

Guided drive DFM-20-80-P-A-KF-F1A

Part number: 8118855

FESTO



 [General operating condition](#)

Data sheet

| Feature | Value |
|---|--|
| Distance from centre of gravity of load to yoke plate xs | 50 mm |
| Stroke | 80 mm |
| Piston diameter | 20 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 |
| 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 | -5 °C ... 60 °C |
| Impact energy in end positions | 0.2 J |
| Max. force Fy | 817 N |
| Max. force Fy static | 1020 N |
| Max. force Fz | 817 N |
| Max. force Fz static | 1020 N |
| Max. moment Mx | 23.69 Nm |
| Max. torque Mx static | 29.58 Nm |
| Max. moment My | 15.11 Nm |
| Max. torque My static | 18.87 Nm |
| Max. moment Mz | 15.11 Nm |
| Max. torque Mz static | 18.87 Nm |

| Feature | Value |
|--|----------------------------|
| Max. permissible torque load Mx as a function of stroke | 3.36 Nm |
| Max. effective load dependent upon stroke at defined distance xs | 86 N |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke | 141 N |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke | 188 N |
| Moving mass | 584 g |
| Product weight | 1310 g |
| Centre of gravity of moving mass as a function of stroke | 50.9 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 |