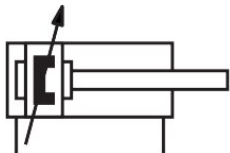
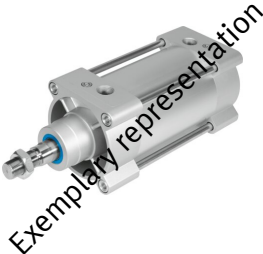


ISO cylinder DSBG-...-100- -

Part number: 1646799



[General operating condition](#)

Data sheet

Overall data sheet – Individual values depend upon your configuration.

Feature	Value
Stroke	1 mm ... 2800 mm
Piston diameter	100 mm
Piston rod thread	M20x1.5 M20 M16x1.5 M16 M12
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
Piston rod end	External thread Internal thread
Structural design	Piston Piston rod Tie rod Cylinder barrel
Position sensing	For proximity sensor
Symbol	00991217 00991218 00991235 00991237 00992970 00992971

Feature	Value
Variants	Extended external thread piston rod Internal thread on piston rod Special 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 Variable spacer bolt length Temperature range 0 to + 150°C Temperature range -40 to 80°C Shortened piston rod external thread Piston rod at one end
Operating pressure	0.005 MPa ... 1.2 MPa
Operating pressure	0.05 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)
ATEX category gas	II 2G
ATEX category for dust	II 2D
Type of ignition protection for gas	Ex h IIC T4 Gb
Type of (ignition) protection for dust	Ex h IIIC T120°C Db
Explosive ambient temperature	-20°C ≤ Ta ≤ +60°C
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	2.5 J
Cushioning length	32 mm
Theoretical force at 6 bar, retracting	4418 N
Theoretical force at 6 bar, advancing	4418 N ... 4712 N
Weight surcharge per 10 mm piston rod extension	39 g
Weight surcharge per 10 mm piston rod thread extension	22 g
Type of mounting	With internal thread With accessories
Pneumatic connection	G1/2
Note on materials	RoHS-compliant
Cover material	Die-cast aluminum, coated
Piston seal material	FPM HNBR TPE-U(PU)
Material of piston	Wrought aluminum alloy
Piston rod material	high-alloy stainless steel, hard chrome plated High-alloy steel High-alloy stainless steel

Feature	Value
Piston rod wiper material	FPM HNBR PE TPE-U(PU)
Buffer seal material	FPM TPE-U(PU)
Cushion piston material	Wrought aluminum alloy POM
Material of cylinder barrel	Wrought aluminum alloy, smooth-anodized
Nut material	Steel, galvanized High-alloy stainless steel
Rod wiper material	Brass PTFE-reinforced
Material of bearing	Bronze Metal polymer compound POM
Collar nut material	Steel, galvanized
Tie rod material	High-alloy steel High-alloy stainless steel
Spacer bolt material	High-alloy stainless steel
Swivel mounting material	Painted spheroidal graphite cast iron
Bellows material	NBR PA