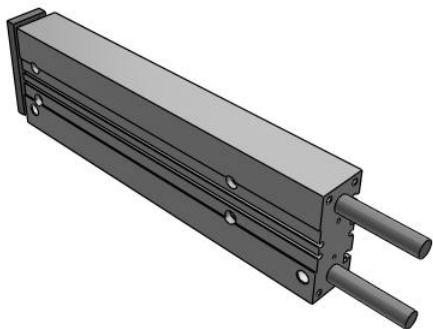




MGP-Z (ø12 to ø32), Compact Guide Cylinder MGPM20TN-250Z

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.

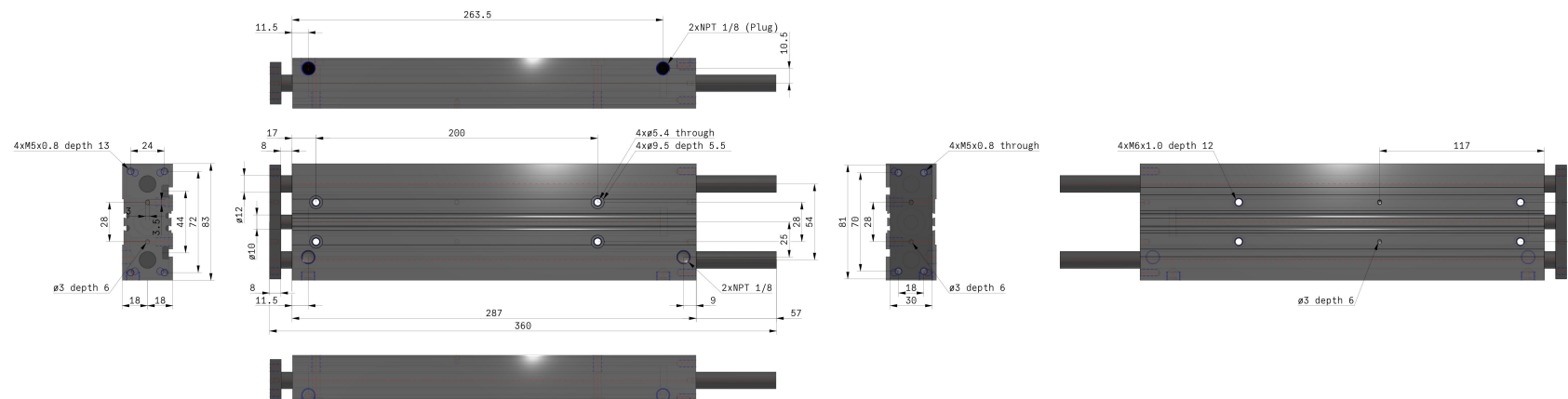


Double-acting, single-rod cylinder

Standard specifications

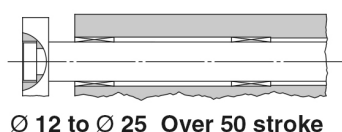
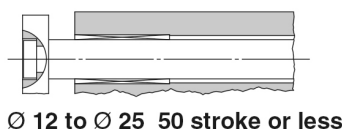
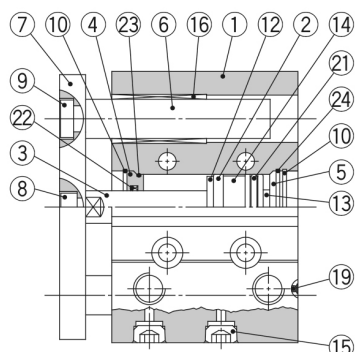
Bearing Type	M (Slide Bearing)
Bore Size	Ø20 mm
Port Thread Type	TN [NPT]
Lube-retainer	Without Stable Lubrication Function
Stroke	250
Auto Switch	No Switch
Lead Wire Length	0.5m [Or None in the Case of No Switch]
Number of Auto Switches	2 pcs. [Or None in Case of No Switch]
Change of Guide Rod End Shape	None
Temperature Resistance	None
Low Speed	None
Stainless Steel	None
Fluororubber Seal	None
Grease for Food Processing Equipment	None
Pressure medium	Compressed air; Compressed air
Maximum temperature of pressure medium	60 °C; 60 °C
Minimum temperature of pressure medium	-10 °C (No freezing); -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;60 °C
Minimum ambient temperature	-10 °C (No freezing);-10 °C (No freezing)
Number of pneumatic connections	4 pcs.
Pneumatic input connection	NPT 1 /8-27
Pneumatic exhaust connection	NPT 1 /8-27
Mode of operation of drive	Double acting
Theoretical cylinder force, advance stroke (at 0.5 MPa)	157 N
Theoretical cylinder force, return stroke (at 0.5 MPa)	118 N
Maximum piston speed	500 mm/s
Type of cushioning	Rubber bumper on both ends
Non-rotating accuracy of plate	± 0.06 °

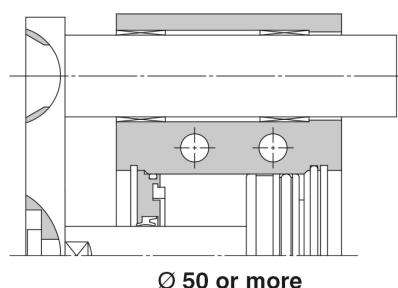
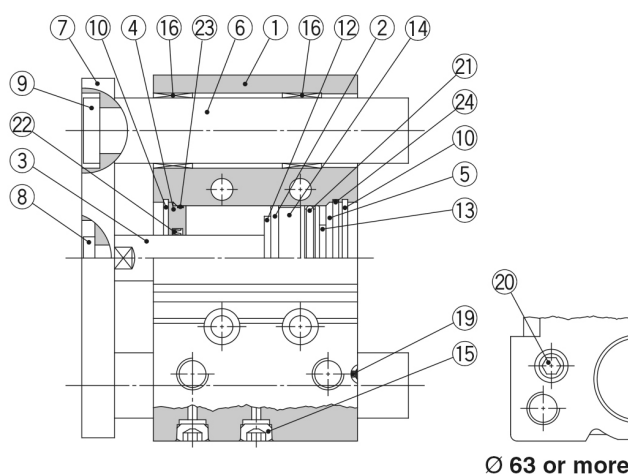


Constructions

MGPM12 to 25



MGPM32 to 100



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	Carbon steel	Ø 12, Ø 16 Ø 20 to Ø 100 Nickel plating
	Hexagon socket head plug		
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.
16	MGP16-Z-PS	above	50	MGP50-Z-PS	above
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](#)