

Type SR8 Sanitary Backpressure Regulator

- ✧ Sanitary Design Standards
- ✧ Superior Flow Performance and Accuracy
- ✧ Wide Control Range
- ✧ Diaphragm Cycle Life
- ✧ Highly Stable
- ✧ Large Turndown Ratio
- ✧ Tight Shutoff
- ✧ Easy Maintenance
- ✧ Covered Adjusting Screw
- ✧ Self-Draining
- ✧ Optional T-Handle Available
- ✧ Remote Setpoint Capability
- ✧ Nonporous Polished Body and Internals
- ✧ Optional Diaphragm Support



W8967

Figure 1. Type SR8 Sanitary Backpressure Regulator



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Specifications

The Specifications section on this page provides the ratings and other specifications for the Type SR8. The following information is stamped on the nameplate fastened on the regulator at the factory: type; body size; maximum inlet, outlet and differential pressure; maximum pressure above setpoint; maximum temperature; spring range; cage type; trim and diaphragm material.

Body Size, Inlet and Outlet Connection

1/2, 3/4, 1, 1-1/2, 2 and 3 In. /
15, 20, 25, 40, 50 and 80 mm

Service Media

All Sizes: Steam, Gas and Liquid

End Connection

Tri-Clamp® Sanitary connections⁽⁵⁾

Body Pressure/Temperature Ratings⁽¹⁾

MAXIMUM TEMPERATURE		MAXIMUM INLET PRESSURE		MAXIMUM OUTLET PRESSURE	
°F	°C	psig	bar	psig	bar
150	65	210	14.5	210	14.5
275	135	180	12.4	180	12.4
400	204	160	11	160	11

Maximum Operating Pressures⁽¹⁾⁽³⁾

BODY SIZE		MAXIMUM TEMPERATURE		MAXIMUM INLET PRESSURE		MAXIMUM OUTLET PRESSURE	
In.	mm	°F	°C	psig	bar	psig	bar
1/2 through 1-1/2	15 through 40	150	65	210	14.5	210	14.5
		275	135	180	12.4	180	12.4
		400	204	160	11.0	160	11.0
2 and 3	50 and 80	150	65	150	10.3	150	10.3
		275	135	125	8.6	125	8.6
		400	204	110	7.6	110	7.6

Set Pressure Ranges

See Table 1

Maximum Differential Pressures⁽¹⁾

See Table 1

Temperature Capabilities⁽¹⁾

See Table 2

Flow Coefficients

See Table 4

Construction Materials

See Table 3

Pressure Registration

Internal

Pressure Loaded Spring Case Option

Maximum Loading Pressure

1/2 through 1-1/2 In. / 15 to 40 mm body size:

125 psig / 8.6 bar

2 and 3 In. / 50 and 80 mm body size:

60 psig / 4.1 bar

1/4 NPT Tapped Vent Connection

Vacuum Protection Option

Maximum Vacuum Pressure:

14 psig / 1.0 bar (vacuum)

Certifications Available Upon Request

316L Stainless steel diaphragms only)

FDA approved elastomers/plastics

Material and Functional Test Certificates

USP Class VI approved elastomers/plastics⁽²⁾

Spring Case Construction

Drilled untapped vent holes (**standard**)

1/4 NPT for Pressure Load Connection (optional)

Pressure Setting Adjustment

Adjusting screw with Electropolished

Cover (**standard**)

T-Handle adjusting screw (optional)

Shutoff Classification per ANSI/FCI 70-3-2003

Metal Seat: ANSI Class III

Polytetrafluoroethylene (PTFE) Soft Seat:

ANSI Class VI

Polyetheretherketone (PEEK) Soft Seat:

ANSI Class VI (150 to 400°F / 65 to 204°C)⁽⁴⁾

Approximate Weight

1/2 and 3/4 in. / 15 and 20 mm:

9 lbs / 4 kg

1 and 1-1/2 in. / 25 and 40 mm:

18 lbs / 8 kg

2 and 3 in. / 50 and 80 mm:

60 lbs / 27 kg

Options

Vacuum protection

Pressure Loaded spring case

T-handle adjusting screw

1. The pressure/temperature limits in this bulletin and any applicable standard or code limitation should not be exceeded.
2. Contact your Local Sales Office for details on available constructions.
3. Maximum pressure to prevent damage to internal parts and leakage to atmosphere.
4. Polyetheretherketone (PEEK) Seat meets ANSI Class IV or better below 150°F / 66°C.
5. End connection clamps and gaskets to be supplied by the user.

Features

- **Nonporous Polished Body and Internals for High Purity Processing**—Body, plug and diaphragm plate (when applicable) are machined from 316L Stainless steel. All internal wetted surfaces are mechanically polished and electropolished to 20 μin / 0.5 μm Ra.
- **Wide Control Range**—Typical setpoints range from 2 to 125 psig / 0.14 to 8.6 bar to cover a wide range of applications.
- **Self-Draining**—Fluids will drain toward the outlet of the body when the regulator is installed with the spring case in the upright vertical position.
- **Tight Shutoff**—Soft seat is available to ensure better shutoff.
- **Superior Flow Performance and Accuracy**—The Type SR8 is designed to deliver high flows with minimal buildup to maintain an even pressure over the full range of flow.
- **Sanitary Design Standards**—ASME BPE and European Hygienic Equipment Design Group criteria.
- **Highly Stable**—The upper guide ring provides for stable control over entire operating range.
- **Easy Maintenance**—The design incorporates a metal-to-metal stop to protect diaphragms from damage due to over compression at outer circumference. Tri-Clamp[®] allows easy access to internal parts.
- **Large Turndown Ratio**—No need for reduced C_v trims at low flows.
- **Optional Diaphragm Support**—A diaphragm support is added to the regulator for installations that will be exposed to vacuum conditions.
- **Covered Adjusting Screw**—Electropolished stainless steel adjusting screw cover improves the aesthetics and cleanability of the regulator.
- **Diaphragm Cycle Life**—Metal 316L Stainless steel diaphragm is designed to maximize service life.
- **Optional T-Handle Available**—T-Handle option available to accommodate frequent adjustments.
- **Remote Setpoint Capability**—An optional spring case configuration permits pressure loading. Loading pressure varied from a remote location adjusts the setpoint in direct proportion.

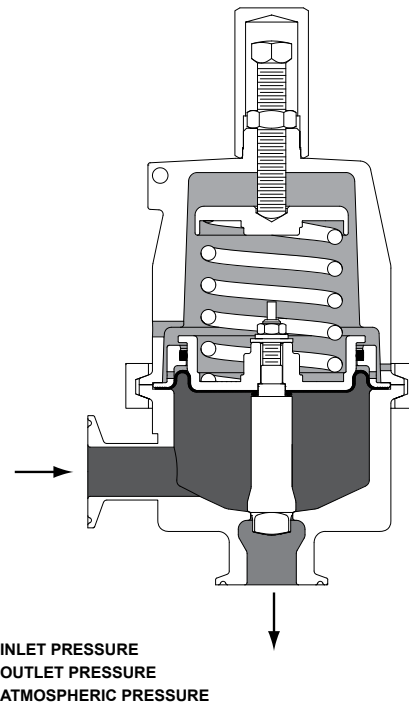


Figure 2. Type SR8 Operational Schematic

Introduction

The Type SR8 backpressure regulator is a compact, large capacity, direct-operated backpressure regulator. It is designed for use in applications where a sanitary design is essential, such as pharmaceutical, biotechnology or food and beverage industries. The unit is available in 1/2 through 3 in. / 15 through 80 mm sizes with end connections that will match up to Tri-Clamp[®] sanitary fittings. The Type SR8 is suitable for use in steam, liquid or gas service.

Principle of Operation

The Type SR8 is a direct-operated regulator. Pressure in the controlled system (regulator inlet pressure) registers beneath the diaphragm of the regulator and opposes the force provided by the predetermined spring compression. When regulator spring force exceeds diaphragm force exerted by the inlet pressure, the spring will keep the valve plug closed to prevent flow to the downstream system. As inlet pressure increases above setpoint, this increase registers on the diaphragm and the valve plug opens to allow flow to the downstream system.

