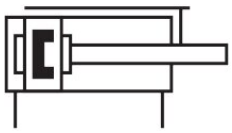
Guided drive
DFM-50-160-P-A-KF-F1A

Part number: 8118939



Data sheet

Feature	Value
Distance from centre of gravity of load to yoke plate xs	50 mm
Stroke	160 mm
Piston diameter	50 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	0.1 MPa...1 MPa 1 bar...10 bar
Max. speed	0.6 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	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. moment Mx	81.79 Nm
Max. torque Mx static	88 Nm
Max. moment My	62.46 Nm

Feature	Value
Max. torque My static	67.2 Nm
Max. moment Mz	62.46 Nm
Max. torque Mz static	67.2 Nm
Max. permissible torque load Mx as a function of stroke	13.78 Nm
Max. effective load dependent upon stroke at defined distance xs	212 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke	1057 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke	1178 N
Moving mass	2945 g
Product weight	6583 g
Centre of gravity of moving mass as a function of stroke	98.1 mm
alternative connections	See product drawing
Pneumatic connection	G1/4
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