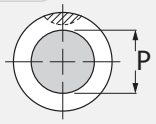
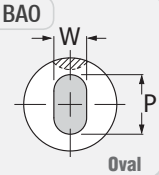
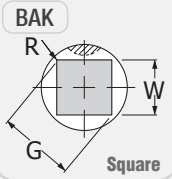
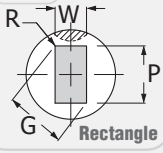
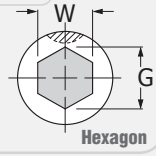
Shapes

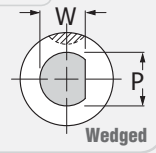
BAY


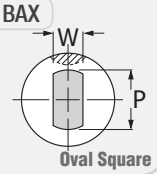
BAO


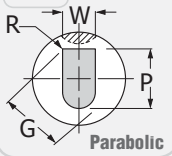
BAK


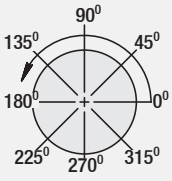
BAD


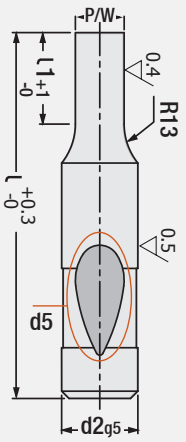
BAA


BAM


BAX


BAP


Standard Position




HEAVY DUTY

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

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

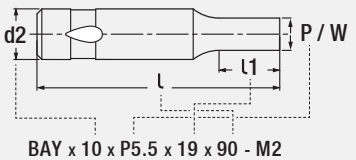
- When **P = d2** shank / body tolerances apply.
- Standard ball socket location is at 90°.
- BA.. Punches conform to NAAMS standards.

Order d2	Ball Socket d5	Shape (BAY) Round P	Shape Other Shapes W G/P	Standard l1	Alternative l1 Min.	Alternative l1 Max.	l mm
BA..10	10	2.5 ~ 9.98	2.5 - 10	19	10	19	71
BA..13	12 mm	5 ~ 12.98	4.5 - 13	19	13	25	80
BA..16		8 ~ 15.98	6 - 16	19	13	25	90
BA..20		12 ~ 19.98	8 - 20	19	13	25	100
BA..25		16 ~ 24.98	10 - 25	19	13	25	110
BA..32		24 ~ 31.98	12 - 32	19	13	25	125
BA..40		30 ~ 39.98	14 - 40	25	19	30	

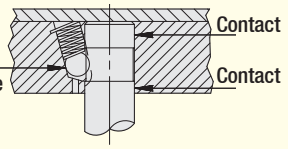
Order Codes: **BAY - BAO - BAK - BAD - BAA - BAM - BAX - BAP**

Please refer to the table on the left side

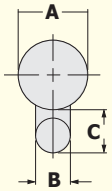
How to order:
Shape
d2
P/W
l1
l
Material



BAY x 10 x P5.5 x 19 x 90 - M2
BAO x 13 x P8.2 x W6.1 x 19 x 100 - M2



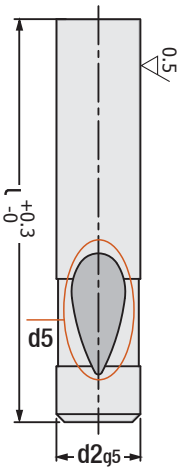
Connecting Punch to Retainer with Ball Socket



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

Requirements of Ball Locking Place

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



HEAVY DUTY

Ball Lock Punch - Heavy Duty Code: BAZ

(Blank type)

Body and cutting edge are precision ground.
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.

d2	d5	l
Ø **10** mm	10 mm	71
		80
		90
		100
Ø **13** mm	12 mm	71
		80
		90
		100
		125
Ø **16** mm	12 mm	71
		80
		90
		100
		125
Ø **20** mm	12 mm	71
		80
		90
		100
		125

d2	d5	l
Ø **25** mm	12 mm	80
		90
		100
		110
		125
Ø **32** mm	12 mm	80
		90
		100
		110
		125
Ø **40** mm	12 mm	80
		90
		100
		110
		125

Order:
BAZ. d2 x l

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

Note: Special dimensions on request.