

# Fluidic muscle DMSP-10- -

Part number: 541403

**FESTO**



## Data sheet

Feature	Value
Size	10
Diameter increase with max. contraction	24 mm
Stroke	0 mm...2250 mm
Max. contraction	25% of nominal length
Max. initial tension	3% of nominal length
Nominal length	40 mm...9000 mm
Repetition accuracy muscle	<= 1% of nominal length, cyclical
Permissible parallelism tolerance	<= 2 mm above nominal length of 400 mm ± 0.5% up to nominal length of 400 mm
Permissible angle tolerance	1 deg
Mounting position	optional
Design	Contracting diaphragm
Operating pressure	0 MPa...0.8 MPa 0 bar...8 bar
Mode of operation	Single-acting Pulling
Approval	German Technical Control Board (TÜV)
Operating medium	Compressed air to ISO 8573-1:2010 [7:::]
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)
Corrosion resistance class CRC	2 - Moderate corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III
Ambient temperature	-5 °C...60 °C
Max. working load freely suspended	30 kg
Theoretical Fluidic Muscle force at max. 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
Note on materials	RoHS-compliant
Material flange	Wrought aluminium alloy Colourless anodised
Material sleeve	Wrought aluminium alloy Colourless anodised

Feature	Value
Material membrane	AR Chloroprene rubber
Material nut	Steel Galvanised