

P134 Pressure Regulator

- Suitable for Monitoring
- Balanced Supply Valve
- Wide Pressure Range Offering

The P134 series pressure regulator is a manual, direct acting, self-operating, spring loaded, adjustable regulator. The P134 series is used in applications where pressure reduction is required. The regulator will reduce the risk of “shock” from abrupt changes of downstream conditions. This can help prevent safety equipment from shutting an operation down. The P134 is equipped with internal pressure registration. Unlike the P133 no external control line is needed to connect output pressure port with the diaphragm chamber. These two chambers are connected with an integrated pitot tube acting as an internal sense line. The P134 utilizes a balance diaphragm to reduce the effects of supply pressure changes on the output pressure.

Applications

- Compressors
- Gas Engines
- Service Regulators



Materials of Construction

Adjusting Screw	Aluminum Brass
Body	Iron or Steel
Bonnet	Aluminum
Cage	Aluminum
Diaphragm	Nitrile or Fluorocarbon
Housing	Aluminum
Valve Disk	Neoprene or Fluorocarbon

Specifications

	134L	134H
Maximum Operating Inlet	60 PSIG	60 PSIG
Maximum Emergency Inlet	125 PSIG	125 PSIG
Maximum Operating Outlet	2 PSIG	10 PSIG
Maximum Emergency Outlet	15 PSIG	15 PSIG
Pressure Ranges	See Table 2	
Port Sizes	2 NPT	
Restrictor Collars	25%	
	40%	
	60%	
	100%	
End Connections	2" NPT (Standard)	
	125 FF Flange (Iron Only)	
	150 RF Flange (Steel Only)	
	300 RF (Steel Only)	
Temperature Range	-40°F to 200°F	
	-40°C to 93°C	
Approx. Weight	35 lbs. (15.9 kg)	

P134 Wide Open Flow Coefficients

Capacity	Wide Open C_g for Relief Valve Sizing	Representative C_1
25% ⁽¹⁾	490	28.2
40% ⁽¹⁾	760	29.1
60% ⁽¹⁾	1150	31.8
100%	1800	35.0

1. Using optional restriction collar.
2. $C_1 = C_g / C_v$

P134 Series Range Springs

Model	Spring Ranges		Spring Color	Part Number
	WC or PSIG	BAR		
P134L & P134H	2" - 4" WC	0.005 - 0.010	Brown	655-697-002
	3.5" - 6" WC	0.009 - 0.015	Red	655-697-003
	5" - 9" WC	0.012 - 0.022	Tan	655-697-004
	6" - 14" WC	0.015 - 0.035	Purple	655-697-011
	8.5" - 18" WC	0.021 - 0.045	White	655-697-005
	14" - 28" WC	0.035 - 0.070	Dark Green	655-697-006
	0.75 - 2 PSIG	0.052 - 0.138	Dark Blue	655-697-007
P134H	PSIG	BAR		
	1.5 - 3 PSIG	0.103 - 0.207	Orange	655-697-008
	2 - 5 PSIG	0.138 - 0.345	Yellow	655-730-000
	5 - 10 PSIG	0.345 - 0.689	Grey	655-730-001

