

# P95H Regulator

- Large Capacity
- Working Media Including Air, Steam and Liquids
- All Vents are Tapped

The P95H is a direct operating pressure reducing regulator with large capacity. Ideally suited for uses in oil and gas, process gases, steam and liquids. Available in four spring ranges and metal or elastomer diaphragm and orifice seat materials.

## Applications

- Steam Injection
- In-line Gas and Liquid Control
- Chemical Boilers, Process Heaters



P95H	0							
								Body Size
04								1/2 NPT
06								3/4 NPT
08								1 NPT
								Spring Range
								PSIG      BAR
015								5 - 15      0.34 - 1.03
030								15 - 30      1 - 2.1
075								25 - 75      1.7 - 5.2
150								70 - 150      9 - 10.3
								Options
	0							Standard
	A							150 RF*
	B							300 RF*
	C							600 RF*
	D							Socket Weld*
								* Steel Bodies Only
	0							Versions
	0							Standard
	N							NACE
								Valve Plug / Orifice Material
	A							416 SS (Metal / Metal)
	B							416 SS / Fluorocarbon
	C							416 SS / Neoprene
	G							Brass / Neoprene
	F							Brass / Fluorocarbon
	M							Monel (1/2" Only)
	I							316 SS (Metal to Metal)
	J							316 SS / Fluorocarbon
	K							316 SS / Neoprene
								Diaphragm Material
	0							302 SS
	2							Fluorocarbon
	3							Neoprene
	4							Monel
								Case / Body Material
	0							Iron / Iron
	1							Steel / Steel
	3							Iron / Steel
	4							Steel / Stainless
	5							Stainless / Stainless

## Specifications

Maximum Inlet		
	250 PSIG	Iron / NPT
	300 PSIG	Steel / NPT
	300 PSIG	Stainless / NPT
Pressure Ranges		
	5-15 PSIG	
	15-30 PSIG	
	25-75 PSIG	
	70-150 PSIG	
Body Size		
	1/2 NPT	
	3/4 NPT	
	1 NPT	
Weight Approximate		
1/2" NPT	8 lb	3.6 kg
3/4" NPT	19 lb	8.6 kg
1" NPT	19 lb	8.6 kg

## Materials of Construction

Body, Bonnet, Diaphragm Case	
Options	Cast Iron
	Steel
	Stainless Steel
Diaphragm	
Options	302SS Fluorocarbon
	Neoprene
	Monel
Supply Valve Shutoff	
Options	Metal to Metal
	Metal to Elastomer

## P95H Flow Coefficients

Body Size, Inches	Wide Open Coefficients (For Relief Sizing)			C <sub>1</sub>	K <sub>m</sub>
	C <sub>v</sub>	C <sub>G</sub>	C <sub>S</sub>		
1/2	1.9	67	3.35	35	.71
3/4, 1	4.4	156	7.80	35	.67

## P95H Maximum Pressures

Nominal Body Size, Inches (DN)	Body and Spring Case Materials	End Connections	Max Inlet Pressure		Max Outlet Pressure	
			PSIG	BAR	PSIG	BAR
1/2, 3/4, 1	Cast Iron	NPT	250	17.2	150	10.3
	Steel / SS	NPT	300	20.7	150	10.3
	Steel / SS	150RF	300	19.7	150	10.3
	Steel / SS	300RF	300	20.7	150	10.3
	Steel / SS	600RF	300	41.2	150	10.3
	Steel / SS	Socket Weld	300	20.7	150	10.3

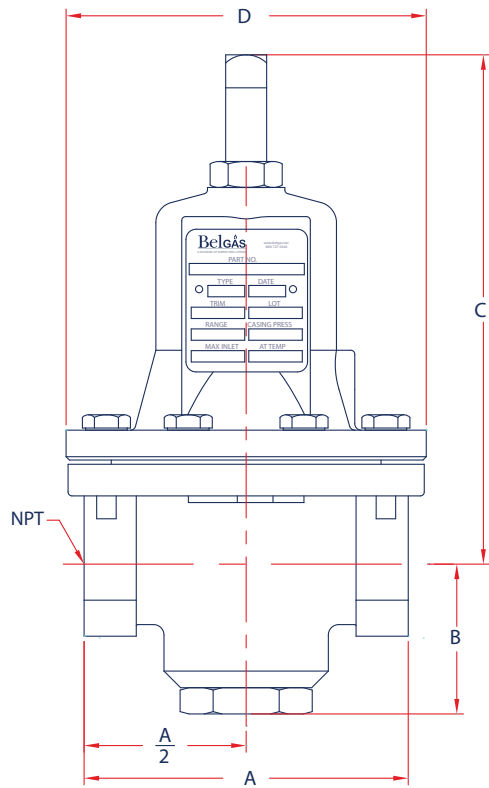
## Spring Range

Body Size	PSIG	BAR	Spring Color Code
1/2", 3/4" and 1"	5 - 15	.3 - 1	White
	15 - 30	1 - 2.1	Yellow
	25 - 75	1.7 - 5.2	Green
	70 - 150	9 - 10.3	Red

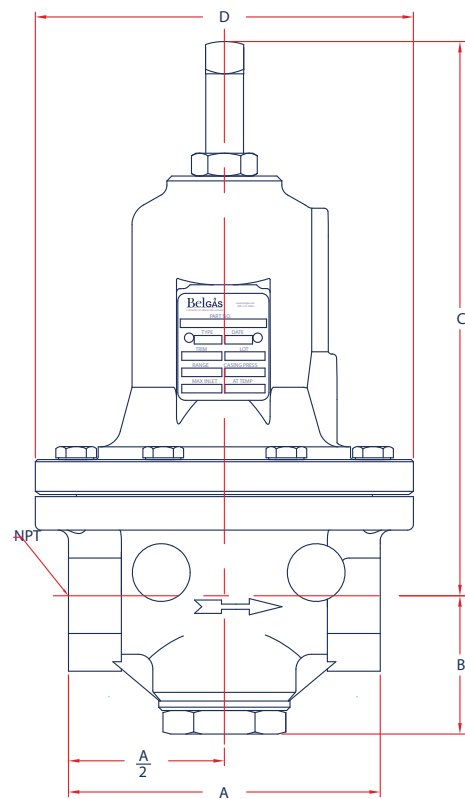
## P95H Dimension, Inches

Nominal Body Size, Inches	A	B	C	D
1/2	3.90	1.80	6.12	4.33
3/4, 1	5.13	2.2	9.1	6.22

