

# Compact cylinder ADN-S-12-20-A-P-A-F1A

Part number: 8142579

FESTO



## Data sheet

| Feature  | Value  |
|--|--|
| Stroke   | 20 mm  |
| Piston diameter                                    | 12 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   |
| Symbol   | 00991217   |
| Variants   | Recommended for production facilities for the manufacture of lithium-ion batteries<br>Piston rod at one end  |
| Operating pressure                                 | 0.1 MPa ... 1 MPa  |
| Operating pressure                                 | 1 bar ... 10 bar   |
| Operating pressure                                 | 14.5 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)                   | 2 - Moderate corrosion stress  |
| LABS (PWIS) conformity                             | VDMA24364-B2-L   |
| Suitability for the production of Li-ion batteries | Metals with more than 1% copper, zinc or nickel by mass are excluded from use. 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 the end positions                 | 0.07 J   |
| Theoretical force at 6 bar, retracting             | 51 N   |
| Theoretical force at 6 bar, advancing              | 68 N   |
| Moving mass at 0 mm stroke                         | 6 g  |
| Additional moving mass per 10 mm stroke            | 2 g  |
| Basic weight with 0 mm stroke                      | 33 g   |
| Additional weight per 10 mm stroke                 | 15 g   |
| Type of mounting                                   | With through-hole<br>With internal thread  |
| Pneumatic connection                               | M5   |
| Note on materials                                  | RoHS-compliant   |
| Cover material                                     | Wrought aluminum alloy, anodized   |

| Feature                   | Value                            |
|---------------------------|----------------------------------|
| Material of dynamic seals | NBR<br>TPE-U(PU)                 |
| Housing material          | Wrought aluminum alloy, anodized |
| Piston rod material       | High-alloy stainless steel       |