

REGULATORS |

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

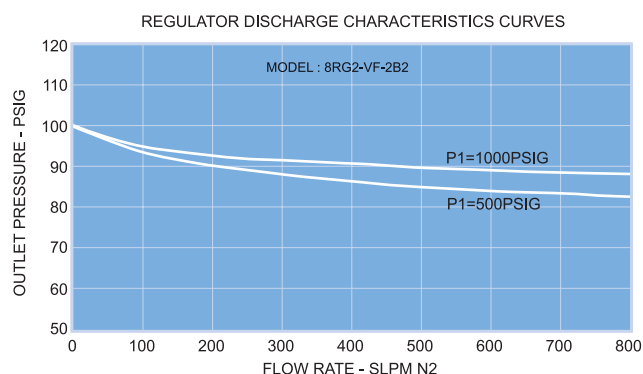
Materials in Contact with Media

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

Other Parameters

Flow coefficient		Cv = 0.5
Certified maximum inboard leak rate		1 x 10 ⁻⁹ atm cc / sec He
Internal surface finish		10Ra or 5Ra microinch (.25 or .13 micrometer)
Operating temperature	PFA seat	-15°F to + 159.8°F (-26°C to +71°C)
	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)

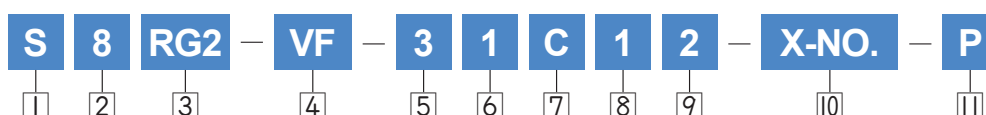
FLOW CURVES



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

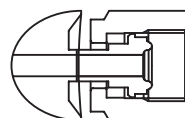
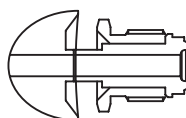
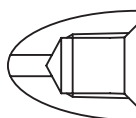
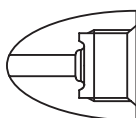
ORDERING INFORMATION



1 Material	S = 316L Stainless steel D = 316L Stainless steel VAR	
2 Connection Size	6 = 3/8" 8 = 1/2"	
3 Product	RG2 Series	
4 Connection Type	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
5 Maximum Inlet Pressure	1 = 3500 PSIG 2 = 1000 PSIG	3 = 600 PSIG
6 Maximum Range of Inlet Gauge	1 = 600 PSIG 2 = 1000 PSIG 3 = 3500 PSIG	4 = 4000 PSIG Blank = No Gauge
7 Gauge Port Configuration	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)
8 Outlet Pressure Range	0 = 1 ~ 30 PSIG 1 = 1 ~ 60 PSIG	2 = 1 ~ 100 PSIG 3 = 1 ~ 150 PSIG
9 Maximum Range of Outlet Gauge	0 = 30 PSIG 1 = 60 PSIG 2 = 100 PSIG	3 = 160 PSIG 4 = 200 PSIG Blank = No Gauge
10 User Option	Customization (*Standard : Blank)	
11 Grade	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