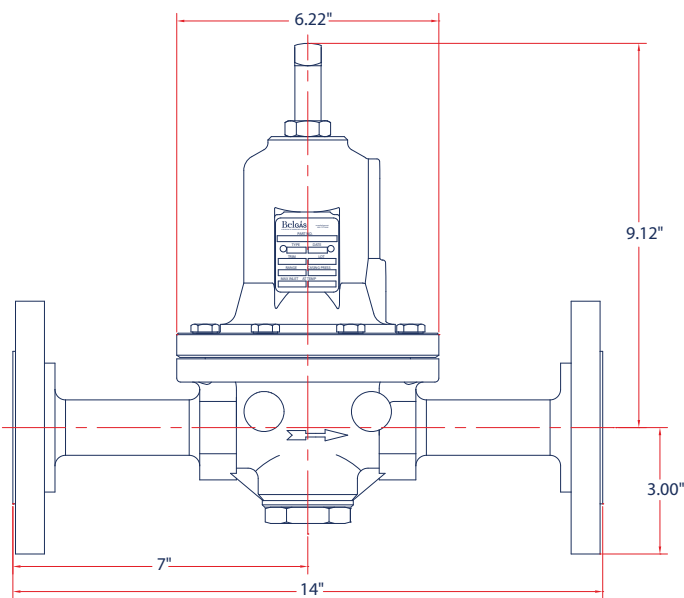
### 1/2 NPT



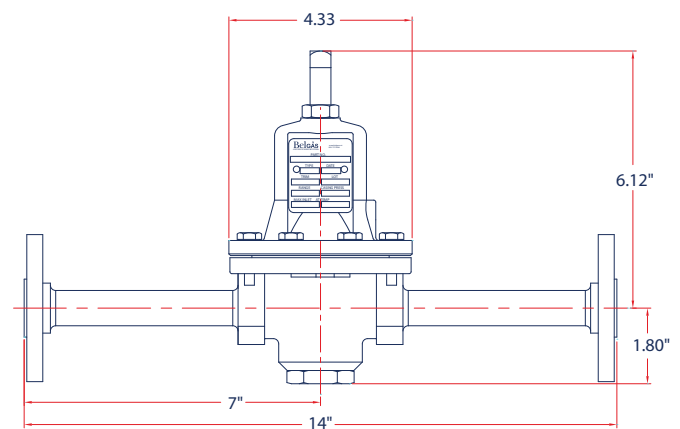
### 3/4 & 1 NPT



### Flanged 3/4 & 1



### Flanged 1/2



## P95H Repair Kits - 1/2" Ported

	Kit Includes	Part Number
302SS Diaphragm	302SS Diaphragm (2), Diaphragm Gasket, Brass Orifice, Brass/Neoprene Valve Plug, Valve Spring	971-P95-007
	302SS Diaphragm (2), Diaphragm Gasket, Brass Orifice, Brass/FKM Valve Plug, Valve Spring	971-P95-106
	302SS Diaphragm (2), Diaphragm Gasket, 416SS Orifice, 416SS/Neoprene Valve Plug, Valve Spring	971-P95-100
	302SS Diaphragm (2), Diaphragm Gasket, 416SS Orifice, 416SS/M to M Valve Plug, Valve Spring	971-P95-101
	302SS Diaphragm (2), Diaphragm Gasket, 416SS Orifice, 416SS/FKM Valve Plug, Valve Spring	971-P95-104
	302SS Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/M to M Valve Plug, Valve Spring	971-P95-109
	302SS Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/Neoprene Valve Plug, Valve Spring	971-P95-111
	302SS Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/FKM Valve Plug, Valve Spring	971-P95-110
	302SS Diaphragm (2), Diaphragm Gasket, 316SS Orifice, Monel Valve Plug, Valve Spring	971-P95-113
	Neoprene Diaphragm	Neoprene Diaphragm, 416SS Orifice, 416SS/Neoprene Valve Plug, Valve Spring
Neoprene Diaphragm, 416SS Orifice, 416SS/FKM Valve Plug, Valve Spring		971-P95-127
Neoprene Diaphragm, Brass Orifice, Brass/Neoprene Valve Plug, Valve Spring		971-P95-103
Neoprene Diaphragm, Brass Orifice, Brass/FKM Valve Plug, Valve Spring		971-P95-129
Neoprene Diaphragm, 416SS Orifice, 416SS/M to M Valve Plug, Valve Spring		971-P95-126
Neoprene Diaphragm, 316SS Orifice, 316SS/M to M Valve Plug, Valve Spring		971-P95-131
Neoprene Diaphragm, 316SS Orifice, 316SS/Neoprene Valve Plug, Valve Spring		971-P95-133
Neoprene Diaphragm, 316SS Orifice, 316SS/FKM Valve Plug, Valve Spring		971-P95-132
Neoprene Diaphragm, 316SS Orifice, Monel Valve Plug, Valve Spring		971-P95-135
Neoprene Diaphragm, 316SS Orifice, 316SS/M to M Valve Plug, NACE Valve Spring		971-P95-153
Neoprene Diaphragm, 316SS Orifice, 316SS/Neoprene Valve Plug, NACE Valve Spring		971-P95-155
Neoprene Diaphragm, 316SS Orifice, 316SS/FKM Valve Plug, NACE Valve Spring		971-P95-154
Neoprene Diaphragm, 316SS Orifice, Monel Valve Plug, NACE Valve Spring		971-P95-157
Monel Diaphragm	Monel Diaphragm (2), Diaphragm Gasket, 416SS Orifice, 416SS/M to M Valve Plug, Valve Spring	971-P95-136
	Monel Diaphragm (2), Diaphragm Gasket, 416SS Orifice, 416SS/Neoprene Valve Plug, Valve Spring	971-P95-138
	Monel Diaphragm (2), Diaphragm Gasket, 416SS Orifice, 416SS/FKM Valve Plug, Valve Spring	971-P95-137
	Monel Diaphragm (2), Diaphragm Gasket, Brass Orifice, Brass/Neoprene Valve Plug, Valve Spring	971-P95-141
	Monel Diaphragm (2), Diaphragm Gasket, Brass Orifice, Brass/FKM Valve Plug, Valve Spring	971-P95-140
	Monel Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/M to M Valve Plug, Valve Spring	971-P95-143
	Monel Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/Neoprene Valve Plug, Valve Spring	971-P95-145
	Monel Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/FKM Valve Plug, Valve Spring	971-P95-144
	Monel Diaphragm (2), Diaphragm Gasket, 316SS Orifice, Monel Valve Plug, Valve Spring	971-P95-147
	Monel Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/M to M Valve Plug, NACE Valve Spring	971-P95-158
	Monel Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/Neoprene Valve Plug, NACE Valve Spring	971-P95-160
	Monel Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/FKM Valve Plug, NACE Valve Spring	971-P95-159
	Monel Diaphragm (2), Diaphragm Gasket, 316SS Orifice, Monel Valve Plug, NACE Valve Spring,	971-P95-162
FKM Diaphragm	FKM Diaphragm (2), Diaphragm Gasket, 416SS Orifice, 416SS/M to M Valve Plug, Valve Spring	971-P95-114
	FKM Diaphragm (2), Diaphragm Gasket, 416SS Orifice, 416SS/Neoprene Valve Plug, Valve Spring	971-P95-116
	FKM Diaphragm (2), Diaphragm Gasket, 416SS Orifice, 416SS/FKM Valve Plug, Valve Spring	971-P95-115
	FKM Diaphragm (2), Diaphragm Gasket, Brass Orifice, Brass/Neoprene Valve Plug, Valve Spring	971-P95-119
	FKM Diaphragm (2), Diaphragm Gasket, Brass Orifice, Brass/FKM Valve Plug, Valve Spring	971-P95-118
	FKM Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/M to M Valve Plug, Valve Spring	971-P95-121
	FKM Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/Neoprene Valve Plug, Valve Spring	971-P95-123
	FKM Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/FKM Valve Plug, Valve Spring	971-P95-122
	FKM Diaphragm (2), Diaphragm Gasket, 316SS Orifice, Monel Valve Plug, Valve Spring	971-P95-125
	FKM Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/M to M Valve Plug, NACE Valve Spring	971-P95-148
	FKM Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/Neoprene Valve Plug, NACE Valve Spring	971-P95-150
	FKM Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/FKM Valve Plug, NACE Valve Spring	971-P95-149
	FKM Diaphragm (2), Diaphragm Gasket, 316SS Orifice, Monel Valve Plug, NACE Valve Spring	971-P95-152

## P95H Repair Kits - 3/4" & 1" Ported

	Kit Includes	Part Number
302SS Diaphragm	302SS Diaphragm (2), Diaphragm Gasket, 416SS Orifice, 416SS/Neoprene Valve Plug, Valve Spring	971-P95-000
	302SS Diaphragm (2), Diaphragm Gasket, 416SS Orifice, 416SS/FKM Valve Plug, Valve Spring	971-P95-004
	302SS Diaphragm (2), Diaphragm Gasket, 416SS Orifice, 416SS/M to M Valve Plug, Valve Spring	971-P95-001
	302SS Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/M to M Valve Plug, Valve Spring	971-P95-009
	302SS Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/Neoprene Valve Plug, Valve Spring	971-P95-011
	02SS Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/FKM Valve Plug, Valve Spring	971-P95-010
	302SS Diaphragm (2), Diaphragm Gasket, Brass Orifice, Brass/Neoprene Valve Plug, Valve Spring	971-P95-107
	302SS Diaphragm (2), Diaphragm Gasket, Brass Orifice, Brass/FKM Valve Plug, Valve Spring	971-P95-006
Neoprene Diaphragm	Neoprene Diaphragm, 416SS Orifice, 416SS/Neoprene Valve Plug, Valve Spring	971-P95-002
	Neoprene Diaphragm, 416SS Orifice, 416SS/FKM Valve Plug, Valve Spring	971-P95-025
	Neoprene Diaphragm, Brass Orifice, Neoprene Valve Plug, Valve Spring	971-P95-003
	Neoprene Diaphragm, 416SS Orifice, 416SS/M to M Valve Plug, Valve Spring	971-P95-024
	Neoprene Diaphragm, 316SS Orifice, 316SS/M to M Valve Plug, Valve Spring	971-P95-029
	Neoprene Diaphragm, 316SS Orifice, 316SS/Neoprene Valve Plug, Valve Spring	971-P95-031
	Neoprene Diaphragm, 316SS Orifice, 316SS/M to M Valve Plug, NACE Valve Spring	971-P95-048
	Neoprene Diaphragm, 316SS Orifice, 316SS/FKM Valve Plug, NACE Valve Spring	971-P95-049
	Neoprene Diaphragm, 316SS Orifice, 316SS/Neoprene Valve Plug, NACE Valve Spring	971-P95-050
Monel Diaphragm	Monel Diaphragm (2), Diaphragm Gasket, 416SS Orifice, 416SS/M to M Valve Plug, Valve Spring	971-P95-033
	Monel Diaphragm (2), Diaphragm Gasket, 416SS Orifice, 416SS/FKM Valve Plug, Valve Spring	971-P95-034
	Monel Diaphragm (2), Diaphragm Gasket, 416SS Orifice, 416SS/Neoprene Valve Plug, Valve Spring	971-P95-035
	Monel Diaphragm (2), Diaphragm Gasket, Brass Orifice, Brass/Neoprene Valve Plug, Valve Spring	971-P95-038
	Monel Diaphragm (2), Diaphragm Gasket, Brass Orifice, Brass/FKM Valve Plug, Valve Spring	971-P95-037
	Monel Diaphragm (2), Diaphragm Gasket, Brass Orifice, Brass/FKM Valve Plug, Valve Spring	971-P95-030
	Monel Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/M to M Valve Plug, Valve Spring	971-P95-040
	Monel Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/Neoprene Valve Plug, Valve Spring	971-P95-042
	Monel Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/FKM Valve Plug, Valve Spring	971-P95-041
	Monel Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/FKM Valve Plug, Valve Spring	971-P95-030
	Monel Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/M to M Valve Plug, NACE Valve Spring	971-P95-052
	Monel Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/FKM Valve Plug, NACE Valve Spring	971-P95-053
	Monel Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/Neoprene Valve Plug, NACE Valve Spring	971-P95-054
FKM Diaphragm	FKM Diaphragm (2), Diaphragm Gasket, 416SS Orifice, 416SS/M to M Valve Plug, Valve Spring	971-P95-013
	FKM Diaphragm (2), Diaphragm Gasket, 416SS Orifice, 416SS/FKM Valve Plug, Valve Spring	971-P95-014
	FKM Diaphragm (2), Diaphragm Gasket, 416SS Orifice, 416SS/Neoprene Valve Plug, Valve Spring	971-P95-015
	FKM Diaphragm (2), Diaphragm Gasket, Brass Orifice, Brass/Neoprene Valve Plug, Valve Spring	971-P95-018
	FKM Diaphragm (2), Diaphragm Gasket, Brass Orifice, Brass/FKM Valve Plug, Valve Spring	971-P95-017
	FKM Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/M to M Valve Plug, Valve Spring	971-P95-020
	FKM Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/Neoprene Valve Plug, Valve Spring	971-P95-022
	FKM Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/M to M Valve Plug, NACE Valve Spring	971-P95-044
	FKM Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/FKM Valve Plug, NACE Valve Spring	971-P95-045
	FKM Diaphragm (2), Diaphragm Gasket, 316SS Orifice, 316SS/Neoprene Valve Plug, NACE Valve Spring	971-P95-046

### P95H Steam Capacities<sup>1</sup> with Metal Diaphragm

Outlet Pressure Range	Outlet Pressure Setting		Inlet Pressure		1/2" Body Size		3/4" Body Size		1" Body Size	
					Offset		Offset		Offset	
	PSIG	BAR	PSIG	BAR	10%	20%	10%	20%	10%	20%
5 to 15 PSIG (0.35 to 1.0 BAR)	10	0.69	20	1.4	30	44	68	100	80	120
			30	2.1	36	48	84	170	100	200
			50	3.5	40	56	110	210	130	250
			75	5.2	40	56	190	340	220	400
			100	6.9	40	56	260	370	300	440
			150	10.3	40	56	310	480	360	560
			200	13.8	40	56	340	520	400	600
	250	17.2	40	56	340	520	400	600		
	15	1.0	20	1.4	32	48	76	110	88	130
			30	2.1	44	60	130	180	150	210
			50	3.5	52	64	200	290	240	340
			75	5.2	56	68	270	370	320	440
			100	6.9	56	72	340	520	400	600
			150	10.3	56	72	440	600	520	720
200			13.8	56	72	440	600	520	720	
250	17.2	56	72	440	600	520	720			

