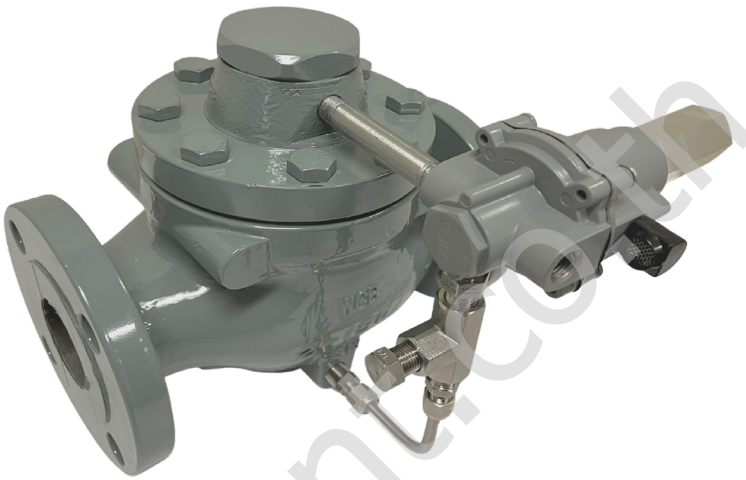
P63 Relief Valve or Back Pressure Regulator

Features

- **Stable Startup** — The unique hollow valve stem in the pilot provides quick pressure registration on top of the main valve plug preventing main valve unseating during normal system startup.
- **Easy In-Line Maintenance** — Top entry design reduces maintenance time. Trim parts can be inspected, cleaned, and replaced without removing the body from the pipeline. If actuator is used, its stem need not be disconnected.
- **Quick Change Trim Package** — The optional quick change trim package allows for faster field maintenance. With standard P63 construction, only body flange cap screws or stud bolt nuts need be removed for quick trim change.



Standard P63

Specifications

Plug	316 Stainless Steel
Type P63 Main Valve	
Body and Body Flange	WCB Steel
Cage	Stainless Steel (Standard Linear)
Type P63 Approximate Weights (including pilot)	
2 Inch / DN 50	55 pounds / 25 kg
4 Inch / DN 100	145 pounds / 66 kg

P63 with Actuator

P63 Standard Ordering Part Matrix

P63S									0	
										Configuration
	B									Backpressure
	R									Relief Valve
										Port Size
		16								2"
		32								4"
										Connections
			0							2" NPT (only for 2" body)
			A							150RF
			B							300RF
										Main Spring
				2						10 - 40 PSI
				6						40 - 125 PSI
										Elastomers
					0					Nitrile
										Pilot - Set Point Range
						0				No Pilot Installed
										PL82/PL82B
						A				10 - 18 PSI (Only use with 10-40 PSI Main Spring)
						B				15 - 40 PSI (Only use with 10-40 PSI Main Spring)
						C				35 - 125 PSI (Only use with 40-125 PSI Main Spring)
										Cage Type/Construction
							1			CF8M Linear Cage (2" only at this time)
							3			CF8M Noise Reduction Cage (4" only at this time)
										Travel Indicator
								1		No Travel Indicator, SS Fitting
								2		Steel Travel Indicator Fittings
								3		Stainless Steel Travel Indicator Fittings
										Body Material
									1	Steel

P63 Actuator Build Ordering Part Matrix

P63A									0	
										Configuration
	R									Relief Valve
										Port Size
		16								2"
		32								4"
										Connections
			0							2" NPT (only for 2" body)
			A							150RF
			B							300RF
										Main Spring
				2						3 - 20 PSI
				6						20 - 65 PSI
										Elastomers
					0					Nitrile
										Pilot - Set Point Range
						0				No Pilot Installed
										PL82B
						A				3 - 18 PSI (Only use with 3-20 PSI Main Spring)
						B				15 - 40 PSI (Only use with 20-65 PSI Main Spring)
						C				35 - 65 PSI (Only use with 20-65 PSI Main Spring)
										Cage Type/Construction
							1			CF8M Linear Cage (2" only at this time)
							3			CF8M Noise Reduction Cage (4" only at this time)
										Travel Indicator
								1		No Travel Indicator, SS Fitting
								2		Steel Travel Indicator Fittings
								3		Stainless Steel Travel Indicator Fittings
										Body Material
									1	Steel

