

## 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 quarter-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)

CRN OH 5216.5C

### Ordering Information

533-3	B	C	D
Series	Flow Control Direction	Material	Connection
533-3	<b>0:</b> Multi-turn right to left	<b>2:</b> Brass	<b>0:</b> 1/4" FPT x 1/4" FPT
	<b>1:</b> Quarter-turn right to left	<b>4:</b> 316L stainless steel	<b>1:</b> 6mm tube fitting x 6mm tube fitting
	<b>2:</b> Multi-turn left to right	<b>9:</b> Chrome-plated brass	<b>2:</b> 1/4" tube fitting x 1/4" tube fitting
	<b>3:</b> Quarter-turn left to right		<b>3:</b> 1/4" MPT (extended leg) x 1/4" tube fitting
			<b>4:</b> 1/4" MPT x 1/4" MPT
			<b>7:</b> 1/4" MPT x 6mm tube fitting
			<b>8:</b> 1/4" MPT (extended leg) x 1/8" tube fitting
			<b>9:</b> 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 quarter 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

Order No.	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