



P3

High Flow Central Gas Supply Panel

Stainless Steel or Brass Barstock Regulator

For High Purity Gases



Description

The P3 High Flow Central Gas Supply Panel is designed for primary pressure control from cylinder bundles of high purity (up to grade 6.0+), toxic, reactive, or corrosive gases.

Manufactured in an ISO 9001:2008 certified facility, each P3 panel is 100% Helium leak checked and cleaned for oxygen service.

Features

316L stainless steel convoluted diaphragm

Durable and diffusion resistant membrane

ISOFLOW technology

Constant delivery pressure at high flows

Stainless steel panel

Clean appearance and easy installation

Integral process purge or inert gas micro-purge options

Maintain purity and safety during cylinder changes

Pipe away relief valve

Safely vent gas

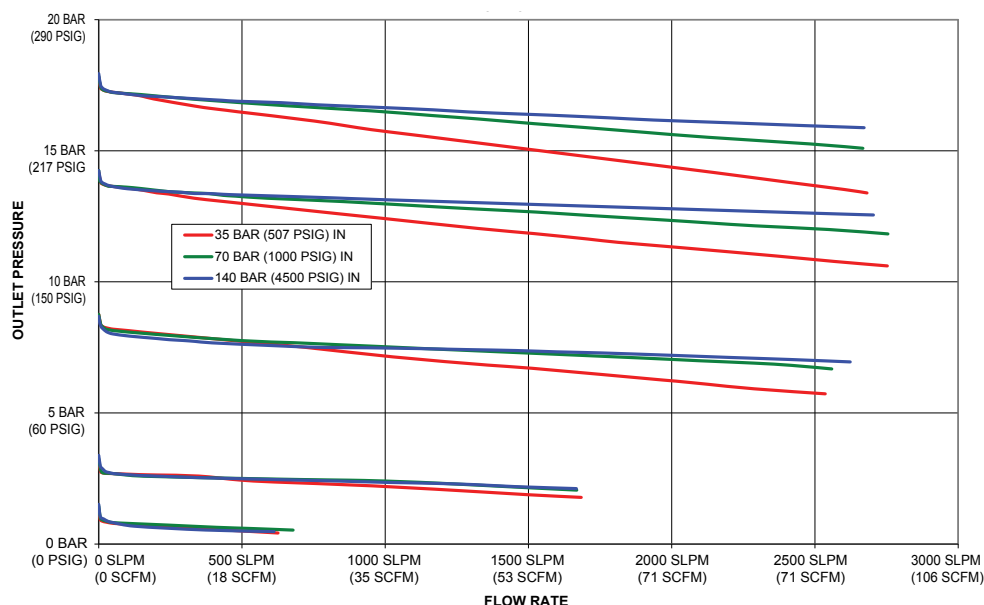
Wide range of outlet pressures

Broad range of applications

Specifications

Maximum Inlet Pressures	Regulator: 210 bar (3000 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

		P3S	P3B
Regulator	Body	316L stainless steel barstock	Brass barstock
	Bonnet	Chrome-plated die-cast zinc	Chrome-plated die-cast zinc
	Seat	PCTFE	PCTFE
	Filter	40 micron 316L stainless steel	40 micron 316L stainless steel
Diaphragm Valves (Optional)	Diaphragm	316L stainless steel	316L stainless steel
	Body	316L stainless steel	Brass or 316L stainless steel
	Diaphragms	Elgiloy®	Elgiloy
	Seat	PCTFE	PCTFE
Needle Valves (Optional)	Seals	Metal to metal	Metal to metal
	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		2mm 304 stainless steel	2mm 304 stainless steel

