

# ISO cylinder DSBF-C-50-25-PPSA-N3-R

Part number: 1780283

**FESTO**



## Data sheet

| Feature                                                      | Value                                                                                      |
|--------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Stroke                                                       | 25 mm                                                                                      |
| Piston diameter                                              | 50 mm                                                                                      |
| Piston rod thread                                            | M16x1.5                                                                                    |
| Cushioning                                                   | Self-adjusting pneumatic end-position cushioning                                           |
| Mounting position                                            | optional                                                                                   |
| Conforms to standard                                         | ISO 15552                                                                                  |
| Piston-rod end                                               | Male thread                                                                                |
| Design                                                       | Piston<br>Piston rod<br>Profile barrel                                                     |
| Position detection                                           | Via proximity switch                                                                       |
| Operating pressure                                           | 0.04 MPa...1.2 MPa<br>0.4 bar...12 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                               | 3 - high corrosion stress                                                                  |
| LABS (PWIS) conformity                                       | VDMA24364-B2-L                                                                             |
| Cleanroom suitability, measured according to ISO 14644-14    | Class 5 according to ISO 14644-1                                                           |
| Ambient temperature                                          | -20 °C...80 °C                                                                             |
| Impact energy in end positions                               | 1 J                                                                                        |
| Cushioning length                                            | 22 mm                                                                                      |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke  | 990 N                                                                                      |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke | 1178 N                                                                                     |
| Moving mass                                                  | 426 g                                                                                      |
| Moving mass for 0 mm stroke                                  | 363 g                                                                                      |
| Additional moving mass per 10 mm stroke                      | 25 g                                                                                       |
| Product weight                                               | 1386 g                                                                                     |
| Basic weight for 0 mm stroke                                 | 1241 g                                                                                     |
| Additional weight per 10 mm stroke                           | 58 g                                                                                       |

| Feature                     | Value                                            |
|-----------------------------|--------------------------------------------------|
| Type of mounting            | Either:<br>Via female thread<br>With accessories |
| Pneumatic connection        | G1/4                                             |
| Note on materials           | RoHS-compliant                                   |
| Material cover              | Coated die-cast aluminium                        |
| Material piston seal        | TPE-U(PU)                                        |
| Material piston             | Wrought aluminium alloy                          |
| Material piston rod         | High-alloy stainless steel                       |
| Material piston rod wiper   | TPE-U(PU)                                        |
| Buffer seal material        | TPE-U(PU)                                        |
| Material of cushioning boss | POM                                              |
| Material cylinder barrel    | Anodised wrought aluminium alloy                 |
| Material nut                | High-alloy stainless steel                       |
| Material bearing            | POM                                              |
| Material collar screws      | Galvanised steel                                 |