P134 Regulator Repair Kits

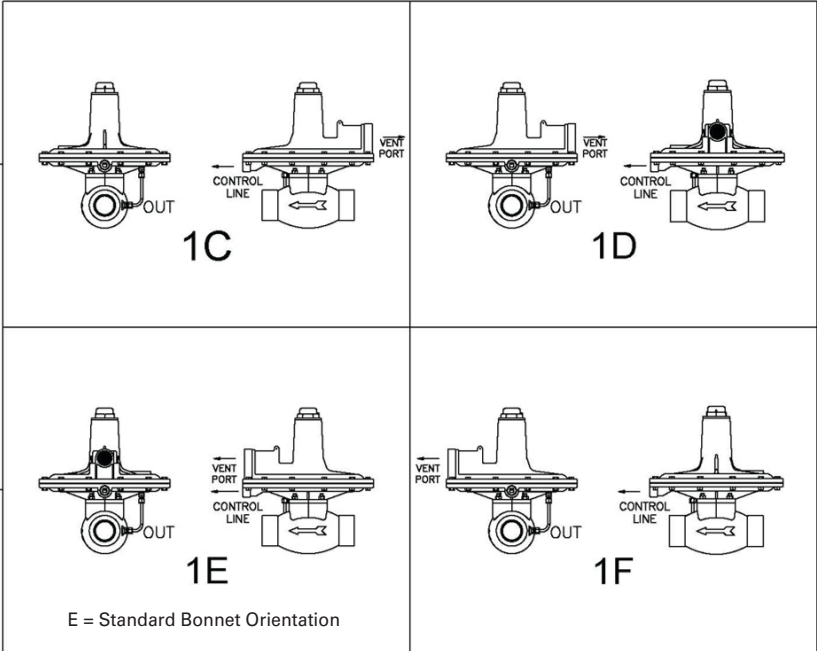
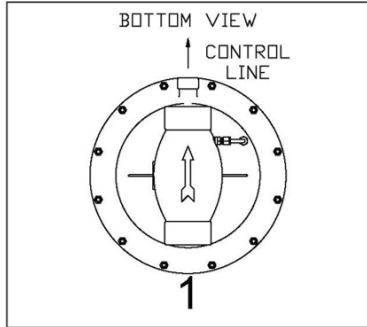
	Kit Includes	Part Number
P134H	Nitrile - Kit Includes: Orifice, Orifice O-Ring, Bearing, Closing Cap, Gasket, Diaphragm, Sealing Washers (2), Valve Disk O-Rings (2), Guide Bushing, Valve Disk, Housing O-Ring, and Thrust Washers (2)	971-P13-300
	Fluorocarbon - Kit Includes: Orifice, Orifice O-Ring, Bearing, Closing Cap, Gasket, Diaphragm, Sealing Washers (2), Valve Disk O-Rings (2), Guide Bushing, Valve Disk, Housing O-Ring, and Thrust Washers (2)	971-P13-301
P134L	Nitrile - Kit Includes: Orifice, Orifice O-Ring, Bearing, Closing Cap, Gasket, Diaphragm, Sealing Washers (2), Valve Disk O-Rings (2), Guide Bushing, Valve Disk, Housing O-Ring, and Thrust Washers (2)	971-P13-302
	Fluorocarbon - Kit Includes: Orifice, Orifice O-Ring, Bearing, Closing Cap, Gasket, Diaphragm, Sealing Washers (2), Valve Disk O-Rings (2), Guide Bushing, Valve Disk, Housing O-Ring, and Thrust Washers (2)	971-P13-303

P134 Part Matrix

P134	↑	↑	↑	↑	↑	↑	↑	↑	1	
										Version
	L									Low Pressure
	H									High Pressure
										Main Spring
										WC or PSIG BAR
									004	2" - 4" WC 0.005 - 0.010
									006	3.5" - 6" WC 0.009 - 0.015
									009	5" - 9" WC 0.012 - 0.022
									014	6" - 14" WC 0.015 - 0.035
									018	8.5" - 18" WC 0.021 - 0.045
									028	14" - 28" WC 0.035 - 0.070
									002	0.75 - 2 PSIG 0.052 - 0.138
										PSIG BAR
									003	1.5 - 3 PSIG 0.103 - 0.207
									005	2 - 5 PSIG 0.138 - 0.345
									010	5 - 10 PSIG 0.345 - 0.689
										Special Construction
									0	None
									A	150 RF (Steel Only)
									E	125 FF (Iron Only)
										Restriction
									00	None
									25	25%
									40	40%
									60	60%
										Port Orientation
									1	Up (Standard)
										Bonnet Orientation
									C	12 O'Clock
									D	3 O'Clock
									E	6 O'Clock (Standard)
									F	9 O'Clock
										Trim Material
									0	Nitrile
									2	Fluorocarbon
										Body Material
									0	Iron
									2	Steel

