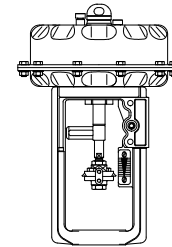


# Technical Data Sheet

## pneum. Multi-Spring-Actuator



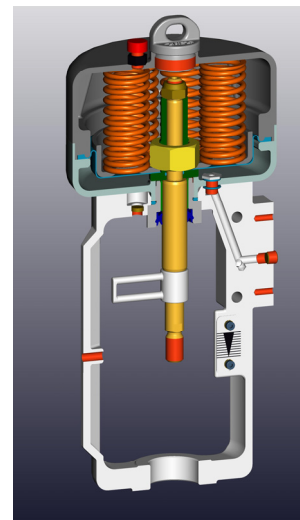
**TD\_812**  
**MF0**

### Technical Data

<b>Series</b>	812 MF0
<b>Diaphragm effective area</b>	143 cm <sup>2</sup>
<b>Stroke</b>	20 mm
<b>Control signal</b>	6 bar max.
<b>Materials</b>	Stainless steel WN 1.4301/304 SS Diaphragm plate: St W 22 galvanized Yoke: investment casting 1.4308/304 SS Spindle: WN 1.4122 micro-finished Springs: WN VD Si Cr plastic-covered Diaphragm: NBR fabric-reinforced (moulded) Gasket high-quality, special polyurethane
<b>Operating temperature</b>	-20 to +80°C (Option -40 to + 80°C)
<b>No. of springs</b>	
<b>ATO</b>	6
<b>ATC</b>	3
<b>Control force spring max.</b>	2,9 kN
<b>Control force air max.</b>	5.6 kN

### Functional description

The ARCAPAQ® is a pneumatic multi-spring diaphragm actuator and is used to actuate linear valves. The actuator spindle is connected to the valve spindle via the coupling shown as a stroke indicator, securely guided in the slide bearing and sealed with a special sealing element with wiper ring. The diaphragm, supported by the diaphragm plate, is connected to the actuator spindle and separates the actuator housing into pressure and spring chamber. If the force of the compressed air control signal exceeds the opposing spring force, the actuator spindle moves and actuates the linear valve. The compressed air is led to the diaphragm chamber via internal channels in the yoke. The air ventilation of the spring chamber is carried out through the protective cap, which is impermeable to splash water.

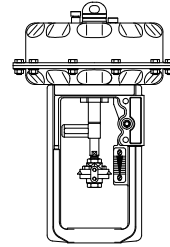


### Design features:

- Function: air to open or air to close
- Adjustable position feedback
- Direct mounting interface for Positioner type 827A /SipartPS2, 824 compact, fully welded design

# Technical Data Sheet

## pneum. Multi-Spring-Actuator



**TD\_812  
MF0**

### Control forces and control ranges

**Opening function** (air to open - spring to close)

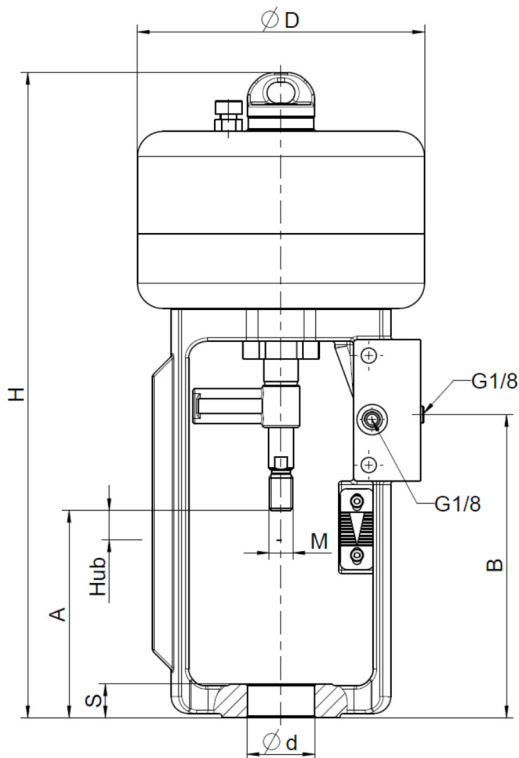
Size	Diaphragm surface (cm <sup>2</sup> )	Type	No. of springs	Stroke (mm)	Control range		Control force (kN)
					from (bar)	to (bar)	
MF0-20	143	812/813	6	20	2,1	4,1	2,9

**Closing function** (air to close - spring to open)

Size	Diaphragm surface (cm <sup>2</sup> )	Type	No. of springs	Stroke (mm)	Control pressure min. bar	Control force (kN) depending on control pressure				
						2,0 bar	3,0 bar	4,0 bar	5,0 bar	6,0 bar
MF0-20	143	812/813	3	20	2,1	-	1,3	2,7	4,1	5,5

**Caution:** The actuator forces and spring ranges listed above are for actuator without valve at nominal stroke only

### Dimensions and weights



Size	Diaphragm surface (cm <sup>2</sup> )	Type	Weight	No. of springs	Stroke (mm)	Ø D (mm)	M	Ø d (mm)	S (mm)	A (mm)	B (mm)	H (mm)
MF0-20	143	812-11.	11	3	20	170	14	40	20	120	180	383
				6								
		812-12.		3								
				6								