

# Compact cylinder

## ADN-S-12-25-A-P-A-F1A

Part number: 8142580

FESTO



### Data sheet

| Feature  | Value   |
|--|---|
| Stroke   | 25 mm   |
| Piston diameter  | 12 mm   |
| Cushioning   | P: Flexible cushioning rings/plates at both ends  |
| Assembly position  | Any   |
| Mode of operation  | double-acting   |
| Piston-rod end   | Male thread   |
| Design structure   | Piston<br>Piston rod  |
| Position detection                                       | For proximity sensor  |
| Variants   | Single-ended piston rod<br>Recommended for production facilities for the manufacture of lithium-ion batteries |
| 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-B2-L  |
| RSBP classification to CD-0033                           | F1a   |
| Cleanroom class  | ISO class 6   |
| Ambient temperature                                      | 0 ... 60 °C   |
| Impact energy in end positions                           | 0.07 J  |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), retracting | 51 N  |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance    | 68 N  |
| Moving mass with 0 mm stroke                             | 6 g   |
| Additional mass factor per 10 mm of stroke               | 2 g   |
| Basic weight for 0 mm stroke                             | 33 g  |
| Additional weight per 10 mm stroke                       | 15 g  |
| Mounting type  | with through hole<br>with internal (female) thread  |
| Pneumatic connection                                     | M5  |
| Materials note   | Conforms to RoHS  |
| Material cover   | Anodised wrought aluminium alloy  |
| Material of dynamic seals                                | NBR<br>TPE-U(PU)  |
| Material housing   | Anodised wrought aluminium alloy  |
| Material piston rod                                      | High alloy steel, non-corrosive   |