2" Standard Build Relief Capacities to Atmosphere(1)

Body Size		Pilot	Main Valve Spring Color	Pilot Spring Pressure		Set Pressure (2)		Buildup Over Set Pressure Needed To Begin Opening Main Valve(3)		Buildup Over Set Pressure Needed To Fully Open Main Valve(4)(5)		Pressure Drop Below Set Pressure Needed To Reseat Pilot		Approximate Flow Capacities of 0.6 SG Natural Gas (2:1 Line to body size Piping)	
NPS	DN			psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	SCFH	Nm^3/h
2	50	PL82	Yellow	10 - 18	0.69 - 1.2	10	0.69	0.3	0.02	8.3	0.57	2.8	0.19	89,000	2,385
						15	1.0	0.3	0.02	3.3	0.23			89,000	2,385
						18	1.2	0.2	0.02	0.4	0.03			89,000	2,385
				15 - 40	1.0 - 2.8	20	1.4	0.4	0.03	0.6	0.04	3.5	0.24	95,000	2,546
						30	2.1	0.4	0.02	0.4	0.03			122,000	3,270
						35	2.4	0.3	0.02	0.7	0.05			136,000	3,645
						40	2.8	0.4	0.03	0.5	0.03			149,000	3,993
			Green	35 - 125	2.4 - 8.6	40	2.8	1.0	0.07	1.8	0.12	7.5	0.52	153,000	4,100
						50	3.4	1.2	0.08	1.7	0.12			180,000	4,824
						60	4.1	1.3	0.09	1.7	0.11			207,000	5,548
						80	5.5	1.4	0.09	1.8	0.13			261,000	6,995
						100	6.9	1.4	0.10	1.8	0.12			315,000	8,442
						125	8.6	1.4	0.09	1.9	0.13			383,000	10,264
		PL82B	Yellow	10 - 18	0.69 - 1.2	10	0.69	1.5	0.10	8.3	0.57	1	0.07	89,000	2,385
						15	1.0	0.5	0.03	3.3	0.23			89,000	2,385
						18	1.2	0.4	0.03	0.8	0.06			90,000	2,412
				15 - 40	1.0 - 2.8	20	1.4	0.9	0.06	1.3	0.09			97,000	2,600
						30	2.1	0.8	0.05	0.9	0.06			123,000	3,296
						35	2.4	0.8	0.05	0.9	0.06			137,000	3,672
						40	2.8	0.8	0.05	0.9	0.06			150,000	4,020
			Green	35 - 125	2.4 - 8.6	40	2.8	2.3	0.16	3.3	0.23			157,000	4,208
						50	3.4	2.4	0.17	3.4	0.23			184,000	4,931
						60	4.1	2.3	0.16	3.3	0.23			211,000	5,655
						80	5.5	2.3	0.16	3.2	0.22			265,000	7,102
						100	6.9	3.0	0.21	3.6	0.25			320,000	8,576
						125	8.6	3.2	0.22	3.8	0.26			388,000	10,398

1. Capacities are based on the set pressure plus buildup to achieve full opening with a standard linear cage and a high gain pilot restriction (or restriction plug for a PL82B)
2. Set Pressure is defined as the point at which the pilot begins to relieve
3. Crack pressure is the buildup over set pressure for a flow to begin through the main valve
4. Fully open pressure is the pressure buildup over set pressure to fully stroke the main valve plug
5. Set Pressure plus buildup should not exceed the maximum rated limit of the unit

* PL82 pilot is used with the Backpressure configuration, Pl82B pilot is used with the Relief Valve configuration*

4" Standard Build Relief Capacities to Atmosphere(1)

