

ISO cylinder
DSBC-...-50- -
 Part number: 1463770

FESTO



Data sheet

Feature	Value
Stroke	1 mm...2800 mm
Piston diameter	50 mm
Piston rod thread	M16x1.5 M10
Max. angle of rotation of the piston rod +/-	-0.45 deg...0.45 deg
Based on norm	ISO 15552
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
Structural design	Piston Piston rod Profile barrel
Position sensing	Via proximity switch
Variants	For unlubricated operation Clamping unit attached End-position locking at both ends End-position locking with piston rod retracted End-position locking with piston rod extended Increased chemical resistance Protective bellows on the bearing cap Hard scraper Stroke adjustment advancing Weld spatter protection Extended external thread piston rod Piston rod with external hexagon Low friction for balancer applications Metal scraper Module for reaching a specific end position in case of a pressure failure Reinforced piston rod Uniform, slow movement Low friction Through, hollow piston rod Sensor slots on 3 profile sides Temperature range 0 to + 150°C Temperature range -40 to 80°C Additional PTFE piston guide
Method of operation clamping unit	Retracting

Feature	Value
	Advancing Static Release through compressed air Frictional clamping via spring force
Static holding force of clamping unit	1400 N
Axial backlash clamping unit	0.8 mm
Clamping unit release pressure	0.3 MPa 3 bar
Method of operation end-position locking	Positive locking by stop cylinder Release through compressed air
Static holding force of end-position locking	2000 N
Axial backlash end-position locking	1.3 mm
Unlocking pressure	0.15 MPa 1.5 bar
Locking pressure	0.05 MPa 0.5 bar
Operating pressure	0.01 MPa...1.2 MPa 0.1 bar...12 bar
Mode of operation	Double-acting
CE marking (see declaration of conformity)	as per EU explosion protection directive (ATEX)
UKCA marking (see declaration of conformity)	acc. to UK EX instructions
Explosion prevention and protection	Zone 1 (ATEX) Zone 1 (UKEX) Zone 2 (ATEX) Zone 21 (ATEX) Zone 21 (UKEX) Zone 22 (ATEX)
Explosion protection certification outside the EU	EPL Db (GB) EPL Gb (GB)
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 3 - High corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L VDMA24364 Zone III
Ambient temperature	-40 °C...150 °C
Impact energy in the end positions	0.3 J...1 J
Cushioning length	0 mm...22 mm
Max. torque for protection against rotation	1.5 Nm
Theoretical force at 6 bar, retracting	990 N
Theoretical force at 6 bar, advancing	990 N...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 rod material	high-alloy stainless steel, hard chrome plated
Material of cylinder barrel	Wrought aluminum alloy, smooth-anodized