



## VETEC Pneumatic Rotary Actuator Type MZ

### Application

For automatic actuation of rotary plug 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>                | MZ450, MZ700                                  |
| <b>Sizes with reinforced springs</b> | MZ450v, MZ700v                                |

### Travel

100 / 130 mm

### Opening angle

75°

### Spring position

Centrally arranged spring

### Diaphragm area

1636 to 3447 cm<sup>2</sup>

### Spring torques

470 to 1976 Nm

### Supply air range

3 to 4 bar

### Ambient temperature range

-40 to +80 °C / -40 to +176 °F

### Mounting of accessories

VDI/VDE 3845

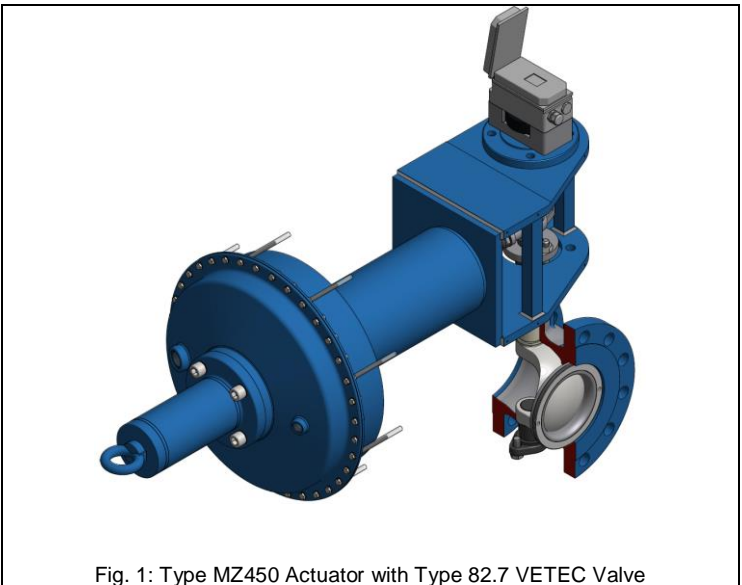


Fig. 1: Type MZ450 Actuator with Type 82.7 VETEC Valve

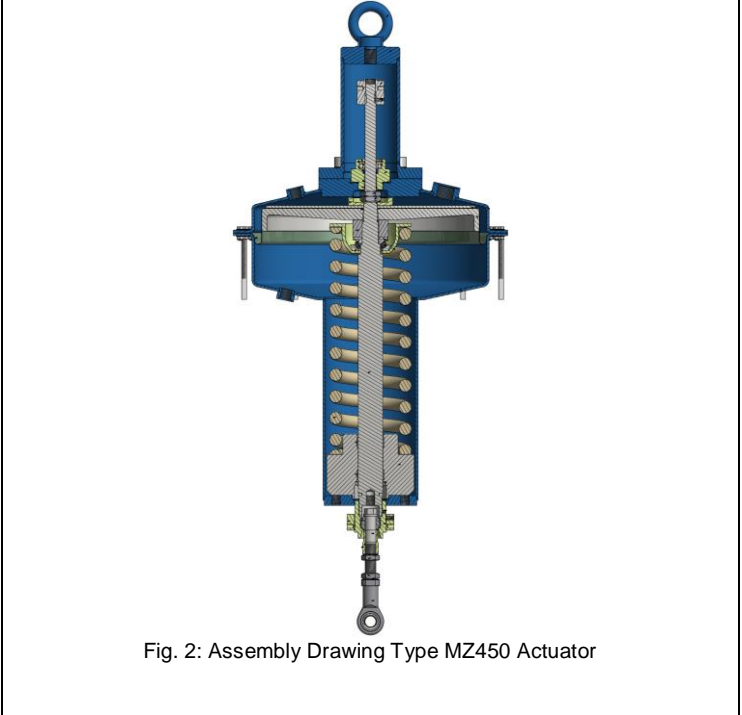


Fig. 2: Assembly Drawing Type MZ450 Actuator

**Principle of operation:**

The Type MZ Actuator is equipped with a diaphragm and a centrally arranged return spring on the inside.

The freely supported piston rod is directly connected to the lever for the valve shaft.

