

# FRN1200 Series

High-Flow, Single Stage Tied  
Diaphragm Pressure Reducing Regulator



## Precise Control, High Flow Performance

The FRN1200 Series pressure reducing regulator offers high-flow capability with an inlet pressure up to 1700 psig and is an excellent choice for general point of use bulk gas applications.

The large, tied Hastelloy C-22® diaphragm provides stable control over its full operational range while providing a robust seal for hazardous gas applications.



## Contact Information: Product Features:

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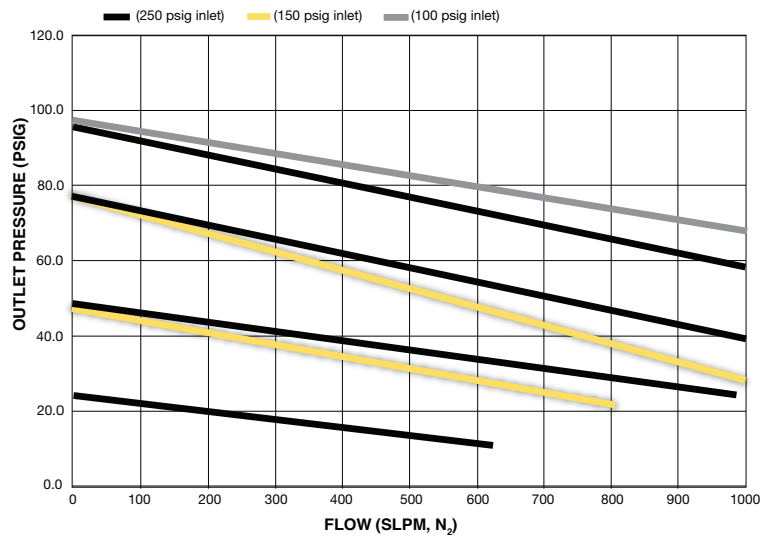
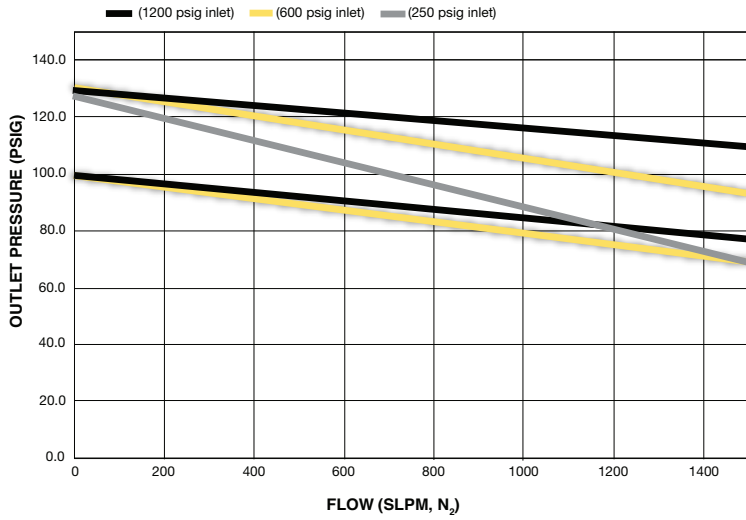
- 316L stainless steel body
- Metal-to-metal diaphragm seal
- Cleaned for oxygen service
- Passivated
- Tied diaphragm design
- Hastelloy C-22® diaphragm
- Flows up to 1200 slpm (42 scfm)
- Reliable leak tight performance



ENGINEERING YOUR SUCCESS.

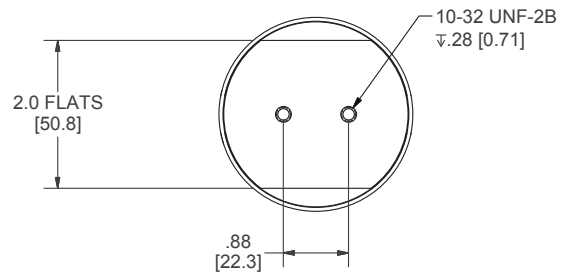
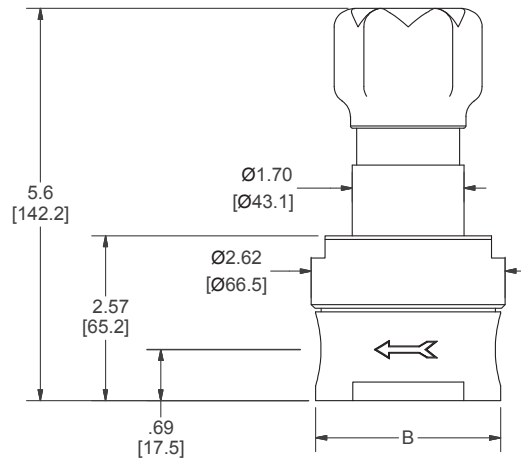
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## Flow Curves



