

PORTER Steel Guide Bushings

GLC ● GDC ● GUC ●

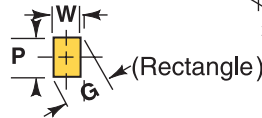
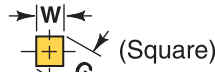
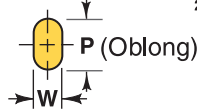
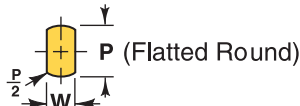
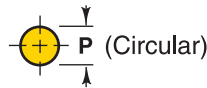
GLF ■ GDF ■ GUF ■

GLO ● GDO ● GUO ●

GLS ■ GDS ■ GUS ■

GLR ■ GDR ■ GUR ■

GLZ ● GDZ ● GUZ ●



Additional Standard Forms (Z) See pages 32 and 33.

Body ØD	Code No.	Length L			Circular ID Range P	Shape ID		Ø C	Match Punch Shank Ø
		.37	.50	.62		Min. W	Max. P/G		
.2500	25	●	●	●	.062-.125	.062	.125	.140	.125
.3125	31	●	●	●	.062-.188	.062	.188	.202	.187
.3750	37	●	●	●	.062-.250	.062	.250	.265	.250
.4375	43	●	●	●	.093-.313	.093	.313	.327	.312
.5000	50		●	●	.125-.375	.125	.375	.390	.375
.6250	62		●	●	.187-.438	.187	.438	.452	.437
.7500	75		●	●	.187-.500	.187	.500	.515	.500
.8750	87			●	.310-.625	.250	.625	.640	.625
1.0000	100			●	.390-.750	.312	.750	.765	.750

- Locating flats and dowels, see page 38.
- Alterations, see page 37.
- Guide Bushing I.D. should be at least .0005 larger than the punch point that it is used with.

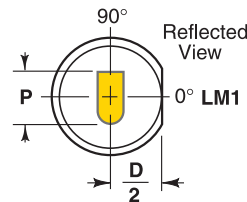
Ordering Example:

Headless 4 ea. GLC 50 x .62 x .298
 Head-Down 4 ea. GDO 62 x .50 x .187 x .327 LM1
 Head-Up 4 ea. GUS 50 x .50 x .250 LM2

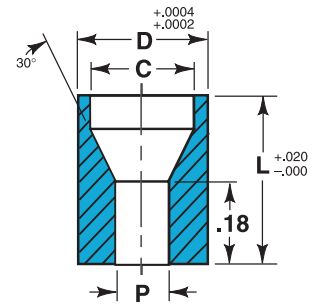
P & W TOLERANCE $\begin{matrix} +.0004 \\ -.0000 \end{matrix}$

◎ .0003 P,W to D

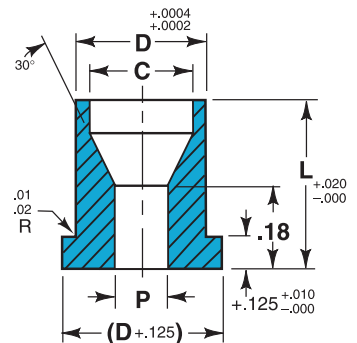
Steel: M2 Rc 60-63
 Manufactured to ANSI and NAPMA Standards where applicable.



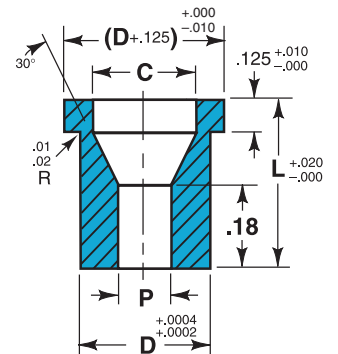
GL-HEADLESS



GD-HEAD-DOWN

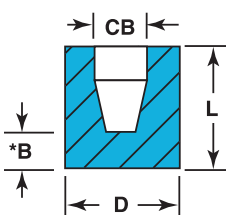


GU-HEAD-UP

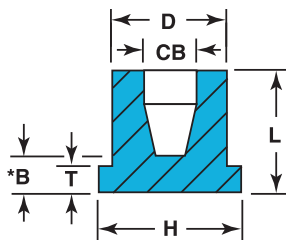


PORTER Urethane Stripper Guides

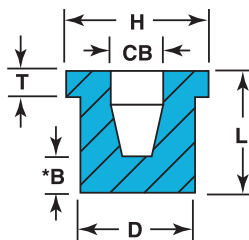
HL HEADLESS



HD HEAD DOWN



HU HEAD UP



Ordering Example:

