

## VETEC Pneumatic Rotary Actuator Type S

### Application

For automatic actuation of rotary plug valves, ball valves and butterfly valves.

|                        |                                               |
|------------------------|-----------------------------------------------|
| <b>Usage</b>           | Throttling service and on/off service         |
| <b>Design</b>          | Diaphragm and internal spring • single-acting |
| <b>Actuator motion</b> | Rotary                                        |
| <b>Standard Sizes</b>  | S160, S320                                    |

### Travel:

29 / 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

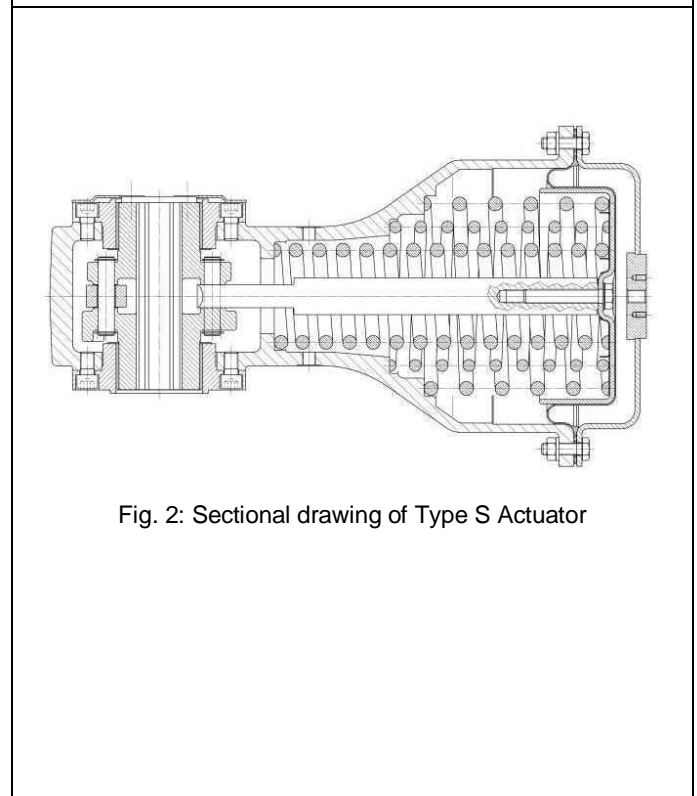

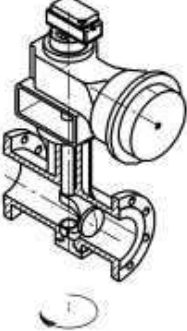
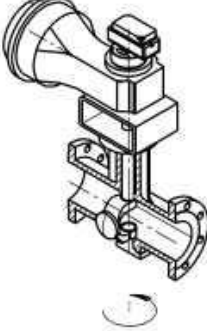
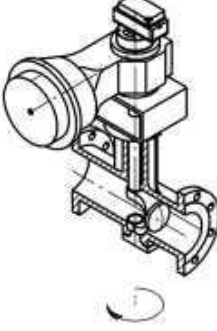
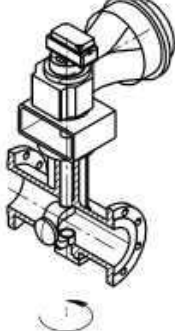
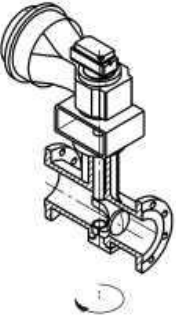
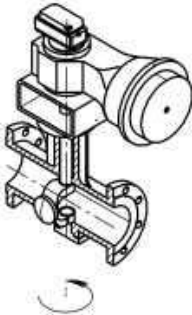
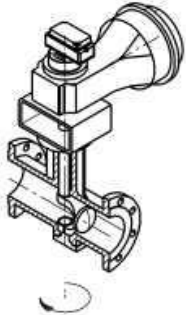
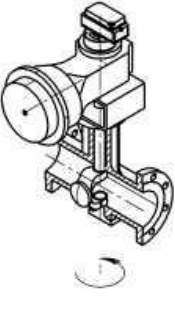


Fig. 2: Sectional drawing of Type S Actuator

Table 1: Technical data

| Type              |                                                                                                         | S 160                            |             | S 320            |             |
|-------------------|---------------------------------------------------------------------------------------------------------|----------------------------------|-------------|------------------|-------------|
| Version           |                                                                                                         | Ddiaphragm                       |             |                  |             |
| Spring position   |                                                                                                         | Centrally arranged               |             |                  |             |
| Opening angles    |                                                                                                         | 75°                              |             |                  |             |
| Travel            | mm                                                                                                      | 29                               |             | 54               |             |
| Diaphragm area    |                                                                                                         | 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<br/>Fail-close</b>                                           | <b>Attachment type A<br/>Fail-open</b>                                            | <b>Attachment type B<br/>Fail-close</b>                                            | <b>Attachment type B<br/>Fail-open</b>                                              |
|  |  |  |  |
| <b>Attachment type C<br/>Fail-close</b>                                           | <b>Attachment type C<br/>Fail-open</b>                                            | <b>Attachment type D<br/>Fail-close</b>                                            | <b>Attachment type D<br/>Fail-open</b>                                              |

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