

# Compact cylinder ADN-S-12-5-I-P-A-F1A

Part number: 8142562

**FESTO**



## Data sheet

| Feature  | Value  |
|--|--|
| Stroke   | 5 mm   |
| Piston diameter  | 12 mm  |
| Cushioning   | Elastic cushioning rings/plates at both ends   |
| Mounting position  | optional   |
| Mode of operation  | Double-acting  |
| Piston-rod end   | Female thread  |
| Design   | Piston<br>Piston rod   |
| Position detection   | Via proximity switch   |
| Variants   | Recommended for production facilities for manufacturing of lithium-ion batteries<br>Piston rod at one end  |
| Operating pressure   | 0.1 MPa...1 MPa<br>1 bar...10 bar<br>14.5 psi...145 psi  |
| Operating medium   | Compressed air to ISO 8573-1:2010 [7:4:4]  |
| Note on operating and pilot medium                           | Lubricated operation possible (in which case lubricated operation will always be required)   |
| Corrosion resistance class CRC                               | 2 - Moderate corrosion stress  |
| LABS (PWIS) conformity                                       | VDMA24364-B2-L   |
| Suitability for the production of Li-ion batteries           | Product corresponds to the internal product definition from Festo for use in battery production: 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, printed circuit boards, cables, electrical plug connectors and coils |
| Cleanroom class  | Class 6 according to ISO 14644-1   |
| Ambient temperature  | 0 °C...60 °C   |
| Impact energy in end positions                               | 0.07 J   |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke  | 51 N   |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke | 68 N   |
| Moving mass for 0 mm stroke                                  | 6 g  |
| Additional moving mass per 10 mm stroke                      | 2 g  |
| Basic weight for 0 mm stroke                                 | 33 g   |
| Additional weight per 10 mm stroke                           | 15 g   |

| Feature                | Value                                  |
|------------------------|--|
| Type of mounting       | With through-hole<br>Via female thread |
| Pneumatic connection   | M5                                     |
| Note on materials      | RoHS-compliant                         |
| Material cover         | Anodised wrought aluminium alloy       |
| Material dynamic seals | NBR<br>TPE-U(PU)                       |
| Material housing       | Anodised wrought aluminium alloy       |
| Material piston rod    | High-alloy stainless steel             |