P134 Orientations

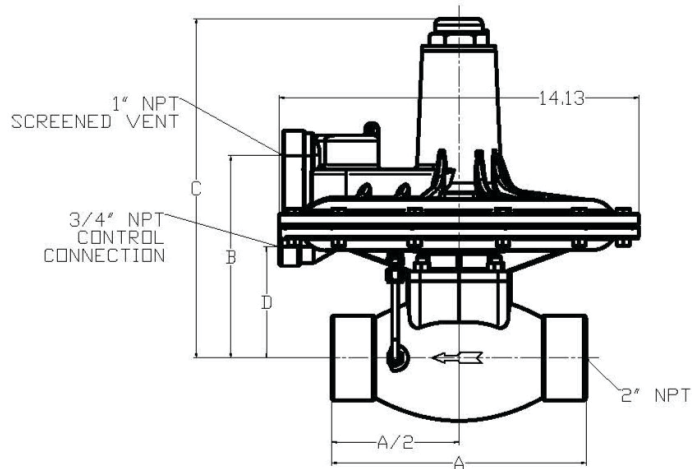
Number and Letter Combinations = Ordering Matrix Digits "12" & "13"



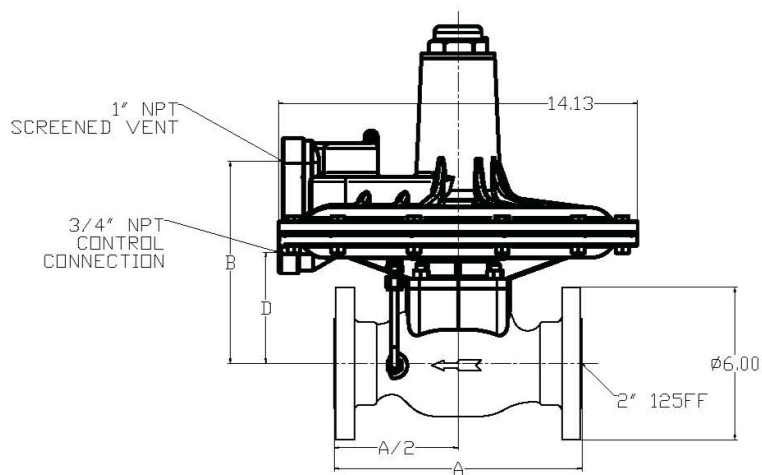
P134 Dimensions

	Body Type	A			B	C	D		
		2" NPT	125 FF	150 RF			2" NPT	125 FF	150 RF
L & H	Standard	10.0	—	—	7.91	13.36	4.36	—	—
	Flanged	—	10.0	10.0	7.91	13.36	—	4.36	4.36

