

# Guided drive DFM-16-50-P-A-GF-F1A

Part number: 8118827

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   | Plain-bearing guide  |
| Design  | Guidance   |
| Position detection  | 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  | 0.2 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  |
| 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                                       | -20 °C ... 80 °C   |
| Impact energy in end positions                            | 0.15 J   |
| Max. force Fy   | 608 N  |
| Max. force Fy static                                      | 608 N  |
| Max. force Fz   | 608 N  |
| Max. force Fz static                                      | 608 N  |
| Max. moment Mx  | 13.98 Nm   |
| Max. torque Mx static                                     | 13.98 Nm   |
| Max. moment My  | 10.34 Nm   |
| Max. torque My static                                     | 10.34 Nm   |
| Max. moment Mz  | 10.34 Nm   |
| Max. torque Mz static                                     | 10.34 Nm   |

| <b>Feature</b>   | <b>Value</b>               |
|--|----------------------------|
| Max. permissible torque load Mx as a function of stroke          | 2.2 Nm                     |
| Max. effective load dependent upon stroke at defined distance xs | 67 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                      |
| Moving mass  | 364 g                      |
| Product weight   | 772 g                      |
| 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 |