



P5 400 Series Automatic Gas Switchover Panel
 Stainless Steel or Brass Barstock Regulator



For High Purity Gases

Description

The P5 Automatic Gas Switchover Panel is designed to provide a seamless flow of high purity (up to grade 6.0+), toxic, reactive, or corrosive gases from two sources such as cylinders or cylinder bundles without user intervention.

Manufactured in an ISO 9001:2008 certified facility, each P5 panel is 100% Helium leak checked and cleaned for oxygen service.

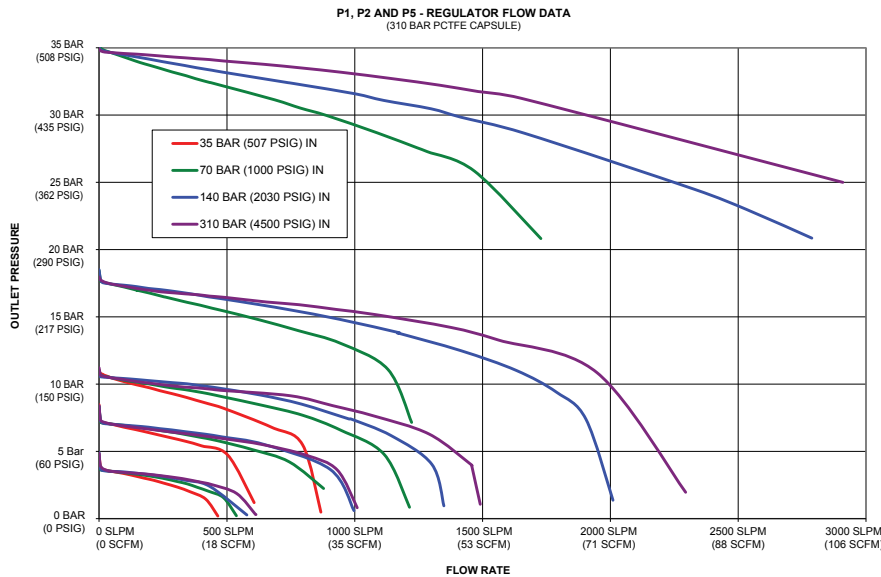
Features

- Pressure differential switchover**
Automatically change gas source without supply interruption
- Metal to metal diaphragm seals**
High leak integrity and no contamination
- 316L stainless steel convoluted diaphragms**
Durable and diffusion resistant membrane
- CAPSULE® seats with 10 micron filtration**
Long service life and reliable performance
- Stainless steel panel**
Clean appearance and easy installation
- Internal process or inert gas micro-purge**
Purity and safety maintained during cylinder changes
- Pipe away relief valve**
Safely vent gas
- Wide range of outlet pressures**
Broad range of applications

Specifications

Maximum Inlet Pressures	Regulator: 310 bar (4500 psig) Diaphragm Valve: 240 bar (3500 psig)
Operating Temperature	-40°C to 60°C (-40°F to 140°F)
Helium Leak Integrity	1x10 ⁻⁸ scc/sec
Gauges	53mm (2") diameter
CV:	0.1

Flow Data



Materials

		P5S	P5B
Regulator	Body	316L stainless steel barstock	Brass barstock
	Bonnet	Chrome-plated brass barstock	Chrome-plated brass barstock
	Seat	PCTFE	PCTFE
	Filter	10 micron 316L stainless steel	10 micron sintered bronze
	Diaphragm	316L stainless steel	316L stainless steel
Diaphragm Valves (Optional)	Body	316L stainless steel barstock	Brass barstock
	Diaphragms	Elgiloy®	Elgiloy
	Seat	PCTFE	PCTFE
	Seals	Metal to metal	Metal to metal
Needle Valves (Optional)	Body	316L stainless steel barstock	Brass barstock
	Stem	316L stainless steel	316L stainless steel
	Packing	Glass-filled PTFE	Glass-filled PTFE
Gauges	Case	Stainless steel	Chrome-plated brass
	Stem	316L stainless steel	Nickel-plated brass
	Bourdon tube	316L stainless steel	Copper alloy
Pipe Fittings		316L stainless steel	Brass
Tube Fittings		316L stainless steel	316L stainless steel
Panel		14 gauge 304 stainless steel	14 gauge 304 stainless steel

