

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	For proximity sensor
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 Bellows on bearing cap Hard scraper Extended external thread piston rod Internal thread on piston rod Extended piston rod Low friction for balancer applications Metal scraper With anti-twist protection Uniform, slow movement Low friction Through piston rod Heat-resistant seals max. 120°C Sensor slots on 3 profile sides Temperature range 0 to + 150°C Temperature range -40 to 80°C Piston rod at one end

Feature	Value
Method of operation clamping unit	Retracting Advancing Static Released by means of 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 Released by means of 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	With internal thread With accessories Optionally:
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 High-alloy steel
Material of cylinder barrel	Wrought aluminum alloy, smooth-anodized