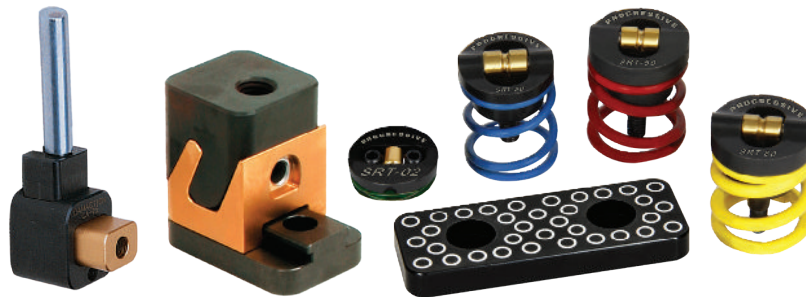




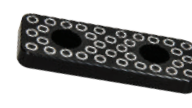
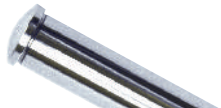
# CAM ACTIONS

## SLIDE COMPONENTS

### SECTION G



CamAction: 100 Series	CamAction: 200 Series	CamAction: 300/350 Series	CamAction: 400 Series
Prefix: CA, CMM	Prefix: CA, CMM	Prefix: CA, CMM	Prefix: CA
Page: G-1	Page: G-2	Page: G-5	Page: G-10



Slide Retainers	Angle Pin	Slide Retainers: Urethane	Wear Plates
Prefix: SRT, SRTM	Prefix: AP	Prefix: RET	Prefix: WP
Page: G-12	Page: G-14	Page: G-14	Page: G-15

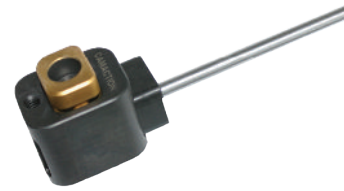


Bronze Wear Plates	L- GIB
Prefix: WP	Prefix: LGIB
Page: G-16	Page: G-16

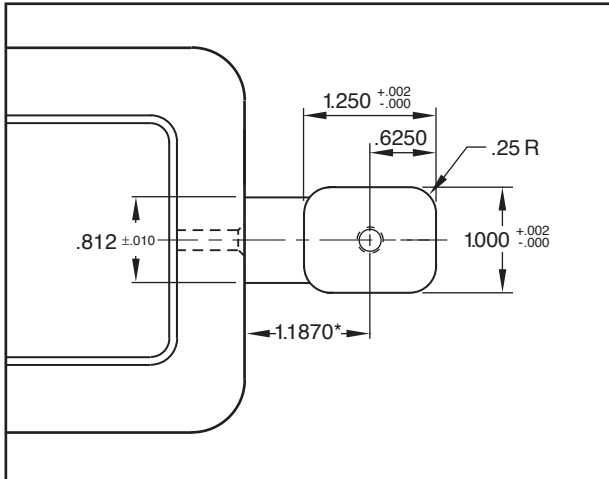




# CAM ACTION® 100 SERIES

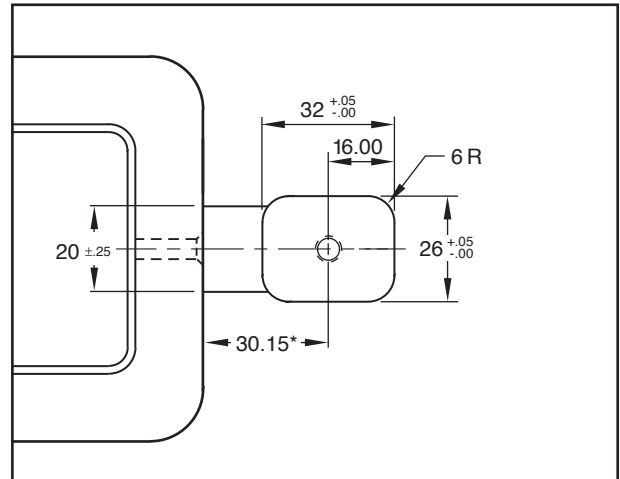


## Inch Standard

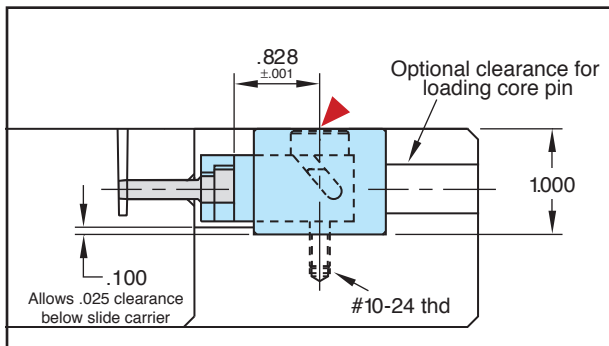


Note: When the core pin is not shutting off on the inner core wall, the distance from the edge of the insert should be 1.142 for the slide carrier to shut off against the core insert.

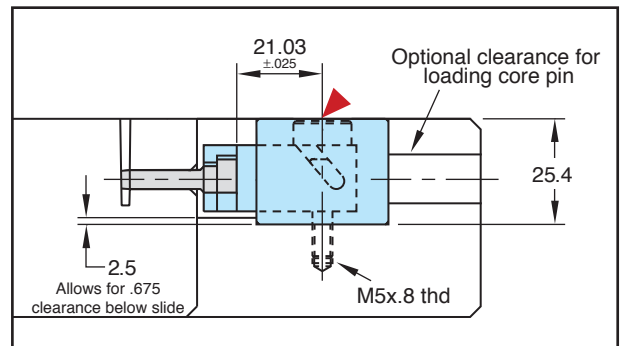
## Metric Standard



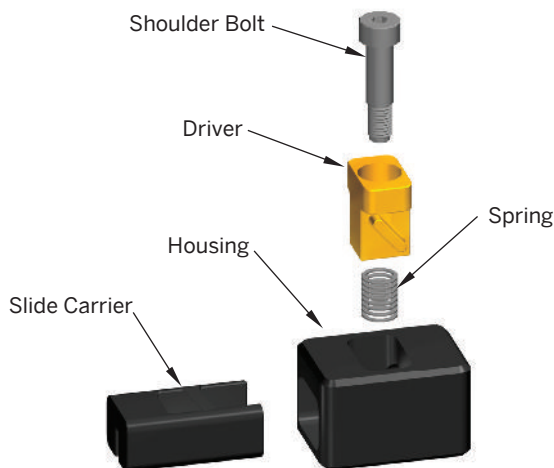
Note: When the core pin is not shutting off on the inner core wall, the distance from the edge of the insert should be 29.00 for the slide carrier to shut off against the core insert.



Note: .828 dimension must be maintained to avoid improper spring pre-load or damage to internal components.



Note: 21.03 dimension must be maintained to avoid improper spring pre-load or damage to internal components.



Travel = .160" (4mm)

▶ CAD insertion point

CATALOG NUMBER	DESCRIPTION
CA-100	CamAction Unit
CAMM-100	Metric CamAction Unit

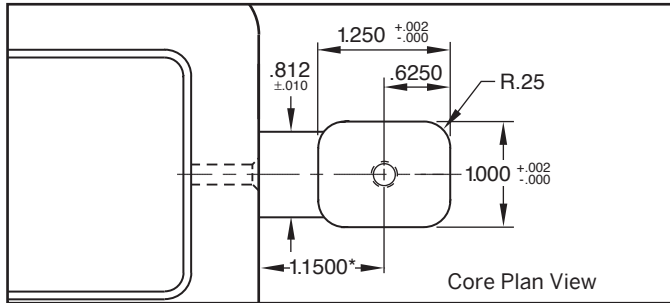
Note: Max operating temperature 300°F.

Replacement parts are available. Refer to the price list for catalog numbers and pricing, and contact Customer Service for availability.

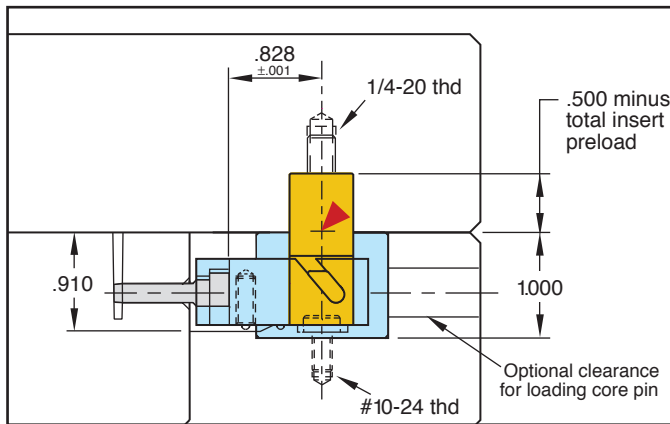
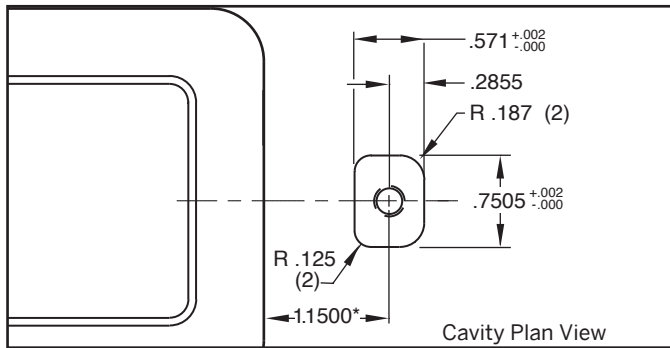
# CAM ACTION® 200 SERIES



## Inch Standard

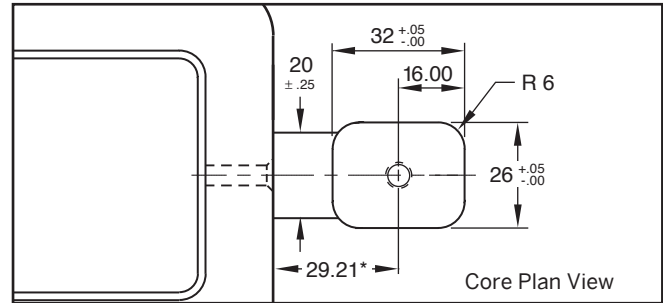


Note: When the core pin is not shutting off on the inner core wall, the distance from the edge of the insert should be 1.1425 for the slide carrier to shut off against the core insert.

