

# Standards-based cylinder

## DSBG-32-160-PPVA-N3

Part number: 1638849

FESTO



### Data sheet

| Feature                                                  | Value                                                                       |
|----------------------------------------------------------|-----------------------------------------------------------------------------|
| Stroke                                                   | 160 mm                                                                      |
| Piston diameter                                          | 32 mm                                                                       |
| Piston rod thread                                        | M10x1,25                                                                    |
| Cushioning                                               | PPV: Pneumatic cushioning adjustable at both ends                           |
| Assembly position                                        | Any                                                                         |
| Conforms to standard                                     | ISO 15552                                                                   |
| Piston-rod end                                           | Male thread                                                                 |
| Design structure                                         | Piston<br>Piston rod<br>Tie rod<br>Cylinder barrel                          |
| Position detection                                       | For proximity sensor                                                        |
| Variants                                                 | Single-ended piston rod                                                     |
| Operating pressure MPa                                   | 0.06 ... 1.2 MPa                                                            |
| Working pressure                                         | 0.6 ... 12 bar                                                              |
| Mode of operation                                        | double-acting                                                               |
| Operating medium                                         | Compressed air in accordance with ISO8573-1:2010 [7:4:4]                    |
| Note on operating and pilot medium                       | Lubricated operation possible (subsequently required for further operation) |
| Corrosion resistance classification CRC                  | 2 - Moderate corrosion stress                                               |
| PWIS conformity                                          | VDMA24364-B1/B2-L                                                           |
| Cleanroom class                                          | ISO class 6                                                                 |
| Ambient temperature                                      | -20 ... 80 °C                                                               |
| Impact energy in end positions                           | 0.4 J                                                                       |
| Cushioning length                                        | 17 mm                                                                       |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), retracting | 415 N                                                                       |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance    | 483 N                                                                       |
| Moving mass                                              | 254 g                                                                       |
| Moving mass with 0 mm stroke                             | 110 g                                                                       |
| Additional mass factor per 10 mm of stroke               | 9 g                                                                         |
| Product weight                                           | 865 g                                                                       |
| Basic weight for 0 mm stroke                             | 465 g                                                                       |
| Additional weight per 10 mm stroke                       | 25 g                                                                        |
| Mounting type                                            | with internal (female) thread<br>with accessories<br>Optional               |
| Pneumatic connection                                     | G1/8                                                                        |
| Materials note                                           | Conforms to RoHS                                                            |
| 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 seal                           | TPE-U(PU)                                                                   |
| Buffer seal material                                     | TPE-U(PU)                                                                   |
| Cushion piston material                                  | POM                                                                         |
| Material cylinder barrel                                 | Smooth-anodised wrought aluminium alloy                                     |
| Material nut                                             | steel, galvanized                                                           |
| Material bearing                                         | POM                                                                         |
| Collar nut material                                      | Galvanized steel                                                            |
| Material tie rod                                         | High alloy steel                                                            |