

# guided drive DFM-50-160-P-A-KF

Part number: 170951

★ Core product range

With integrated guide.

The proximity switch, type SMTSO-8E, can be used with this product with stroke lengths equal to or greater than 50 mm. The corresponding mounting kit, type SMB-8E, is mounted inwardly or outwardly.

FESTO



## Data sheet

| Feature   | Value   |
|---|---|
| Centre of gravity distance from working load to yoke plate          | 50 mm   |
| Stroke  | 160 mm  |
| Piston diameter   | 50 mm   |
| Operating mode of drive unit  | Yoke  |
| Cushioning  | P: Flexible cushioning rings/plates at both ends                            |
| Assembly position   | Any   |
| Guide   | Recirculating ball bearing guide  |
| Design structure  | Guide   |
| Position detection  | For proximity sensor  |
| Operating pressure MPa  | 0.1 ... 1 MPa   |
| Operating pressure  | 1 ... 10 bar  |
| Max. speed  | 0.6 m/s   |
| Mode of operation   | double-acting   |
| Operating medium  | Compressed air in accordance with ISO8573-1:2010 [7:4:4]                    |
| Note on operating and pilot medium                                  | Lubricated operation possible (subsequently required for further operation) |
| Corrosion resistance classification CRC                             | 0 - No corrosion stress   |
| PWIS conformity   | VDMA24364-B1/B2-L   |
| Ambient temperature   | -5 ... 60 °C  |
| Impact energy in end positions                                      | 1 Nm  |
| Max. force Fy   | 1,487 N   |
| Max. force Fy static  | 1,600 N   |
| Max. force Fz   | 1,487 N   |
| Max. force Fz static  | 1,600 N   |
| Max. torque Mx  | 81.79 Nm  |
| Max. torque Mx static   | 88 Nm   |
| Max. torque My  | 62.46 Nm  |
| Max. torque My static   | 67.2 Nm   |
| Max. torque Mz  | 62.46 Nm  |
| Max. torque Mz static   | 67.2 Nm   |
| Max. permissible torque load Mx as a function of the stroke         | 13.78 Nm  |
| Max. useful load as a function of the stroke at defined distance xs | 212 N   |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), retracting            | 1,057 N   |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance               | 1,178 N   |
| Moving mass   | 2,945 g   |
| Product weight  | 6,583 g   |
| Centre of gravity of the moving mass as a function of the stroke    | 98.1 mm   |
| alternative connections   | See product drawing   |
| Pneumatic connection  | G1/4  |
| Materials note  | Conforms to RoHS  |
| Material cover  | Wrought Aluminium alloy   |
| Material seals  | NBR   |
| Material housing  | Wrought Aluminium alloy   |
| Material piston rod   | High alloy steel, non-corrosive   |