Body Size		Pilot	Main Valve Spring Color	Pilot Spring Pressure		Set Pressure (2)		Buildup Over Set Pressure Needed To Begin Opening Main Valve(3)		Buildup Over Set Pressure Needed To Fully Open Main Valve(4)(5)		Pressure Drop Below Set Pressure Needed To Reseat Pilot		Approximate Flow Capacities of 0.6 SG Natural Gas (2:1 Line to body size Piping)	
NPS	DN			psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	SCFH	Nm^3/h
4	100	PL82	Yellow	10 - 18	0.69 - 1.2	10	0.69	0.3	0.02	5.5	0.38	2.8	0.19	229,000	6,137
						15	1.03	0.35	0.02	1.3	0.09			235,000	6,298
						18	1.24	0.35	0.02	1.2	0.08			257,000	6,888
				15 - 40	1.0 - 2.8	20	1.38	0.45	0.03	1	0.07	3.5	0.24	271,000	7,263
						30	2.07	0.45	0.03	1	0.07			347,000	9,300
						35	2.41	0.45	0.03	1	0.07			385,000	10,318
						40	2.76	0.5	0.03	0.9	0.06			422,000	11,310
			Green	35 - 125	2.4 - 8.6	40	2.76	0.8	0.06	1.4	0.10	7.5	0.52	426,000	11,417
						50	3.45	0.8	0.06	1.4	0.10			502,000	13,454
						60	4.14	0.8	0.06	1.2	0.08			577,000	15,464
						80	5.52	1	0.07	1.7	0.12			733,000	19,644
						100	6.90	1.1	0.08	1.7	0.12			885,000	23,718
						125	8.62	1.5	0.10	1.9	0.13			1,076,000	28,837
		PL82B	Yellow	10 - 18	0.69 - 1.2	10	0.69	0.6	0.04	5.5	0.38	1	0.07	229,000	6,137
						15	1.03	0.6	0.04	1.9	0.13			240,000	6,432
						18	1.24	1	0.07	1.7	0.12			261,000	6,995
				15 - 40	1.0 - 2.8	20	1.38	1	0.07	2	0.14			279,000	7,477
						30	2.07	1	0.07	1.8	0.12			353,000	9,460
						35	2.41	1	0.07	1.8	0.12			391,000	10,479
						40	2.76	1	0.07	1.7	0.12			428,000	11,470
			Green	35 - 125	2.4 - 8.6	40	2.76	2.4	0.17	3.6	0.25			443,000	11,872
						50	3.45	2.4	0.17	3.3	0.23			517,000	13,856
						60	4.14	2.4	0.17	3.1	0.21			591,000	15,839
						80	5.52	2.6	0.18	3.4	0.23			745,000	19,966
						100	6.90	2.6	0.18	3.2	0.22			896,000	24,013
						125	8.62	2.6	0.18	3.4	0.23			1,088,000	29,158

1. Capacities are based on the set pressure plus buildup to achieve full opening with a Noise Reduction cage and a high gain pilot restriction (or restriction plug for a PL82B)
2. Set Pressure is defined as the point at which the pilot begins to relieve
3. Crack pressure is the buildup over set pressure for a flow to begin through the main valve
4. Fully open pressure is the pressure buildup over set pressure to fully stroke the main valve plug
5. Set Pressure plus buildup should not exceed the maximum rated limit of the unit

* PL82 pilot is used with the Backpressure configuration, Pl82B pilot is used with the Relief Valve configuration*

Actuator Build Relief Capacities to Atmosphere(1)

