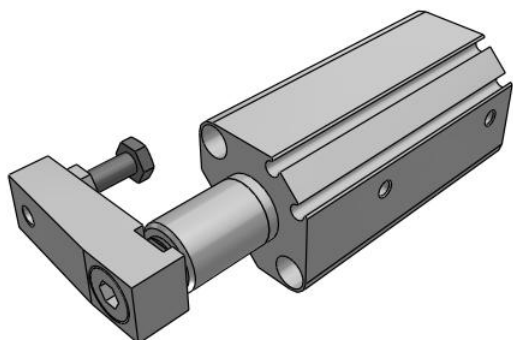




## MK-Z Rotary Clamp Cylinder, Standard w/Auto Switch Mounting Grooves MKB20-20RNZ

Datasheet

### General series information

- Length has been reduced in comparison to MK2 and is similar in length to MK.
- Bore sizes (mm): 12, 16, 20, 25, 32, 40, 50, 63
- Compact auto switch D-M9 can be mounted on 4 sides.
- Magnetic field resistant auto switch can be used.
- 2 types of cylinder mounting are available with one body.



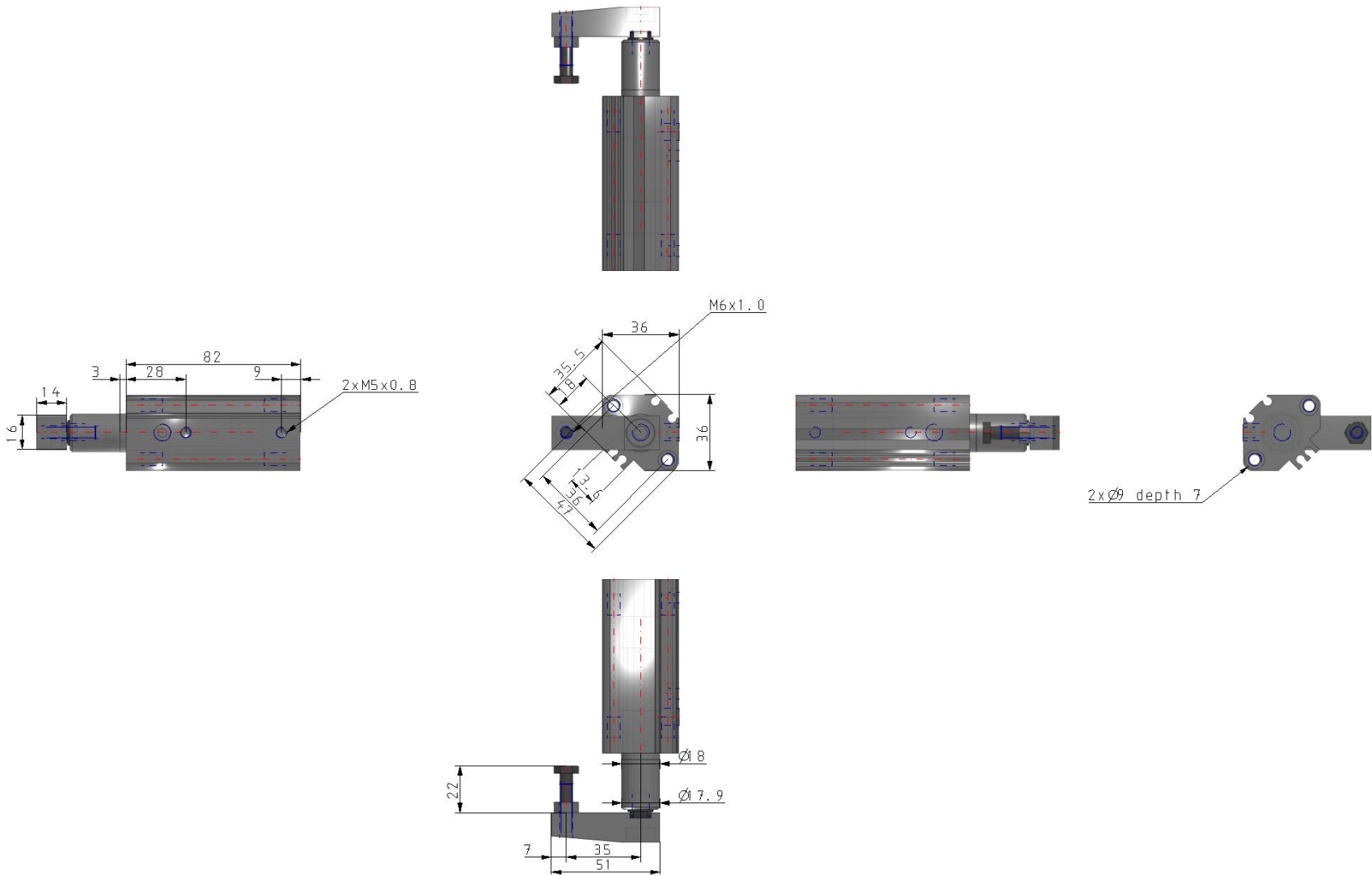
Double-acting, single-rod cylinder

### Standard specifications

|                                                    |                                                 |
|----------------------------------------------------|-------------------------------------------------|
| Mounting                                           | B (Through-hole/Both Ends Tapped Common, Basic) |
| Bore Size                                          | Ø20 mm                                          |
| Port Thread                                        | M thread: ø12 to ø25, Rc: 32 to 63              |
| Clamp Stroke                                       | 20 mm                                           |
| Rotary Direction                                   | R (Clockwise)                                   |
| Body Option                                        | N (w/Arm)                                       |
| Auto Switch                                        | No Switch                                       |
| Lead Wire or Prewired Connector                    | 0.5m [Or None in the Case of No Switch]         |
| Number                                             | 2 pcs. [Or None in the Case of No Switch]       |
| Made to Order                                      | None                                            |
| Pressure medium                                    | Air                                             |
| Maximum temperature of pressure medium             | 70 °C                                           |
| Maximum temperature of pressure medium with magnet | 60 °C                                           |
| Minimum temperature of pressure medium             | -10 °C (No freezing)                            |
| Minimum temperature of pressure medium with magnet | -10 °C (No freezing)                            |
| Maximum operating pressure                         | 1.0 MPa                                         |
| Minimum operating pressure                         | 0.1 MPa                                         |
| Proof pressure                                     | 1.5 MPa                                         |

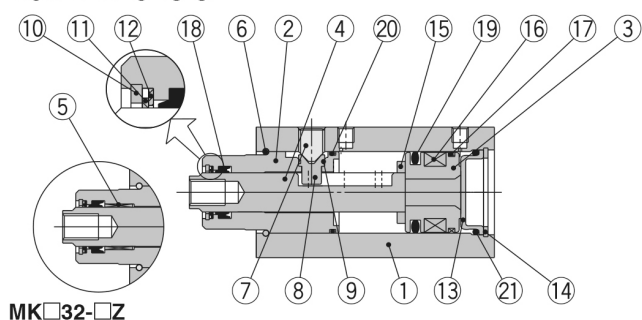
|                                                         |                      |
|---------------------------------------------------------|----------------------|
| Maximum ambient temperature                             | 70 °C                |
| Maximum ambient temperature with magnet                 | 60 °C                |
| Minimum ambient temperature                             | -10 °C (No freezing) |
| Minimum ambient temperature with magnet                 | -10 °C (No freezing) |
| Number of pneumatic connections                         | 2 pcs.               |
| Pneumatic input connection                              | M5                   |
| Pneumatic exhaust connection                            | M5                   |
| 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)  | 101 N                |
| Maximum piston speed                                    | 200 mm/s             |
| Type of cushioning                                      | Rubber bumper        |
| Piston rod end                                          | Female thread        |
