

MGP-Z (ø40 to ø100), Compact Guide Cylinder

MGPM100TF-25Z

Datasheet

General series information

- 3 types of bearing can be selected: slide bearing, ball bushing and high precision ball bushing.
- Compactness & Lightness
- Bore size: 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

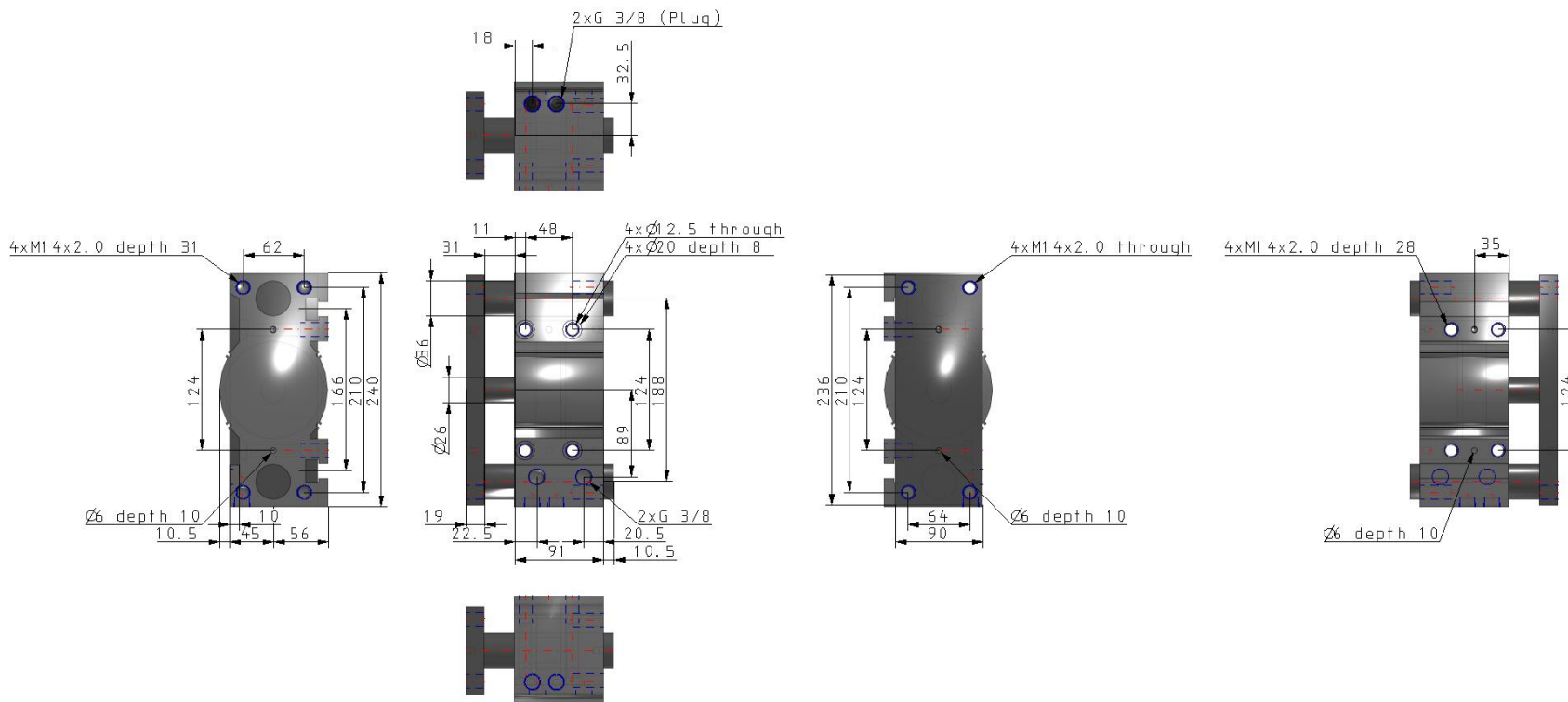
Standard specifications

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 3/8
Pneumatic exhaust connection	G 3/8
Mode of operation of drive	Double acting
Theoretical cylinder force, advance stroke (at 0.5 MPa)	3927 N
Theoretical cylinder force, return stroke (at 0.5 MPa)	3662 N
Maximum piston speed	400 mm/s
Type of cushioning	Rubber bumper on both ends
Non-rotating accuracy of plate	± 0.03 °

Weight

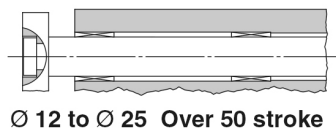
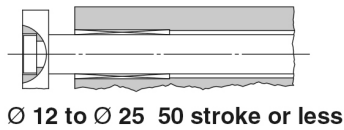
9.120 Kg

Dimensions



Constructions

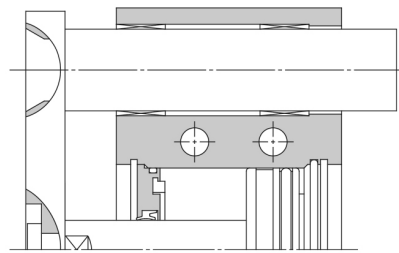
MGPM12 to 25



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.	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](#)