

High Flow Pressure Reducing Regulator

PL Series

PL series, single-stage diaphragm construction, stainless steel diaphragm pressure transmission, output stability, are mainly used in the low pressure gas systems with high flow.

Features

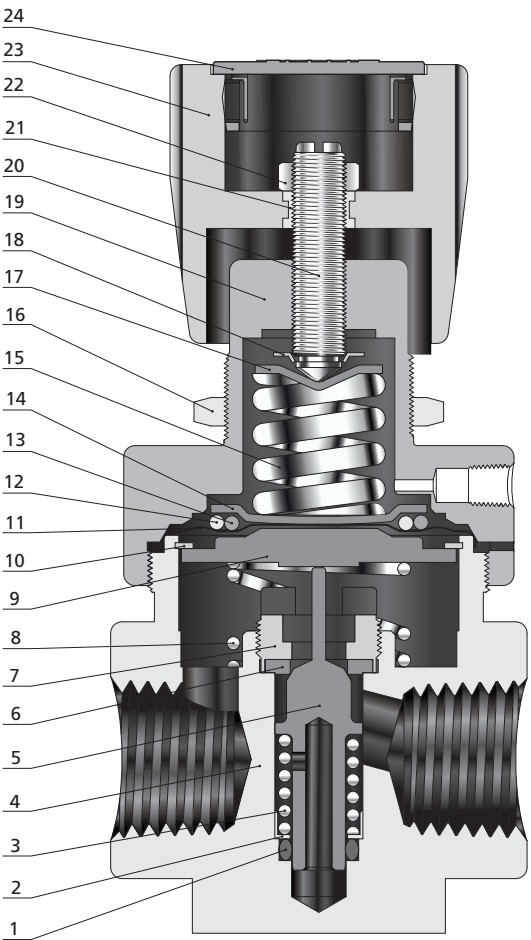
- Low cost stainless steel body
- Large diameter convoluted diaphragm for increased pressure sensitivity
- Metal-to-metal diaphragm seal
- Large flow, minimal droop
- Panel mounting available

Technical Data

- Maximum inlet pressure: 500 psig
- Outlet pressure ranges: 0~15, 0~30, 0~75, 0~150 psig
- Flow coefficient (Cv): 1.8
- Working temperature: -40°F~+165°F (-40°C~+74°C)
- Leak rate:
 - Internal: Bubble-tight
 - External: $\leq 2 \times 10^{-8}$ atm · cc/sec He
- Weight: ≈ 5.95 lbs (2.7 Kg)
- Ports: Inlet, Outlet — 3/4" Female NPT
- Gauge, Relief valve — 1/4" Female NPT

