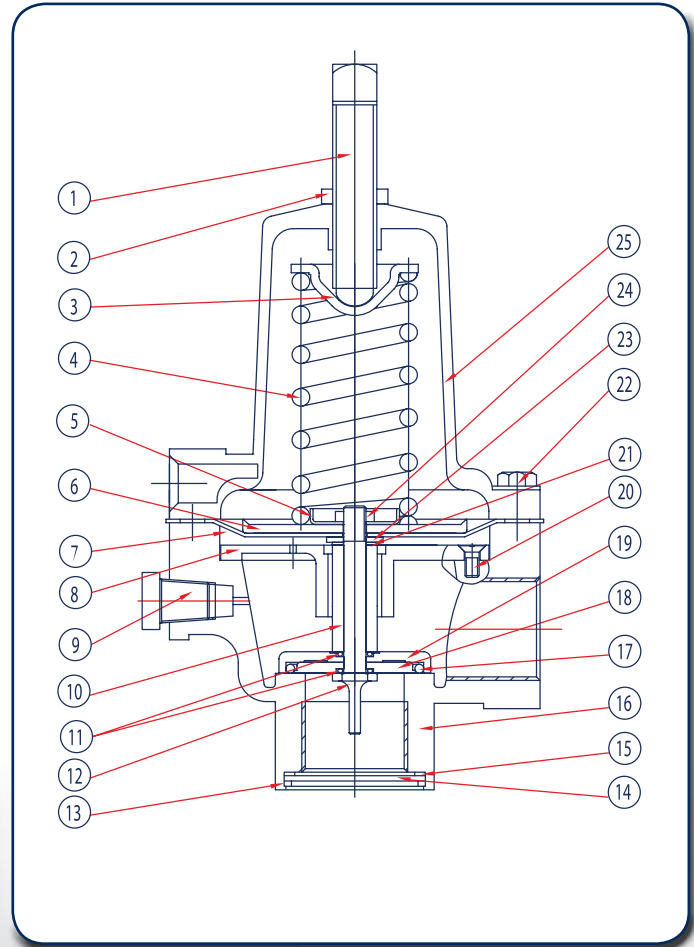


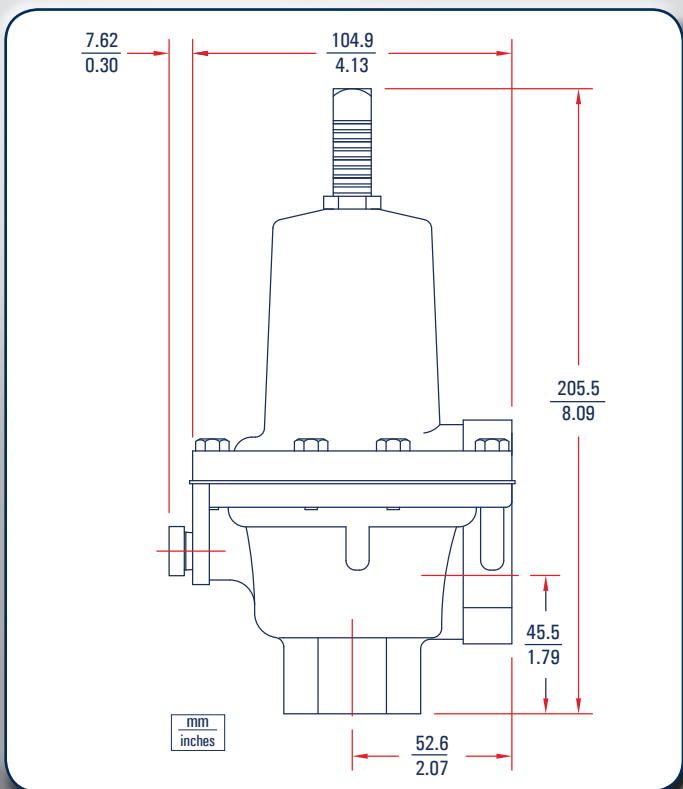


## P289 1" Parts

Item	Description	Qty.	Part Number
1	Adjusting Screw, Plated Steel	1	648-487-000
2	Hex Nut, Plated Steel	1	634-154-000
3	Spring Guide, plated steel	1	626-079-000
4	Spring	1	1-4.5 PSIG (0.1-0.3 BAR), Pink
			4-15 PSIG (0.3-1 BAR), Red
			10-20 PSIG (0.7-1.4 BAR), Silver
			15-50 PSIG (1-3.4 BAR), & 45-75 PSIG (3.1-5.2 BAR), Green
5	Piston Retainer, Plated Steel	1	643-191-000
6	Piston, Plated Steel (All Output Pressures other than 45-75 PSIG)	1	637-306-000
			Range 45-75 PSIG
7	Diaphragm	1	P289 1" Nitrile
			P289 1" Fluoroelastomer
8	Stem Guide Assembly	1	814-014-000
9	Pipe Plug, Plated Steel	1	639-099-000
10	Spacer Tube, Stainless Steel	1	654-178-000
11	O-ring	2	Nitrile
			Fluoroelastomer
12	Pitot Tube, Aluminum	1	660-051-000
13	Retaining Ring, plated steel	1	644-051-000
14	Screen, Stainless Steel	1	647-018-000
15	Gasket, Neoprene	1	624-063-000
16	Body, Aluminum, 1" NPT	1	664-295-000
			Body, Aluminum, 3/4" x 1" NPT
17	O-ring	1	Nitrile
			Fluoroelastomer
18	O-ring Spacer, Aluminum	1	654-177-000
19	O-ring Piston, Aluminum	1	637-311-000
20	Machine Screw, Stainless Steel	2	648-488-000
21	Gasket, Composite	2	624-062-000
22	Machine Screw	8	648-466-005
23	Washer, Steel	1	662-204-000
24	Hex Nut, Plated Steel	1	634-162-000
25	Bonnet, Aluminum	1	604-221-000



## P289 1" Dimensions



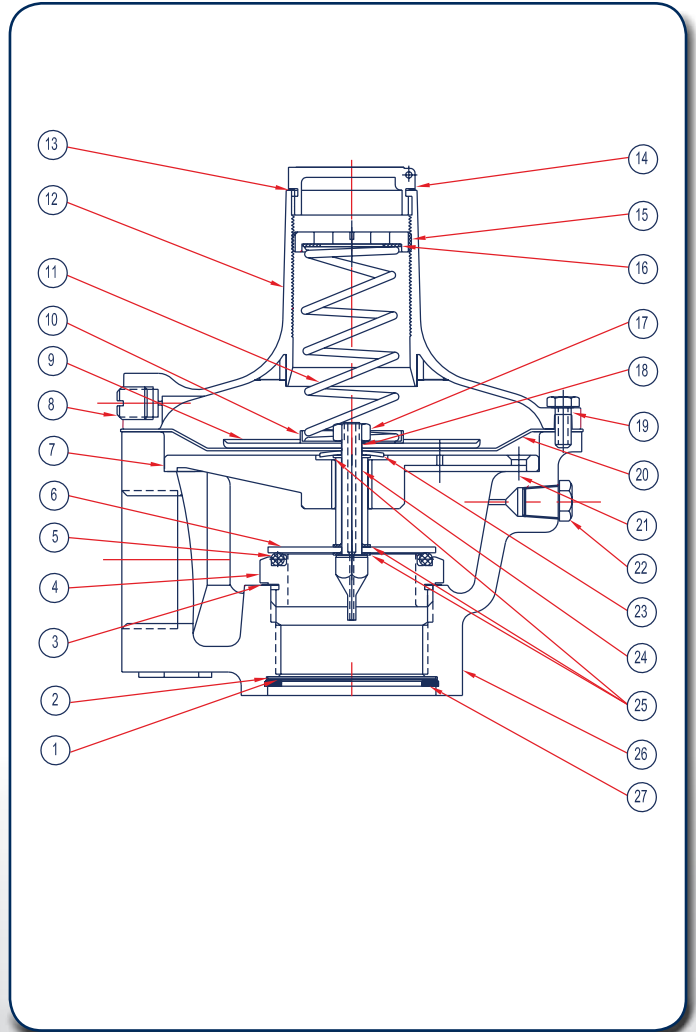
## P289 1" & 3/4" x 1" Regulator Rebuild Kits