Outlet Pressure Range	Outlet Pressure Setting		Inlet Pressure		1/2" Body Size			3/4" Body Size			1" Body Size		
					Offset			Offset			Offset		
	PSIG	BAR	PSIG	BAR	10%	20%	40%	10%	20%	40%	10%	20%	40%
15 to 30 PSIG (1.0 to 2.1 BAR)	15	1.0	30	2.1	27	42	66	66	93	150	66	99	160
			40	2.8	27	45	69	81	110	190	78	130	200
			50	3.5	27	45	66	87	130	200	100	160	250
			75	5.2	36	54	81	110	170	250	140	210	330
			100	6.9	42	63	87	120	180	270	160	240	360
			150	10.3	54	72	96	150	210	300	210	300	450
			200	13.8	66	84	110	180	240	330	260	360	480
	250	17.2	63	93	120	200	260	330	260	360	510		
	300	20.7	81	99	130	220	290	360	300	420	540		
	30	2.1	40	2.8	45	69	110	87	140	190	96	160	200
			50	3.5	39	63	100	120	180	230	120	200	250
			75	5.2	54	84	130	170	260	360	160	280	360
			100	6.9	60	90	130	190	290	420	220	330	480
			150	10.3	72	110	160	230	360	480	300	450	660
200			13.8	93	130	170	280	360	510	360	540	780	
250			17.2	110	140	190	270	390	540	420	600	810	
300	20.7	120	150	200	300	420	570	450	630	840			
25 to 75 PSIG (1.7 to 5.2 BAR)	50	3.4	60	4.1	36	60	110	120	200	270	130	220	280
			75	5.2	42	69	120	180	260	360	190	290	360
			100	6.9	63	87	150	220	330	450	210	390	480
			150	10.3	75	110	170	250	390	630	480	540	720
			200	13.8	93	140	200	330	510	720	450	720	930
			250	17.2	93	140	210	350	540	750	510	780	1100
			300	20.7	110	150	220	360	540	780	570	810	1100
	75	5.2	100	6.9	69	110	190	240	360	450	260	390	450
			125	8.6	78	130	220	330	480	570	390	510	600
			150	10.3	96	140	230	360	540	660	390	630	750
			200	13.8	110	170	260	420	630	720	510	840	960
			250	17.2	120	180	290	480	720	780	660	990	1100
			300	20.7	140	210	300	480	750	840	690	1100	1400
			125	8.6	100	170	260	260	420	540	330	480	570
70 to 150 PSIG (4.8 to 10.3 BAR)	100	6.9	150	10.3	120	200	330	360	540	660	420	600	690
			175	12.0	140	230	360	390	630	780	480	750	840
			200	13.8	160	250	390	450	690	900	480	810	960
			250	17.2	130	270	420	450	750	1100	630	1000	1200
			300	20.7	240	330	450	570	870	1200	780	1100	1400
			125	8.6	150	250	330	360	540	630	390	600	690
			175	12.0	150	270	390	390	630	750	450	690	810
	150	10.3	200	13.8	170	280	420	480	750	870	510	840	930
			225	15.5	200	330	480	510	840	990	570	900	1100
			250	17.2	210	390	510	540	870	1100	600	1000	1200
			300	20.7	210	390	570	630	960	1400	780	1200	1400
			175	12.0	170	290	360	420	600	870	480	660	780
			200	13.8	200	330	420	480	720	870	600	780	900
			225	15.5	210	360	480	600	870	990	660	900	1100
250	17.2	270	420	540	600	900	1100	780	1100	1200			
300	20.7	260	450	600	690	1100	1400	930	1300	1400			

1. Capacities are based in Pounds of saturated steam per hour.

## P95H Pressure Ranges

Nominal Body Size, Inches	Outlet or Differential Pressure Range		Spring Wire Diameter		Spring Part Number	Spring Color
	PSIG	BAR	Inches	mm		
1/2	5 to 15	.3 to 1	.192	4.88	655-754-000	White
	15 to 30	1.0 to 2.1	.218	5.54	655-714-000	Yellow
	25 to 75	1.7 to 5.2	.235	5.97	655-690-000	Green
	70 to 150	4.8 to 10.3	.281	7.14	655-714-001	Red
3/4, 1	5 to 15	.3 to 1	.252	6.40	655-753-000	White
	15 to 30	1.0 to 2.1	.306	7.77	655-712-000	Yellow
	25 to 75	1.7 to 5.2	.343	8.71	655-712-001	Green
	70 to 150	4.8 to 10.3	.406	10.31	655-712-002	Red

## P95H Air SCFH Capacities with Elastomer Diaphragm

Outlet Pressure Range	Outlet Pressure Setting		Inlet Pressure		1/2" Body Size		3/4" Body Size		1" Body Size	
	PSIG	BAR	PSIG	BAR	Offset		Offset		Offset	
					10%	20%	10%	20%	10%	20%
5 to 15 PSIG (0.35 to 1.0 BAR)	10	0.69	20	1.4	750	1100	1700	2500	2000	3000
			30	2.1	900	1200	2100	4200	2500	5000
			50	3.5	1000	1400	2800	5300	3300	6300
			75	5.2	1000	1400	4700	8500	5500	10,000
			100	6.9	1000	1400	6400	9300	7500	11,000
			150	10.3	1000	1400	7700	12,000	9000	14,000
			200	13.8	1000	1400	8500	13,000	10,000	15,000
	15	1.0	20	1.4	800	1200	1900	2700	2200	3200
			30	2.1	1100	1500	3200	4500	3800	5300
			50	3.5	1300	1600	5100	7200	6000	8500
			75	5.2	1400	1650	6800	9300	8000	11,000
			100	6.9	1400	1800	8500	13,000	10,000	15,000
			150	10.3	1400	1800	11,000	15,000	13,000	18,000
			200	13.8	1400	1800	11,000	15,000	13,000	18,000

Outlet Pressure Range	Outlet Pressure Setting		Inlet Pressure		1/2" Body Size			3/4" Body Size			1" Body Size		
	PSIG	BAR	PSIG	BAR	Offset			Offset			Offset		
					10%	20%	40%	10%	20%	40%	10%	20%	40%
15 to 30 PSIG (1.0 to 2.1 BAR)	15	1.0	30	2.1	900	1400	2200	2200	3100	4900	2200	3300	5400
			40	2.8	900	1500	2300	2700	3800	6200	2600	4200	6500
			50	3.5	900	1500	2200	2900	4300	6800	3400	5400	8200
			75	5.2	1200	1800	2700	3800	5500	8400	4800	7000	11,000
			100	6.9	1400	2100	2900	4000	6000	9000	5400	8000	12,000
			150	10.3	1800	2400	3200	5000	7000	10,000	7000	10,000	15,000
			200	13.8	2200	2800	3600	6000	8000	11,000	8700	11,700	16,000
	30	2.1	250	17.2	2100	3100	3900	6800	8700	11,000	8500	12,000	17,000
			300	20.7	2700	3300	4300	7400	9600	12,000	10,000	14,000	18,000
			40	2.8	1500	2300	3500	2900	4500	6200	3200	5200	6600
			50	3.5	1300	2100	3400	4000	6000	7800	4000	6600	8300
			75	5.2	1800	2800	4200	5700	8500	12,000	5400	9300	12,000
			100	6.9	2000	3000	4400	6300	9800	14,000	7400	11,000	16,000
			150	10.3	2400	3800	5300	7700	12,000	16,000	10,000	15,000	22,000
25 to 75 PSIG (1.7 to 5.2 BAR)	50	3.4	200	13.8	3100	4600	6500	11,000	17,000	24,000	15,000	24,000	31,000
			250	17.2	3100	4500	6900	12,000	18,000	25,000	17,000	26,000	36,000
			300	20.7	3500	5100	7300	12,000	18,000	26,000	19,000	27,000	38,000
			100	6.9	2300	3700	6200	8000	12,000	15,000	8700	13,000	15,000
			125	8.6	2600	4300	7300	11,000	16,000	19,000	13,000	17,000	20,000
			150	10.3	3200	4700	7700	12,000	18,000	22,000	13,000	21,000	25,000
			200	13.8	3700	5500	8500	14,000	21,000	24,000	17,000	28,000	32,000
	75	5.2	250	17.2	4000	6100	9500	16,000	24,000	25,000	22,000	33,000	38,000
			300	20.7	4700	7100	10,000	16,000	25,000	28,000	23,000	35,000	45,000
			125	8.6	3400	5800	8800	8500	14,000	18,000	11,000	16,000	19,000
			150	10.3	4000	6800	11,000	12,000	18,000	22,000	14,000	20,000	23,000
			175	12.0	4800	7800	12,000	13,000	21,000	26,000	16,000	25,000	28,000
			200	13.8	5200	8200	13,000	15,000	23,000	30,000	16,000	27,000	32,000
			250	17.2	4300	8900	14,000	15,000	25,000	37,000	21,000	34,000	39,000
70 to 150 PSIG (4.8 to 10.3 BAR)	100	6.9	300	20.7	8000	11,000	15,000	19,000	29,000	41,000	26,000	38,000	46,000
			150	10.3	5200	8200	11,000	12,000	18,000	21,000	13,000	20,000	23,000
			175	12.0	5000	9000	13,000	13,000	21,000	25,000	15,000	23,000	27,000
			200	13.8	5500	9300	14,000	16,000	25,000	29,000	17,000	28,000	31,000
	125	8.6	225	15.5	6800	11,000	16,000	17,000	28,000	33,000	19,000	30,000	35,000
			250	17.2	6900	13,000	17,000	18,000	29,000	37,000	20,000	34,000	39,000
			300	20.7	7000	13,000	19,000	21,000	32,000	45,000	26,000	41,000	46,000
			175	12.0	5600	9500	12,000	14,000	20,000	29,000	16,000	22,000	26,000
	150	10.3	200	13.8	6500	11,000	14,000	16,000	24,000	29,000	20,000	26,000	30,000
			225	15.5	7100	12,000	16,000	20,000	29,000	33,000	22,000	30,000	35,000
			250	17.2	9000	14,000	18,000	20,000	30,000	37,000	26,000	35,000	39,000
			300	20.7	8700	15,000	20,000	23,000	37,000	45,000	31,000	44,000	46,000

