

**Data Sheet**  
**Actuator Type S (Pneumatic, diaphragm actuator)**

**Sizes:** S160, S320

**Version:**

- Diaphragm actuator

**Travel:**

- 29 mm / 54 mm

**Opening angle:**

- 0°... 90° (for VETEC valves 75°)

**Spring position:**

- Centrally arranged spring

**Diaphragm area:**

- 160 to 320 cm<sup>2</sup>

**Spring torques:**

- 26 to 205 Nm

**Supply air range:**

- 3 to 6 bar

**Ambient temperature range:**

- -35 to 90 °C / -31 to 194 °F

**Mounting of accessories:**

- VDI/VDE 3845

**Principle of operation:**

The Type S Actuator is equipped with a diaphragm and one or more centrally arranged return springs on the inside. The freely supported piston rod is directly connected to the lever for the valve shaft. Its design allows the actuator to be used with different opening angles. The actuator can be equipped with additional manual gears as well as end stops.



Fig. 1: Type S Actuator

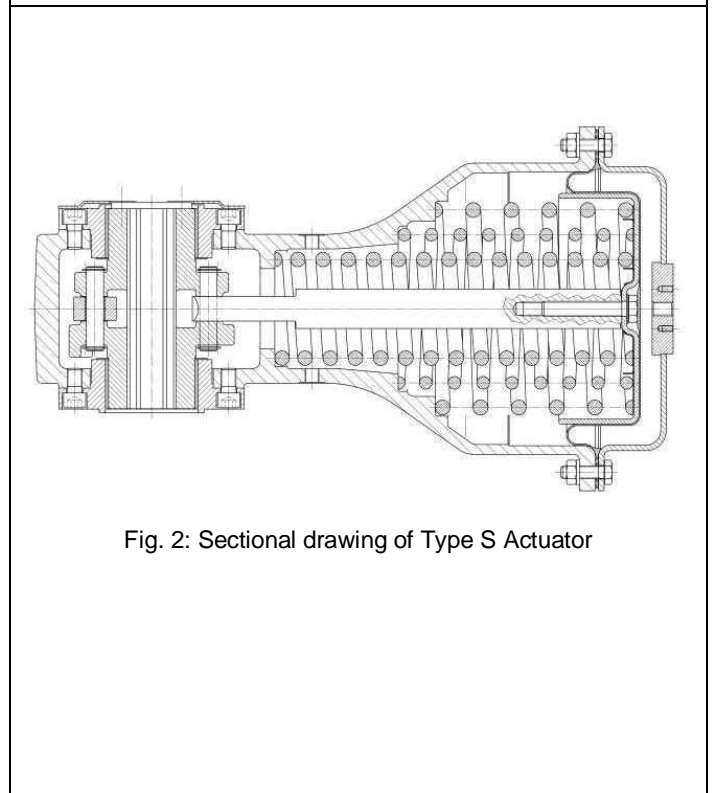

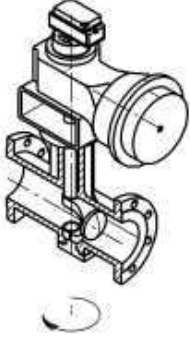
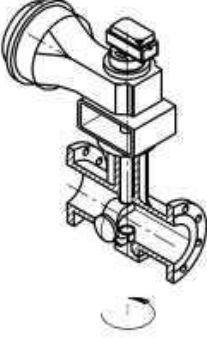
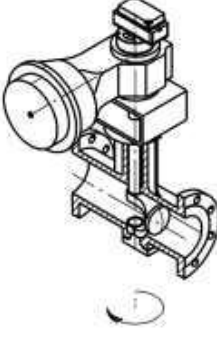
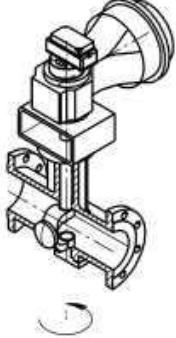
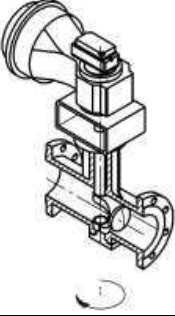
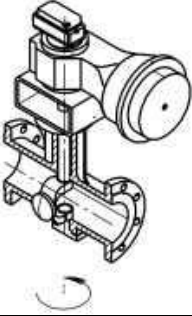
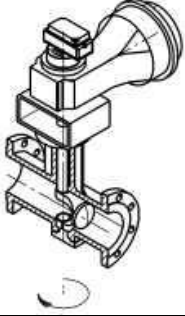
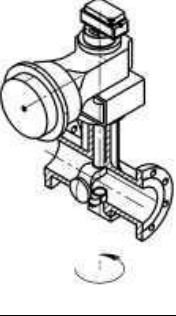


Fig. 2: Sectional drawing of Type S Actuator

Table 1: Technical data

Type		S 160		S 320	
Version		Ddiaphragm			
Spring position		Centrally arranged			
Opening angles		75°			
Travel	mm	29		54	
Diaphragm area	cm <sup>2</sup>	160		320	
Spring range	FTC	spring 2 + 3	0,90 - 1,75	spring 2 + 3	0,90 – 1,75
		spring 1 + 3	1,19 - 2,30	spring 1 + 3	1,10 – 2,25
		spring 1 + 2 + 3	1,75 - 3,25	spring 1 + 2 + 3	1,60 – 3,20
	FTO	spring 2 + 3	1,03 – 1,96	spring 2 + 3	1,02 – 1,96
		spring 1 + 3	1,39 – 2,55	spring 1 + 3	1,29 – 2,48
		spring 1 + 2 + 3	1,97 – 3,60	spring 1 + 2 + 3	1,86 – 3,52
Temperature range	°C/ °F	-35 to 90 °C / -31 to 194 °F			
Supply air range	bar	3 to 6 (spring 1+2+3 min. 4 bar)			
Weight (w/o yoke)	kg	19		51	
Manual gear	 <p>Manual gear</p>				

**Fig. 3: Attachment types**

			
<b>Attachment type A Fail-close</b>	<b>Attachment type A Fail-open</b>	<b>Attachment type B Fail-close</b>	<b>Attachment type B Fail-open</b>
			
<b>Attachment type C Fail-close</b>	<b>Attachment type C Fail-open</b>	<b>Attachment type D Fail-close</b>	<b>Attachment type D Fail-open</b>