	Kit Includes	Part Number
P289 1"	Nitrile Diaphragms, Screen & Gasket	971-289-000
P289 1"	Fluorocarbon Diaphragm, Screen & Gasket	971-289-001

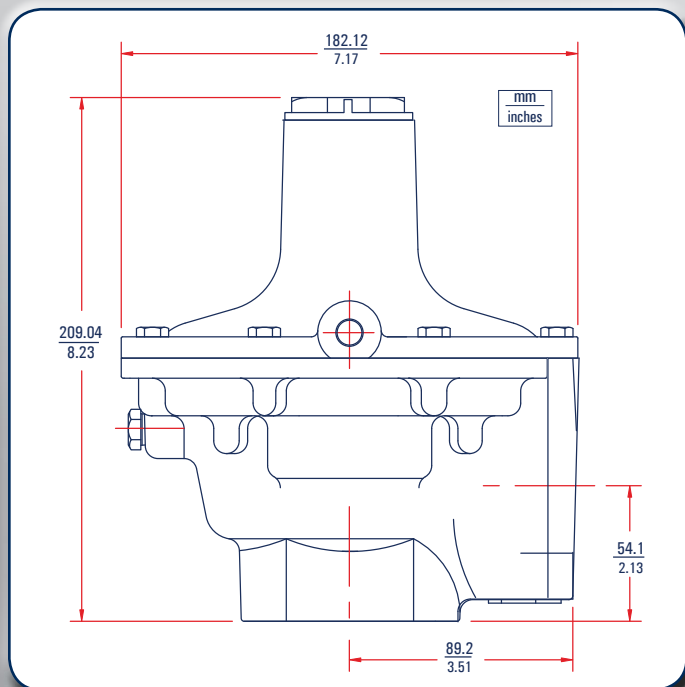


## L289 & P289 2" Parts

Item	Description	Qty.	Part Number	
1	Gasket, Neoprene	1	624-066-000	
2	Screen, Stainless Steel	1	647-020-000	
3	Seat Gasket, Neoprene	1	624-071-000	
4	Main Seat	1	Brass	650-132-000
			Stainless Steel	650-133-000
5	O-ring	1	Nitrile	649-302-000
			Fluoroelastomer	649-301-000
6	O-ring, Washer, Stainless Steel	1	662-207-000	
7	Stem Guide Assembly, Cast Iron & Brass	1	814-015-000	
8	Upper Pipe Plug	1	639-102-000	
9	Diaphragm Head, Plated Steel	1	637-315-000	
10	Lower Spring Retainer, Zinc Plated Steel	1	643-197-000	
11	Spring	1	5 to 10" W.C.	655-732-000
			7 to 18" W.C. , Dark Blue	655-691-000
			12 to 40" W.C. , White	655-767-000
			0.5 to 2.25 PSIG (.03 to .15 BAR), Grey	655-692-000
			1.75 to 7 PSIG (.12 to .48 BAR), Dark Green	655-693-000
	4 to 10 PSIG (.27 to .69 BAR), Red Stripe	655-694-000		
12	Bonnet, Aluminum	1	604-558-000	
13	Closing Cap Gasket, Neoprene	1	624-069-000	
14	Closing Cap, Acetal	1	610-056-000	
15	Adjusting Screw, Zinc	1	648-499-000	
16	Upper Spring Seat Washer, Aluminum	1	662-206-000	
17	Hex Nut, Plated Steel	1	634-173-000	
18	Pitot Tube	1	Brass	660-053-000
			Stainless Steel	660-054-000
19	Machine Bolt, Stainless Steel	8	648-466-000	
20	Diaphragm	1	Nitrile	618-071-000
			Fluoroelastomer	618-071-001
21	Machine Screw, Stainless Steel	4	648-500-000	
22	Low Pipe Plug, Plated Steel	1	639-099-000	
23	Snap Washer, Plated Steel	1	662-208-000	
24	Spacer	1	Brass	654-181-000
			Stainless Steel	654-182-000
25	Gasket, Neoprene	3	624-065-000	
26	Body	1	3/4" x 2" Aluminum (L289)	624-303-000
			1" x 2" Aluminum (L289)	624-303-001
			2" x 2" Aluminum (L289)	624-303-002
			2" x 2" Iron (P289)	664-302-000
27	Retaining Ring, Plated Steel	1	644-054-000	



## P289 2" Dimensions

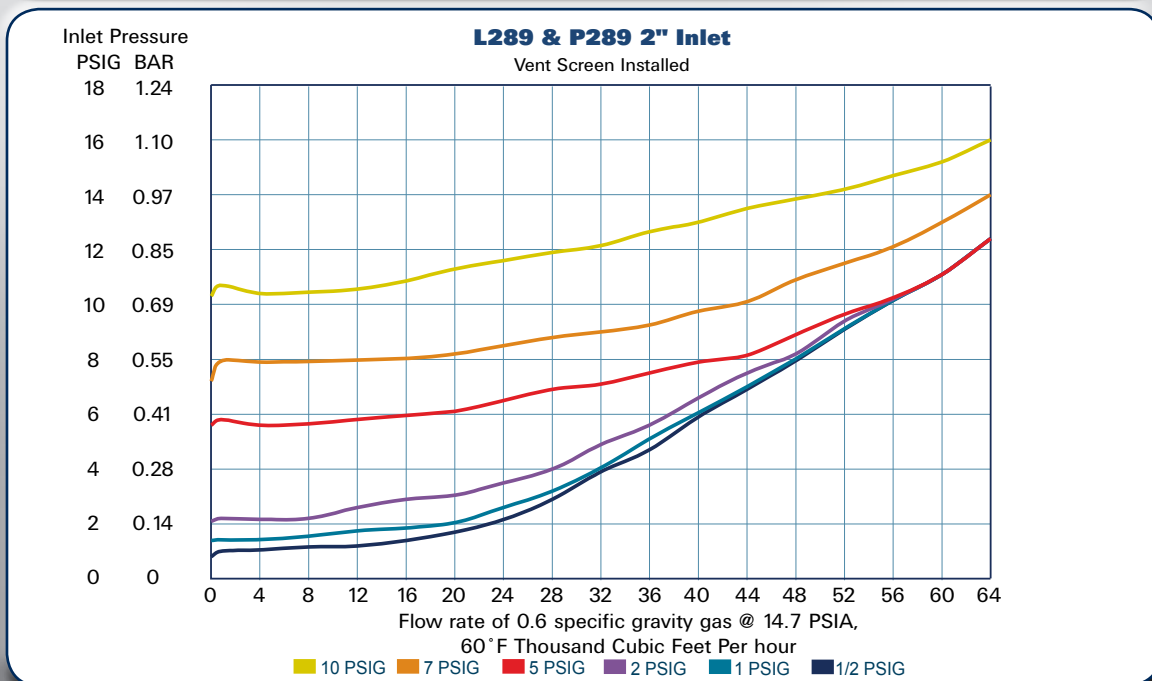
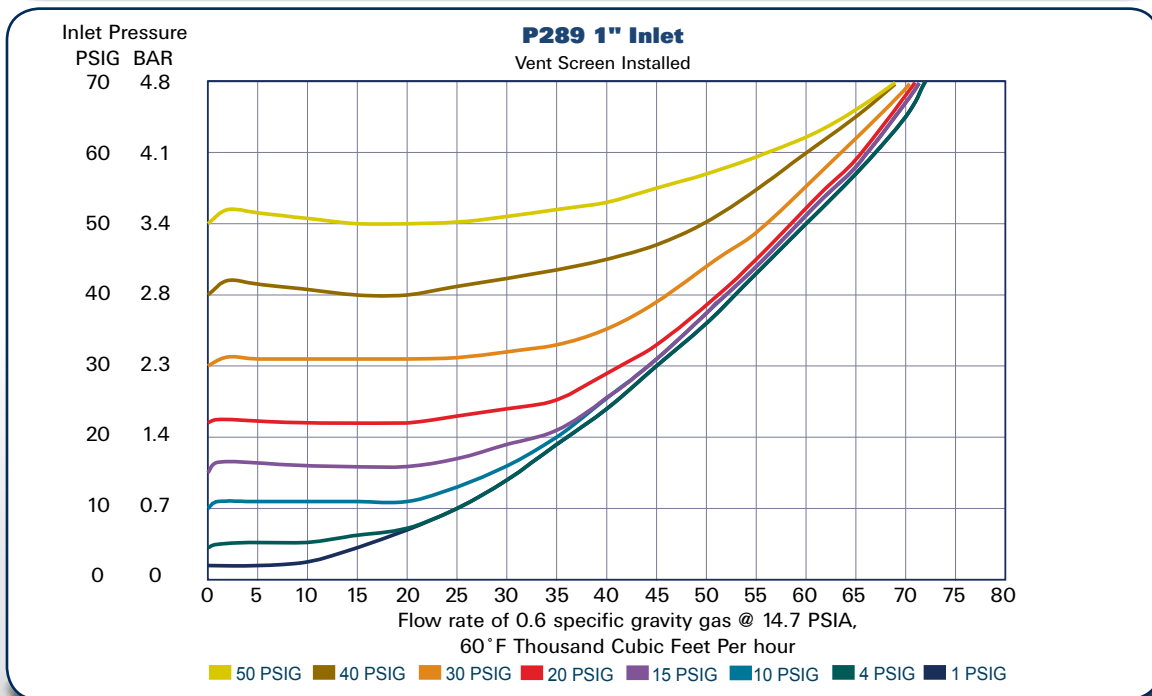
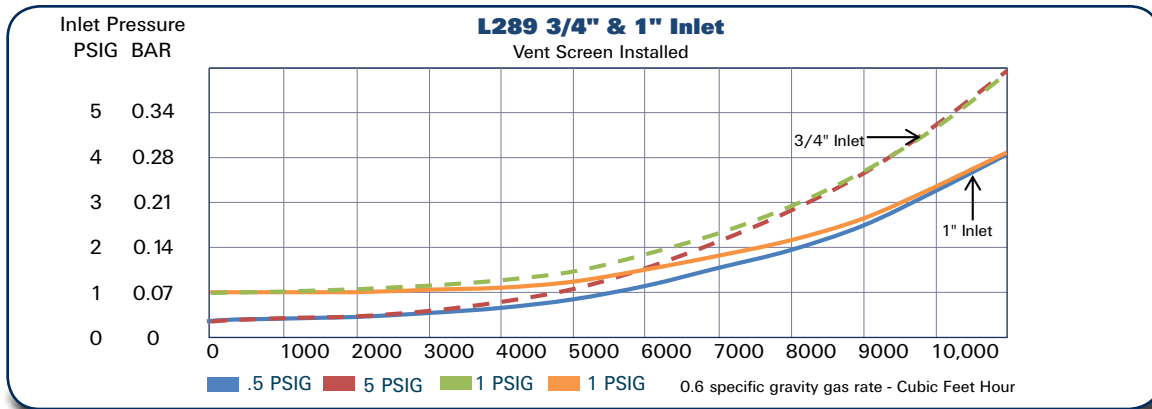