## P95H Water Capacities with Elastomer Diaphragm<sup>1</sup>

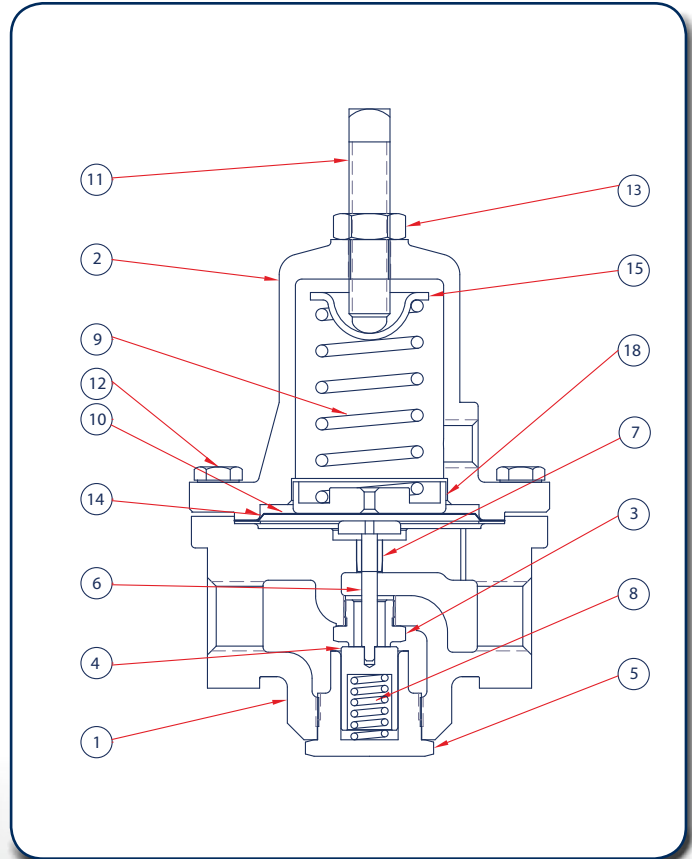
Outlet Pressure Range	Outlet Pressure Setting		Inlet Pressure		1/2" Body Size		3/4" Body Size		1" Body Size	
					Offset		Offset		Offset	
	PSIG	BAR	PSIG	BAR	10%	20%	10%	20%	10%	20%
5 to 15 PSIG (0.35 to 1.0 BAR)	10	0.69	20	1.4	3.7	5.0	7.0	10	8.3	12
			30	2.1	4.0	5.2	10	13	12	16
			50	3.5	4.2	5.3	12	17	14	20
			75	5.2	4.2	5.3	12	20	14	25
			100	6.9	4.2	5.3	12	22	14	27
			150	10.3	4.2	5.3	12	22	14	27
			200	13.8	4.2	5.3	12	22	14	27
	15	1.0	20	1.4	3.5	5.0	7.0	8.5	8.3	10
			30	2.1	4.7	5.8	11	13	13	15
			50	3.5	4.8	6.2	15	17	18	20
			75	5.2	5.0	6.3	15	22	18	27
			100	6.9	5.0	6.3	15	28	18	33
			150	10.3	5.0	6.3	15	32	18	37
			200	13.8	5.0	6.3	15	35	18	42
250	17.2	5.0	6.3	15	35	20	42			

Outlet Pressure Range	Outlet Pressure Setting		Inlet Pressure		1/2" Body Size			3/4" Body Size			1" Body Size		
					Offset			Offset			Offset		
	PSIG	BAR	PSIG	BAR	10%	20%	40%	10%	20%	40%	10%	20%	40%
15 to 30 PSIG (1.0 to 2.1 BAR)	15	1.0	30	2.1	2.0	3.2	6.8	7.0	10	15	8.0	11	16
			40	2.8	3.0	5.0	7.0	8.0	12	18	8.0	13	20
			50	3.5	4.0	5.5	7.2	9.0	14	20	8.5	15	23
			75	5.2	5.0	6.5	7.4	12	18	26	13	21	29
			100	6.9	5.0	6.5	7.6	13	19	28	19	26	34
			150	10.3	5.0	6.5	7.8	15	22	31	25	36	42
			200	13.8	5.1	6.5	8.0	19	25	35	32	37	44
	30	2.1	250	17.2	5.1	6.6	8.5	20	27	37	33	37	46
			300	20.7	5.2	6.6	9.0	20	28	40	34	38	48
			40	2.8	2.8	4.9	9.5	9.0	13	17	8.5	14	17
			50	3.5	3.5	5.7	10	11	16	21	11	18	22
			75	5.2	4.0	5.9	13	15	21	28	16	25	29
			100	6.9	5.0	6.1	14	17	24	33	19	31	34
			150	10.3	6.0	6.5	14	21	30	40	30	39	42
25 to 75 PSIG (1.7 to 5.2 BAR)	50	3.4	200	13.8	6.5	6.9	14	24	31	46	35	48	49
			250	17.2	7.0	11	14	26	39	51	33	49	55
			300	20.7	7.3	11	15	25	40	55	40	55	60
			100	6.9	9.5	12	15	16	23	28	16	24	30
			125	8.6	10	14	18	20	29	33	21	31	36
			150	10.3	11	15	21	23	33	39	24	37	42
			200	13.8	11	15	23	28	41	47	29	46	49
	75	5.2	250	17.2	11	15	23	32	43	52	37	50	55
			300	20.7	11	15	23	33	49	56	39	56	60
			125	8.6	7.0	11	16	15	24	30	30	24	32
			150	10.3	8.0	14	19	17	27	35	35	30	38
			175	12.0	9.0	15	21	24	28	40	40	33	43
			200	13.8	9.5	15	23	25	37	45	45	41	48
			250	17.2	10	16	24	29	42	52	52	42	54
70 to 150 PSIG (4.8 to 10.3 BAR)	100	6.9	300	20.7	11	16	24	33	48	57	57	43	58
			125	8.7	7.8	12	18	19	25	32	17	27	35
			150	10.3	9.0	15	20	23	32	37	22	33	40
			175	12.0	9.5	16	23	27	36	42	24	25	47
			200	13.8	10	18	25	32	40	47	29	38	49
			250	17.2	11	18	26	34	44	51	32	42	53
	125	8.6	300	20.7	12	18	28	36	47	57	38	44	59
			175	12.0	8.7	14	19	21	28	34	34	26	37
			200	13.8	10	17	22	24	33	40	40	34	42
			225	15.5	12	19	24	29	37	45	45	39	48
			250	17.2	13	20	26	30	41	50	50	45	52
			300	20.7	13	20	28	35	49	55	55	53	59

1. Capacities are based in gallons per minute of water.

## P95H Parts for 1/2" Body

Item		Description	Qty.	Part Number
1	Body	Cast Iron, 1/2"	1	664-333-000
		Steel, 1/2"		664-334-000
		Stainless Steel, 1/2"		664-335-000
2	Bonnet	Cast Iron, Tapped	1	604-251-000
		Steel, Tapped		604-250-000
		Stainless Steel, Tapped		604-252-000
3	Orifice	416 SS (Metal)	1	688-025-000
		Brass		688-031-000
		416 SS (Composite)		688-029-000
		316 SS (Metal)		688-026-000
		316 SS (Composite)		688-030-000
4	Valve Plug Assemblies	Valve Plug Seat, 416 SS (Metal)	1	650-151-000
		416 SS / Neoprene Seat		822-030-001
		Brass / Neoprene Seat		822-032-001
		416 SS / Fluorocarbon		822-030-000
		Brass / Fluorocarbon		822-032-000
		316 SS / Fluorocarbon		822-031-000
		Valve Plug Seat, 316 SS (Metal)		650-152-000
		Valve Plug Seat, Monel (Metal)		650-162-000
5	Valve Plug Guide	416 SS (Metal)	1	639-109-000
		Brass		639-110-000
		316 SS (Metal)		639-111-000
6	Stem Assembly	416 SS	1	811-080-001
		316 SS		811-080-000
7	Stem Guide Bushing	416 SS	1	608-079-000
		316 SS		608-078-000
8	Valve Plug Spring	Stainless Steel	1	655-713-000
		Inconel		655-716-000
9	Range Springs	5-15 PSIG, White	1	655-754-000
		15-30 PSIG, Yellow		655-714-000
		25-75 PSIG, Green		655-690-000
		70-150 PSIG, Red		655-714-001
10	Diaphragm	Neoprene	1	618-087-000
		Fluorocarbon		618-088-000
		302 Stainless Steel		618-082-000
		Monel		618-081-000
11	Adjusting Screw, Steel	Adjusting Screw, Steel	1	648-487-000
		Adjusting Screw, SS		648-487-001
12	Build Screws, Steel	Build Screws, Steel	8	648-463-009
		Build Screws, SS		648-547-001
13	Jam Nut, Steel	Jam Nut, Steel	1	634-179-000
		Jam Nut, SS		634-185-000
14	Diaphragm Gasket, Composition		1	624-073-000
15	Spring Guide, Steel		1	626-079-000
16	NACE Tag (Not Shown)		1	632-503-000
17	P95H Nameplate (Not Shown)		1	632-524-000
18	Piston, Aluminum		1	637-323-000
19	Nameplate Drive Screws		2	648-464-000
21	Vent Screen		1	647-023-000
22	Diaphragm Protector		1	641-011-000



### P95H Maximum Body & Bonnet Temp Range

Cast Iron	-40° to +406°F	-40° to +208°C
Steel	-20° to +450°F	-29° to +232°C
Stainless	-40° to +450°F	-40° to +232°C