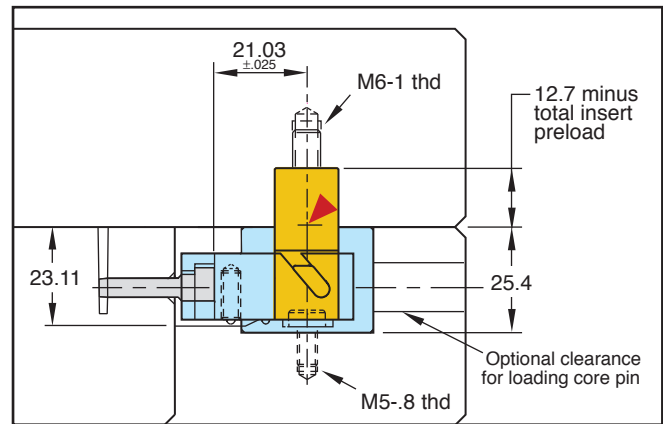
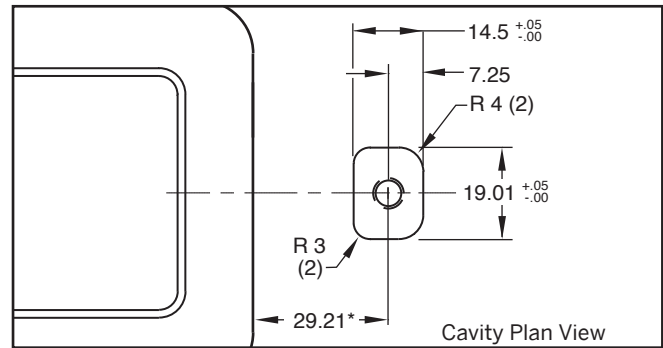


Note: .828 dimension must be maintained to ensure proper shut-off.

## Metric Standard



Note: When the core pin is not shutting off on the inner core wall, the distance from the edge of the insert should be 29.02 for the slide carrier to shut off against the core insert.



Note: 21.03 dimension must be maintained to ensure proper shut-off.

Travel = .230" (5.8mm)

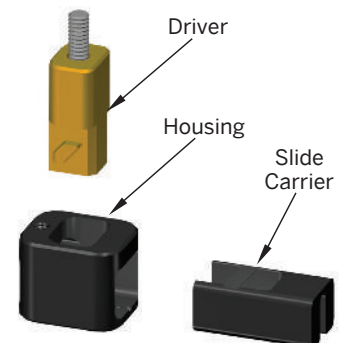
▶ CAD insertion point

CATALOG NUMBER	DESCRIPTION
CA-200	CamAction Unit-Standard Driver
CA-200L	CamAction Unit-Longer Driver
CAMM-200	Metric CamAction Unit-Standard Driver
CAMM-200L	Metric CamAction Unit-Longer Driver

Note: Longer driver allows for extension below parting line up to 3" (76mm).

Note: Max operating temperature 300°F.

Replacement parts are available. Refer to the price list for catalog numbers and pricing, and contact Customer Service for availability.



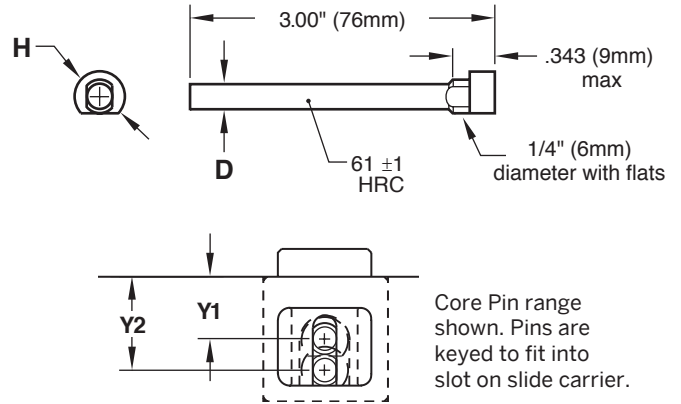


# CAM ACTION® ACCESSORIES

## 100/200 SERIES CORE PINS

**M** M-2 **H** 60-62 HRC **S** Chrome Plated

CATALOG NUMBER	D	H	Y1	Y2
<b>CAP1-187</b>	$\frac{.1872}{.1869}$	.37	.500	.750
<b>CAP1-375</b>	$\frac{.3747}{.3744}$	.37	.500	.688
<b>CAPMM-5</b>	$\frac{4.984 \text{ mm}}{4.992 \text{ mm}}$	9.5 mm	12.7 mm	19.05 mm
<b>CAPMM-10</b>	$\frac{9.985 \text{ mm}}{9.992 \text{ mm}}$	9.5 mm	12.7 mm	17.40 mm

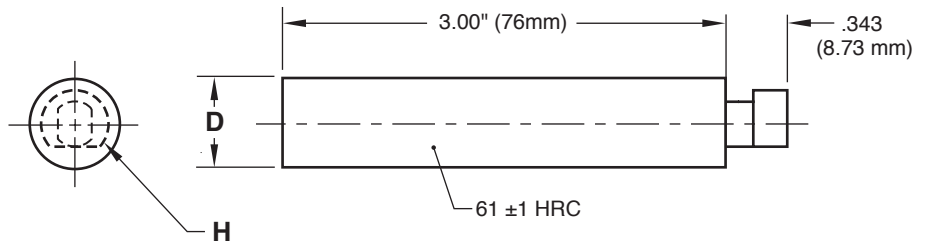


For use with 100 and 200 Series CamActions.  
When using with the 100 Series, 2° draft per side (minimum) is required in the molding area.

## 200 SERIES CORE PINS

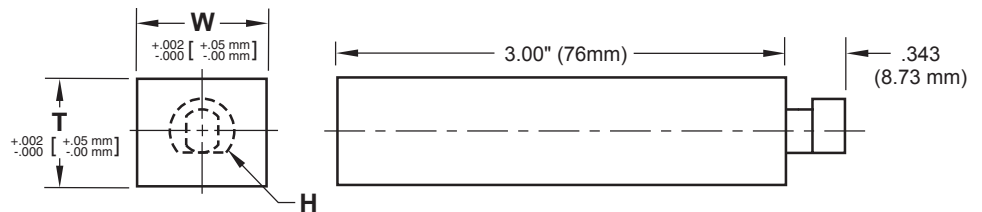
**M** M-2 **H** 60-62 HRC **S** Chrome Plated

CATALOG NUMBER	D	H
<b>CAP2-500</b>	$\frac{.5001}{.5003}$	.37
<b>CAP2MM-13</b>	$\frac{13.002 \text{ mm}}{13.007 \text{ mm}}$	9.5 mm



For use with 200 Series CamActions only.

## 200 SERIES INSERTS



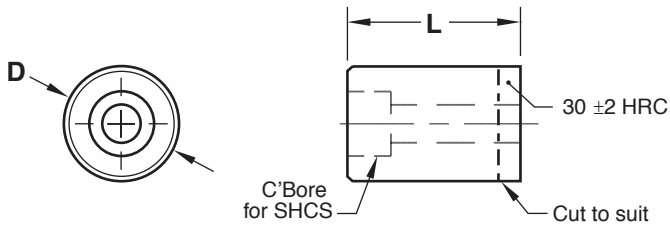
**M** P-20 Pre-Hard **S** Salt Bath Nitride

CATALOG NUMBER	T	W	H
<b>CSE2-62X75</b>	.625	.750	.37
<b>CSE2MM-16X19</b>	15.98 mm	19 mm	9.5 mm

For use with 200 Series CamActions only.

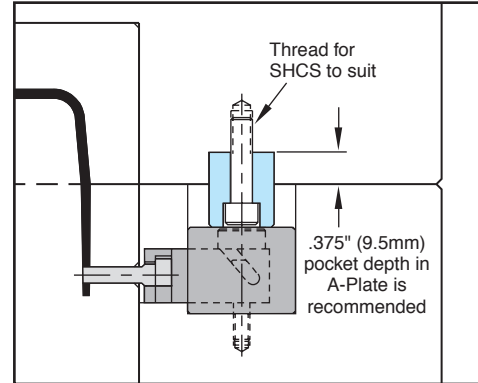
# CAM ACTION® ACCESSORIES

## “A” EXTENSION

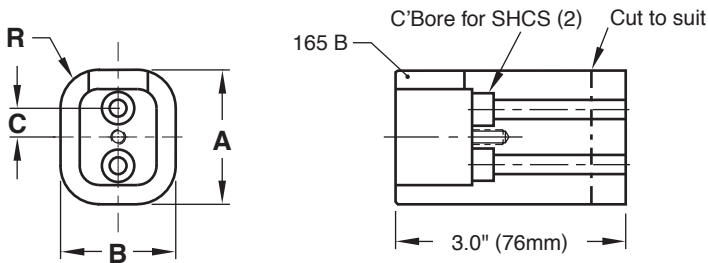


**M** 4140 **H** 28-32 HRC **S** Black Oxide

CATALOG NUMBER	D	L	SHCS
<b>CAE-100</b>	.750	1.125	1/4-20
<b>CAEMM-100</b>	19 mm	28 mm	M6-1