## P289 2" Regulator Rebuild Kits

	Kit Includes	Part Number
P289 2"	Nitrile Diaphragms, Screen, Screen Gasket (Neoprene), Composite Gaskets (Qty.3)	971-289-002
P289 2"	Fluorocarbon Diaphragm, Screen, Screen Gasket (Neoprene), Composite Gaskets (Qty. 3)	971-289-003



## L289 & P289 Flow Rates



# F289 Pilot Operated Back Pressure Regulator

- Throttling Type Relief
- Compact
- Tight Shutoff
- High Flow Rates
- Reliability Due to Simplicity

The Type F289 is a Pilot Operated Back Pressure Regulator that functions as a high flow relief valve with an adjustable set point. The F289 can be used in place of a standard relief valve to provide protection against over pressurization in the downstream system. The pilot regulator allows for accurate back pressure control with minimal buildup over the set pressure for full opening of the main valve.

## Applications

- Fuel Gas Relief
- Gas Gathering Relief

## Specifications

Port Size	F289 1"		F289 2"	
	1 NPT		2 NPT	
Maximum Relief Inlet Pressure	50 PSIG above max output or 110 PSIG Max.	7.6 BAR	15 PSIG	1.0 BAR
Relief Set Pressure Ranges	10 - 18 PSIG	.7-1.2 BAR	14" - 2 PSIG	.04 - .14
	18 - 30 PSIG	1.2-2.1 BAR	2 - 10 PSIG	.14 - .7
	30 - 100 PSIG	2.1-6.9 BAR		
Temperature Range	-20-150 °F with Nitrile and Neoprene		-20-150 °F with Nitrile and Neoprene Elastomers	
	0-300 °F with Fluoroelastomer		0-300 °F with Fluoroelastomer	
Approximate Weight	2.5 lbs.	1.133 kg	15.5 lbs.	7.030 kg



## Materials of Construction

	F289 1"	F289 2"
Body, Bonnet	Aluminum	Cast Iron Body with Aluminum Bonnet
Diaphragm	Nitrile or Fluoroelastomer	Nitrile or Fluoroelastomer
Gaskets	Neoprene	Neoprene/Composite
O-rings	Nitrile or Fluoroelastomer	Nitrile or Fluoroelastomer
O-ring Piston and spacer	Aluminum	N/A
Seat Washer	N/A	Stainless Steel
Pitot Tube	Aluminum	Brass or Stainless Steel
Main Seat	N/A	Brass or Stainless Steel
Spring	Zinc-plated steel	Zinc-Plated Steel
Diaphragm Piston	Zinc-plated steel	Zinc-Plated Steel
Closing Cap	N/A	Zinc

## F289 1" Part Matrix

F289		0	0	0	0	0	0
	▲	▲	▲	▲	▲	▲	▲
							Body
07							3/4" x 1" NPT
08							1" x 1" NPT
							Output Ranges
							PSIG      BAR
018							10 - 18      0.7 - 1.3
030							18 - 30      1.3 - 2.1
100							30 - 100      2.1 - 7.0
		0	0	0	0		O-ring / Diaphragm Material
						0	Nitrile (NBR)
						1	Fluoroelastomer (FKM)
						0	Trim Material
							0 Brass
							1 Stainless Steel

## F289 2" Part Matrix

F28916		0	0	0	0	
	▲	▲	▲	▲	▲	▲
						Output Ranges
						W.C. or PSIG      BAR
002						14" W.C - 2 PSIG      0.04 - 0.14
010						2 - 10 PSIG      0.14 - 0.7
						O-ring / Diaphragm Material
						0 Nitrile (NBR)
						1 Fluoroelastomer (FKM)
						Trim Material
						0 Brass
						1 Stainless Steel



## F289 1 NPT Main Valve Capacities and PL82 Pilot

Main Valve Spring Part Number, and Color	Set Pressure Range		Set Pressure <sup>1</sup>		Build-up Over Set Pressure to Begin Opening Main Valve <sup>2</sup>		Build-up Over Set Pressure to Fully Open Main Valve <sup>3</sup>		Pressure Drop Below Set Pressure to Reseat Pilot		Capacities of 0.6 Specific Gravity Natural Gas <sup>4</sup>	
	PSIG	BAR	PSIG	BAR	PSIG	BAR	PSIG	BAR	PSIG	BAR	SCFH	Nm <sup>3</sup> /h
For set pressures up to 30 psig / 2.1 bar	10 to 18	0.69 to 1.2	10	0.69	0.8	0.055	1.0	0.07	1.0	0.07	23,000	616
			15	1.0							29,000	777
			18	1.2							32,000	858
	18 to 30	1.2 to 2.1	18	1.2	0.9	0.062	1.2	0.08	1.0	0.07	32,000	858
			25	1.7							39,000	1,045
			30	2.1							44,000	1,179
For set pressures over 30 psig / 2.1 bar	30 to 100	2.1 to 7.0	30	2.1	1.4	0.10	1.9	0.13	1.0	0.07	44,000	1,179
			40	2.8							54,000	1,447
			50	3.4							64,000	1,715
			60	4.1							73,000	1,956
			70	4.8	1.6	0.11	2.1	0.14	1.0	0.07	83,000	2,224
			80	5.5							92,000	2,466
			90	6.2							102,000	2,734
			100	7.0							111,000	2,975

1. Set pressure is defined as the pressure at which the pilot exhaust starts to bubble (discharge).
2. Crack pressure is the inlet pressure at which the main valve starts audible flow.
3. Inlet pressure buildup over the set pressure to achieve wide-open capacity.
4. Capacities with inlet piping equal to body size and without outlet piping.

