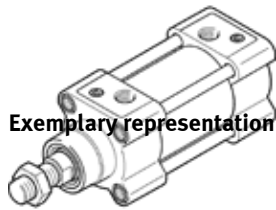


# Standards-based cylinder

**DSBG-...-50- -**

Part number: 1646707

**FESTO**



Exemplary representation

## Data sheet

Overall data sheet – Individual values depend upon your configuration.

Feature	Value
Stroke	1 ... 2,800 mm
Piston diameter	50 mm
Piston rod thread	M16x1,5 M10
Max. angular deflection of piston rod +/-	-0.45 ... 0.45 deg
Based on the standard	ISO 15552
Cushioning	P: Flexible cushioning rings/plates at both ends PPS: Self-adjusting pneumatic end-position cushioning PPV: Pneumatic cushioning adjustable at both ends
Assembly position	Any
Conforms to standard	ISO 15552
Piston-rod end	Male thread Female thread
Design structure	Piston Piston rod Tie rod Cylinder barrel
Position detection	For proximity sensor
Variants	For unlubricated operation Bellows on bearing cap Hard wiper seal Extended male piston rod thread Female thread on piston rod Extended piston rod Metal wiper seal With protection against rotation Constant slow movement Low-friction Through piston rod Heat resistant seals, max. 120°C Temperature range 0 - 150 °C Temperature range -40 - 80 °C Single-ended piston rod Low friction for balancer applications
Operating pressure MPa	0.01 ... 1.2 MPa
Working pressure	0.1 ... 12 bar
Mode of operation	double-acting
CE symbol (see declaration of conformity)	according to EU-Ex protection guideline (ATEX)
UKCA marking (see declaration of conformity)	To UK EX instructions
ATEX category Gas	II 2G
ATEX category Dust	II 2D
Explosion ignition protection type Gas	Ex h IIC T4 Gb
Explosion ignition protection type Dust	Ex h IIIC T120°C Db
Explosion-proof ambient temperature	-20°C ≤ Ta ≤ +60°C

Feature	Value
Explosion protection certification outside the EU	EPL Db (GB) EPL Gb (GB)
Operating medium	Compressed air in accordance with ISO8573-1:2010 [7:4:4]
Note on operating and pilot medium	Lubricated operation possible (subsequently required for further operation)
Corrosion resistance classification CRC	2 - Moderate corrosion stress 3 - High corrosion stress
PWIS conformity	VDMA24364-B1/B2-L VDMA24364 zone III
Ambient temperature	-40 ... 150 °C
Impact energy in end positions	1 J
Cushioning length	22 mm
Theoretical force at 0.6 MPa (6 bar, 87 psi), retracting	990 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance	990 ... 1,178 N
Additional weight per piston rod extension of 10 mm	25 g
Additional weight per piston rod thread extension of 10 mm	14 g
Mounting type	with internal (female) thread with accessories Optional
Pneumatic connection	G1/4
Materials note	Conforms to RoHS
Material cover	Coated die-cast aluminium
Material piston seal	FPM HNBR TPE-U(PU)
Material piston	Wrought Aluminium alloy
Material piston rod	high-alloy stainless steel, hard chrome plated High alloy steel High alloy steel, non-corrosive
Material piston rod wiper seal	FPM HNBR PE TPE-U(PU)
Buffer seal material	FPM TPE-U(PU)
Cushion piston material	Wrought aluminium alloy POM
Material cylinder barrel	Smooth-anodised wrought aluminium alloy
Material nut	steel, galvanized High alloy steel, non-corrosive
Rod wiper seal material	Brass PTFE reinforced
Material bearing	Bronze Metal polymer compound POM
Collar nut material	Galvanized steel
Material tie rod	High alloy steel High alloy steel, non-corrosive
Swivel mounting material	Stainless steel casting
Material bellows	NBR PA