

Data sheet

Feature	Value
Stroke	10 mm100 mm
Adjustable end-position range/front length	7.35 mm22.1 mm
Adjustable end-position range/rear length	7.6 mm20.8 mm
Piston diameter	12 mm
Drive unit operating mode	Yoke
Cushioning	Short elastic cushioning rings/pads at both ends Elastomer cushioning, at both ends, stroke not adjustable Elastic cushioning rings/pads at both ends Elastic cushioning rings/pads at both ends with fixed stop External hydraulic cushioning
Mounting position	Any
Guide	Recirculating ball bearing guide
Structural design	Twin piston Yoke Piston rod Slide
Position sensing	For proximity sensor
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 MPa0.8 MPa 1 bar8 bar 14.5 psi116 psi
Max. speed	0.5 m/s0.8 m/s
Repetition accuracy	<= 0.3 mm <= 0.02 mm
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)	1 - Low corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L

Feature	Value
Suitability for the production of Li-ion batteries	Product corresponds to Festo's internal product definition for use in battery production: Metals with more than 1% by mass of copper, zinc or nickel are excluded from use. The exceptions are nickel in steel, chemically nickel-plated surfaces, circuit boards, cables, electrical plug connectors and coils
Cleanroom class	Class 6 according to ISO 14644-1
Ambient temperature	-10 °C60 °C
Impact energy in the end positions	0.04 J1.4 J
Cushioning length	1.1 mm5 mm
Max. force Fy	500 N620 N
Max. force Fz	500 N620 N
Max. torque Mx	4.2 Nm10 Nm
Max. torque My	4.2 Nm6.8 Nm
Max. torque Mz	4.2 Nm6.8 Nm
Theoretical force at 6 bar, retracting	102 N
Theoretical force at 6 bar, advancing	136 N
Moving mass	195 g488 g
Product weight	391 g1034 g
Type of mounting	With through-hole
Pneumatic connection	M5
Note on materials	RoHS-compliant
Cover material	Wrought aluminum alloy
Seals material	HNBR
Guide material	POM TPE-E High-alloy steel
Housing material	Wrought aluminum alloy
Piston rod material	High-alloy stainless steel