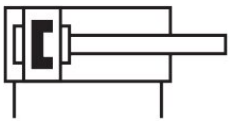
# ISO cylinder
# DSBG-...-320- -

Part number: 2776472

General operating condition

## Data sheet

Overall data sheet – Individual values depend upon your configuration.

| Feature | Value |
|---|---|
| Stroke | 1 mm ... 2250 mm |
| Piston diameter | 320 mm |
| Piston rod thread | M48x2<br>M48<br>M42x2<br>M36x2<br>M36<br>M30x2<br>M27x2<br>M27 |
| Based on standard | ISO 15552 |
| Cushioning | Elastic cushioning rings/plates at both ends<br>Pneumatic cushioning, adjustable at both ends |
| Mounting position | Any |
| Conforms to standard | ISO 15552 |
| Piston-rod end | Male thread<br>Female thread |
| Design | Piston<br>Piston rod<br>Tie rod 1<br>Cylinder barrel |
| Position detection | Via proximity switch |
| Symbol | 00991217<br>00991218<br>00991227<br>00991235<br>00991237 |
| Variants | Extended male piston rod thread<br>Piston rod with female thread<br>Custom thread on the piston rod<br>Extended piston rod<br>High corrosion protection<br>Through piston rod<br>Heat-resistant seals max. 120°C<br>Screwed-on swivel mounting position<br>Spacer bolt on end cap side<br>Spacer bolt on both sides<br>Spacer bolt on bearing cap side<br>Variable stud bolt length<br>Shortened male piston rod thread<br>Piston rod at one end<br>Via proximity switch |
| Operating pressure | 0.06 MPa ... 1 MPa |

| Feature | Value |
|---|---|
| Operating pressure | 0.6 bar ... 10 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)<br>Zone 2 (ATEX)<br>Zone 21 (ATEX)<br>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 |
| 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<br>3 - high corrosion stress |
| LABS (PWIS) conformity | VDMA24364-B1/B2-L |
| Ambient temperature | -20 °C ... 120 °C |
| Impact energy in end positions | 6 J ... 12.6 J |
| Cushioning length | 65 mm |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke | 46385 N |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke | 46385 N ... 48255 N |
| Note on materials | RoHS compliant |
| Material cover | Cast aluminium, coated |
| Material piston seal | Fluoro rubber<br>NBR |
| Material piston | Cast aluminium |
| Material piston rod | High-alloy steel<br>High-alloy stainless steel |
| Material piston rod wiper | Fluoro rubber<br>NBR |
| Buffer seal material | Fluoro rubber<br>TPE-U(PU) |
| Material of cushioning boss | Wrought aluminium alloy<br>POM |
| Material cylinder barrel | Smooth-anodised wrought aluminium alloy |
| Material nut | Galvanised steel<br>High-alloy stainless steel |
| Material bearing | Bronze<br>Metal polymer compound |
| Material collar nut | Galvanised steel<br>High-alloy stainless steel |
| Material tie rod | High-alloy steel<br>High-alloy stainless steel |
| Material spacer bolt | High-alloy steel<br>High-alloy stainless steel |
| Material swivel mounting | Galvanised steel |