

# Compact cylinder ADN-S-50-50-A-P-A-F1A

Part number: 8142916

FESTO



## Data sheet

| Feature  | Value   |
|--|---|
| Stroke   | 50 mm   |
| Piston diameter                                    | 50 mm   |
| Cushioning   | Elastic cushioning rings/pads at both ends  |
| Mounting position                                  | Any   |
| Mode of operation                                  | Double-acting   |
| Piston rod end                                     | External thread   |
| Structural design                                  | Piston<br>Piston rod  |
| Position sensing                                   | For proximity sensor  |
| Variants   | Recommended for production facilities for the manufacture of lithium-ion batteries<br>Piston rod at one end   |
| Operating pressure                                 | 0.04 MPa...1 MPa<br>0.4 bar...10 bar<br>5.8 psi...145 psi   |
| Operating medium                                   | Compressed air as per ISO 8573-1:2010 [7:4:4]   |
| Information on operating and pilot media           | Operation with oil lubrication possible (required for further use)  |
| Corrosion resistance class (CRC)                   | 0 - No corrosion stress   |
| LABS (PWIS) conformity                             | VDMA24364-B2-L  |
| Suitability for the production of Li-ion batteries | Product corresponds to Festo's internal product definition 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, 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 the end positions                 | 1 J   |
| Theoretical force at 6 bar, retracting             | 1057 N  |
| Theoretical force at 6 bar, advancing              | 1178 N  |
| Moving mass at 0 mm stroke                         | 104 g   |
| Additional moving mass per 10 mm stroke            | 16 g  |
| Basic weight with 0 mm stroke                      | 324 g   |
| Additional weight per 10 mm stroke                 | 63 g  |

| <b>Feature</b>            | <b>Value</b>                              |
|---------------------------|---|
| Type of mounting          | With through-hole<br>With internal thread |
| Pneumatic connection      | G1/8                                      |
| Note on materials         | RoHS-compliant                            |
| Cover material            | Wrought aluminum alloy, anodized          |
| Material of dynamic seals | TPE-U(PU)                                 |
| Housing material          | Wrought aluminum alloy, anodized          |
| Piston rod material       | High-alloy stainless steel                |