS0010, the load decreases about 25% when the adjustment bolt is loosened a half rotation, 70% when it is loosened one rotation.
- The load for mold closing is about 50% of mold opening.
- A fixing screw is provided on the load adjustment bolt. Loosen it to perform load adjustment, and make sure to tighten it after adjustment is completed.

**Note:** Make sure to assemble the right and left unit symmetrically for well balanced operation.

### Features

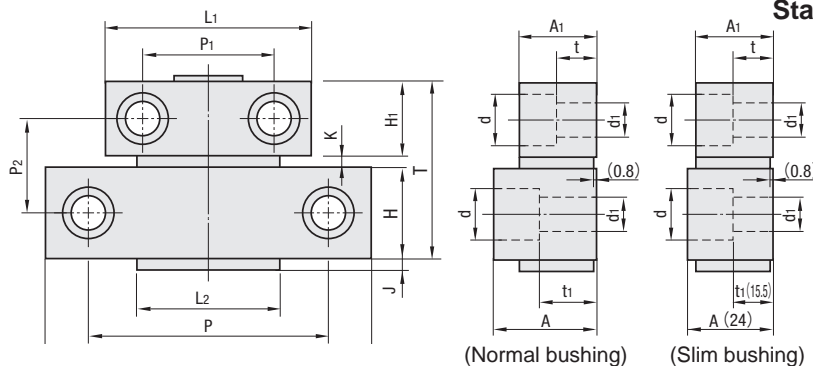


### Structure and Usage

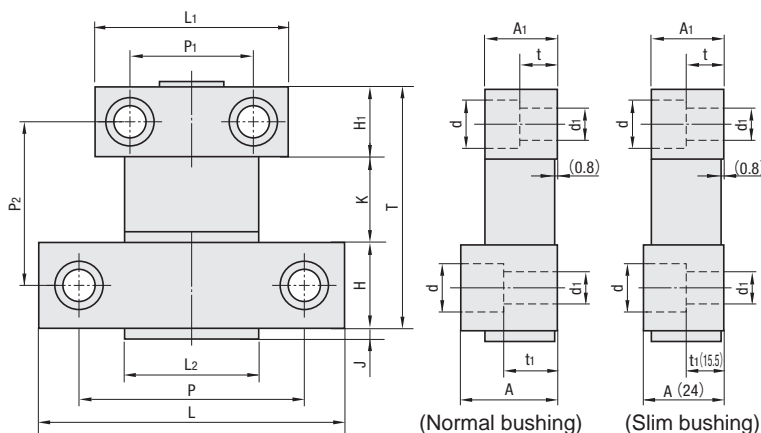


- Mount it in parallel to the parting line.
- The roller lock set can be removed by pulling it in the direction of arrow in the figure.

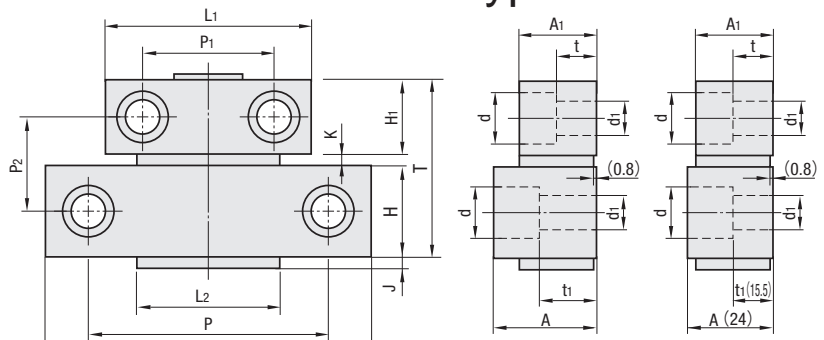
### Standard Type/Standard Type - High Heat Resistance