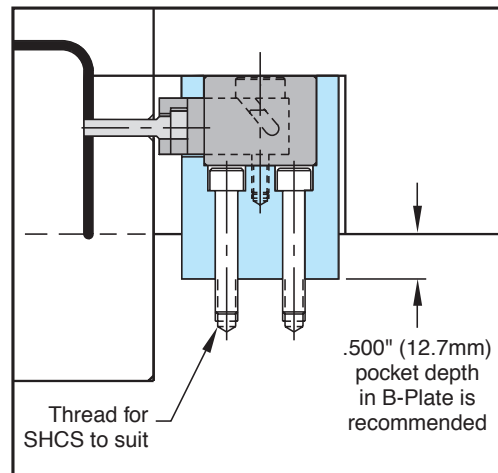


## “B” RISER



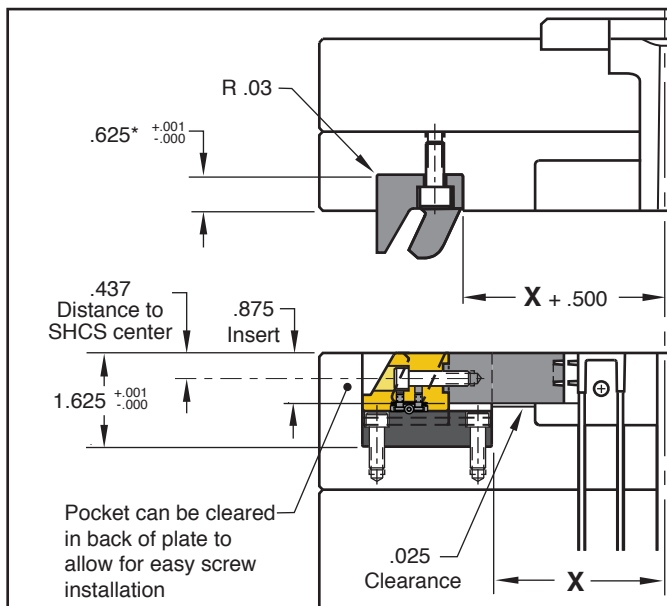
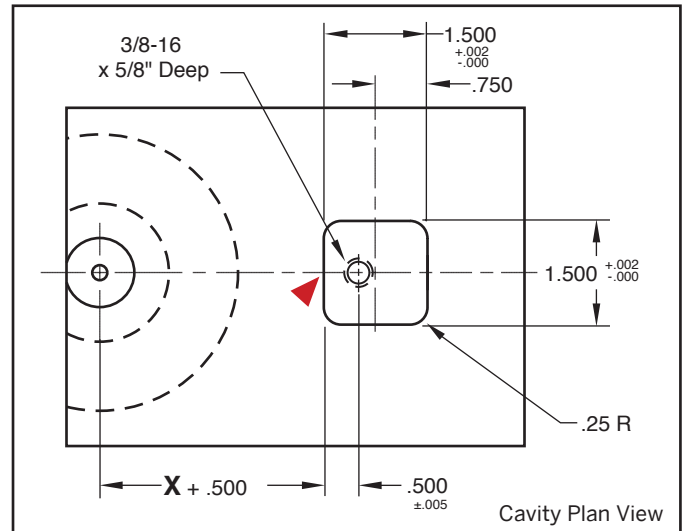
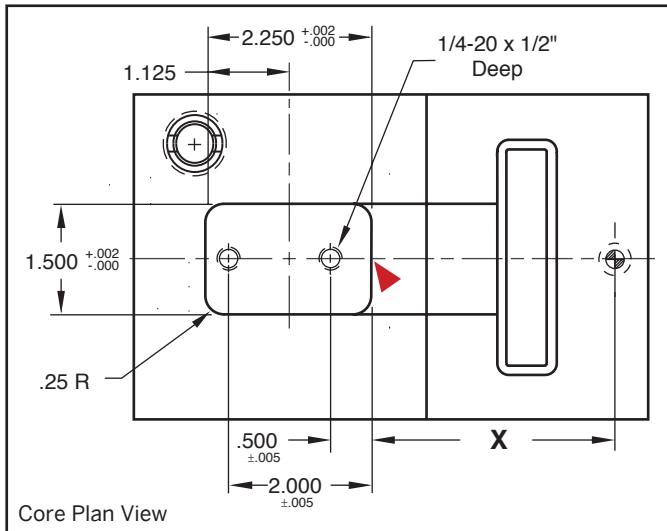
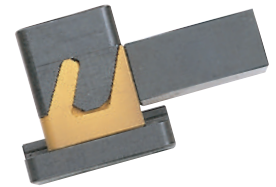
**M** AISI 4140 PH **H** 28-32 HRC **S** Black Oxide

CATALOG NUMBER	A	B	C	R	SHCS
<b>CBR-100</b>	1.750	1.500	.375	.50	1/4-20
<b>CBRMM-100</b>	44 mm	38 mm	10 mm	12.7 mm	M6-1

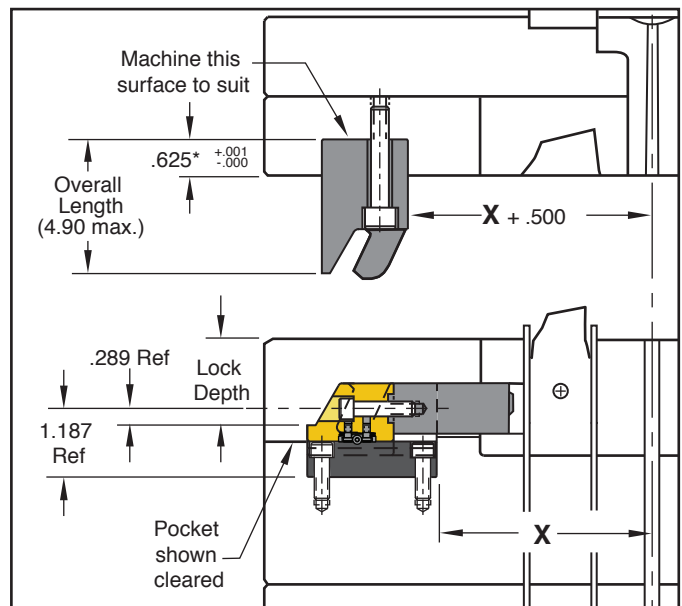




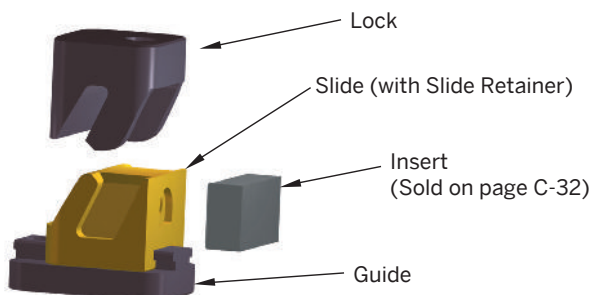
# CAM ACTION® 300 SERIES: INCH STANDARD



\*Minus pre-load.



\*Minus pre-load.



Travel = .250"

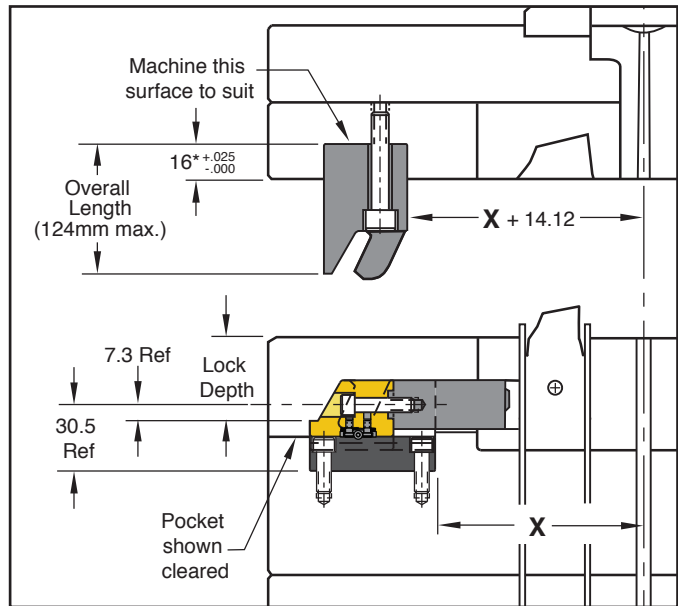
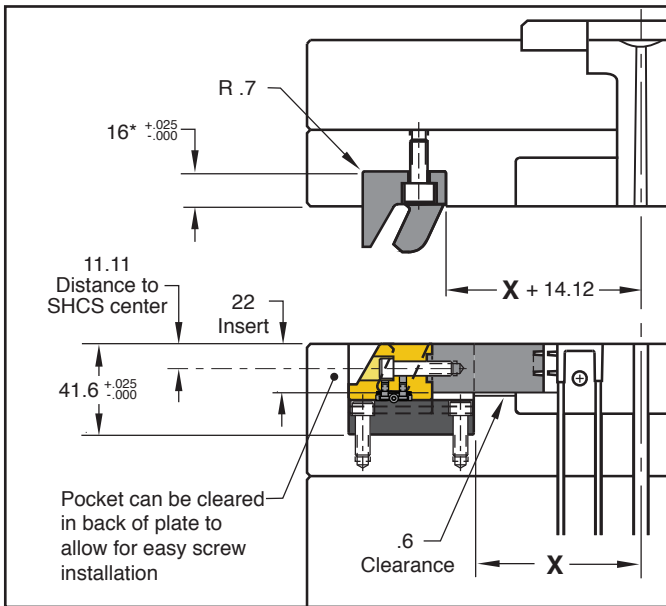
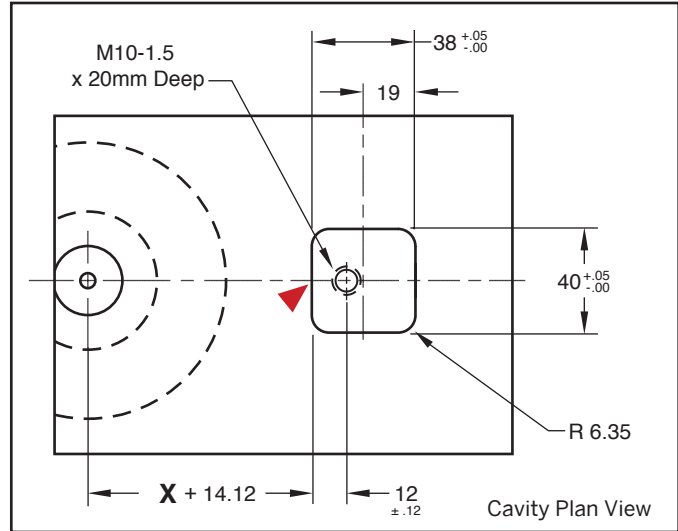
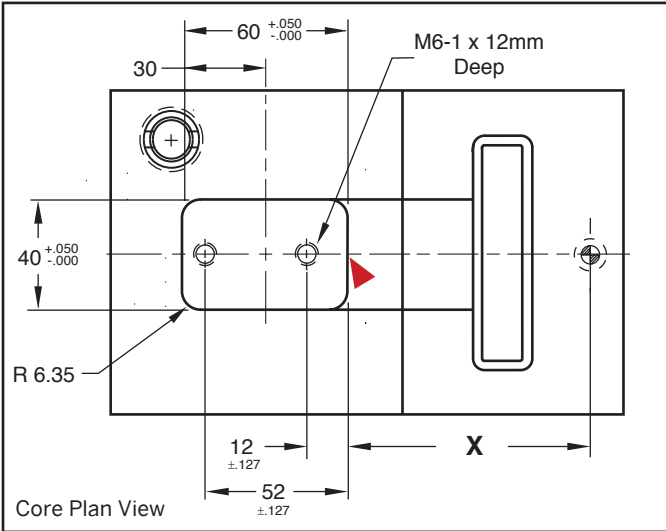
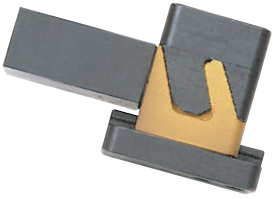
CAD insertion point

