

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

Part number: 8142512

**FESTO**



## Data sheet

| Feature                                                      | Value                                                                                                     |
|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| Stroke                                                       | 10 mm                                                                                                     |
| Piston diameter                                              | 6 mm                                                                                                      |
| Cushioning                                                   | No cushioning                                                                                             |
| Mounting position                                            | Any                                                                                                       |
| 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                                           | 0.2 MPa...0.8 MPa<br>2 bar...8 bar<br>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           | Suitable for battery production with reduced Cu/Zn/Ni values (F1a)                                        |
| Cleanroom suitability, measured according to ISO 14644-14    | Class 5 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                                                  | 2.4 g                                                                                                     |
| Product weight                                               | 13.6 g                                                                                                    |
| Type of mounting                                             | With through-hole                                                                                         |
| Pneumatic connection                                         | M3                                                                                                        |
| Note on materials                                            | RoHS compliant                                                                                            |
| Material cover                                               | Wrought aluminium alloy                                                                                   |
| Material dynamic seals                                       | NBR                                                                                                       |

| Feature             | Value                                        |
|---------------------|----------------------------------------------|
|                     | TPE-U(PU)                                    |
| Material housing    | Anodised wrought aluminium alloy<br>anodised |
| Material piston rod | High-alloy stainless steel                   |