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Table 1. Set Pressure Ranges, Control Spring Data and Maximum Differential Pressures

BODY SIZE		SET PRESSURE RANGES		MAXIMUM DIFFERENTIAL PRESSURE		COLOR CODE	PART NUMBER	WIRE DIAMETER		FREE LENGTH	
In.	mm	psig	bar	psid	bar d			In.	mm	In.	mm
1/2 and 3/4	15 and 20	2 to 8 ⁽¹⁾	0.14 to 0.55 ⁽¹⁾	15	1.0	Blue	GE06780X012	0.138	3.51	2.75	69.9
		5 to 25	0.34 to 1.7	40	2.7	Silver	GE06781X012	0.177	4.50	2.75	69.9
		10 to 50	0.69 to 3.4	100	6.9	Green	GE06782X012	0.192	4.88	2.75	69.9
		35 to 100	2.4 to 6.9	140	9.6	Red	GE06783X012	0.225	5.72	2.75	69.9
		75 to 125	5.2 to 8.6	160	11.0	Red/ Yellow	GE06783X012/ GE06784X012	0.225/ 0.148	5.72/ 3.76	2.75/ 2.75	69.9/ 69.9
1 and 25 full port 1-1/2 x 1	1-1/2 and 40 full port 40 x 25	2 to 8 ⁽¹⁾	0.2 to 0.5 ⁽¹⁾	15	1.0	Blue	GE02763X012	0.225	5.72	3.25	82.6
		5 to 25	0.4 to 1.7	40	2.7	Silver	GE02764X012	0.282	7.16	3.25	82.6
		15 to 70	1.0 to 4.8	100	6.9	Green	GE02765X012	0.331	8.41	3.25	82.6
		25 to 90	1.7 to 6.2	125	8.6	Red	GE02766X012	0.362	9.19	3.25	82.6
		35 to 100	2.4 to 6.9	140	9.6	Green/ Yellow	GE02765X012/ GE06090X012	0.331/ 0.250	8.41/ 6.35	3.25/ 3.25	82.6/ 82.6
		75 to 125	5.2 to 8.6	160	11.0	Red/ Yellow	GE02766X012/ GE06090X012	0.362/ 0.250	9.19/ 6.35	3.25/ 3.25	82.6/ 82.6
2 and 3	50 and 80	10 to 25	0.7 to 1.7	50	3.4	Silver	GE14003X012	0.562	14.3	6.00	152
		15 to 50	1.0 to 3.4	75	5.2	Green	GE14004X012	0.625	15.9	6.00	152
		25 to 60	1.7 to 4.1	75	5.2	Red	GE14005X012	0.625	15.9	6.00	152

1. The 2 to 8 psig / 0.14 to 0.55 bar spring is not available with the metal diaphragm.

Table 2. Temperature Capabilities

SEAT TYPE	DIAPHRAGM MATERIAL	O-RING MATERIAL	TEMPERATURE RANGE	
			°F	°C
Metal (316L)	Ethylenepropylene (EPDM)	Ethylenepropylene (EPDM)	- 20 to 275	-28 to 135
	316L Stainless steel	PTFE/Fluorocarbon (FKM) ⁽¹⁾	20 to 400	-6 to 204
	PTFE/Fluorocarbon (FKM)	PTFE/Fluorocarbon (FKM)	20 to 400	-6 to 204
Soft (PTFE/316L)	Ethylenepropylene (EPDM)	Ethylenepropylene (EPDM)	- 20 to 150	-28 to 65
	316L Stainless steel	PTFE/Fluorocarbon (FKM) ⁽¹⁾	20 to 150	-6 to 65
	PTFE/Fluorocarbon (FKM)	PTFE/Fluorocarbon (FKM)	20 to 150	-6 to 65
Soft (Polyetheretherketone (PEEK)/316L)	Ethylenepropylene (EPDM)	Ethylenepropylene (EPDM)	-20 to 275	-28 to 135
	316L Stainless steel	PTFE/Fluorocarbon (FKM) ⁽¹⁾	20 to 400	-6 to 204
	PTFE/Fluorocarbon (FKM)	PTFE/Fluorocarbon (FKM)	20 to 400	-6 to 204

1. O-ring material is Polytetrafluoroethylene (PTFE) for the 1/2 and 3/4 In. / 15 and 20 mm sizes. Temperature range is the same.

Table 3. Construction Materials

PART	MATERIAL
Body	316L Stainless steel, 20 µin / 0.5 µm Ra with Electropolish
Spring Case	316 Stainless steel with Electropolish
Plug and Diaphragm Plate	316L Stainless steel, 20 µin / 0.5 µm Ra with Electropolish
Soft Seat	Virgin PTFE or Polyetheretherketone (PEEK)
Diaphragm	Ethylenepropylene (EPDM)(FDA), Virgin PTFE coated Fluorocarbon (FKM) or 316L Stainless steel
Control Springs	Inconel® or 302 Stainless steel
Guide Ring and Upper and lower spring seats	300 Series Stainless steel
Adjusting Screw and locknut	300 Series Stainless steel
Closing Cap	300 Series Stainless steel with Electropolish or Plastic
T-handle and Locking Lever	300 Series Stainless steel
O-rings	Ethylenepropylene (EPDM) (FDA), Virgin PTFE encapsulated Fluorocarbon (FKM) or Virgin PTFE
Piston Ring	Expanded PTFE with 302 Stainless steel
Gaskets (Stainless steel diaphragm only)	Virgin PTFE
Bolted Clamp	304 Stainless steel with Brass or Stainless steel Nuts
Bead Chain and Ring Grip	300 Series Stainless steel

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Table 4. Flow Coefficients

BODY SIZE		WIDE OPEN COEFFECIENTS			C_1	K_m	F_L	X_T	F_d
In.	mm	C_g	C_v	C_s					
1/2	15	27	1.4	1.3	19.1	0.54	0.73	0.23	0.40
3/4	20	70	3.1	3.5	22.8	0.61	0.78	0.33	0.41
1	25	202	7.2	10.1	28.1	0.63	0.79	0.50	0.42
1-1/2 x 1	40 x 25	216	7.6	10.8	28.4	0.60	0.77	0.51	0.42
1-1/2 full port	40 full port	309	10.9	15.5	28.4	0.68	0.82	0.51	0.40
2	50	962	34.4	48	28.0	0.60	0.78	0.49	0.32
3	80	1114	40.3	56	27.6	0.44	0.67	0.48	0.36

Capacity Data

The capacity information on the following pages is based on four buildup factors, 10, 20, 30 and 40 percent. Buildup is the increase above setpoint required to open and is usually stated in percentage of setpoint value. Flow at setpoint (set flow) is approximately 10% of maximum flow. Greater capacities are obtained with higher buildups over the relief pressure setting, as shown in the capacity tables. To evaluate the performance of a regulator, compare the stated capacities at equivalent operating pressures and buildup factors. Comparing the wide open C_v does not consider the overall accuracy.

Buildup is derived by applying the applicable percentage buildup to the setpoint. Buildup of 10 percent on a 20 psig / 1.4 bar setpoint would be 2 psig / 0.14 bar for a total pressure of 22 psig / 1.5 bar. Capacity information assumes full drop. For instances where full drop is not applicable, it is easiest to use the Fisher® Sizing program and the C_v values listed in Table 5.

For the most accurate control, use the lowest range spring that can be adjusted to the desired setpoint (see Table 1 for part numbers of appropriate springs for each body size). If closer control is necessary, a regulator of larger capacity should be selected, so that the necessary flow can be obtained with a smaller offset factor.

It may be necessary to interpolate the capacity table data to determine capacity for settings not given. To maintain accuracy, it is important when interpolating to stay within a spring range if possible.

An alternative method for interpolating capacities is to use the C_v as shown in Table 5 in the Fisher Sizing Program. When using this method remember that P_1 pressure is the sum of the setpoint and applicable

buildup. Do not use the wide open coefficients shown in Table 4 for interpolating capacities.

Contact your nearest local Sales Office if you should have any questions about selecting the proper regulator.

Regulating capacities in Table 6 are shown in SCFH (60°F and 14.7 psia) of air at 60°F and normal cubic meters per hour at 0°C and 1.01325 bar. For gases of other specific gravities, divide by the square root of the appropriate specific gravity.

