

# Round cylinder CRDSNU-80

Part number: 8126418

**FESTO**



## Data sheet

| Feature                                           | Value                                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Stroke                                            | 1 mm...500 mm                                                                                                                                                                                                                                                                                                                              |
| Piston diameter                                   | 80 mm                                                                                                                                                                                                                                                                                                                                      |
| Piston rod thread                                 | M20x1.5<br>M12                                                                                                                                                                                                                                                                                                                             |
| Cushioning                                        | Elastic cushioning rings/pads at both ends<br>Self-adjusting pneumatic end-position cushioning<br>Pneumatic cushioning, adjustable at both ends                                                                                                                                                                                            |
| Mounting position                                 | Any                                                                                                                                                                                                                                                                                                                                        |
| Piston rod end                                    | External thread<br>Internal thread                                                                                                                                                                                                                                                                                                         |
| Structural design                                 | Piston<br>Piston rod<br>Cylinder barrel                                                                                                                                                                                                                                                                                                    |
| Position sensing                                  | Via proximity switch                                                                                                                                                                                                                                                                                                                       |
| Variants                                          | For unlubricated operation<br>EX protection approval (ATEX)<br>Increased chemical resistance<br>Extended external thread piston rod<br>Internal thread on piston rod<br>Special thread on piston rod<br>Extended piston rod<br>Bearing cover without mounting thread<br>Lateral supply port<br>Through piston rod<br>Piston rod at one end |
| Operating pressure                                | 0.1 MPa...1 MPa                                                                                                                                                                                                                                                                                                                            |
| Mode of operation                                 | Double-acting                                                                                                                                                                                                                                                                                                                              |
| CE marking (see declaration of conformity)        | as per EU explosion protection directive (ATEX)                                                                                                                                                                                                                                                                                            |
| UKCA marking (see declaration of conformity)      | acc. to UK EX instructions                                                                                                                                                                                                                                                                                                                 |
| Explosion protection certification outside the EU | EPL Db (GB)<br>EPL Gb (GB)                                                                                                                                                                                                                                                                                                                 |
| Explosion prevention and protection               | Zone 1 (ATEX)<br>Zone 1 (UKEX)<br>Zone 2 (ATEX)<br>Zone 21 (ATEX)<br>Zone 21 (UKEX)<br>Zone 22 (ATEX)                                                                                                                                                                                                                                      |
| ATEX category gas                                 | II 2G                                                                                                                                                                                                                                                                                                                                      |

| Feature                                  | Value                                                              |
|------------------------------------------|--------------------------------------------------------------------|
| ATEX category for dust                   | II 2D                                                              |
| Type of ignition protection for gas      | Ex h IIC T4 Gb                                                     |
| Type of (ignition) protection for dust   | Ex h IIIC T120°C Db                                                |
| Explosive ambient temperature            | -20°C ≤ Ta ≤ +60°C                                                 |
| 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)         | 4 - Particularly high corrosion stress                             |
| LABS (PWIS) conformity                   | VDMA24364-B2-L<br>VDMA24364 Zone III                               |
| For use in the food industry             | See declaration of conformity                                      |
| Ambient temperature                      | -20 °C...80 °C                                                     |
| Theoretical force at 6 bar, retracting   | 2721 N                                                             |
| Theoretical force at 6 bar, advancing    | 3016 N                                                             |
| Moving mass at 0 mm stroke               | 860 g                                                              |
| Additional moving mass per 10 mm stroke  | 39 g                                                               |
| Basic weight with 0 mm stroke            | 5891 g                                                             |
| Additional weight per 10 mm stroke       | 68 g                                                               |
| Type of mounting                         | With accessories                                                   |
| Pneumatic connection                     | G3/8                                                               |
| Note on materials                        | RoHS compliant                                                     |
| Cover material                           | high-alloy stainless steel                                         |
| Piston rod material                      | high-alloy stainless steel                                         |
| Material of cylinder barrel              | high-alloy stainless steel                                         |