

# Guided drive DFM-50-25-P-A-KF

Part number: 170946

**FESTO**



## Data sheet

| Feature                                                         | Value                                                              |
|-----------------------------------------------------------------|--------------------------------------------------------------------|
| Distance of centre of gravity of payload to yoke plate xs       | 50 mm                                                              |
| Stroke                                                          | 25 mm                                                              |
| Piston diameter                                                 | 50 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                                               |
| 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 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                                                  |
| 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                              | 1 Nm                                                               |
| Max. force Fy                                                   | 1487 N                                                             |
| Max. force Fy static                                            | 1600 N                                                             |
| Max. force Fz                                                   | 1487 N                                                             |
| Max. force Fz static                                            | 1600 N                                                             |
| Max. torque Mx                                                  | 81.79 Nm                                                           |
| Max. static moment Mx                                           | 88 Nm                                                              |
| Max. torque My                                                  | 31.98 Nm                                                           |
| Max. static moment My                                           | 34.4 Nm                                                            |
| Max. torque Mz                                                  | 31.98 Nm                                                           |
| Max. static moment Mz                                           | 34.4 Nm                                                            |
| Max. permissible torque load Mx as a function of the stroke     | 19.35 Nm                                                           |
| Max. payload as a function of the stroke at defined distance xs | 235 N                                                              |

| Feature                                                          | Value                      |
|------------------------------------------------------------------|----------------------------|
| Theoretical force at 6 bar, retracting                           | 1057 N                     |
| Theoretical force at 6 bar, advancing                            | 1178 N                     |
| Moving mass                                                      | 1796 g                     |
| Product weight                                                   | 3212 g                     |
| Center of gravity of the moving mass as a function of the stroke | 30.6 mm                    |
| Alternative connections                                          | See product drawing        |
| Pneumatic connection                                             | G1/4                       |
| 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 |