## F289 2 NPT Main Valve Capacities and PL83 & PL82 Pilot

Relief Set Pressure Range, Spring Part Number, and Color	Set Pressure <sup>1</sup>		Buildup Over Set Pressure to Fully Open Main Valve <sup>2</sup>		Pressure Drop Below Set Pressure to Reseat Pilot		Capacities of 0.6 Specific Gravity Natural Gas <sup>3</sup>	
	PSIG	BAR	PSIG	mBAR	PSIG	mBAR	SCFH	Nm <sup>3</sup> /h
14-inches w.c. to 2 PSIG (35 mbar to 0.14 BAR) <b>PL83</b>	0.5	0.03	0.25	17	0.25	17	18,700	501
	1.0	0.07					24,000	643
	1.5	0.10					28,400	761
	2.0	0.14					32,100	860
2 to 10 PSIG (0.14 to 0.69 BAR) <b>PL82</b>	2.0	0.14	0.30	21	0.30	21	32,500	871
	4.0	0.28					44,300	1,187
	6.0	0.41					53,700	1,439
	8.0	0.55					62,000	1,662
	10.0	0.69					69,500	1,863

1. Set pressure is defined as the pressure at which the pilot exhaust starts to bubble (discharge).
2. Inlet pressure buildup over the set pressure to achieve wide-open capacity.
3. Capacities with inlet piping equal to body size and without outlet piping.

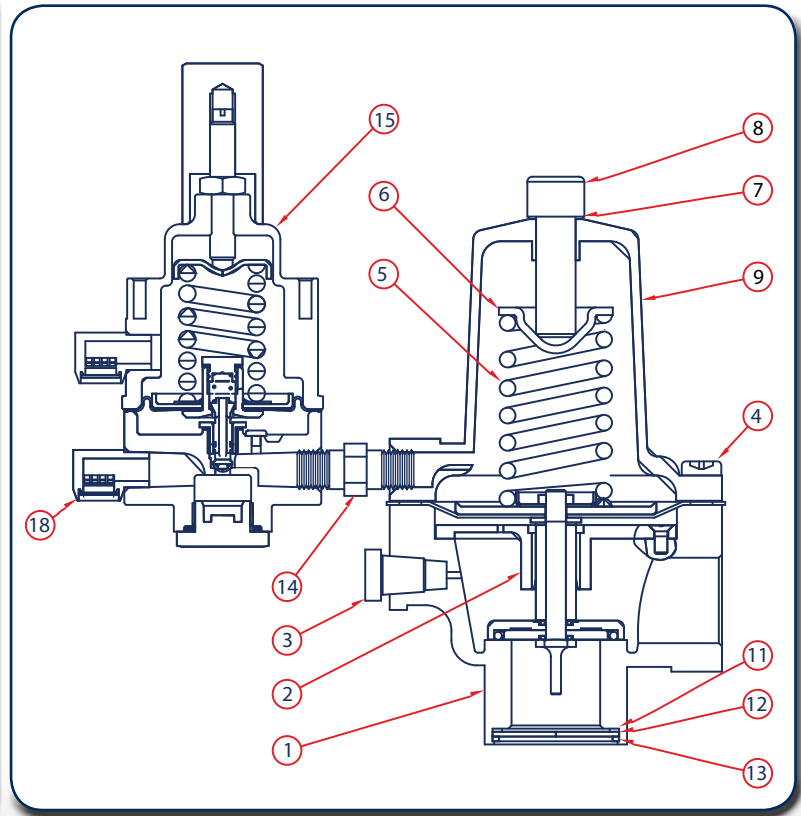
## F289 Wide Open Flow Coefficients

1 NPT Main Valve				2 NPT Main Valve			
Inlet Piping Size	C <sub>0</sub>	C <sub>v</sub>	C <sub>1</sub>	Inlet Piping Size	C <sub>0</sub>	C <sub>v</sub>	C <sub>1</sub>
Line Size Equals Body Size [1-inch (25 mm) Inlet Piping]	740	23.1	32	Line Size Equals Body Size [2-inch (51 mm) Inlet Piping]	2,290	73.4	31.2
2:1 Line Size to Body Size Piping [2-inch (51 mm) Inlet Piping]	560	17.5		2:1 Line Size to Body Size Piping [4-inch (102 mm) Inlet Piping]	2,050	65.7	

1. Wide-open flow coefficients without outlet piping and outlet screen.

**F289 1" Parts**

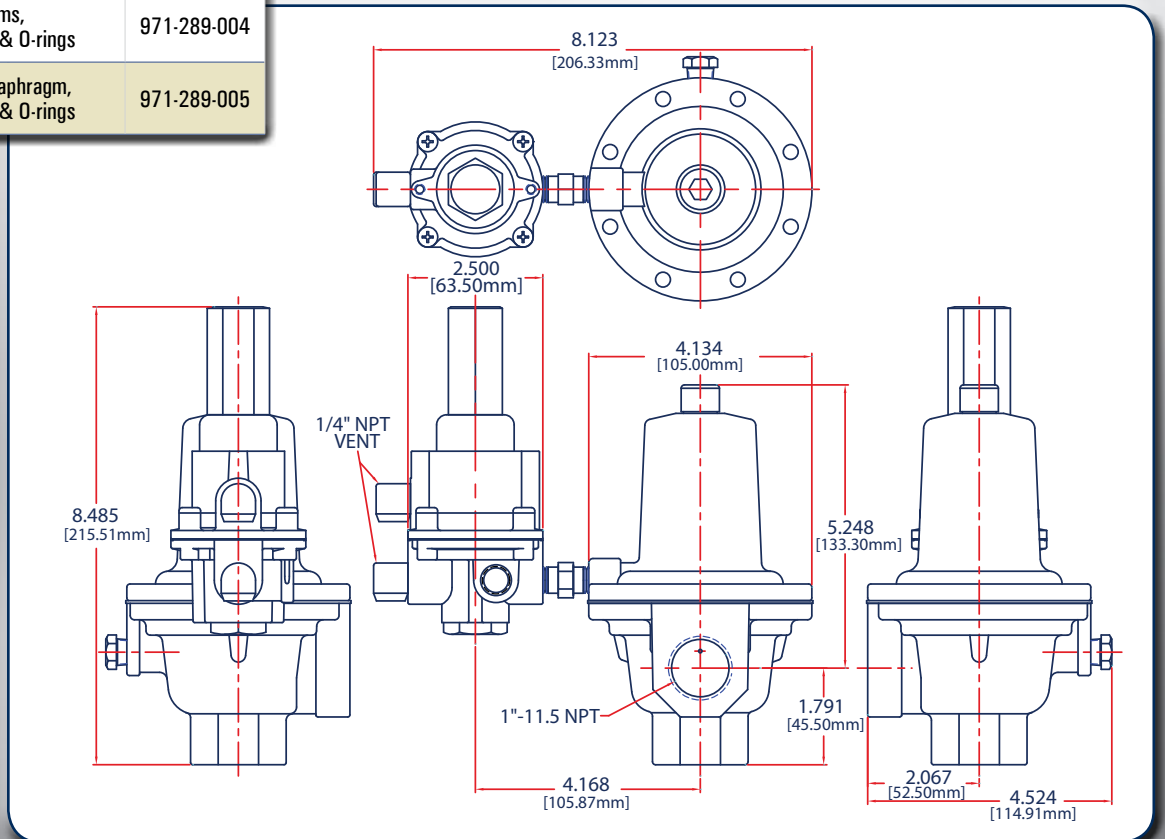
Item	Description	Qty.	Part Number
1	Body	1	1" Aluminum
			3/4" x 1" Aluminum
2	Diaphragm Assembly	1	Nitrile
			Fluoroelastomer
3	Pipe Plug, Plated Steel	1	639-099-000
4	Machine Screw	8	648-466-005
5	Range Spring	1	10 - 30 PSIG, Pink
			30 - 100 PSIG, Red
6	Spring Guide, Steel	1	626-079-000
7	Gasket, Copper	1	624-090-000
8	Adjustment Screw, Plated Steel	1	648-554-000
9	Bonnet, Aluminum	1	604-237-000
10	Machine Screw, Stainless Steel	2	648-488-000
11	Gasket, Neoprene	1	624-063-000
12	Screen, Stainless Steel	1	647-018-000
13	Retaining Ring, Steel	1	644-051-000
14	1/4" to 1/4" Pipe Nipple	1	622-056-000
15	PL82 Pilot	1	10-18 PSI, Nitrile
			10-18 PSI, Fluoroelastomer
			18-30 PSI, Nitrile
			18-30 PSI, Fluoroelastomer
			30-100 PSI, Nitrile
			30-100 PSI, Fluoroelastomer



