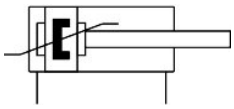
# ISO cylinder
# DSBG-40-320-PPSA-N3

Part number: 1646568





## Data sheet

| Feature | Value |
|---|---|
| Stroke | 320 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 | Male thread |
| Design | Piston<br>Piston rod<br>Tie rod 1<br>Cylinder barrel |
| Position detection | Via proximity switch |
| Variants | Piston rod at one end |
| Operating pressure | 0.06 MPa...1.2 MPa<br>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 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 | 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 | 717 g |
| Moving mass for 0 mm stroke | 205 g |
| Additional moving mass per 10 mm stroke | 16 g |
| Product weight | 1860 g |
| Basic weight for 0 mm stroke | 740 g |
| Additional weight per 10 mm stroke | 35 g |

| Feature | Value |
|---|---|
| Type of mounting | Either:<br>With 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 steel |
| Material piston rod wiper | TPE-U(PU) |
| Buffer seal material | TPE-U(PU) |
| Material of cushioning boss | 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 |