

# PRG1 SERIES (TIED DIAPHRAGM)



## POSITIVE SHUTOFF SEAL REGULATOR

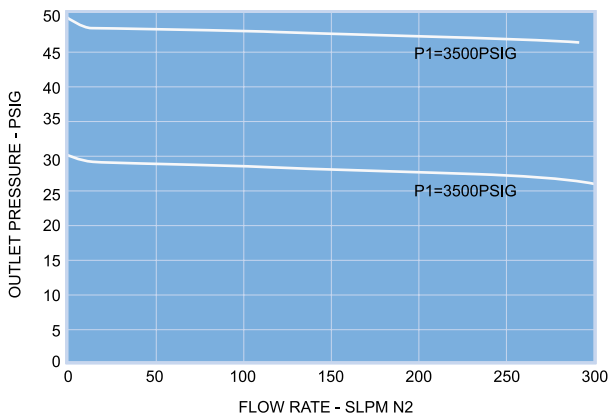
- No internal springs and threadless design to minimize particle entrapment areas.
- Positive shutoff seal reduces pressure creep.
- Metal to metal diaphragm seal enhances leak tight integrity.
- All internal surfaces are finished with 10Ra or 5Ra to ensure minimal particle generation and entrapment. 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

Pressure Rating		
Max. rated inlet pressure	600, 1000, 3500 PSIG	
Outlet pressure ranges	1-30, 1-60, 1-100 or 1-150 PSIG	
Design proof pressure	150% of Maximum rated pressure	
Materials in Contact with Media		
Body	316L Stainless Steel / Hastelloy C-22	
Seat	PCTFE (PI optional for 3,500 PSIG model only)	
Diaphragm	Hastelloy C-22	
Gas contact parts	316L Stainless Steel / Hastelloy C-22	
Other Parameters		
Flow coefficient	3500 PSIG Inlet : Cv = 0.06 600, 1000 PSIG Inlet : Cv = 0.15	
Operating temperature	PCTFE seat	-40°F to +65°C
	PI seat	-26°F to +149°C
Inboard leak rate	1 x 10 <sup>-9</sup> atm cc / sec He	
Weight (w/o gauges)	2.0lbs. (0.9kg)	

## FLOW CURVES

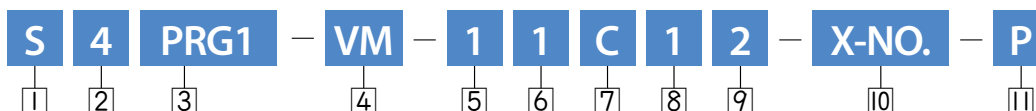
DISCHARGE CHARACTERISTICS CURVES



## MATERIAL

Wetted Parts	PRG1 Series
Body	316L Stainless Steel
Main Valve	316L Stainless Steel Hastelloy C-22
Seat	PCTFE (Option : PI)
Diaphragm	Hastelloy C-22

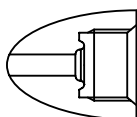
## ORDERING INFORMATION



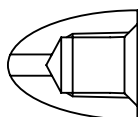
1 Material	S = 316L Stainless steel	SH = 316L Stainless steel with Hastelloy internals DH = 316L Stainless steel VAR with Hastelloy internals
2 Connection Size	4 = 1/4" 6 = 3/8"	8 = 1/2"
3 Product	PRG1 Series	
4 Connection Type	NF = Female NPT Thread TW = Tube Butt Weld	VF = Female Type Face Seal VM = 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 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 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

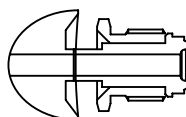
1/4" INTERNAL FACE SEAL



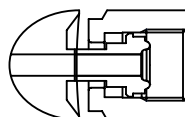
1/4" FEMALE NPT THREAD



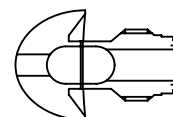
1/4" MALE FACE SEAL



1/4" FEMALE FACE SEAL



1/4" FIXED MALE FACE SEAL



## PORT CONFIGURATION

