

MGP-Z (ø12 to ø32), Compact Guide Cylinder

MGPM25TF-250Z

Datasheet

General series information

- 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 (mm)
- Strokes from 1 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.



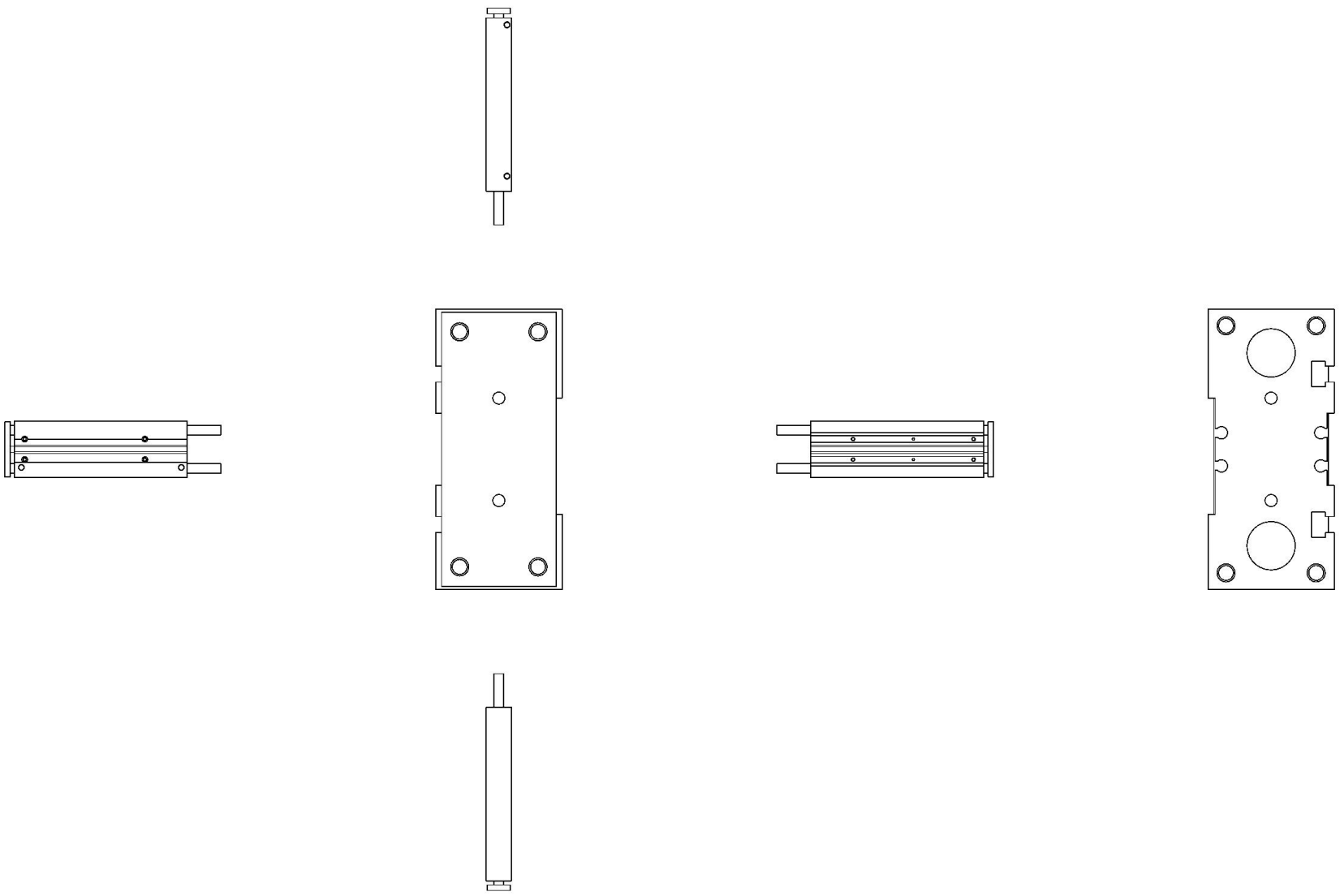
Double-acting, single-rod cylinder

Standard specifications

| | |
|--|---|
| Bearing Type | M (Slide Bearing) |
| Bore Size | Ø25 mm |
| Port Thread Type | TF [G] |
| Lube-retainer | Without Stable Lubrication Function |
| Stroke | 250 |
| 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 |
| Stainless Steel | None |
| Fluororubber Seal | None |
| Grease for Food Processing Equipment | None |
| Pressure medium | Compressed air |
| Maximum temperature of pressure medium | 60 °C |
| Minimum temperature of pressure medium | -10 °C (No freezing) |

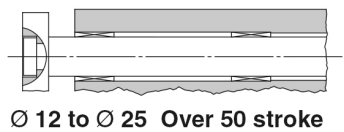
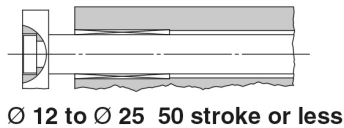
| | |
|---|----------------------------|
| Maximum operating pressure | 1.0 MPa |
| Minimum operating pressure | 0.1 MPa |
| Proof pressure | 1.5 MPa |
| Maximum ambient temperature | 60 °C |
| Minimum ambient temperature | -10 °C (No freezing) |
| Number of pneumatic connections | 4 pcs. |
| Pneumatic input connection | G 1/8 |
| Pneumatic exhaust connection | G 1/8 |
| Mode of operation of drive | Double acting |
| Theoretical cylinder force, advance stroke (at 0.5 MPa) | 245 N |
| Theoretical cylinder force, return stroke (at 0.5 MPa) | 206 N |
| Maximum piston speed | 500 mm/s |
| Type of cushioning | Rubber bumper on both ends |
| Non-rotating accuracy of plate | ± 0.06 ° |
| Weight | 3.350 Kg |

Dimensions



Constructions

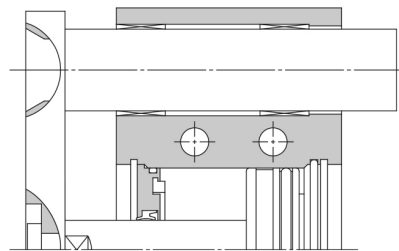
MGPM12 to 25



MGPM32 to 100



Ø 63 or more



Ø 50 or more

Component Parts

| No. | Description | Material | Note |
|-----|----------------------------------|-------------------|-------------------------------------|
| 1 | Body | Aluminium alloy | Hard anodised |
| 2 | Piston | Aluminium alloy | |
| 3 | Piston rod | Stainless steel | Ø 12 to Ø 25 |
| | | Carbon steel | Ø 32 to Ø 100 Hard chrome plating |
| 4 | Collar | Aluminium alloy | Chromated |
| 5 | Head cover | Aluminium alloy | Ø 12 to Ø 63 Chromated |
| | | | 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 Hexagon socket head plug | Carbon steel | Ø 12, Ø 16 Nickel plating |
| | | | Ø 20 to Ø 100 |
| 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 | 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](#)