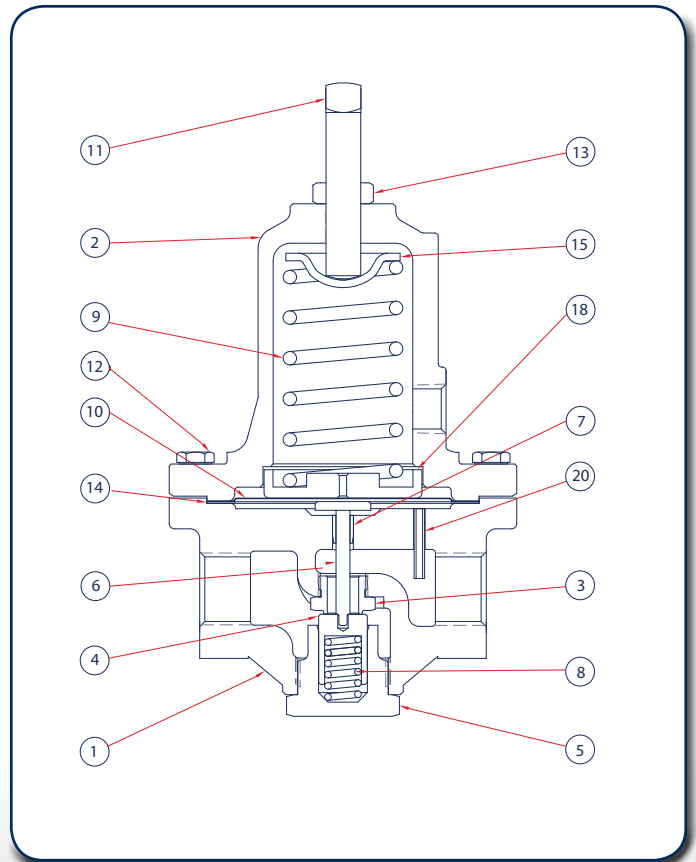
### P95H Maximum Diaphragm & Seat Temp Range

Nitrile	-40° to +180°F	-40° to +82°C
Neoprene	-40° to +180°F	-40° to +82°C
Stainless	-40° to +650°F	-40° to +343°C



## P95H Parts for 3/4" & 1" Bodies

Item		Description	Part Number
1	Body	Cast Iron, 3/4"	664-329-000
		Cast Iron, 1"	664-329-001
		Steel, 3/4"	664-330-000
		Steel, 1"	664-330-001
		Stainless Steel, 3/4"	664-331-000
		Stainless Steel, 1"	664-331-001
2	Bonnet	Cast Iron, Tapped	604-244-000
		Steel, Tapped	604-243-000
		Stainless Steel Tapped	604-246-000
3	Orifice	416 SS (Metal / Metal)	688-020-000
		Brass	688-022-000
		416 SS (Composite)	688-023-000
		316 SS (Metal)	688-024-000
		316 SS (Composite)	688-021-000
4	Valve Plug Assemblies	Valve Plug Seat, 416 SS (Metal)	650-145-000
		416 SS / Neoprene Seat	822-026-001
		Brass / Neoprene Seat	822-028-001
		416 SS / Fluorocarbon	822-026-000
		Brass / Fluorocarbon	822-028-000
		316 SS / Fluorocarbon	822-027-000
		Valve Plug Seat, 316 SS (Metal)	650-149-000
		Assembly 316 SS / Neoprene Seat	822-027-001
5	Valve Plug Guide	416 SS (Metal)	639-106-000
		Brass	639-107-000
		316 SS (Metal)	639-108-000
6	Stem Assembly, 416 SS	416 SS	811-079-001
		316 SS	811-079-000
7	Stem Guide Bushing , 416 SS	416 SS	608-077-000
		316 SS	608-076-000
8	Valve Plug Spring, Stainless Steel	Stainless Steel	655-710-000
		Inconel	655-711-000
9	Range Springs	5-15 PSIG, White	655-753-000
		15-30 PSIG, Yellow	655-712-000
		25-75 PSIG, Green	655-712-001
		70-150 PSIG, Red	655-712-002
10	Diaphragm	Neoprene	1 618-075-000
		Fluorocarbon	1 618-076-000
		302 Stainless Steel	2 618-077-000
		Monel	2 618-078-000
11	Adjusting Screw, Steel	Steel	1 648-519-000
		SS	1 648-519-001
12	Build Screws, Steel	Steel	8 648-463-002
		SS	8 648-547-000
13	Jam Nut, Steel	Steel	1 634-181-000
		SS	1 634-181-001
14	Diaphragm Gasket, Composition	1 624-072-000	
15	Spring Guide, Steel	1 626-100-000	
16	NACE Tag (Not Shown)	1 632-503-000	
17	P95H Nameplate (Not Shown)	1 632-524-000	
18	Piston, Aluminum	1 637-321-000	
19	Nameplate Drive Screws (Not Shown)	2 648-464-000	
20	Pitot Tube	1 660-064-000	
21	Vent Screen	1 647-023-001	
22	Diaphragm Protector	1 641-011-000	



### P95H Maximum Body & Bonnet Temp Range

Cast Iron	-40° to +406°F	-40° to +208°C
Steel	-20° to +450°F	-29° to +232°C
Stainless	-40° to +450°F	-40° to +232°C

### P95H Maximum Diaphragm & Seat Temp Range

Nitrile	-40° to +180°F	-40° to +82°C
Neoprene	-40° to +180°F	-40° to +82°C
Stainless	-40° to +650°F	-40° to +343°C

# P98H Back Pressure Regulator / Relief Valve

The P98H monitors upstream pressure and opens to relieve excess pressure increases above setpoint. As a Back Pressure Regulator, the upstream pressure is monitored and released downstream when the setpoint is exceeded.

## Applications

- Pulp and Paper - Boilers, Heaters, PM Drums
- Chemical Boilers, Process Heaters
- Water and Waste Water Systems
- Steam Injection

## P98H Part Matrix

P98H									
									Body Size
	06								3/4 NPT
	08								1 NPT
									Spring Range
									PSIG      BAR
	015								5 - 15      0.34 - 1.03
	035								15 - 35      1 - 2.4
	075								25 - 75      1.7 - 5.2
	140								70 - 140      4.8 - 9.7
	200								130 - 200      9 - 13.8
									Options
	0								Standard
	1								Tapped Vent
	A								150 RF*
	B								300 RF*
	C								600 RF*
	D								Socket Weld*
	W								Tapped Vent + 150RF*
	X								Tapped Vent + 300RF*
	Y								Tapped Vent + 600RF*
	Z								Tapped Vent + Socket Weld*
	0								Version
									Standard
	N								NACE
									Valve Plug / Orifice
	A								416 SS (Metal / Metal)
	B								416 SS Fluorocarbon
	E								416 SS / Nitrile
	I								316 SS (Metal / Metal)
	J								316 SS Fluorocarbon
	K								316 SS / Nitrile
									Diaphragm
	0								302 SS
	2								Fluorocarbon
	3								Neoprene
	4								Monel
									Case / Body Material
	0								Iron / Iron
	1								Steel / Steel
	3								Iron / Steel
	4								Steel / Stainless
	5								Stainless / Stainless

## P98H Maximum Body & Bonnet Temp Range

Material	Temperature Range (°F)	Temperature Range (°C)
Cast Iron	-40° to +406°F	-40° to +208°C
Steel	-20° to +450°F	-29° to +232°C
Stainless	-40° to +450°F	-40° to +232°C

## P98H Maximum Diaphragm & Seat Temp Range

Material	Temperature Range (°F)	Temperature Range (°C)
Nitrile	-40° to +180°F	-40° to +82°C
Neoprene	-40° to +180°F	-40° to +82°C



## Specifications

Maximum Inlet Pressure (Set Pressure Plus Build Up)		
Body	300 PSIG	WCB Steel / SS
	250 PSIG @ 400 °F	Cast Iron
	300 PSIG @ 300 °F	Cast Iron
Pressure Ranges	5-15 PSIG	
	15-35 PSIG	
	25-75 PSIG	
	70-140 PSIG	
	130-200 PSIG	
Body Size	3/4 NPT	
	1 NPT	
Orifice Size	9/16"	
Weight Approximate		
3/4" NPT	20 lb	9.1 kg
1" NPT	20 lb	9.1 kg

## Spring Range

Body Size	PSIG	BAR	Spring Color Code
3/4 and 1 NPT (20 and 25 DN)	5 - 15	.3 - 1	White
	15 - 35	1.03 - 2.41	Yellow
	25 - 75	1.72 - 5.17	Green
	70 - 140	4.83 - 9.65	Red
	130 - 200	8.96 - 13.8	Blue

## Materials of Construction

Body, Bonnet, Diaphragm Case	
Options	Cast Iron
	Steel
	Stainless Steel
Diaphragm	
Options	302 SS Fluorocarbon
	Neoprene
	Monel
Valve Plug / Seat	
Options	Nitrile Valve Plug / SS Orifice
	Metal Valve Plug / SS Orifice
	Fluorocarbon Valve Plug / SS Orifice

## P98H Dimension, Inches

Nominal Body Size, Inches	A		B	C (Maximum)	D	E (NPT)
	NPT or SWE	Flanged				
3/4, 1	5.0	14.0	1.31	9.69	6.22	1/2*

