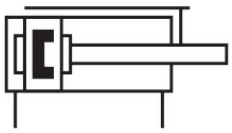
# Guided drive
# DFM-50-160-P-A-GF-F1A

Part number: 8118932



## Data sheet

| Feature | Value |
|---|---|
| Distance from centre of gravity of load to yoke plate xs | 50 mm |
| Stroke | 160 mm |
| Piston diameter | 50 mm |
| Operating mode, drive unit | Yoke |
| Cushioning | Elastic cushioning rings/plates at both ends |
| Mounting position | Any |
| Guide | Plain-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 | 0.1 MPa...1 MPa<br>1 bar...10 bar |
| Max. speed | 0.6 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 | 1 Nm |
| Max. force Fy | 1533 N |
| Max. force Fy static | 1533 N |
| Max. force Fz | 1533 N |
| Max. force Fz static | 1533 N |
| Max. moment Mx | 84.33 Nm |
| Max. torque Mx static | 84.33 Nm |
| Max. moment My | 69.77 Nm |

| Feature | Value |
|---|---|
| Max. torque My static | 69.77 Nm |
| Max. moment Mz | 69.77 Nm |
| Max. torque Mz static | 69.77 Nm |
| Max. permissible torque load Mx as a function of stroke | 12.43 Nm |
| Max. effective load dependent upon stroke at defined distance xs | 200 N |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke | 1057 N |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke | 1178 N |
| Moving mass | 3569 g |
| Product weight | 7205 g |
| alternative connections | See product drawing |
| Pneumatic connection | G1/4 |
| 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 |