Standards-based cylinder
DSBC-...-50- -F1A-

Part number: 8150689

Data sheet

Feature	Value
Stroke	1 mm...2800 mm
Piston diameter	50 mm
Piston rod thread	M16x1.5 M10
Cushioning	Elastic cushioning rings/pads at both ends Self-adjusting pneumatic end-position cushioning Pneumatic cushioning, adjustable at both ends
Mounting position	Any
Conforms to standard	ISO 15552
Piston rod end	External thread Internal thread
Structural design	Piston Piston rod Profile barrel
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. Stroke adjustment advancing Weld spatter protection Extended external thread piston rod Piston rod with external hexagon Low friction Sensor slots on 3 profile sides Additional PTFE piston guide
Operating pressure	0.04 MPa...1.2 MPa 0.4 bar...12 bar
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)	2 - Moderate corrosion stress
LABS (PWIS) conformity	VDMA24364-C1-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 5 according to ISO 14644-1
Ambient temperature	-20 °C...80 °C

Feature	Value
Impact energy in the end positions	0.8 J...1 J
Cushioning length	22 mm
Theoretical force at 6 bar, retracting	990 N
Theoretical force at 6 bar, advancing	1178 N
Weight surcharge per 10 mm piston rod extension	25 g
Weight surcharge per 10 mm piston rod thread extension	14 g
Type of mounting	Alternatively: With internal thread With accessories
Pneumatic connection	G1/4
Note on materials	RoHS compliant
Cover material	Die-cast aluminum, coated
Piston seal material	TPE-U(PU)
Material of piston	Wrought aluminum alloy
Piston rod material	High-alloy steel
Piston rod wiper material	TPE-U(PU)
Buffer seal material	TPE-U(PU)
Cushion piston material	POM
Material of cylinder barrel	Wrought aluminum alloy, smooth-anodized
Nut material	Steel, chemically nickel-plated
Material of bearing	POM
Flange screws material	Steel, nickel-plated