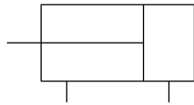


## MGP-Z, Compact Guide Cylinder MGPM12-150Z

### Datasheet

- 3 types of bearing can be selected: slide bearing, ball bushing and high precision ball bushing.
- Compactness & Lightness
- Bore size: 12, 16, 20, 25, 32, 40, 50, 63, 80, 100 (mm)
- Strokes from 10 to 400mm (depending upon bore size)
- 4 types of mounting are possible: top mounting, side mounting, bottom mounting and T-slot side mounting.
- Auto switches can be mounted on 2 surfaces.



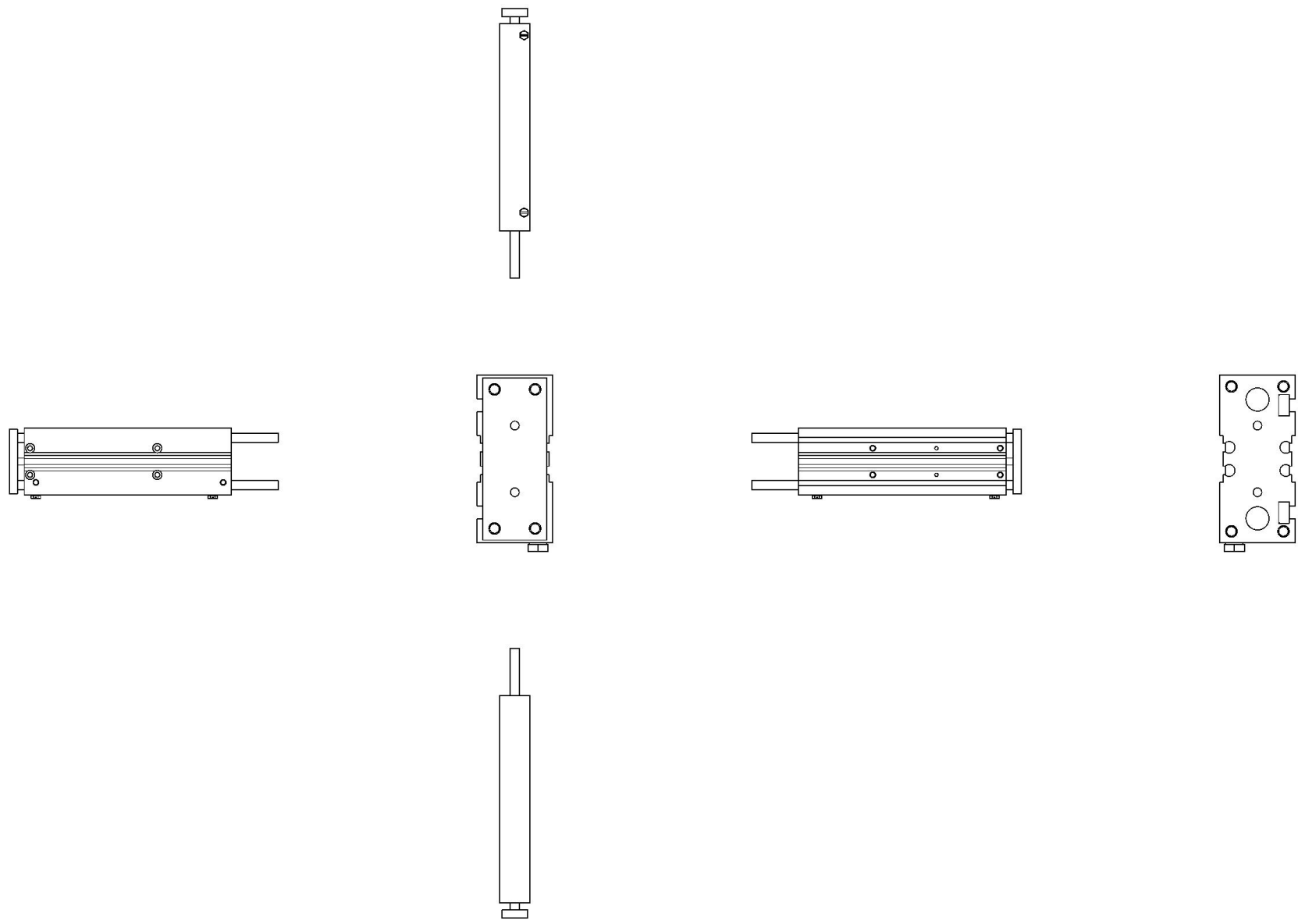
Double-acting, single-rod cylinder

### Standard specifications

|                                      |   |
|--------------------------------------|---|
| Bearing Type                         | M (Slide Bearing)                       |
| Bore Size                            | Ø12 mm                                  |
| Port Thread Type                     | Rc [Or M5x0.8 for 12, 16 Bores]         |
| Lube-retainer                        | Without Stable Lubrication Function     |
| Stroke                               | 150                                     |
| Auto Switch                          | No Switch                               |
| Lead Wire Length                     | 0.5m [Or None in the Case of No Switch] |
| Number of Auto Switches              | 2 pcs. [Or None in Case of No Switch]   |
| Change of Guide Rod End Shape        | None                                    |
| Temperature Resistance               | None                                    |
| Low Speed                            | None                                    |
| Fluororubber Seal                    | None                                    |
| Grease for Food Processing Equipment | None                                    |
| -                                    | Compressed air;Compressed air           |
| Maximum operating pressure           | 1.0 MPa                                 |
| Minimum operating pressure           | 0.12 MPa                                |
| Proof pressure                       | 1.5 MPa                                 |
| Pneumatic input connection           | M5 x 0.8                                |