P5 Ordering Information

P5

- 0 1 -



Materials

- B. Brass
- S. Stainless steel

Outlet Pressure

- 5 bar (70 psig) nominal*
1 bar (15 psig) optional†
- 14 bar (200 psig) nominal*
10 bar (150 psig) optional†
- 20 bar (300 psig) nominal*
17 bar (250 psig) optional†
- 35 bar (500 psig) nominal*
27 bar (400 psig) optional†

*Actual outlet pressure as much as 3 bar (45 psig) higher or lower than nominal depending on current priority and source.

†Maximum guaranteed outlet with integral line regulator option (see outlet options).

Inlet Gauge

3. 0-270 bar/ 0-4000 psig	J. 0-400 bar/ 0-6000 psig with pressure switch
4. 0-40 bar/ 0-600 psig	C. 0-28000 kPa/ 0-4000 psig
5. 0-70 bar/ 0-1000 psig	D. 0-4000 kPa/ 0-600 psig
6. 0-20 bar/ 0-300 psig	E. 0-7000 kPa/ 0-1000 psig
7. 0-27 bar/ 0-400 psig	F. 0-2000 kPa/ 0-300 psig
8. 0-400 bar/ 0-6000 psig	G. 0-2800 kPa/ 0-400 psig
A. 0-270 bar/ 0-4000 psig with pressure switch	H. 0-40000 kPa/ 0-6000 psig
B. 0-40 bar/ 0-600 psig with pressure switch	

Transducers

0. No inlet pressure transducers	C. Intrinsically safe pressure transducers with alarm
A. Standard inlet pressure transducers with alarm	D. Intrinsically safe pressure transducers without alarm
B. Standard inlet pressure transducers without alarm	

Outlet

1* or A† or L‡ or T: 1/4" NPT-F	*Includes line regulator for constant delivery pressure. Outlet from regulator.
2* or B† or M‡ or U: Outlet diaphragm valve with 1/4" NPT-F	†Includes line regulator for constant delivery pressure. Outlet from top of panel (valve shipped separately for pipeline installation where applicable).
3* or C† or N‡ or V: 1/4" compression tube fitting	*Does not include line regulator for constant delivery pressure or outlet pressure gauge. Outlet from switching assembly.
4* or D† or P‡ or W: 6mm compression tube fitting	*Does not include line regulator for constant delivery pressure. Includes outlet pressure gauge. Outlet from top of panel (valve shipped separately for pipeline installation where applicable).
5* or E† or Q‡ or X: Outlet diaphragm valve with 1/4" compression tube fitting	
6* or F† or R‡ or Y: Outlet diaphragm valve with 6mm tube fitting	

Connection

- 001. No inlet hoses (1/4" NPT-F inlet)
- CON. Cylinder connection for inlet hoses

Inlet Hoses

0. None	7. 600mm (24") tethered stainless steel core
1. 600mm (24") armored stainless steel core	8. 900mm (36") tethered stainless steel core
2. 900mm (36") armored stainless steel core	9. 1800mm (72") tethered stainless steel core
3. 1800mm (72") armored stainless steel core	A. 600mm (24") tethered Monel core
4. 600mm (24") armored Monel® core	B. 900mm (36") tethered Monel core
5. 900mm (36") armored Monel core	C. 1800mm (72") tethered Monel core
6. 1800mm (72") armored Monel core	

Inlet Assembly

0. No valve	5. Regulator isolation diaphragm valve and process purge outlet isolation needle valve with check valve (1/4" NPT-F purge outlet)
1. Regulator isolation diaphragm valve	6. Regulator isolation diaphragm valve, inert purge inlet isolation diaphragm valve, and inert purge outlet isolation diaphragm valve (1/4" NPT-F purge inlet and outlet)
2. Regulator isolation diaphragm valve and process purge outlet isolation diaphragm valve (1/4" NPT-F purge outlet)	8. Regulator isolation diaphragm valve, inert purge inlet isolation diaphragm valve, and inert purge outlet isolation diaphragm valve with check valve (1/4" NPT-F purge inlet and outlet)
3. Regulator isolation diaphragm valve and process purge outlet isolation needle valve (1/4" NPT-F purge outlet)	
4. Regulator isolation diaphragm valve and process purge outlet isolation diaphragm valve with check valve (1/4" NPT-F purge outlet)	

