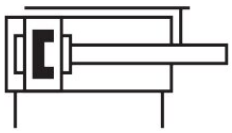
Guided drive
DFM-50-160-P-A-KF-F1A

Part number: 8118939





Data sheet

Feature	Value
Distance of centre of gravity of payload to yoke plate xs	50 mm
Stroke	160 mm
Piston diameter	50 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	0.1 MPa...1 MPa 1 bar...10 bar
Max. speed	0.6 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	1 Nm
Max. force Fy	1487 N
Max. force Fy static	1600 N
Max. force Fz	1487 N
Max. force Fz static	1600 N
Max. torque Mx	81.79 Nm
Max. static moment Mx	88 Nm
Max. torque My	62.46 Nm

Feature	Value
Max. static moment My	67.2 Nm
Max. torque Mz	62.46 Nm
Max. static moment Mz	67.2 Nm
Max. permissible torque load Mx as a function of the stroke	13.78 Nm
Max. payload as a function of the stroke at defined distance xs	212 N
Theoretical force at 6 bar, retracting	1057 N
Theoretical force at 6 bar, advancing	1178 N
Moving mass	2945 g
Product weight	6583 g
Center of gravity of the moving mass as a function of the stroke	98.1 mm
Alternative connections	See product drawing
Pneumatic connection	G1/4
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