

# Compact cylinder ADN-S-6-10-I-F1A

Part number: 8142510

FESTO



 General operating condition

## Data sheet

| Feature                                                      | Value                                                                                                                                                                                                                 |
|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Stroke                                                       | 10 mm                                                                                                                                                                                                                 |
| Piston diameter                                              | 6 mm                                                                                                                                                                                                                  |
| Cushioning                                                   | No cushioning                                                                                                                                                                                                         |
| Mounting position                                            | optional                                                                                                                                                                                                              |
| Mode of operation                                            | Double-acting                                                                                                                                                                                                         |
| Piston-rod end                                               | Female thread                                                                                                                                                                                                         |
| Design                                                       | Piston<br>Piston rod                                                                                                                                                                                                  |
| Symbol                                                       | 00991215                                                                                                                                                                                                              |
| Variants                                                     | Recommended for production facilities for manufacturing of lithium-ion batteries<br>Piston rod at one end                                                                                                             |
| Operating pressure                                           | 0.2 MPa ... 0.8 MPa                                                                                                                                                                                                   |
| Operating pressure                                           | 2 bar ... 8 bar                                                                                                                                                                                                       |
| Operating pressure                                           | 21.75 psi ... 116 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           | 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                                          | -10 °C ... 60 °C                                                                                                                                                                                                      |
| Impact energy in end positions                               | 0.006 J                                                                                                                                                                                                               |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke  | 9.4 N                                                                                                                                                                                                                 |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke | 17 N                                                                                                                                                                                                                  |
| Moving mass                                                  | 2.3 g                                                                                                                                                                                                                 |
| Product weight                                               | 11.9 g                                                                                                                                                                                                                |
| Type of mounting                                             | With through-hole                                                                                                                                                                                                     |
| Pneumatic connection                                         | M3                                                                                                                                                                                                                    |
| Note on materials                                            | RoHS-compliant                                                                                                                                                                                                        |
| Material cover                                               | Wrought aluminium alloy                                                                                                                                                                                               |
| Material dynamic seals                                       | NBR<br>TPE-U(PU)                                                                                                                                                                                                      |
| Material housing                                             | Anodised wrought aluminium alloy<br>Anodised                                                                                                                                                                          |

| Feature             | Value                      |
|---------------------|----------------------------|
| Material piston rod | High-alloy stainless steel |