Body Size		Pilot	Main Valve Spring Color	Pilot Spring Pressure		Set Pressure (2)		Buildup Over Set Pressure Needed To Begin Opening Main Valve(3)		Buildup Over Set Pressure Needed To Fully Open Main Valve(4)(5)		Pressure Drop Below Set Pressure Needed To Reseat Pilot		Approximate Flow Capacities of 0.6 SG Natural Gas (2:1 Line to body size Piping)	
NPS	DN			psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	SCFH	Nm^3/h
2	50	PL82B	Yellow	3-18	0.2-1.2	3	0.2	0.5	0.03	0.65	0.04	1	0.07	34,000	911
						5	0.3	0.6	0.04	0.8	0.06			44,000	1,179
						10	0.7	0.6	0.04	0.8	0.06			63,000	1,688
						15	1.0	0.5	0.03	0.8	0.06			86,000	2,305
						18	1.2	0.5	0.03	0.78	0.05			95,000	2,546
			Green	15-40	1.0-2.8	20	1.4	1	0.07	1.1	0.08			101,000	2,707
						30	2.1	0.85	0.06	1.1	0.08			130,000	3,484
						35	2.4	1	0.07	1.1	0.08			144,000	3,859
						40	2.8	1	0.07	1.1	0.08			158,000	4,234
				35-65	2.4-4.5	35	2.4	1.1	0.08	1.6	0.11			145,000	3,886
						40	2.8	1.3	0.09	1.7	0.12			160,000	4,288
						50	3.4	1.3	0.09	1.7	0.12			188,000	5,038
						60	4.1	1.5	0.10	1.7	0.12			216,000	5,789
						65	4.5	1.5	0.10	1.7	0.12			231,000	6,191
4	100		Yellow	3-18	0.2-1.2	3	0.2	0.6	0.04	2.2	0.15			120,000	3,216
						5	0.3	0.55	0.04	1.3	0.09			133,000	3,564
						10	0.7	0.5	0.03	1.1	0.08			183,000	4,904
						15	1.0	0.5	0.03	1.1	0.08			246,000	6,593
						18	1.2	0.6	0.04	1	0.07			269,000	7,209
			Green	15-40	1.0-2.8	20	1.4	1	0.07	1.2	0.08			286,000	7,665
						30	2.1	1	0.07	1.1	0.08			365,000	9,782
						35	2.4	1	0.07	1.1	0.08			405,000	10,854
						40	2.8	1	0.07	1.1	0.08			445,000	11,926
				35-65	2.4-4.5	35	2.4	1.9	0.13	2.3	0.16			415,000	11,122
						40	2.8	1.9	0.13	2.2	0.15			454,000	12,167
						50	3.4	1.9	0.13	2.2	0.15			534,000	14,311
						60	4.1	2	0.14	2.2	0.15			614,000	16,455
						65	4.5	2.1	0.14	2.2	0.15			654,000	17,527

1. Capacities are based on the set pressure plus buildup to achieve full opening with a standard linear cage for a 2" valve and a Noise Reduction cage for a 4" valve and a high gain pilot restriction (or restriction plug for a PL82B)
2. Set Pressure is defined as the point at which the pilot begins to relieve
3. Crack pressure is the buildup over set pressure for a flow to begin through the main valve
4. Fully open pressure is the pressure buildup over set pressure to fully stroke the main valve plug
5. Set Pressure plus buildup should not exceed the maximum rated limit of the unit

* PL82 pilot is used with the Backpressure configuration, Pl82B pilot is used with the Relief Valve configuration*

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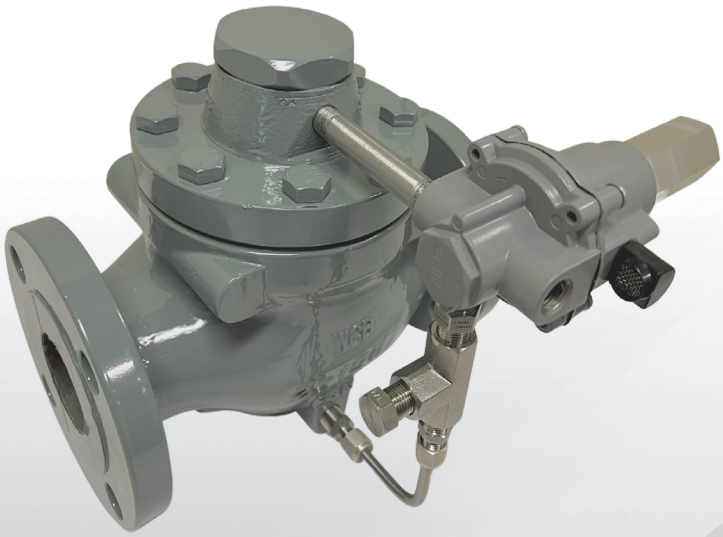

BelGAS, the leader in pressure regulator design, offers the Oil, Gas and Pipeline Industry the same precision and reliability in flow control and pressure control that the control valve market has enjoyed for over 40 years. At BelGAS, we have raised the industry standard for quality, accuracy, and dependability. Even more important is that we provide this value to our customers at an economical price.

The BelGAS product offering includes pressure regulators for gas, air and propane service; explosion-proof I/P transducers for electro-pneumatic applications; process and test gauges for pressure measurement in general and severe service and a wide assortment of bimetals thermometers and thermowells for both high and low temperature indication.

Whether the requirements call for a high pressure flow condition, a low pressure relief application or the regulation of fuel or process gas in a system, BelGAS can provide a dependable and cost effective solution.