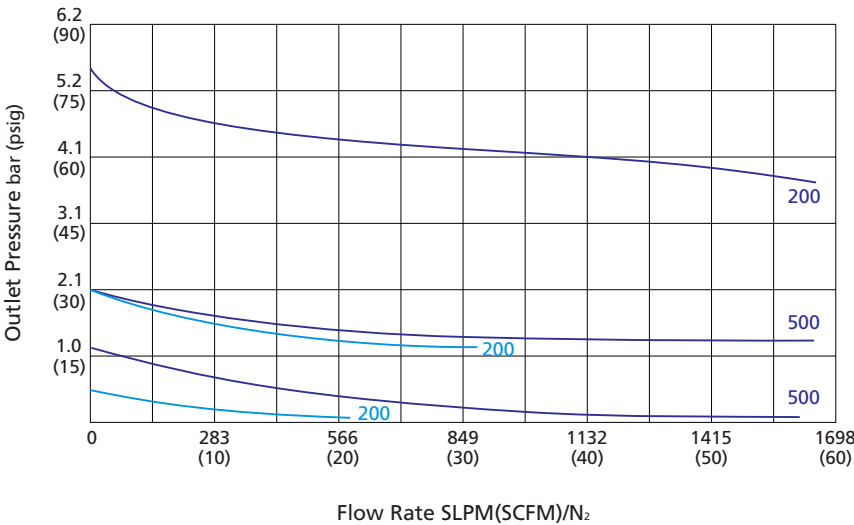


Normal Materials of Construction



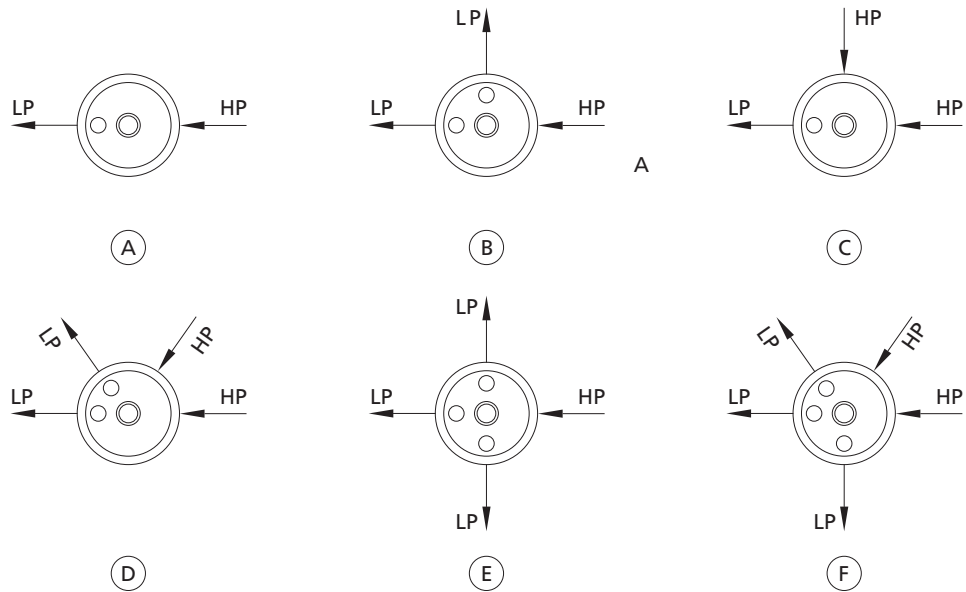
Component		Material Grade/ASTM Specification
1	Oriented ring	PTFE/D1710
2	Spring washer	316L SS/A276
3	Poppet spring	316 SS/A313
4	Body	316L SS/A479
5	Lift poppet	316L SS/A276
6	Seat	PCTFE/D1430
7	Seat retainer	316L SS/A276
8	Reset spring	316 SS/A313
9	Cushioning plate	316L SS/A276
10	Light stretch block	316 SS
11	Diaphragm	316L SS/A240
12	O-ring	PTFE/D1710
13	O-ring	PTFE/D1710
14	Stop plate	304 SS/A240
15	Range spring	Alloy
16	Mounting nut	304 SS/A276
17	Spring button	304 SS/A240
18	Lock ring	304 SS/A240
19	Bonnet	304 SS/A479
20	Stem	C36000/B16
21	Embed nut	C36000/B16
22	Stem nut	C36000/B16
23	Knob handle	ABS
24	Hole plug	ABS