EXAMPLE

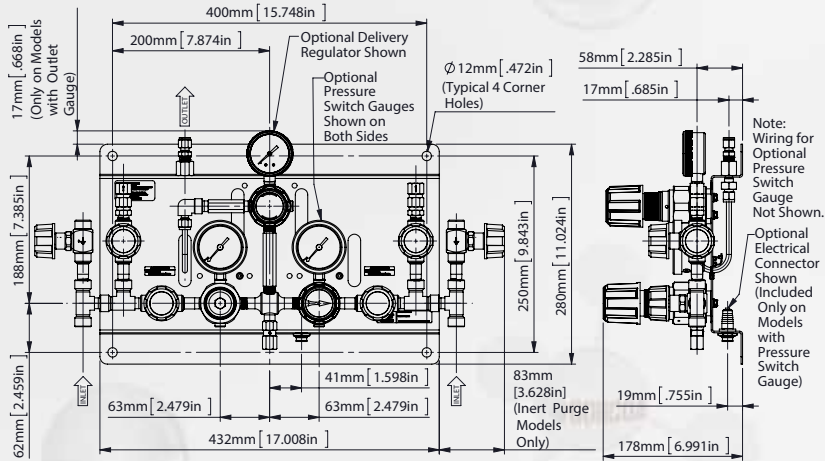
P5 S 3 3 2 6 0 - 0 1 - D 0 6 2

Stainless steel P5 assembly with an integral line regulator providing constant pressure up to a maximum of 17 bar; 0-270 bar/0-4000 psig inlet gauges; regulator inlet isolation valves and process purge isolation valves; outlet diaphragm valve with 6mm compression tube fitting from the integral line regulator; no inlet pressure transducers; and 900mm (36") length armor-jacketed 316L stainless steel flexible hoses with DIN 477 #6 cylinder connections.

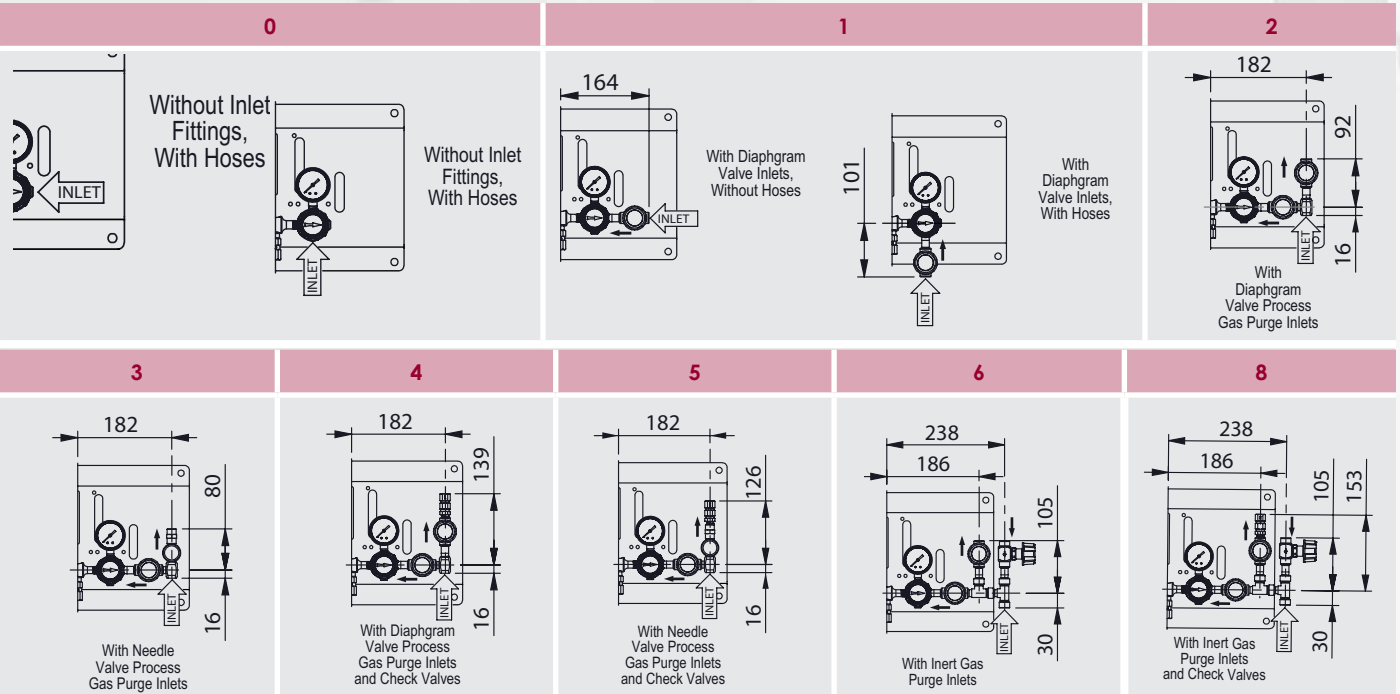
P5 Installation and Typical Configuration

