

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

Part number: 8150689

FESTO



Data sheet

Feature	Value
Stroke	1 mm...2800 mm
Piston diameter	50 mm
Piston rod thread	M16x1.5 M10
Cushioning	Elastic cushioning rings/plates at both ends Self-adjusting pneumatic end-position cushioning Pneumatic cushioning, adjustable at both ends
Mounting position	optional
Conforms to standard	ISO 15552
Piston-rod end	Male thread Female thread
Design	Piston Piston rod Profile barrel
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. Extended male piston rod thread Piston rod with female thread Extended piston rod Through piston rod Sensor slots on 3 profile sides Piston rod at one end
Operating pressure	0.04 MPa...1.2 MPa 0.4 bar...12 bar
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	2 - Moderate corrosion stress
LABS (PWIS) conformity	VDMA24364-C1-L

Feature	Value
Suitability for the production of Li-ion batteries	Product corresponds to the internal product definition from Festo 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, printed circuit boards, cables, electrical plug connectors and coils
Cleanroom class	Class 6 according to ISO 14644-1
Ambient temperature	-20 °C...80 °C
Impact energy in end positions	1 J
Cushioning length	22 mm
Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke	990 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke	1178 N
Additional weight per piston rod extension of 10 mm	25 g
Additional weight per piston rod thread extension of 10 mm	14 g
Type of mounting	Via female thread With accessories Either:
Pneumatic connection	G1/4
Note on materials	RoHS-compliant
Material cover	Die-cast aluminium, coated
Material piston seal	TPE-U(PU)
Material piston	Wrought aluminium alloy
Material piston rod	High-alloy steel
Material piston rod wiper	TPE-U(PU)
Buffer seal material	TPE-U(PU)
Cushioning boss material	POM
Material cylinder barrel	Smooth-anodised wrought aluminium alloy
Material nut	Steel, nickel-plated
Material bearing	POM
Material collar screws	Steel, nickel-plated