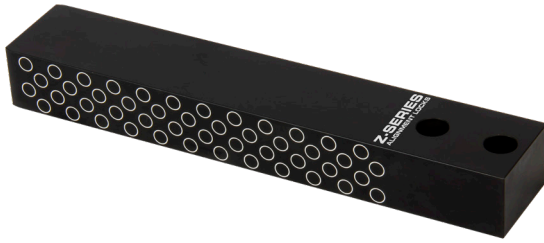


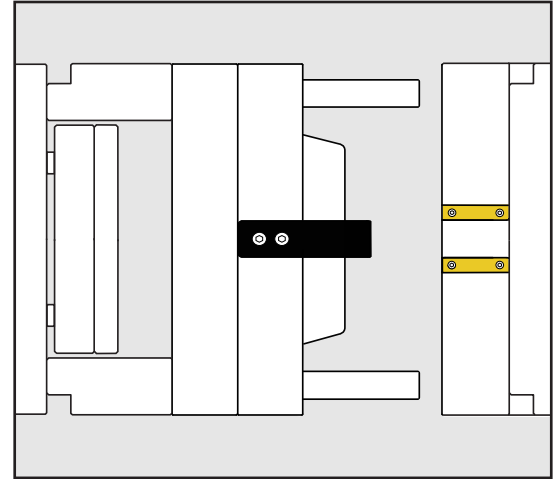
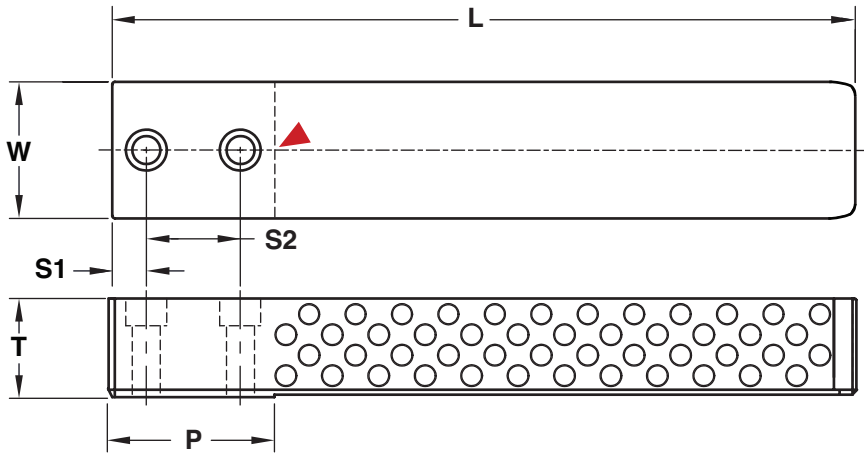
# BAR LOCKS

## Z-SERIES



Progressive's Bar Locks enable mold designers to select off-the-shelf components for alignment of large molds and molds with multiple moving plates.

Long-term precision alignment of plates is achieved through Progressive's Z-Series proprietary treatments, engagement ramp geometry and particle rings on the guiding surfaces.



### MALE BAR LOCKS

#### Inch Standard

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

CATALOG NUMBER	L	T +.000 -.005	W +.0000 -.0005	P Minimum Pocket Length	S1 ±.01	S2 ±.01	SHCS
BLB100L4	3.88	1.000	1.000	1.38	.38	.69	5/16-18 x 1.25
BLB100L6	6.00						
BLB125L5	4.88	1.250	1.500	1.88	.50	1.00	3/8 - 16 x 1.50
BLB125L9	8.88						
BLB137L6	5.88	1.375	2.000	2.38	.50	1.38	3/8 - 16 x 1.50
BLB137L11	10.88						
BLB150L8	7.88	1.500	3.000	3.38	.63	2.00	1/2 - 13 x 1.75
BLB150L16	15.88						

Note: 500°F max operating temperature.

Note: Sold individually. Each catalog number includes (1) Bar and (2) Screws.

Guides are sold separately on page C-5.

