

# Guided drive DFM-16-50-P-A-KF

Part number: 170912

FESTO



 [General operating condition](#)

## Data sheet

| Feature  | Value  |
|--|--|
| Distance from centre of gravity of load to yoke plate xs         | 50 mm  |
| Stroke   | 50 mm  |
| Piston diameter  | 16 mm  |
| Operating mode, drive unit                                       | Yoke   |
| Cushioning   | Elastic cushioning rings/plates at both ends   |
| Mounting position  | optional   |
| Guide  | Recirculating ball bearing guide   |
| Design   | Guidance   |
| Position detection   | Via proximity switch   |
| Symbol   | 00991737   |
| Operating pressure   | 0.2 MPa ... 1 MPa  |
| Operating pressure   | 2 bar ... 10 bar   |
| Max. speed   | 0.8 m/s  |
| Mode of operation  | Double-acting  |
| Operating medium   | Compressed air to ISO 8573-1:2010 [7:4:4]  |
| Note on operating and pilot medium                               | Lubricated operation possible (in which case lubricated operation will always be required) |
| 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 end positions                                   | 0.15 J   |
| Max. force Fy  | 778 N  |
| Max. force Fy static   | 830 N  |
| Max. force Fz  | 778 N  |
| Max. force Fz static   | 830 N  |
| Max. moment Mx   | 17.9 Nm  |
| Max. torque Mx static  | 19.09 Nm   |
| Max. moment My   | 10.5 Nm  |
| Max. torque My static  | 11.2 Nm  |
| Max. moment Mz   | 10.5 Nm  |
| Max. torque Mz static  | 11.2 Nm  |
| Max. permissible torque load Mx as a function of stroke          | 2.63 Nm  |
| Max. effective load dependent upon stroke at defined distance xs | 77 N   |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke      | 90 N   |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke     | 121 N  |

| <b>Feature</b>   | <b>Value</b>               |
|--|----------------------------|
| Moving mass  | 310 g                      |
| Product weight   | 699 g                      |
| Centre of gravity of moving mass as a function of stroke | 35.2 mm                    |
| alternative connections                                  | See product drawing        |
| Pneumatic connection                                     | M5                         |
| Note on materials  | RoHS-compliant             |
| Material cover   | Wrought aluminium alloy    |
| Material seals   | NBR                        |
| Material housing   | Wrought aluminium alloy    |
| Material piston rod                                      | High-alloy stainless steel |