

Guided drive DFM-20-50-P-A-KF-F1A

Part number: 8118854

FESTO



[PDF](#) General operating condition

Data sheet

Feature	Value
Distance from centre of gravity of load to yoke plate xs	50 mm
Stroke	50 mm
Piston diameter	20 mm
Operating mode, drive unit	Yoke
Cushioning	Elastic cushioning rings/plates at both ends
Mounting position	optional
Guide	Recirculating ball bearing guide
Design	Guidance
Position detection	Via proximity switch
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 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 according to the Festo internal definition of the degree of severity F1A with restrictions regarding the use of Cu/Zn/Ni
Cleanroom class	Class 6 according to ISO 14644-1
Ambient temperature	-5 °C ... 60 °C
Impact energy in end positions	0.2 J
Max. force Fy	817 N
Max. force Fy static	1020 N
Max. force Fz	817 N
Max. force Fz static	1020 N
Max. moment Mx	23.69 Nm
Max. torque Mx static	29.58 Nm
Max. moment My	15.11 Nm
Max. torque My static	18.87 Nm

Feature	Value
Max. moment Mz	15.11 Nm
Max. torque Mz static	18.87 Nm
Max. permissible torque load Mx as a function of stroke	4.23 Nm
Max. effective load dependent upon stroke at defined distance xs	102 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke	141 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke	188 N
Moving mass	512 g
Product weight	1064 g
Centre of gravity of moving mass as a function of stroke	38.5 mm
alternative connections	See product drawing
Pneumatic connection	M5
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