

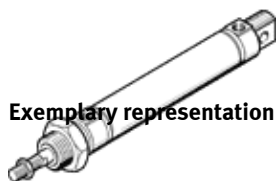
# Standards-based cylinder

## DSNU-20- -F1A-

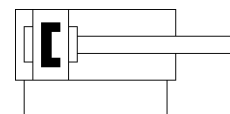
Part number: 8149446

FESTO

A stroke of at least 10 mm is required for position sensing with proximity sensors.



Exemplary representation



## Data sheet

Overall data sheet – Individual values depend upon your configuration.

| Feature  | Value  |
|--|--|
| Stroke   | 1 ... 320 mm   |
| Piston diameter  | 20 mm  |
| Piston rod thread  | M8   |
| Cushioning   | P: Flexible cushioning rings/plates at both ends<br>PPS: Self-adjusting pneumatic end-position cushioning<br>PPV: Pneumatic cushioning adjustable at both ends   |
| Assembly position  | Any  |
| Conforms to standard                                     | CETOP RP 52 P<br>ISO 6432  |
| Design structure   | Piston<br>Piston rod<br>Cylinder barrel  |
| Position detection                                       | For proximity sensor   |
| Variants   | Extended male piston rod thread<br>Female thread on piston rod<br>External piston rod thread shortened on one end<br>Extended piston rod<br>axial supply port<br>lateral supply port<br>Through piston rod<br>Recommended for production facilities for the manufacture of lithium-ion batteries |
| Operating pressure MPa                                   | 0.1 ... 1 MPa  |
| Working pressure   | 1 ... 10 bar   |
| Mode of operation  | double-acting  |
| Operating medium   | Compressed air in accordance with ISO8573-1:2010 [7:4:4]   |
| Note on operating and pilot medium                       | Lubricated operation possible (subsequently required for further operation)  |
| Corrosion resistance classification CRC                  | 0 - No corrosion stress  |
| PWIS conformity  | VDMA24364-B1/B2-L  |
| RSBP classification to CD-0033                           | F1a  |
| Cleanroom class  | ISO class 6  |
| Ambient temperature                                      | -20 ... 80 °C  |
| Cushioning length  | 15 mm  |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), retracting | 158.3 N  |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance    | 188.5 N  |
| Moving mass with 0 mm stroke                             | 44 g   |
| Additional mass factor per 10 mm of stroke               | 4 g  |
| Basic weight for 0 mm stroke                             | 186.8 g  |
| Additional weight per 10 mm stroke                       | 7.2 g  |
| Mounting type  | with accessories   |

| Feature                  | Value                            |
|--------------------------|----------------------------------|
| Pneumatic connection     | G1/8                             |
| Materials note           | Conforms to RoHS                 |
| Material cover           | Anodised wrought aluminium alloy |
| Material seals           | TPE-U(PU)                        |
| Material piston rod      | High alloy steel, non-corrosive  |
| Material cylinder barrel | High alloy steel, non-corrosive  |