

Guided drive DFM-16-20-P-A-KF-F1A

Part number: 8118831

FESTO



Data sheet

| Feature | Value |
|--|--|
| Distance from centre of gravity of load to yoke plate xs | 50 mm |
| Stroke | 20 mm...20 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 |
| 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...0.2 MPa 2 bar...2 bar |
| Max. speed | 0.8 m/s...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 | Product corresponds to the internal product definition from Festo for use in battery production:Metals with more than 1% by mass of copper, zinc or nickel are excluded from use.The 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 | -5 °C...5 °C |
| Impact energy in end positions | 0.15 Nm...0 J |
| Max. force Fy | 389 N...389 N |
| Max. force Fy static | 415 N |
| Max. force Fz | 389 N...389 N |
| Max. force Fz static | 415 N |

| Feature | Value |
|--|----------------------------|
| Max. moment Mx | 8.95 Nm...8.95 Nm |
| Max. torque Mx static | 9.55 Nm |
| Max. moment My | 3.89 Nm...3.89 Nm |
| Max. torque My static | 4.15 Nm |
| Max. moment Mz | 3.89 Nm...3.89 Nm |
| Max. torque Mz static | 4.15 Nm...4.15 Nm |
| Max. permissible torque load Mx as a function of stroke | 1.79 Nm |
| Max. effective load dependent upon stroke at defined distance xs | 41 N...41 N |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke | 90 N...90 N |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke | 121 N...121 N |
| Moving mass | 229 g...229 g |
| Product weight | 484 g...484 g |
| Centre of gravity of moving mass as a function of stroke | 16.5 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 |