### MALE BAR LOCKS

#### Metric Standard

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

CATALOG NUMBER	L	T +.0 -.1	W +.00 -.01	P Minimum Pocket Length	S1 ±.25	S2 ±.25	SHCS
BLBM25L125	125	25	25	36	10	18	M8-1.25 x 30
BLBM32L160	160	32	38	46	12.5	25	M10-1.5 x 35
BLBM38L250	250	38	50	56	15	30	M12-1.75 x 45

Note: 260°C max operating temperature.

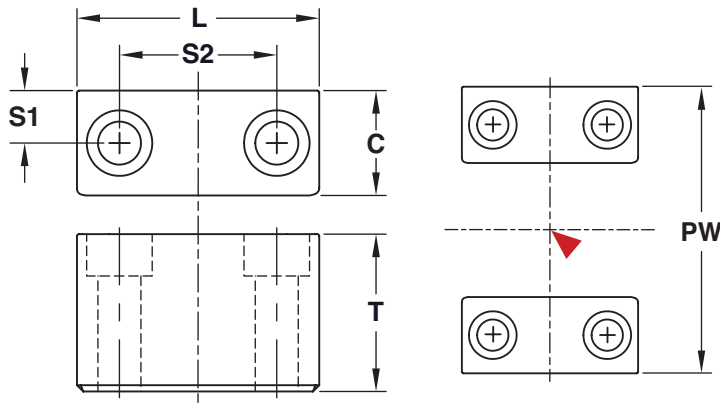
Note: Sold individually. Each catalog number includes (1) Bar and (2) Screws.

Guides are sold separately on page C-5.

Bars can be cut to length and have radii machined and Guides can be provided with radii machined. Refer to page C-7 for details. Bars and Guides can also be made to customer specifications by referring to the template in section X.



# BAR LOCKS GUIDES



PW Tolerances:  
Standard Bars:  
+.0003/+.0006  
(+.007/+.015mm)  
Inserted Bars:  
+.0010/+.0015  
(+.025/+.038mm)

▶ CAD insertion point

**M** D-2 **H** Core: 58-62 HRC, Surface 80 HRC **S** Titanium Nitride Coated

**Inch Standard**

CATALOG NUMBER	T +.000 -.005	L +.000 -.005	C +.0000 -.0003	S1 ±.01	S2 ±.01	SHCS	PW	USE WITH
BLG100L1.3	1.000	1.310	.500	.250	.750	#10-32 x 1.25	2.000	BLB100L4 & BLB100L6
BLG100L1.8		1.810			1.125			
BLG100L2.3		2.310			1.250			
BLG100L2.8		2.810			1.625			
BLG125L1.3	1.250	1.310	.625	.312	.750	1/4-20 x 1.50	2.750	BLB125L5 & BLB125L9
BLG125L1.8		1.810			1.125			
BLG125L2.3		2.310			1.250			
BLG125L2.8		2.810			1.625			
BLG137L1.8	1.375	1.810	.750	.375	1.125	5/16-18 x 1.50	3.500	BLB137L6 & BLB137L11
BLG137L2.3		2.310			1.250			
BLG137L2.8		2.810			1.625			
BLG137L3.3		3.310			2.250			
BLG137L3.8		3.810			2.500			
BLG150L1.8	1.500	1.810	1.000	.500	1.000	3/8-16 x 1.75	5.000 (6.000 for BLN150)	BLN150L8, BLB150L8, & BLB150L16
BLG150L2.3		2.310			1.500			
BLG150L2.8		2.810			1.625			
BLG150L3.3		3.310			2.250			
BLG150L3.8		3.810			2.500			
BLG250L4.3	2.500	4.310	1.250	.625	3.00	1/2-13 x 2.75	7.500	BLN250L10
BLG350L4.8	3.500	4.810	1.750	.875	3.25	5/8-11 x 3.75	9.500	BLN350L13

Note: 500°F max operating temperature.

