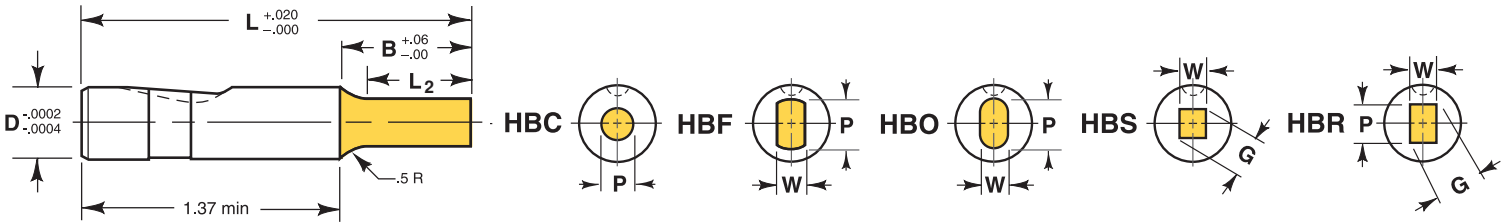
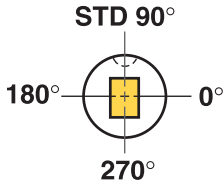


PORTER Heavy Duty Bal-Lok Solid Punch (HB-)



Ordering Example:

Qty Steel Type D B L P
10 PM4 HBC 50 B x 3.50 x .265



Standard ball seat location is at 90° using reflected view for punches. Alternate locations of 0°, 180° and 270° are available at no extra charge. Custom ball seat locations can be specified as number of degrees counterclockwise from 0°. Example call out: BS 180°

Steel: M2 Rc 60-63
PM4, Rc 63-65 L ≤ 4"

TOLERANCES

Round P $\begin{matrix} +.0005 \\ -.0000 \end{matrix}$ $\text{Ⓢ} .0005$ P to D

Shape P, W $\pm .0005$ $\text{Ⓢ} .001$ P, W to D

Manufactured to ANSI and NAPMA Standards where applicable.

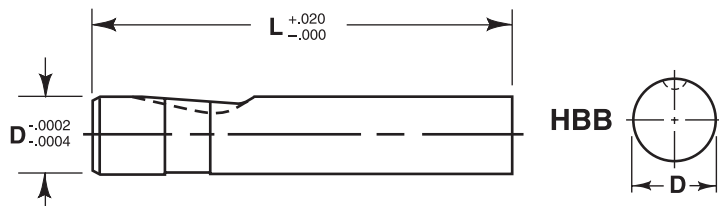
Back Draft .001/inch L2 max.

Shank		Point Length B				Lengths L in .25" Increments	Point		
		Standard	Alternates				Round	Shape	
D	Code No.	S	B(.75)	C(1.0)	D(1.25)	Range P	Min W	Max P/G	
.375	37	.625	●	●		2.50 thru 5.00	.062 – .374	.062	.374
.500	50	.912	●	●	●	2.50 thru 6.00	.187 – .499	.187	.499
.625	62	.937	●	●	●	2.50 thru 6.00	.312 – .624	.250	.624
.750	75	1.062	●	●	●	2.50 thru 6.00	.437 – .749	.312	.749
.875	87	1.187	●	●	●	2.75 thru 6.00	.625 – .874	.375	.874
1.000	100	1.250	●	●		3.00 thru 6.00	.750 – .999	.437	.999
1.250	125	1.437	●	●	●	3.00 thru 6.00	1.000 – 1.249	.500	1.249

PORTER Heavy Duty Bal-Lok Punch Blank (HBB)

Ordering Example:

Qty Steel Type D L
25 M2 HBB 62 x 4.75



Shank		Lengths L in .25" Increments
D	Code No.	
.375	37	2.50 thru 5.00
.500	50	2.50 thru 6.00
.625	62	2.50 thru 6.00
.750	75	2.50 thru 6.00
.875	87	2.75 thru 6.00
1.000	100	3.00 thru 6.00
1.250	125	3.00 thru 6.00

Standard Alterations are changes that are beyond the ranges listed in the catalog that can be altered for a minimal charge. See page 37.

For additional standard forms and configurations see pages 32 and 33.