

# RG2 SERIES



## ULTRA HIGH PURITY REGULATOR

- Designed for point-of-use high flow to be used in process gas cabinets for gas companies, equipment manufactures and semiconductor manufacturers.
- The RG2 provides precise control of process gas pressure at or near the tool for flow rates of up to 600 SLPM at 300 PSIG inlet.
- All internal surfaces are finished with 10Ra or 5Ra to ensure minimal particle generation and entrapment. Metal-to-metal diaphragm seals provide enhanced leak tight integrity.
- Every step of assembly, welding, testing and final cleaning finished in Class 100 Cleanrooms.

## SPECIFICATIONS

### Fluid Media

All gases corrosive or non-corrosive or those requiring high purity regulation compatible with materials of construction. For other media, consult with factory.

### Pressure Rating (Per criteria of ANSI / ASME B31.3.)

Max. rated inlet pressure	600, 1000, 3500 PSIG (41, 69, 241 bar)
Outlet pressure ranges	1-30, 1-60, 1-100 and 1-150 PSIG (.1-2.1, .1-4.1, .1-6.9 and .1-10.3bar)
Design proof pressure	150% of Maximum rated pressure

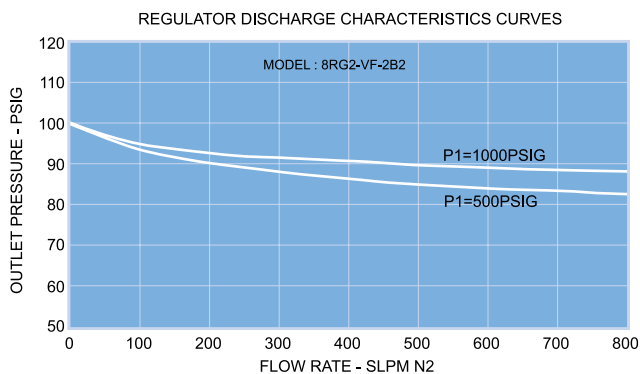
### Materials in Contact with Media

Body	316L Stainless Steel with BA, Electropolish
Seat	3500 PSIG - PI / 1000 PSIG - PCTFE / 600 PSIG - PFA
Diaphragm	Hastelloy C-22
Gas contact parts	316L Stainless Steel / Hastelloy C-22 / Inconel 750

### Other Parameters

Flow coefficient	Cv = 0.5	
Certified maximum inboard leak rate	1 x 10 <sup>-9</sup> atm cc / sec He	
Internal surface finish	10Ra or 5Ra microinch (.25 or .13 micrometer)	
Operating temperature	PCTFE seat	-15°F to + 200°F (-26°C to +93°C)
	PI seat	-15°F to + 350°F (-26°C to +149°C)
Weight (w/o gauges)	3.5lbs. (1.6kg)	

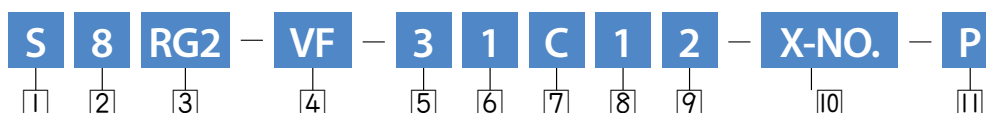
## FLOW CURVES



## MATERIAL

Wetted Parts	RG2 Series
Body	316L Stainless Steel
Main Valve	316L Stainless Steel
Valve Spring	316 Stainless Steel Inconel 750
Seat	PFA PCTFE PI
Diaphragm	Hastelloy C-22

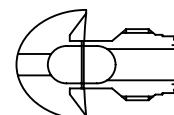
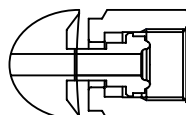
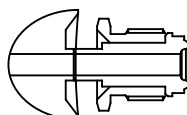
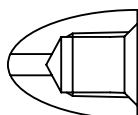
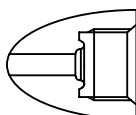
## ORDERING INFORMATION



<b>1 Material</b>	S = 316L Stainless steel D = 316L Stainless steel VAR	SH = 316L Stainless steel with Hastelloy internals DH = 316L Stainless steel VAR with Hastelloy internals
<b>2 Connection Size</b>	6 = 3/8" 8 = 1/2"	
<b>3 Product</b>	RG2 Series	
<b>4 Connection Type</b>	NF = Female NPT Thread SW = Compression Lok Fitting TW = Tube Butt Weld	VF = Female Type Face Seal VM = Male Type Face Seal VMF = Fixed Male Type Face Seal
<b>5 Maximum Inlet Pressure</b>	1 = 3500 PSIG 2 = 1000 PSIG	3 = 600 PSIG
<b>6 Maximum Range of Inlet Gauge</b>	1 = 600 PSIG 2 = 1000 PSIG 3 = 3500 PSIG	4 = 4000 PSIG Blank = No Gauge
<b>7 Gauge Port Configuration</b>	A = No Gauge Port (Fig. A) B = 1/4" Internal Face Seal (Fig. C) C = 1/4" Internal Face Seal (Fig. B) D = 1/4" Internal Face Seal (Fig. D) E = 1/4" Male Face Seal (Fig. D) F = 1/4" Male Face Seal (Fig. C) G = 1/4" Male Face Seal (Fig. B) H = 1/4" Female Face Seal (Fig. D)	I = 1/4" Female Face Seal (Fig. C) J = 1/4" Female Face Seal (Fig. B) K = 1/4" Fixed Male Face Seal (Fig. B) L = 1/4" Fixed Male Face Seal (Fig. C) M = 1/4" Fixed Male Face Seal (Fig. D) N = 1/4" Female NPT Thread (Fig. B) O = 1/4" Female NPT Thread (Fig. C) P = 1/4" Female NPT Thread (Fig. D)
<b>8 Outlet Pressure Range</b>	0 = 1 ~ 30 PSIG 1 = 1 ~ 60 PSIG	2 = 1 ~ 100 PSIG 3 = 1 ~ 150 PSIG
<b>9 Maximum Range of Outlet Gauge</b>	0 = 30 PSIG 1 = 60 PSIG 2 = 100 PSIG	3 = 160 PSIG 4 = 200 PSIG Blank = No Gauge
<b>10 User Option</b>	Customization (※Standard : Blank)	
<b>11 Grade</b>	Blank = BA Standard (10 Ra μinch) P = Electropolishing (5 Ra μinch) PX = Electropolishing (5 Ra μinch)	

## GAUGE PORT INFORMATION

1/4" INTERNAL FACE SEAL    1/4" FEMALE NPT THREAD    1/4" MALE FACE SEAL    1/4" FEMALE FACE SEAL    1/4" FIXED MALE FACE SEAL



## PORT CONFIGURATION

