

Ball Lock Punch with Ejector - Light Duty

(Blank type)

Code: **BFZ**

Body and cutting edge are precision ground.

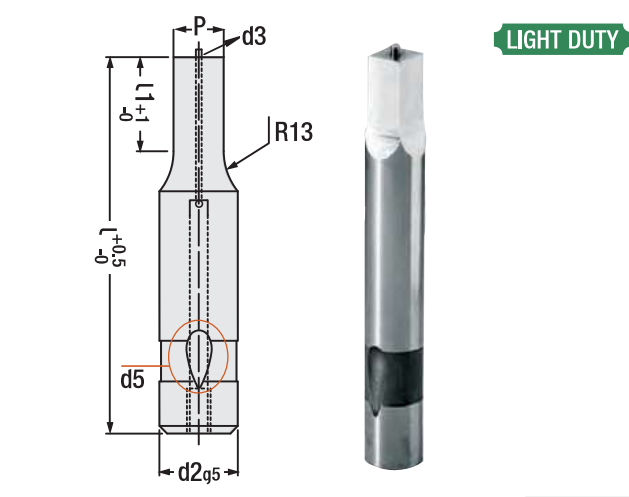
It is for durable parts in all kinds of dies.

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	d3	L	d2	d5	d3	L
Ø 6 mm	6 mm	Ø 3	63	Ø 20 mm	8 mm	Ø 6	63
			71				71
			80				80
			90				90
			100				100
Ø 10 mm	8 mm	Ø 4	63	Ø 25 mm	8 mm	Ø 6	63
			71				71
			80				80
			90				90
			100				100
Ø 13 mm	8 mm	Ø 5	63	Ø 32 mm	8 mm	Ø 6	71
			71				80
			80				90
			90				100
			100				100
Ø 16 mm	8 mm	Ø 5	63	Ø 38 mm	8 mm	Ø 6	80
			71				90
			80				90
			90				100
			100				100

Order: **BFZ.** d2 x L

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



Ball Lock Stepped Punch with Ejector - Light Duty

Code: **BF..**

Types: **BFY - BFO - BFK - BFD - BFA - BFM - BFX - BFP**

Please refer to the table on the right side

How to order:

Shape

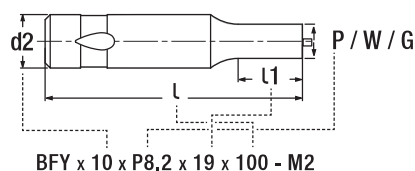
d2

P/W

L1

L

Material



- When P = d2 shank / body tolerances apply.

- Standard ball socket location is at 90°.

Order d2	Ball Socket d5	Pin d3	d1 / Shape		Standard L1	Alternative L1 Min. Max.		L mm
			(BFY) Round P	Other Shapes W G/P				
BF.06	6	3	2.2 ~5.9	2.2 -5.9	13	10	-	63 71 80 90 100
BF..10	8 mm	4	2.5 ~9.9	2.5 -9.9	19	10	19	
BF..13		5	5.0 ~12.9	4.5 -12.9	19	13	25	
BF..16		5	8.0 ~15.9	6.0 -15.9	19	13	25	
BF..20		6	12 ~19.9	8.0 -19.9	19	13	25	
BF..25		6	16 ~24.9	10 -24.9	19	13	25	
BF..32		6	24 ~31.9	12.5 -31.9	25	25	30	80 90
BF..38	6	30 ~37.9	14 -37.9	25	25	30	100	

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

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

Standard Tolerances

Round P +0.1 / -0.05 $\text{Ø} 0.1$ From P to d2

Shape P,W,G ± 0.1 $\text{Ø} 0.2$ From P to d2

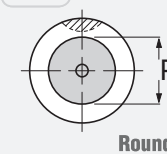
Standard position of ball socket is 90°.

It can be preferred as 0° - 180° - 270°.

Note: By looking their position at die from upper surface of die, parts are displayed. Positions of punches are determined by looking along body. It is determined by tracking from the upper surface.

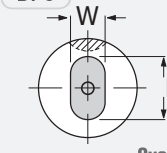
Shapes

BFY



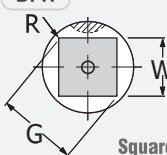
Round

BFO



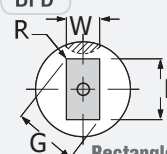
Oval

BFK



Square

BFD



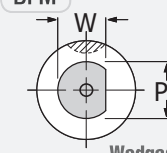
Rectangle

BFA



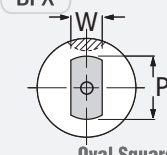
Hexagon

BFM



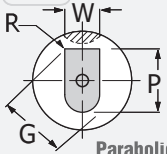
Wedged

BFX



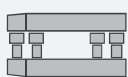
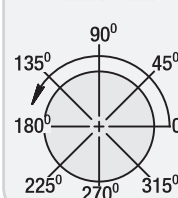
Oval Square

BFP



Parabolic

Standard Position



Note: Special dimensions on request.