Capacities in Table 7 are in pounds per hour and kilograms per hour of saturated steam.

All water capacities in Tables 8 are shown in gallons per minute and liters per minute. The K_m values listed in Table 4 can be used to predict choked flow on liquid service.

Installation

The Type SR8 regulator may be installed in any position, as long as flow will be in the same direction as that indicated by the body arrow. However, to ensure self-draining (from inlet to outlet) the regulator should be installed with the spring case in the upright vertical position. The regulator should be installed so that the spring case vent is protected from anything that might interfere with it.

Emerson Process Management Regulator Technologies, Inc. provides an instruction manual with every regulator shipped. Refer to this for complete installation, operation and maintenance instructions. Included is a complete listing of individual parts and recommended spare parts.

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Table 5. C_v Coefficients

SPRING RANGE, psig / bar	SET PRESSURE, psig / bar	C_v AT % BUILD-UP							
		Elastomer Diaphragm				Metal Diaphragm			
		1/2 In. / 15 mm				1/2 In. / 15 mm			
		10%	20%	30%	40%	10%	20%	30%	40%
2 to 8 / 0.14 to 0.55	2 / 0.14	0.45	0.55	0.65	0.75	Not Available			
	5 / 0.34	0.45	0.67	0.84	0.99				
	8 / 0.55	0.50	0.80	1.03	1.22				
5 to 25 / 0.34 to 1.7	5 / 0.34	0.35	0.49	0.62	0.80	0.32	0.36	0.40	0.47
	15 / 1.0	0.59	0.94	1.13	1.26	0.40	0.55	0.67	0.81
	25 / 1.7	0.71	1.15	1.36	1.40	0.44	0.64	0.78	0.96
10 to 50 / 0.69 to 3.4	10 / 0.69	0.40	0.65	0.87	1.10	0.35	0.42	0.50	0.57
	15 / 1.0	0.54	0.87	1.04	1.21	0.38	0.49	0.62	0.74
	30 / 2.1	0.76	1.22	1.30	1.37	0.43	0.59	0.82	0.98
	45 / 3.1	0.86	1.39	1.40	1.40	0.45	0.64	0.91	1.09
	50 / 3.4	0.89	1.40	1.40	1.40	0.45	0.66	0.93	1.12
35 to 100 / 2.4 to 6.9	35 / 2.4	0.60	0.95	1.24	1.40	0.42	0.60	0.75	0.94
	50 / 3.4	0.69	1.10	1.35	1.40	0.46	0.69	0.89	1.11
	75 / 5.2	0.77	1.23	1.40	1.40	0.50	0.77	1.02	1.27
	100 / 6.9	0.82	1.30	1.40	1.40	0.53	0.82	1.09	1.36
75 to 125 / 5.2 to 8.6	75 / 5.2	1.16	1.40	1.40	1.40	1.12	1.40	1.40	1.40
	100 / 6.9	1.13	1.40	1.40	1.40	1.10	1.40	1.40	1.40
	125 / 8.6	1.23	1.36	1.39		1.02	1.40	1.40	

Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.

Table 5. C_v Coefficients (continued)

SPRING RANGE, psig / bar	SET PRESSURE, psig / bar	C_v AT % BUILD-UP							
		Elastomer Diaphragm				Metal Diaphragm			
		3/4 In. / 20 mm				3/4 In. / 20 mm			
		10%	20%	30%	40%	10%	20%	30%	40%
2 to 8 / 0.14 to 0.55	2 / 0.14	0.58	0.67	0.90	1.07	Not Available			
	5 / 0.34	0.82	1.38	2.08	2.27				
	8 / 0.55	1.04	1.94	2.96	3.10				
5 to 25 / 0.34 to 1.7	5 / 0.34	0.60	0.87	1.16	1.44	0.51	0.56	0.64	0.75
	15 / 1.0	1.04	2.10	2.69	2.82	0.56	0.70	0.86	1.03
	25 / 1.7	1.26	2.67	3.10	3.10	0.59	0.76	0.95	1.15
10 to 50 / 0.69 to 3.4	10 / 0.69	0.62	0.92	1.28	1.70	0.47	0.55	0.62	0.73
	15 / 1.0	0.80	1.35	1.70	2.11	0.51	0.65	0.78	0.93
	30 / 2.1	1.09	2.02	2.34	2.72	0.59	0.80	1.02	1.23
	45 / 3.1	1.23	2.34	2.64	3.00	0.62	0.87	1.13	1.37
	50 / 3.4	1.26	2.41	2.70	3.06	0.63	0.88	1.16	1.40
35 to 100 / 2.4 to 6.9	35 / 2.4	0.91	1.83	2.71	3.10	0.56	0.73	0.89	1.06
	50 / 3.4	1.34	2.36	3.00	3.10	0.62	0.83	1.09	1.35
	75 / 5.2	1.72	2.83	3.10	3.10	0.67	0.93	1.27	1.59
	100 / 6.9	1.94	3.10	3.10	3.10	0.70	0.98	1.36	1.73
75 to 125 / 5.2 to 8.6	75 / 5.2	1.66	2.80	3.04	3.10	1.01	1.58	1.92	2.10
	100 / 6.9	1.96	3.10	3.10	3.10	1.01	1.33	1.85	2.21
	125 / 8.6	2.21	3.10	3.10		1.01	1.47	1.96	

Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.

Table 5. C_v Coefficients (continued)

SPRING RANGE, psig / bar	SET PRESSURE, psig / bar	C _v AT % BUILD-UP							
		Elastomer Diaphragm				Metal Diaphragm			
		1 In. / 25 mm				1 In. / 25 mm			
		10%	20%	30%	40%	10%	20%	30%	40%
2 to 8 / 0.14 to 0.55	2 / 0.14	1.79	2.48	3.02	4.13	Not Available			
	5 / 0.34	1.82	3.14	4.37	5.75				
	8 / 0.55	2.18	3.70	5.29	6.57				
5 to 25 / 0.34 to 1.7	5 / 0.34	1.37	1.79	2.28	2.91	1.03	1.25	1.53	1.76
	15 / 1.0	1.70	3.03	4.49	5.46	1.11	1.52	2.12	2.74
	25 / 1.7	2.13	4.01	6.00	7.20	1.19	1.69	2.43	3.21
15 to 70 / 1.0 to 4.8	15 / 1.0	1.19	2.19	3.34	4.26	1.04	1.32	1.68	2.11
	30 / 2.1	2.06	4.07	5.20	5.99	1.60	2.35	3.25	4.12
	45 / 3.1	2.48	4.96	6.06	6.78	1.87	2.84	3.98	5.03
	50 / 3.4	2.58	5.16	6.25	6.96	1.93	2.95	4.14	5.23
	60 / 4.1	2.73	5.47	6.56	7.20	2.03	3.12	4.40	5.55
25 to 90 / 1.7 to 6.2	70 / 4.8	2.84	5.71	6.79	7.20	2.10	3.25	4.59	5.79
	35 / 2.4	1.08	1.70	2.44	3.31	1.01	1.39	1.90	2.47
	50 / 3.4	1.76	3.24	4.58	5.27	1.39	2.20	3.10	3.98
	75 / 5.2	2.38	4.61	6.48	7.00	1.73	2.93	4.16	5.32
	90 / 6.2	2.60	5.12	7.18	7.20	1.85	3.20	4.55	5.80
35 to 100 / 2.4 to 6.9	35 / 2.4	1.55	2.46	3.57	4.66	1.11	1.52	2.02	2.58
	50 / 3.4	1.98	3.45	5.02	5.87	1.41	2.19	3.05	3.86
	75 / 5.2	2.38	4.33	6.31	6.95	1.68	2.79	3.96	4.98
	100 / 6.9	2.60	4.82	7.02	7.20	1.83	3.12	4.46	5.60
75 to 125 / 5.2 to 8.6	75 / 5.2	5.21	7.07	7.20	7.20	3.45	4.94	5.81	5.66
	100 / 6.9	5.88	7.20	7.20	7.20	3.30	4.93	5.28	6.00
	125 / 8.6	5.84	7.20	7.20		3.51	5.17	5.79	

Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.

