fluidic muscle DMSP-10-Part number: 541403







Data sheet

Overall data sheet – Individual values depend upon your configuration.

| Feature | Value |
|---|--|
| Size | 10 |
| Diameter expansion at max. contraction | 24 mm |
| Stroke | 0 2,250 mm |
| Max. contraction | 25% of nominal length |
| Max. initial tension | 3% of nominal length |
| Nominal length | 40 9,000 mm |
| Repetition accuracy | <= 1% of nominal length, cyclical |
| Permissible tolerance for parallelism | <= 2 mm as of a nominal length of 400 mm |
| | ±0.5% for nominal lengths of up to 400 mm |
| Permissible angular tolerance | <= 1 deg |
| Assembly position | Any |
| Design structure | Contractible membrane |
| Operating pressure MPa | 0 0.8 MPa |
| Operating pressure | 0 8 bar |
| Mode of operation | single-acting |
| | pulling action |
| Authorisation | TÜV |
| Operating medium | Compressed air in accordance with ISO8573-1:2010 [7:-:-] |
| 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 zone III |
| Ambient temperature | -5 60 °C |
| Maximum freely suspended additional load | 30 kg |
| Theoretical muscular energy at maximum operating pressure | 630 N |
| Theoretical force at 0.6 MPa (6 bar, 87 psi) | 480 N |
| Additional weight per 1 m length | 94 g |
| Pneumatic connection | G1/8 |
| Materials note | Conforms to RoHS |
| Material flange | Wrought Aluminium alloy |
| | neutral anodisation |
| Material sleeve | Wrought Aluminium alloy |
| | neutral anodisation |
| Material membrane | AR |
| | CR |
| Material nut | Steel |
| | Galvanised |