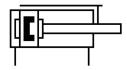
## Guided actuators DFM-40-50-P-A-GF-F1A Part number: 8118908

**FESTO** 





General operating condition

## **Data sheet**

| Distance of centre of gravity of payload to yoke plate xs Stroke Piston diameter Drive unit operating mode | 50 mm  50 mm  40 mm  Yoke  Elastic cushioning rings/pads at both ends  Any                                                                                                                                                        |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Piston diameter  Drive unit operating mode                                                                 | 40 mm  Yoke  Elastic cushioning rings/pads at both ends Any                                                                                                                                                                       |
| Drive unit operating mode                                                                                  | Yoke Elastic cushioning rings/pads at both ends Any                                                                                                                                                                               |
|                                                                                                            | Elastic cushioning rings/pads at both ends Any                                                                                                                                                                                    |
|                                                                                                            | Any                                                                                                                                                                                                                               |
| Cushioning                                                                                                 | · ·                                                                                                                                                                                                                               |
| Mounting position                                                                                          |                                                                                                                                                                                                                                   |
| Guide                                                                                                      | Sliding guide                                                                                                                                                                                                                     |
| Structural design                                                                                          | Guide                                                                                                                                                                                                                             |
| Position sensing                                                                                           | For proximity sensor                                                                                                                                                                                                              |
| Symbol                                                                                                     | 00991737                                                                                                                                                                                                                          |
| 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                                                                                         | 0.15 MPa 1 MPa                                                                                                                                                                                                                    |
| Operating pressure                                                                                         | 1.5 bar 10 bar                                                                                                                                                                                                                    |
| Max. speed                                                                                                 | 0.8 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                                                                                                                                                                                                                 |
| Suitability for the production of Li-ion batteries                                                         | Metals with more than 1% by mass of copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils |
| Cleanroom class                                                                                            | Class 7 according to ISO 14644-1                                                                                                                                                                                                  |
| Ambient temperature                                                                                        | -20 °C 80 °C                                                                                                                                                                                                                      |
| Impact energy in the end positions                                                                         | 0.7 J                                                                                                                                                                                                                             |
| Max. force Fy                                                                                              | 1227 N                                                                                                                                                                                                                            |
| Max. force Fy static                                                                                       | 1227 N                                                                                                                                                                                                                            |
| Max. force Fz                                                                                              | 1227 N                                                                                                                                                                                                                            |
| Max. force Fz static                                                                                       | 1227 N                                                                                                                                                                                                                            |
| Max. torque Mx                                                                                             | 53.97 Nm                                                                                                                                                                                                                          |
| Max. static moment Mx                                                                                      | 53.97 Nm                                                                                                                                                                                                                          |
| Max. torque My                                                                                             | 24.53 Nm                                                                                                                                                                                                                          |
| Max. static moment My                                                                                      | 24.53 Nm                                                                                                                                                                                                                          |

| Feature                                                         | Value                      |
|-----------------------------------------------------------------|----------------------------|
| Max. torque Mz                                                  | 24.53 Nm                   |
| Max. static moment Mz                                           | 24.53 Nm                   |
| Max. permissible torque load Mx as a function of the stroke     | 8.78 Nm                    |
| Max. payload as a function of the stroke at defined distance xs | 150 N                      |
| Theoretical force at 6 bar, retracting                          | 686 N                      |
| Theoretical force at 6 bar, advancing                           | 754 N                      |
| Moving mass                                                     | 1371 g                     |
| Product weight                                                  | 2655 g                     |
| Alternative connections                                         | See product drawing        |
| Pneumatic connection                                            | G1/8                       |
| 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 |