

ORDERING REFERENCE GAS REGULATOR

MODEL:P50

www.bellofram-usa.com



(800) 576 - 6308

The P50 NACE is available for use in corrosive environments. This complies with NACE material requirement MRO175 for sulfide stress cracking resistant metallic material for oil field equipment.



P50 & P50 NACE FILTER REGULATORS

- Superior regulation characteristics
- Rugged, corrosion-resistant construction
- Excellent stability and repeatability
- Integral, 40 micron, self cleaning filter
- Several mounting options
- Self-relieving
- Standard tapped vent
- Soft relief seat on P50
- Economical

The BelGAS General Purpose P50 & P50 NACE Filter Regulators are reliable precision units designed for instrumentation and general purpose use in both standard environments (P50), and corrosive environments (P50 NACE). The P50 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 P50 Regulator is finished with vinyl paint (which resists scratching, weathering & other physical abuse), while the P50 NACE is finished with epoxy paint and includes a vent cap for added protection. Both models 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. The P50 regulators include a unique self-cleaning 40 micron nylon mesh filter (316 stainless steel in the P50 NACE) that can be easily removed.

APPLICATIONS

The design of these regulators is especially well suited to pilot-operated level, pressure and flow controllers and instruments, as well as applications such as air chucks, air spray guns, air cylinders and actuators, and a wide range of industrial pneumatic systems and equipment.

P50 PART MATRIX

	P	0	5	0	0	2						0	0	0
VERSIONS														
Standard														0
NACE														N
OUTPUT RANGE														
0-10 PSIG *														010
0-35 PSIG														035
0-60 PSIG														060
0-120 PSIG														120
* Not available in NACE														
OPTIONS														
Standard														00
Non-relieving														0B
5 Micron Filter														0F
Knob *														0K
Non-relieving & 5 M Filter														BF
Non-relieving & Knob*														BK
5 M Filter & Knob*														FK
Non-relieving, 5 M Filter & Knob*														CD
* P50 standard version only														

NON RELIEVING: Used in applications where it is desirable to relieve pressure downstream of the regulator, for some constant flow applications, and where the gas flowing through the regulator must not escape at the regulator. Non-relieving regulators should not be used for low or no flow applications.

5 MICRON FILTER: Replaces the 40 micron filter supplied with the standard Type P50 for more complete air filtration.

The standard P50 will have a tapped vent, vinyl paint, 40 micron filter and low bleed. The standard P50N will have a tapped vent, epoxy paint, 40 micron filter and standard bleed.

P50 & P50 NACE SPECIFICATIONS

	P50 FILTER REGULATOR	P50 NACE FILTER REGULATOR
Sensitivity	1" (25.4 mm) Water Column	1" (25.4 mm) Water Column
Flow Capacity	20 SCFM (565 LPM)	18 SCFM (510 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 (2.8-12.7LPM)
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) (¼" NPT, 20 PSIG / 1.4 BAR set point)	5 PSIG (0.3 BAR) over flow 10 SCFM (283 LPM) (¼" 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)	0-35 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)	-20 to 180° F (-29 to 82° C)
Total Air Consumption @ Maximum Output	0.1 SCFH (0.05 LPM)	6 SCFH (2.8 LPM)
Port Size	¼" NPT	¼" NPT
Size	3.19" X 3.19" X 7.25" (81 X 81 X 184 mm)	3.19" X 3.19" X 7.25" (81 X 81 X 184 mm)
Weight	1.81 lb. (0.8 kg)	1.81 lb. (0.8 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: Stainless steel Trim: Stainless steel, Neoprene, Diaphragm: Fluoroelastomers, Polyester Spring: Inconel
Mounting	Pipe, Panel, Bracket or Thru Body Holes	Pipe, Panel, Bracket or Thru Body Holes

P50 & P50 NACE DIMENSIONS

