

# ISO cylinder CRDSNU-25-

Part number: 552790

FESTO



General operating condition

## Data sheet

Overall data sheet – Individual values depend upon your configuration.

| Feature                                           | Value                                                                                                                                                                                                                                                                                                                  |
|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Stroke                                            | 1 mm ... 500 mm                                                                                                                                                                                                                                                                                                        |
| Piston diameter                                   | 25 mm                                                                                                                                                                                                                                                                                                                  |
| Piston rod thread                                 | M6<br>M10x1.25                                                                                                                                                                                                                                                                                                         |
| Based on standard                                 | ISO 6432                                                                                                                                                                                                                                                                                                               |
| 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                                                                                                                                                                                                                                                                                                               |
| Piston-rod end                                    | Male thread<br>Female thread                                                                                                                                                                                                                                                                                           |
| Design                                            | Piston<br>Piston rod<br>Cylinder barrel                                                                                                                                                                                                                                                                                |
| Position detection                                | Via proximity switch                                                                                                                                                                                                                                                                                                   |
| Variants                                          | Hard scraper<br>For unlubricated operation<br>Increased chemical resistance<br>Extended male piston rod thread<br>Extended piston rod<br>Bearing cap without mounting thread<br>Lateral supply port<br>Through piston rod<br>Heat-resistant seals max. 120°C<br>Temperature range -40 to 80°C<br>Piston rod at one end |
| Operating pressure                                | 0.1 MPa ... 1 MPa                                                                                                                                                                                                                                                                                                      |
| Operating pressure                                | 1 bar ... 10 bar                                                                                                                                                                                                                                                                                                       |
| Mode of operation                                 | Double-acting                                                                                                                                                                                                                                                                                                          |
| CE mark (see declaration of conformity)           | To EU Explosion Protection Directive (ATEX)                                                                                                                                                                                                                                                                            |
| UKCA marking (see declaration of conformity)      | To UK EX instructions                                                                                                                                                                                                                                                                                                  |
| Explosion protection certification outside the EU | EPL Db (GB)<br>EPL Gb (GB)                                                                                                                                                                                                                                                                                             |
| Explosion 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                                                                                                                                                                                                                                                                                                                  |
| ATEX category dust                                | II 2D                                                                                                                                                                                                                                                                                                                  |

| Feature                                                      | Value                                                                                      |
|--------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Explosion ignition protection type for gas                   | Ex h IIC T4 Gb                                                                             |
| Explosion ignition protection type for dust                  | Ex h IIIC T120°C Db                                                                        |
| Explosion ambient temperature                                | -20°C ≤ Ta ≤ +60°C                                                                         |
| 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                               | 3 - high corrosion stress                                                                  |
| LABS (PWIS) conformity                                       | VDMA24364-B2-L<br>VDMA24364 zone III                                                       |
| Cleanroom class                                              | Class 6 according to ISO 14644-1                                                           |
| Suitable for use with food                                   | See declaration of conformity                                                              |
| Ambient temperature                                          | -40 °C ... 120 °C                                                                          |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke  | 247 N                                                                                      |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke | 295 N                                                                                      |
| Moving mass for 0 mm stroke                                  | 73 g                                                                                       |
| Additional moving mass per 10 mm stroke                      | 6 g                                                                                        |
| Basic weight for 0 mm stroke                                 | 410 g                                                                                      |
| Additional weight per 10 mm stroke                           | 11 g                                                                                       |
| Type of mounting                                             | With accessories                                                                           |
| Pneumatic connection                                         | G1/8                                                                                       |
| Note on materials                                            | RoHS-compliant                                                                             |
| Material cover                                               | High-alloy stainless steel                                                                 |
| Material piston rod                                          | High-alloy stainless steel                                                                 |
| Material cylinder barrel                                     | High-alloy stainless steel                                                                 |