

VALVES

DIAPHRAGM VALVES

The 533 Series Diaphragm Valves are ideal for use as the primary flow switch 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.



5333029-01-001 shown

Materials & Specifications

Housing

Brass barstock

Seals

Buna-N®

Inlet and Outlet Fittings

Brass 1/4" FPT

Pressure Drop

2.4 PSIG (0.16 BAR) at 3 SCFM (85 lpm) Air

Efficiency

99% original

Maximum Inlet Pressure

3000 PSIG (210 BAR)

500 PSIG (34 BAR)

Weight

4.4 lbs. (2 kg)

Ordering Information

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

*Only for D=3, 8, & 9

RELIEF VALVES

The 9400 Series Gas Phase Relief Valves offer excellent discharge capacity and field adjustability. The captive seat design minimizes the wetted surface area reducing possible contamination. The unique design also provides an accurate cracking pressure with zero leakage up to 98% of the nominal set pressure. Models 2039 and 2040 are designed for cryogenic on-line application and offer a gooseneck design that enables a safe discharge.



8309413 shown

Materials & Specifications

580-2039 and 580-2040 Temperature Range

-450°F to 1500°F

830-9412, 830-9413, and 830-9414 Temperature Range

Viton® Seat - 20°F to 400°F

Neoprene - 40°F to 300°F

Maximum Pressure

3700 PSIG (255 BAR)

Ordering Information

Part Number	Description	Connections	Materials
8309412	Preset at 220 PSIG: range 130 - 310 PSIG (8.9 - 21 BAR)	1/2" MPT x 1/2" FPT	Brass body, Viton® seat
8309413	Preset at 420 PSIG: range 260 - 600 PSIG (17 - 41 BAR)	1/2" MPT x 1/2" FPT	Brass body, Viton seat
8309414	Preset at 100 PSIG: range 80 - 120 PSIG (5 - 8.2 BAR)	1/4" MPT x 1/2" FPT	Brass body, Neoprene seat
8309415	Preset at 20 PSIG: range 8 - 34 PSIG (0.5 - 2.3 BAR)	1/2" MPT x 1/2" FPT	Brass body, Neoprene seat
5802039	750 PSIG Cryogenic Relief	Male x female CGA 440 (3/8" Flare)	Stainless steel
5802040	750 PSIG Cryogenic Relief	Male x female CGA 295 (1/2" Flare)	Stainless steel