

Fluidic muscle DMSP-10- -

Part number: 541403

FESTO



Data sheet

Feature	Value
Size	10
Diameter expansion at max. contraction	24 mm
Stroke	0 mm...2250 mm
Max. contraction	25 % of nominal length
Max. pre-tensioning	3 % of nominal length
Nominal length	40 mm...9000 mm
Muscle repetition accuracy	<= 1% of nominal length, cyclic
Permissible parallelism tolerance	<= 2 mm for a nominal length of at least 400 mm ±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 MPa...0.8 MPa 0 bar...8 bar
Mode of operation	Single-acting 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 °C...60 °C
Maximum additional load freely suspended	30 kg
Theoretical force Fluidic Muscle at maximum operating pressure	630 N
Theoretical force at 6 bar	480 N
Additional weight per 1 m length	94 g
Pneumatic connection	G1/8
Note on materials	RoHS-compliant
Material of flange	Wrought aluminum alloy Plain anodized
Sleeve material	Wrought aluminum alloy Plain anodized

Feature	Value
Diaphragm material	AR Chloroprene rubber
Nut material	Steel Galvanized