

# Compact cylinder ADN-S-63-40-A-P-A-F1A

Part number: 8142934

FESTO



 General operating condition

## Data sheet

| Feature                                            | Value                                                                                                                                                                                                                             |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Stroke                                             | 40 mm                                                                                                                                                                                                                             |
| Piston diameter                                    | 63 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                                 | 0.04 MPa ... 1 MPa                                                                                                                                                                                                                |
| Operating pressure                                 | 0.4 bar ... 10 bar                                                                                                                                                                                                                |
| Operating pressure                                 | 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 | Metals with more than 1% by mass of 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                 | 1.3 J                                                                                                                                                                                                                             |
| Theoretical force at 6 bar, retracting             | 1750 N                                                                                                                                                                                                                            |
| Theoretical force at 6 bar, advancing              | 1870 N                                                                                                                                                                                                                            |
| Moving mass at 0 mm stroke                         | 151 g                                                                                                                                                                                                                             |
| Additional moving mass per 10 mm stroke            | 16 g                                                                                                                                                                                                                              |
| Basic weight with 0 mm stroke                      | 499 g                                                                                                                                                                                                                             |
| Additional weight per 10 mm stroke                 | 77 g                                                                                                                                                                                                                              |
| 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                                                                                                                                                                                                  |

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