

# Guided drive DFM-100-80-P-A-KF

Part number: 170969

FESTO



[PDF](#) General operating condition

## Data sheet

| Feature   | Value  |
|---|--|
| Distance of centre of gravity of payload to yoke plate xs       | 125 mm   |
| Stroke  | 80 mm  |
| Piston diameter   | 100 mm   |
| Drive unit operating mode                                       | Yoke   |
| Cushioning  | Elastic cushioning rings/pads at both ends                         |
| Mounting position   | Any  |
| Guide   | Recirculating ball bearing guide                                   |
| Structural design   | Guide  |
| Position sensing  | For proximity sensor   |
| Symbol  | 00991737   |
| Operating pressure  | 0.05 MPa ... 1 MPa   |
| Operating pressure  | 0.5 bar ... 10 bar   |
| Max. speed  | 0.4 m/s  |
| Mode of operation   | Double-acting  |
| Operating medium  | Compressed air as per ISO 8573-1:2010 [7:4:4]                      |
| Information on operating and pilot media                        | Operation with oil lubrication possible (required for further use) |
| Corrosion resistance class (CRC)                                | 0 - No corrosion stress  |
| LABS (PWIS) conformity  | VDMA24364-B1/B2-L  |
| Cleanroom suitability, measured according to ISO 14644-14       | Class 6 according to ISO 14644-1                                   |
| Ambient temperature   | -5 °C ... 60 °C  |
| Impact energy in the end positions                              | 1 J  |
| Max. force Fy   | 3043 N   |
| Max. force Fy static  | 5400 N   |
| Max. force Fz   | 3043 N   |
| Max. force Fz static  | 5400 N   |
| Max. torque Mx  | 286.02 Nm  |
| Max. static moment Mx   | 507.6 Nm   |
| Max. torque My  | 155.16 Nm  |
| Max. static moment My   | 275.4 Nm   |
| Max. torque Mz  | 155.16 Nm  |
| Max. static moment Mz   | 275.4 Nm   |
| Max. permissible torque load Mx as a function of the stroke     | 65.84 Nm   |
| Max. payload as a function of the stroke at defined distance xs | 495 N  |
| Theoretical force at 6 bar, retracting                          | 4418 N   |
| Theoretical force at 6 bar, advancing                           | 4712 N   |
| Moving mass   | 7105 g   |

| <b>Feature</b>   | <b>Value</b>               |
|--|----------------------------|
| Product weight   | 13612 g                    |
| Center of gravity of the moving mass as a function of the stroke | 67.9 mm                    |
| Alternative connections  | See product drawing        |
| Pneumatic connection   | G3/8                       |
| Note on materials  | RoHS-compliant             |
| Cover material   | Wrought aluminum alloy     |
| Seals material   | NBR                        |
| Housing material   | Wrought aluminum alloy     |
| Piston rod material  | High-alloy stainless steel |