**F289 1" Regulator Rebuild Kits**

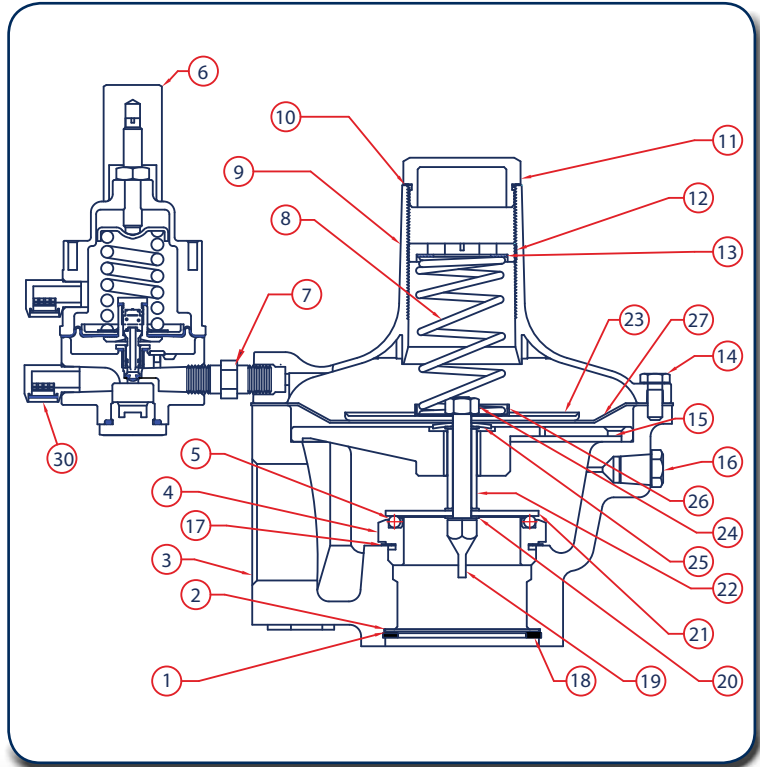
	Kit Includes	Part Number
F289 1"	Nitrile Diaphragms, Screen, Gasket & O-rings	971-289-004
F289 1"	Fluorocarbon Diaphragm, Screen, Gasket & O-rings	971-289-005

**F289 1" Pilot Dimensions**



## F289 2" Parts

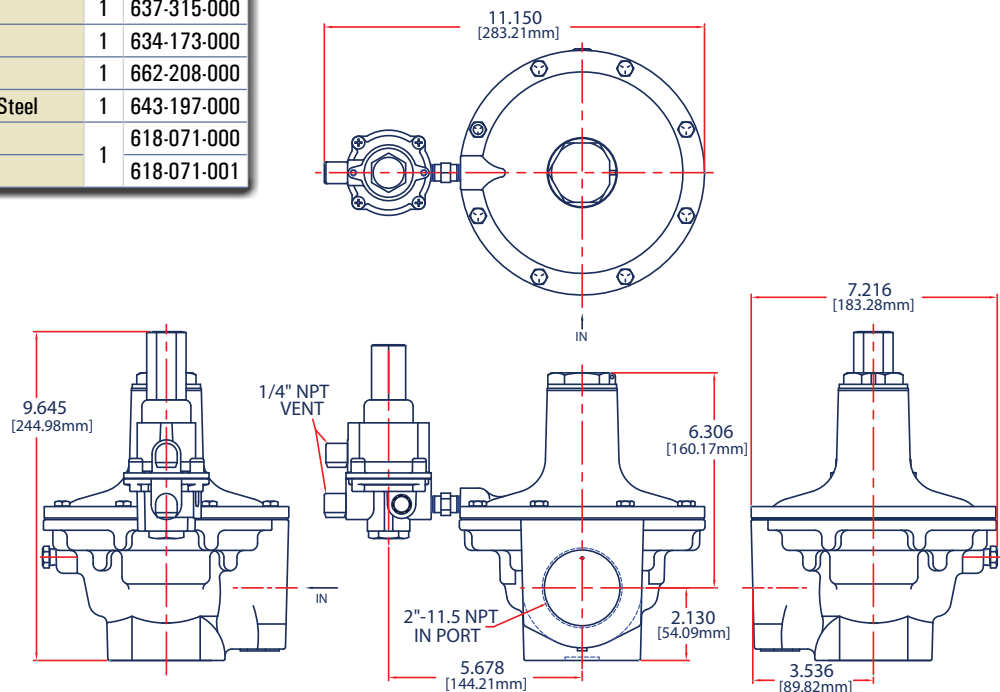
Item	Description	Qty.	Part Number
1	Gasket, Neoprene	1	624-066-000
2	Screen, Stainless Steel	1	647-020-000
3	Body	3/4" x 2" Aluminum	664-303-000
		1" x 2" Aluminum	664-303-001
		2" x 2" Aluminum	664-303-002
		2" x 2" Iron	664-302-000
4	Main Seat	Brass	650-132-000
		Stainless Steel	650-133-000
5	O-Ring	Nitrile	649-302-000
		Fluoroelastomer	649-301-000
6	PL82/ PL83 Pilot	PL82 2-10 PSI, Nitrile	832-833-032
		PL82 2-10 PSI, Fluoroelastomer	832-833-034
		PL83 14"-2 PSI, Nitrile	833-032-000
		PL83 14"-2 PSI, Fluoroelastomer	833-032-001
7	1/4" to 1/4" Pipe Nipple	1	622-056-000
8	Spring	14" W.C. - 2 PSIG White	655-751-000
		2 - 10 PSIG Blue	655-691-000
9	Bonnet, Aluminum	1	604-268-000
10	Closing Cap Gasket, Neoprene	1	624-069-000
11	Closing Cap	1	610-071-000
12	Adjusting Screw, Zinc	1	648-499-000
13	Upper Spring Seat Washer, Aluminum	1	662-206-000
14	Machine Bolt, Stainless Steel	8	648-466-000
15	Machine Screw, Stainless Steel	4	648-500-000
16	Low Pipe Plug, Steel	1	639-099-000
17	Seat Gasket, Neoprene	1	624-071-000
18	Retaining Ring, Steel	1	644-054-000
19	Pitot Tube	Brass	660-053-000
		Stainless Steel	660-054-001
20	Gasket, Neoprene	3	624-065-000
21	O-Ring, Washer, Stainless Steel	1	662-207-000
22	Spacer	Brass	654-181-000
		Stainless Steel	654-182-000
23	Diaphragm Head, Steel	1	637-315-000
24	Hex Nut, Steel	1	634-173-000
25	Snap Washer, Steel	1	662-208-000
26	Lower Spring Retainer, Zinc Plated Steel	1	643-197-000
27	Diaphragm	Nitrile	618-071-000
		Fluoroelastomer	618-071-001



## F289 2" Regulator Rebuild Kits

	Kit Includes	Part Number
F289 2"	Nitrile Diaphragms, Screen, Screen Gasket (Neoprene), Composite Gaskets	971-289-006
F289 2"	Fluorocarbon Diaphragm, Screen, Screen Gasket (Neoprene), Composite Gaskets	971-289-007

