

Fluidic Muscle DMSP with press-fitted connectors

FESTO



Fluidic Muscle with press-fitted connectors – even more compact and long-lasting, with unbeatable power, dynamics and freedom from stick/slip effect.

Simply compact

A Fluidic Muscle with press-fitted connectors is on average up to 25% more compact than the MAS version.

Simply lighter

Compared with type MAS, up to 30% less weight – which means an excellent power/weight ratio and allows unbeatable dynamic characteristics.

Simply more dynamic!

With the Fluidic Muscle, frequencies of 100 Hz can be achieved depending on the working stroke. Based on industrial use, acceleration values of up to 100 m/s^2 and speeds of up to 3 m/s are possible. In special applications, even higher.

Simply more flexible

The press-fitted connectors make it possible to offer three adapter variants, thus giving system designers all the freedom they need to create optimum solutions.



Powerful,

dynamic,

free of stick/slip!

501.2.PSI →

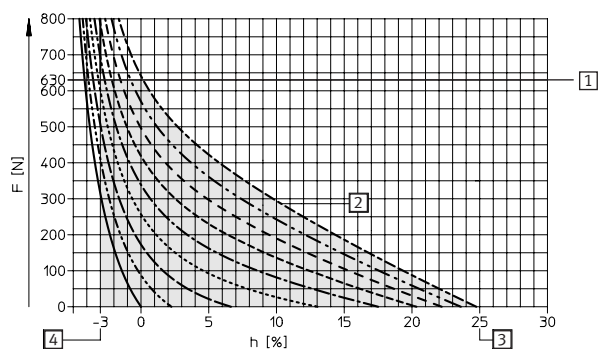
Product Short Information

Fluidic Muscle DMSP with press-fitted connectors

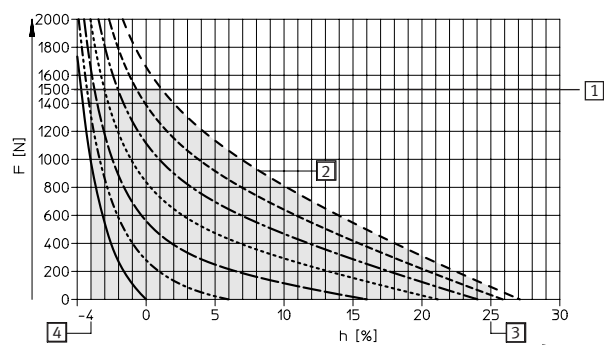


EN 292-1: 1991; EN 292-2/A1: 1995

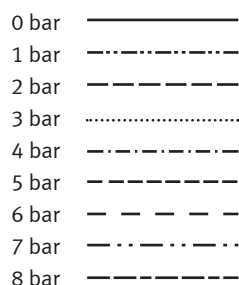
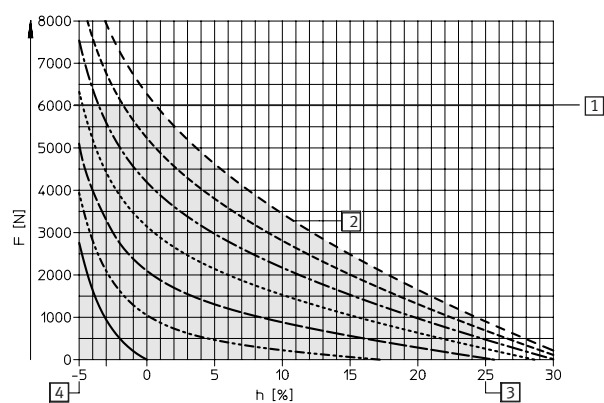
Force/displacement graph
DMSP-10-100N-...



Force/displacement graph
DMSP-20-200N-...



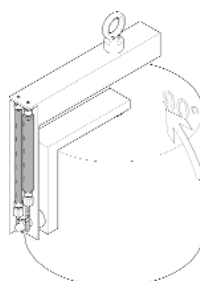
Force/displacement graph
DMSP-40-400N-...



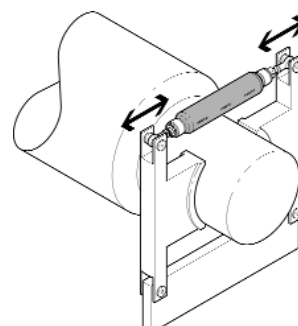
- 1 min. theoretical force at max. operating pressure
- 2 Max. operating pressure
- 3 Max. deformation
- 4 Max. initial stretch
- Permissible working range with MAS-10/-20/-40

General technical data

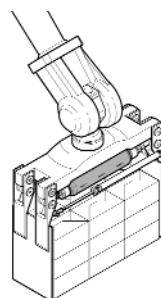
Size	10	20	40
Mode of operation	Single-acting, pulling		
Inside diameter [mm]	10	20	40
Nominal length [mm]	40 ... 9000	60 ... 9000	120 ... 9000
Theoretical force [N]	630	1500	6000
Operating pressure [bar]	0 ... 8	0 ... 6	0 ... 6
Ambient temperature [°C]	-5 ... 60		



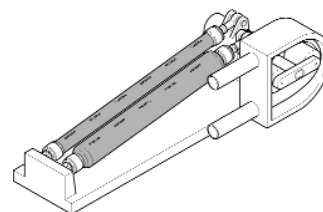
Dynamic with high loads:
e.g. roller swivelling device



Powerful, e.g. as a brake applicator



Sturdy and unaffected by dirt,
e.g. as gripper on robot arms



High torque with slow movements: e.g. as a tubing pump

Note

The graphs were determined for muscles of a nominal length (nominal length = 10 x inner diameter). For this reason, the sizing was carried out using the Fluidic Muscle calculation software. The software is available at www.festo.com/download or can be requested on CD-ROM from Festo. A rough sizing is possible using the force/displacement graph. Properties that influence the dependence of force and displacement (e.g. material properties, production fluctuation and nominal length) are not accounted for in these graphs. As a result of this, the theoretical force can be raised by up to 10%. Deviations can be compensated for via pressure compensation up to the maximum permissible operating pressure.

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