**M** D-2 **H** Core: 58-62 HRC, Surface 80 HRC **S** Titanium Nitride Coated

**Metric Standard**

CATALOG NUMBER	T +0 -1	L +0 -1	C +.000 -.007	S1 ±.25	S2 ±.25	SHCS	PW	USE WITH
BLGM25L27	25	27	12	6	14	M4-0.7 x 25	49	BLBM25L125
BLGM25L36		36			20			
BLGM32L36	32	36	16	8	20	M6-1.0 x 35	70	BLBM32L160
BLGM32L46		46			30			
BLGM38L46	38	46	22	11	24	M10-1.5 x 40	94	BLBM38L250
BLGM38L76		76			54			

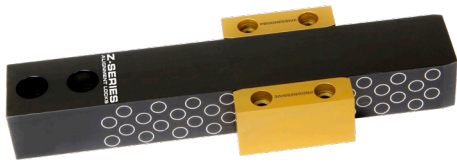
Guides are sold in pairs. Each catalog number includes (2) Guides and (4) Screws.

Note: 260°C max operating temperature.

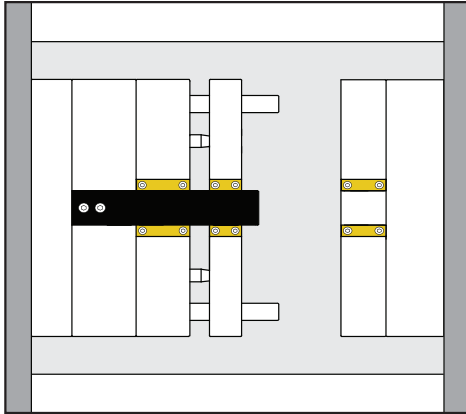
Bars can be cut to length and have radii machined and Guides can be provided with radii machined. Refer to page C-7 for details.  
 Bars and Guides can also be made to customer specifications by referring to the template in section X.



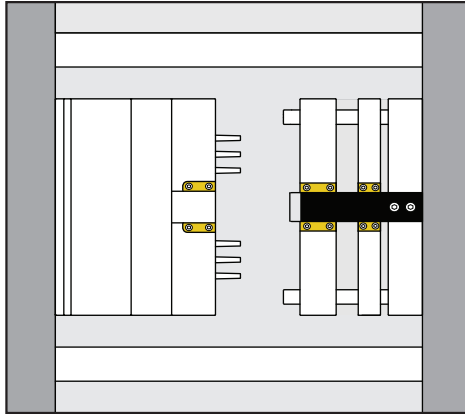
# BAR LOCKS APPLICATIONS



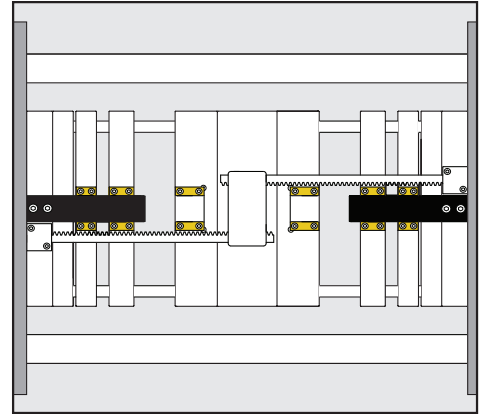
**Stripper Plate Application**



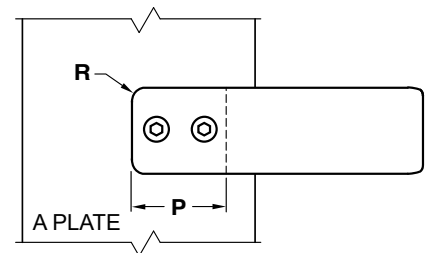
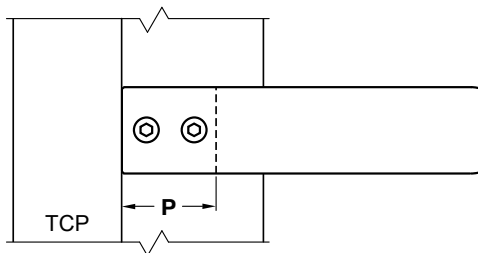
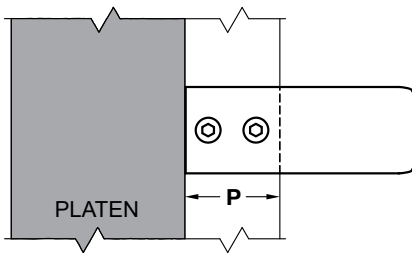
**Three Plate Application**



