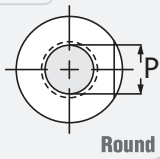


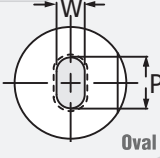
### Shapes

MBY



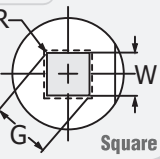
Round

MBO



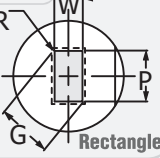
Oval

MBK



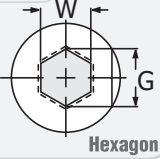
Square

MBD



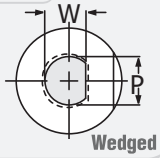
Rectangle

MBA



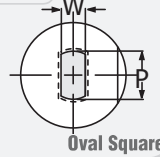
Hexagon

MBM



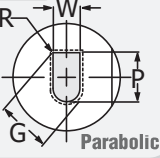
Wedged

MBX



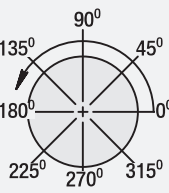
Oval Square

MBP



Parabolic

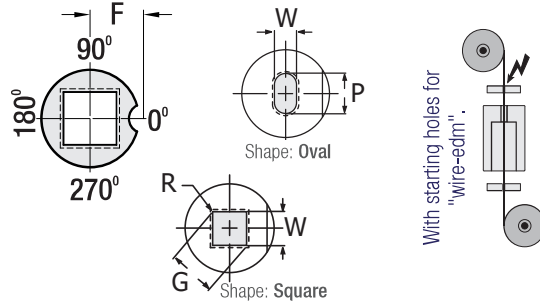
Standard Position



### Ball Lock Matrix - Straight Automotive Standard / Shaped Types

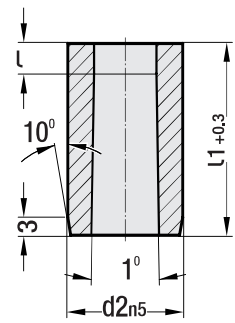
- Inner hole conical type.  
- d2 and inlet radius ground.  
Material: 1.3343 (M2) Hardness: 60 - 62 HRC

Code: MB..



#### Some Shape & Dim. Details

- Shape: Square  
MBK  $G = \sqrt{2} \times P$
- Shape: Rectangle  
MBD  $G = \sqrt{P^2 \times W^2}$
- Shape: Rectangle with radius  $R 0.5 \pm 0.01$   
MBD  $G = \sqrt{(P-1.0)^2 + (W-1.0)^2} + 1$
- Shape: Oval  
MBO  $G = P$



d2	Form F	Shape		L	L1 + 0.3 Matrix Length														
		W	G		13	16	20	22	25	28	30	32	35	40					
10	7	1.3	6.8	3-4-5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
13	8.2	1.9	8.8	3-5-8	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
16	9	1.9	10	3-5-8			•	•	•	•	•	•	•	•	•	•	•	•	•
20	11	1.9	13	3-6-10				•	•	•	•	•	•	•	•	•	•	•	•
22	12	1.9	15	3-6-10					•	•	•	•	•	•	•	•	•	•	•
25	13.5	1.9	17	3-6-10						•	•	•	•	•	•	•	•	•	•
32	16	1.9	22	3-6-10							•	•	•	•	•	•	•	•	•
38	19	1.9	27	3-8-12								•	•	•	•	•	•	•	•
40	20	2.4	27	3-8-12									•	•	•	•	•	•	•
45	22.5	4.0	35	3-8-12										•	•	•	•	•	•
50	25	4.0	40	3-8-12											•	•	•	•	•
56	28	4.0	45	3-8-12												•	•	•	•
63	31.5	4.0	50	3-8-12													•	•	•
71	35.5	5.6	56	3-8-12														•	•
76	38	5.6	60	3-8-12															•
85	42.5	5.6	66	3-8-12															
90	45	5.6	70	3-8-12															
100	50	5.6	78	3-8-12															

Note: Special dimensions on request.

Order: MB. (type) d2 x F x W/G (R) x L x L1

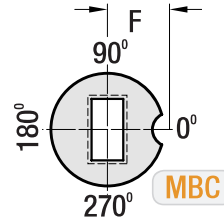


Code: MBE

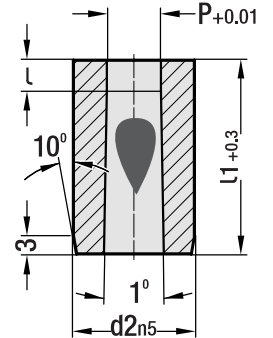
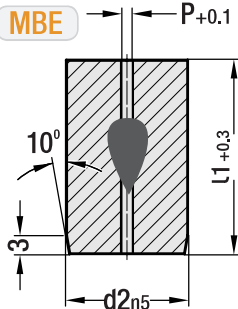
Code: MBC

### Ball Lock Matrix - Straight Automotive Standard

Specifications:  
MBC: Inner hole conical type and lower surfaces ground.  
MBE: With starting holes for "wire-edm".  
Material: 1.3343 (M2)  
Hardness: 60 - 62 HRC



MBE



MBE

d2	P	L1 + 0.3 "MBE" Matrix Length																		
		13	16	20	22	25	28	30	32	35	40									
10	0.8	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
13	0.8	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
16	1.5			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
20	2.4				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
25	3.0					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
32	3.0						•	•	•	•	•	•	•	•	•	•	•	•	•	•
40	3.0							•	•	•	•	•	•	•	•	•	•	•	•	•
50	3.0								•	•	•	•	•	•	•	•	•	•	•	•
63	3.0									•	•	•	•	•	•	•	•	•	•	•
71	3.0										•	•	•	•	•	•	•	•	•	•

Order: MBE. d2 x P x L1

MBC

d2	P	L	L1 + 0.3 "MBC" Matrix Length																	
			13	16	20	22	25	28	30	32	35	40								
10	1.6 - 6.8	3-4-5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
13	3 - 8.8	3-5-8	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
16	7.4 - 10.8	3-5-8			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
20	9.5 - 13.6	3-5-10				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
25	12 - 17	3-6-10					•	•	•	•	•	•	•	•	•	•	•	•	•	•
32	16 - 22	3-6-12						•	•	•	•	•	•	•	•	•	•	•	•	•
40	18 - 27	3-8-12							•	•	•	•	•	•	•	•	•	•	•	•
50	18 - 40	3-8-12								•	•	•	•	•	•	•	•	•	•	•
63	18 - 50	3-8-12									•	•	•	•	•	•	•	•	•	•
71	18 - 56	3-8-12										•	•	•	•	•	•	•	•	•

Order: MBC. d2 x P x L x L1

Note: In order, P / L / L1 should be selected from the options.