P134 Standard



P134 Flanged



P134L Unrestricted Flow Capacities in Thousands of SCFH

(Nm³/h) of 0.6 Specific Gravity Natural Gas at 14.7 PSIA and 60°F

Inlet Pressure		Outlet Pressure Setting ⁽¹⁾ and Outlet Pressure Range													
		4 in. WC (10 mBAR) 2 to 4 in. WC (5 to 10 mBAR)		6 in. WC (15 mBAR) 3.5 to 6 in. WC (8.7 to 15 mBAR)		7 in. WC (17 mBAR) 5 to 9 in. WC (12 to 22 mBAR)		14 in. WC (35 mBAR) 8.5 to 18 in. WC (21.2 to 44.8 mBAR)		14 in. WC (35 mBAR) 14 to 28 in. WC (35 to 70 mBAR)		1 PSIG (0.07 BAR) 14 to 28 in. WC (35 to 70 mBAR)		2 PSIG (0.14 BAR) 0.75 to 2 PSIG (0.05 to 0.14 BAR)	
		1 in. WC (2.5 mBAR) Droop	1 in. WC (2.5 mBAR) Droop	1 in. WC (2.5 mBAR) Droop	1 in. WC (2.5 mBAR) Droop	2 in. WC (5 mBAR) Droop	1 in. WC (2.5 mBAR) Droop	2 in. WC (5 mBAR) Droop	10% Droop	20% Droop	10% Droop	20% Droop			
PSIG	BAR														
1	0.07	14 (0.38)	13 (0.35)	12 (0.32)	5 (0.13)	8.4 (0.22)									
2	0.14	20.8 (0.56)	20 (0.54)	17 (0.46)	8.2 (0.22)	15.2 (0.41)				11.5 (0.31)	16 (0.43)				
3	0.21	26 (0.70)	24.5 (0.66)	21 (0.56)	12 (0.32)	19.5 (0.52)				15.5 (0.42)	21.5 (0.58)	12.5 (0.34)	18.5 (0.50)		
5	0.34	35 (0.94)	33 (0.88)	32 (0.86)	16 (0.43)	28 (0.75)	14 (0.38)	23 (0.62)	24 (0.64)	31.5 (0.84)	20.5 (0.55)	28 (0.75)			
10	0.69	52 (1.39)	52 (1.39)	48 (1.29)	34 (0.91)	45 (1.21)	26 (0.70)	38 (1.02)	37.5 (1.00)	44 (1.18)	38 (1.02)	46 (1.29)			
20	1.38	78 (2.09)	77 (2.06)	79 (2.12)	69 (1.85)	76 (2.04)	60 (1.61)	69 (1.85)	70 (1.88)	77 (2.06)	62 (1.66)	76 (2.04)			
30	2.07	101 (2.7)	100 (2.68)	100 (2.68)	91 (2.44)	97 (2.60)	87 (2.33)	93 (2.49)	90 (2.41)	101 (2.71)	87 (2.33)	101 (2.71)			
40	2.76	124 (3.32)	122 (3.27)	124 (3.32)	109 (2.92)	116 (3.11)	107 (2.87)	115 (3.08)	110 (2.95)	122 (3.27)	105 (2.81)	121 (3.24)			
50	3.45	146 (3.91)	144 (3.86)	145 (3.89)	130 (3.48)	136 (3.64)	132 (3.54)	137 (3.67)	127 (3.40)	145 (3.89)	124 (3.32)	145 (3.89)			
60	4.14	170 (4.56)	168 (4.50)	166 (4.45)	155 (4.15)	161 (4.32)	152 (4.07)	158 (4.23)	149 (3.99)	167 (4.48)	145 (3.89)	170 (4.56)			

