

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

Part number: 8142576

**FESTO**



 General operating condition

## Data sheet

| Feature                                            | Value                                                              |
|----------------------------------------------------|--------------------------------------------------------------------|
| Stroke                                             | 5 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                                           | 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 | Suitable for battery production with reduced Cu/Zn/Ni values (F1a) |
| Cleanroom class                                    | Class 5 according to ISO 14644-1                                   |
| Ambient temperature                                | 0 °C ... 80 °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                                   |
| Material of dynamic seals                          | NBR<br>TPE-U(PU)                                                   |
| Housing material                                   | Wrought aluminum alloy, anodized                                   |

| Feature             | Value                      |
|---------------------|----------------------------|
| Piston rod material | High-alloy stainless steel |