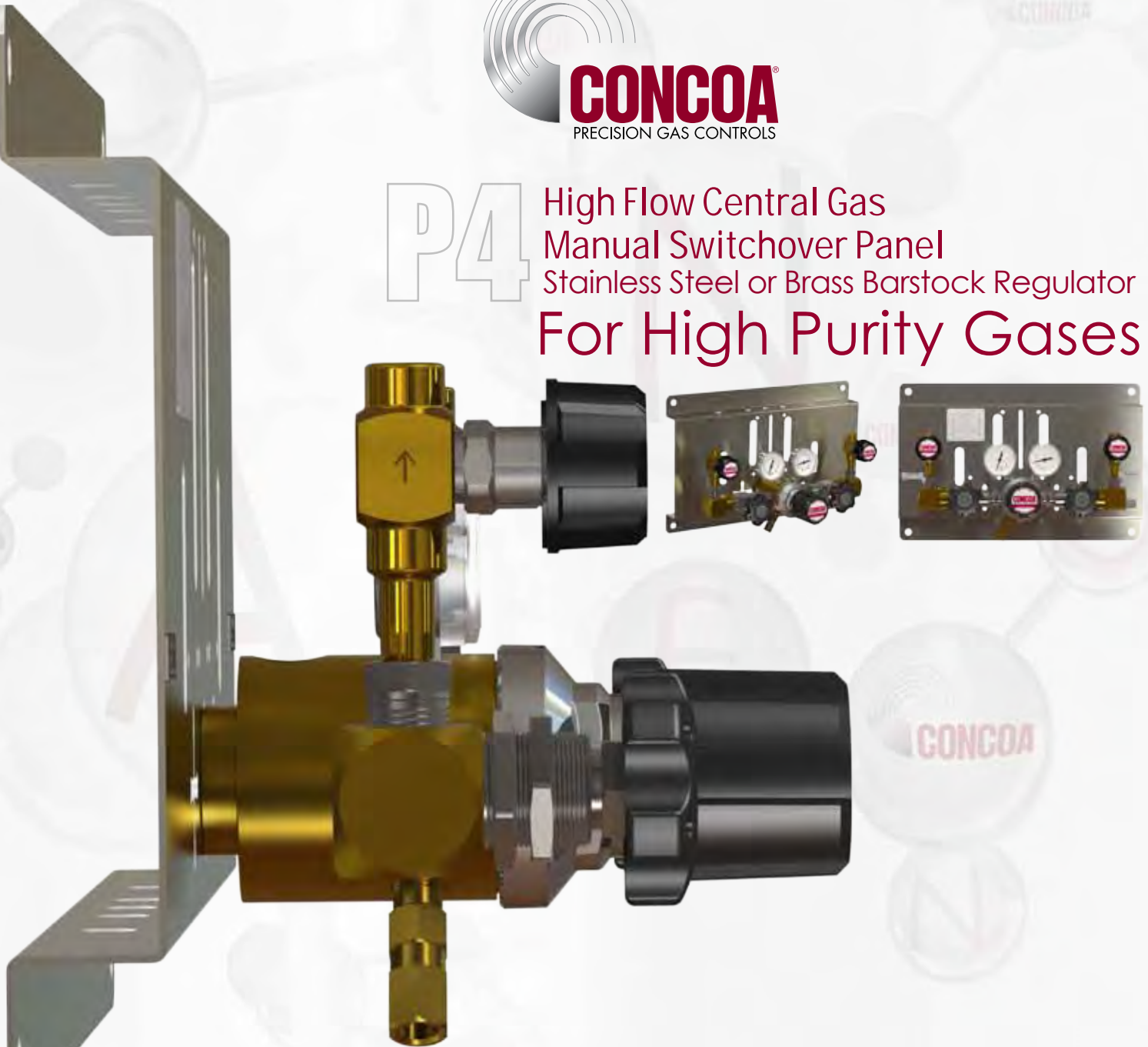




P4 High Flow Central Gas Manual Switchover Panel Stainless Steel or Brass Barstock Regulator For High Purity Gases



Description

The P4 High Flow Central Gas Supply Panel is designed for primary pressure control from two bulk sources of high purity (up to grade 6.0+), toxic, reactive, or corrosive gases such as cylinder bundles.