1. Outlet pressure setting was made at approximately 10% of the maximum capacity for the listed conditions.

P134H Unrestricted Flow Capacities in Thousands of SCFH

(Nm³/h) of 0.6 Specific Gravity Natural Gas at 14.7 Psia and 60°F

Inlet Pressure		Outlet Pressure Setting ⁽¹⁾ and Outlet Pressure Range												
		3 PSIG (0.21 BAR) 1.5 to 3 PSIG (0.10 to 0.21 BAR)		2 PSIG (0.14 BAR) 2 to 5 PSIG (0.14 to 0.34 BAR)		5 PSIG (0.34 BAR) 2 to 5 PSIG (0.14 to 0.34 BAR)		5 PSIG (0.34 BAR) 5 to 10 PSIG (0.34 to 0.69 BAR)		10 PSIG (0.69 BAR) 5 to 10 PSIG (0.34 to 0.69 BAR)				
		10% Droop	20% Droop	10% Droop	20% Droop	10% Droop	20% Droop	10% Droop	20% Droop	10% Droop	20% Droop			
PSIG	BAR													
3	0.21			6.5 (0.17)	11.5 (0.31)									
5	0.34	14 (0.38)	22 (0.59)	11 (0.30)	18 (0.48)									
7	0.48	21.5 (0.58)	31 (0.83)	13 (0.35)	22 (0.59)	15.5 (0.42)	24 (0.64)	9 (0.24)	15 (0.40)					
10	0.69	28 (0.75)	42 (1.13)	15 (0.40)	27 (0.72)	24 (0.64)	35 (0.94)	14 (0.38)	22 (0.59)					
15	1.03	40 (1.07)	57 (1.53)	25.5 (0.68)	39 (1.04)	35 (0.94)	51 (1.37)	19 (0.51)	31.5 (0.84)	21 (0.56)	35 (0.94)			
20	1.38	52 (1.39)	72 (1.93)	35 (0.94)	52 (1.39)	46 (1.23)	67 (1.80)	24 (0.64)	41 (1.10)	31 (0.83)	51 (1.37)			
30	2.07	76 (2.04)	96 (2.57)	49 (1.31)	73 (1.96)	68 (1.82)	95 (2.55)	35 (0.94)	58 (1.55)	44 (1.18)	74 (1.98)			
40	2.76	98 (2.63)	119 (3.19)	66 (1.77)	97 (2.60)	88 (2.36)	117 (3.14)	44 (1.18)	73 (1.96)	56 (1.50)	97 (2.60)			
50	3.44	118 (3.16)	141 (3.78)	84 (2.25)	112 (3.00)	103 (2.76)	138 (3.70)	57 (1.53)	89 (2.38)	74 (1.98)	117 (3.14)			
60	4.14	136 (3.64)	165 (4.42)	104 (2.79)	132 (3.54)	122 (3.27)	156 (4.18)	65 (1.74)	106 (2.84)	91 (2.44)	136 (3.64)			

1. Outlet pressure setting was made at approximately 10% of the maximum capacity for the listed conditions.

P134H Flow Capacities in Thousands of SCFH

(Nm³/h) of 0.6 Specific Gravity Natural Gas at 14.7 Psia and 60°F

Inlet Pressure		Outlet Pressure Setting ⁽¹⁾ and Outlet Pressure Range											
		25% Capacity				40% Capacity				60% Capacity			
		5 PSIG (0.34 BAR) 2 to 5 PSIG (0.14 to 0.34 BAR)		10 PSIG (0.69 BAR) 5 to 10 PSIG (0.34 to 0.69 BAR)		5 PSIG (0.34 BAR) 2 to 5 PSIG (0.14 to 0.34 BAR)		10 PSIG (0.69 BAR) 5 to 10 PSIG (0.34 to 0.69 BAR)		5 PSIG (0.34 BAR) 2 to 5 PSIG (0.14 to 0.34 BAR)		10 PSIG (0.69 BAR) 5 to 10 PSIG (0.34 to 0.69 BAR)	
PSIG	BAR	10% Droop	20% Droop	10% Droop	20% Droop	10% Droop	20% Droop	10% Droop	20% Droop	10% Droop	20% Droop	10% Droop	20% Droop
7	0.48	8.0 (0.21)	9.0 (0.24)			11.0 (0.0)	15.0 (0.40)			13.0 (0.35)	17.0 (0.46)		
10	0.69	12.3 (0.33)	13.0 (0.35)			16.5 (0.44)	20.0 (0.54)			20.0 (0.54)	25.0 (0.67)		
15	1.03			13.0 (0.35)	15.5 (0.42)			16.5 (0.44)	23.5 (0.63)			20.0 (0.54)	29.5 (0.79)
20	1.38	20.8 (0.56)	21.2 (0.57)	17.5 (0.47)	20.0 (0.54)	31.5 (0.84)	33.5 (0.90)	23.5 (0.63)	30.5 (0.82)	36.0 (0.96)	46.5 (1.25)	29.0 (0.78)	39.5 (1.06)
40	2.76	33.5 (0.90)	33.5 (0.90)	33.0 (0.88)	33.5 (0.90)	52.0 (1.39)	53.2 (1.43)	46.0 (1.23)	53.2 (1.43)	70.0 (1.88)	77.5 (2.08)	57.0 (1.53)	74.5 (2.00)
60	4.14	45.5 (1.22)	45.5 (1.22)	45.5 (1.22)	45.5 (1.22)	72.7 (1.95)	72.7 (1.95)	67.0 (1.80)	72.7 (1.95)	105.0 (2.81)	107.0 (2.87)	87.0 (2.33)	107 (2.87)

