## Fluidic muscle DMSP-40- -Part number: 541405



## **Data sheet**

| Feature  | Value  |
|--|--|
| Size   | 40   |
| Diameter expansion at max. contraction                         | 80 mm  |
| Stroke   | 0 mm2250 mm  |
| Max. contraction   | 25 % of nominal length   |
| Max. pre-tensioning  | 5 % of nominal length  |
| Nominal length   | 120 mm9000 mm  |
| Muscle repetition accuracy                                     | <= 1% of nominal length, cyclic  |
| Permissible parallelism tolerance                              | <= 2 mm for a nominal length of at least 400 mm<br>±0.5 % up to a nominal length of 400 mm |
| Permissible angle tolerance                                    | 1 deg  |
| Mounting position  | Any  |
| Structural design  | Contracting diaphragm  |
| Operating pressure   | 0 MPa0.6 MPa<br>0 bar6 bar   |
| Mode of operation  | Single-acting<br>Pulling   |
| Certification  | German Technical Control Board (TÜV)   |
| Operating medium   | Compressed air as per ISO 8573-1:2010 [7:-:-]  |
| Information on operating and pilot media                       | Operation with oil lubrication possible (required for further use)                         |
| Corrosion resistance class (CRC)                               | 2 - Moderate corrosion stress  |
| LABS (PWIS) conformity   | VDMA24364 zone III   |
| Ambient temperature  | -5 °C60 °C   |
| Maximum additional load freely suspended                       | 250 kg   |
| Theoretical force Fluidic Muscle at maximum operating pressure | 6000 N   |
| Theoretical force at 6 bar                                     | 6000 N   |
| Additional weight per 1 m length                               | 340 g  |
| Pneumatic connection   | G3/8   |
| Note on materials  | RoHS-compliant   |
| Material of flange   | Wrought aluminum alloy<br>Plain anodized   |
| Sleeve material  | Wrought aluminum alloy<br>Plain anodized   |

## **FESTO**

| Feature | Value                    |
|---------|--------------------------|
|         | AR<br>Chloroprene rubber |
|         | Steel<br>Galvanized      |