Table 5. C_v Coefficients (continued)

SPRING RANGE, psig / bar	SET PRESSURE, psig / bar	C _v AT % BUILD-UP							
		Elastomer Diaphragm				Metal Diaphragm			
		1-1/2 In. / 40 mm Reduced Port				1-1/2 In. / 40 mm Reduced Port			
		10%	20%	30%	40%	10%	20%	30%	40%
2 to 8 / 0.14 to 0.55	2 / 0.14	1.97	2.72	3.31	4.54	Not Available			
	5 / 0.34	2.00	3.44	4.78	6.29				
	8 / 0.55	2.38	4.05	5.78	7.16				
5 to 25 / 0.34 to 1.7	5 / 0.34	1.50	1.96	2.49	3.18	1.12	1.37	1.67	1.92
	15 / 1.0	1.85	3.30	4.89	5.95	1.21	1.65	2.31	2.99
	25 / 1.7	2.32	4.37	6.54	7.60	1.30	1.84	2.65	3.50
15 to 70 / 1.0 to 4.8	15 / 1.0	1.29	2.39	3.64	4.64	1.13	1.44	1.83	2.30
	30 / 2.1	2.24	4.43	5.66	6.52	1.74	2.56	3.54	4.48
	45 / 3.1	2.70	5.40	6.60	7.38	2.04	3.09	4.33	5.48
	50 / 3.4	2.80	5.62	6.81	7.58	2.10	3.21	4.51	5.70
	60 / 4.1	2.97	5.96	7.14	7.60	2.21	3.40	4.79	6.05
25 to 90 / 1.7 to 6.2	70 / 4.8	3.10	6.22	7.39	7.60	2.29	3.55	5.00	6.31
	35 / 2.4	1.17	1.86	2.65	3.61	1.10	1.51	2.07	2.69
	50 / 3.4	1.91	3.52	4.98	5.74	1.51	2.40	3.37	4.34
	75 / 5.2	2.59	5.03	7.06	7.60	1.88	3.19	4.53	5.80
	90 / 6.2	2.84	5.57	7.60	7.60	2.02	3.48	4.95	6.32
35 to 100 / 2.4 to 6.9	35 / 2.4	1.69	2.68	3.89	5.08	1.21	1.65	2.20	2.81
	50 / 3.4	2.16	3.75	5.47	6.40	1.53	2.38	3.32	4.20
	75 / 5.2	2.59	4.71	6.87	7.57	1.83	3.04	4.31	5.43
	100 / 6.9	2.83	5.25	7.60	7.60	1.99	3.40	4.86	6.10
75 to 125 / 5.2 to 8.6	75 / 5.2	5.49	6.87	7.45	7.60	3.38	5.05	6.01	6.05
	100 / 6.9	5.44	7.52	7.60	7.60	3.58	5.25	5.87	6.92
	125 / 8.6	6.42	7.60	7.60		3.64	4.91	6.63	

Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.

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Table 5. C_v Coefficients (continued)

SPRING RANGE, psig / bar	SET PRESSURE, psig / bar	C_v AT % BUILD-UP							
		Elastomer Diaphragm				Metal Diaphragm			
		1-1/2 In. / 40 mm				1-1/2 In. / 40 mm			
		10%	20%	30%	40%	10%	20%	30%	40%
2 to 8 / 0.14 to 0.55	2 / 0.14	1.95	2.54	2.81	3.31	Not Available			
	5 / 0.34	1.55	2.73	4.87	6.66				
	8 / 0.55	1.47	3.05	6.32	8.91				
5 to 25 / 0.34 to 1.7	5 / 0.34	1.37	1.64	2.54	2.94	1.37	1.51	1.81	2.06
	15 / 1.0	1.87	4.12	7.34	8.17	1.31	1.68	2.40	3.08
	25 / 1.7	2.16	5.32	9.55	10.50	1.35	1.81	2.71	3.57
15 to 70 / 1.0 to 4.8	15 / 1.0	1.87	2.94	4.14	5.83	1.37	1.62	2.16	2.79
	30 / 2.1	4.83	7.28	7.83	8.70	1.66	2.59	3.66	4.76
	45 / 3.1	6.25	9.33	9.54	10.01	1.81	3.05	4.36	5.66
	50 / 3.4	6.57	9.79	9.92	10.30	1.84	3.16	4.52	5.86
	60 / 4.1	7.09	10.52	10.52	10.76	1.89	3.32	4.77	6.18
25 to 90 / 1.7 to 6.2	70 / 4.8	7.48	10.90	10.90	10.90	1.93	3.44	4.95	6.42
	35 / 2.4	1.85	3.13	4.40	5.66	1.07	1.41	1.75	2.25
	50 / 3.4	3.61	6.48	7.44	8.17	1.46	2.29	3.11	4.05
	75 / 5.2	5.20	9.49	10.15	10.39	1.82	3.08	4.31	5.65
35 to 100 / 2.4 to 6.9	90 / 6.2	5.79	10.59	10.90	10.90	1.96	3.37	4.75	6.22
	35 / 2.4	2.93	3.99	5.59	8.06	1.47	2.00	2.59	3.28
	50 / 3.4	4.13	6.41	7.91	9.36	1.64	2.47	3.57	4.75
	75 / 5.2	5.22	8.60	9.97	10.51	1.80	2.90	4.45	6.04
75 to 125 / 5.2 to 8.6	100 / 6.9	5.83	9.80	10.90	10.90	1.88	3.13	4.93	6.75
	75 / 5.2	5.85	9.55	10.56	10.51	3.62	5.21	6.22	6.38
	100 / 6.9	6.05	10.50	10.74	10.41	3.89	5.08	6.70	7.87
	125 / 8.6	7.46	10.68	10.81		3.96	5.52	7.34	

Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.

Table 5. C_v Coefficients (continued)

SPRING RANGE, psig / bar	SET PRESSURE, psig / bar	C_v AT % BUILD-UP							
		Elastomer Diaphragm				Metal Diaphragm			
		2 In. / 50 mm				2 In. / 50 mm			
		10%	20%	30%	40%	10%	20%	30%	40%
10 to 25 / 0.69 to 1.7	10 / 0.69	9.54	12.90	20.16	25.94	6.97	9.73	12.00	14.51
	15 / 1.0	13.77	25.30	30.19	30.19	9.10	11.66	14.20	17.37
	25 / 1.7	19.87	30.19	30.19	30.19	9.39	12.66	16.48	19.66
15 to 50 / 1.0 to 3.4	15 / 1.0	12.16	17.45	24.11	28.98	6.97	9.67	11.54	12.29
	25 / 1.7	14.20	24.03	29.03	30.08	8.32	11.20	14.90	17.73
	50 / 3.4	22.24	28.76	29.98	29.90	9.57	15.28	20.12	23.86
25 to 60 / 1.7 to 4.1	25 / 1.7	12.93	21.88	30.01	30.19	8.26	11.29	15.06	18.15
	50 / 3.4	18.16	29.95	30.19	30.19	9.12	14.28	19.11	22.97
	60 / 4.1	22.06	30.19	30.19		10.75	17.53	22.96	

Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.

Table 5. C_v Coefficients (continued)

SPRING RANGE, psig / bar	SET PRESSURE, psig / bar	C_v AT % BUILD-UP							
		Elastomer Diaphragm				Metal Diaphragm			
		3 In. / 80 mm				3 In. / 80 mm			
		10%	20%	30%	40%	10%	20%	30%	40%
10 to 25 / 0.69 to 1.7	10 / 0.69	12.81	17.24	24.09	28.28	8.76	14.51	19.01	22.35
	15 / 1.0	13.42	21.30	28.37	35.03	11.58	17.34	21.63	25.08
	25 / 1.7	17.78	28.44	37.90	39.21	13.03	19.27	23.95	28.24
15 to 50 / 1.0 to 3.4	15 / 1.0	10.11	15.34	22.43	28.58	11.25	16.30	20.36	23.58
	25 / 1.7	12.15	23.16	33.49	39.21	10.85	18.05	22.17	26.93
	50 / 3.4	12.51	26.03	38.44	39.08	14.70	23.64	28.97	33.40
25 to 60 / 1.7 to 4.1	25 / 1.7	11.29	20.42	28.43	35.61	10.73	17.26	22.36	26.33
	50 / 3.4	13.31	25.82	37.56	39.11	13.57	21.54	27.47	31.76
	60 / 4.1	24.47	34.81	39.21		15.57	23.99	30.03	

Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.