Manufactured in an ISO 9001:2008 certified facility, each P4 panel is 100% Helium leak checked and cleaned for oxygen service.

Features

Both right and left inlets

Manual switchover for continuous supply

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

Internal process purge or inert gas micro-purge

Maintained purity and safety during cylinder changes

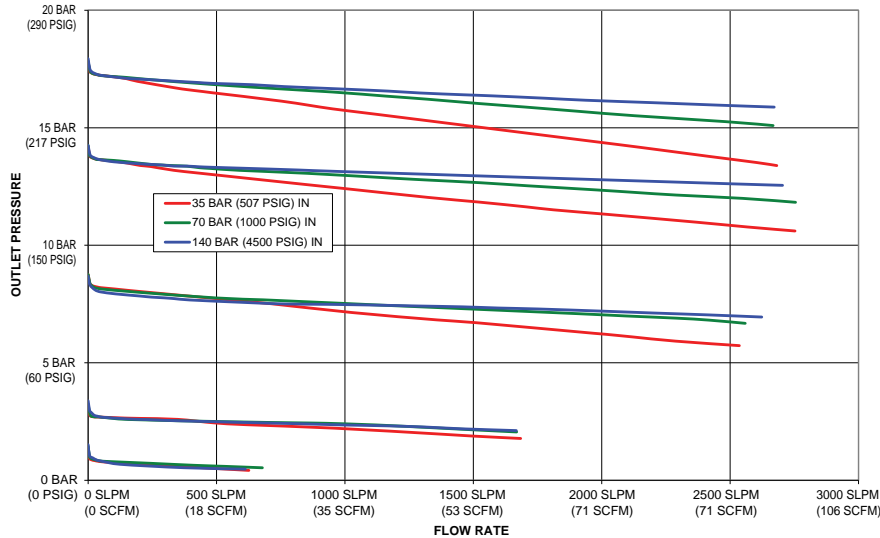
Pipe away relief valve

Safely vent gas

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

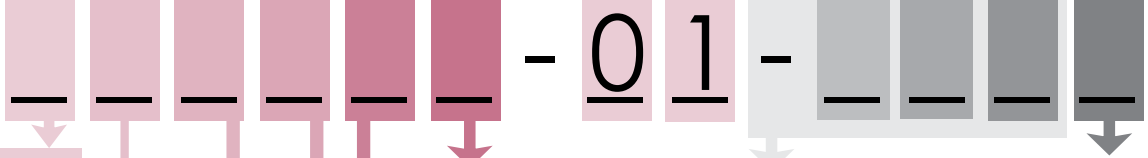


Materials

		P4S	P4B
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	316L stainless steel	316L stainless steel
Diaphragm Valves (Optional)	Body	316L stainless steel	Brass or 316L stainless steel
	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		2mm 304 stainless steel	2mm 304 stainless steel

P4 Ordering Information

P4



Materials

- B.** Brass
- S.** Stainless steel

Max Outlet and Gauge*

- 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

Transducers

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

Connection

- 001.** No inlet hose (1/2" NPT-F inlet)
- CON.** Cylinder connection for inlet hose

Inlet Hoses

- 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

Inlet Gauge

- 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
- 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

Inlet Assembly

- 1.** Regulator isolation diaphragm valve
- 2.** Regulator isolation diaphragm valve and process purge outlet isolation diaphragm valve (1/4" NPT-F purge 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)
- 5.** Regulator isolation diaphragm valve and process purge outlet isolation needle valve with check valve (1/4" NPT-F purge outlet)
- 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)
- 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)

