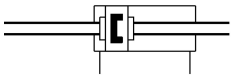
# ISO cylinder DSBC-...-32- -

Part number: 1463250



## Data sheet

| Feature | Value |
|---|---|
| Stroke | 1 mm...2800 mm |
| Piston diameter | 32 mm |
| Piston rod thread | M6<br>M10x1.25 |
| Torsional backlash at piston rod +/- | -0.65 deg...0.65 deg |
| Based on standard | ISO 15552 |
| Cushioning | Elastic cushioning rings/plates at both ends<br>Self-adjusting pneumatic end-position cushioning<br>Pneumatic cushioning, adjustable at both ends |
| Mounting position | optional |
| Conforms to standard | ISO 15552 |
| Design | Piston<br>Piston rod<br>Profile barrel |
| Position detection | Via proximity switch |
| Variants | For unlubricated operation<br>Clamping unit attached<br>End-position locking at both ends<br>End-position locking with piston rod in retracted position<br>End-position locking with piston rod in advanced position<br>Increased chemical resistance<br>Bellows on bearing cap<br>Hard scraper<br>Extended male piston rod thread<br>Piston rod with female thread<br>Extended piston rod<br>Low friction for balancer applications<br>Metal scraper<br>With protection against rotation<br>Uniform, slow movement<br>Low friction<br>Through piston rod<br>Heat-resistant seals max. 120°C<br>Sensor slots on 3 profile sides<br>Temperature range 0 to 150°C<br>Temperature range -40 to 80°C<br>Piston rod at one end |

| Feature | Value |
|---|---|
| Mode of operation clamping unit | Retracting<br>Advancing<br>Static<br>Released through compressed air<br>Frictional clamping with spring force |
| Static holding force of clamping unit | 600 N |
| Axial backlash clamping unit | 0.5 mm |
| Clamping unit release pressure | 0.3 MPa<br>3 bar |
| Mode of operation end-position locking | Positive interlocking with stop cylinder<br>Released through compressed air |
| Static holding force of end-position locking | 500 N |
| Axial backlash end-position locking | 1.3 mm |
| Unlocking pressure | 0.25 MPa<br>2.5 bar |
| Locking pressure | 0.05 MPa<br>0.5 bar |
| Operating pressure | 0.01 MPa...1.2 MPa<br>0.1 bar...12 bar |
| Mode of operation | Double-acting |
| CE mark (see declaration of conformity) | To EU Explosion Protection Directive (ATEX) |
| CE marking (see declaration of conformity) | To UK EX instructions |
| Explosion protection | Zone 1 (ATEX)<br>Zone 1 (UKEX)<br>Zone 2 (ATEX)<br>Zone 21 (ATEX)<br>Zone 21 (UKEX)<br>Zone 22 (ATEX) |
| Explosion protection certification outside the EU | EPL Db (GB)<br>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<br>3 - high corrosion stress |
| LABS (PWIS) conformity | VDMA24364-B1/B2-L<br>VDMA24364 zone III |
| Ambient temperature | -40 °C...150 °C |
| Impact energy in end positions | 0.1 J...0.4 J |
| Cushioning length | 0 mm...17 mm |
| Max. torque for protection against torsion | 0.8 Nm |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke | 415 N |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke | 415 N...483 N |
| Additional moving mass per 10 mm stroke | 8 g...18 g |
| Additional weight per piston rod extension of 10 mm | 9 g |
| Additional weight per piston rod thread extension of 10 mm | 6 g |
| Type of mounting | Either:<br>Via female thread<br>With accessories |
| Pneumatic connection | G1/8 |
| Note on materials | RoHS-compliant |
| Material cover | Die-cast aluminium, coated |
| Material piston rod | High-alloy stainless steel, hard chrome-plated |
| Material cylinder barrel | Smooth-anodised wrought aluminium alloy |