Flow Charts



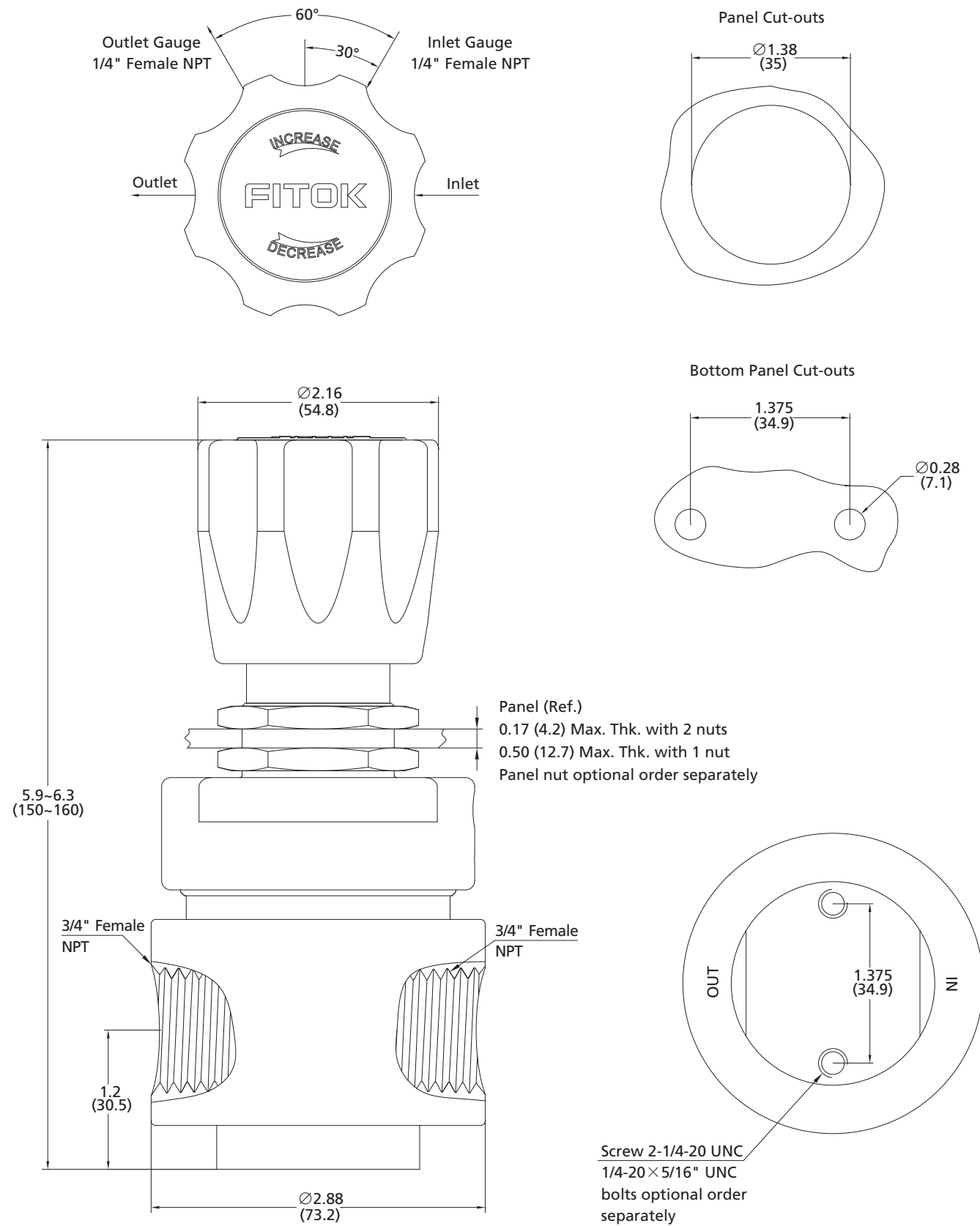
Porting Configurations

6 Types: A, B, C, D, E, F, inlet and outlet ports in horizontal direction are 3/4" Female NPT, the other ports are 1/4" Female NPT. HP: High pressure inlet LP: Low pressure outlet



Dimensions

Dimensions, in. (mm), are for reference only and are subject to change.