TYPICAL SYSTEM - P5S1A8F0-01-0010 Shown:

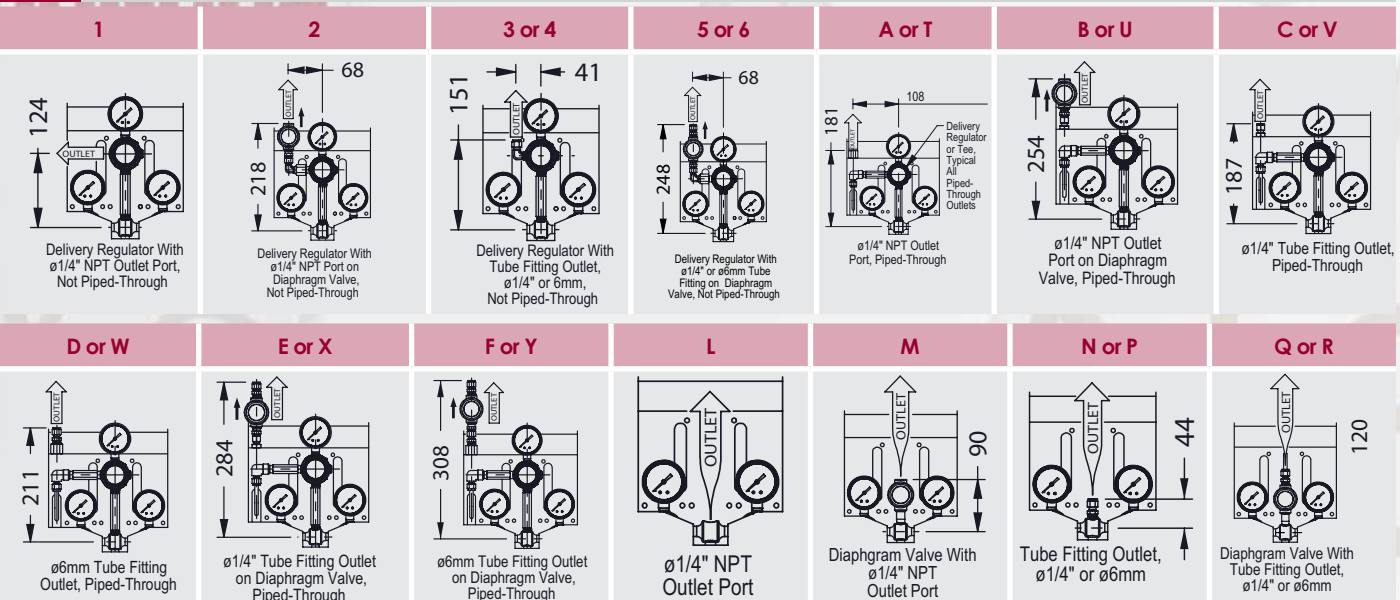
Dimensions shown are typical for all P5 series systems unless otherwise noted.
Dimensions are shown on one side only. Dimensions on opposite side are mirror image.



Inlet Assembly Options



Outlet Options



Note: All inlet options use a 1/4" NPT female port. Right-hand inlets are shown. Left-hand inlets are mirror image. All dimensions are in mm.