

## **Data sheet**

| Feature                                    | Value   |
|--|---|
| Stroke                                     | 1 mm500 mm  |
| Piston diameter                            | 80 mm   |
| Cushioning                                 | Elastic cushioning rings/plates at both ends Self-adjusting pneumatic end-position cushioning   |
| Mounting position                          | optional  |
| Conforms to standard                       | ISO 21287   |
| Design                                     | Piston Piston rod Profile barrel  |
| Position detection                         | Via proximity switch  |
| Variants                                   | EX protection approval (ATEX)  Metals with copper, zinc or nickel as main constituent are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils. Improved running performance Extended male piston rod thread Custom thread on the piston rod Extended piston rod With protection against rotation High corrosion protection Dust protection Uniform, slow movement Low friction Through piston rod Through, hollow piston rod Heat-resistant seals max. 120°C Laser etched rating plate Temperature range -40 to 80°C Piston rod at one end |
| Operating pressure                         | 0.06 MPa1 MPa<br>0.6 bar10 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) Zone 2 (ATEX) Zone 21 (ATEX) Zone 22 (ATEX)   |

| Feature  | Value  |
|--|--|
| 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                               | 0 - No corrosion stress 2 - Moderate corrosion stress 3 - high corrosion stress  |
| LABS (PWIS) conformity                                       | VDMA24364-B1/B2-L<br>VDMA24364 zone III  |
| Suitability for the production of Li-ion batteries           | Metals with more than 1% copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils |
| Ambient temperature  | -40 °C120 °C   |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke  | 2827 N   |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke | 2827 N3016 N   |
| Additional weight per piston rod extension of 10 mm          | 25 g   |
| Additional weight per piston rod thread extension of 10 mm   | 16 g   |
| Type of mounting   | Either: With through-hole Via female thread With accessories   |
| Pneumatic connection   | G1/8   |
| Note on materials  | RoHS-compliant   |
| Material collar screws                                       | Steel  |
| Material cover   | Die-cast aluminium, coated<br>Anodised wrought aluminium alloy   |
| Material piston rod  | High-alloy steel   |
| Material cylinder barrel                                     | Smooth-anodised wrought aluminium alloy  |