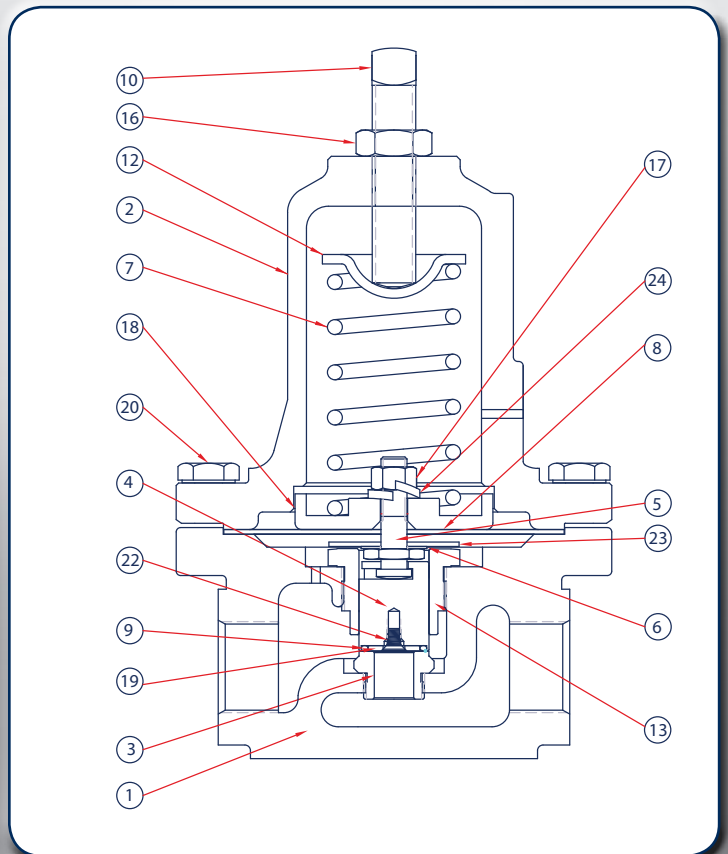
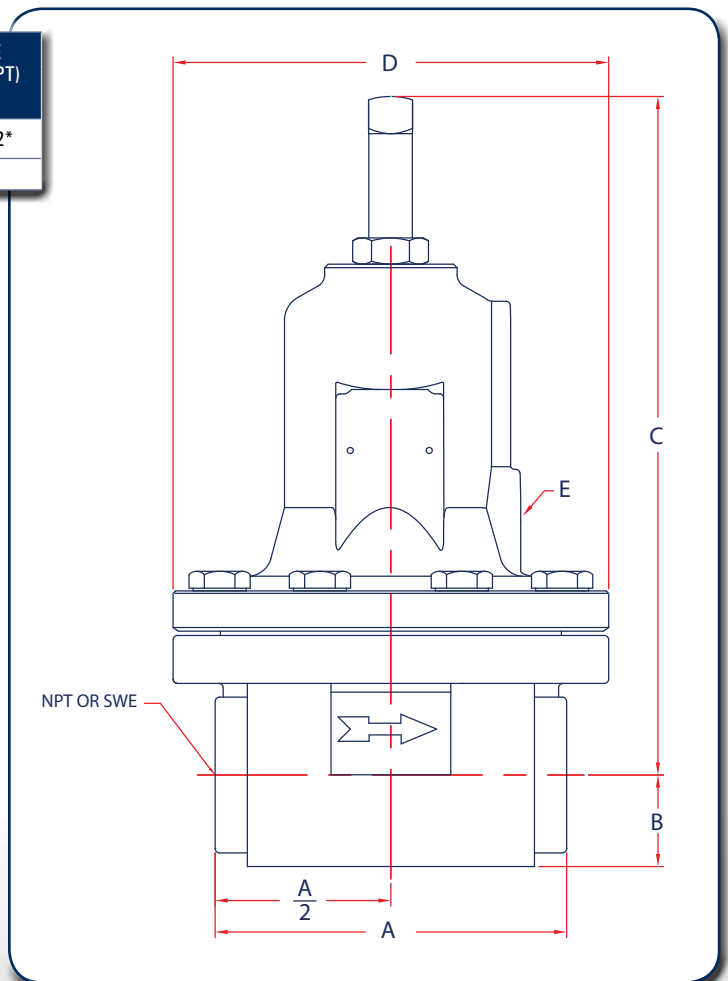
\* Tapped Vent Option Only

## Installation

These relief valves may be installed in any position, as long as flow will be in the same direction as that of the arrow cast on the body.

## P98H Parts

Item	Description	Qty.	Part Number
1	Body	Iron 3/4"	664-336-000
		Iron 1"	664-336-001
		Steel 3/4"	664-337-000
		Steel 1"	664-337-001
		Stainless Steel 3/4"	664-338-000
		Stainless Steel 1"	664-338-001
2	Bonnet	Steel (Drilled)	604-241-000
		Iron (Drilled)	604-242-000
		Stainless Steel, (Drilled)	604-245-000
		Steel, Tapped	604-243-000
		Iron, Tapped	604-244-000
		Stainless Steel, Tapped	604-246-000
3	Orifice	416 Stainless Steel / Metal to Metal	688-020-000
		416 Stainless Steel w/Elastomer	688-027-000
		316 Stainless Steel / Metal to Metal	688-024-000
		316 Stainless Steel w/Elastomer	688-028-000
4	Valve Plugs	416 Stainless Steel	639-112-000
		416 Stainless Steel / Metal to Metal	639-116-000
		316 Stainless Steel	639-117-000
		316 Stainless Steel / Metal to Metal	639-113-000
5	Pusher Post, 416 SS Elastomer	416 SS Elastomer	613-034-000
		416 SS Metal to Metal	613-036-000
		316 SS Elastomer	613-035-000
		316 SS Metal to Metal	613-037-000
6	Diaphragm Assembly Gasket	1	624-074-000
7	Range Springs	5-15 PSIG, White	655-753-000
		15-35 PSIG, Yellow	655-712-000
		25-75 PSIG, Green	655-712-001
		70-140 PSIG, Red	655-712-002
		130-200 PSIG, Blue	655-717-000
8	Diaphragm	Neoprene	618-083-000
		Fluorocarbon	618-084-000
		302 Stainless Steel	618-085-000
		Monel	618-086-000
9	O-ring - Nitrile	1	649-269-004
	O-ring - Fluorocarbon	1	010-380-000
	O-ring - Neoprene	1	649-312-000
10	Adjusting Screw - Steel	1	648-519-000
	Adjusting Screw - Stainless Steel	1	648-519-001
11	Diaphragm Flange Gasket	1	624-072-000
12	Spring Guide	1	626-100-000
13	Valve Plug Guide - 416 SS	1	626-103-000
	Valve Plug Guide - 316 SS	1	626-104-000
14	NACE Tag (Not Shown)	1	632-503-000
15	Nameplate (Not Shown)	1	632-524-000
16	Stem Jam Nut	1	634-181-000
	Stem Jam Nut - Stainless Steel	1	634-181-001
17	Diaphragm Assembly Locknut	1	634-184-000
18	Piston (Diaphragm Head)	1	637-324-000
19	Retainer, O-ring - 416 SS	1	643-199-000
	Retainer, O-ring - 316 SS	1	643-200-000
20	Build Screw - Steel	8	648-463-002
	Build Screw - Stainless Steel	8	648-547-000
21	Drive Screw (Nameplate)	2	648-464-000
22	Valve Plug Machine Screw (SS)	1	648-522-000
23	Washer - 416 SS	1	662-220-000
	Washer - 316 SS	1	662-219-000
24	Lockwasher (Split Ring)	1	662-221-000
25	Vent Screen	1	647-023-001



**P98H Water Relief Capacities** in Gallons per Minute (l/min) **with Neoprene Diaphragm**

Nominal Body Size, Inches (DN)	Spring		Relief Pressure Setting PSIG (BAR)	Flow at Relief Setting, GPM (l/min.)	Pressure Buildup Over Relief Setting, PSIG (BAR)								
	Part Number	Color Code			2 (0.14)	4 (0.28)	6 (0.41)	8 (0.55)	10 (0.69)	15 (1.0)	20 (1.4)	25 (1.7)	30 (2.1)
3/4, 1 (20, 25)	655-753-000	White	10 (0.69)	2.2 (8.3)	16.5 (62.5)	21.5 (81.4)	24.5 (92.7)	26.5 (100)	27.5 (104)	29.5 (112)	32.3 (122)	34.9 (132)	37.3 (141)

Nominal Body Size, Inches (DN)	Spring		Relief Pressure Setting PSIG (BAR)	Flow at Relief Setting, GPM (l/min.)	Pressure Buildup Over Relief Setting, PSIG (BAR)								
	Part Number	Color Code			5 (0.34)	7 (0.48)	10 (0.69)	15 (1.03)	20 (1.38)	30 (2.07)	50 (3.45)	75 (5.17)	100 (6.90)
3/4, 1 (20, 25)	655-753-000	White	10 (0.69)	2.2 (8.3)	16.5 (62.5)	21.5 (81.4)	24.5 (92.7)	26.5 (100)	27.5 (104)	29.5 (112)	32.3 (122)	34.9 (132)	37.3 (141)
	655-712-000	Yellow	15 (1.03)	1.8 (6.81)	18 (68.1)	23.5 (88.9)	27 (102)	31 (117)	33 (125)	37 (140)	45 (170)	53 (201)	59 (223)
			25 (1.72)	1.8 (6.81)	26 (98.4)	29 (110)	33 (125)	38 (144)	41 (155)	45 (170)	53 (201)	61 (231)	67 (254)
			35 (2.41)	1.8 (6.81)	32 (121)	34.5 (131)	37.5 (142)	42 (159)	45 (170)	49.5 (187)	56 (212)	64 (242)	70 (265)
	655-712-001	Green	35 (2.41)	1.5 (5.68)	20 (75.7)	25 (94.6)	28 (106)	33 (125)	37 (140)	44 (167)	50 (189)	57 (216)	63 (238)
			50 (3.45)	1.5 (5.68)	25 (94.6)	31 (117)	37 (140)	42.5 (161)	47 (178)	52 (200)	58 (220)	65 (246)	71.0 (269)
			75 (5.17)	1.5 (5.68)	35 (132)	41 (155)	45 (170)	50 (189)	53 (201)	58 (220)	63.5 (240)	68.5 (259)	74 (280)
	655-712-002	Red	75 (5.17)	1.3 (4.92)	19 (71.9)	25 (94.6)	32 (121)	37 (140)	41 (155)	47 (178)	57 (216)	66.5 (252)	72 (273)
			100 (6.90)	1.3 (4.92)	22 (83.3)	29 (110)	35 (132)	43 (163)	48.5 (184)	57 (216)	66.5 (252)	73 (276)	78 (295)
			125 (8.62)	1.3 (4.92)	27 (102)	34.5 (131)	42 (159)	50.5 (191)	57 (216)	67 (254)	73.5 (278)	78 (295)	83 (314)
	655-717-000	Blue	150 (10.34)	1 (3.78)	15 (56.8)	20 (75.7)	27 (102)	39 (148)	48 (182)	62 (235)	78 (295)	83 (314)	88 (333)
			175 (12.07)	1 (3.78)	19 (71.9)	24 (90.8)	32 (121)	50 (189)	60 (227)	72 (273)	82 (310)	88.5 (335)	94 (356)
			200 (13.79)	1 (3.78)	22 (83.3)	27 (102)	36 (136)	53 (201)	65 (246)	78 (295)	88 (333)	93 (352)	98 (371)

**P98H Water Relief Capacities** in Gallons per Minute (l/min) **with Metal Diaphragm**

Nominal Body Size, Inches (DN)	Spring		Relief Pressure Setting PSIG (BAR)	Flow at Relief Setting, GPM (l/min.)	Pressure Buildup Over Relief Setting, PSIG (BAR)								
	Part Number	Color Code			2 (0.14)	4 (0.28)	6 (0.41)	8 (0.55)	10 (0.69)	15 (1.0)	20 (1.4)	25 (1.7)	30 (2.1)
3/4, 1 (20, 25)	655-753-000	White	10 (0.69)	2.2 (8.3)	11.5 (43.5)	17.5 (66.2)	20.2 (76.5)	20.5 (77.6)	24 (90.8)	26.5 (100)	29.0 (110)	31.4 (119)	33.5 (127)

