

Fluidic muscle DMSP-20- -

Part number: 541404

FESTO



Data sheet

| Feature | Value |
|---|--|
| Size | 20 |
| Diameter increase with max. contraction | 40 mm |
| Stroke | 0 mm...2250 mm |
| Max. contraction | 25% of nominal length |
| Max. initial tension | 4% of nominal length |
| Nominal length | 60 mm...9000 mm |
| Repetition accuracy muscle | <= 1% of nominal length, cyclical |
| Permissible parallelism tolerance | <= 2 mm above nominal length of 400 mm ± 0.5% up to nominal length of 400 mm |
| Permissible angle tolerance | 1 deg |
| Mounting position | optional |
| Design | Contracting diaphragm |
| Operating pressure | 0 MPa...0.6 MPa 0 bar...6 bar |
| Mode of operation | Single-acting Pulling |
| Approval | German Technical Control Board (TÜV) |
| Operating medium | Compressed air to ISO 8573-1:2010 [7:::] |
| 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 zone III |
| Ambient temperature | -5 °C...60 °C |
| Max. working load freely suspended | 80 kg |
| Theoretical Fluidic Muscle force at max. operating pressure | 1500 N |
| Theoretical force at 0.6 MPa (6 bar, 87 psi) | 1500 N |
| Additional weight per 1 m length | 178 g |
| Pneumatic connection | G1/4 |
| Note on materials | RoHS-compliant |
| Material flange | Wrought aluminium alloy Colourless anodised |
| Material sleeve | Wrought aluminium alloy Colourless anodised |

| Feature | Value |
|-------------------|--------------------------|
| Material membrane | AR Chloroprene rubber |
| Material nut | Steel Galvanised |