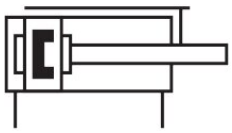
Guided drive
DFM-12-20-P-A-KF-F1A

Part number: 8118632





Data sheet

Feature	Value
Distance of centre of gravity of payload to yoke plate xs	25 mm
Stroke	20 mm
Piston diameter	12 mm
Drive unit operating mode	Yoke
Cushioning	Elastic cushioning rings/pads at both ends
Mounting position	Any
Guide	Recirculating ball bearing
Structural design	Guide
Position sensing	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	0.2 MPa...1 MPa 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	0.07 Nm
Max. force Fy	270 N
Max. force Fy static	355 N
Max. force Fz	270 N
Max. force Fz static	355 N
Max. torque Mx	5.53 Nm
Max. static moment Mx	7.28 Nm
Max. torque My	2.43 Nm

Feature	Value
Max. static moment My	3.2 Nm
Max. torque Mz	2.43 Nm
Max. static moment Mz	3.2 Nm
Max. permissible torque load Mx as a function of the stroke	0.98 Nm
Max. payload as a function of the stroke at defined distance xs	33 N
Theoretical force at 6 bar, retracting	51 N
Theoretical force at 6 bar, advancing	68 N
Moving mass	165 g
Product weight	357 g
Center of gravity of the moving mass as a function of the stroke	15.2 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