

# Guide cylinder

## DFM-50-25-P-A-KF-F1A

Part number: 8118934

FESTO

The proximity switch, type SMTSO-8E, can be used with this product with stroke lengths of 20 to 40 mm only when the corresponding mounting kit, type SMB-8E, is mounted outwardly.



## Data sheet

| Feature   | Value  |
|---|--|
| Centre of gravity distance from working load to yoke plate          | 50 mm  |
| Stroke  | 25 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   |
| Variants  | Recommended for production facilities for the manufacture of lithium-ion batteries |
| Operating pressure MPa  | 0.1 ... 1 MPa  |
| Working 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  |
| RSBP classification to CD-0033                                      | F1a  |
| Cleanroom class   | ISO class 5  |
| 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  | 31.98 Nm   |
| Max. torque My static   | 34.4 Nm  |
| Max. torque Mz  | 31.98 Nm   |
| Max. torque Mz static   | 34.4 Nm  |
| Max. permissible torque load Mx as a function of the stroke         | 19.35 Nm   |
| Max. useful load as a function of the stroke at defined distance xs | 235 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   | 1,796 g  |
| Product weight  | 3,212 g  |
| Centre of gravity of the moving mass as a function of the stroke    | 30.6 mm  |
| alternative connections   | See product drawing  |
| Pneumatic connection  | G1/4   |

| Feature             | Value                           |
|---------------------|---------------------------------|
| Materials note      | Conforms to RoHS                |
| Material cover      | Wrought Aluminum alloy          |
| Material seals      | NBR                             |
| Material housing    | Wrought Aluminum alloy          |
| Material piston rod | High alloy steel, non-corrosive |