P70 Natural Gas & Propane Regulator

- · Superior regulation characteristics
- · Rugged, corrosion-resistant construction
- · Excellent stability and repeatability
- High flow capacity (80 SCFM)
- Self-relieving
- · Standard tapped vent
- · Soft relief seat for low gas consumption
- Several mounting options

The BelGAS P70 Regulators are reliable precision units designed for instrumentation and general purpose use.

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 P70 Regulator is finished with vinyl paint (which resists scratching, weathering & other physical abuse), while the P70 NACE is supplied with an epoxy paint for added corrosion protection. The P70 regulator is pressure and leak tested prior to shipment from the factory.

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

Applications

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

P70 Part Matrix

P070

1						0	0	0		
	A	A	A	A	A				Port Size	
	02								1/4 NPT	
	03								3/8 NPT	
	04								1/2 NPT	
									Spring Range	
									PSIG BAR	
		015							0 - 15 0 - 1.0	
		030							0 - 30 0 - 2.1	
		160							1 - 60 0.1 - 4.1	
		100							2 - 100 0.2 - 6.9	
		150							2 - 150 0.2 - 10.3	
									Special Construction	
			0						Standard	
			1						Epoxy Paint	
			N						NACE Construction (Wetted Parts)	
									Adjusting Method	
				1					Square Head Screw	
				2					Knob (Handwheel)	
										*Relieving version
					0				Tionoving	will have no
					1				Non-Relieving	constant bleed.

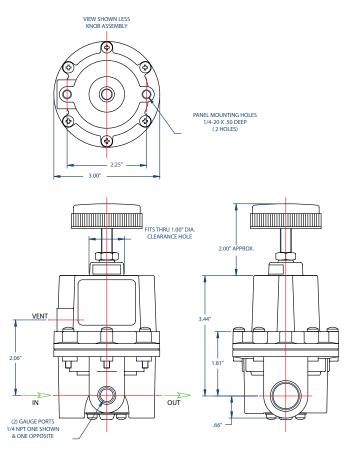


Specifications

Specifications						
P70						
Sensitivity	1/4" V	WC (6.4 mm)				
Flow Capacity	80 SCFM	2266 LPM				
Effect of Supply Pressure variation (25 PSIG) on Outlet Pressure	< 0.05 PSIG	0.003 BAR				
Exhaust Capacity (5 PSIG above 20 PSIG set Point)	3 SCFM Typical	85 LPM				
Maximum Inlet/Supply Pressure	250 PSIG	17.2 BAR				
Effect of Changes in Flow on Regulated Pressure (100 PSIG/6.9 BAR Supply)	2.5 PSIG (0.2 BAR) over flow 50 SCFM (1416 LPM)					
	0-15 PSIG	0-1.0 BAR				
	0-30 PSIG	0-2.1 BAR				
Output Pressure Ranges	1-60 PSIG	0.1-4.1 BAR				
	2-100 PSIG	0.2-6.9 BAR				
	2-150 PSIG	0.2-10.3 BAR				
Temperature Range	-40 to 200 °F	-40 to 93 °C				
Total Air Consumption at Maximum Output	0.1 SCFH	0.05 LPM				
	1	/4 NPT				
Port Size	3/8 NPT					
	1	1/4 NPT 3/8 NPT 1/2 NPT				
Size	3.0" x 3.0" x 6.0"	76 x 76 x 152 mm				
Weight	1.41 lb.	0.6 kg				
	Body	Diacast aluminum with vinyl paint				
	Adjusting Screw	Plated Steel				
Materials of Construction	Trim	Plated steel , brass, acetal resin				
	Knob	Phenolic plastic (option)				
	Spring	Music wire				
	Diaphragm Material	Buna-N elastomer with polyester fabric				
Mounting	Pipe, Panel, Bracket or thru Body Ports					

P70 Dimensions

Outlet Pressure	Outlet Pressure Setting		Inlet Pr	essure	Air Capacity (SCFH)	
Range	PSIG	BAR	PSIG	BAR	20% Offset	MAX
			10	0.7	140	570
			15	1.0	150	690
	5	0.3	25	1.7	185	960
			50	3.5	300	1500
			100	6.9	360	2700
			15	1.0	330	690
0 to 15			25	1.7	492	930
PSIG	10	0.7	50	3.5	750	1560
(0 to 1 BAR)			100	6.9	1260	2700
			125	8.6	1680	3300
			25	1.7	570	960
			50	3.5	900	1620
	15	1.0	100	6.9	1680	2820
			125	8.6	2100	3480
			15	1.0	110	840
	5	0.3	50	3.5	250	1800
			100	6.9	345	3300
			125	8.6	400	3600
			25	1.7	450	1320
	15	1.0	50	3.5	1140	1920
0.4-00	10	1.0	100	6.9	1800	3900
0 to 30			125	8.6	2160	4500
PSIG			35	2.4	1320	1740
(0 to 2.1 BAR)			50	3.5	1800	2280
	25	1.7	100	6.9	2820	3900
			125	8.6	3300	4800
			40	2.8	1500	1800
	30	2.1	50	3.5	1560	2100
			100	6.9	3240	3900
			125	8.6	3960	4800
			30	2.1	600	1080
	20	1.4	50	3.5	960	1620
	20		100	6.9	1680	2820
			125	8.6	2280	3480
			40	2.8	870	1440
1 to 60		2.1	50	3.5	1110	1620
PSIG	30		100	6.9	1980	3060
(0.07 to 4.1			125	8.6	7500	3780
BAR)			50	3.5	1050	1800
DAIII	40	2.8				
			100	6.9	2100	3300
			125	8.6	2700	4080
			70	4.8	1560	2700
			100	6.9	2400	3720
			125	8.6	3000	4500
			50	3.5	1260	2100
	40	2.8	100	6.9	2280	3960
			125	8.6	2820	4800
2 to 100			70	4.8	1800	3000
PSIG	60	4.2	100	6.9	2700	4050
(0.14 to 6.9			125	8.6	3360	4920
BAR)			100	6.9	3000	4140
DAIII	80	5.5	125	8.6	3900	5040
	100	6.9	110	7.6	3300	4500
		3.5	125	8.6	4020	5100
			60	4.1	870	2700
	50		100	6.9	1440	3720
2 to 150 PSIG			125	8.6	1620	5220
			85	5.9	1800	3780
(0.14 to 10.3	75	5.2	100	6.9	2250	4380
BAR)			125	8.6	2760	5280
DAIL						
DAIII	100	6.9	110	7.6	3060	4800



SHOWN WITH KNOB OPTION

P70 Flow Chart