P3 Ordering Information

P3

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Materials	Transducer	Connection	Inlet Hoses	
B. Brass S. Stainless steel	0. No inlet pressure transducer A. Standard inlet pressure transducer with alarm B. Standard inlet pressure transducer without alarm C. Intrinsically safe pressure transducer with alarm D. Intrinsically safe pressure transducer without alarm	-001. No inlet hose (1/2" NPT-F inlet) -CON. Cylinder connection for inlet hose	0. None 1. 600mm (24") armored stainless steel core 2. 900mm (36") armored stainless steel core 3. 1800mm (72") armored stainless steel core 4. 600mm (24") armored Monel® core 5. 900mm (36") armored Monel core 6. 1800mm (72") armored Monel core	7. 600mm (24") tethered stainless steel core 8. 900mm (36") tethered stainless steel core 9. 1800mm (72") tethered stainless steel core A. 600mm (24") tethered Monel core B. 900mm (36") tethered Monel core C. 1800mm (72") tethered Monel core
Max Outlet and Gauge*		Inlet Assembly		
1. 1 bar (15 psig) -1-0-2 bar/-30-0-30 psig 2. 3 bar (40 psig) -1-0-7 bar/-30-0-100 psig 3. 8 bar (120 psig) -1-0-14 bar/-30-0-200 psig 4. 14 bar (200 psig) 0-27 bar/0-400 psig 5. 17 bar (250 psig) 0-27 bar/0-400 psig *Outlet gauge scales determined by inlet gauge		0* or K†. No valve 1* or A†. Regulator isolation diaphragm valve 2* or B†. Regulator isolation diaphragm valve and process purge outlet isolation diaphragm valve (1/4" NPT-F purge outlet) 3* or C†. Regulator isolation diaphragm valve and process purge outlet isolation needle valve (1/4" NPT-F purge outlet) 4* or D†. Regulator isolation diaphragm valve and process purge outlet isolation diaphragm valve with check valve (1/4" NPT-F purge outlet) 5* or E†. Regulator isolation diaphragm valve and process purge outlet isolation needle valve with check valve (1/4" NPT-F purge outlet) 6* or F†. 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) 8* or H†. 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) *Right side inlet orientation †Left side inlet orientation		
Inlet Gauge		Outlet		
3. 0-270 bar/0-4000 psig 4. 0-40 bar/0-600 psig 5. 0-70 bar/0-1000 psig 6. 0-20 bar/0-300 psig 7. 0-27 bar/0-400 psig A. 0-270 bar/0-4000 psig with pressure switch B. 0-40 bar/0-600 psig with pressure switch		1. 1/2" NPT-F 2. Outlet diaphragm valve with 1/2" NPT-F 3. 1/2" compression tube fitting 4. 12mm compression tube fitting 5. Outlet diaphragm valve with 1/2" compression tube fitting 6. Outlet diaphragm valve with 12mm tube fitting		
C. 0-28000 kPa/0-4000 psig D. 0-4000 kPa/0-600 psig E. 0-7000 kPa/0-1000 psig F. 0-2000 kPa/0-300 psig G. 0-2800 kPa/0-400 psig				

EXAMPLE

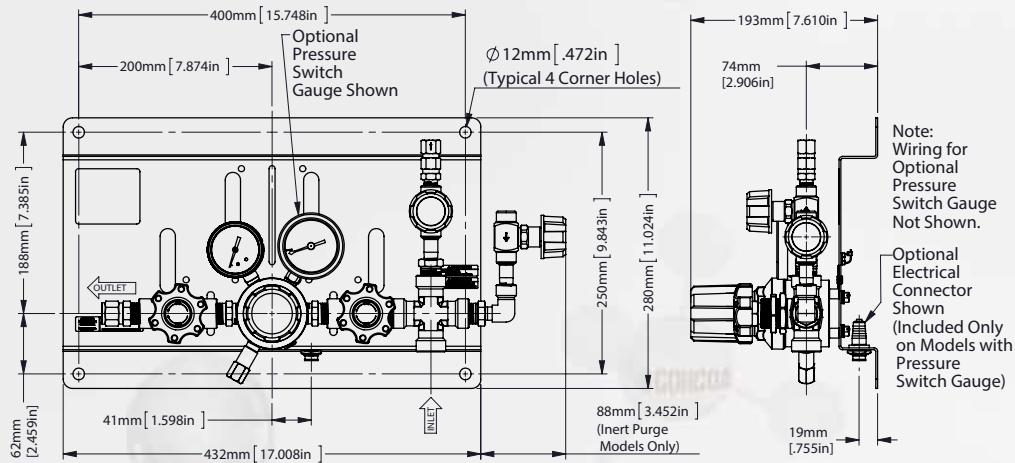
P3 S 4 3 2 4 0 - 0 1 - D 0 6 2

Stainless steel P3 assembly with 14 bar maximum outlet pressure; -1-0-14 bar/-30-0-200 psig outlet gauge; 0-270 bar/4000 psig inlet gauge; right hand inlet orientation; regulator isolation valve and process purge outlet isolation diaphragm valve; 12mm compression tube fitting outlet; no inlet pressure transducer; and a 900mm (36") length armor-jacketed 316L stainless steel core flexible hose with DIN 477 #6 cylinder connection.

