

# MB Series Standard Cylinder(Japanese standard)

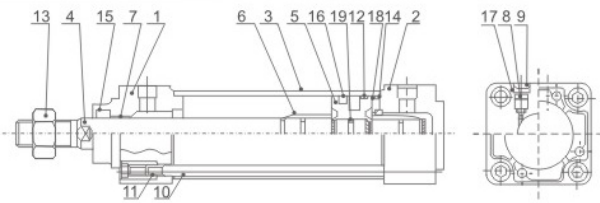


MB 50 x 100

### Ordering Code

**MB** × **50** × **50** — **S** — □  
**Series Code**  
 Japanese standard  
 Double Action Type  
**Stroke**  
 32mm-100mm  
**Cylinder Bore**  
 32mm-100mm  
**Magnet Code**  
 Blank: Without  
 Magnet  
 S: With Magnet  
**Fixed Type**  
 Blank: Basic type  
 Lb: Front and back fixed type  
 Fa: Front cover fixed type(Front flange type)  
 Fb: Back cover fixed type(Rear flange type)  
 Ca: Back cover fixed type (Single earring)  
 Cb: Back cover fixed type(Double earring)  
 Tc: Central trunnion type  
 Tc-m: Central trunnion type attaching foot seat

### Internal structure



| NO | Designation | NO | Designation   | NO | Designation      |
|----|-------------|----|---------------|----|------------------|
| 1  | Front cover | 6  | Buffer ring   | 11 | Tie rod nut      |
| 2  | Back Cover  | 7  | Bearing       | 12 | Wear ring        |
| 3  | Barrel      | 8  | Cushion Screw | 13 | Piston rod nut   |
| 4  | Piston rod  | 9  | Cushion Seal  | 14 | Buffer seal ring |
| 5  | Piston      | 10 | Tie rod       | 15 | Piston O-ring    |

### Specification

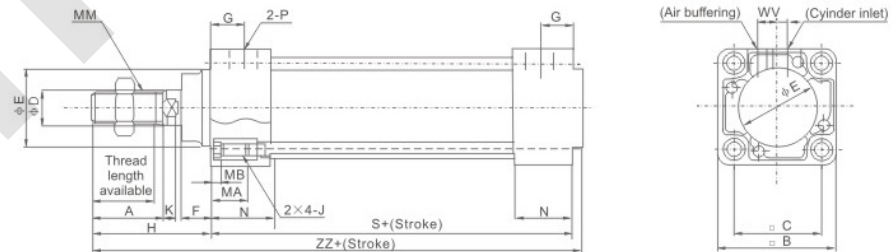
|                            |  |       |       |       |    |     |
|----------------------------|--|-------|-------|-------|----|-----|
| Cylinder diameter          | 32   | 40    | 50    | 63    | 80 | 100 |
| Working Medium             | Air  |       |       |       |    |     |
| Action type                | Double acting  |       |       |       |    |     |
| Proof pressure             | 15.3kgf/cm <sup>2</sup> (1.5Mpa)   |       |       |       |    |     |
| Max.pressure               | 10.2kgf/cm <sup>2</sup> (1.0Mpa)   |       |       |       |    |     |
| Min.pressure               | 0.5kgf/cm <sup>2</sup> (0.05Mpa)   |       |       |       |    |     |
| Environment and fluid temp | -10~+60°C  |       |       |       |    |     |
| Piston velocity            | 50~1000mm/s  |       |       |       |    |     |
| Buffering                  | Air buffering  |       |       |       |    |     |
| Stroke tolerance           | ~0~250 <sup>+10</sup> , 251~1000 <sup>+14</sup> , 1001~1500 <sup>+18</sup> |       |       |       |    |     |
| Rc(PT)Joint size           | G1/8"  | G1/4" | G3/8" | G1/2" |    |     |

### Stroke

| Bore(mm) | Standard stroke  |
|----------|--|
| 32       | 25,50,75,100,125,150,175,200,250,300,350,400,450,500             |
| 40       | 25,50,75,100,125,150,175,200,250,300,350,400,450,500             |
| 50       | 25,50,75,100,125,150,175,200,250,300,350,400,450,500,600         |
| 63       | 25,50,75,100,125,150,175,200,250,300,350,400,450,500,600         |
| 80       | 25,50,75,100,125,150,175,200,250,300,350,400,450,500,600,700,750 |
| 100      | 25,50,75,100,125,150,175,200,250,300,350,400,450,500,600,700,750 |

### Overall Dimensions

MB Series φ 32~ φ 200



### Dimension Sheet

| Diameter | Stroke range | Thread length available | A  | B   | C    | φD | φE | F  | G    | MA | MB | J         | K  | MM         | N    | P   | S   | V    | W    | H  | ZZ  |
|----------|--------------|-------------------------|----|-----|------|----|----|----|------|----|----|-----------|----|------------|------|-----|-----|------|------|----|-----|
| 32       | ~500         | 19.5                    | 22 | 46  | 32.5 | 12 | 30 | 13 | 13   | 16 | 4  | M6 × 1.0  | 6  | M10 × 1.25 | 27   | 1/8 | 84  | 4    | 6.5  | 47 | 135 |
| 40       | ~500         | 27                      | 30 | 52  | 38   | 16 | 35 | 13 | 14   | 16 | 4  | M6 × 1.0  | 6  | M14 × 1.5  | 27   | 1/4 | 84  | 4    | 9    | 51 | 139 |
| 50       | ~600         | 32                      | 35 | 65  | 46.5 | 20 | 40 | 14 | 15.5 | 16 | 5  | M8 × 1.25 | 7  | M18 × 1.5  | 31.5 | 1/4 | 94  | 5    | 10.5 | 58 | 156 |
| 63       | ~600         | 32                      | 35 | 75  | 56.5 | 20 | 45 | 14 | 16.5 | 16 | 5  | M8 × 1.25 | 7  | M18 × 1.5  | 31.5 | 3/8 | 94  | 9    | 12   | 58 | 156 |
| 80       | ~750         | 37                      | 40 | 95  | 72   | 25 | 45 | 20 | 19   | 16 | 5  | M10 × 1.5 | 10 | M22 × 1.5  | 38   | 3/8 | 114 | 11.5 | 14   | 72 | 190 |
| 100      | ~750         | 37                      | 40 | 114 | 89   | 30 | 55 | 20 | 19   | 16 | 5  | M10 × 1.5 | 10 | M26 × 1.5  | 38   | 1/2 | 114 | 17   | 15   | 72 | 190 |