### Long Type/Long Type - High Heat Resistance



## Roller Pulling Assemblies - Standard Type



### Standard Type (Normal Bushing) - Withstands temperatures up to 175°F, 80°C

CATALOG NO.	MAX. USABLE LOAD	L	L1	L2	T	H	H1	J	K	P	P1	P2	A	A1	t	t1	d	d1	P 2 PCS. EACH
PLS0010	981N {100kgf}	48	36	25	42	22	18	2	2	36	24	22	24	16	9.5	18	11	6.5	PLF0002 PLF0004
PLS0020	1961N {200kgf}	54	42							40	28				9	16			
PLS0030	2942N {300kgf}	65	46	35	48.5	25	20	3.5	3.5	50	31	26	27	19	9.5	17	14	9	PLF0004 PLF0005
PLS0060	5884N {600kgf}	73	50							52	33								
PLS0080	7845N {800kgf}				56.5				11.5										PLF0007 PLF0008

### Standard Type (Slim Bushings) - Withstands temperatures up to 175°F, 80°C

CATALOG NO.	MAX. USABLE LOAD	L	L1	L2	T	H	H1	J	K	P	P1	P2	A	A1	t	t1	d	d1	P 2 PCS. EACH
PLSS0030	2942N {300kgf}	65	46	35	48.5	25	20	3.5	3.5	50	31	26	24	19	9.5	15.5	11	7	PLF0003 PLF0004
PLSS0060	5884N {600kgf}	73	50							52	33						34	14	
PLSS0080	7845N {800kgf}				56.5				11.5										PLF0006 PLF0007

### Standard Type (Normal Bushing - High Heat Resistance) - Withstands temperatures up to 300°F, 150°C

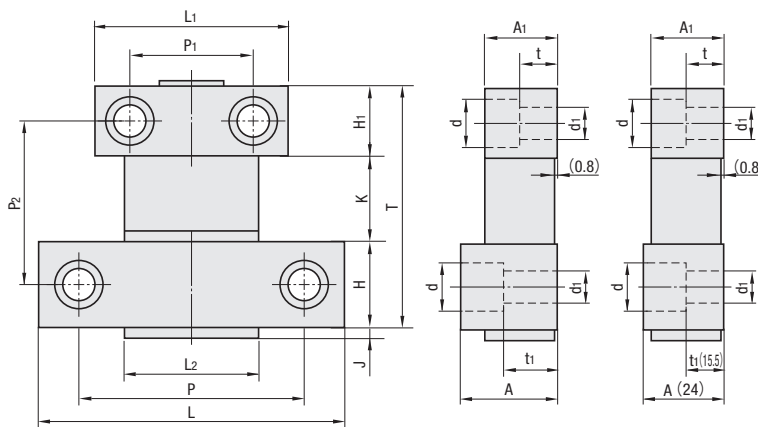
CATALOG NO.	MAX. USABLE LOAD	L	L1	L2	T	H	H1	J	K	P	P1	P2	A	A1	t	t1	d	d1	P 2 PCS. EACH
PLS0020H	1961N {200kgf}	54	42	25	42	22	18	2	2	40	28	22	24	16	9	16	11	6.5	PLF0002 PLF0003
PLS0030H	2942N {300kgf}	65	46	35	48.5	25	20	3.5	3.5	50	31	26	27	19	9.5	17		6.5	
PLS0060H	5884N {600kgf}	73	50							52	33						34	14	9
PLS0080H	7845N {800kgf}				56.5				11.5										PLF0007 PLF0008
PLS0100H	9807N {1000kgf}	103	65	48	58	30	24	4	4	76	42	31	34	25	13	19	17	11	PLF0009 PLF0010

### Standard Type (Slim Bushings - High Heat Resistance) - Withstands temperatures up to 300°F, 150°C

CATALOG NO.	MAX. USABLE LOAD	L	L1	L2	T	H	H1	J	K	P	P1	P2	A	A1	t	t1	d	d1	P 2 PCS. EACH
PLSS0030H	2942N {300kgf}	65	46	35	48.5	25	20	3.5	3.5	50	31	26	24	19	9.5	15.5	11	7	PLF0003 PLF0004
PLSS0060H	5884N {600kgf}	73	50							52	33						34	14	
PLSS0080H	7845N {800kgf}				56.5				11.5										PLF0006 PLF0007