Table 6. Air Capacities

SPRING RANGE, psig / bar	SET PRESSURE, psig / bar	CAPACITIES IN SCFH / Nm ³ /h OF AIR AT % BUILD-UP							
		Elastomer Diaphragm				Metal Diaphragm			
		1/2 In. / 15 mm				1/2 In. / 15 mm			
		10%	20%	30%	40%	10%	20%	30%	40%
2 to 8 / 0.14 to 0.55	2 / 0.14	140 / 3.8	180 / 4.8	220 / 5.9	260 / 7.0	Not Available			
	5 / 0.34	210 / 5.6	320 / 8.6	410 / 11	500 / 13				
	8 / 0.55	270 / 7.2	450 / 12	600 / 16	730 / 20				
5 to 25 / 0.34 to 1.7	5 / 0.34	160 / 4.3	230 / 6.2	300 / 8.0	400 / 11	120 / 3.2	140 / 3.8	160 / 4.3	190 / 5.1
	15 / 1.0	430 / 12	720 / 19	900 / 24	1050 / 28	240 / 6.4	340 / 9.1	430 / 12	550 / 15
	25 / 1.7	700 / 19	1200 / 32	1500 / 40	1700 / 46	350 / 9.4	540 / 14	700 / 19	900 / 24
10 to 50 / 0.69 to 3.4	10 / 0.7	240 / 6.4	400 / 11	560 / 15	730 / 20	170 / 4.6	210 / 5.6	260 / 7.0	310 / 8.3
	15 / 1.0	390 / 10	660 / 18	830 / 22	1000 / 27	220 / 5.9	300 / 8.0	400 / 11	500 / 13
	30 / 2.1	850 / 23	1450 / 39	1630 / 44	1820 / 49	390 / 10	570 / 15	830 / 22	1060 / 28
	45 / 3.1	1300 / 35	2240 / 60	2430 / 65	2630 / 70	550 / 15	840 / 23	1260 / 34	1610 / 43
35 to 100 / 2.4 to 6.9	50 / 3.4	1450 / 39	2500 / 67	2700 / 72	2900 / 78	600 / 16	930 / 25	1400 / 38	1800 / 48
	35 / 2.4	750 / 20	1260 / 34	1750 / 47	2150 / 58	420 / 11	640 / 17	860 / 23	1130 / 30
	50 / 3.4	1130 / 30	1920 / 51	2520 / 68	2970 / 80	610 / 16	980 / 26	1350 / 36	1790 / 48
	75 / 5.2	1770 / 47	3010 / 81	3810 / 102	4330 / 116	930 / 25	1540 / 41	2180 / 58	2900 / 78
75 to 125 / 5.2 to 8.6	100 / 6.9	2400 / 64	4100 / 110	5100 / 137	5700 / 153	1250 / 34	2100 / 56	3000 / 80	4000 / 107
	75 / 5.2	2650 / 71	3590 / 96	3960 / 106	4100 / 110	2060 / 55	3160 / 85	3650 / 98	4100 / 110
	100 / 6.9	3310 / 89	4550 / 122	4910 / 132	5580 / 150	2610 / 70	4190 / 112	4360 / 117	4950 / 133
	125 / 8.6	4390 / 118	5250 / 141	5770 / 155		2970 / 80	4870 / 131	5310 / 142	

Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.

Table 6. Air Capacities (continued)

SPRING RANGE, psig / bar	SET PRESSURE, psig / bar	CAPACITIES IN SCFH / Nm ³ /h OF AIR AT % BUILD-UP							
		Elastomer Diaphragm				Metal Diaphragm			
		3/4 In. / 20 mm				3/4 In. / 20 mm			
		10%	20%	30%	40%	10%	20%	30%	40%
2 to 8 / 0.14 to 0.55	2 / 0.14	180 / 4.8	220 / 5.9	300 / 8.0	370 / 9.9	Not Available			
	5 / 0.34	370 / 9.9	640 / 17	990 / 27	1110 / 30				
	8 / 0.55	550 / 15	1060 / 28	1670 / 45	1840 / 49				
5 to 25 / 0.34 to 1.7	5 / 0.34	270 / 7.2	400 / 11	550 / 15	700 / 19	230 / 6.2	260 / 7.0	310 / 8.3	370 / 9.9
	15 / 1.0	740 / 20	1550 / 42	2080 / 56	2280 / 61	400 / 11	520 / 14	660 / 18	830 / 22
	25 / 1.7	1200 / 32	2700 / 72	3600 / 96	3850 / 103	560 / 15	770 / 21	1020 / 27	1300 / 35
10 to 50 / 0.69 to 3.4	10 / 0.69	360 / 9.6	550 / 15	800 / 21	1100 / 29	270 / 7.2	330 / 8.8	390 / 10	480 / 13
	15 / 1.0	570 / 15	990 / 27	1310 / 35	1700 / 46	360 / 9.6	480 / 13	600 / 16	750 / 20
	30 / 2.1	1180 / 32	2330 / 62	2850 / 76	3500 / 94	640 / 17	920 / 25	1240 / 33	1590 / 43
	45 / 3.1	1800 / 48	3660 / 98	4390 / 118	5300 / 142	910 / 24	1350 / 36	1890 / 51	2420 / 65
35 to 100 / 2.4 to 6.9	50 / 3.4	2000 / 54	4100 / 110	4900 / 131	5900 / 158	1000 / 27	1500 / 40	2100 / 56	2700 / 72
	35 / 2.4	1100 / 29	2350 / 63	3700 / 99	4800 / 129	680 / 18	940 / 25	1220 / 33	1540 / 41
	50 / 3.4	2120 / 57	4000 / 107	5430 / 146	6480 / 174	980 / 26	1420 / 38	1980 / 53	2590 / 69
	75 / 5.2	3810 / 102	6750 / 181	8320 / 223	9290 / 249	1490 / 40	2210 / 59	3240 / 87	4350 / 117
75 to 125 / 5.2 to 8.6	100 / 6.9	5500 / 147	9500 / 255	11,200 / 300	12,100 / 324	2000 / 54	3000 / 80	4500 / 121	6100 / 163
	75 / 5.2	3660 / 98	6670 / 179	7760 / 208	8680 / 233	2240 / 60	3760 / 101	4910 / 132	5710 / 153
	100 / 6.9	5570 / 149	9520 / 255	10,540 / 282	11,300 / 303	2860 / 77	4080 / 109	6100 / 163	7800 / 209
	125 / 8.6	7650 / 205	11,690 / 313	12,680 / 340		3510 / 94	5510 / 148	7940 / 213	

Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.

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Table 6. Air Capacities (continued)

