

Guided actuators DFM-20-50-P-A-GF-F1A

Part number: 8118847

FESTO



 General operating condition

Data sheet

| Feature | Value |
|---|---|
| Distance of centre of gravity of payload to yoke plate xs | 50 mm |
| Stroke | 50 mm |
| Piston diameter | 20 mm |
| Drive unit operating mode | Yoke |
| Cushioning | Elastic cushioning rings/pads at both ends |
| Mounting position | Any |
| Guide | Sliding guide |
| Structural design | Guide |
| Position sensing | For proximity sensor |
| 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 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 | Metals with more than 1% by mass of copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils |
| Cleanroom class | Class 7 according to ISO 14644-1 |
| Ambient temperature | -20 °C ... 80 °C |
| Impact energy in the end positions | 0.2 J |
| Max. force Fy | 709.3 N |
| Max. force Fy static | 709.3 N |
| Max. force Fz | 709.3 N |
| Max. force Fz static | 709.3 N |
| Max. torque Mx | 20.57 Nm |
| Max. static moment Mx | 20.57 Nm |
| Max. torque My | 16.31 Nm |
| Max. static moment My | 16.31 Nm |

| Feature | Value |
|---|----------------------------|
| Max. torque Mz | 16.31 Nm |
| Max. static moment Mz | 16.31 Nm |
| Max. permissible torque load Mx as a function of the stroke | 3.85 Nm |
| Max. payload as a function of the stroke at defined distance xs | 103 N |
| Theoretical force at 6 bar, retracting | 141 N |
| Theoretical force at 6 bar, advancing | 188 N |
| Moving mass | 582 g |
| Product weight | 1158 g |
| Alternative connections | See product drawing |
| Pneumatic connection | M5 |
| 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 |