The optimized construction ensures very short actuating times and also for a very fine and precise control.

The actuator can be equipped with manual gears as well as end stops.

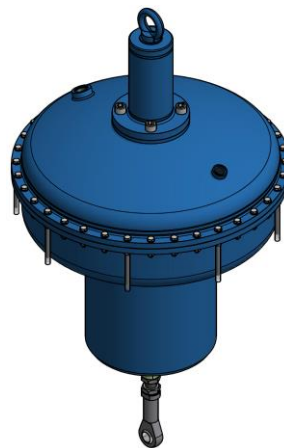


Fig. 3: Type MZ700v

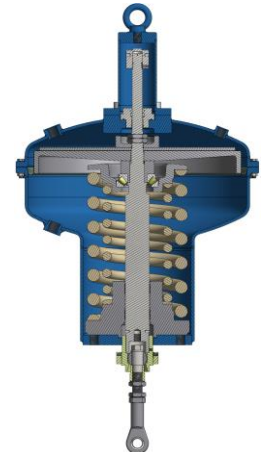
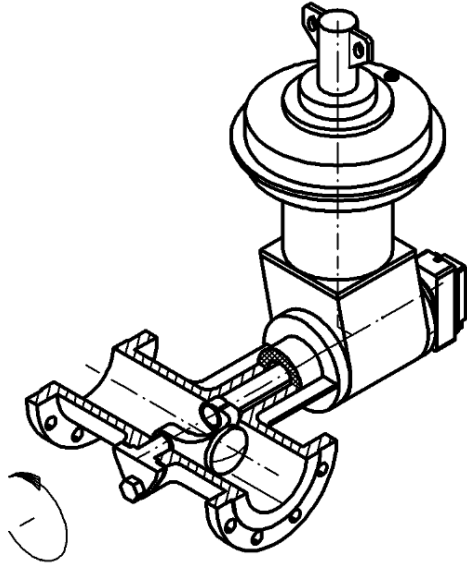


Fig.4: Assembly Drawing Type MZ700v

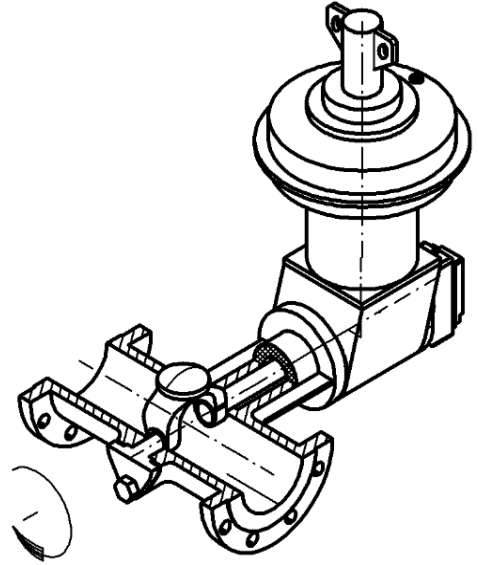
**Table 1: Technical Data**

| Type               |                 | MZ450 / MZ450v                 |              | MZ700 / MZ700v |              |
|--------------------|-----------------|--------------------------------|--------------|----------------|--------------|
| Version            |                 | Diaphragm                      |              |                |              |
| Spring position    |                 | Centrally arranged spring      |              |                |              |
| Opening angles     |                 | 75°                            |              |                |              |
| Travel             | mm              | 100                            |              | 130            |              |
| Diaphragm area     | cm <sup>2</sup> | 1636                           |              | 3447           |              |
| Spring range       | bar             | 0.45 to 1.30                   | 0.88 to 2.10 | 0.40 to 1.28   | 0.69 to 2.05 |
| Spring torque      | Nm              | 470                            | 919          | 1145           | 1976         |
| Temperature range  | °C / °F         | -40 to +80 °C / -40 to +176 °F |              |                |              |
| Supply air range   | bar             | 3 to 4                         |              |                |              |
| Weight (w bracket) | kg              | 165                            | 170          | 510            | 520          |
| Manual gear        |                 |                                |              |                |              |