## Roller Pulling Assemblies - Long Type



### Long Type (Normal Bushing) - Withstands temperatures up to 150°F, 80°C

CATALOG NO.	MAX. USABLE LOAD	L	L1	L2	T	H	H1	J	K	P	P1	P2	A	A1	t	t1	d	d1	2 PCS. EACH <sup>P</sup>
PLS0060L	5884N {600kgf}	73	50	35	79.5	25	20	3.5	34.5	52	33	57	27	19	9.5	17	14	9	PLF0007 PLF0008
PLS0080L	7845N {800kgf}				87.5				42.5			65							
PLS0100L	9807N {1000kgf}	103	65	48	89	30	24	4	35	76	42	62	34	25	13	19	17	11	

### Long Type (Slim Bushing) - Withstands temperatures up to 150°F, 80°C

CATALOG NO.	MAX. USABLE LOAD	L	L1	L2	T	H	H1	J	K	P	P1	P2	A	A1	t	t1	d	d1	2 PCS. EACH <sup>P</sup>
PLSS0080L	7845N {800kgf}	73	50	35	87.5	25	20	3.5	42.5	52	33	65	24	19	9.5	15.5	14	9	PLF0006 PLF0007

### Long Type (Normal Bushing - High Heat Resistance) - Withstands temperatures up to 300°F, 150°C

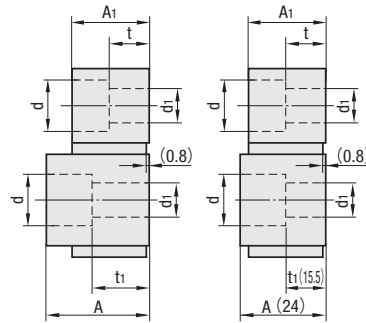
CATALOG NO.	MAX. USABLE LOAD	L	L1	L2	T	H	H1	J	K	P	P1	P2	A	A1	t	t1	d	d1	2 PCS. EACH <sup>P</sup>
PLS0060LH	5884N {600kgf}	73	50	35	79.5	25	20	3.5	34.5	52	33	57	27	19	9.5	17	14	9	PLF0007 PLF0008
PLS0080LH	7845N {800kgf}				87.5				42.5			65							
PLS0100LH	9807N {1000kgf}	103	65	48	89	30	24	4	35	76	42	62	34	25	13	19	17	11	

### Long Type (Slim Bushing - High Heat Resistance) - Withstands temperatures up to 300°F, 150°C

CATALOG NO.	MAX. USABLE LOAD	L	L1	L2	T	H	H1	J	K	P	P1	P2	A	A1	t	t1	d	d1	2 PCS. EACH <sup>P</sup>
PLSS0080LH	7845N {800kgf}	73	50	35	87.5	25	20	3.5	42.5	52	33	65	24	19	9.5	15.5	14	9	PLF0006 PLF0007

# Roller Pulling Assemblies - Normal & Slim Bushings

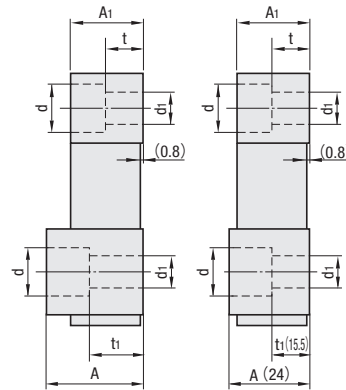
## Standard Type/Standard Type - High Heat Resistance



(Normal bushing)

(Slim bushing)

## Long Type/Long Type - High Heat Resistance



(Normal bushing)

(Slim bushing)

### Normal Bushing Component

CATALOG NO.	APPLICATION
PLB1000	For PLS0010(H)
PLB2000	For PLS0020(H)
PLB3000	For PLS0030(H) For PLSS0030(H)
PLB6080	For PLS0060(H) - PLS0080L(H) - PLS0060L(H)- PLS0080(H) For PLSS0060(H) - PLSS0080L(H) - PLSS0080(H)
PLB1100	For PLS0100(H) PLS0100L(H)

### Slim Bushing Component

CATALOG NO.	APPLICATION
PLBS3000	For PLSS0030(H) For PLS0030(H)
PLBS6080	For PLS0060(H) - PLS0080L(H) PLS0080(H) For PLSS0060(H) - PLSS0080L(H) PLSS0080(H)

For use in 2-color molding, insert molding, etc. that require additional lock bushings.