CATALOG NUMBER	DESCRIPTION
CA-300	CamAction Unit-Standard Lock
CA-300L	CamAction Unit-Longer Lock

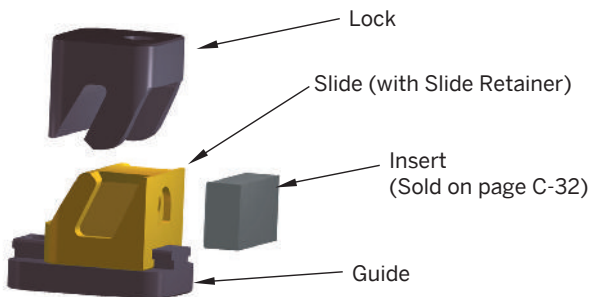
Each assembly includes SRT-10 Slide Retainer and (3) mounting screws. Individual replacement parts are available. Refer to the price list for catalog numbers and pricing, and contact Customer Service for availability.

# CAM ACTION®

## 300 SERIES: METRIC STANDARD



\*Minus pre-load.



Travel = 6.35 mm

CAD insertion point

CATALOG NUMBER	DESCRIPTION
<b>CAMM-300</b>	Metric CamAction Unit-Standard Lock
<b>CAMM-300L</b>	Metric CamAction Unit-Longer Lock

Each assembly includes SRTM-04 Slide Retainer and (3) mounting screws. Individual replacement parts are available. Refer to the price list for catalog numbers and pricing, and contact Customer Service for availability.

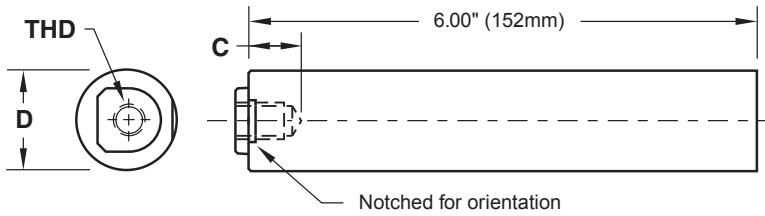




# CAM ACTION® ACCESSORIES

## 300 SERIES CORE PINS

**M** M-2 **H** 58-62 HRC **S** Chrome Plated

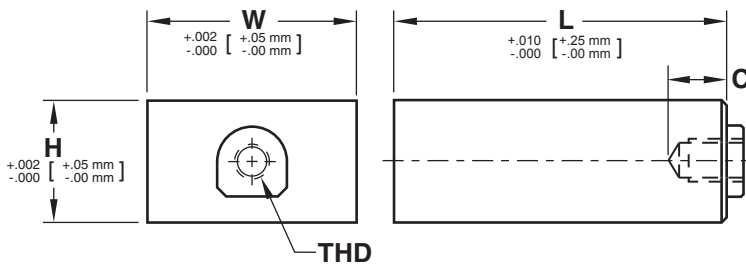


CATALOG NUMBER	D	THD	C
<b>CAP3-750</b>	.7504 .7508	1/4-20	3/4
<b>CAP3MM-19</b>	19.009 mm 19.019 mm	M6-1	20 mm

Socket head cap screw included.

## 300 SERIES INSERTS

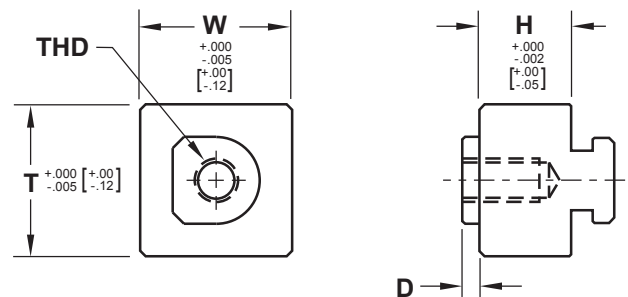
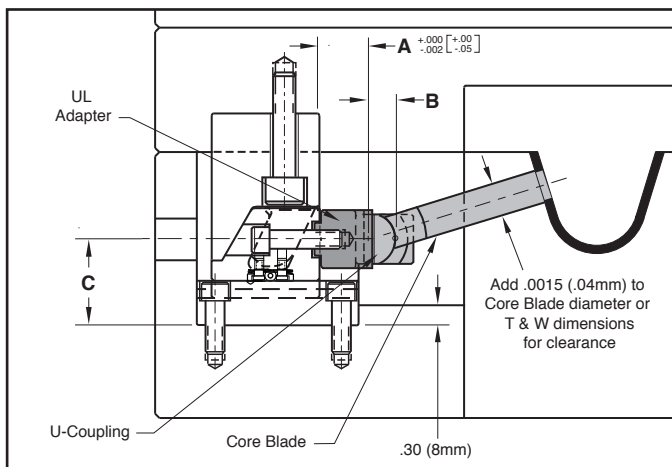
**M** P-20 Pre-Hard **S** Salt Bath Nitride



CATALOG NUMBER	H	W	L	THD	C
<b>CSE3-50</b>	.875	1.500	.50	1/4 - 20	5/8
<b>CSE3-200</b>	.875	1.500	2.00	1/4 - 20	5/8
<b>CSE3MM-12</b>	22 mm	38 mm	12 mm	M6 - 1mm	15 mm
<b>CSE3MM-50</b>	22 mm	38 mm	50 mm	M6 - 1mm	15 mm

Socket head cap screw included.

## 300 SERIES UL ADAPTERS



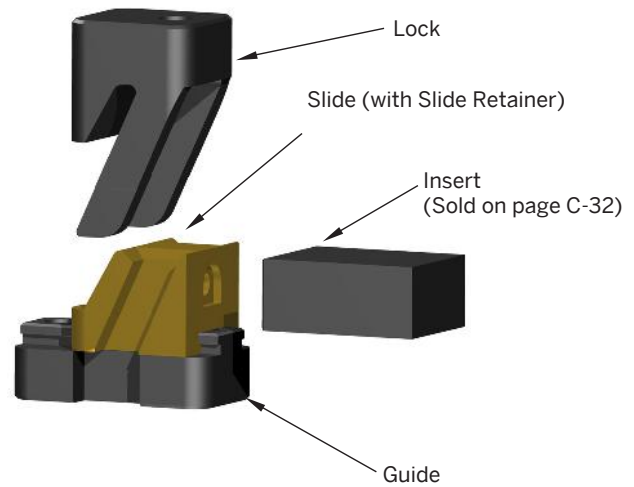
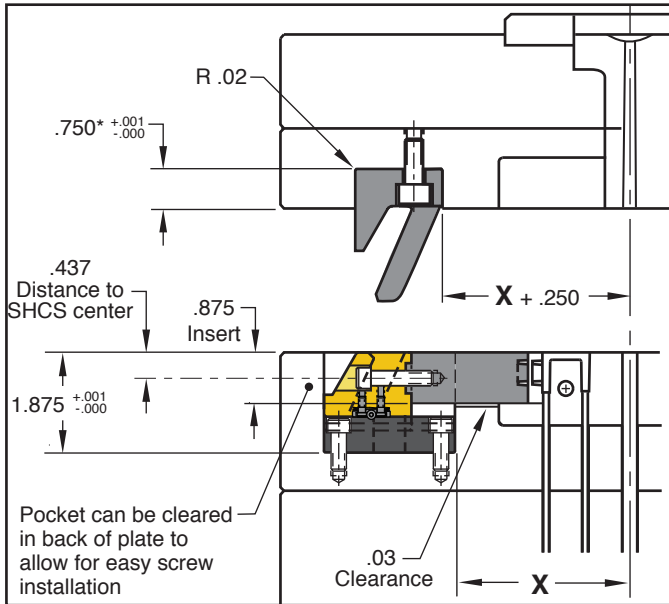
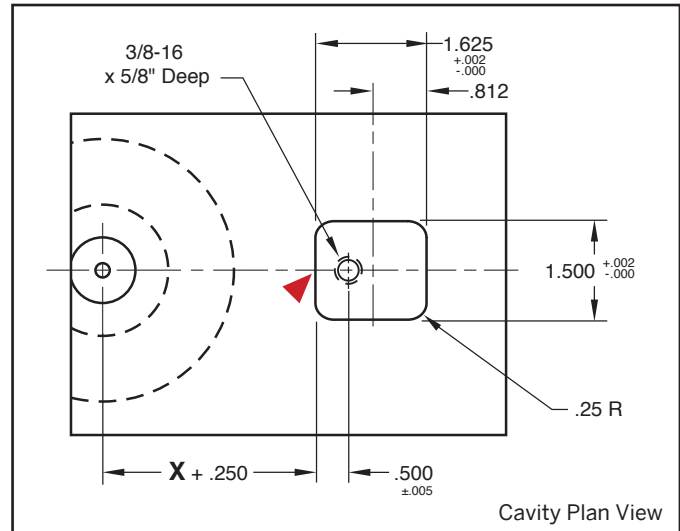
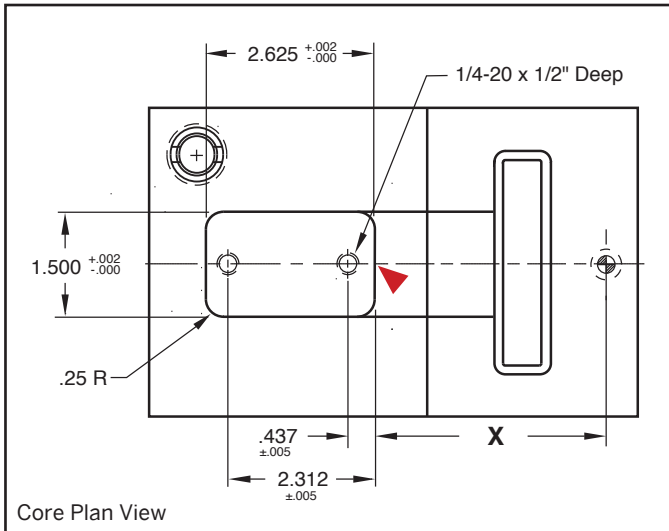
**M** 4140 **S** Salt Bath Nitride