| Female thread of rod end                                | M8                   |
| Weight                                                  | 0.290 Kg             |

Dimensions



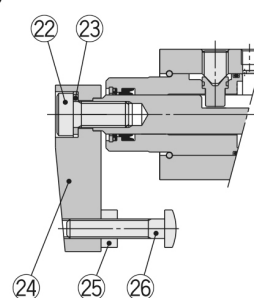
## Constructions

### New MK20 to 32

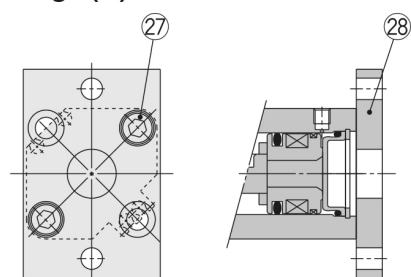


MK□32-□Z

### With arm (N)



### Head flange (G)



### Component Parts

| No. | Description                   | Material                  | Note                                 |
|-----|-------------------------------|---------------------------|--------------------------------------|
| 1   | Cylinder tube                 | Aluminum alloy            | Hard anodised                        |
| 2   | Rod cover                     | Aluminum alloy            | Hard anodised                        |
| 3   | Piston                        | Aluminum alloy            | Chromated                            |
| 4   | Piston rod                    | Stainless steel           | ø20 to ø25 Nitriding                 |
|     |                               | Carbon steel              | ø32 Heated, Nickel plated            |
| 5   | Bushing                       | Copper bearing material   | ø32 only                             |
| 6   | Stop ring                     | Stainless steel           |                                      |
| 7   | Hexagon socket head set screw | Chromium molybdenum steel | Sharp end section: 90°               |
| 8   | Guide pin                     | Stainless steel           | Nitriding                            |
| 9   | O-ring                        | NBR                       |                                      |
| 10  | Round R-type retaining ring   | Carbon tool steel         |                                      |
| 11  | Coil scraper                  | Phosphor bronze           |                                      |
| 12  | Scraper pressure              | Stainless steel           |                                      |
| 13  | Head cover                    | Rolled steel              | Electroless nickel plated            |
| 14  | C-type retaining ring         | Carbon tool steel         |                                      |
| 15  | Bumper                        | Urethane                  |                                      |
| 16  | Magnet                        | —                         |                                      |
| 17  | Wear ring                     | Resin                     |                                      |
| 18  | Rod seal                      | NBR                       |                                      |
| 19  | Piston seal                   | NBR                       |                                      |
| 20  | Gasket                        | NBR                       |                                      |
| 21  | O-ring                        | NBR                       |                                      |
| 22  | Hexagon socket head cap screw | Chromium molybdenum steel |                                      |
| 23  | Spring washer                 | Hard steel                |                                      |
| 24  | Arm                           | Rolled steel              |                                      |
| 25  | Hexagon nut                   | Rolled steel              |                                      |
| 26  | Clamp bolt                    | Chromium molybdenum steel |                                      |
| 27  | Hexagon socket head cap screw | Chromium molybdenum steel | Qty. ø20, ø25: 2 pcs.<br>ø32: 4 pcs. |
| 28  | Flange                        | Rolled steel              |                                      |

## Additional information

Catalogue

[MK-A\\_EU.pdf](#)