1. Outlet pressure setting was made at approximately 10% of the maximum capacity for the listed conditions.

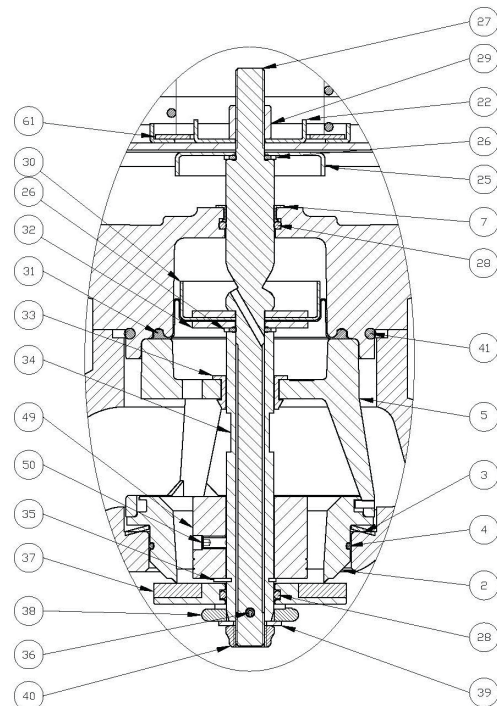
P134 Parts List

Item	Description	Qty.	Part Number
1	Iron Body, 2" NPT	1	664-717-000
	Steel Body, 2" NPT		664-717-001
	Iron Body, 2" 125FF		664-717-002
	Steel Body, 2" 150RF		664-717-003
2	Orifice	1	688-054-001
3	Belleville Spring Washer	1	662-235-000
4	O-Ring, Nitrile	1	649-317-000
	O-Ring, Fluorocarbon		649-317-001
5	Cage Assembly	1	839-002-000
7	Stem Bearing	1	602-126-000
8	Housing	1	629-322-000
9	Bonnet	1	604-230-000
10	Flapper Stem	1	661-008-000
11	Lower Flapper	1	661-009-000
12	Upper Flapper	1	661-010-000
13	Seat Ring	1	650-136-000
14	Self-Tapping Screw	3	648-502-000
15	Spring	2	655-697-000
16	Screen	1	647-018-000
17	Snap Ring	1	693-021-000
18	Closing Cap	1	610-058-000
19	Closing Cap Gasket	1	624-068-000
20	Adjustment Screw, L Version	1	648-504-000
	Adjustment Screw, H Version		648-536-000
21	2" to 4" WC, Brown Spring	1	655-697-002
	3.5" to 6" WC, Red Spring		655-730-002
	5" to 9" WC, Tan Spring		655-730-003
	6" to 14" WC, Purple Spring		655-697-011
	8.5" to 18" WC, White Spring		655-697-005
	14" to 28" WC, Green Spring		655-697-006
	.75 to 2 PSIG, Blue Spring		655-697-007
	1.5 to 3.25 PSIG, Orange Spring		655-697-008
	2 to 5 PSIG, Yellow Spring		655-730-000
	5 to 10 PSIG, Grey Spring		655-730-001
22	Spring Seat	1	650-171-000
23	Diaphragm Plate, L Version	1	638-071-000
	Diaphragm Plate, H Version		638-070-000
24	Control Diaphragm, Nitrile	1	618-094-000
	Control Diaphragm, Fluorocarbon		618-094-001
25	Sealing Diaphragm Plate	1	638-072-000
26	Sealing Washer, Nitrile	2	662-231-000
	Sealing Washer, Fluorocarbon		662-231-001
27	Stem	1	689-007-000
28	O-Ring, Nitrile	2	649-000-197
	O-Ring, Fluorocarbon		649-000-342
29	Hex Nut	1	634-196-000
30	Diaphragm Plate	1	638-069-000
31	Balance Diaphragm, Nitrile	1	600-511-000
	Balance Diaphragm, Fluorocarbon		600-511-001
32	Washer	2	662-232-000
33	Guide Bushing	1	608-082-000
34	Stem Sleeve	1	653-056-000
35	E-Ring	1	693-025-000
36	Roll Pin	1	635-071-000
37	Valve Disk Assembly, Nitrile	1	822-039-000
	Valve Disk Assembly, Fluorocarbon		822-039-001
38	Registration Disk	1	619-064-000
39	Washer	1	662-233-000
40	Hex Nut	1	634-000-031
41	Body O-Ring, Nitrile	1	649-000-257
	Body O-Ring, Fluorocarbon		649-318-000