CATALOG NUMBER	T	W	H	D	THD	A	B	C	COMPATIBLE U-COUPLING
<b>CTG-300</b>	.875	.875	.563	.098	1/4-20	.75	.406	1.187	UCU87
<b>CTGMM-300</b>	23 mm	23 mm	6 mm	2.5 mm	M6-1	12 mm	10 mm	30.15 mm	UCMM22

Socket head cap screw included. Core Blades and U-Couplings are sold on page C-2 and C-3.

# CAM ACTION®

## 350 SERIES: INCH STANDARD



Travel = .750"

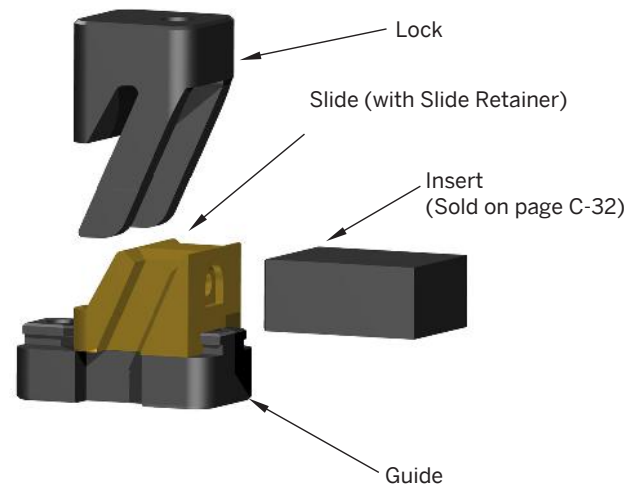
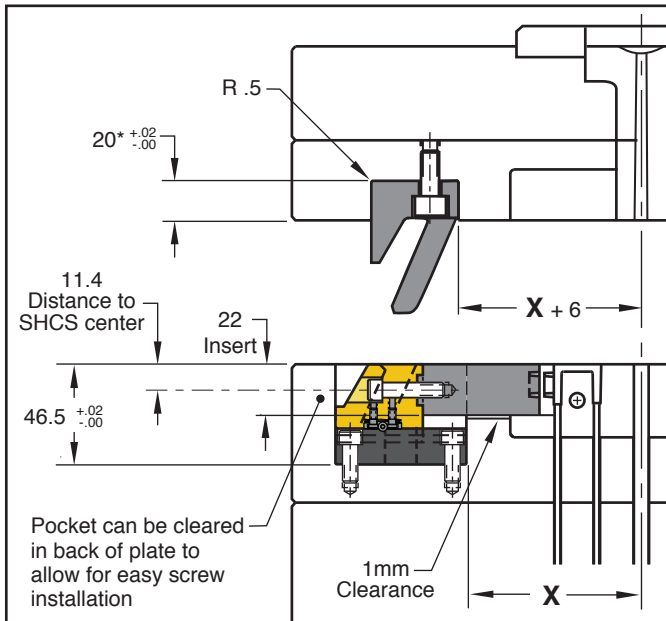
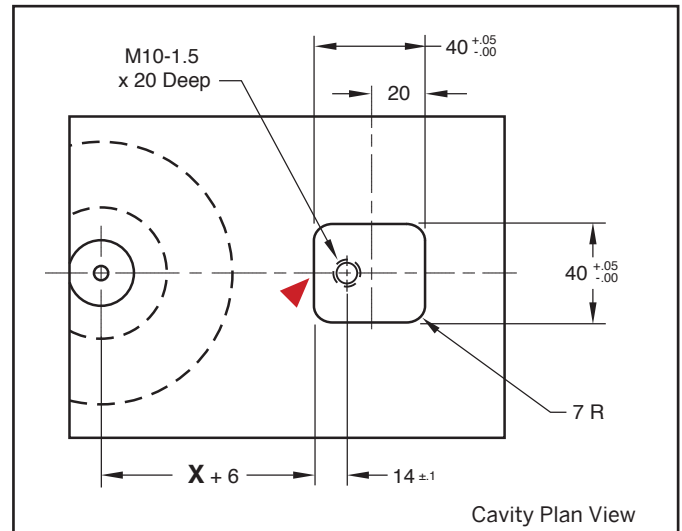
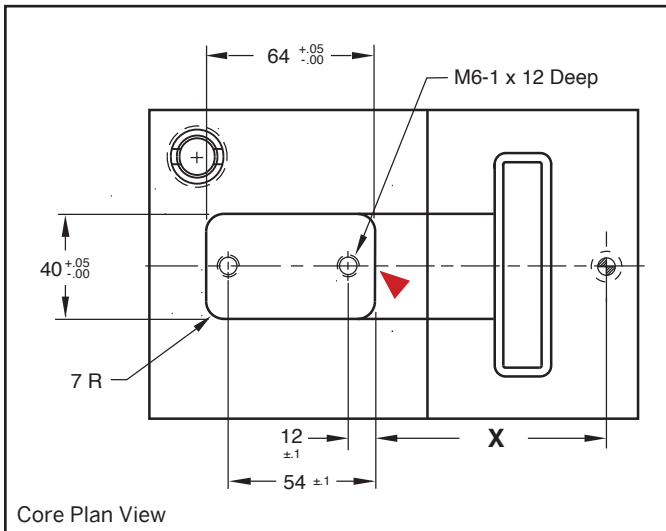
CAD insertion point

CATALOG NUMBER	DESCRIPTION
CA-350	CamAction Unit: 350 Series

Each assembly includes SRT-10 Slide Retainer and (3) mounting screws. Individual replacement parts are available. Refer to the price list for catalog numbers and pricing, and contact Customer Service for availability.



# CAMACTION® 350 SERIES: METRIC STANDARD



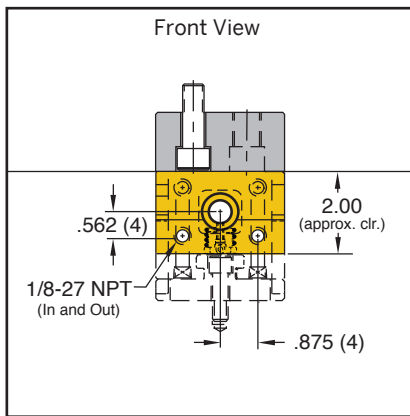
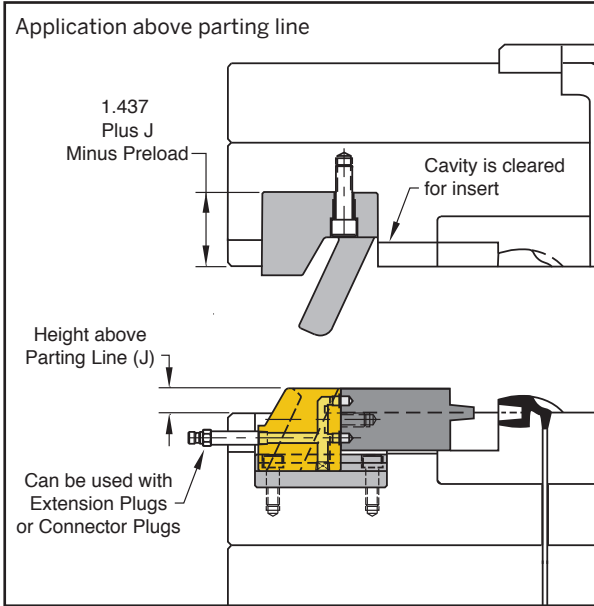
Travel = 18mm

CAD insertion point

CATALOG NUMBER	DESCRIPTION
<b>CAMM-350</b>	CamAction Unit: 350 Series (Metric)

Each assembly includes SRTM-04 Slide Retainer and (3) mounting screws. Individual replacement parts are available. Refer to the price list for catalog numbers and pricing, and contact Customer Service for availability.

