## Compact air cylinder ADN-80- -

Part number: 536351





General operating condition

## **Data sheet**

Overall data sheet – Individual values depend upon your configuration.

| Feature   | Value   |
|---|---|
| Stroke  | 1 mm 500 mm   |
| Piston diameter                                   | 80 mm   |
| Cushioning  | Elastic cushioning rings/pads at both ends<br>Self-adjusting pneumatic end-position cushioning  |
| Mounting position                                 | Any   |
| Conforms to standard                              | ISO 21287   |
| Structural design                                 | Piston Piston rod Profile barrel  |
| Position sensing                                  | For proximity sensor  |
| Variants  | EX protection approval (ATEX) Metals with copper, zinc or nickel by mass 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 external thread piston rod Special thread on piston rod Extended piston rod With anti-twist protection 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 MPa 1 MPa  |
| Operating pressure                                | 0.6 bar 10 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 protection certification outside the EU | EPL Db (GB)<br>EPL Gb (GB)  |
| Explosion prevention and protection               | Zone 1 (ATEX) Zone 1 (UKEX) Zone 2 (ATEX) Zone 21 (ATEX) Zone 21 (UKEX) Zone 22 (ATEX)  |

| Feature  | Value   |
|--|---|
| 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  |
| 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)                       | 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% by mass of copper, zinc or nickel are excluded from use. The exceptions are nickel in steel, chemically nickel-plated surfaces, circuit boards, cables, electrical plug connectors and coils |
| Ambient temperature                                    | -40 °C 120 °C   |
| Theoretical force at 6 bar, retracting                 | 2827 N  |
| Theoretical force at 6 bar, advancing                  | 2827 N 3016 N   |
| Weight surcharge per 10 mm piston rod extension        | 25 g  |
| Weight surcharge per 10 mm piston rod thread extension | 16 g  |
| Type of mounting                                       | With through-hole With internal thread With accessories Optionally:   |
| Pneumatic connection                                   | G1/8  |
| Note on materials                                      | RoHS-compliant  |
| Flange screws material                                 | Steel   |
| Cover material   | Die-cast aluminum, coated<br>Wrought aluminum alloy, anodized   |
| Piston rod material                                    | High-alloy steel  |
| Material of cylinder barrel                            | Wrought aluminum alloy, smooth-anodized   |