

VETEC Pneumatic Rotary Actuator Type MD

Application

For automatic actuation of rotary plug valves.

Usage	Throttling service and on/off service
Design	Diaphragm and internal springs • single-acting
Actuator motion	Rotary
Standard sizes	MD450, MD700
Sizes with reinforced springs	MD450v, MD700v

Travel:

100 / 130 mm

Opening angle:

75°

Spring position:

Multi-spring, symmetric

Diaphragm area:

1636 to 3447 cm²

Spring torques:

679 to 8247 Nm

Supply air range:

3 to 6 bar

Ambient temperature range:

−40 to +80 °C / −40 to +176 °F

Mounting of accessories:

VDI/VDE 3845

Principle of operation:

The Type MD Actuator is equipped with a diaphragm and several symmetrically arranged return springs. The combination of several spring assemblies and the design of the piston rod bearing allow high torques to be transmitted.

The short travel ensures very short actuating times.

The actuator can be equipped with additional manual gears as well as end stops. A multi-stage version is possible.



Fig. 1: Type MD Actuator

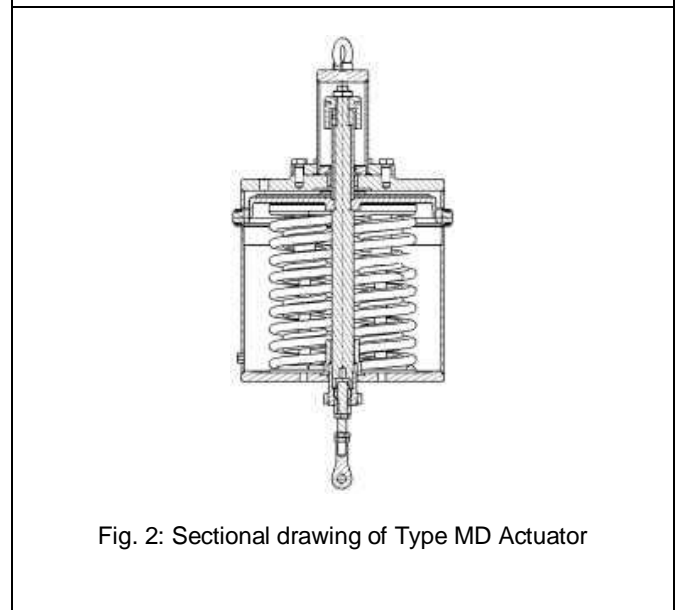


Fig. 2: Sectional drawing of Type MD Actuator

Table 1: Technical data of MD450


Type	MD450			
Version	Diaphragm			
Spring position	Multi-spring, symmetric			
Opening angles (°)	75			
Travel (mm)	100			
Diaphragm area (cm²)	1636			
Spring range (bar)	0.65 - 1.10	1.15 - 2.01	1.56 - 2.72	1.71 - 3.13
Spring torque (Nm)	679	1202	1630	1787
Supply air range (bar)	3 to 6			
Temperature range (°C/°F)	-40 to +80 °C / -40 to +176 °F			
Weight (with yoke) (kg)	310	350	360	380
Manual gear	 <p>Manual gear</p>			

Table 2: Technical data of MD700


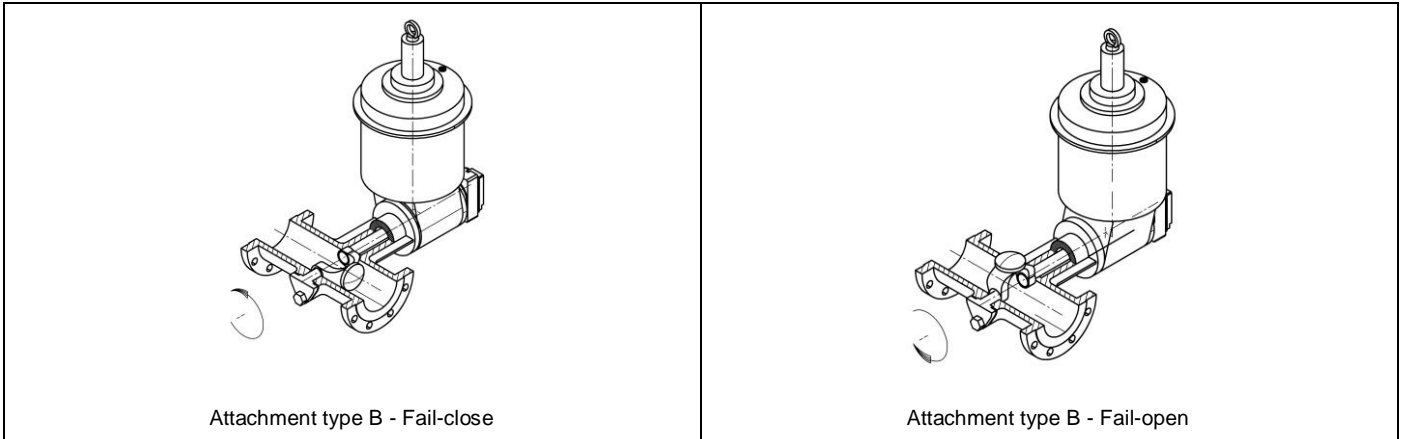
Type	MD700			
Version	Diaphragm			
Spring position	Multi-spring, symmetric			
Opening angles (°)	75			
Travel (mm)	130			
Diaphragm area (cm²)	3447			
Spring range (bar)	1.51 to 2.80	1.74 to 3.10	2.10 to 3.75	2.51 to 4.07
Spring torque (Nm)	4324	4983	6014	7188
Supply air range (bar)	3 to 6			
Temperature range (°C/°F)	-40 to +80 °C / -40 to +176 °F			
Weight (with yoke) (kg)	660	680	700	720
Manual gear	 <p>Manual gear</p>			

Fig. 3: Standard attachment types



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