ISO cylinder
DSBC-...-80- -

Part number: 1463495

Data sheet

Feature	Value
Stroke	1 mm...2800 mm
Piston diameter	80 mm
Piston rod thread	M20x1.5 M12
Torsional backlash at piston rod +/-	-0.45 deg...0.45 deg
Based on standard	ISO 15552
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
Design	Piston Piston rod Profile barrel
Position detection	Via proximity switch
Variants	For unlubricated operation Clamping unit attached End-position locking at both ends End-position locking with piston rod in retracted position End-position locking with piston rod in advanced position Increased chemical resistance Bellows on bearing cap Hard scraper Extended male piston rod thread Piston rod with female thread Extended piston rod Low friction for balancer applications Metal scraper With protection against rotation 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
Mode of operation clamping unit	Retracting Advancing Static Released through compressed air Frictional clamping with spring force
Static holding force of clamping unit	5000 N
Axial backlash clamping unit	0.8 mm
Clamping unit release pressure	0.3 MPa 3 bar
Mode of operation end-position locking	Positive interlocking with stop cylinder Released through compressed air
Static holding force of end-position locking	5000 N
Axial backlash end-position locking	1.5 mm
Unlocking pressure	0.15 MPa 1.5 bar
Locking pressure	0.05 MPa 0.5 bar
Operating pressure	0.005 MPa...1.2 MPa 0.05 bar...12 bar
Mode of operation	Double-acting
CE mark (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)
UKCA marking (see declaration of conformity)	To UK EX instructions
Explosion 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 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 3 - high corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L VDMA24364 zone III
Ambient temperature	-40 °C...150 °C
Impact energy in end positions	0.9 J...1.8 J
Cushioning length	0 mm...31 mm
Max. torque for protection against torsion	3 Nm
Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke	2721 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke	2721 N...3016 N
Additional weight per piston rod extension of 10 mm	39 g
Additional weight per piston rod thread extension of 10 mm	22 g
Type of mounting	Via female thread With accessories Either:
Pneumatic connection	G3/8
Note on materials	RoHS-compliant
Material cover	Die-cast aluminium, coated
Material piston rod	High-alloy stainless steel, hard chrome-plated High-alloy steel
Material cylinder barrel	Smooth-anodised wrought aluminium alloy