

LIGHT DUTY

Ball Lock Pilot - Conical Code: **BPK**

"N" becomes = 1.2 x "P" minimum when "P" is below (see table).

Standard Tolerances

Round / P ^{+0.01} _{-0.00}		,01	From P to d2
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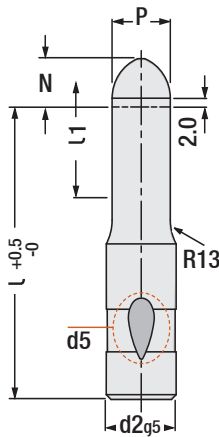
When P = d2, shank / body tolerances apply.

Material: 1.3343 (M2) Hardness: 60 - 62 HRC

d2	d5	P	L1	N	l
10	8 mm	5.9 ~ 9.9	19	8	71
13		9.9 ~ 12.9	19	10	80
16		12.9 ~ 15.9	25	15	100
20		15.9 ~ 19.9	25	20	71
25		19.9 ~ 24.9	25	25	80
32		24.9 ~ 31.9	25	30	100
38		31.9 ~ 37.9	30	35	125

Note: P / L selection as per request.
- Special dimensions on request.

Order: **BPK. d2 x P x l**



LIGHT DUTY

Ball Lock Pilot - Spherical Code: **BPX**

- It is length of "L" pilot except end.
- 2 mm length is guided to punch before punch contacting sheet metal.

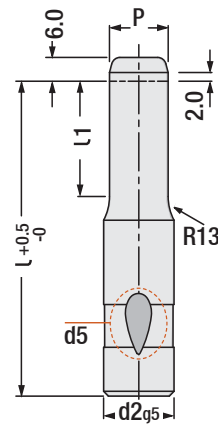
	P	N
	≤ 10 mm	8 mm
10.1 mm - 15 mm	12 mm	
> 15 mm	15 mm	

Material: 1.3343 (M2) Hardness: 60 - 62 HRC

d2	d5	P	L1	N	l	
6	6	2.9 ~ 5.9	13	-	63	
10	8 mm	5.9 ~ 9.9	19	8		
13		9.9 ~ 12.9	19	10		71
16		12.9 ~ 15.9	25	15		80
20		15.9 ~ 19.9	25	15		90
25		19.9 ~ 24.9	25	20		100
32		24.9 ~ 31.9	25	25		

Note: P / L selection as per request.
- Special dimensions on request.

Order: **BPX. d2 x P x l**



LIGHT DUTY

Ball Lock Pilot - Parabolic Code: **BPP**

Standard Tolerances

Round / P ^{+0.01} _{-0.00}		,01	From P to d2
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When P = d2, shank / body tolerances apply.

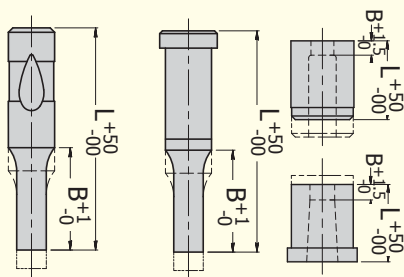
Material: 1.3343 (M2) Hardness: 60 - 62 HRC

d2	d5	P	L1	l	
6	6	2.2 ~ 6.0	13	63	
10	8 mm	2.5 ~ 10	19		
13		5.0 ~ 13	19		71
16		8.0 ~ 16	19		80
20		12 ~ 20	19		90
25		16 ~ 15	19		100

Note: P / L selection as per request.
- Special dimensions on request.

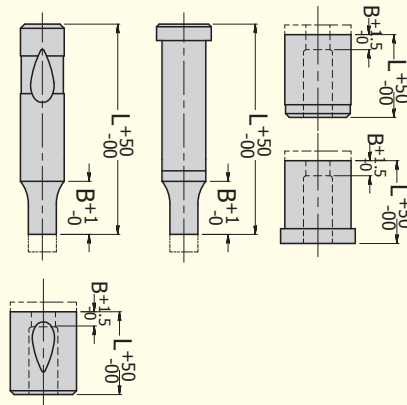
Order: **BPP. d2 x P x l**

Alternative Selection Information:
Gaps Except Punch Centre



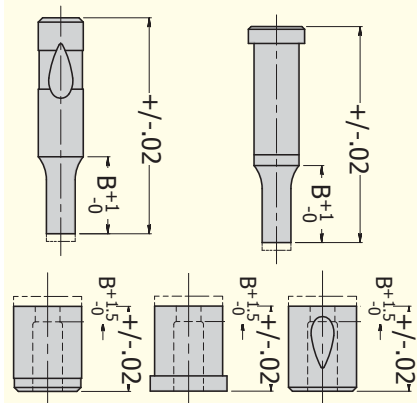
X1 B: Main Dimension

Shortening punch or matrix length maintaining "B" point or land length. Not available in counter bore style on headed or ball lock matrixes.



X2 B: Shortened Dimension

Shortening punch or matrix length but also decreases "B" dimension or land length.



X3

Provides a precision overall length of ± 0.02
Note: 5 maximum stock removal