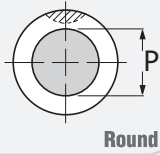


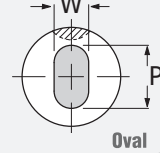
Shapes

BAY



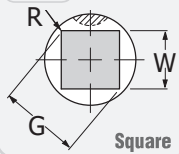
Round

BAO



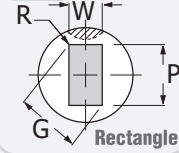
Oval

BAK



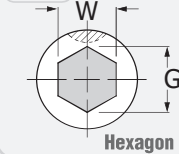
Square

BAD



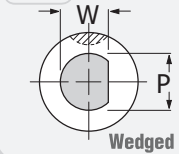
Rectangle

BAA



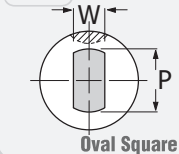
Hexagon

BAM



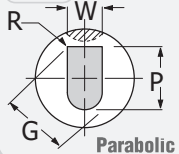
Wedged

BAX



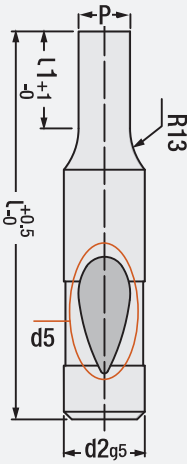
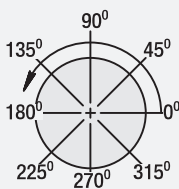
Oval Square

BAP



Parabolic

Standard Position



HEAVY DUTY



Shapes



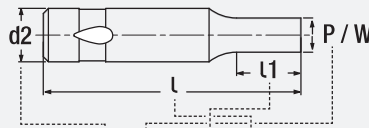
Ball Lock Stepped Punch - Heavy Duty Code: BA..

Types: BAY - BAO - BAK - BAD - BAA - BAM - BAX - BAP

Please refer to the table on the left side

How to order:

Shape
d2
P/W
L1
L
Material



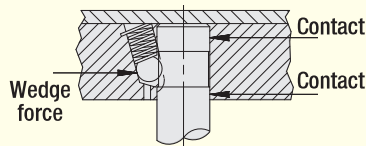
BAY x 10 x P8.2 x 19 x 90 - M2

- When P = d2 shank / body tolerances apply.
- Standard ball socket location is at 90°.

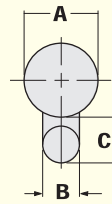
Order d2	Ball Socket d5	d1 / Shape		Standard L1	Alternative L1		L mm
		(BAY) Round P	Other Shapes W G/P		Min.	Max.	
BA..10	10	2.5 ~ 9.98	2.5 - 10	19	10	19	71
BA..13	12	5 ~ 12.98	4.5 - 13	19	13	25	
BA..16		8 ~ 15.98	6 - 16	19	13	25	
BA..20		12 ~ 19.98	8 - 20	19	13	25	
BA..25		16 ~ 24.98	10 - 25	19	13	25	
BA..32		24 ~ 31.98	12 - 32	19	13	25	
BA..40	30 ~ 39.98	14 - 40	25	19	30	125	110

Order: BA(type). d2 x (P/W) x L1 x L

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



Connecting Punch to Retainer with Ball Socket

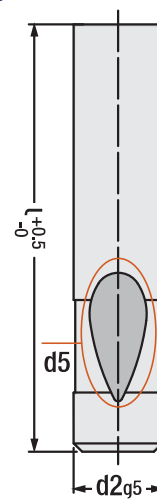


for precise retainers, please add 1.7 to "C" dimension

Requirements of Ball Locking Place

Punch Dia. A	Ball Dia. B	Clearance C
10	10	13
13	12	15
16		
20		
25		
32		
40		

Heavy Duty Punch



HEAVY DUTY

Punch as per request:



TIN / TIC Coating
Other Coating



Complete Coating

Ball Lock Punch - Heavy Duty Code: BAZ (Blank type)

Body and cutting edge are precision ground. It is for durable parts in all kinds of dies. Also, full or partial coating can be preferred upon request, by providing resistance against heat and friction on external layer, it solves problems such as winding and cold welding, coating thickness is 2 - 4 microns.

d2	d5	l	d2	d5	l		
Ø 10 mm	10 mm	71	Ø 25 mm	12 mm	80		
		80			90		
		100			100		
		125			110		
		150			125		
Ø 13 mm	12 mm	71			125		
		80			150		
		90			175		
		100			80		
		125			90		
Ø 16 mm	12 mm	150	Ø 32 mm	12 mm	100		
		165			110		
		71			125		
		80			150		
		90			180		
Ø 20 mm	12 mm	100			Ø 40 mm	12 mm	80
		110					90
		125					100
		150					110
		170					125
		150	150				
		170	190				

Order: BAZ. d2 x L

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

Note: Special dimensions on request.

Dies



Page

203