Outlet

- 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

EXAMPLE

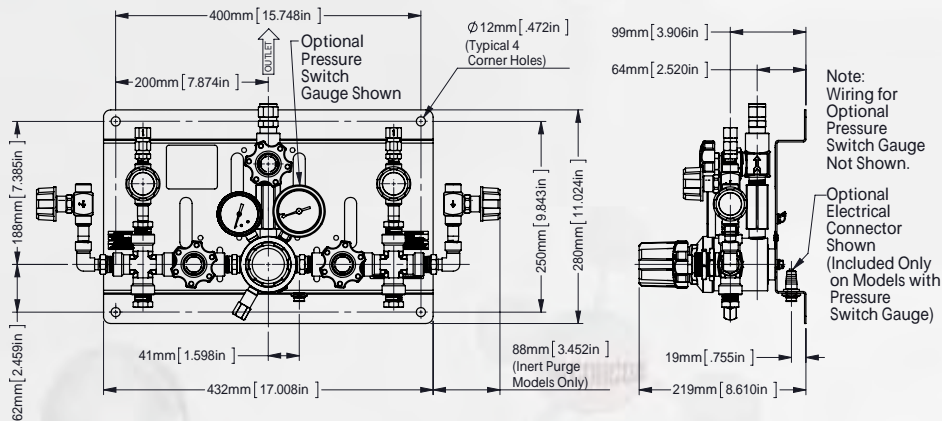
P4 S 4 3 2 4 0 - 0 1 - D 0 6 2

Stainless steel P4 assembly with 14 bar maximum outlet pressure; -1-0-14 bar/ -30-0-200 psig outlet gauge; 0-270 bar/4000 psig inlet gauge; regulator isolation valve and process purge isolation diaphragm valves; 12mm compression tube fitting outlet; no inlet pressure transducers; and 900mm (36") length armor-jacketed 316L stainless steel core flexible hoses with DIN 477 #6 cylinder connections.

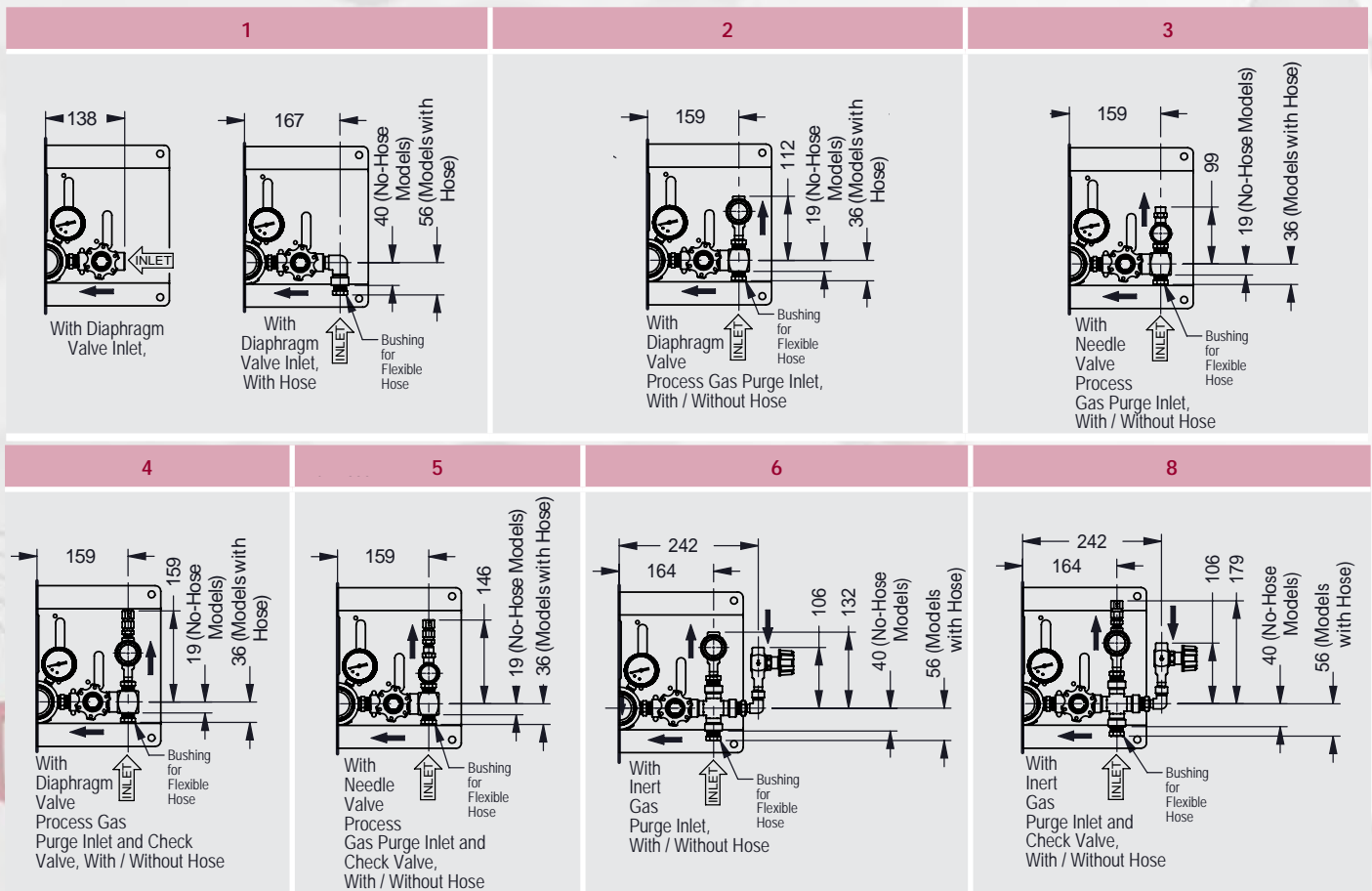
P4 Installation and Typical Configuration

