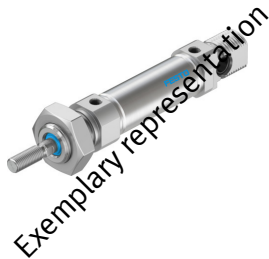


# Standards-based cylinder DSNU-16- -F1A-

Part number: 8149445

FESTO



 General operating condition

## Data sheet

Overall data sheet – Individual values depend upon your configuration.

| Feature   | Value  |
|---|--|
| Stroke  | 1 mm ... 200 mm  |
| Piston diameter   | 16 mm  |
| Piston rod thread   | M6   |
| Cushioning  | Elastic cushioning rings/plates at both ends<br>Self-adjusting pneumatic end-position cushioning<br>Pneumatic cushioning, adjustable at both ends  |
| Mounting position   | optional   |
| Conforms to standard  | ISO 6432   |
| Design  | Piston<br>Piston rod<br>Cylinder barrel  |
| Position detection  | Via proximity switch   |
| Symbol  | 00991217   |
| Variants  | Metals with copper, zinc or nickel by mass as main constituent are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils.<br>Extended male piston rod thread<br>Piston rod with male thread shortened at one end<br>Extended piston rod<br>Axial supply port<br>Lateral supply port<br>Through piston rod |
| Operating pressure  | 0.1 MPa ... 1 MPa  |
| Operating pressure  | 1 bar ... 10 bar   |
| Mode of operation   | Double-acting  |
| 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                              | 0 - No corrosion stress  |
| LABS (PWIS) conformity                                      | VDMA24364-B1/B2-L  |
| Suitability for the production of Li-ion batteries          | Suitable for battery production according to the Festo internal definition of the degree of severity F1A with restrictions regarding the use of Cu/Zn/Ni   |
| Cleanroom class   | Class 6 according to ISO 14644-1   |
| Ambient temperature   | -20 °C ... 80 °C   |
| Impact energy in end positions                              | 0.15 J   |
| Cushioning length   | 12 mm  |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke | 103.7 N  |

| Feature  | Value                            |
|--|----------------------------------|
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke | 120.6 N                          |
| Moving mass for 0 mm stroke                                  | 23 g                             |
| Additional moving mass per 10 mm stroke                      | 2 g                              |
| Basic weight for 0 mm stroke                                 | 89.9 g                           |
| Additional weight per 10 mm stroke                           | 4.6 g                            |
| Type of mounting   | With accessories                 |
| Pneumatic connection   | M5                               |
| Note on materials  | RoHS-compliant                   |
| Material cover   | Anodised wrought aluminium alloy |
| Material seals   | TPE-U(PU)                        |
| Material piston rod  | High-alloy stainless steel       |
| Material cylinder barrel                                     | High-alloy stainless steel       |