SPRING RANGE, psig / bar	SET PRESSURE, psig / bar	CAPACITIES IN SCFH / Nm ³ /h OF AIR AT % BUILD-UP							
		Elastomer Diaphragm				Metal Diaphragm			
		1 in. / 25 mm				1 in. / 25 mm			
		10%	20%	30%	40%	10%	20%	30%	40%
2 to 8 / 0.14 to 0.55	2 / 0.14	590 / 16	850 / 23	1070 / 29	1520 / 41	Not Available			
	5 / 0.34	930 / 25	1660 / 44	2400 / 64	3270 / 88				
	8 / 0.55	1380 / 37	2450 / 66	3640 / 98	4680 / 125				
5 to 25 / 0.34 to 1.7	5 / 0.34	700 / 19	950 / 25	1250 / 34	1650 / 44	520 / 14	660 / 18	840 / 23	1000 / 27
	15 / 1.0	1480 / 40	2750 / 74	4270 / 114	5430 / 146	960 / 26	1380 / 37	2020 / 54	2730 / 73
	25 / 1.7	2500 / 67	5000 / 134	7900 / 212	10,000 / 268	1400 / 38	2100 / 56	3200 / 86	4450 / 119
15 to 70 / 1.0 to 4.8	15 / 1.0	1030 / 28	1990 / 53	3180 / 85	4230 / 113	900 / 24	1200 / 32	1600 / 43	2100 / 56
	30 / 2.1	2740 / 73	5760 / 154	7790 / 209	9490 / 254	2130 / 57	3330 / 89	4870 / 131	6520 / 175
	45 / 3.1	4450 / 119	9520 / 255	12,410 / 333	14,740 / 395	3350 / 90	5450 / 146	8150 / 218	10,940 / 293
	50 / 3.4	5020 / 135	10,780 / 289	13,950 / 374	16,490 / 442	3760 / 101	6160 / 165	9240 / 248	12,410 / 333
	60 / 4.1	6160 / 165	13,290 / 356	17,020 / 456	20,000 / 536	4580 / 123	7580 / 203	11,420 / 306	15,350 / 411
	70 / 4.8	7300 / 196	15,800 / 423	20,100 / 539	23,500 / 630	5400 / 145	9000 / 241	13,600 / 364	18,300 / 490
25 to 90 / 1.7 to 6.2	35 / 2.4	1600 / 43	2700 / 72	4100 / 110	5900 / 158	1500 / 40	2200 / 59	3200 / 86	4400 / 118
	50 / 3.4	3430 / 92	6760 / 181	10,210 / 274	12,500 / 335	2700 / 72	4600 / 123	6910 / 185	9450 / 253
	75 / 5.2	6470 / 173	13,540 / 363	20,390 / 546	23,500 / 630	4700 / 126	8600 / 230	13,090 / 351	17,850 / 478
	90 / 6.2	8300 / 222	17,600 / 472	26,500 / 710	30,100 / 807	5900 / 158	11,000 / 295	16,800 / 450	22,900 / 614
35 to 100 / 2.4 to 6.9	35 / 2.4	2300 / 62	3900 / 105	6000 / 161	8300 / 222	1650 / 44	2400 / 64	3400 / 91	4600 / 123
	50 / 3.4	3870 / 104	7200 / 193	11,190 / 300	13,930 / 373	2750 / 74	4570 / 122	6790 / 182	9150 / 245
	75 / 5.2	6480 / 174	12,700 / 340	19,850 / 532	23,320 / 625	4570 / 122	8180 / 219	12,450 / 334	16,720 / 448
75 to 125 / 5.2 to 8.6	100 / 6.9	9100 / 244	18,200 / 488	28,500 / 764	32,700 / 876	6400 / 172	11,800 / 316	18,100 / 485	24,300 / 651
	75 / 5.2	14,200 / 381	20,740 / 556	23,630 / 633	26,090 / 699	9400 / 252	14,480 / 388	18,280 / 490	18,990 / 509
	100 / 6.9	20,550 / 551	28,460 / 763	32,210 / 863	34,940 / 936	11,530 / 309	18,640 / 500	21,420 / 574	26,050 / 698
	125 / 8.6	24,920 / 668	35,760 / 958	40,760 / 1092		15,000 / 402	23,880 / 640	28,790 / 772	

Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.

Table 6. Air Capacities (continued)

SPRING RANGE, psig / bar	SET PRESSURE, psig / bar	CAPACITIES IN SCFH / Nm ³ /h OF AIR AT % BUILD-UP							
		Elastomer Diaphragm				Metal Diaphragm			
		1-1/2 in. / 40 mm Reduced Port				1-1/2 in. / 40 mm Reduced Port			
		10%	20%	30%	40%	10%	20%	30%	40%
2 to 8 / 0.14 to 0.55	2 / 0.14	650 / 17	930 / 25	1180 / 32	1670 / 45	Not Available			
	5 / 0.34	1020 / 27	1830 / 49	2640 / 71	3600 / 96				
	8 / 0.55	1520 / 41	2700 / 72	4000 / 107	5150 / 138				
5 to 25 / 0.34 to 1.7	5 / 0.34	760 / 20	1040 / 28	1380 / 37	1820 / 49	570 / 15	730 / 20	920 / 25	1100 / 29
	15 / 1.0	1620 / 43	3030 / 81	4700 / 126	5970 / 160	1060 / 28	1520 / 41	2220 / 59	3000 / 80
	25 / 1.7	2750 / 74	5500 / 147	8690 / 233	11,000 / 295	1540 / 41	2310 / 62	3520 / 94	4900 / 131
15 to 70 / 1.0 to 4.8	15 / 1.0	1130 / 30	2190 / 59	3500 / 94	4650 / 125	990 / 27	1320 / 35	1760 / 47	2310 / 62
	30 / 2.1	3010 / 81	6330 / 170	8570 / 230	10,430 / 280	2340 / 63	3660 / 98	5360 / 144	7170 / 192
	45 / 3.1	4900 / 131	10,480 / 281	13,650 / 366	16,220 / 435	3690 / 99	6000 / 161	8960 / 240	12,030 / 322
	50 / 3.4	5520 / 148	11,860 / 318	15,340 / 411	18,140 / 486	4140 / 111	6780 / 182	10,160 / 272	13,650 / 366
	60 / 4.1	6780 / 182	14,620 / 392	18,730 / 502	22,000 / 590	5040 / 135	8340 / 224	12,560 / 337	16,890 / 453
	70 / 4.8	8030 / 215	17,380 / 466	22,110 / 593	25,850 / 693	5940 / 159	9900 / 265	14,960 / 401	20,130 / 539
25 to 90 / 1.7 to 6.2	35 / 2.4	1760 / 47	2970 / 80	4510 / 121	6490 / 174	1650 / 44	2420 / 65	3520 / 94	4840 / 130
	50 / 3.4	3770 / 101	7440 / 199	11,230 / 301	13,750 / 369	2970 / 80	5060 / 136	7600 / 204	10,390 / 278
	75 / 5.2	7120 / 191	14,890 / 399	22,430 / 601	25,850 / 693	5170 / 139	9460 / 254	14,400 / 386	19,640 / 526
	90 / 6.2	9130 / 245	19,360 / 519	29,150 / 781	33,110 / 887	6490 / 174	12,100 / 324	18,480 / 495	25,190 / 675
35 to 100 / 2.4 to 6.9	35 / 2.4	2530 / 68	4290 / 115	6600 / 177	9130 / 245	1820 / 49	2640 / 71	3740 / 100	5060 / 136
	50 / 3.4	4260 / 114	7920 / 212	12,310 / 330	15,320 / 411	3020 / 81	5030 / 135	7470 / 200	10,060 / 270
	75 / 5.2	7130 / 191	13,970 / 374	21,830 / 585	25,650 / 687	5030 / 135	9000 / 241	13,690 / 367	18,400 / 493
75 to 125 / 5.2 to 8.6	100 / 6.9	10,010 / 268	20,020 / 537	31,350 / 840	35,970 / 934	7040 / 189	12,980 / 348	19,910 / 534	26,730 / 716
	75 / 5.2	15,080 / 404	20,360 / 546	23,670 / 634	26,040 / 698	9290 / 249	14,970 / 401	19,070 / 511	20,510 / 550
	100 / 6.9	19,200 / 515	28,690 / 769	31,780 / 852	34,820 / 933	12,660 / 339	20,040 / 537	24,040 / 644	30,340 / 813
	125 / 8.6	27,700 / 742	36,570 / 980	40,860 / 1095		15,690 / 420	22,930 / 615	33,290 / 892	

Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.