# CAM ACTION® 400 SERIES

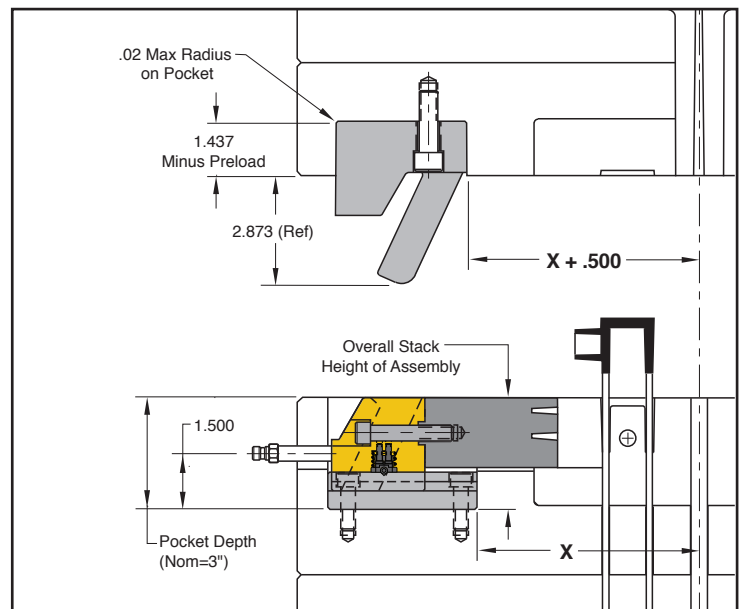
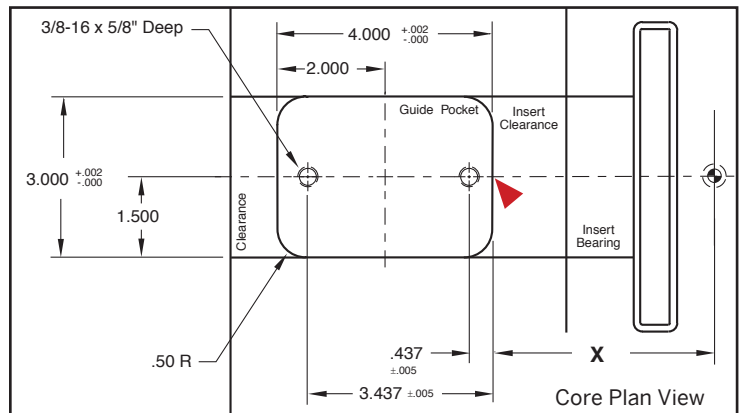
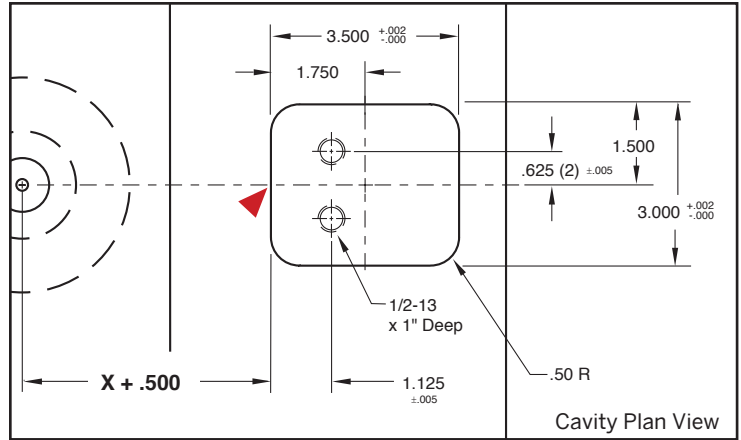


Each assembly includes an installed SRT-30 Slide Retainer, Threadless Waterline Plugs (2), O-Rings (2), and (4) mounting screws.

Travel = 1.00"

CAD insertion point

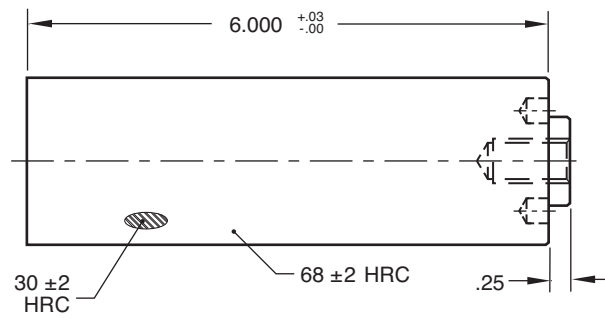
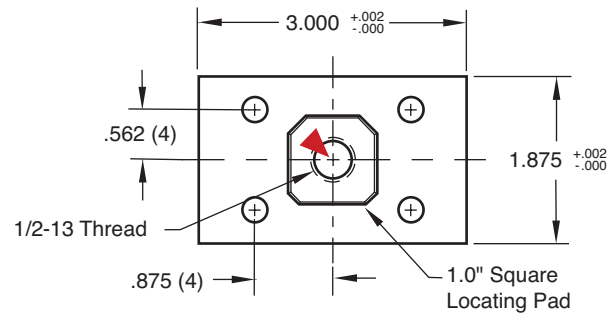
CATALOG NUMBER	DESCRIPTION
CA-400	CamAction Unit with 1" Travel





# CAM ACTION® ACCESSORIES

## 400 SERIES INSERTS

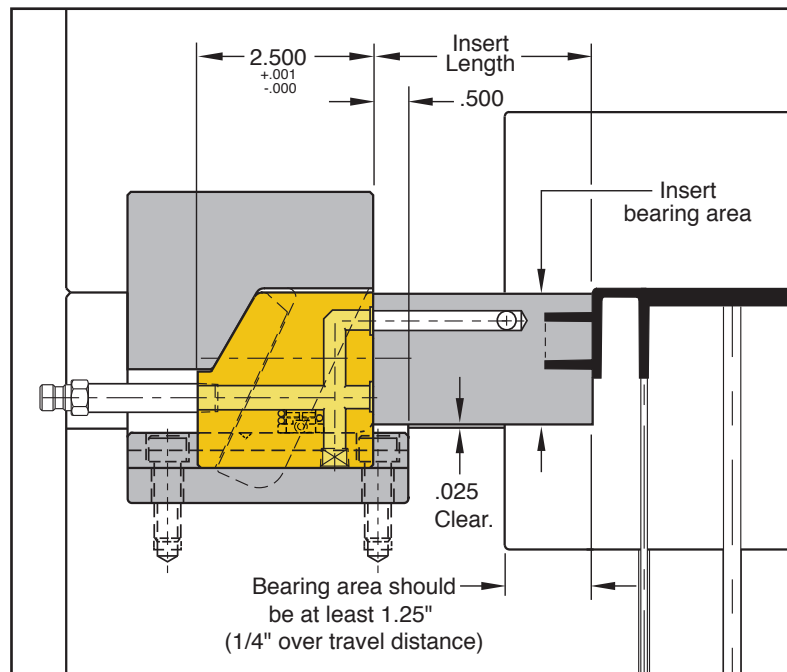


**M** P-20 Pre-Hard **S** Salt Bath Nitride (SBN)

CATALOG NUMBER	DESCRIPTION
<b>CSE4-18X30</b>	CA-400 Insert

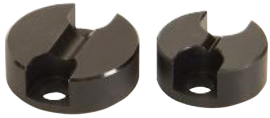
Socket head cap screw included.

CAD insertion point



# SLIDE RETAINERS

Progressive's SRT® Series Slide Retainers reliably hold from 2 to 80 pounds (4 to 36 kgs) each. This slide retention design now features color-coded springs to indicate force rating. This compact design allows for installation in a mold base or wear plates.



Optional cleats may be selected, or the V-Groove for roller retention may be machined in the bottom of the slide as shown on opposing page.

## Inch Standard

Roller: **M** M-2 **H** 60-62 HRC **S** Titanium Nitride Coated 80 HRC

SLIDE RETAINER								CLEAT				
SLIDE RETAINER CATALOG NUMBER	Max Weight Per Unit (lbs)	D +0.05 -0.00	L ±.001	S ±.002	T Screws (2)	E Minimum Thread Depth	Color	CLEAT CATALOG NUMBER	G ±.001	C ±.002	H Screws (2)	J Minimum Thread Depth
SRT-02	2	.625	.160	.155	#4-48	.075	GRN	SRTC-10	.250	.190	#6-32	.250
SRT-04	4						BLU					
SRT-10	10						RED					
SRT-20	20	.750	.500	.150	#8-32	.190	GRN	SRTC-30	.250	.250	#6-32	.250
SRT-30	30						BLU					
SRT-50	50	.875	.750	.150	#8-32	.245	RED	SRTC-80	.250	.300	#6-32	.250
SRT-80	80						YEL					

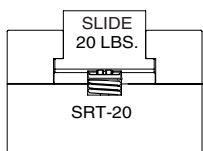
## Metric Standard

Roller: **M** M-2 **H** 60-62 HRC **S** Titanium Nitride Coated 80 HRC

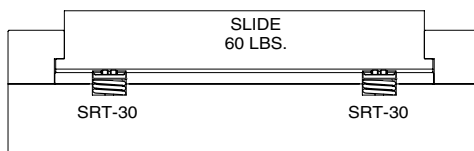
SLIDE RETAINER								CLEAT				
SLIDE RETAINER CATALOG NUMBER	Max Weight Per Unit (kgs)	D +1 -0	L ±.025	S ±.05	T Screws (2)	E Minimum Thread Depth	Color	CLEAT CATALOG NUMBER	G ±.025	C ±.05	H Screws (2)	J Minimum Thread Depth
SRTM-01	1	15.9	4.06	3.95	M3	1.9	GRN	SRTMC-04	6.35	4.85	M3	6.35
SRTM-02	2						BLU					
SRTM-04	4						RED					
SRTM-09	9	19.1	12.70	3.80	M4	4.8	GRN	SRTMC-13	6.35	6.35	M3	6.35
SRTM-13	13						BLU					
SRTM-22	22	22.3	19.05	3.80	M4	6.2	RED	SRTMC-36	6.35	7.60	M3	6.35
SRTM-36	36						YEL					