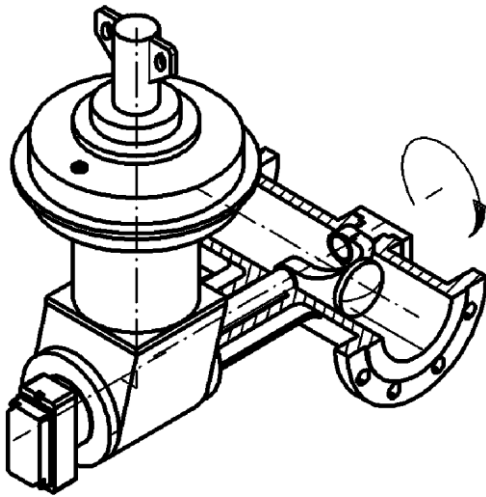
Table 2: Standard attachment types



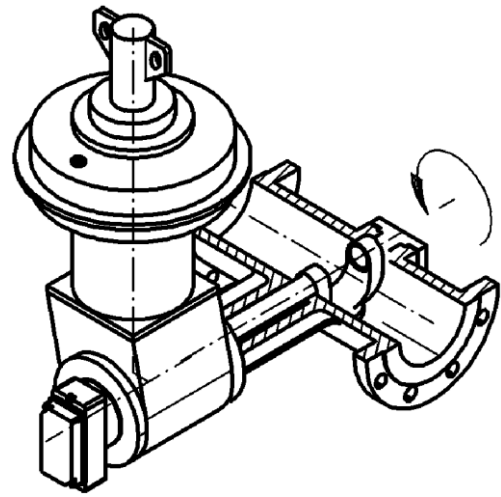
Attachment Type B  
Fail-Close



Attachment Type B  
Fail-Open



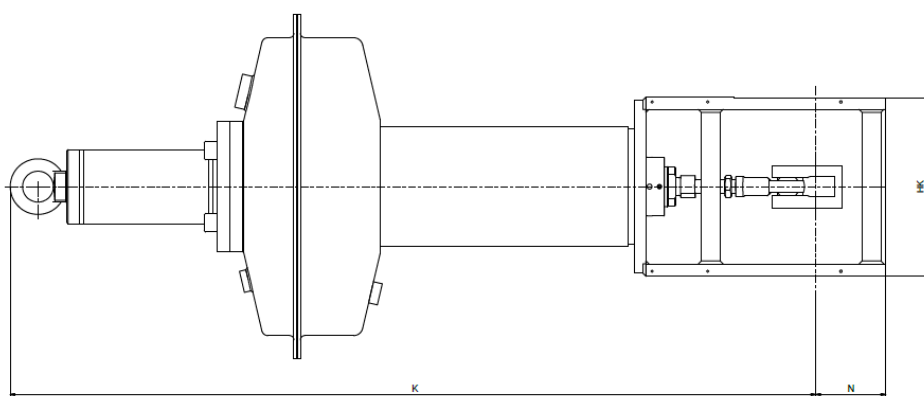
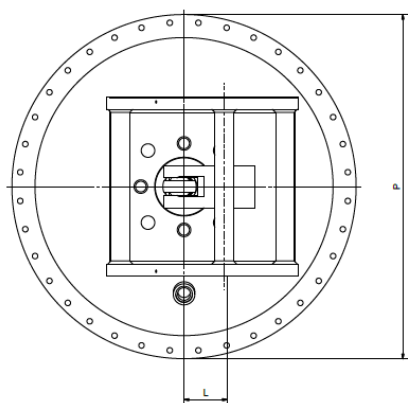
Attachment Type D  
Fail-Close



Attachment Type D  
Fail-Open

**Table 3: Dimensions**

| Actuator Type      | K             | L  | N   | Ø P | HK  |
|--------------------|---------------|----|-----|-----|-----|
|                    | Dimensions mm |    |     |     |     |
| <b>MZ 450 / 75</b> | 1300          | 65 | 150 | 557 | 240 |
| <b>MZ 700 / 75</b> | 1440          | 85 | 155 | 756 | 360 |



VETEC Ventiltechnik GmbH

Siemensstraße 12 · 67346 Speyer  
 Telefon: 06232 6412-0 · Fax: 06232 42479 · E-mail: [vetec@vetec.de](mailto:vetec@vetec.de) · Internet:  
[www.vetec.de](http://www.vetec.de)