

Round cylinder DSNU-S-12- -F1A-

Part number: 8148786

FESTO



Data sheet

| Feature | Value |
|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Stroke | 1 mm...150 mm |
| Piston diameter | 12 mm |
| Cushioning | Elastic cushioning rings/plates at both ends |
| Mounting position | optional |
| Design | Piston Piston rod Cylinder barrel |
| Position detection | Via proximity switch |
| Variants | Metals with copper, zinc or nickel by mass as main constituent are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils. Extended male piston rod thread Piston rod with female thread Extended piston rod Axial supply port Swivel mounting, end cap Lateral supply port Mounting thread, end cap Shortened male piston rod thread |
| Operating pressure | 0.15 MPa...1 MPa 1.5 bar...10 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 | 0 - No corrosion stress |
| LABS (PWIS) conformity | VDMA24364-B2-L |
| Suitability for the production of Li-ion batteries | Product corresponds to the internal product definition from Festo for use in battery production: Metals with more than 1% by mass of copper, zinc or nickel are excluded from use. The exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils |
| Cleanroom class | Class 6 according to ISO 14644-1 |
| Ambient temperature | -20 °C...80 °C |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke | 50.9 N |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke | 67.9 N |

| Feature | Value |
|-----------------------------------------|----------------------------------|
| Moving mass for 0 mm stroke | 16.2 g |
| Additional moving mass per 10 mm stroke | 2 g |
| Basic weight for 0 mm stroke | 35.9 g |
| Additional weight per 10 mm stroke | 4.2 g |
| Type of mounting | With accessories |
| Pneumatic connection | M5 |
| Note on materials | RoHS-compliant |
| Material cover | Anodised wrought aluminium alloy |
| Material seals | TPE-U(PU) |
| Material piston rod | High-alloy stainless steel |
| Material cylinder barrel | High-alloy stainless steel |