Item	Description	Qty.	Part Number
42	Stud (not shown)	4	657-016-000
43	Lock Nut (not shown)	4	634-184-000
44	Cap Screw	12	648-506-000
45	Hex Nut	12	634-174-000
46	Nameplate (not shown)	1	632-536-000
47	Set Screw (not shown)	2	648-534-000
48	Thrust Washer, L Version	1	662-234-001
	Thrust Washer, H Version		662-234-000
49	Restriction Collar, 25%	1	612-009-000
	Restriction Collar, 40%		612-010-000
	Restriction Collar, 60%		612-011-000
50	Restriction Collar Set Screw	1	648-535-000
51	Swagelok Fitting	2	TSCMB-4-4
52	Washer	1	662-234-007
53	Drive Screw (not shown)	4	648-533-001
54	Pitot Tube	1	660-279-000
55	Plug	1	1034

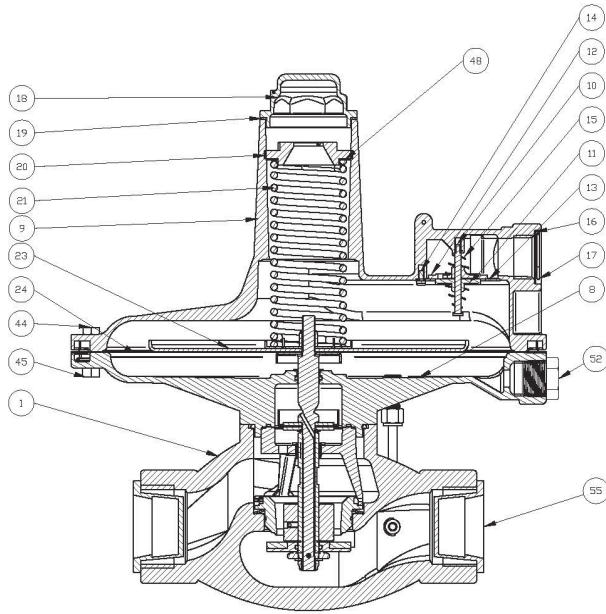
P134 Parts Drawing

P134 Stem Assembly

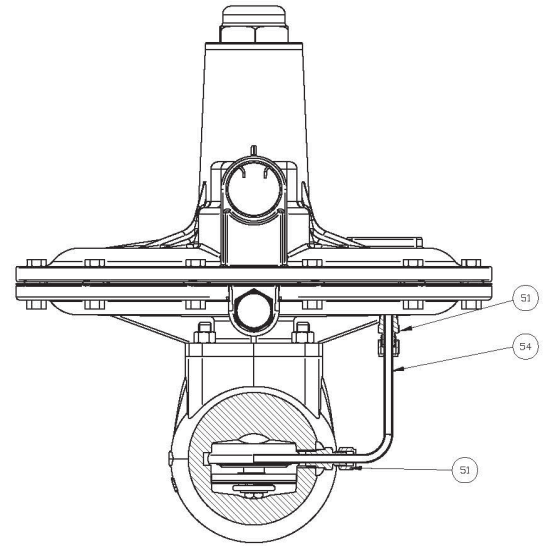


P134 Parts Drawing Cont.

