

# Compact cylinder

## ADN-1/2"-1"-I-P-A

Part number: 557028

FESTO

With position sensing and internal piston rod thread



### Data sheet

| Feature  | Value  |
|--|--|
| Stroke   | 1 "  |
| Piston diameter  | 1/2"   |
| Piston rod thread  | 4-48 UNF-2B  |
| Based on the standard                                    | ISO 21287  |
| Cushioning   | P: Flexible cushioning rings/plates at both ends                                   |
| Assembly position  | Any  |
| Mode of operation  | double-acting  |
| Piston-rod end   | Female thread  |
| Design structure   | Piston<br>Piston rod<br>Profile barrel   |
| Position detection                                       | For proximity sensor   |
| Variants   | Single-ended piston rod  |
| Operating pressure MPa                                   | 0.1 ... 1 MPa  |
| Working pressure   | 1 ... 10 bar   |
| Operating pressure                                       | 14.5 ... 145 psi   |
| 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                                      | -4 ... 176 °F  |
| Impact energy in end positions                           | 0.052 ft-lbf   |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), retracting | 11.465 lbf   |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance    | 15.287 lbf   |
| Moving mass with 0 mm stroke                             | 0.319 oz   |
| Additional mass factor per 10 mm of stroke               | 0.425 oz   |
| Basic weight for 0 mm stroke                             | 2.726 oz   |
| Additional weight per 10 mm stroke                       | 0.071 oz   |
| Mounting type  | with through hole<br>with internal (female) thread<br>with accessories<br>Optional |
| Pneumatic connection                                     | 10-32 UNF-2B   |
| Material of flange screw                                 | Steel  |
| Material cover   | Anodised wrought aluminium alloy   |
| Material of dynamic seals                                | TPE-U(PU)  |
| Material piston rod                                      | High alloy steel   |
| Material cylinder barrel                                 | Smooth-anodised wrought aluminium alloy  |