## F289 2" Dimensions







## P1808 Flow and Sizing Coefficients

Type	Flow Coefficients (Wide-Open)		C <sub>1</sub>	K <sub>m</sub>	IEC Sizing Coefficients		
	C <sub>g</sub>	C <sub>v</sub>			X <sub>r</sub>	F <sub>L</sub>	F <sub>D</sub>
1808	1410	40.1	35.2	0.79	0.78	0.89	0.50
1808 with Angle Body	1800	51.4	35	0.76	0.78	0.87	0.50

## P1808 Inlet Pressure

Maximum Inlet Pressure	150 PSIG
------------------------	----------

## P1808 Capacities<sup>1</sup> Using Internal Control Line and a Pilot with High-Gain Restriction

Relief Pressure Setting		Capacity in Thousands of SCFH (Nm <sup>3</sup> /h) of 0.6 Specific Gravity Natural Gas							
		Pressure Build-up in PSIG Over Relief Pressure Setting							
PSIG	BAR	2	6	10	15	20	25	30	
5	0.34	32	46	50	61	70	80	89	
12	0.83	41	55	65	74	84	93	102	
20	1.4	56	73	80	89	99	108	117	
30	2.1	67	89	99	108	117	127	136	
40	2.8	85	105	120	127	136	145	154	
50	3.5	94	120	137	145	154	163	172	
60	4.1	..	135	152	163	172	181	190	
70	4.8	..	150	168	161	190	200	209	
80	5.5	..	161	180	200	201	218	227	
90	6.2	..	170	192	213	227	236	245	
100	6.9	..	183	209	231	245	254	263	
110	7.6	..	197	223	246	263	276	281	
125	8.6	..	201	241	267	284	298	..	

.. Shaded areas indicate capacities with main valve wide-open.

1. Capacities based on 0 PSIG (0 BAR) outlet pressure. If outlet pressure is not 0 PSIG (0 BAR), shaded capacities may be recalculated using the wide-open C<sub>g</sub> and the desired pressure drop.

## P1808 Capacities Using Optional External Control Line and a Pilot with High-Gain Restriction

Set Pressure Range, PSIG (BAR)	Set Pressure <sup>1</sup>		Buildup Over Set Pressure to Begin Opening Main Valve <sup>2</sup>		Buildup Over Set Pressure to Fully Open Main Valve <sup>3</sup>		Pressure Drop Below Set Pressure to Reset Pilot		Capacities of 0.6 Specific Gravity Natural Gas <sup>4</sup>	
	PSIG	BAR	PSIG	BAR	PSIG	BAR	PSIG	BAR	SCFH	Nm <sup>3</sup> /h
3 to 18 (0.21 to 1.2)	3	0.21	0.9	0.06	6.0	0.41	1.0	0.07	37,000	992
	5	0.35	0.7	0.05	4.0	0.28			37,000	992
	10	0.69	0.7	0.05	1.2	0.08			42,000	1126
	15	1.0	0.7	0.05	1.0	0.07			52,000	1394
15 to 40 (1.0 to 2.8)	15	1.0	0.8	0.05	1.1	0.07	1.0	0.07	53,000	1420
	20	1.4							63,000	1688
	30	2.1							82,000	2198
	40	2.8							101,000	2707
35 to 125 (2.4 to 8.6)	40	2.8	1.4	0.09	1.9	0.13	1.0	0.07	102,000	2734
	50	3.5							121,000	3243
	60	4.1							139,000	3725
	70	4.8							157,000	4208
	80	5.5	1.6	0.11	2.2	0.15	1.0	0.07	176,000	4717
	90	6.2							194,000	5199
	100	6.9							213,000	5708
	110	7.6							231,000	6191
125	8.6	258,000	6914							

1. Set pressure is defined as the pressure at which the pilot exhaust starts to bubble (discharge).

2. Crack pressure is the inlet pressure at which the main valve starts audible flow.

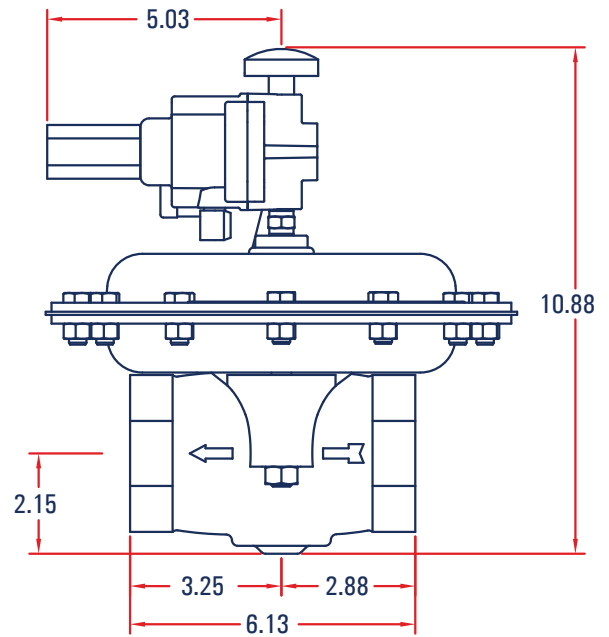
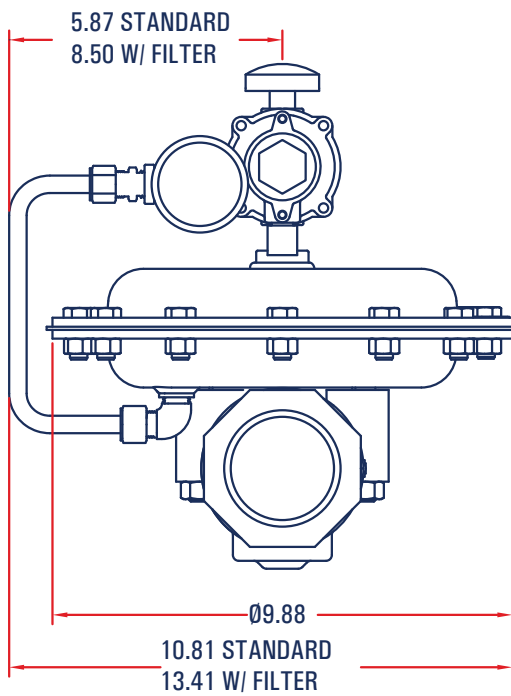
3. Inlet pressure buildup over the set pressure to achieve wide-open capacity.

4. Capacities with inlet piping equal to body size and without outlet piping.

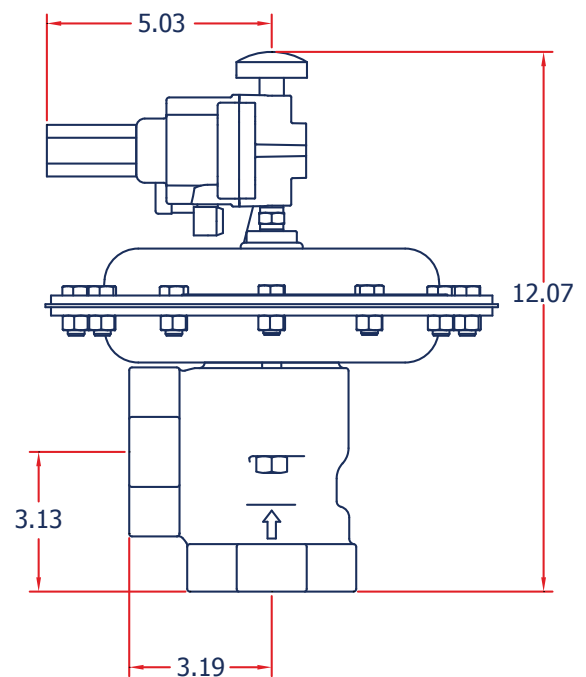
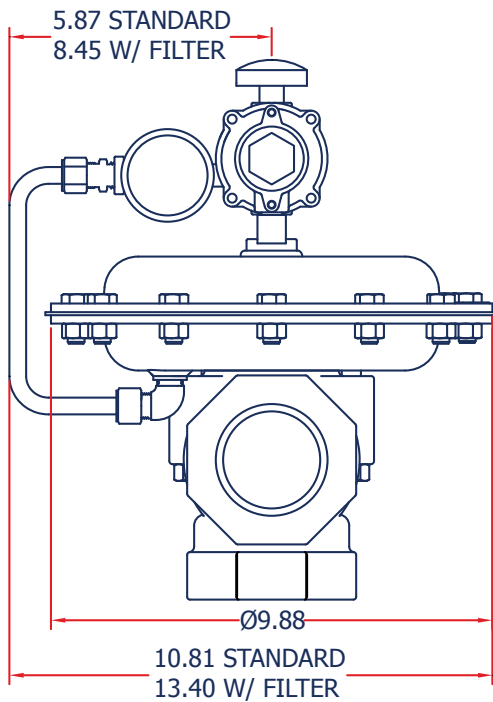
### P1808 Regulator Rebuild Kits

