

# Diaphragm Valves

The 533 Series diaphragm valves are ideal for use as the primary flow control in high purity or corrosive gas systems. Springless design and low wetted surface area combine to minimize particle generation and the completely swept path minimizes entrapment.

The unique design of the 533 Series allows low torque operation with gas flow in either direction. Flow control is accomplished with the multi-turn model while the 1/4 turn model is quick acting and indicates on/off position. Directional arrows listed for user pressure.



## Materials and Specifications

- **Maximum Inlet Pressure**  
3300 PSIG (230 BAR)
- **Temperature Range**  
-40°F to 140°F (-40°C to 60°C)
- **Helium Leak Integrity**  
1 x 10<sup>-9</sup> scc/sec
- **Bodies and Fittings**  
Brass barstock, 316L stainless steel or chrome-plated brass
- **Diaphragms**  
Elgiloy®
- **Seats**  
PCTFE
- **Seals**  
Metal to metal
- **Cv**  
0.17
- **Weight**  
0.66 lbs. (0.3 kg)

## Ordering Information

533-3	B	C	D
<b>Series</b> 533-3	<b>Flow Control Direction</b> 0: Multi-Turn Right to Left 1: 1/4 Turn Right to Left 2: Multi-Turn Left to Right 3: 1/4 Turn Left to Right	<b>Material</b> 2: Brass 4: 316L Stainless Steel 9: Chrome-Plated Brass	<b>Connection</b> 0: 1/4" FPT x 1/4" FPT 1: 6mm Tube x 6mm Tube 2: 1/4" Tube x 1/4" Tube 3: 1/4" MPT (Extended Leg) x 1/4" Tube 4: 1/4" MPT x 1/4" MPT 7: 1/4" MPT x 6mm Tube 8: 1/4" MPT (Extended Leg) x 1/8" Tube 9: 1/4" MPT (Extended Leg) x 1/4" FPT

For example, a 533-3140 is a bare body, 316L stainless steel diaphragm valve controlled by a 1/4 turn handle.

# Needle Valves

The 500 Series miniature needle valves are forged from brass or 316L stainless steel. They are designed for fine flow control in a variety of applications in the chemical process and petroleum industries as well as laboratories and hospitals. The ground and polished stem and PTFE packing make them suitable for controlling the flow of liquids or gases from vacuum to 3000 PSIG.



## Materials and Specifications

- **Maximum Pressure**  
3000 PSIG (210 BAR)
- **Maximum Pressure (533-9304)**  
5000 PSIG (345 BAR)
- **Temperature Range**  
-65°F to 450°F (-54°C to 232°C)
- **Weight**  
0.7 lbs. (0.3 kg)

## Ordering Information

Stock Number	End Fittings	Body	Stem	Packing
550-0067	1/8" MPT x 1/8" MPT	Forged Chrome-Plated Brass	303 Stainless Steel	PTFE/Chrome-Plated Brass
533-9002	1/4" MPT x 1/4" MPT	Forged Brass	303 Stainless Steel	PTFE/Brass
555-3225	1/4" MPT x 1/4" MPT	Forged Chrome-Plated Brass	303 Stainless Steel	PTFE/Chrome-Plated Brass
533-9304	1/4" MPT x 1/4" MPT	Forged 316L Stainless Steel	316L Stainless Steel	PTFE/316L Stainless Steel