

# ISO cylinder DSBF-C-...-40- -

Part number: 570078

FESTO



## Data sheet

Feature	Value
Stroke	1 mm...2800 mm
Piston diameter	40 mm
Piston rod thread	M8 M12x1.25
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
Piston-rod end	Male thread Female thread
Design	Piston Piston rod Profile barrel
Position detection	Via proximity switch
Variants	For unlubricated operation Increased chemical resistance Hard scraper Extended male piston rod thread Piston rod with female thread Extended piston rod Uniform, slow movement Low friction Through piston rod Heat-resistant seals max. 120°C Temperature range 0 to 150°C Temperature range -40 to 80°C
Operating pressure	0.01 MPa...1.2 MPa 0.1 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

Feature	Value
Explosion protection	Zone 1 (ATEX) Zone 1 (UKEX) Zone 2 (ATEX) Zone 21 (ATEX) Zone 21 (UKEX) Zone 22 (ATEX)
ATEX category gas	II 2G
ATEX category dust	II 2D
Explosion ignition protection type for gas	Ex h IIC T4 Gb
Explosion ignition protection type for dust	Ex h IIIC T120°C Db
Explosion ambient temperature	-20°C ≤ Ta ≤ +60°C
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	3 - high corrosion stress
LABS (PWIS) conformity	VDMA24364-B2-L VDMA24364 zone III
Suitable for use with food	See supplementary material information
Ambient temperature	-40 °C...150 °C
Impact energy in end positions	0.35 J...0.7 J
Cushioning length	18 mm...19 mm
Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke	633 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke	633 N...754 N
Additional weight per piston rod extension of 10 mm	16 g
Additional weight per piston rod thread extension of 10 mm	8 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	FPM TPE-U(PU)
Material piston	Wrought aluminium alloy
Material piston rod	High-alloy stainless steel, hard chrome-plated High-alloy stainless steel
Material piston rod wiper	FPM PE TPE-U(PU)
Buffer seal material	FPM TPE-U(PU)
Cushioning boss material	Aluminium POM
Material cylinder barrel	Anodised wrought aluminium alloy
Material nut	High-alloy stainless steel
Material rod wiper	PTFE reinforced
Material bearing	Bronze Metal polymer compound POM
Material collar screws	Galvanised steel