

Guided drive DFM-16-50-P-A-KF-F1A

Part number: 8118835

FESTO



 [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	16 mm
Drive unit operating mode	Yoke
Cushioning	Elastic cushioning rings/pads at both ends
Mounting position	Any
Guide	Recirculating ball bearing 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	0.2 MPa ... 1 MPa
Operating pressure	2 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	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 the end positions	0.15 J
Max. force Fy	778 N
Max. force Fy static	830 N
Max. force Fz	778 N
Max. force Fz static	830 N
Max. torque Mx	17.9 Nm
Max. static moment Mx	19.09 Nm
Max. torque My	10.5 Nm
Max. static moment My	11.2 Nm
Max. torque Mz	10.5 Nm
Max. static moment Mz	11.2 Nm

Feature	Value
Max. permissible torque load Mx as a function of the stroke	2.63 Nm
Max. payload as a function of the stroke at defined distance xs	77 N
Theoretical force at 6 bar, retracting	90 N
Theoretical force at 6 bar, advancing	121 N
Moving mass	310 g
Product weight	699 g
Center of gravity of the moving mass as a function of the stroke	35.2 mm
Alternative connections	See product drawing
Pneumatic connection	M5
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