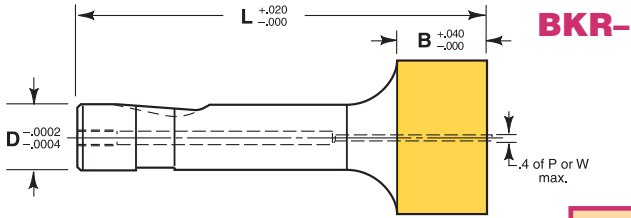


# PORTER Light Duty Knob Style Punches



### Ordering Example:

Qty Steel Type D L P  
6 M2 BKRC 100 x 3.00 x 1.250

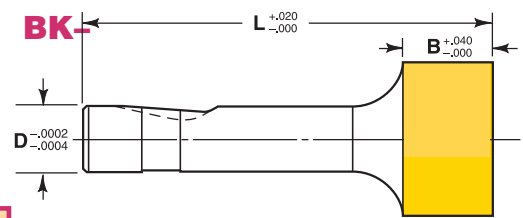
Steel: M2 Rc 60-63

### TOLERANCES

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

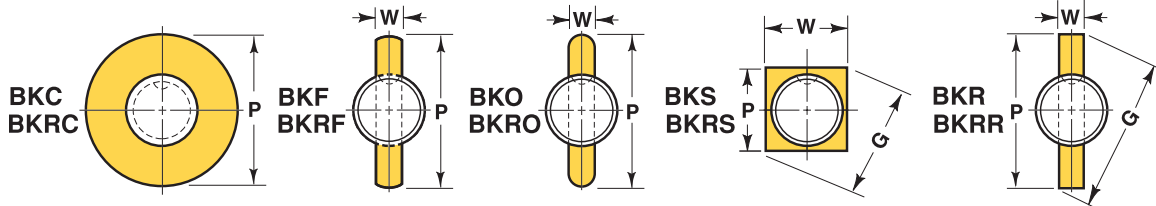
Shape P, W  $\pm .0005$   $\text{Ⓢ}$  .001 P, W to D

Manufactured to ANSI and NAPMA Standards where applicable.  
Back Draft .001/inch L2 max.



### Ordering Example:

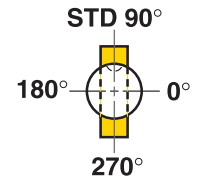
Qty Steel Type D L W P  
3 M2 BKO 75 x 3.00 x .600 x .890



Shank D	Code No.	Point Length B	Lengths L in .25" Increments							Point			Replacement Retrakto Kit*
			2.50	2.75	3.00	3.25	3.50	3.75	4.00	Round	Shape		
										Range P	Min W	Max P/G	
.375	37	.625	2.50	2.75	3.00	3.25	3.50	3.75	4.00	.376 - 1.000	.125	1.000	K4I
.500	50	.750	2.50	2.75	3.00	3.25	3.50	3.75	4.00	.501 - 1.250	.188	1.250	K6I
.625	62	.875	2.50	2.75	3.00	3.25	3.50	3.75	4.00	.626 - 1.500	.250	1.500	K6I
.750	75	.937	2.50	2.75	3.00	3.25	3.50	3.75	4.00	.751 - 1.500	.312	1.500	K9I
.875	87	.937	2.50	2.75	3.00	3.25	3.50	3.75	4.00	.876 - 1.750	.375	1.750	K9I
1.000	100	.937	2.50	2.75	3.00	3.25	3.50	3.75	4.00	1.001 - 1.750	.437	1.750	K9I

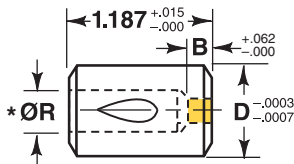
\*Retrakto kits available see page 36 for details.

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



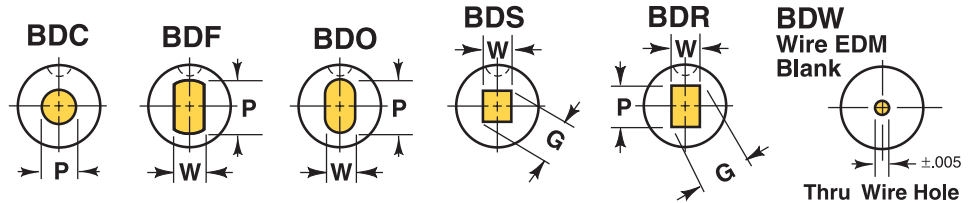
Standard ball seat location is at 90° using reflected view for punches. Alternate locations of 0°, 180° and 270° are available at no extra charge. Custom ball seat locations can be specified as number of degrees counter-clockwise from 0°.

# PORTER Bal-Lok Die Buttons (BD-)



### Ordering Example:

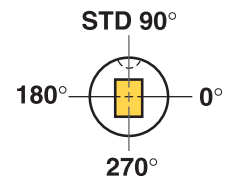
Qty Steel Type Body x W x P  
6 M2 BDO 75 x .156 x .280



\*SPECIAL NOTE: Small quantities of bal-Lok die buttons may be substituted with a taper relief of 1 degree per side.

Body Code	D	Min. B	Max. R	Length L	Round I.D.	Shape I.D.		BDW Hole Size
		Range P	Min. W		Max. P/G			
50	.500	.156	.250	1.187	.064 - .220	.048	.220	.043
62	.625	.187	.313	1.187	.110 - .282	.064	.282	.043
75	.750	.187	.422	1.187	.125 - .391	.095	.391	.043
87	.875	.187	.547	1.187	.196 - .516	.127	.516	.043
100	1.000	.250	.688	1.187	.346 - .657	.158	.657	.125
125	1.250	.250	.844	1.187	.436 - .813	.189	.813	.125
150	1.500	.250	1.094	1.187	.545 - 1.063	.220	1.063	.125
175	1.750	.312	1.297	1.187	.656 - 1.262	.252	1.262	.125

Standard Ball Seat location is at 90°, alternate locations of 0°, 180° and 270° are available at no extra charge. See pages 32 and 33 for additional standard I.D. forms.



Steel: M2 Rc 60-63

### TOLERANCES

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

Shape P, W  $\begin{matrix} +.001 \\ -.000 \end{matrix}$   $\text{Ⓢ}$  .001 P, W to D

Manufactured to ANSI and NAPMA Standards where applicable.

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