Fluidic Muscle
The innovative principle

A completely new type of pneumatic drive which could also revolutionise your industry. Fluidic Muscle is a membrane contraction system or, to put it more simply, a tube which contracts under pressure. An innovation which is based on a tensile material consisting of a flexible hose sheathed in fibres in the form of a rhomboidal mesh. The usable tensile force is at its maximum at the start of the contraction and then decreases in a virtually linear manner as a function of stroke.

Key features – at a glance

- High force combined with a small diameter
- Frequency up to 150 Hz
- Frictionless movement
- Simple positioning
- Unaffected by dirt
- Hermetically sealed

Do you have questions, suggestions or requests?
Or do you need technical support?
We will be happy to help you with your dimensioning work!

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Clamping

**Benefit:**
- High force combined with a small diameter (up to 10 times higher)
- Unaffected by dirt
- Frictionless movement
- Hermetically sealed

Vibrating and shaking

**Benefit:**
- Frequency up to 150 Hz
- Amplitude/frequency can be adjusted independently of each other
- Unaffected by dirt

Pneumatic spring

**Benefit:**
- Adjustable spring force
- Frictionless movement
- Hermetically sealed
- Easy to handle

Clamping unit in machining centre for control cabinets

Vibrating chute for discharge of stamping waste

A coating is distributed by vibration on a production line

In a mine, various materials are separated using several Fluidic Muscles to operate a screen

Clamping device for wood panels

Warp beam brake in looms for an optimum yarn tension

Clamping unit for welding machines

Tensioning a toothed belt in a concrete works

Adjusting the height of a stacking device for corrugated cardboard