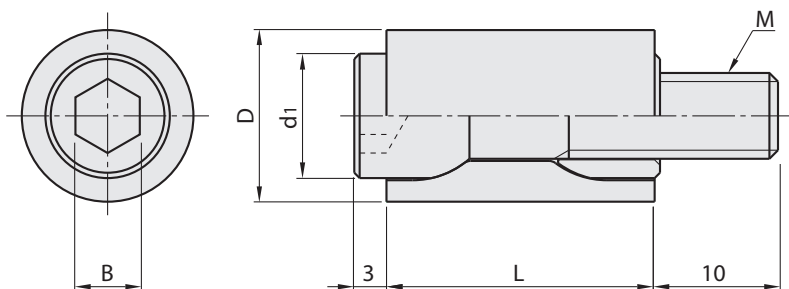
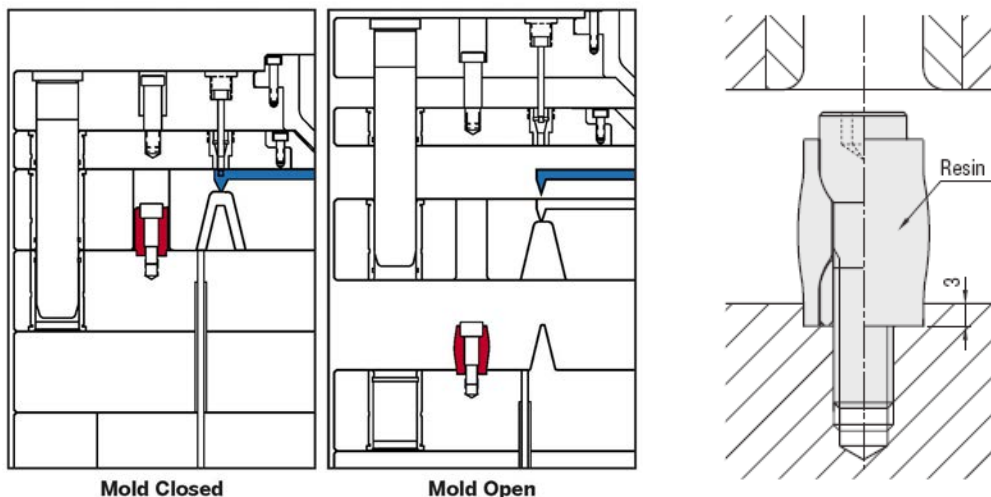
## Friction Puller

- Provides smooth plate sequence control
- Systematically draw floating plates & inserts apart
- Maximum Operating Temperature of 250°F (120°F)
- Four available sizes: 10mm, 13mm, 16mm, 20mm
- For installation, tighten screw to the desired amount of friction

Friction Pullers are designed to provide plate sequence control. The Friction Puller controls plate movement and utilizes friction at a particular setting to release the plate once travel limits are reached. This product can be used to systematically draw floating plates and inserts. Available sizes include: 10mm, 13mm, 16mm, and 20mm.



SPECIFICATIONS	
Bolt Material Type	SCM435
Maximum Operating Temperature	250°F (120°C)
Resin Material Type	Heat-Stabilized, Lubricated Nylon 6
Ring Material Type	S45C
Unit of Measure	Inch



CATALOG NO.	B	D	D1	L	M	MAX FORCE
FP-10P	4	10	7.6	17	M5-8	32.5 kg (70 lbs)
FP-13P	5	13	9.6	20	M6-1	62.5 kg (135 lbs)
FP-16P	6	16	11.6	25	M8-1.25	150.0 kg (330 lbs)
FP-20P	6	20	14.6	30	M10-1.5	212.5 kg (470 lbs)

