

HFRG3 SERIES



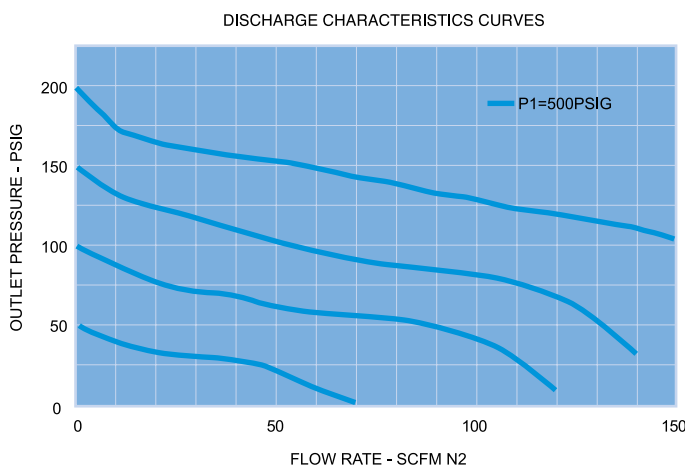
HIGH FLOW REGULATOR

- A regulator for the control of high purity, corrosive, toxic, flammable and inert gases at high flow rate.
- Metal to metal diaphragm seals provide enhances leak tight integrity.
- Every step of assembly, welding, testing and final cleaning finished in Class 100 Cleanrooms.

SPECIFICATIONS

| Pressure (Rating per criteria of ANSI/ASME B31.3) | |
|---|---------------------------------------|
| Max. rated inlet pressure | 500 PSIG |
| Outlet pressure ranges | 1-25, 1-50, 1-100, 1-150 & 1-200 PSIG |
| Design proof pressure | 150% of Maximum rated pressure |
| Materials in Contact with Media | |
| Body | 316L Stainless Steel |
| Seat | PFA |
| Diaphragm | Hastelloy C-22 |
| Gas contact parts | 316L Stainless Steel, PTFE |
| Other Parameters | |
| Flow coefficient | Cv = 1.0 |
| Certified maximum inboard leak rate | 1 x 10 ⁻⁹ atm cc / sec He |
| Internal Surface Finish | 5 Ra or 10 Ra microinch |
| Operating temperature | -15°F to 165°F (-26°C to 74°C) |
| Weight (w/o gauges) | 3.7lbs. (1.7kg) |

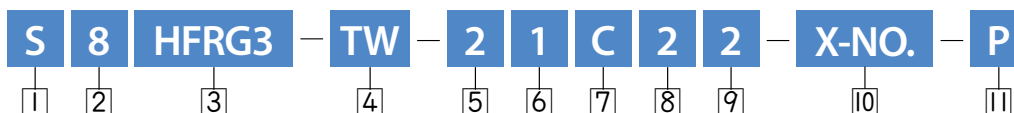
FLOW CURVES



MATERIAL

| Wetted Parts | v |
|--------------|----------------------|
| Body | 316L Stainless Steel |
| Seat Holder | 316L Stainless Steel |
| Main Valve | 316L Stainless Steel |
| Valve Spring | 316 Stainless Steel |
| Seat | PFA |
| Diaphragm | Hastelloy C-22 |

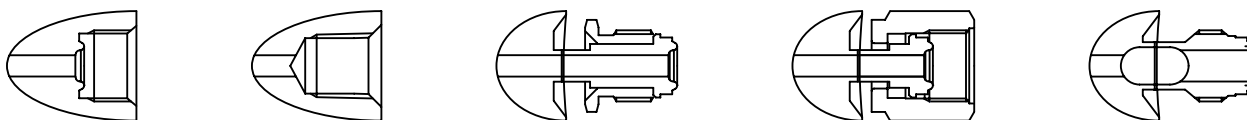
ORDERING INFORMATION



| | | |
|---------------------------------|---|---|
| 1 Material | S = 316L Stainless steel | D = 316L Stainless steel VAR |
| 2 Connection Size | 6 = 3/8" (NPT) 8 = 1/2" (NPT) 12 = 3/4" (TUBE) 8 = 1/2" (TUBE) | 16 = 1" (TUBE) 15A 20A 25A |
| 3 Product | HFRG3 SERIES | |
| 4 Connection Type | NF = Female NPT Thread TW = Tube Butt Weld VF = Female Type Face Seal | VM = Male Type Face Seal SW = Compression Lok Fitting |
| 5 Maximum Inlet Pressure | 2 = 500PSIG | |
| 6 Maximum Range of Inlet Gauge | 1 = 600 PSIG | Blank = No Gauge |
| 7 Gauge Port Configuration | A = NONE (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 ~ 25PSIG 1 = 1 ~ 50PSIG 2 = 1 ~ 100PSI | 3 = 1 ~ 150PSIG 4 = 1 ~ 200PSIG |
| 9 Maximum Range of Outlet Gauge | 0 = 30 PSIG 1 = 60 PSIG 2 = 160 PSIG 3 = 200 PSIG | 4 = 300 PSIG 5 = 100 PSIG Blank = No Gauge |
| 10 User Option | Customization (*Standard:Blank) | |
| 11 Grade | Blank = BA Standard (10 Ra pinch) | P = Electropolishing (5 Ra pinch) |

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

