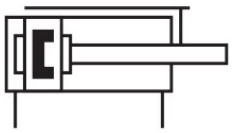
# Guided drive
# DFM-20-25-P-A-KF-F1A

Part number: 8118851





## Data sheet

| Feature | Value |
|---|---|
| Distance of centre of gravity of payload to yoke plate xs | 50 mm |
| Stroke | 25 mm |
| Piston diameter | 20 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 |
| 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<br>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 | 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 | 0.2 Nm |
| Max. force Fy | 408 N |
| Max. force Fy static | 510 N |
| Max. force Fz | 408 N |
| Max. force Fz static | 510 N |
| Max. torque Mx | 11.84 Nm |
| Max. static moment Mx | 14.79 Nm |
| Max. torque My | 4.49 Nm |

| Feature | Value |
|---|---|
| Max. static moment My | 5.61 Nm |
| Max. torque Mz | 4.49 Nm |
| Max. static moment Mz | 5.61 Nm |
| Max. permissible torque load Mx as a function of the stroke | 2.24 Nm |
| Max. payload as a function of the stroke at defined distance xs | 44 N |
| Theoretical force at 6 bar, retracting | 141 N |
| Theoretical force at 6 bar, advancing | 188 N |
| Moving mass | 388 g |
| Product weight | 781 g |
| Center of gravity of the moving mass as a function of the stroke | 19.1 mm |
| 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 |