## 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  |
| Working pressure  | 0 8 bar  |
| Mode of operation                                       | single-acting  |
|   | pulling action   |
| Authorization   | 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 working 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 Aluminum alloy   |
|   | neutral anodization  |
| Material sleeve   | Wrought Aluminum alloy   |
|   | neutral anodization  |
| Material membrane                                       | AR   |
|   | CR   |
| Material nut  | Steel  |
|   | Galvanized   |