

# Fluidic muscle DMSP-5-50N-RM-CM

Part number: 8114532

FESTO



 General operating condition

## Data sheet

| Feature  | Value  |
|--|--|
| Size   | 5  |
| Diameter expansion at max. contraction                         | 12 mm  |
| Stroke   | 0 mm ... 12.5 mm   |
| Max. contraction   | 20 % of nominal length   |
| Max. pre-tensioning  | 1 % of nominal length  |
| Nominal length   | 50 mm  |
| Muscle repetition accuracy                                     | ≤ 1% of nominal length, cyclic                                     |
| Permissible parallelism tolerance                              | ±0.5 % up to a nominal length of 400 mm                            |
| Permissible angle tolerance                                    | ≤ 1 deg  |
| Mounting position  | Any  |
| Structural design  | Contracting diaphragm  |
| Symbol   | 00991121   |
| Operating pressure   | 0 MPa ... 0.6 MPa  |
| Operating pressure   | 0 bar ... 6 bar  |
| Mode of operation  | Single-acting<br>Pulling   |
| Certification  | 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 °C ... 60 °C  |
| Maximum additional load freely suspended                       | 5 kg   |
| Theoretical force Fluidic Muscle at maximum operating pressure | 140 N  |
| Theoretical force at 6 bar                                     | 140 N  |
| Pneumatic connection   | M3   |
| Note on materials  | RoHS compliant   |
| Material of flange   | Wrought aluminum alloy<br>Colorless anodized                       |
| Sleeve material  | Colorless anodized   |
| Diaphragm material   | AR<br>Chloroprene rubber   |
| Nut material   | Steel<br>Galvanized  |