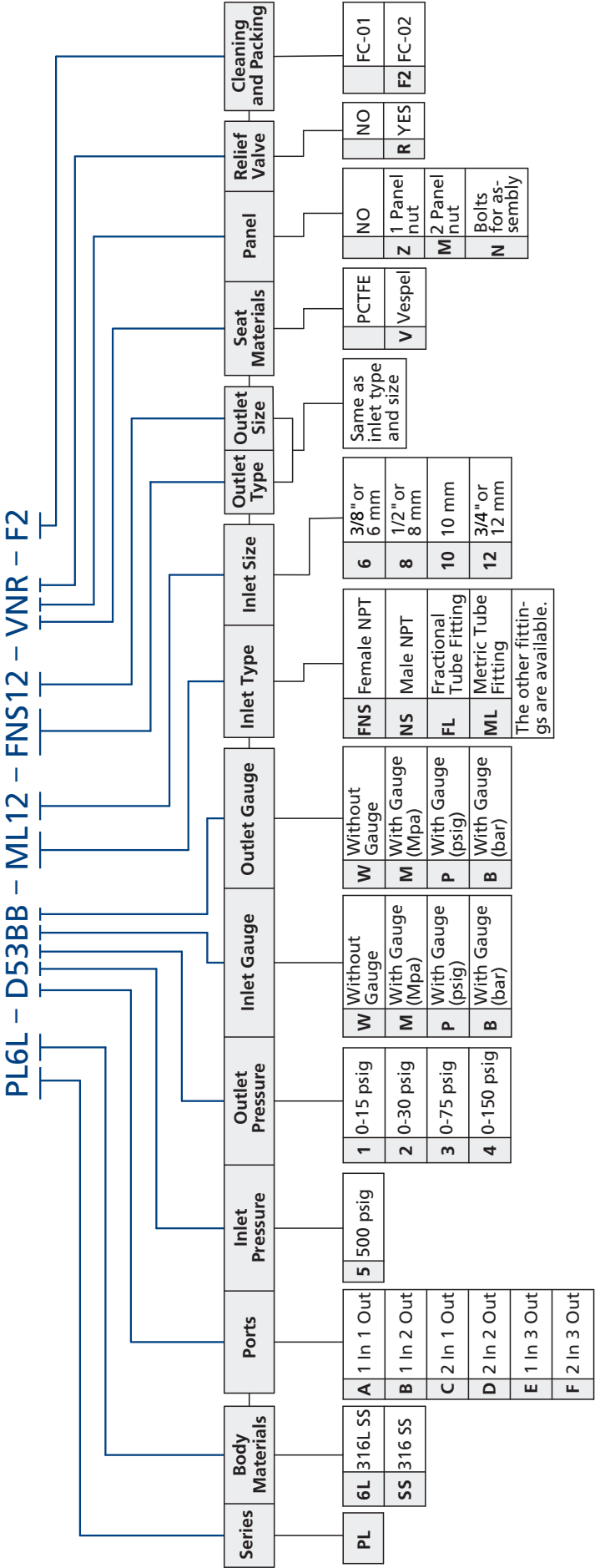
Ordering Number

Basic Ordering Information				
Basic Ordering Number	Porting Configurations	Cv	Max. Inlet Pressure (psig)	Outlet Pressure Range (psig)
PL□□-D52PP-FNS12-F2	D	1.8	500	0~30
PL□□-F53BB-FL8-R	F			0~75

Table 1.1: 1/2" NPT x 1/2" NPT, 150# Flange, 150# End Connections, 150# Flange, 150# End Connections, 150# Flange, 150# End Connections				
Basic Ordering Number	Porting Configurations	Cv	Max. Inlet Pressure (psig)	Outlet Pressure Range (psig)
PL□□-A51WW-ML18-Z	A	1.8	500	0~15
PL□□-B53WM-FNS12-N	B			0~75
PL□□-C52PW-FNS12-FL12	C			0~30
PL□□-E54WB-FNS12-R	E			0~150

Note: The others are available, please contact FITOK group or authorized agents for the others.

Part Number Description



Note:

- "Part Number Description" is used for composition rules of FITOK product model, not suitable for specific product part number selection, not random combinations;
- The ports from body are according to the porting configuration, the other port types and sizes could be chosen with adapters, for further detail, please contact FITOK group or authorized agents;
- Gauge configurations description for regulator:
Pay attention to the ordering number cause the ports from body for gauges are one part of the total number. For further detail, please read the stylebook of gauge or contact FITOK group;
- Cleaning and Packing:
FC-01: Normal industry standard cleaning and packaging.
FC-02: Special cleaning and packaging, following ASTM G93 level C.