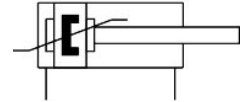


# Standards-based cylinder DSBC-40-500-D3-PPSA-N3

Part number: 8165586

**FESTO**



 [General operating condition](#)

## Data sheet

| Feature                                  | Value                                                              |
|------------------------------------------|--------------------------------------------------------------------|
| Stroke                                   | 500 mm                                                             |
| Piston diameter                          | 40 mm                                                              |
| Piston rod thread                        | M12x1.25                                                           |
| Cushioning                               | Self-adjusting pneumatic end-position cushioning                   |
| 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                                   | 00992970                                                           |
| Variants                                 | Piston rod at one end                                              |
| Operating pressure                       | 0.06 MPa ... 1.2 MPa                                               |
| Operating pressure                       | 0.6 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       | 0.7 J                                                              |
| Cushioning length                        | 19 mm                                                              |
| Theoretical force at 6 bar, retracting   | 633 N                                                              |
| Theoretical force at 6 bar, advancing    | 754 N                                                              |
| Moving mass                              | 1005 g                                                             |
| Moving mass at 0 mm stroke               | 205 g                                                              |
| Additional moving mass per 10 mm stroke  | 16 g                                                               |
| Product weight                           | 3218 g                                                             |
| Basic weight with 0 mm stroke            | 768 g                                                              |
| Additional weight per 10 mm stroke       | 49 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                                          |

| Feature                     | Value                                   |
|-----------------------------|-----------------------------------------|
| 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                       |