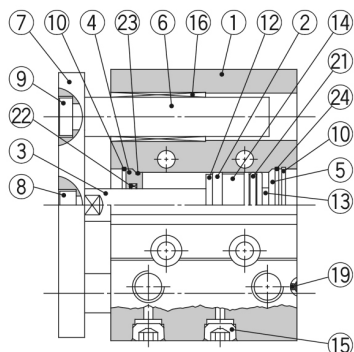
|   |                            |
|---|----------------------------|
| Pneumatic exhaust connection                            | M5 x 0.8                   |
| Theoretical cylinder force, advance stroke (at 0.5 MPa) | 57 N                       |
| Theoretical cylinder force, return stroke (at 0.5 MPa)  | 42 N                       |
| Maximum piston speed                                    | 500 mm/s                   |
| Type of cushioning                                      | Rubber bumper on both ends |
| Non-rotating accuracy of plate                          | $\pm 0.07^\circ$           |

# Dimensions



# Constructions

## MGPM12 to 25



## MGPM32 to 100



Ø 63 or more



### Component Parts

| No. | Description                      | Material                        | Note  |
|-----|----------------------------------|---------------------------------|---|
| 1   | Body                             | Aluminium alloy                 | Hard anodised                                       |
| 2   | Piston                           | Aluminium alloy                 |   |
| 3   | Piston rod                       | Stainless steel<br>Carbon steel | Ø 12 to Ø 25<br>Ø 32 to Ø 100   Hard chrome plating |
| 4   | Collar                           | Aluminium alloy                 | Chromated   |
| 5   | Head cover                       | Aluminium alloy                 | Ø 12 to Ø 63   Chromated<br>Ø 80, Ø 100   Painted   |
| 6   | Guide rod                        | Carbon steel                    | Hard chrome plating                                 |
| 7   | Plate                            | Carbon steel                    | Nickel plating                                      |
| 8   | Plate mounting bolt              | Carbon steel                    | Nickel plating                                      |
| 9   | Guide bolt                       | Carbon steel                    | Nickel plating                                      |
| 10  | Retaining ring                   | Carbon tool steel               | Phosphate coated                                    |
| 11  | Retaining ring                   | Carbon tool steel               | Phosphate coated                                    |
| 12  | Bumper A                         | Urethane                        |   |
| 13  | Bumper B                         | Urethane                        |   |
| 14  | Magnet                           | —                               |   |
| 15  | Plug<br>Hexagon socket head plug | Carbon steel                    | Ø 12, Ø 16<br>Ø 20 to Ø 100   Nickel plating        |
| 16  | Slide bearing                    | Bearing alloy                   |   |

\*: A felt is not installed on the slide bearing.

### Component Parts

| No. | Description  | Material        | Note                           |
|-----|--------------|-----------------|--------------------------------|
| 17  | Ball bushing |                 |                                |
| 18  | Spacer       | Aluminium alloy |                                |
| 19  | Steel ball   | Carbon steel    | Ø 12 to Ø 50                   |
| 20  | Plug         | Carbon steel    | Ø 63 to Ø 100   Nickel plating |
| 21* | Piston seal  | NBR             |                                |
| 22* | Rod seal     | NBR             |                                |
| 23* | Gasket A     | NBR             |                                |
| 24* | Gasket B     | NBR             |                                |

### Replacement Parts/Seal Kit

| Bore size [mm] | Kit no.    | Contents          | Bore size [mm] | Kit no.     | Contents          |
|----------------|------------|-------------------|----------------|-------------|-------------------|
| 12             | MGP12-Z-PS | Set of nos. above | 40             | MGP40-Z-PS  | Set of nos. above |
| 16             | MGP16-Z-PS |                   | 50             | MGP50-Z-PS  |                   |
| 20             | MGP20-Z-PS | ⑳, ㉑, ㉒, ㉓, ㉔     | 63             | MGP63-Z-PS  | ㉑), ㉒), ㉓), ㉔)    |
| 25             | MGP25-Z-PS |                   | 80             | MGP80-Z-PS  |                   |
| 32             | MGP32-Z-PS |                   | 100            | MGP100-Z-PS |                   |

\*: Seal kit includes ㉑) to ㉔). Order the seal kit, based on each bore size.

\*: Since the seal kit does not include a grease pack, order it separately.

Grease pack part number: GR-S-010 (10 g)

## Additional information

Catalogue

[MGP-Z-Dd\\_EU.pdf](#)

Operation manuals

[OM\\_MGP-Z\\_MGPx-OM0047PEN-B.pdf](#)