	Kit Includes	Part Number
P1808	Nitrile Diaphragm Assembly, Valve plug O-rings & backup O-rings, Casing/body gasket	971-180-800

### P1808 Dimensions



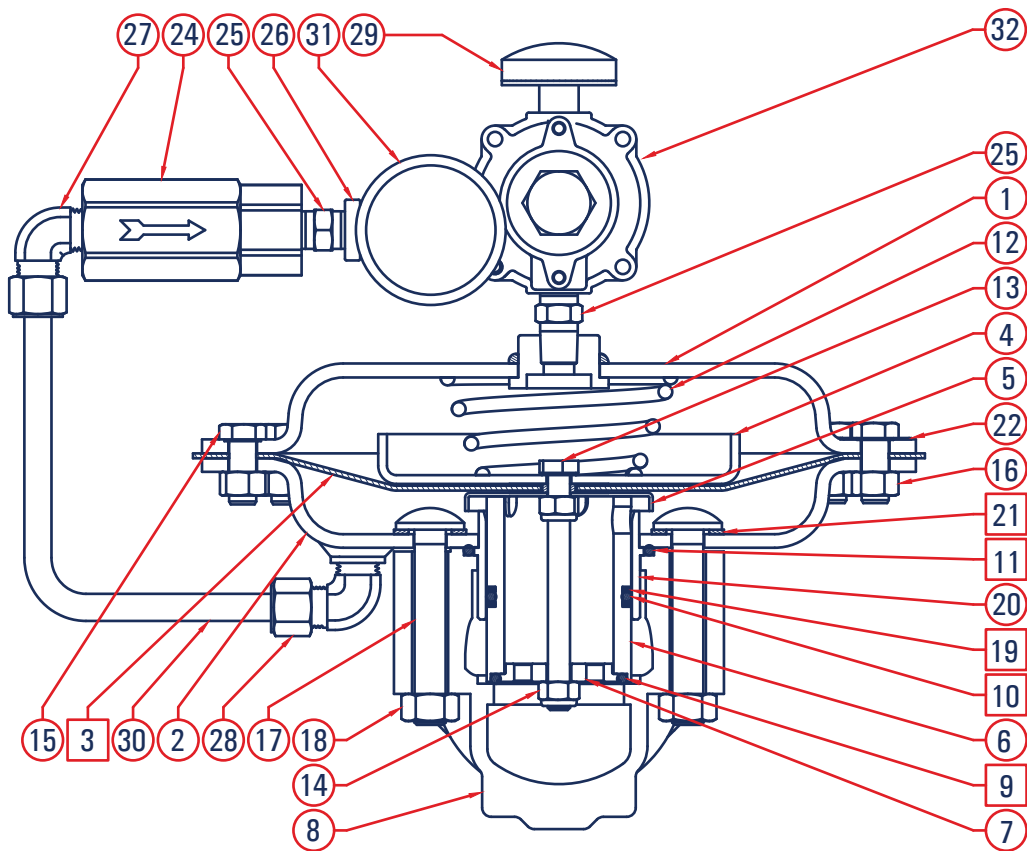
### Angle Body



## P1808 Parts

Item	Description	Qty.	Part Number
1	Upper Casing, Steel	1	802-121-000
2	Lower Casing, Steel	1	802-122-000
3	Diaphragm Assembly	1	804-278-000
4	Upper Diaphragm Plate	1	638-080-000
5	Lower Diaphragm Plate	1	638-081-000
6	Valve Plug, Stainless Steel	1	639-121-000
7	O-ring Retainer	1	643-207-000
8	Body	1	2" NPT - Iron, Straight 664-387-000
	2" NPT - Steel, Straight 664-387-001		
	2" NPT - Iron, Angle 664-429-000		
9	Valve Plug Base O-ring - Nitrile	1	649-309-005
10	Valve Plug O-ring - Nitrile	1	649-309-006
19	Valve Plug Backup Ring	1	649-320-000
11	Upper Valve Plug O-ring - Nitrile	1	649-309-007
12	Spring	1	655-747-000
13	Valve Plug Bolt	1	648-467-006
14	Valve Plug Bolt Nut	2	634-201-000
15	Casing Build Screws	12	648-467-007
16	Casing Build Screws Nuts	12	634-151-000
17	Casing/Body Build Screws	2	603-010-000
18	Casing/Body Build Screw Nuts	2	634-202-000

Item	Description	Qty.	Part Number
20	Valve Plug Guide	1	626-113-000
21	Casing/Body Gasket	2	624-085-000
22	Name Plate	1	632-553-000
24	P590 Filter Assembly - Brass	1	P594
	P590 Filter Assembly - Stainless		P595
25	Hex Nipple - 1/4	1	622-056-000
26	Street T - 1/4 FxFxM	1	622-064-000
27	Compression Fttg. - 3/8 x 1/4 NPT	1	622-065-000
28	Elbow Compression Fttg. - 3/8 x 1/4 NPT	1	622-066-000
29	Vent	1	836-009-000
30	Pilot Tubing - Standard	1	660-083-000
	Pilot Tubing - With P590 Filter		660-083-001
31	0-160 PSI Gauge	1	GG20160C4
32	Consult PL82 / PL83 Pilot Regulator information data sheet in the BelGAS Product Binder in Tab entitled "Pilot's and Small Regs"	1	



- PARTS INCLUDED IN REPAIR KITS 971-180-8XX

# P255 High Capacity Relief Valves

- Zero leakage to 98% of set pressure
- Set pressure tolerance  $\pm 5\%$  of preset
- Reseal at 92% of set pressure
- Line sizes of 3/4" and 1" NPT

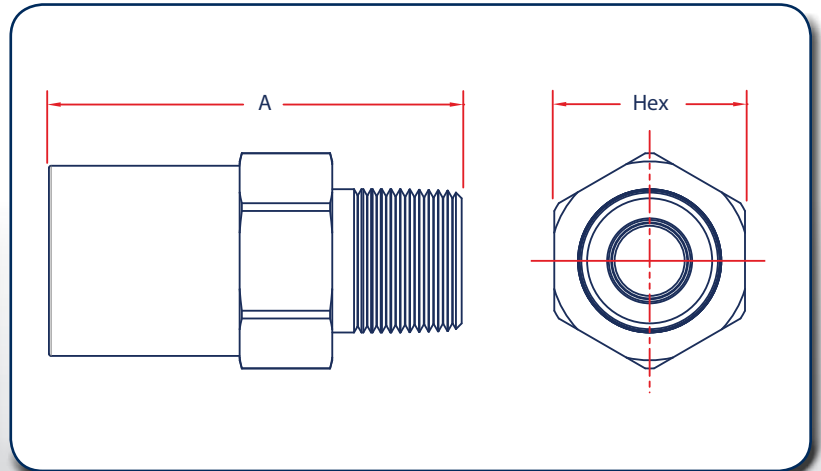


## Materials of Construction

Component	Material
Body	CDA360 Brass
Spring	302 Stainless Steel
Retainer	CDA360 Brass
Seal	Nitrile

## P255 Dimensions

Pipe Size	A	Hex
3/4" NPT	3.39"	1-3/4"
1" NPT	3.79"	1-3/4"