### Technical Information:

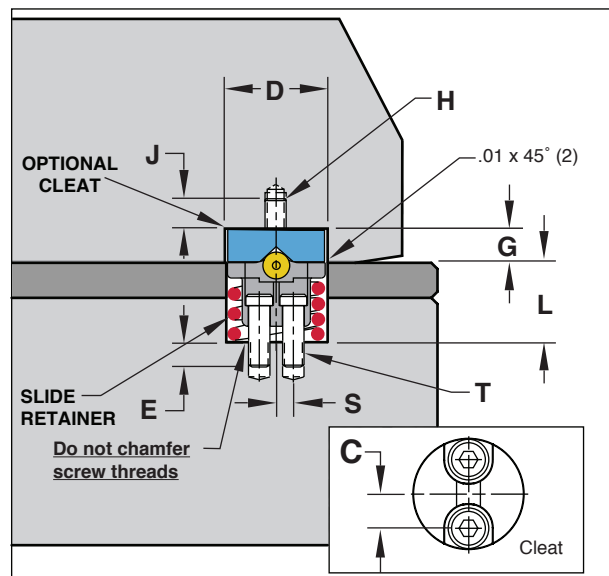
- Maximum operating temperature is 425° F (218° C).
- Match total Slide Retainers Spring force to slide weight, excess spring force could induce wear.
- Do not chamfer screw threads
- Machine 10 degree lead-in on all slides to aid in assembly once the SRT is installed.
- Cleats sold separately.



Select the single Slide Retainer to match the slide weight.



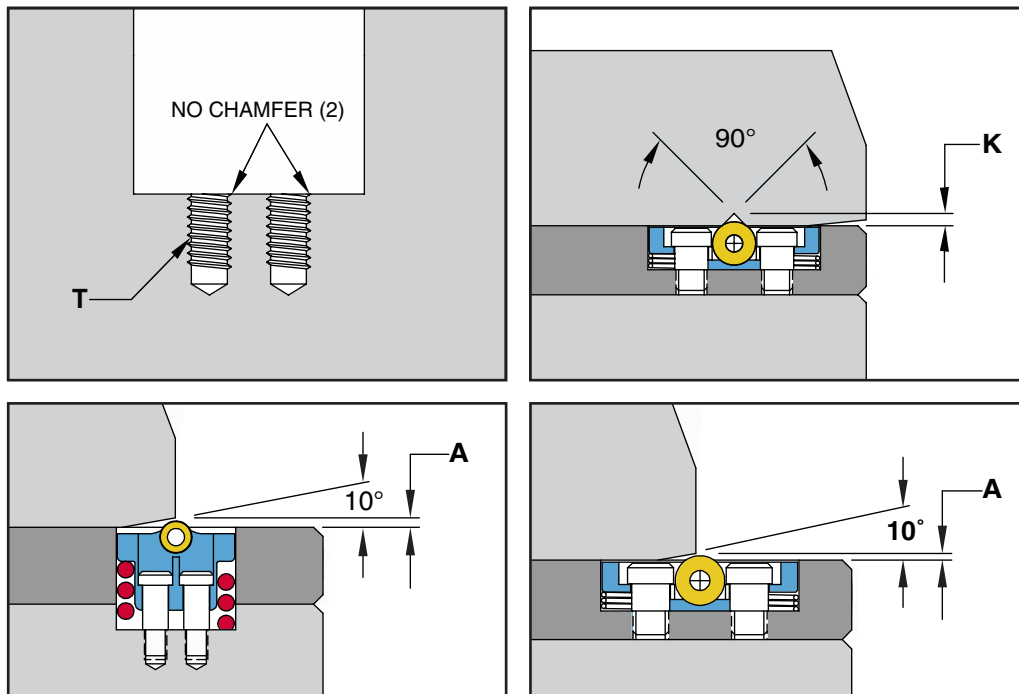
Or add the force of multiple Slide Retainers to match the slide weight.



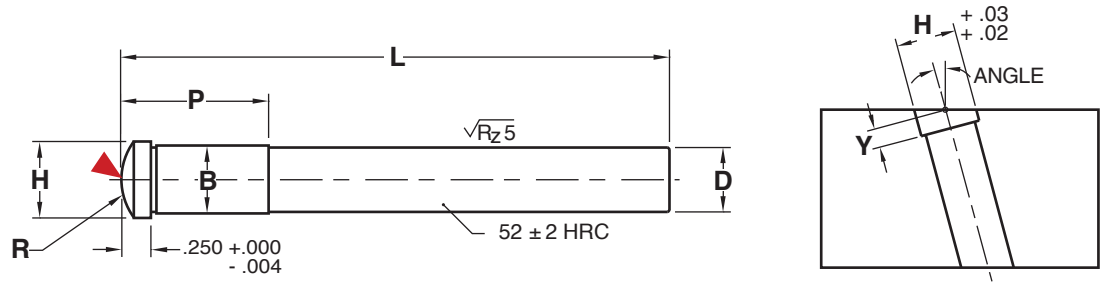


# SLIDE RETAINERS

RETAINER CATALOG NUMBER	T Thread (2)	Tap Class Required	K V-Groove	A 10° Angle Lead - In
SRT-02	#4-48	2B GH2	.041"	.02"
SRT-04				
SRT-10				
SRT-20	#8-32	2B GH3	.078"	.04"
SRT-30				
SRT-50	#8-32	2B GH3	.078"	.05"
SRT-80				
SRTM-01	M3x.5	6H D3	1 mm	.50 mm
SRTM-02				
SRTM-04				
SRTM-09	M4x.7	6H D4	2 mm	1.00 mm
SRTM-13				
SRTM-22	M4x.7	6H D4	2 mm	1.27 mm
SRTM-36				



# ANGLE PINS



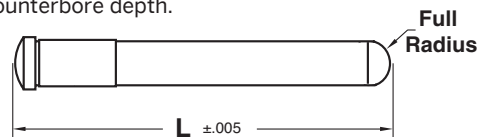
M 8620 H Surface: 50-54 HRC

CAD insertion point

Nominal Diameter	CATALOG NUMBER	D +.0000 -.0005	L +.125 -.000	B +.0005 -.0000	H +.000 -.010	R Head Radius	P Press Fit Length	Angle	Y Depth
3/8	AP375L6	.374	6	.376	.500	.375	.87	10°	.258
	15°							.265	
	AP375L10						10	1.37	20°
1/2	AP500L6	.499	6	.501	.625	.500	.87	10°	.260
	15°							.270	
	AP500L10						10	1.37	20°
5/8	AP625L6	.624	6	.626	.750	.625	.87	10°	.262
	15°							.274	
	AP625L10						10	1.37	20°
3/4	AP750L10	.749	10	.751	.875	.750	1.37	10°	.264
	14		15°					.278	
			20°					.300	
								25°	.329

### Installation Instructions:

The spherical radius included on the head of the Angle Pin saves grinding after installation. To install on a specific angle, use the chart at the top of the page to determine the correct counterbore depth.



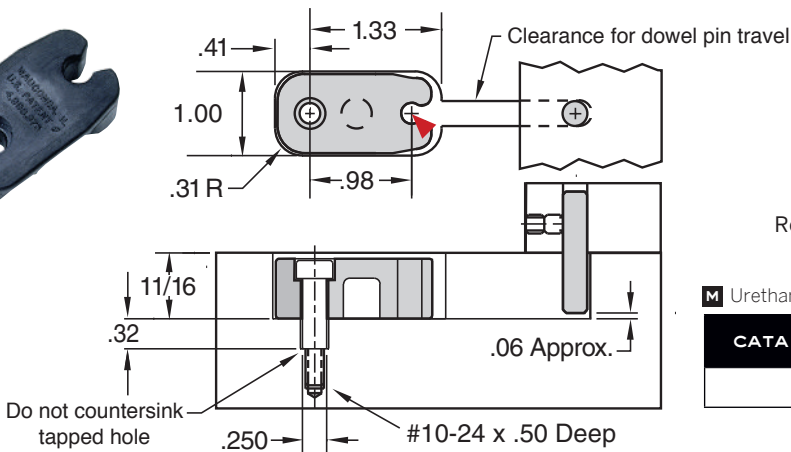
Angle Pins Special Order

APR	-	625	-	L7.244
Angle Pin With Full Radius		Diameter can be 375 500 625 750		Length Specified to 3 decimals

### Special Order Instructions:

Full Radius option is available as a special order by specifying APR prefix.  
Example: APR 500- L6.500 : Angle pin with 1/2" diameter 6.500" long with full radius. P will be 1.37" per table above.

# URETHANE RETAINERS



Maximum slide weight for retainer weight: 25 lbs.  
Maximum operating temperature is 150° F (65° C).  
Retainer, 1/4 Ø x 3/4" Shoulder Bolt, 1/4 Ø x 1 1/4" Dowel Pin

M Urethane

CATALOG NUMBER	DESCRIPTION
RET-1	Retainer, Stripper Bolt & Dowel

CAD insertion point

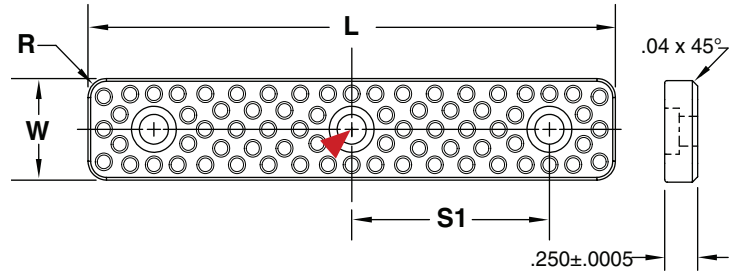
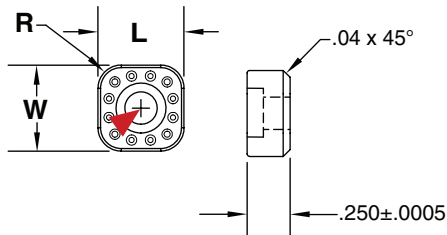




# WEAR PLATES

Progressive's Wear Plates enable moldmakers to select off-the-shelf standard sizes versus manufacturing in-house. Wear Plates leverage the long lasting Z-Series proprietary treatments and particle rings for lubrication retention.

