

# profile cylinder DNC-5"-12"-PPV-A

Part number: 178136

FESTO

As per ISO 15552, with profile cylinder barrel, for proximity sensing,  
with adjustable cushioning at both end positions.



## Data sheet

| Feature  | Value   |
|--|---|
| Stroke   | 12 "  |
| Piston diameter  | 5"  |
| Piston rod thread  | 1-12 UNF-2A   |
| Based on the standard                                    | ISO 15552 (previously also VDMA 24652, ISO 6431, NF E49 003.1, UNI 10290)   |
| Cushioning   | PPV: Pneumatic cushioning adjustable at both ends                           |
| Assembly position  | Any   |
| Piston-rod end   | Male thread   |
| Design structure   | Piston<br>Piston rod<br>Profile barrel                                      |
| Position detection                                       | For proximity sensor  |
| Variants   | Single-ended piston rod   |
| Operating pressure MPa                                   | 0.06 ... 1 MPa  |
| Operating pressure                                       | 0.6 ... 10 bar  |
| Mode of operation  | double-acting   |
| Operating medium   | Compressed air in accordance with ISO8573-1:2010 [7:4:4]                    |
| Note on operating and pilot medium                       | Lubricated operation possible (subsequently required for further operation) |
| Corrosion resistance classification CRC                  | 2 - Moderate corrosion stress   |
| PWIS conformity  | VDMA24364-B1/B2-L   |
| Ambient temperature                                      | -20 ... 80 °C   |
| Impact energy in end positions                           | 5 J   |
| Cushioning length  | 42 mm   |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), retracting | 6,881 N   |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance    | 7,363 N   |
| Moving mass with 0 mm stroke                             | 2,809 g   |
| Additional mass factor per 10 mm of stroke               | 63 g  |
| Basic weight for 0 mm stroke                             | 6,771 g   |
| Additional weight per 10 mm stroke                       | 168 g   |
| Mounting type  | with internal (female) thread<br>with accessories                           |
| Pneumatic connection                                     | NPT1/2-14   |
| Materials note   | Conforms to RoHS  |
| Material cover   | Aluminium die cast<br>coated  |
| Material seals   | TPE-U(PU)   |
| Material piston rod                                      | High alloy steel  |
| Material cylinder barrel                                 | Wrought Aluminium alloy<br>Smooth anodised                                  |