Table 6. Air Capacities (continued)

SPRING RANGE, psig / bar	SET PRESSURE, psig / bar	CAPACITIES IN SCFH / Nm ³ /h OF AIR AT % BUILD-UP							
		Elastomer Diaphragm				Metal Diaphragm			
		1-1/2 In. / 40 mm				1-1/2 In. / 40 mm			
		10%	20%	30%	40%	10%	20%	30%	40%
2 to 8 / 0.14 to 0.55	2 / 0.14	640 / 17	870 / 23	1000 / 27	1220 / 33	Not Available			
	5 / 0.34	790 / 21	1450 / 39	2690 / 72	3810 / 102				
	8 / 0.55	940 / 25	2030 / 54	4380 / 117	6400 / 172				
5 to 25 / 0.34 to 1.7	5 / 0.34	700 / 19	870 / 23	1400 / 38	1680 / 45	700 / 19	800 / 21	1000 / 27	1180 / 32
	15 / 1.0	1640 / 44	3790 / 102	7050 / 189	8190 / 219	1150 / 31	1540 / 41	2300 / 62	3090 / 83
	25 / 1.7	2570 / 69	6700 / 180	12,700 / 340	14,700 / 394	1600 / 43	2280 / 61	3600 / 96	5000 / 134
15 to 70 / 1.0 to 4.8	15 / 1.0	1640 / 44	2700 / 72	3980 / 107	5850 / 157	1200 / 32	1490 / 40	2070 / 55	2800 / 75
	30 / 2.1	6480 / 174	10,400 / 279	11,850 / 318	13,910 / 373	2240 / 60	3710 / 99	5550 / 149	7620 / 204
	45 / 3.1	11,330 / 304	18,100 / 485	19,720 / 528	21,980 / 589	3270 / 88	5920 / 159	9020 / 242	12,440 / 333
	50 / 3.4	12,940 / 347	20,660 / 554	22,350 / 599	24,670 / 661	3620 / 97	6660 / 178	10,180 / 273	14,040 / 376
	60 / 4.1	16,170 / 433	25,800 / 691	27,590 / 739	30,040 / 805	4310 / 116	8140 / 218	12,500 / 335	17,260 / 463
25 to 90 / 1.7 to 6.2	70 / 4.8	19,400 / 520	30,930 / 829	32,840 / 880	35,420 / 949	5000 / 134	9620 / 258	14,820 / 397	20,470 / 549
	35 / 2.4	2770 / 74	5000 / 134	7480 / 200	10,170 / 273	1600 / 43	2250 / 60	2970 / 80	4050 / 109
	50 / 3.4	7100 / 190	13,670 / 366	16,760 / 449	19,560 / 524	2880 / 77	4830 / 129	7000 / 188	9710 / 260
	75 / 5.2	14,310 / 384	28,130 / 754	32,240 / 864	35,210 / 944	5020 / 135	9120 / 244	13,700 / 367	19,140 / 513
35 to 100 / 2.4 to 6.9	90 / 6.2	18,640 / 500	36,800 / 986	41,520 / 1113	44,600 / 1195	6300 / 169	11,700 / 314	17,730 / 475	24,800 / 665
	35 / 2.4	4390 / 118	6380 / 171	9500 / 255	14,500 / 389	2200 / 59	3200 / 86	4400 / 118	5900 / 158
	50 / 3.4	8130 / 218	13,540 / 363	17,810 / 477	22,420 / 601	3230 / 87	5220 / 140	8050 / 216	11,370 / 305
	75 / 5.2	14,370 / 385	25,470 / 683	31,660 / 848	35,610 / 954	4940 / 132	8580 / 230	14,140 / 379	20,480 / 549
75 to 125 / 5.2 to 8.6	100 / 6.9	20,600 / 552	37,400 / 1002	45,510 / 1220	48,810 / 1308	6650 / 178	11,940 / 320	20,230 / 542	29,600 / 793
	75 / 5.2	16,090 / 431	28,300 / 758	33,550 / 899	35,600 / 954	9940 / 266	15,430 / 414	19,740 / 529	21,630 / 580
	100 / 6.9	21,360 / 572	40,070 / 1074	44,020 / 1180	45,650 / 1223	13,730 / 368	19,400 / 520	27,470 / 736	34,480 / 924
	125 / 8.6	32,190 / 863	49,830 / 1335	54,270 / 1454		17,060 / 457	25,780 / 691	36,860 / 988	

Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.

Table 6. Air Capacities (continued)

SPRING RANGE, psig / bar	SET PRESSURE, psig / bar	CAPACITIES IN SCFH / Nm ³ /h OF AIR AT % BUILD-UP							
		Elastomer Diaphragm				Metal Diaphragm			
		2 In. / 50 mm				2 In. / 50 mm			
		10%	20%	30%	40%	10%	20%	30%	40%
10 to 25 / 0.69 to 1.7	10 / 0.69	6370 / 171	8950 / 240	14,520 / 389	19,370 / 519	4700 / 126	6830 / 183	8740 / 234	10,960 / 294
	15 / 1.0	11,190 / 300	21,560 / 578	29,180 / 782	30,980 / 830	7480 / 200	10,050 / 269	12,810 / 343	16,360 / 438
	25 / 1.7	21,920 / 587	38,350 / 1028	41,540 / 1113	43,490 / 1166	10,470 / 281	14,970 / 401	20,580 / 552	25,870 / 693
15 to 50 / 1.0 to 3.4	15 / 1.0	9880 / 265	14,880 / 399	21,500 / 576	26,990 / 723	5730 / 154	8340 / 224	10,410 / 279	11,570 / 310
	25 / 1.7	15,660 / 420	28,080 / 753	35,840 / 961	39,130 / 1049	9290 / 249	13,240 / 355	18,600 / 498	23,320 / 625
	50 / 3.4	40,670 / 1090	56,380 / 1511	62,730 / 1681	66,500 / 1782	17,700 / 474	30,300 / 812	42,580 / 1141	53,670 / 1438
25 to 60 / 1.7 to 4.1	25 / 1.7	14,260 / 382	25,580 / 686	37,060 / 993	41,230 / 1105	9210 / 247	13,350 / 358	18,800 / 504	23,880 / 640
	50 / 3.4	33,210 / 890	58,720 / 1574	64,870 / 1739	68,920 / 1847	16,860 / 452	28,320 / 759	40,440 / 1084	51,660 / 1384
	60 / 4.1	56,330 / 1509	83,590 / 2240	89,580 / 2401		27,760 / 744	48,800 / 1308	68,490 / 1836	

Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.

Table 6. Air Capacities (continued)

SPRING RANGE, psig / bar	SET PRESSURE, psig / bar	CAPACITIES IN SCFH / Nm ³ /h OF AIR AT % BUILD-UP							
		Elastomer Diaphragm				Metal Diaphragm			
		3 In. / 80 mm				3 In. / 80 mm			
		10%	20%	30%	40%	10%	20%	30%	40%
10 to 25 / 0.69 to 1.7	10 / 0.69	9050 / 243	12,710 / 341	18,470 / 495	22,500 / 603	6080 / 163	10,500 / 281	14,290 / 383	17,430 / 467
	15 / 1.0	11,620 / 311	19,350 / 519	26,980 / 723	34,790 / 932	9830 / 263	15,440 / 414	20,150 / 540	24,400 / 654
	25 / 1.7	20,900 / 560	35,440 / 950	49,900 / 1337	55,940 / 1499	15,010 / 402	23,530 / 631	30,890 / 828	38,370 / 1028
15 to 50 / 1.0 to 3.4	15 / 1.0	8760 / 235	13,940 / 374	21,320 / 571	28,380 / 761	9550 / 256	14,510 / 389	18,960 / 508	22,940 / 615
	25 / 1.7	14,280 / 383	28,860 / 773	44,090 / 1182	56,210 / 1506	12,500 / 335	22,040 / 591	28,600 / 766	36,590 / 981
	50 / 3.4	24,390 / 654	54,400 / 1458	85,750 / 2298	92,660 / 2483	28,080 / 753	48,410 / 1297	63,320 / 1697	77,610 / 2080
25 to 60 / 1.7 to 4.1	25 / 1.7	13,280 / 356	25,440 / 682	37,430 / 1003	49,380 / 1323	12,360 / 331	21,070 / 565	28,840 / 773	35,770 / 959
	50 / 3.4	25,950 / 695	53,950 / 1446	83,780 / 2245	92,740 / 2485	25,930 / 695	44,100 / 1182	60,040 / 1609	73,790 / 1978
	60 / 4.1	66,630 / 1786	102,120 / 2737	123,800 / 3318		41,530 / 1113	68,970 / 1848	92,510 / 2479	

Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.

