

Models SG5340, SG5350

Ultra-Fine, Low Flow, Metering Valves

Designed for extremely low flow gas and liquid applications, these valves provide smooth, nonpulsing flow control which is always proportional and absolutely constant at any given setting. They are particularly suited to the most precise control requirements of gas chromatography.

Six different needle tapers offer a wide choice of flow ranges (see Table II). Fifteen revolutions of the adjusting handle ("fully opened" to "fully closed") provide excellent resolution. The valves will shut off bubble-tight and cannot be damaged by overtightening.

Two Models are available. Model SG5340 has a nickel-plated brass body for non-corrosive service, and Model SG5350 has a Type 316 Stainless Steel body for corrosive applications. These valves are provided standard with mounting nuts for panel mounting applications.



Ultra-Fine Metering Valve

Specifications

Maximum Operating Pressure:
 SG5340: 600 psig at 70°F
 SG5350: 1000 psig at 70°F

Maximum Operating Temperature:
 SG5340: 180°F
 SG5350: 250°F

Flow Coefficient: See Table II

Inlet & Outlet Connections: 1/8" NPT female

Approximate Weight: 5 oz

Materials of Construction

Body: See Table I

Internal Parts Exposed to Gas:

SG5340: Brass, Delrin® and Stn. Stl.

SG5350: Type 316 Stn. Stl. and Vespel®

Seals: Viton®

Table I, Metering Valves

Body Material	Part No.
Nickel-Plated Brass	SG5340-()
Type 316 Stn. Stl.	SG5350-()

Where "()" is indicated above, insert the applicable needle taper number from Table II to complete the part number. Example: SG5350-2. Order by complete part number.

Table II, Flow Capacity

Needle Taper No.	Flow Coefficient (Cv)	Flow Capacity (sccm)*		
		Helium	Air	Water
1	0.00029	300	150	4
2	0.00066	700	350	10
3	0.0013	1,400	600	20
4	0.0057	6,000	2,400	80
5	0.017	18,000	6800	200
6	0.052	55,000	27,000	650

* Measured with 10 psig inlet pressure and atmospheric outlet pressure.

Models SG5602, SG5622

Two-Way, Ball Valves

These rugged, reliable, quick-acting valves provide high flow capacity. They are available with a brass body for noncorrosive gases or with a Type 316 Stainless Steel body for corrosive gases and permit flow in either direction. These valves are supplied standard with a single hole panel mounting capability.



Two-Way Ball Valve

Specifications

Maximum Operating Pressure:
 Model SG5602: 3000 psig at 70°F
 Model SG5622: 6000 psig at 70°F

Operating Temperature Range:
 -65°F to 350°F

Flow Coefficient: Cv = 1.4

Pressure Drop (to atmosphere):
 10 psi at 19.3 scfm Air
 50 psi at 54.7 scfm Air
 100 psi at 97.0 scfm Air

Inlet and Outlet Connections:
 1/4" NPT female

Approximate Weight: 9 oz

Materials of Construction

Body and Ball: See Table I

Seat: PCTFE

Seals: Teflon®

Table I

Body and Ball Material	Part No.
Brass	SG5602
Type 316 Stn. Stl.	SG5622