



P1 400 Series Central Gas Supply Panel

Stainless Steel or Brass Barstock Regulator
For High Purity Gases



Description

The P1 Single Stage Central Gas Supply Panel is designed for primary pressure control from single cylinders or cylinder bundles of high purity (up to grade 6.0+), toxic, reactive, or corrosive gases.

Manufactured in an ISO 9001:2008 certified facility, each P1 panel is 100% Helium leak checked and cleaned for oxygen service.

Features

Metal to metal seals

High leak integrity and no contamination

316L stainless steel convoluted diaphragm

Durable and diffusion-resistant membrane

CAPSULE® seat with 10 micron filtration

Long service life and reliable performance

Stainless steel panel with optional piped-through outlet

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

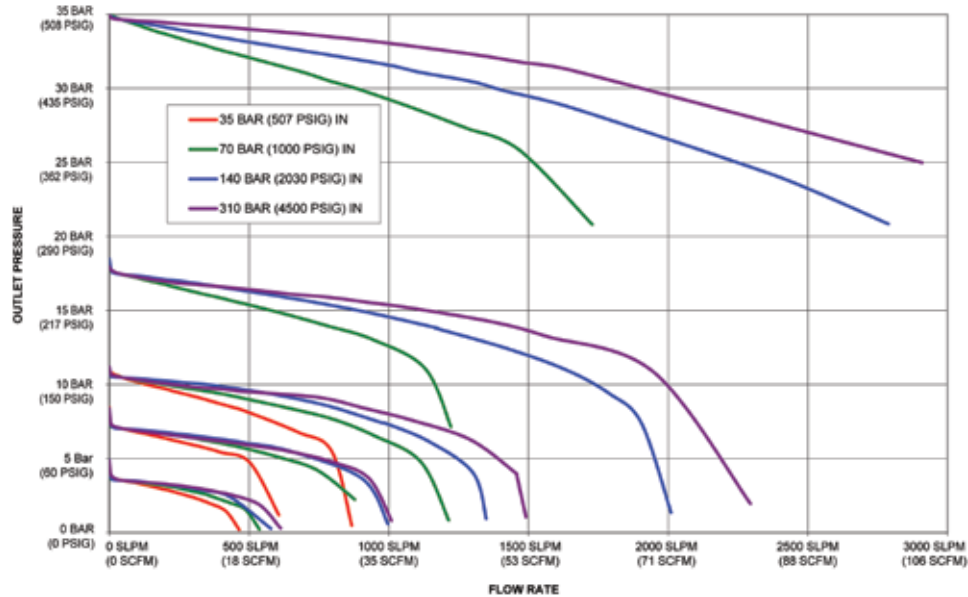
Wide range of outlet pressures

Broad range of applications

Specifications

Maximum Inlet Pressures	Regulator: 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

