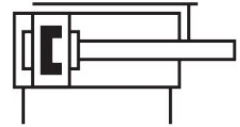


# Guided drive DFM-25-40-P-A-KF-F1A

Part number: 8118872

**FESTO**



## Data sheet

| Feature                                                   | Value                                                                                                                                                                                                                          |
|-----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Distance from centre of gravity of load to yoke plate xs  | 50 mm                                                                                                                                                                                                                          |
| Stroke                                                    | 40 mm                                                                                                                                                                                                                          |
| Piston diameter                                           | 25 mm                                                                                                                                                                                                                          |
| Operating mode, drive unit                                | Yoke                                                                                                                                                                                                                           |
| Cushioning                                                | Elastic cushioning rings/plates at both ends                                                                                                                                                                                   |
| Mounting position                                         | Any                                                                                                                                                                                                                            |
| Guide                                                     | Recirculating ball bearing guide                                                                                                                                                                                               |
| Design                                                    | Guidance                                                                                                                                                                                                                       |
| Position detection                                        | Via proximity switch                                                                                                                                                                                                           |
| 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<br>1.5 bar...10 bar                                                                                                                                                                                           |
| Max. speed                                                | 0.8 m/s                                                                                                                                                                                                                        |
| Mode of operation                                         | Double-acting                                                                                                                                                                                                                  |
| Operating medium                                          | Compressed air to ISO 8573-1:2010 [7:4:4]                                                                                                                                                                                      |
| Note on operating and pilot medium                        | Lubricated operation possible (in which case lubricated operation will always be required)                                                                                                                                     |
| Corrosion resistance class CRC                            | 0 - No corrosion stress                                                                                                                                                                                                        |
| LABS (PWIS) conformity                                    | VDMA24364-B1/B2-L                                                                                                                                                                                                              |
| Suitability for the production of Li-ion batteries        | Suitable for battery production with reduced Cu/Zn/Ni values (F1a)                                                                                                                                                             |
| Cleanroom suitability, measured according to ISO 14644-14 | Class 6 according to ISO 14644-1                                                                                                                                                                                               |
| Ambient temperature                                       | -5 °C...60 °C                                                                                                                                                                                                                  |
| Impact energy in end positions                            | 0.3 Nm                                                                                                                                                                                                                         |
| Max. force Fy                                             | 863 N                                                                                                                                                                                                                          |
| Max. force Fy static                                      | 1060 N                                                                                                                                                                                                                         |
| Max. force Fz                                             | 863 N                                                                                                                                                                                                                          |
| Max. force Fz static                                      | 1060 N                                                                                                                                                                                                                         |
| Max. moment Mx                                            | 29.35 Nm                                                                                                                                                                                                                       |
| Max. torque Mx static                                     | 36.04 Nm                                                                                                                                                                                                                       |
| Max. moment My                                            | 16.83 Nm                                                                                                                                                                                                                       |

| Feature                                                             | Value                      |
|---------------------------------------------------------------------|----------------------------|
| Max. torque $M_y$ static                                            | 20.67 Nm                   |
| Max. moment $M_z$                                                   | 16.83 Nm                   |
| Max. torque $M_z$ static                                            | 20.67 Nm                   |
| Max. permissible torque load $M_x$ as a function of stroke          | 5.94 Nm                    |
| Max. effective load dependent upon stroke at defined distance $x_s$ | 119 N                      |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke         | 247 N                      |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke        | 295 N                      |
| Moving mass                                                         | 680 g                      |
| Product weight                                                      | 1411 g                     |
| Centre of gravity of moving mass as a function of stroke            | 34.9 mm                    |
| alternative connections                                             | See product drawing        |
| Pneumatic connection                                                | G1/8                       |
| Note on materials                                                   | RoHS compliant             |
| Material cover                                                      | Wrought aluminium alloy    |
| Material seals                                                      | NBR                        |
| Material housing                                                    | Wrought aluminium alloy    |
| Material piston rod                                                 | High-alloy stainless steel |