- Standardized "plug and play" design ready to install.
- Place multiple sizes in a series as needed.
- Low Head Cap Screws included.



**M** H-13 **H** Core: 42-48 HRC, Surface: 70 HRC **S** Salt Bath Nitride

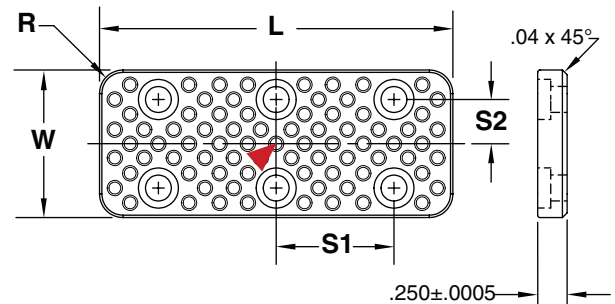
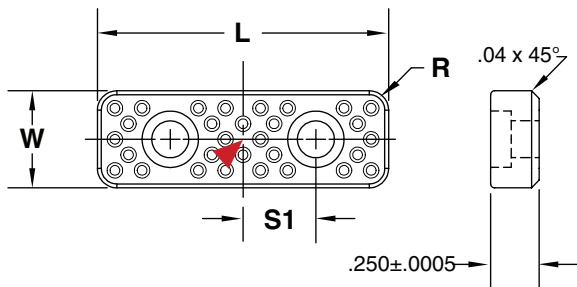
CATALOG NUMBER	W +.000 -.005	L +.000 -.005	R Pocket Radius	LHCS (1)
WP050X050	.500	.500	.125	#8-32 X .38

▶ CAD insertion point

**M** H-13 **H** Core: 42-48 HRC, Surface: 70 HRC **S** Salt Bath Nitride

CATALOG NUMBER	W +.000 -.005	L +.000 -.005	S1 ±.005	R Pocket Radius	LHCS (3)
WP050X250	.500	2.500	.875	.094	#8-32 X .38
WP050X350	.500	3.500	1.250	.094	#8-32 X .38
WP075X400	.750	4.000	1.500	.125	#10-32 X .38
WP075X600	.750	6.000	2.500	.125	#10-32 X .38

▶ CAD insertion point



**M** H-13 **H** Core: 42-48 HRC, Surface: 70 HRC **S** Salt Bath Nitride

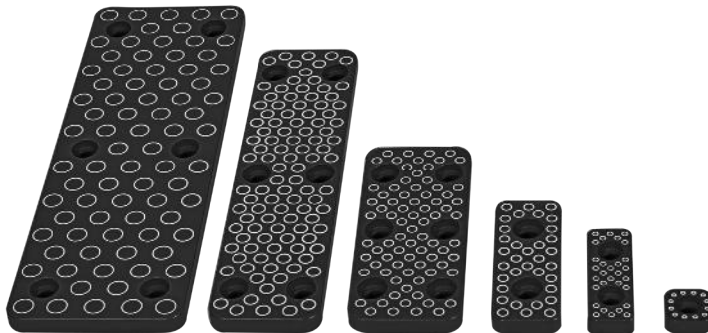
CATALOG NUMBER	W +.000 -.005	L +.000 -.005	S1 ±.005	R Pocket Radius	LHCS (2)
WP050X150	.500	1.500	.375	.094	#8-32 X .38
WP075X200	.750	2.000	.500	.125	#10-32 X .38

▶ CAD insertion point

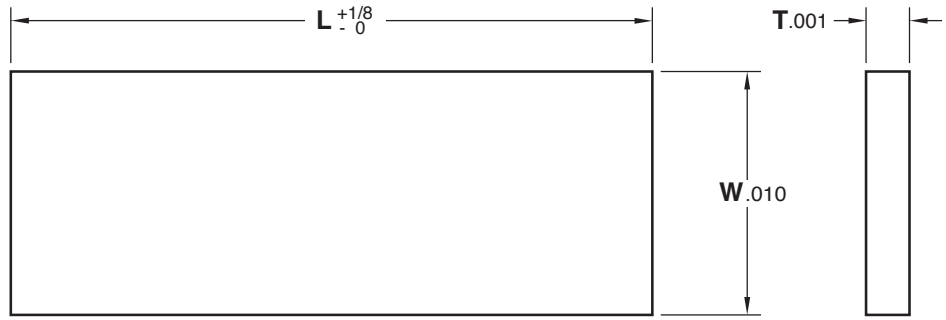
**M** H-13 **H** Core: 42-48 HRC, Surface: 70 HRC **S** Salt Bath Nitride

CATALOG NUMBER	W +.000 -.005	L +.000 -.005	S1 ±.005	S2 ±.005	R Pocket Radius	LHCS (6)
WP125X300	1.250	3.000	1.00	.375	.187	#10-32 X .38
WP125X500	1.250	5.000	2.00	.375	.187	#10-32 X .38
WP125X800	1.250	8.000	3.50	.375	.187	#10-32 X .38
WP200X600	2.000	6.000	2.50	.625	.187	#10-32 X .38
WP200X800	2.000	8.000	3.50	.625	.187	#10-32 X .38
WP250X600	2.500	6.000	2.50	.750	.187	#10-32 X .38
WP300X600	3.000	6.000	2.50	.750	.187	#10-32 X .38

▶ CAD insertion point



# BRONZE WEAR PLATES

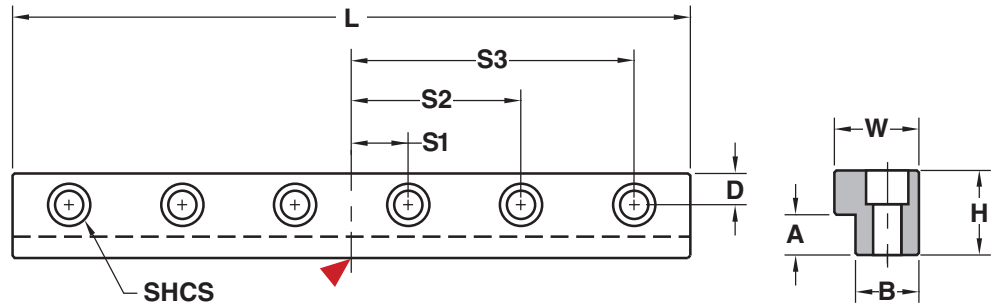


**M** CA954 Solid Bronze **H** 170 Brinell

T	W	L=4"	L=5"	L=6"	L=8"	L=10"	L=12"
1/4	1.000	WP25X1X4	WP25X1X5	WP25X1X6	WP25X1X8	WP25X1X10	WP25X1X12
	1.500	WP25X1.5X4	WP25X1.5X5	WP25X1.5X6	WP25X1.5X8	WP25X1.5X10	WP25X1.5X12
	2.000	WP25X2X4	WP25X2X5	WP25X2X6	WP25X2X8	WP25X2X10	WP25X2X12
	2.500	WP25X2.5X4	WP25X2.5X5	WP25X2.5X6	WP25X2.5X8	WP25X2.5X10	WP25X2.5X12
	3.000	WP25X3X4	WP25X3X5	WP25X3X6	WP25X3X8	WP25X3X10	WP25X3X12
	4.000	WP25X4X4	WP25X4X5	WP25X4X6	WP25X4X8	WP25X4X10	WP25X4X12
3/8	1.000	WP37X1X4	WP37X1X5	WP37X1X6	WP37X1X8	WP37X1X10	WP37X1X12
	1.500	WP37X1.5X4	WP37X1.5X5	WP37X1.5X6	WP37X1.5X8	WP37X1.5X10	WP37X1.5X12
	2.000	WP37X2X4	WP37X2X5	WP37X2X6	WP37X2X8	WP37X2X10	WP37X2X12
	2.500	WP37X2.5X4	WP37X2.5X5	WP37X2.5X6	WP37X2.5X8	WP37X2.5X10	WP37X2.5X12
	3.000	WP37X3X4	WP37X3X5	WP37X3X6	WP37X3X8	WP37X3X10	WP37X3X12
	4.000	WP37X4X4	WP37X4X5	WP37X4X6	WP37X4X8	WP37X4X10	WP37X4X12

Other materials and graphite plug configurations available upon request. Call Customer Service for pricing and delivery.

# L-GIBS



**M** CA954 Solid Bronze **H** 170 Brinell

CAD insertion point

CATALOG NUMBER	W +0.002 -0.000	L +0.125 -0.000	H ±0.005	A +0.002 -0.000	B +0.002 -0.000	# Screw Holes	SHCS	S1	S2	S3	D
LGIB75L5.25	.750	5.25	.750	.312	.563	3	1/4	1.625	—	—	.281
LGIB75L8.75	.750	8.75	.750	.312	.563	4	1/4	1.000	3.375	—	.281
LGIB100L6	1.000	6.00	.750	.375	.750	4	5/16	.750	2.250	—	.375
LGIB100L10	1.000	10.00	.750	.375	.750	4	5/16	1.250	3.750	—	.375
LGIB125L6	1.250	6.00	.875	.500	.875	4	3/8	.750	2.250	—	.438
LGIB125L10	1.250	10.00	.875	.500	.875	4	3/8	1.250	3.750	—	.438
LGIB150L9	1.500	9.00	1.250	.750	1.000	4	3/8	1.125	3.375	—	.500
LGIB150L15	1.500	15.00	1.250	.750	1.000	6	3/8	1.250	3.750	6.250	.500

Available with or without screw counterbores. To order undrilled L-Gibs, specify "N" at the end of the catalog number.