**Stack Mold Application**



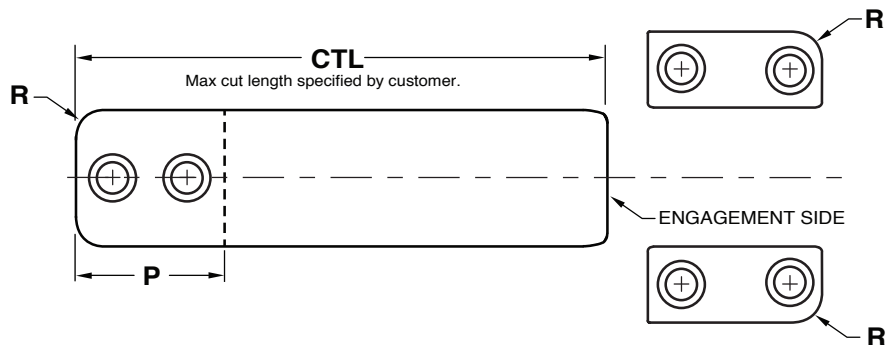
The minimum pocket length (P) is shown below in different applications. Refer to the information below for mold-ready options.



**How to Order:**

- For Bars cut to length, specify the prefix of the Bar and the finished length. Ex. BLB100L4.56. (See max length in the chart below.)
- For Bars cut to length with pocket radii (sizes shown in the chart), specify the prefix of the Bar with the finished length and add -R to the end of the catalog number. Ex. BLB100L4.56-R.
- For Bars with pocket radii in standard lengths, specify the full catalog number of the Bar and add -R to the end. Ex. BLB100L6-R.
- For Guides with corner radii on both parts, add -R to the end of the catalog number. Ex. BLG150L2.8-R.

**MOLD-READY SPECIALS**

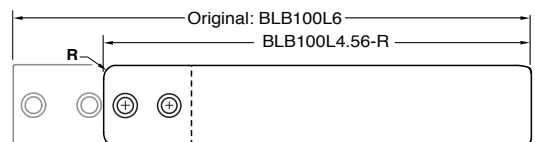


BAR CATALOG PREFIX	CTL Max	R Pocket Radius
BLB100	4.62	.25
BLB125	7.00	.31
BLB137	8.50	.37
BLB150	12.50	.50
BLBM25	89 mm	6 mm
BLBM32	114 mm	8 mm
BLBM38	194 mm	10 mm

GUIDE CATALOG PREFIX	R Pocket Radius
BLG100	.18
BLG125	.25
BLG137	.31
BLG150	.37
BLG250	.37
BLG350	.50
BLGM25	5 mm
BLGM32	6 mm
BLGM38	7 mm

**Design Guidelines:**

- For Guides, the pocket radii are machined on opposing sides as shown above.
- Bar lengths are modified from standards and radii are machined on the pocket side to maintain the integrity of the material and treatment on the engagement side.





# SIDE/TOP/GUIDE LOCK SELECTION GUIDE

Refer to the chart below to match the correct alignment lock for the corresponding mold size and weight of B-Side and press platen, using four locks per mold. Clean and lubricate lock every 100,000 cycles, and prevent corrosion during mold storage.