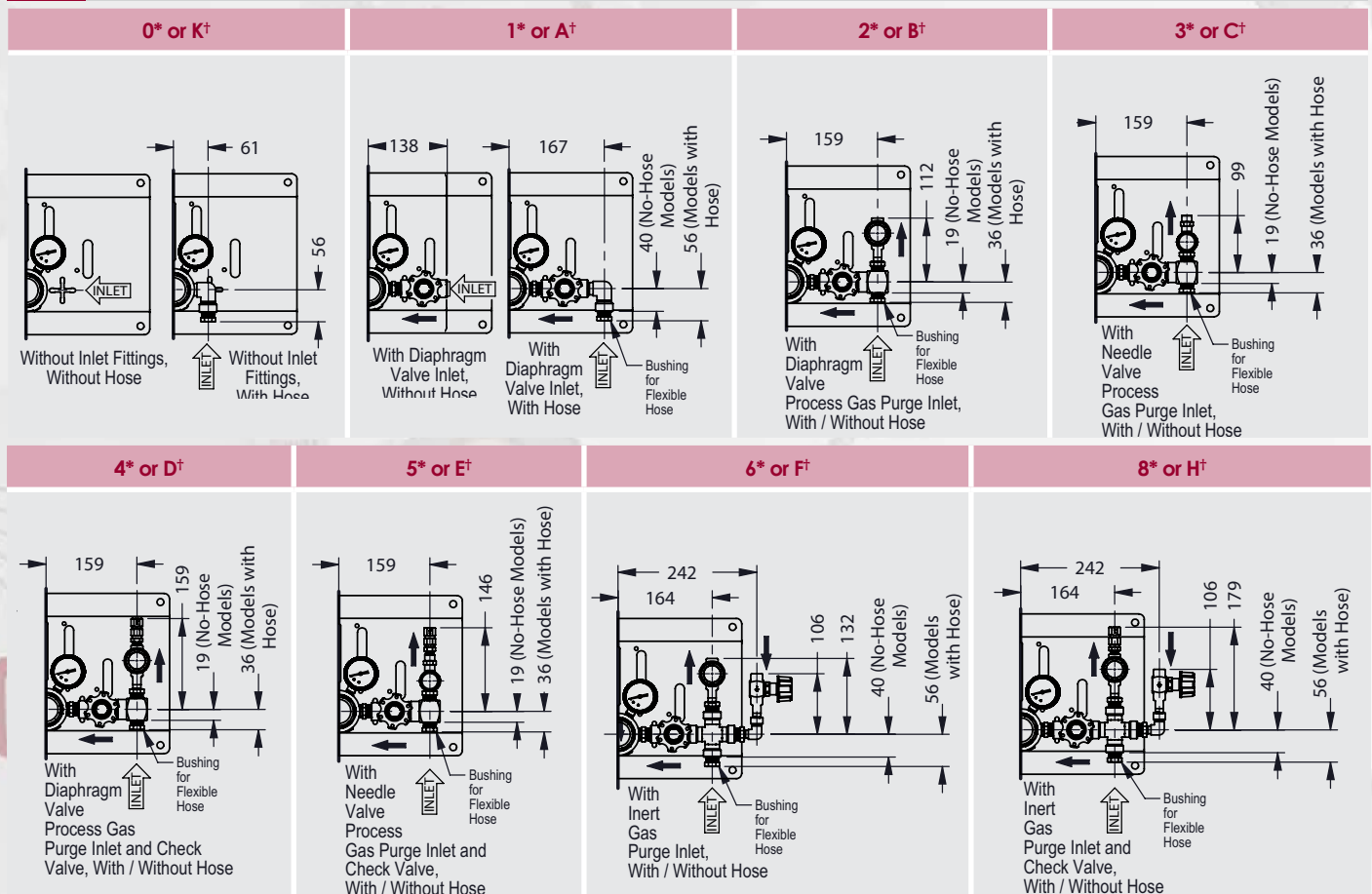
P3 Installation and Typical Configuration

TYPICAL SYSTEM - P3S1A850-01-0010 Shown:

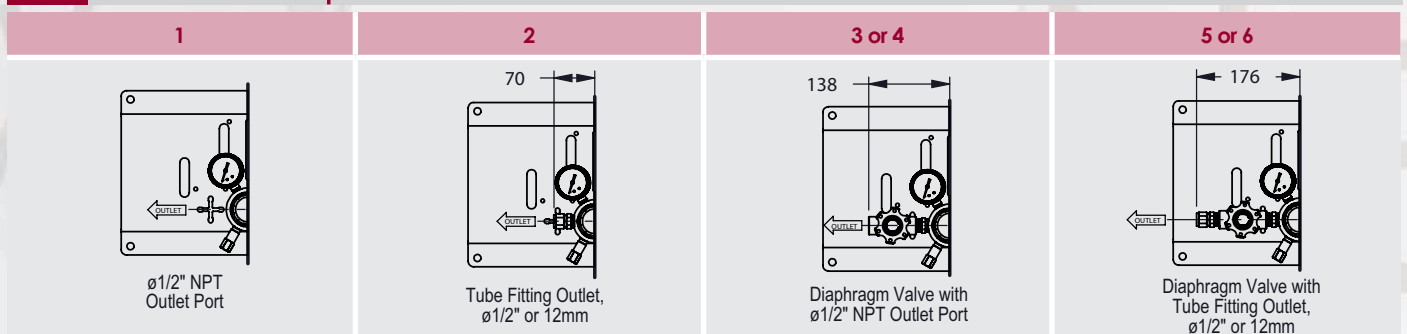
Dimensions Shown are typical for all P3 series systems unless otherwise noted.
A right-hand inlet model is shown. Left-hand inlet model dimensions are mirror image.



Inlet Assembly Options



Outlet Options



Note: Models without hose have a 1/2" NPT female port. Inlets and outlets for right-hand models are shown. Left-hand inlet models are mirror image. All dimensions are in mm.

*Right side inlet orientation †Left side inlet orientation