P134L

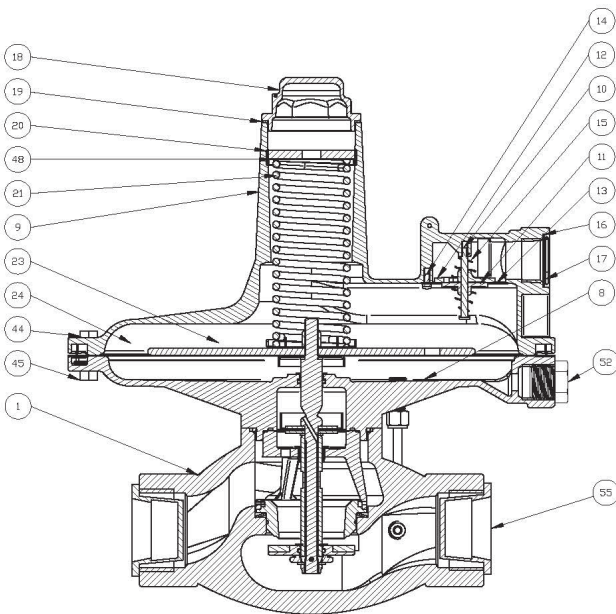


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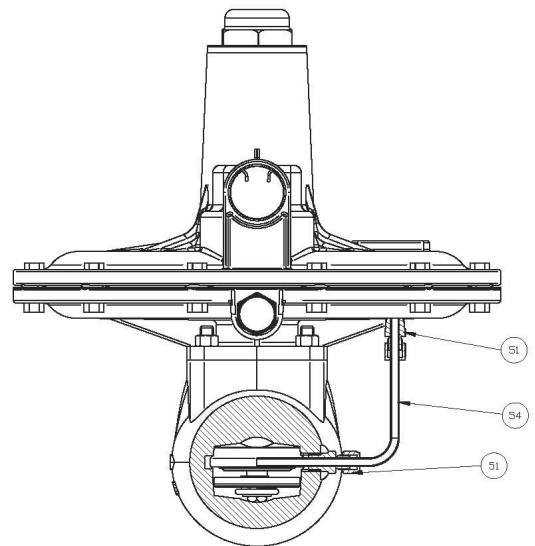


P134L

P134H



P134H



P134H

BelGAS

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BelGAS Website

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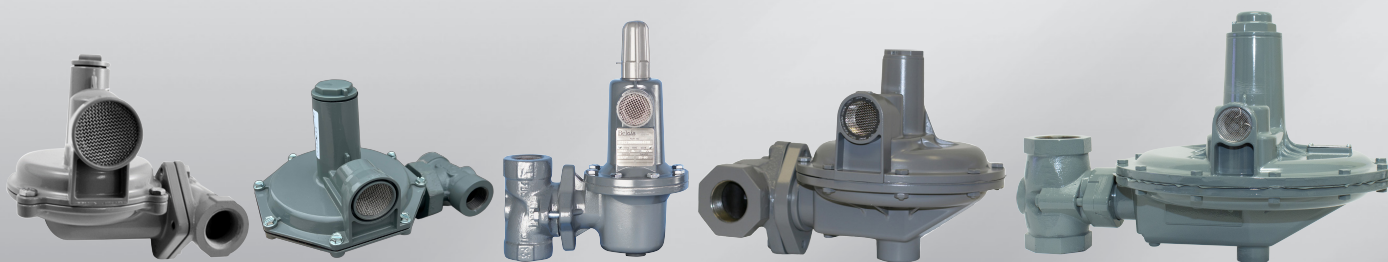
BelGAS Regulator Sizing Wizard

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