## P255 Ordering Info

Part Number	NPT Size	Set Pressure
<b>P25506BB1050</b>	3/4 NPT	50 PSIG
<b>P25508BB1050</b>	1 NPT	
<b>P25506BB1055</b>	3/4 NPT	55 PSIG
<b>P25508BB1055</b>	1 NPT	
<b>P25506BB1070</b>	3/4 NPT	70 PSIG
<b>P25508BB1070</b>	1 NPT	
<b>P25506BB1075</b>	3/4 NPT	75 PSIG
<b>P25508BB1075</b>	1 NPT	
<b>P25506BB1100</b>	3/4 NPT	100 PSIG
<b>P25508BB1100</b>	1 NPT	
<b>P25506BB1125</b>	3/4 NPT	125 PSIG
<b>P25508BB1125</b>	1 NPT	
<b>P25506BB1150</b>	3/4 NPT	150 PSIG
<b>P25508BB1150</b>	1 NPT	

## P255 Flow Data

Spring Range	45 - 90			100 - 150			100 - 150			100 - 150		
Vessel Pressure	65	75	85	65	75	85	65	75	85	65	75	85
Set Pressure	50			100			125			150		
Flow in SCFH Natural Gas, Converted for Air Flow Rate												
	24,000	36,700	46,100	23,100	36,600	47,100	32,200	50,700	72,100	47,000	61,600	72,500

# PL 82 / PL83 Pilot Regulator

The PL82 is designed for the P1808 and P289 Back Pressure/Relief regulators.

The PL82B is used in pressure relief applications and vents continuously when the main valve is re-positioned or in the relieving mode. The PL82B does not bleed/relieve with pressures below the set pressure.

The PL82 is a low bleed pilot and will only bleed when the valve is being repositioned.

The PL83 is a low pressure unit for the inches of water column spring ranges of the 2" P289 and is a high bleed restriction pilot.

The gain options of low, medium and high allow for the lowest build ups and fastest response speed - high gain being the fastest.

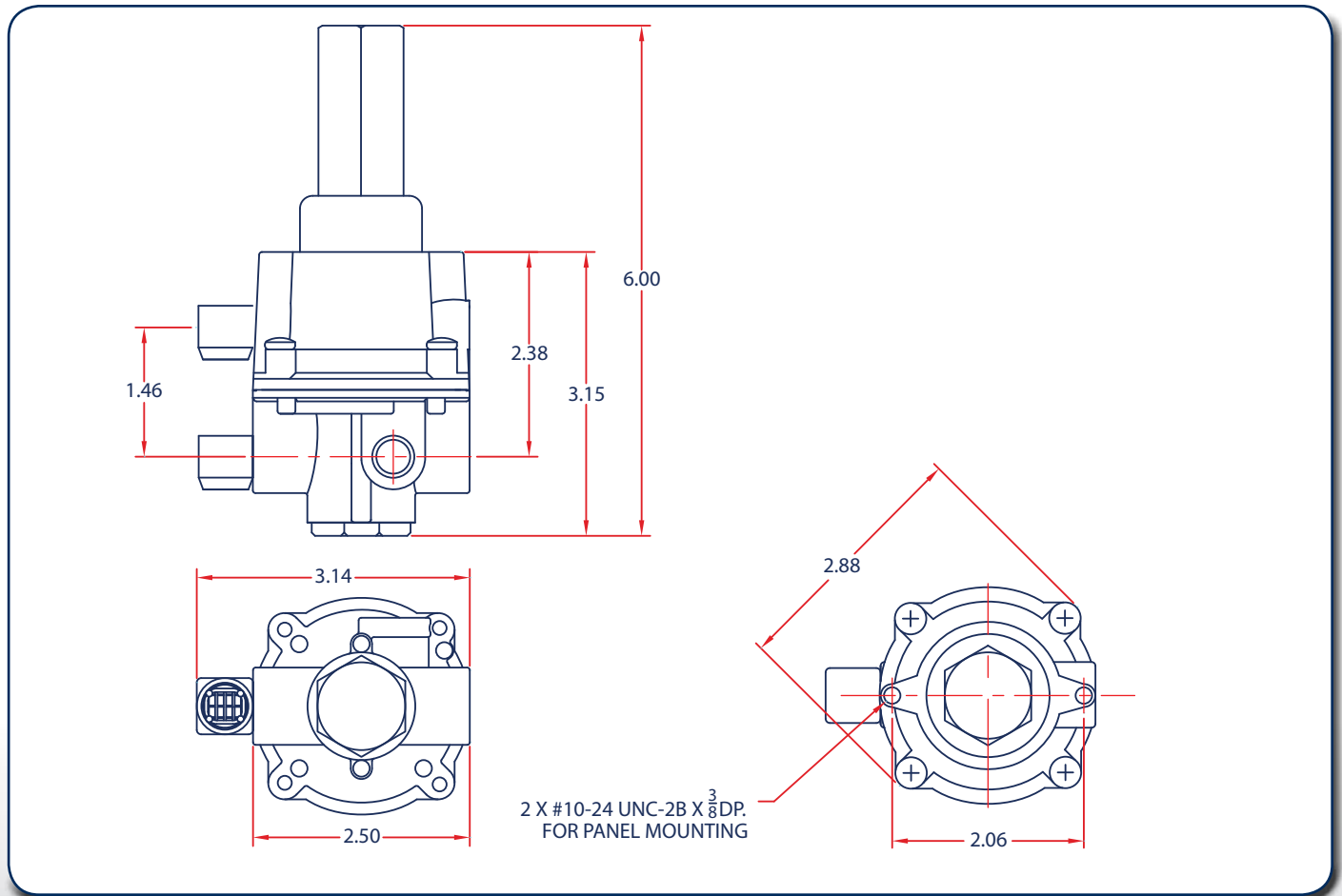
## PL Part Matrix

PL						0	0	0	
	↑	↑	↑	↑	↑				Version
<b>82</b>									For PSIG Ranges
<b>83</b>									For WC Ranges (High Gain Only)
									Configuration
<b>0</b>									BP App
<b>B</b>									Relief App
									Port Size
<b>02</b>									1/4" Standard
									Output Ranges
<b>002</b>									14" W.C. to 2 PSIG
<b>010</b>									2 to 10 PSIG
<b>018</b>									3 to 18 PSIG
<b>030</b>									18 to 30 PSIG
<b>040</b>									15 to 40 PSIG
<b>125</b>									10 to 125 PSIG
									Bleed Restriction
<b>0</b>									No Bleed (PL 820 Only)
<b>L</b>									No Gain
<b>S</b>									Standard Gain (PL 82B Only)
<b>H</b>									High Gain
									Trim
<b>0</b>									Nitrile (NBR)
<b>2</b>									Fluorocarbon (FKM)
									Body Material
<b>0</b>									Aluminum



Note: Spring ranges may change depending on main regulator. Consult Factory.

## PL 83/ PL 83 Dimensions



### Pilot Regulator Filters

The PL Pilot Regulators can be adapted to many of the BelGAS pressure regulators. Although most main regulators are in some way modified to accept a pilot regulator operation, the BelGAS Pilot regulators can be used on other pressure regulators designed for the use of a pilot regulator.

In any application where a smaller flow rate due to a smaller orifice, medium filtration is the key to a smooth and trouble free operation of the pilot regulator. Filtration of the pilot supply is always recommended.

### P350 Filter Assemblies

Stainless and Aluminum cartridge type filters can be mounted in line before the pilot inlet.

P3500200000			
	↑	↑	↑
	<b>P</b>		Drain Options
	<b>V</b>		Drain Plug
			Manual Drain Valve
			Filter Options
		<b>25</b>	25 Micron (Standard)
		<b>01</b>	1 Micron
		<b>05</b>	5 Micron
		<b>50</b>	50 Micron
			Body Material
		<b>0</b>	Stainless Steel
		<b>1</b>	Aluminium

### P590 In-Line Filter Assembly

Brass and stainless steel inline filter designed for use with multiple pilot regulators and main regulators.

P590 Complete Filter / Brass	P594
P590 Complete Filter / Stainless	P595
P590 25 Micron Element	677-052-000



