

# Standards-based cylinder DSBC-50-500-D3-PPVA-N3

Part number: 8165589

FESTO



[PDF](#) General operating condition

## Data sheet

| Feature                                  | Value  |
|--|--|
| Stroke                                   | 500 mm   |
| Piston diameter                          | 50 mm  |
| Piston rod thread                        | M16x1.5  |
| Cushioning                               | Pneumatic cushioning, adjustable at both ends                      |
| Mounting position                        | Any  |
| Conforms to standard                     | ISO 15552  |
| Piston rod end                           | External thread  |
| Structural design                        | Piston<br>Piston rod<br>Profile barrel                             |
| Position sensing                         | For proximity sensor   |
| Symbol                                   | 00991235   |
| Variants                                 | Piston rod at one end  |
| Operating pressure                       | 0.04 MPa ... 1.2 MPa   |
| Operating pressure                       | 0.4 bar ... 12 bar   |
| Mode of operation                        | Double-acting  |
| 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)         | 2 - Moderate corrosion stress                                      |
| LABS (PWIS) conformity                   | VDMA24364-B1/B2-L  |
| Ambient temperature                      | -20 °C ... 80 °C   |
| Impact energy in the end positions       | 1 J  |
| Cushioning length                        | 22 mm  |
| Theoretical force at 6 bar, retracting   | 990 N  |
| Theoretical force at 6 bar, advancing    | 1178 N   |
| Moving mass                              | 1615 g   |
| Moving mass at 0 mm stroke               | 365 g  |
| Additional moving mass per 10 mm stroke  | 25 g   |
| Product weight                           | 5116 g   |
| Basic weight with 0 mm stroke            | 1216 g   |
| Additional weight per 10 mm stroke       | 78 g   |
| Type of mounting                         | With internal thread<br>With accessories                           |
| Pneumatic connection                     | G1/4   |
| Note on materials                        | RoHS-compliant   |
| Cover material                           | Die-cast aluminum, coated  |

| <b>Feature</b>              | <b>Value</b>                            |
|-----------------------------|---|
| Piston seal material        | TPE-U(PU)                               |
| Material of piston          | Wrought aluminum alloy                  |
| Piston rod material         | High-alloy steel                        |
| Piston rod wiper material   | TPE-U(PU)                               |
| Buffer seal material        | TPE-U(PU)                               |
| Cushion piston material     | POM                                     |
| Material of cylinder barrel | Wrought aluminum alloy, smooth-anodized |
| Nut material                | Steel, galvanized                       |
| Rod wiper material          | TPE-E                                   |
| Material of bearing         | Metal polymer compound                  |
| Flange screws material      | Steel, galvanized                       |