Additional flow curves available upon request

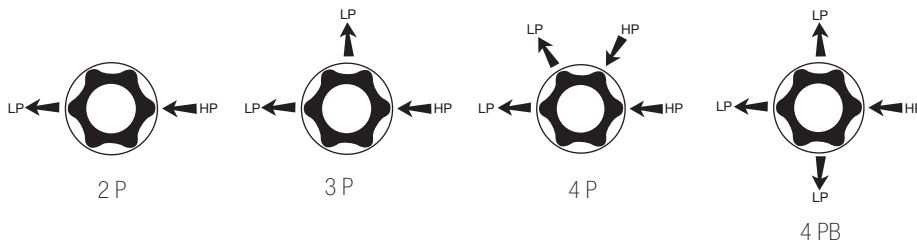
## Dimensional Drawings



All dimensions in inches. Metric dimensions are for reference only.

## Porting Configurations

Top View



Safety Guide and Installation and Operating Instructions available at  
[www.parker.com/veriflo](http://www.parker.com/veriflo)

# FRN1200 Series

## Ordering Information

Build an FRN1200 Series regulator by replacing the numbered symbols with an option from the corresponding tables below.

Contact factory for most up to date lead time information.

**Blue = Configurations that have selections in blue may have an extended lead time and a minimum order quantity.**

Sample: **FRN1215 H S 12 K 4P X X 88 PM**  
Finished Order: **FRN1215HS12K2PXX88PM**

### 1 Basic Series

FRN1203= 1 - 30 psig  
FRN1206= 5 - 60 psig  
FRN1210= 10 - 100 psig  
FRN1215= 15 - 150 psig

### 2 Source Pressure Range

H = 0 - 1700 psig  
L = 0 - 300 psig

*\* For low inlet pressure applications below 300 psig, specify "L" model for improved droop performance.*

### 3 Body Material

S = 316L SS

### 4 Flow Capacity

12 = 1.2 Cv

### 5 Seat Material

K = PCTFE  
V = Polyimide

### 6 Porting\*

2P = 2 Ports  
4P = 4 Ports  
4PB = 4 Ports

*\* Refer to the Regulator Porting Guide, 25000156, for additional porting*

### 7 Outlet Gauge\*

X = No Gauge  
03 = 0 - 30 psig  
OL = 0 - 60 psig  
01 = 0 - 100 psig  
2 = 0 - 200 psig  
4 = 0 - 400 psig

*\* Only include with "3P" or "4P" body configurations.*

### 8 Inlet Gauge\*

X = No Gauge  
01 = 0 - 100 psig  
4 = 0 - 400 psig  
10 = 0 - 1000 psig  
20 = 0 - 2000 psig  
30 = 0 - 3000 psig  
40 = 0 - 4000 psig

*\* Only include with "4P" body configuration.*

### 9 Port Style\*

4 = 1/4" NPT Female  
6 = 3/8" NPT Female  
8 = 1/2" NPT Female  
4T = 1/4" A-LOK®  
6T = 3/8" A-LOK®  
8T = 1/2" A-LOK®

*\* 1/4" FNPT Gauge Ports are Standard  
Any other gauge port configuration may have an extended lead time.*

### 10 Optional Features

This section can have multiple options

Blank = None  
PM = Panel Mount

# FRN1200 Series

## Specifications

Wetted Materials of Construction	
Body	316L SS
Diaphragm	Ni-Cr-Mo alloy (Hastelloy® or equivalent)
Poppet	316 SS
Poppet Spring	Inconel®
Seat Retainer	316L SS
Seat	PCTFE (std), Polyimide
Finish	Passivated

For additional information on materials of construction, functional performance and operating conditions, please refer to Veriflo report RI.EN.RP018 .

All specifications subject to change without notice.

Hastelloy® is a registered trademark of Haynes International, Inc.  
Inconel® is a registered trademark of Special Metals Corporation

Functional Performance	
Flow Capacity (Cv)	1.2
Internal Leakage (seat)	$\leq 4 \times 10^{-8}$ scc/sec He
External Leakage (Inboard)	$\leq 2 \times 10^{-10}$ scc/sec He
Supply Pressure Effect	6.8 psig / 100 psig
Proof Pressure	2,550 psig
Burst Pressure	5100 psig

Operating Conditions	
Maximum Inlet Pressure	300 or 1700 psig <sup>2</sup>
Temperature	-40°F to 150°F (-40°C to 65°C)
Mounting	Surface (std)
	Panel (1.75 in. [44.4 mm] hole required)

1. Internal volume includes end connections.
2. Pressure rating based on nominal temperature conditions. Refer to Veriflo report RI.EN.RP018 for specific information regarding regulator performance at temperature.

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