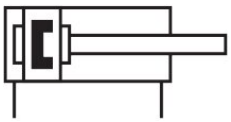
# ISO cylinder
# DSBC-...-63- -

Part number: 1463475

General operating condition

## Data sheet

Overall data sheet – Individual values depend upon your configuration.

| Feature | Value |
|---|---|
| Stroke | 1 mm ... 2800 mm |
| Piston diameter | 63 mm |
| Piston rod thread | M16x1.5<br>M10 |
| 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<br>Self-adjusting pneumatic end-position cushioning<br>Pneumatic cushioning, adjustable at both ends |
| Mounting position | Any |
| Conforms to standard | ISO 15552 |
| Piston rod end | External thread<br>Internal thread |
| Structural design | Piston<br>Piston rod<br>Profile barrel |
| Position sensing | Via proximity switch |
| Symbol | 00991217<br>00991218<br>00991235<br>00991237<br>00991257<br>00991258<br>00991907<br>00991910<br>00992970<br>00992971 |
| Variants | Stroke adjustment advancing<br>Weld spatter protection<br>Extended external thread piston rod<br>Piston rod with external hexagon<br>Low friction for balancer applications<br>Metal scraper<br>Module for reaching a specific end position in case of a pressure failure<br>Reinforced piston rod<br>Uniform, slow movement<br>Low friction<br>Through, hollow piston rod<br>Sensor slots on 3 profile sides<br>Additional PTFE piston guide |

| Feature | Value |
|---|---|
| Method of operation clamping unit | Retracting<br>Advancing<br>Static<br>Release through compressed air<br>Frictional clamping via spring force |
| Static holding force of clamping unit | 2000 N |
| Axial backlash clamping unit | 0.8 mm |
| Clamping unit release pressure | 0.3 MPa |
| Clamping unit release pressure | 3 bar |
| Method of operation end-position locking | Positive locking by stop cylinder<br>Release through compressed air |
| Static holding force of end-position locking | 2000 N |
| Axial backlash end-position locking | 1.5 mm |
| Unlocking pressure | ≥0.15 MPa |
| Unlocking pressure | ≥1.5 bar |
| Locking pressure | ≤0.05 MPa |
| Locking pressure | ≤0.5 bar |
| Operating pressure | 0.01 MPa ... 1.2 MPa |
| Operating pressure | 0.1 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)<br>Zone 1 (UKEX)<br>Zone 2 (ATEX)<br>Zone 21 (ATEX)<br>Zone 21 (UKEX)<br>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)<br>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<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 the end positions | 0.4 J ... 1.3 J |
| Cushioning length | 0 mm ... 22 mm |
| Max. torque for protection against rotation | 1.5 Nm |
| Theoretical force at 6 bar, retracting | 1682 N |
| Theoretical force at 6 bar, advancing | 1682 N ... 1870 N |
| Moving mass at 0 mm stroke | 346 g ... 874 g |
| Additional moving mass per 10 mm stroke | 20 g ... 50 g |
| Weight surcharge per 10 mm piston rod extension | 25 g |
| Weight surcharge per 10 mm piston rod thread extension | 14 g |
| Type of mounting | With internal thread<br>With accessories |
| Pneumatic connection | G3/8 |
| Note on materials | RoHS compliant |
| Cover material | Die-cast aluminum, coated |

| Feature | Value |
|---|---|
| Material of spring | Spring steel<br>high-alloy stainless steel |
| Clamping unit housing material | Wrought aluminum alloy, anodized |
| Housing end-position locking material | Wrought aluminum alloy, anodized |
| Piston seal material | FPM<br>HNBR<br>TPE-U(PU) |
| Clamping jaws clamping unit material | Brass |
| Piston clamping unit material | POM |
| Piston end-position locking material | Hardened steel |
| Material of piston | Wrought aluminum alloy |
| Piston rod material | high-alloy stainless steel, hard chrome plated<br>High-alloy steel<br>high-alloy stainless steel |
| Piston rod wiper material | FPM<br>HNBR<br>Protective grounding<br>TPE-U(PU) |
| Buffer seal material | FPM<br>TPE-U(PU) |
| Cushion piston material | Aluminum<br>POM |
| Material of cylinder barrel | Wrought aluminum alloy, smooth-anodized |
| Nut material | Steel, galvanized |
| Rod wiper material | Brass<br>PTFE-reinforced<br>TPE-E |
| Material of bearing | Bronze<br>Metal polymer compound<br>POM |
| Flange screws material | Steel, galvanized |
| Bellows material | NBR<br>PA |