

P40 & P40 NACE Regulators



- Superior regulation characteristics
- Rugged, corrosion-resistant construction
- Economical
- Self-relieving
- Standard tapped vent
- Excellent stability and repeatability
- Soft relief seat on P40
- Several mounting options

The BelGAS General Purpose P40 & P40 NACE Regulators are reliable precision units designed for instrumentation and general purpose use in both standard environments (P40), and corrosive environments (P40 NACE). The P40 NACE complies with NACE material requirement MRO175 for sulfide stress cracking resistant metallic material for oil field equipment.

Test data for these regulators show excellent performance characteristics compared with those of similar units presently on the market. These BelGAS regulators are generally superior in regulated pressure vs. flow, forward-to-reverse flow offset, supply pressure sensitivity, repeatability and stability.

Ruggedly designed and constructed, the regulators have housings of diecast aluminum. The P40 Regulator is finished with vinyl paint (which resists scratching, weathering & other physical abuse), while the P40 NACE is supplied with an epoxy paint for added corrosion protection. Both the P40 and P40 NACE, are pressure and leak tested prior to shipment from the factory.

The full flow gauge port is convenient for gauge installation and can also be used as an additional full flow outlet.

Applications

The design of these regulators is especially well suited to pilot-operated level, pressure and flow controllers and instruments.

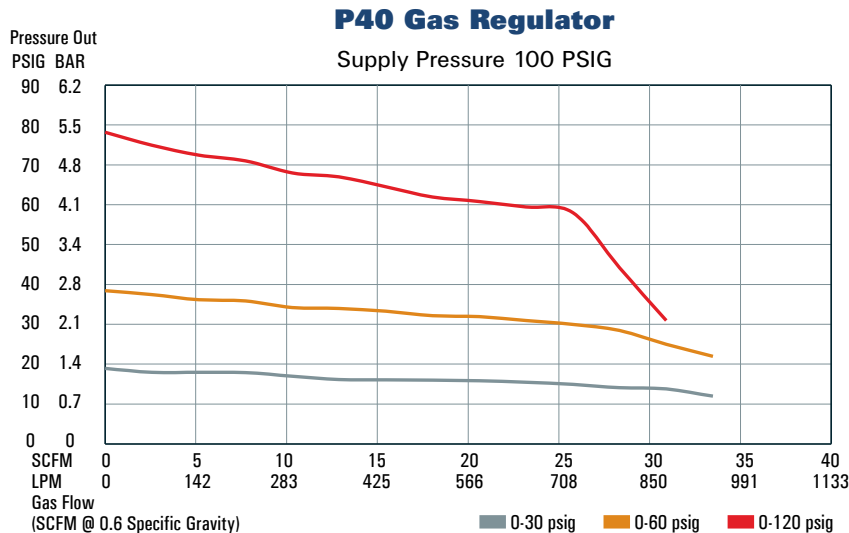


P40 & P40 NACE Part Matrix

P040	0	2			0	0	0	Versions
	↑	↑	↑	↑	↑	↑	↑	Standard*
	0							NACE**
		0	2					Spring Range
				010				0-10 PSIG
				035				0-35 PSIG
				060				0-60 PSIG
				120				0-120 PSIG
								Options
						00		Standard
						OK		Knob Adjustment
						0	0	0

* Standard P40 is a Soft Relief Seat unit. Max Gas Consumption is 0.1 SCFH.

** The P40 NACE has a metal-on-metal relief seat. Max Gas consumption is 6 SCFH.



The P40 NACE is available for use in corrosive environments. This complies with NACE material requirement MR0175 for sulfide stress cracking resistant metallic material for oil field equipment.

P40 & P40 NACE Specifications

	P40 Regulator	P40 NACE Regulator
Sensitivity	1" (25.4 mm) Water Column	1" (25.4 mm) Water Column
Flow Capacity	20 SCFM (565 LPM)	20 SCFM (565 LPM)
Effect of Supply Pressure variation (25 PSIG) on Outlet Pressure	< 0.2 PSIG (0.01 BAR)	< 0.2 PSIG (0.01 BAR)
Exhaust Capacity (5 PSIG above 20 PSIG set point)	0.1–0.45 SCFM Typical (2.8–12.7 LPM)	0.1–0.45 SCFM Typical (2.8–12.7 LPM)
Maximum Input/Supply Pressure	250 PSIG (17.2 BAR)	250 PSIG (17.2 BAR)
Effect of Changes in Flow on Regulated Pressure (100 PSIG/6.9 BAR Supply)	4 PSIG (0.3 BAR) over flow 10 SCFM (283 LPM) (1/4 NPT, 20 PSIG / 1.4 BAR set point)	4 PSIG (0.3 BAR) over flow 10 SCFM (283 LPM) (1/4" NPT, 20 PSIG / 1.4 BAR set point)
Output Pressure Ranges	0-10 PSIG (0-0.7 BAR), 0-35 PSIG (0-2.4 BAR) 0-60 PSIG (0-4.1 BAR), 0-120 PSIG (0-8.3 BAR)	0-10 PSI (0-0.7 BAR), 0-35 PSIG (0-2.4 BAR) 0-60 PSIG (0-4.1 BAR), 0-120 PSIG (0-8.3 BAR)
Temperature Range	0 to 160°F (-18 to 71°C)	0 to 180°F (-15 to 82°C)
Total Air Consumption @ Maximum Output	0.1 SCFH (0.05 LPM)	6 SCFH (2.8 LPM)
Port Size	1/4 NPT	1/4 NPT
Size	2.5" X 2.5" X 5.63" (63.5 X 63.5 X 143 mm)	2.5" X 2.5" X 5.63" (63.5 X 63.5 X 143 mm)
Weight	0.82 lb. (.37 kg)	0.82 lb. (.37 kg)
Materials of Construction	Body: Diecast Aluminum with Vinyl Paint Adjusting Screw: Plated Steel Trim: Plated Steel, Brass, Acetal Resin Diaphragm: Buna-N elastomer with Polyester Fabric Knob: Phenolic Plastic (option) Spring: Music Wire	Body: Diecast Aluminum with Epoxy Paint Adjusting Screw: Plated Steel Trim: Plated Steel, Stainless Steel, Acetal Resin Diaphragm: Fluoroelastomers, Polyester Valve Spring: Inconel, Range Spring: Music Wire
Mounting	Pipe, Panel or Bracket	Pipe, Panel, or Bracket

P40 & P40 NACE Dimensions