6 ea. HL 50 x .50
 6 ea. HD 31 x .62
 8 ea. HU 62 x .50

Headless	Head Down	Head Up	D	L	P/W Range	H	CB	T
HL-31	HD-31	HU-31	$\begin{matrix} +.007 \\ +.003 \end{matrix}$	$\pm .005$.031-.187	.4375	.203	.125
HL-37	HD-37	HU-37	.375	.50	.031-.250	.5000	.265	.125
HL-50	HD-50	HU-50	.500	.50	.093-.312	.6250	.328	.125
HL-62	HD-62	HU-62	.625	.50	.125-.375	.7500	.390	.125

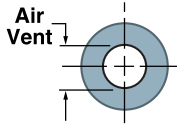
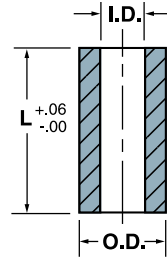
* The counterbore "CB" is so constructed that the land length equals 1.5 x P.

For Round and Shaped Punches

- Eliminate Vibration
- Will not wear or gall punch
- Will not distort alignment because the punch shears its own bore.

Durathane

Open End Punch Strippers

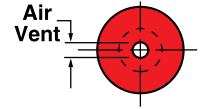
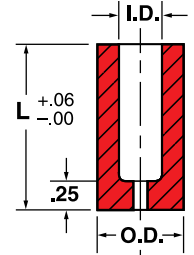


Ordering Example:
Quantity Description
6 O-37A

All are oil and solvent resistant 95A durometer. All provide greater pressures than equal sized steel die springs. All are easy to install and dampen vibration. Pop-On's closed end gives more positive stripping and full stripping around periphery of punch point. Open end more economical.

Pop-On

Closed End Punch Strippers



Ordering Example:
Quantity Description
7 U-62B

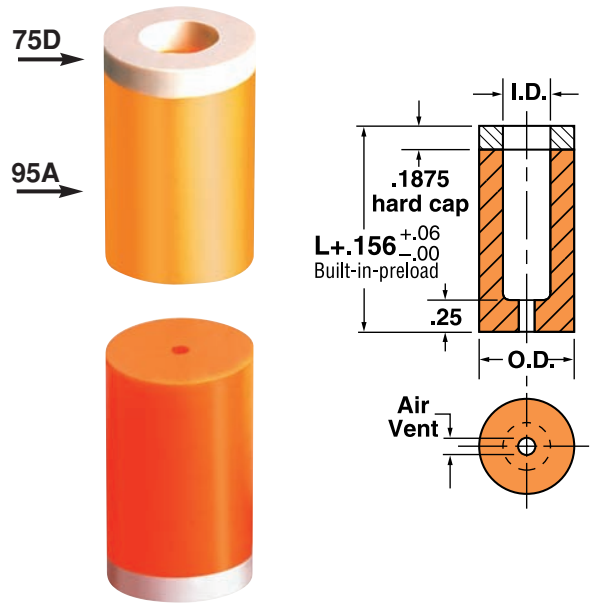
I.D. Inch	O.D. Inch	Length L Inch	Catalog Number	Approx. Stripping Pressure in Lbs. at deflection of		
				.187	.281	.437
.187	.688	1.25	O-18	250		
		1.50	O-18A	230	350	
.250	.750	1.25	O-25	280		
		1.50	O-25A	275	465	
		1.75	O-25B	220	375	490
.312	.812	1.25	O-31	320		
		1.50	O-31A	300	450	
		1.75	O-31B	270	400	575
		2.00	O-31C	240	370	600
.375	.875	1.25	O-37	420		
		1.50	O-37A	385	625	
		1.75	O-37B	355	575	760
		2.00	O-37C	310	515	670
.500	1.000	1.25	O-50	520		
		1.50	O-50A	450	725	
		1.75	O-50B	435	680	875
		2.00	O-50C	315	510	650
.625	1.125	1.25	O-62	600		
		1.50	O-62A	520	835	
		1.75	O-62B	480	775	1000
		2.00	O-62C	440	730	935
.750	1.500	1.75	O-75B	500	800	1200
		2.00	O-75C	400	700	1100
		2.25	O-75D	350	650	1000
		2.50	O-75E	325	600	900
		2.75	O-75F	300	550	800
.875	1.750	1.75	O-87B	1500	2200	3400
		2.00	O-87C	1200	1900	2800
		2.25	O-87D	1150	1850	2400
		2.50	O-87E	900	1450	1900
		2.75	O-87F	850	1350	1800
1.000	2.000	1.75	O-100B	2000	3000	3500
		2.00	O-100C	1600	2600	3400
		2.25	O-100D	1400	2300	3200
		2.50	O-100E	1200	2000	3000
		2.75	O-100F	1000	1800	2800

