

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

Part number: 170872

FESTO



[PDF](#) General operating condition

## Data sheet

| Feature                                                         | Value                                                              |
|-----------------------------------------------------------------|--------------------------------------------------------------------|
| Distance of centre of gravity of payload to yoke plate xs       | 50 mm                                                              |
| Stroke                                                          | 50 mm                                                              |
| Piston diameter                                                 | 50 mm                                                              |
| Drive unit operating mode                                       | Yoke                                                               |
| Cushioning                                                      | Elastic cushioning rings/pads at both ends                         |
| Mounting position                                               | Any                                                                |
| Guide                                                           | Sliding guide                                                      |
| Structural design                                               | Guide                                                              |
| Position sensing                                                | For proximity sensor                                               |
| Symbol                                                          | 00991737                                                           |
| Operating pressure                                              | 0.1 MPa ... 1 MPa                                                  |
| Operating pressure                                              | 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)                                | 1 - Low 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                                             | -20 °C ... 80 °C                                                   |
| Impact energy in the end positions                              | 1 J                                                                |
| Max. force Fy                                                   | 1533 N                                                             |
| Max. force Fy static                                            | 1533 N                                                             |
| Max. force Fz                                                   | 1533 N                                                             |
| Max. force Fz static                                            | 1533 N                                                             |
| Max. torque Mx                                                  | 84.33 Nm                                                           |
| Max. static moment Mx                                           | 84.33 Nm                                                           |
| Max. torque My                                                  | 38.33 Nm                                                           |
| Max. static moment My                                           | 38.33 Nm                                                           |
| Max. torque Mz                                                  | 38.33 Nm                                                           |
| Max. static moment Mz                                           | 38.33 Nm                                                           |
| Max. permissible torque load Mx as a function of the stroke     | 15.44 Nm                                                           |
| Max. payload as a function of the stroke at defined distance xs | 216 N                                                              |
| Theoretical force at 6 bar, retracting                          | 1057 N                                                             |
| Theoretical force at 6 bar, advancing                           | 1178 N                                                             |
| Moving mass                                                     | 2254 g                                                             |

| <b>Feature</b>          | <b>Value</b>               |
|-------------------------|----------------------------|
| Product weight          | 4085 g                     |
| 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 |