

# Guided drive DFM-40-80-P-A-KF-F1A

Part number: 8118916

FESTO



 [General operating condition](#)

## Data sheet

| Feature   | Value  |
|---|--|
| Distance of centre of gravity of payload to yoke plate xs | 50 mm  |
| Stroke  | 80 mm  |
| Piston diameter   | 40 mm  |
| Drive unit operating mode                                 | Yoke   |
| Cushioning  | Elastic cushioning rings/pads at both ends   |
| Mounting position   | Any  |
| Guide   | Recirculating ball bearing   |
| Structural design   | Guide  |
| Position sensing  | Via proximity switch   |
| Symbol  | 00991737   |
| Variants  | Metals with copper, zinc or nickel by mass as main constituent are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils. |
| Operating pressure  | 0.15 MPa ... 1 MPa   |
| Operating pressure  | 1.5 bar ... 10 bar   |
| Max. speed  | 0.6 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  |
| Suitability for the production of Li-ion batteries        | Suitable for battery production with reduced Cu/Zn/Ni values (F1a)   |
| 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                        | 0.7 J  |
| Max. force Fy   | 1130 N   |
| Max. force Fy static                                      | 1260 N   |
| Max. force Fz   | 1130 N   |
| Max. force Fz static                                      | 1260 N   |
| Max. torque Mx  | 49.74 Nm   |
| Max. static moment Mx                                     | 55.44 Nm   |
| Max. torque My  | 28.83 Nm   |
| Max. static moment My                                     | 32.13 Nm   |
| Max. torque Mz  | 28.83 Nm   |
| Max. static moment Mz                                     | 32.13 Nm   |

| <b>Feature</b>   | <b>Value</b>               |
|--|----------------------------|
| Max. permissible torque load Mx as a function of the stroke      | 8.7 Nm                     |
| Max. payload as a function of the stroke at defined distance xs  | 151 N                      |
| Theoretical force at 6 bar, retracting                           | 686 N                      |
| Theoretical force at 6 bar, advancing                            | 754 N                      |
| Moving mass  | 1352 g                     |
| Product weight   | 2964 g                     |
| Center of gravity of the moving mass as a function of the stroke | 53.9 mm                    |
| Alternative connections  | See product drawing        |
| Pneumatic connection   | G1/8                       |
| 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 |