Nominal Body Size, Inches (DN)	Spring		Relief Pressure Setting PSIG (BAR)	Flow at Relief Setting, GPM (l/min.)	Pressure Buildup Over Relief Setting, PSIG (BAR)								
	Part Number	Color Code			5 (0.34)	7 (0.48)	10 (0.69)	15 (1.03)	20 (1.38)	30 (2.07)	50 (3.45)	75 (5.17)	100 (6.90)
3/4, 1 (20, 25)	655-712-000	Yellow	15 (1.03)	1.8 (6.81)	6 (22.7)	13 (49.2)	16 (60.6)	20 (75.7)	26 (98.4)	31 (117)	37 (140)	44 (167)	49 (185)
			25 (1.72)	1.8 (6.81)	13 (49.2)	16 (60.6)	19.5 (73.8)	24 (90.8)	32 (121)	35 (132)	40 (151)	46 (174)	50 (189)
			35 (2.41)	1.8 (6.81)	16 (60.9)	19 (71.9)	23 (87.1)	28 (106)	33 (125)	37 (140)	41 (155)	47 (178)	51 (193)
	655-712-001	Green	35 (2.41)	1.5 (5.68)	8 (30.3)	14 (53.0)	16.5 (62.5)	21 (79.5)	23 (87.1)	29.5 (112)	33 (125)	37 (140)	41 (155)
			50 (3.45)	1.5 (5.68)	11 (41.6)	15 (56.8)	18.5 (70.0)	24 (90.8)	28 (108)	35.5 (134)	44 (167)	49 (185)	53 (201)
			75 (5.17)	1.5 (5.68)	14 (53.0)	20 (75.7)	26 (98.4)	33 (125)	37 (140)	42.5 (161)	50 (189)	58 (220)	62 (235)
	655-712-002	Red	75 (5.17)	1.3 (4.92)	7 (26.5)	10 (37.9)	14 (53.0)	20 (75.7)	26 (98.4)	35 (132)	46 (174)	55 (208)	58 (220)
			100 (6.90)	1.3 (4.92)	9 (34.1)	12 (45.4)	18 (68.1)	25.5 (96.5)	32 (121)	41 (155)	54 (204)	62 (235)	68 (257)
			125 (8.62)	1.3 (4.92)	11 (41.6)	14.5 (54.9)	20 (75.7)	30 (114)	38 (144)	50 (189)	60.5 (229)	67.5 (255)	72 (273)
	655-717-000	Blue	150 (10.34)	1 (3.78)	7 (26.5)	9 (34.1)	12 (45.4)	17.5 (66.2)	23 (87.1)	34 (129)	51 (193)	66 (250)	76 (288)
			175 (12.07)	1 (3.78)	8 (30.3)	10 (37.9)	14 (53.0)	20.5 (77.6)	27 (102)	39 (148)	59 (223)	74 (280)	81 (307)
			200 (13.79)	1 (3.78)	9 (34.1)	12 (45.4)	17 (64.3)	24.5 (92.7)	32.5 (123)	47 (178)	66 (250)	79 (299)	85 (322)

### P98H Steam Relief Capacities in Pounds per Hour (kg/h) with Metal Diaphragm Only

Nominal Body Size, Inches (DN)	Spring		Relief Pressure Setting PSIG (BAR)	Flow at Relief Setting, GPM (l/min.)	Pressure Buildup Over Relief Setting, PSIG (BAR)								
	Part Number	Color Code			2 (0.14)	4 (0.28)	6 (0.41)	8 (0.55)	10 (0.69)	15 (1.0)	20 (1.4)	25 (1.7)	30 (2.1)
3/4, 1 (20, 25)	655-753-000	White	10 (0.69)	25 (11.3)	136 (61.7)	200 (90.7)	240 (109)	280 (127)	310 (141)	370 (168)	417 (189)	463 (210)	509 (231)

Nominal Body Size, Inches (DN)	Spring		Relief Pressure Setting PSIG (BAR)	Flow at Relief Setting, LB/H (kg/h)	Pressure Buildup Over Relief Setting, PSIG (BAR)								
	Part Number	Color Code			5 (0.34)	7 (0.48)	10 (0.69)	15 (1.03)	20 (1.38)	30 (2.07)	50 (3.45)	75 (5.17)	100 (6.90)
3/4, 1 (20, 25)	655-712-000	Yellow	15 (1.03)	25 (11.3)	91 (41.3)	135 (61.2)	180 (81.6)	260 (118)	360 (163)	440 (200)	580 (263)	770 (349)	950 (431)
			25 (1.72)	25 (11.3)	120 (54.4)	180 (81.6)	230 (104)	330 (150)	395 (179)	510 (231)	660 (299)	850 (386)	1030 (467)
			35 (2.41)	25 (11.3)	135 (61.2)	190 (86.2)	250 (113)	360 (163)	455 (206)	590 (268)	730 (331)	920 (417)	1100 (499)
	655-712-001	Green	35 (2.41)	25 (11.3)	68 (30.8)	110 (49.9)	160 (72.6)	230 (104)	330 (150)	500 (227)	625 (284)	785 (356)	940 (426)
			50 (3.45)	25 (11.3)	110 (48.9)	160 (72.6)	210 (95.3)	340 (154)	430 (195)	640 (290)	910 (413)	1100 (499)	1300 (590)
			75 (5.17)	25 (11.3)	180 (81.6)	230 (104)	320 (145)	445 (202)	630 (286)	820 (372)	1100 (499)	1350 (612)	1550 (703)
	655-712-002	Red	75 (5.17)	25 (11.3)	130 (59.0)	155 (70.3)	210 (95.3)	320 (145)	410 (186)	590 (268)	1050 (476)	1350 (612)	1550 (703)
			100 (6.90)	25 (11.3)	135 (61.2)	160 (72.6)	230 (104)	350 (159)	455 (206)	680 (308)	1180 (535)	1600 (726)	1800 (816)
			125 (8.62)	25 (11.3)	145 (65.8)	205 (93.0)	280 (127)	450 (204)	540 (245)	860 (390)	1400 (635)	1770 (803)	2000 (907)
	655-717-000	Blue	150 (10.34)	25 (11.3)	86 (39.0)	135 (61.2)	200 (90.7)	340 (154)	455 (206)	720 (327)	1270 (576)	1900 (862)	2200 (998)
			175 (12.07)	25 (11.3)	91 (41.3)	145 (65.8)	230 (104)	350 (159)	500 (227)	770 (349)	1350 (612)	2000 (907)	2400 (1089)
			200 (13.79)	25 (11.3)	160 (72.6)	225 (102)	320 (145)	450 (204)	630 (286)	950 (431)	1600 (726)	2300 (1043)	2700 (1225)

### P98H Air Relief Capacities in SCFH (Nm³/h) with Neoprene Diaphragm

Nominal Body Size, Inches (DN)	Spring		Relief Pressure Setting PSIG (BAR)	Flow at Relief Setting, GPM (l/min.)	Pressure Buildup Over Relief Setting, PSIG (BAR)								
	Part Number	Color Code			2 (0.14)	4 (0.28)	6 (0.41)	8 (0.55)	10 (0.69)	15 (1.0)	20 (1.4)	25 (1.7)	30 (2.1)
3/4, 1 (20, 25)	655-753-000	White	10 (0.69)	500 (13.4)	4600 (166)	6900 (185)	7400 (198)	8000 (214)	8900 (239)	10,000 (268)	11,000 (297)	11,100 (297)	12,300 (330)

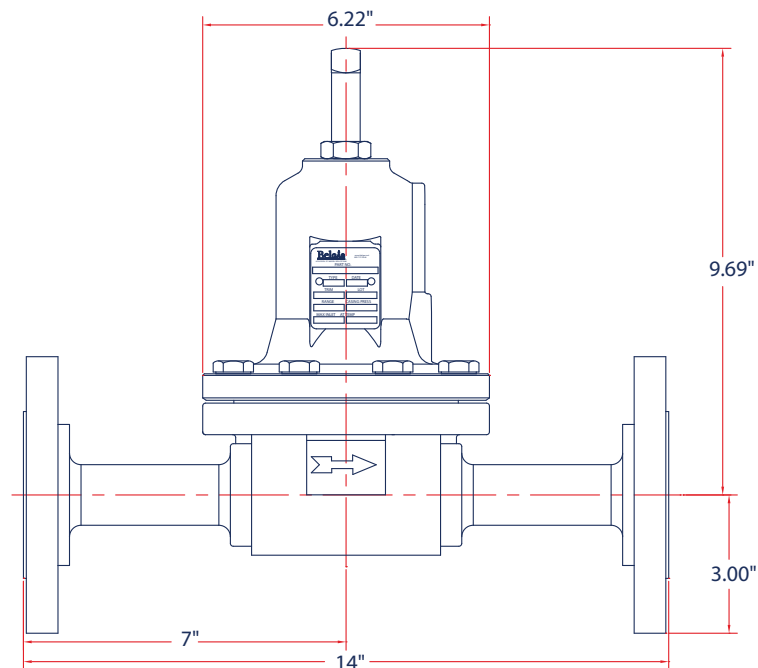
Nominal Body Size, Inches (DN)	Spring		Relief Pressure Setting PSIG (BAR)	Flow at Relief Setting, SCFH (Nm³/h)	Pressure Buildup Over Relief Setting, PSIG (BAR)								
	Part Number	Color Code			5 (0.34)	7 (0.48)	10 (0.69)	15 (1.03)	20 (1.38)	30 (2.07)	50 (3.45)	75 (5.17)	100 (6.90)
3/4, 1 (20, 25)	655-712-000	Yellow	15 (1.03)	500 (13.4)	5000 (134)	6500 (174)	7700 (206)	9500 (247)	9900 (265)	11,900 (319)	15,900 (426)	20,900 (560)	25,900 (694)
			25 (1.72)	500 (13.4)	7000 (188)	8500 (228)	9700 (260)	12,000 (322)	13,000 (348)	13,900 (373)	17,900 (480)	22,900 (614)	27,900 (748)
			35 (2.41)	500 (13.4)	9000 (241)	10,500 (281)	12,000 (322)	13,000 (348)	14,000 (375)	17,000 (456)	20,800 (557)	26,000 (697)	31,000 (831)
	655-712-001	Green	35 (2.41)	500 (13.4)	4500 (121)	5500 (147)	8500 (228)	13,000 (348)	14,000 (375)	17,000 (456)	20,800 (557)	26,000 (697)	31,000 (831)
			50 (3.45)	500 (13.4)	6000 (161)	7000 (188)	11,500 (308)	15,500 (415)	17,000 (456)	20,000 (536)	24,000 (643)	29,000 (777)	34,000 (911)
			75 (5.17)	500 (13.4)	7500 (201)	10,000 (268)	15,000 (402)	20,000 (536)	22,000 (590)	25,000 (670)	29,000 (777)	34,000 (911)	39,000 (1045)
	655-712-002	Red	75 (5.17)	500 (13.4)	5000 (134)	6500 (174)	10,000 (268)	15,000 (402)	20,000 (536)	24,000 (643)	29,000 (777)	34,000 (911)	39,000 (1045)
			100 (6.90)	500 (13.4)	6500 (174)	8500 (228)	13,000 (348)	20,000 (536)	24,000 (643)	29,000 (777)	34,000 (911)	39,000 (1045)	45,000 (1206)
			125 (8.62)	500 (13.4)	7000 (188)	9000 (241)	14,500 (389)	23,000 (616)	28,000 (750)	33,000 (884)	39,000 (1045)	45,000 (1206)	50,000 (1340)
	655-717-000	Blue	150 (10.34)	500 (13.4)	4700 (126)	6000 (161)	9000 (241)	14,000 (375)	19,000 (509)	28,000 (750)	42,000 (1126)	50,000 (1340)	56,000 (1501)
			175 (12.07)	500 (13.4)	5700 (153)	7000 (188)	10,500 (281)	17,000 (456)	23,000 (616)	34,000 (911)	49,000 (1313)	56,000 (1501)	61,000 (1635)
			200 (13.79)	500 (13.4)	5700 (153)	7500 (201)	12,000 (322)	18,000 (482)	24,000 (643)	36,000 (965)	54,000 (1447)	61,000 (1635)	66,000 (1769)