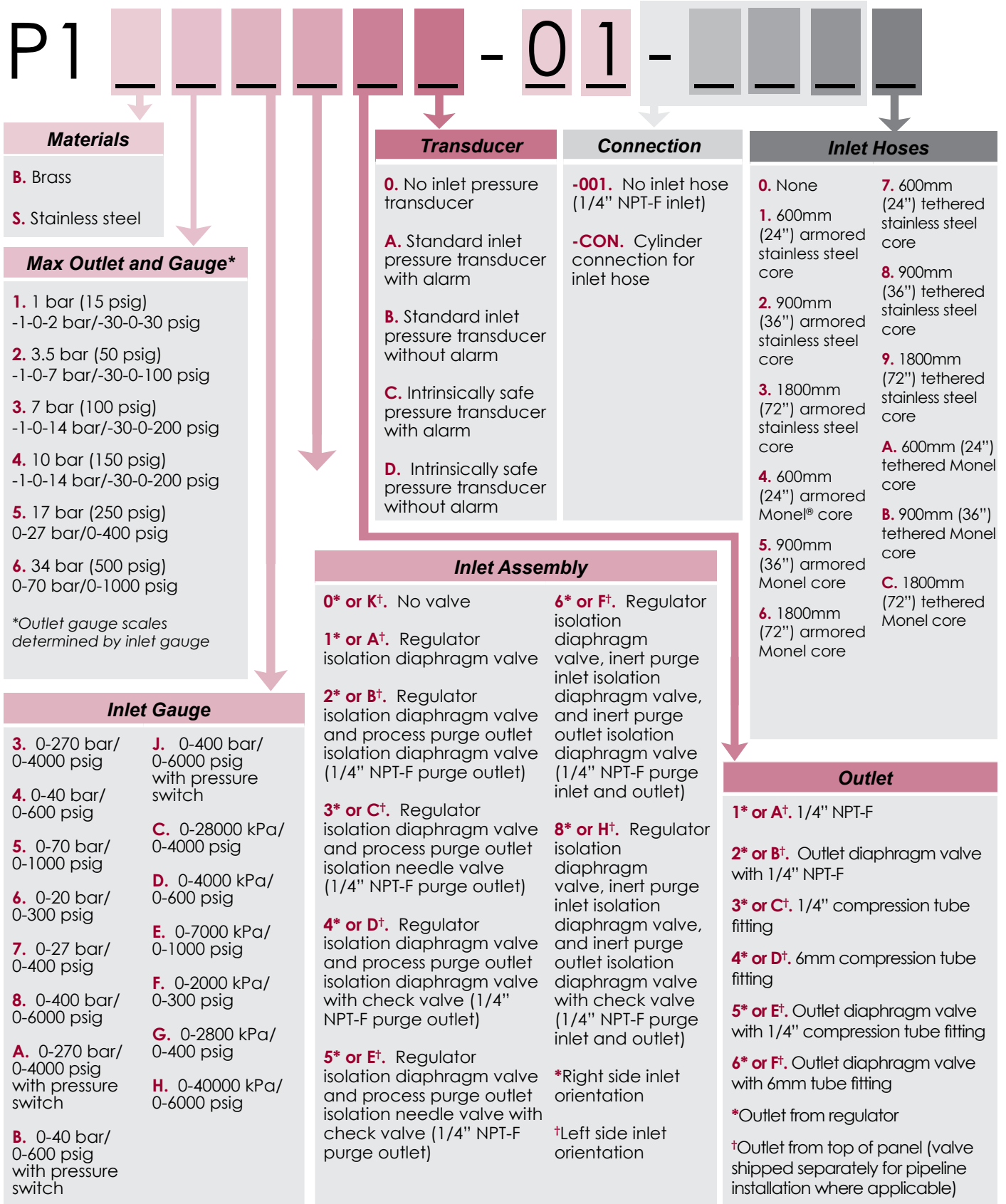


Materials

		P1S	P1B
Regulator	Body	316L stainless steel barstock	Brass barstock
	Bonnet	Chrome-plated brass barstock	Chrome-plated brass barstock
	Seat	PCTFE	PCTFE
	Filter	10 micron 316 stainless mesh	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		2mm 304 stainless steel	2mm 304 stainless steel

PI Ordering Information

P1



EXAMPLE

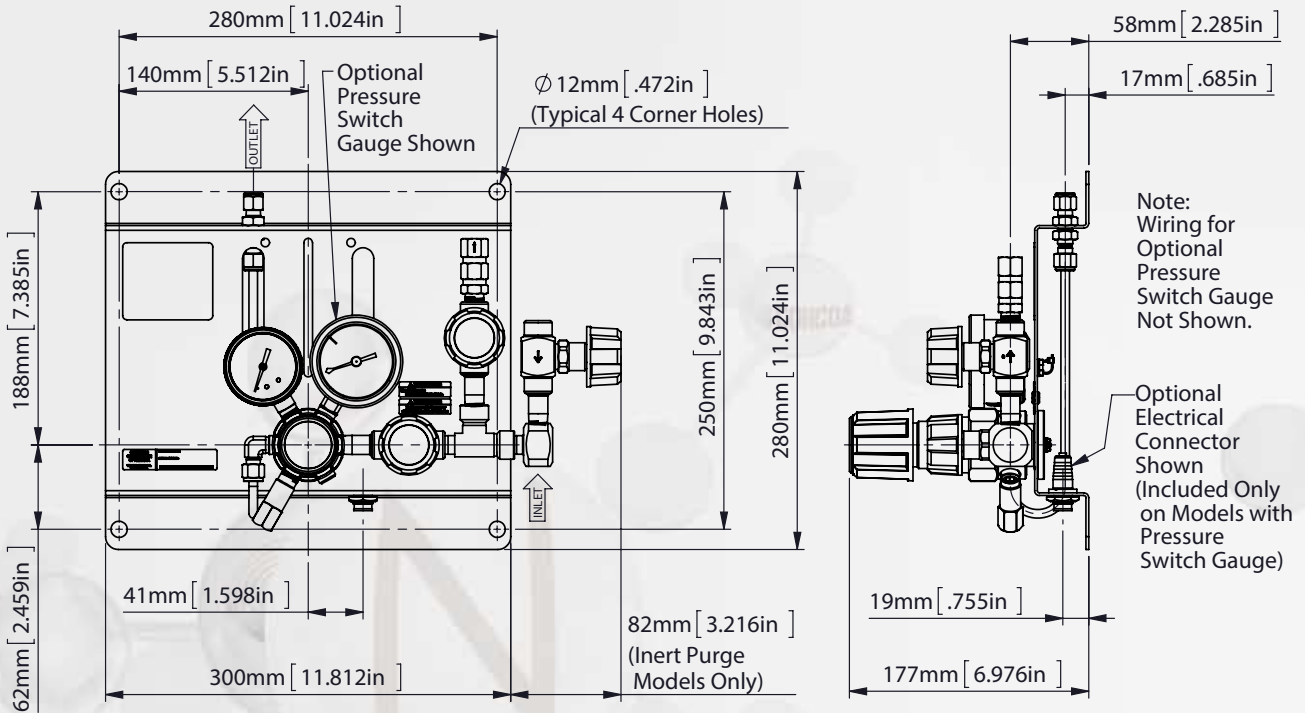
P1 S 4 3 2 D 0 - 0 1 - D 0 6 2

Stainless steel P1 assembly with 10 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 inlet isolation diaphragm valve and process purge isolation valve; 6mm compression tube fitting outlet piped through the top of the panel; no inlet pressure transducer; and a 900mm (36") length armor-jacketed 316L stainless steel core flexible hose with DIN 477 #6 cylinder connection