RECOMMENDED MAX MOLD SIZE (LXWXH)	SIDE LOCKS	METRIC SIDE LOCKS	GUIDE LOCKS	TOP LOCKS	TOTAL MAX WEIGHT B SIDE + PRESS PLATEN (LBS/KG)
<b>RTI AND MOLDS 8 X 8 X 8 AND SMALLER</b>	SL37X100, SL50X125 SL50X150, SL50X200 SLS62X150, SLS62X200 SLR50X125, SLR50X150	SLM16X50, SLP16X20 SLPM16X40, SLP20X25 SLPM20X50, SLM13X38 SLMS16X50	GL100X150 GLM25X45	TL50X100, TL62X125 TL75X125, TLM26X35 TLR87X150	2,000 / 900
<b>11 X 16 X 10</b>	SL50X125, SL50X150 SL50X200, SLS62X150 SLS62x200, SLS75X300 SLS75X400, SLR50X150 SLR50X200	SLM16X50, SLMS19X75 SLPM25X32, SLP25X63 SLPM32X40, SLP32X80 SLPM40X50 SLPM40X100 SLMS19X100	GL100X150 GL150X250 GLM25X45	TL62X125, TL75X125 TLM26X35 TLR87X150 TLR112X200	5,000 / 2,300
<b>16 X 24 X 16</b>	SL50X150, SL50X200 SL75X300, SLS112X500 SLS75X300, SLS75X400 SLR75X300, SLR100X400	SLM19X75, SLM19X100 SLMS25X125 SLPM50X56 SLPM50X112	GL150X250 GLM40X65	TL75X125, TL87X150 TLM26X35, TLM30X45 TLR112X200 TLR150X250	7,000 / 3,200
<b>28 X 34 X 24</b>	SL75X300, SLS112X500	SLM19X75, SLM19X100	GL200X350 GL150X250 GLM40X65	TL100X150, TL100X200 TL112X200, TL112X300 TLM26X35, TLM30X45	10,000 / 4,500
<b>32 X 40 X 28</b>	SL100X400	SLM25X125	GL200X350 GLM40X65	TL112X200, TL112X300 TLM36X55, TLM36X75	15,000 / 6,800
<b>42 X 48 X 34</b>	SL125X500		GL250X450 GLM50X90	TL150X250, TL175X300 TLM36X55, TLM36X75	20,000 / 9,000
<b>48 X 52 X 38</b>	SL150X600		GL250X450	TL175X300, TL200X350 TLM45X100	26,000 / 11,800

# BAR LOCK SELECTION GUIDE

BAR CATALOG NUMBER	GUIDE CATALOG NUMBER	BAR LOCK ENGAGEMENT	TOTAL MAX WEIGHT SUPPORTED (LBS/KG)
BLB100L4	BLG100L1.3, BLG100L1.8	2.50	<b>15,000 / 6,800</b>
BLB100L6	BLG100L2.3, BLG100L2.8	4.50	
BLBM25L125	BLGM25L27, BLGM25L36	89 mm	<b>15,000 / 6,800</b>
BLB125L5	BLG125L1.3, BLG125L1.8	3.00	<b>20,000 / 9,000</b>
BLB125L9	BLG125L2.3, BLG125L2.8	7.00	
BLBM32L160	BLGM32L36, BLGM32L46	114 mm	<b>20,000 / 9,000</b>
BLB137L6	BLG137L1.8, BLG137L2.3	3.50	<b>23,000 / 10,400</b>
BLB137L11	BLG137L2.8, BLG137L3.3, BLG137L3.8	8.50	
BLBM38L250	BLGM38L46, BLGM38L76	194 mm	<b>26,000 / 11,800</b>
BLB150L8	BLG150L1.8, BLG150L2.3	4.50	<b>26,000 / 11,800</b>
BLB150L16	BLG150L2.8, BLG150L3.3, BLG150L3.8	12.50	
BLN150L8	BLG150L1.8, BLG150L2.3 BLG150L2.8, BLG150L3.3, BLG150L3.8	3.75	<b>25,000 / 11,340</b>
BLN250L10	BLG250L4.3	5.00	<b>50,000 / 22,500</b>
BLN350L13	BLG350L4.8	6.00	<b>75,000 / 34,000</b>