## P98H Air Relief Capacities in SCFH (Nm<sup>3</sup>/h) with Metal Diaphragm

Nominal Body Size, Inches (DN)	Spring		Relief Pressure Setting PSIG (BAR)	Flow at Relief Setting, GPM (l/min.)	Pressure Buildup Over Relief Setting, PSIG (BAR)								
	Part Number	Color Code			2 (0.14)	4 (0.28)	6 (0.41)	8 (0.55)	10 (0.69)	15 (1.0)	20 (1.4)	25 (1.7)	30 (2.1)
3/4, 1 (20, 25)	655-753-000	White	10 (0.69)	500 (13.4)	3000 (80.4)	4400 (118)	5300 (142)	6200 (166)	6800 (182)	8200 (220)	8400 (225)	9340 (250)	10,300 (276)

Nominal Body Size, Inches (DN)	Spring		Relief Pressure Setting PSIG (BAR)	Flow at Relief Setting, SCFH (Nm <sup>3</sup> /h)	Pressure Buildup Over Relief Setting, PSIG (BAR)									
	Part Number	Color Code			5 (0.34)	7 (0.48)	10 (0.69)	15 (1.03)	20 (1.38)	30 (2.07)	50 (3.45)	75 (5.17)	100 (6.90)	
3/4, 1 (20, 25)	655-712-000	Yellow	15 (1.03)	500 (13.4)	2000 (53.6)	3000 (80.4)	4000 (107)	5700 (153)	8500 (228)	10,400 (279)	13,900 (373)	18,000 (482)	22,500 (603)	
			25 (1.72)	500 (13.4)	2700 (72.4)	4000 (107)	5200 (139)	7200 (193)	8700 (233)	12,100 (324)	15,600 (418)	20,000 (536)	24,000 (643)	
			35 (2.41)	500 (13.4)	3000 (80.4)	4200 (113)	5500 (147)	8000 (214)	10,000 (268)	13,000 (349)	17,300 (464)	21,700 (582)	26,000 (697)	
	655-712-001	Green	35 (2.41)	500 (13.4)	1500 (40.2)	2500 (67.0)	3500 (93.8)	5200 (139)	7200 (193)	9500 (255)	11,000 (295)	17,000 (456)	21,600 (579)	26,000 (697)
			50 (3.45)	500 (13.4)	2500 (67.0)	3500 (93.8)	4700 (126)	7500 (201)	9500 (255)	14,000 (375)	20,000 (536)	24,000 (643)	28,600 (766)	
			75 (5.17)	500 (13.4)	4000 (107)	5200 (139)	7000 (188)	10,000 (268)	14,000 (375)	18,000 (482)	25,000 (670)	30,000 (804)	35,000 (938)	
	655-712-002	Red	75 (5.17)	500 (13.4)	2900 (77.7)	3400 (91.1)	4700 (126)	7000 (188)	9200 (247)	13,000 (348)	23,000 (616)	30,000 (804)	35,000 (938)	
			100 (6.90)	500 (13.4)	3000 (80.4)	3500 (93.8)	5000 (134)	7700 (206)	10,000 (268)	15,000 (402)	26,000 (697)	35,000 (938)	40,000 (1072)	
			125 (8.62)	500 (13.4)	3200 (85.8)	4500 (121)	6200 (166)	9500 (255)	12,000 (322)	19,000 (509)	31,000 (831)	39,000 (1045)	45,000 (1206)	
	655-717-000	Blue	150 (10.34)	500 (13.4)	1900 (50.9)	3000 (80.4)	4500 (121)	7500 (201)	10,000 (268)	16,000 (429)	28,000 (750)	42,000 (1126)	50,000 (1340)	
			175 (12.07)	500 (13.4)	2000 (53.6)	3200 (85.8)	5000 (134)	7700 (206)	11,000 (295)	17,000 (456)	30,000 (804)	45,000 (1206)	54,000 (1447)	
			200 (13.79)	500 (13.4)	3500 (93.8)	5000 (134)	7000 (188)	10,000 (268)	14,000 (375)	21,000 (563)	35,000 (938)	52,000 (1394)	60,000 (1608)	

## P98H Flanged Unit Dimension, Inches



## P98H Repair Kits

	Kit Includes	Part Number
302SS Diaphragm	302SS Diaphragm (2), Diaphragm Gasket, Thru Hole Gasket, 416SS Orifice, 416SS/Nitrile Valve Plug, Seat O-ring Retainer and O-ring, Seat Machine Screw	971-P98-000
	302SS Diaphragm (2), Diaphragm Gasket, Thru Hole Gasket, 416SS Orifice, 416SS/M to M Valve Plug	971-P98-001
	302SS Diaphragm (2), Diaphragm Gasket, Thru Hole Gasket, 416SS Orifice, 416SS/FKM Valve Plug, Seat O-ring Retainer and O-ring, Seat Machine Screw	971-P98-004
	302SS Diaphragm (2), Diaphragm Gasket, Thru Hole Gasket, 316SS Orifice, 316SS/M to M Valve Plug	971-P98-006
	302SS Diaphragm (2), Diaphragm Gasket, Thru Hole Gasket, 316SS Orifice, 316SS/Nitrile Valve Plug, Seat O-ring Retainer and O-ring, Seat Machine Screw	971-P98-028
Neoprene Diaphragm	Neoprene Diaphragm, Thru Hole Gasket, 416SS Orifice, 416SS/Nitrile Valve Plug, Seat O-ring Retainer and O-ring, Seat Machine Screw	971-P98-002
	Neoprene Diaphragm, Thru Hole Gasket, 416SS Orifice, 416SS/M to M Valve Plug	971-P98-003
	Neoprene Diaphragm, Thru Hole Gasket, 416SS Orifice, 416SS/FKM Valve Plug, Seat O-ring Retainer and O-ring, Seat Machine Screw	971-P98-016
	Neoprene Diaphragm, Thru Hole Gasket, 316SS Orifice, 316SS/M to M Valve Plug	971-P98-018
	Neoprene Diaphragm, Thru Hole Gasket, 316SS Orifice, 316SS/Nitrile Valve Plug, Seat O-ring Retainer and O-ring, Seat Machine Screw	971-P98-030
	Neoprene Diaphragm, Thru Hole Gasket, 316SS Orifice, 316SS/FKM Valve Plug, Seat O-ring Retainer and O-ring, Seat Machine Screw	971-P98-019
Monel Diaphragm	Monel Diaphragm (2), Diaphragm Gasket, Thru Hole Gasket, 416SS Orifice, 416SS/M to M Valve Plug	971-P98-021
	Monel Diaphragm (2), Diaphragm Gasket, Thru Hole Gasket, 416SS Orifice, 416SS/Nitrile Valve Plug, Seat O-ring Retainer and O-ring, Seat Machine Screw	971-P98-024
	Monel Diaphragm (2), Diaphragm Gasket, Thru Hole Gasket, 416SS Orifice, 416SS/FKM Valve Plug, Seat O-ring Retainer and O-ring, Seat Machine Screw	971-P98-022
	Monel Diaphragm (2), Diaphragm Gasket, Thru Hole Gasket, 316SS Orifice, 316SS/M to M Valve Plug	971-P98-025
	Monel Diaphragm (2), Diaphragm Gasket, Thru Hole Gasket, 316SS Orifice, 316SS/Nitrile Valve Plug, Seat O-ring Retainer and O-ring, Seat Machine Screw	971-P98-031
	Monel Diaphragm (2), Diaphragm Gasket, Thru Hole Gasket, 316SS Orifice, 316SS/FKM Valve Plug, Seat O-ring Retainer and O-ring, Seat Machine Screw	971-P98-026
FKM Diaphragm	FKM Diaphragm (2), Diaphragm Gasket, Thru Hole Gasket, 416SS Orifice, 416SS/M to M Valve Plug	971-P98-009
	FKM Diaphragm (2), Diaphragm Gasket, Thru Hole Gasket, 416SS Orifice, 416SS/FKM Valve Plug, Seat O-ring Retainer and O-ring, Seat Machine Screw	971-P98-010
	FKM Diaphragm, Thru Hole Gasket, 416SS Orifice, 416SS/Nitrile Valve Plug, Seat O-ring Retainer and O-ring, Seat Machine Screw	971-P98-012
	FKM Diaphragm (2), Diaphragm Gasket, Thru Hole Gasket, 416SS Orifice, 416SS/FKM Valve Plug,	971-P98-014
	FKM Diaphragm, Thru Hole Gasket, 316SS Orifice, 316SS/M to M Valve Plug	971-P98-013
	FKM Diaphragm, Thru Hole Gasket, 316SS Orifice, 316SS/Nitrile Valve Plug, Seat O-ring Retainer and O-ring, Seat Machine Screw	971-P98-029

# BelGAS™

A DIVISION OF MARSH BELLOFRAM



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 bimetal 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.