

# ISO cylinder DSBG-40-50-PPSA-N3

Part number: 1646561

FESTO



 [General operating condition](#)

## Data sheet

| Feature                                                      | Value                                                                                      |
|--------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Stroke                                                       | 50 mm                                                                                      |
| Piston diameter                                              | 40 mm                                                                                      |
| Piston rod thread                                            | M12x1.25                                                                                   |
| 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>Tie rod<br>Cylinder barrel                                         |
| Position detection                                           | Via proximity switch                                                                       |
| 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 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                               | 2 - Moderate corrosion stress                                                              |
| LABS (PWIS) conformity                                       | VDMA24364-B1/B2-L                                                                          |
| Cleanroom class                                              | Class 5 according to ISO 14644-1                                                           |
| Ambient temperature                                          | -20 °C ... 80 °C                                                                           |
| Impact energy in end positions                               | 0.7 J                                                                                      |
| Cushioning length                                            | 19 mm                                                                                      |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke  | 633 N                                                                                      |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke | 754 N                                                                                      |
| Moving mass                                                  | 285 g                                                                                      |
| Moving mass for 0 mm stroke                                  | 205 g                                                                                      |
| Additional moving mass per 10 mm stroke                      | 16 g                                                                                       |
| Product weight                                               | 915 g                                                                                      |
| Basic weight for 0 mm stroke                                 | 740 g                                                                                      |
| Additional weight per 10 mm stroke                           | 35 g                                                                                       |
| Type of mounting                                             | Either:<br>Via female thread<br>With accessories                                           |

| Feature                   | Value                                   |
|---------------------------|-----------------------------------------|
| 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 steel                        |
| Material piston rod wiper | TPE-U(PU)                               |
| Buffer seal material      | TPE-U(PU)                               |
| Cushioning boss material  | POM                                     |
| Material cylinder barrel  | Smooth-anodised wrought aluminium alloy |
| Material nut              | Galvanised steel                        |
| Material bearing          | POM                                     |
| Material collar nut       | Galvanised steel                        |
| Material tie rod          | High-alloy steel                        |