TYPICAL SYSTEM - P4S1A851-01-0010 Shown:

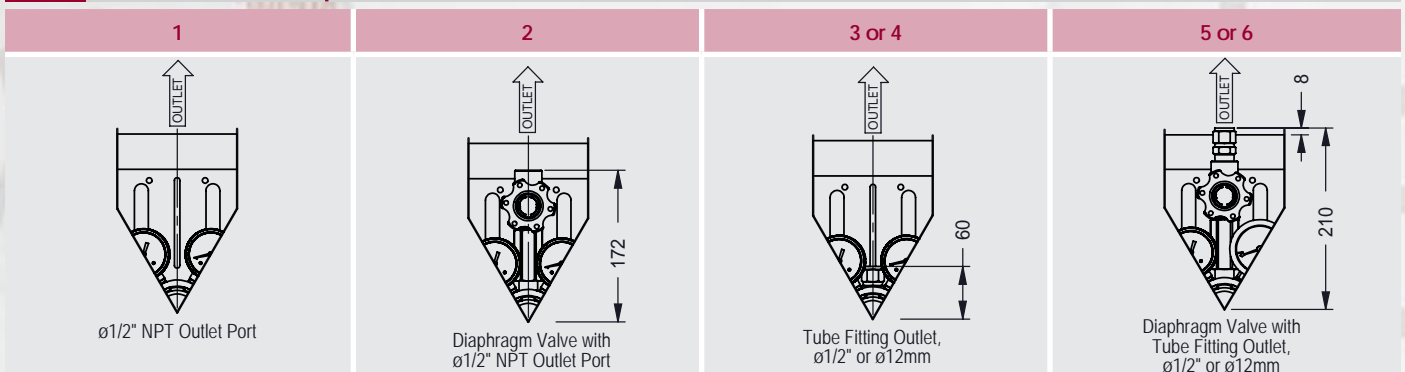
Dimensions shown are typical for all P4 series systems unless otherwise noted. Dimensions are shown on one side only. Dimensions on opposite side are mirror image.



Inlet Assembly Options



Outlet Options



Note: Models without hose have a 1/2" NPT female port. Right-hand inlets are shown. Left-hand inlets are mirror image. All dimensions are in mm.