I.D. Inch	O.D. Inch	Length L Inch	Catalog Number	Approx. Stripping Pressure in Lbs. at deflection of		
				.125	.25	.375
.187	.688	1.25	U-18	250	400	
		1.50	U-18A	230	350	
.250	.750	1.25	U-25	280	475	
		1.50	U-25A	275	465	
		1.75	U-25B	220	375	490
.312	.812	1.25	U-31	320	500	
		1.50	U-31A	300	450	
		1.75	U-31B	270	400	575
		2.00	U-31C	240	370	600
.375	.875	1.25	U-37	420	695	
		1.50	U-37A	385	625	
		1.75	U-37B	355	575	760
		2.00	U-37C	310	515	670
.500	1.000	1.25	U-50	520	790	
		1.50	U-50A	450	725	
		1.75	U-50B	435	680	875
		2.00	U-50C	315	510	650
.625	1.125	1.25	U-62	600	925	
		1.50	U-62A	520	835	
		1.75	U-62B	480	775	1000
		2.00	U-62C	440	730	935
.750	1.500	1.75	U-75B	500	800	1200
		2.00	U-75C	400	700	1100
		2.25	U-75D	350	650	1000
		2.50	U-75E	325	600	900
		2.75	U-75F	300	550	800
.875	1.750	1.75	U-87B	1500	2200	3400
		2.00	U-87C	1200	1900	2800
		2.25	U-87D	1150	1850	2400
		2.50	U-87E	900	1450	1900
		2.75	U-87F	850	1350	1800
1.000	2.000	1.75	U-100B	2000	3000	3500
		2.00	U-100C	1600	2600	3400
		2.25	U-100D	1400	2300	3200
		2.50	U-100E	1200	2000	3000
		2.75	U-100F	1000	1800	2800



Closed End Punch Strippers

I.D. Inch	O.D. Inch	Length L Inch	Catalog Number	Approx. Stripping Pressure in Lbs. at deflection of		For Punch Length
				.125	.25	
.250	.750	1.000	UHL25100	285	475	2.00
		1.250	UHL25125	269	465	2.25
		1.500	UHL25150	245	405	2.50
.375	.875	1.000	UHL37100	450	725	2.00
		1.125	UHH37112	415	675	2.50
		1.250	UHL37125	395	640	2.25
		1.375	UHH37137	380	605	2.75
		1.500	UHL37150	360	590	2.50
		1.625	UHH37162	345	575	3.00
		1.750	UHL37175	335	565	2.75
		2.000	UHL37200	320	550	3.00
		2.125	UHH37212	300	530	3.50
.500	1.000	1.250	UHL50125	500	780	2.25
		1.375	UHH50137	460	728	2.75
		1.500	UHL50150	450	715	2.50
		1.625	UHH50162	455	686	3.00
		1.750	UHL50175	435	680	2.75
		1.875	UHH50187	385	550	3.25
		2.000	UHL50200	345	530	3.00
		2.125	UHH50212	300	465	3.50
.625	1.125	1.500	UHL62150	565	865	2.50
		1.625	UHH62162	545	835	3.00
		1.750	UHL62175	520	810	2.75
		2.000	UHL62200	455	740	3.00
		2.125	UHH62212	435	715	3.50
.750	1.500	1.625	UHH75162	730	1075	3.00
		1.750	UHL75175	540	835	2.75
		2.000	UHL75200	435	730	3.00
		2.125	UHH75212	395	690	3.50
		2.250	UHL75225	335	660	2.25
		2.500	UHL75250	315	620	3.50
.875	1.750	1.625	UHH87162	1780	2380	3.00
		1.750	UHL87175	1630	2150	2.75
		2.000	UHL87200	1490	1907	3.00
		2.125	UHH87212	1340	1790	3.50
1.000	2.000	1.750	UHL100175	1800	2955	2.75
		2.000	UHL100200	1650	2655	3.00
		2.125	UHH100212	1570	2385	3.50
		2.250	UHL100225	1370	2200	3.25
		2.500	UHL100250	1175	2000	3.50
1.250	2.250	1.625	UHH125162	1980	2840	3.00
		2.125	UHH125212	1890	2710	3.50



Ordering Example:
 Quantity Description
 13 UHL37200

Ordering Example:
 Quantity Description
 6 UHH50162

UHL is designed for light duty retainer

UHH is designed for heavy duty retainer

All the benefits of the Pop-On Stripper plus:

- Patented 75D Hard-Hat designed to withstand the sharp edges of standard retainers.
- Co-injection molded to blend 2 different durometers of Urethane into one homogeneous piece without adhesive or bonding agents.
- .156 preload in for positive holding pressure as the punch contacts the material.