

# Profile cylinder DNC-1 5/8"-8"-PPV-A

Part number: 177874

FESTO

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



## Data sheet

| Feature                                                  | Value                                                                       |
|----------------------------------------------------------|-----------------------------------------------------------------------------|
| Stroke                                                   | 8 "                                                                         |
| Piston diameter                                          | 1 5/8"                                                                      |
| Piston rod thread                                        | 1/2-20 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 ... 1.2 MPa                                                            |
| Working pressure                                         | 0.6 ... 12 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                           | 0.2 J                                                                       |
| Cushioning length                                        | 20 mm                                                                       |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), retracting | 633 N                                                                       |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance    | 754 N                                                                       |
| Moving mass with 0 mm stroke                             | 307 g                                                                       |
| Additional mass factor per 10 mm of stroke               | 16 g                                                                        |
| Basic weight for 0 mm stroke                             | 800 g                                                                       |
| Additional weight per 10 mm stroke                       | 45 g                                                                        |
| Mounting type                                            | with internal (female) thread<br>with accessories                           |
| Pneumatic connection                                     | NPT1/4-18                                                                   |
| Materials note                                           | Conforms to RoHS                                                            |
| Material cover                                           | Aluminum die cast<br>coated                                                 |
| Material seals                                           | TPE-U(PU)                                                                   |
| Material piston rod                                      | High alloy steel                                                            |
| Material cylinder barrel                                 | Wrought Aluminum alloy<br>Smooth anodized                                   |