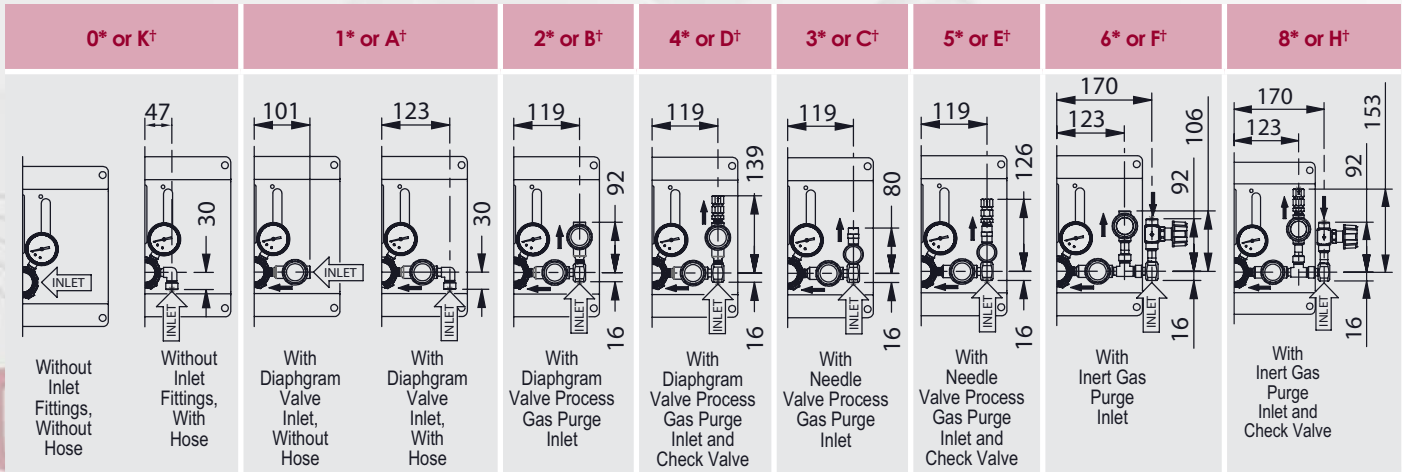
P1 Installation and Typical Configuration

TYPICAL SYSTEM - P1S1A8B1-01-0010 Shown:

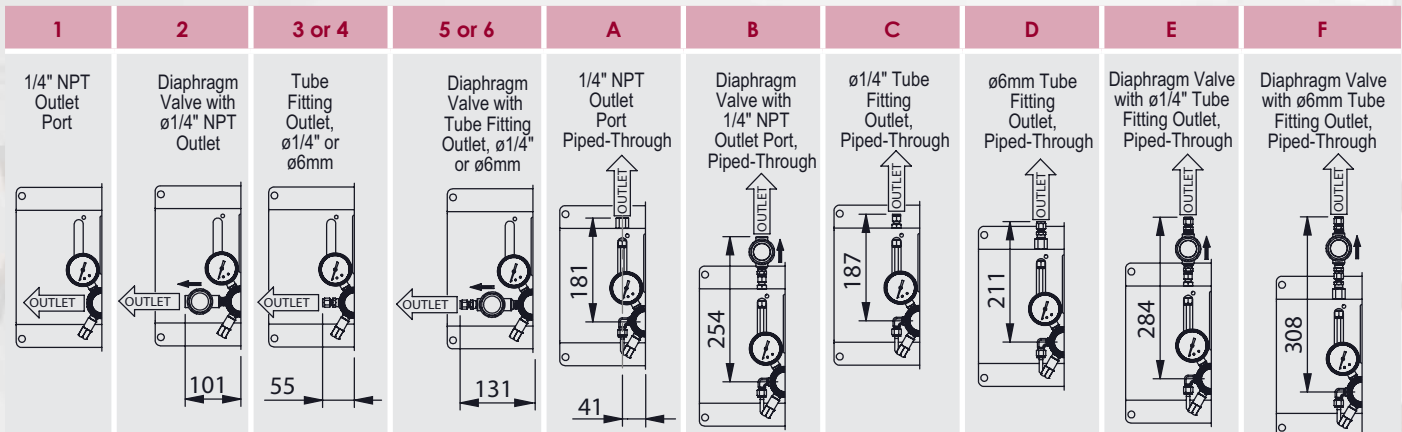
Dimensions shown are typical for all P1 series systems unless otherwise noted. A right-hand inlet model is shown. Left-hand inlet model dimensions are mirror image.



Inlet Assembly Options



Outlet Options



Note: All inlet options use a 1/4" 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