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Table 7. Steam Capacities

SPRING RANGE, psig / bar	SET PRESSURE, psig / bar	CAPACITIES IN POUNDS PER HOUR / kg/h SATURATED STEAM AT % BUILD-UP							
		Elastomer Diaphragm				Metal Diaphragm			
		1/2 In. / 15 mm				1/2 In. / 15 mm			
		10%	20%	30%	40%	10%	20%	30%	40%
2 to 8 / 0.14 to 0.55	2 / 0.14	6.4 / 2.9	8.3 / 3.8	10 / 4.5	12 / 5.4	Not Available			
	5 / 0.34	9.2 / 4.2	14 / 6.4	18 / 8.2	22 / 10				
	8 / 0.55	12 / 5.4	20 / 9.1	27 / 12	32 / 15				
5 to 25 / 0.34 to 1.7	5 / 0.34	7.2 / 3.3	10 / 4.5	13 / 5.9	18 / 8.2	5.3 / 2.4	6.2 / 2.8	7.1 / 3.2	8.4 / 3.8
	15 / 1.0	19 / 8.6	32 / 15	40 / 18	46 / 21	10 / 4.5	15 / 6.8	19 / 8.6	24 / 11
	25 / 1.7	31 / 14	53 / 24	66 / 30	72 / 33	15 / 6.8	24 / 11	31 / 14	40 / 18
10 to 50 / 0.69 to 3.4	10 / 0.69	11 / 5.0	18 / 8.2	25 / 11	32 / 15	7.5 / 3.4	9.3 / 4.2	12 / 5.4	14 / 6.4
	15 / 1.0	17 / 7.7	29 / 13	37 / 17	44 / 20	10 / 4.5	13 / 5.9	18 / 8.2	22 / 10
	30 / 2.1	37 / 17	64 / 29	72 / 33	80 / 36	17 / 7.7	25 / 11	37 / 17	47 / 21
	45 / 3.1	57 / 26	99 / 45	110 / 50	110 / 50	24 / 11	37 / 17	56 / 25	71 / 32
35 to 100 / 2.4 to 6.9	50 / 3.4	64 / 29	110 / 50	120 / 54	120 / 54	27 / 12	41 / 19	62 / 28	80 / 36
	35 / 2.4	33 / 15	56 / 25	77 / 35	92 / 42	19 / 8.6	28 / 13	38 / 17	50 / 23
	50 / 3.4	50 / 23	85 / 39	110 / 50	120 / 54	27 / 12	43 / 20	60 / 27	79 / 36
	75 / 5.2	78 / 35	130 / 59	160 / 73	170 / 77	41 / 19	68 / 31	96 / 44	130 / 59
75 to 125 / 5.2 to 8.6	100 / 6.9	110 / 50	180 / 82	210 / 95	220 / 100	55 / 25	93 / 42	130 / 59	180 / 82
	75 / 5.2	120 / 54	150 / 68	160 / 73	170 / 77	91 / 41	120 / 54	130 / 59	140 / 64
	100 / 6.9	150 / 68	200 / 91	210 / 95	220 / 100	120 / 54	160 / 73	170 / 77	180 / 82
	125 / 8.6	190 / 86	230 / 104	260 / 118		130 / 59	190 / 86	210 / 95	

Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.

Table 7. Steam Capacities (continued)

SPRING RANGE, psig / bar	SET PRESSURE, psig / bar	CAPACITIES IN POUNDS PER HOUR / kg/h SATURATED STEAM AT % BUILD-UP							
		Elastomer Diaphragm				Metal Diaphragm			
		3/4 In. / 20 mm				3/4 In. / 20 mm			
		10%	20%	30%	40%	10%	20%	30%	40%
2 to 8 / 0.14 to 0.55	2 / 0.14	8.3 / 3.8	9.9 / 4.5	14 / 6.4	17 / 7.7	Not Available			
	5 / 0.34	16 / 7.3	28 / 13	44 / 20	49 / 22				
	8 / 0.55	24 / 11	47 / 21	74 / 34	80 / 36				
5 to 25 / 0.34 to 1.7	5 / 0.34	12 / 5.4	18 / 8.2	24 / 11	31 / 14	10 / 4.5	12 / 5.4	14 / 6.4	16 / 7.3
	15 / 1.0	33 / 15	69 / 31	92 / 42	100 / 45	17 / 7.7	23 / 10	29 / 13	37 / 17
	25 / 1.7	53 / 24	120 / 54	150 / 68	150 / 68	25 / 11	34 / 15	45 / 20	58 / 26
10 to 50 / 0.69 to 3.4	10 / 0.7	16 / 7.3	24 / 11	35 / 16	49 / 22	12 / 5.4	15 / 6.8	17 / 7.7	21 / 9.5
	15 / 1.0	25 / 11	44 / 20	58 / 26	75 / 34	16 / 7.3	21 / 9.5	27 / 12	33 / 15
	30 / 2.1	52 / 24	100 / 45	130 / 59	150 / 68	28 / 13	40 / 18	55 / 25	70 / 32
	45 / 3.1	79 / 36	160 / 73	190 / 86	230 / 104	40 / 18	60 / 27	83 / 38	110 / 50
35 to 100 / 2.4 to 6.9	50 / 3.4	89 / 40	180 / 82	220 / 100	260 / 118	44 / 20	66 / 30	93 / 42	120 / 54
	35 / 2.4	49 / 22	100 / 45	160 / 73	200 / 91	30 / 14	42 / 19	54 / 25	68 / 31
	50 / 3.4	94 / 43	180 / 82	240 / 109	260 / 118	44 / 20	63 / 29	87 / 39	110 / 50
	75 / 5.2	170 / 77	300 / 136	350 / 159	370 / 168	66 / 30	98 / 44	140 / 64	190 / 86
75 to 125 / 5.2 to 8.6	100 / 6.9	240 / 109	420 / 191	450 / 204	480 / 218	89 / 40	130 / 59	200 / 91	270 / 123
	75 / 5.2	160 / 73	300 / 136	340 / 154	370 / 168	99 / 45	170 / 77	220 / 100	250 / 114
	100 / 6.9	250 / 114	420 / 191	450 / 204	480 / 218	130 / 59	180 / 82	270 / 123	350 / 159
	125 / 8.6	340 / 154	520 / 236	550 / 250		160 / 73	240 / 109	350 / 159	

Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.

Table 7. Steam Capacities (continued)

SPRING RANGE, psig / bar	SET PRESSURE, psig / bar	CAPACITIES IN POUNDS PER HOUR / kg/h SATURATED STEAM AT % BUILD-UP							
		Elastomer Diaphragm				Metal Diaphragm			
		1 In. / 25 mm				1 In. / 25 mm			
		10%	20%	30%	40%	10%	20%	30%	40%
2 to 8 / 0.14 to 0.55	2 / 0.14	27 / 12	39 / 18	49 / 22	70 / 32	Not Available			
	5 / 0.34	42 / 19	75 / 34	110 / 50	150 / 68				
	8 / 0.55	62 / 28	110 / 50	160 / 73	210 / 95				
5 to 25 / 0.34 to 1.7	5 / 0.34	32 / 15	43 / 20	57 / 26	75 / 34	24 / 11	30 / 14	38 / 17	45 / 20
	15 / 1.0	65 / 30	120 / 54	190 / 86	240 / 109	42 / 19	61 / 28	89 / 40	120 / 54
	25 / 1.7	110 / 50	220 / 100	350 / 159	440 / 200	62 / 28	93 / 42	140 / 64	200 / 91
15 to 70 / 1.0 to 4.8	15 / 1.0	46 / 21	88 / 40	140 / 64	190 / 86	40 / 18	53 / 24	71 / 32	93 / 42
	30 / 2.1	120 / 54	250 / 114	340 / 154	420 / 191	94 / 43	150 / 68	220 / 100	290 / 132
	45 / 3.1	200 / 91	420 / 191	550 / 250	650 / 295	150 / 68	240 / 109	360 / 163	480 / 218
	50 / 3.4	220 / 100	480 / 218	620 / 281	730 / 331	170 / 77	270 / 123	410 / 186	550 / 250
	60 / 4.1	270 / 123	590 / 268	750 / 341	880 / 400	200 / 91	340 / 154	510 / 232	680 / 309
	70 / 4.8	320 / 145	700 / 318	890 / 404	1010 / 459	240 / 109	400 / 182	600 / 272	810 / 368
25 to 90 / 1.7 to 6.2	35 / 2.4	71 / 32	120 / 54	180 / 82	260 / 118	66 / 30	97 / 44	140 / 64	190 / 86
	50 / 3.4	150 / 68	300 / 136	450 / 204	550 / 250	120 / 54	200 / 91	310 / 141	420 / 191
	75 / 5.2	290 / 132	600 / 272	900 / 409	1040 / 472	210 / 95	380 / 173	580 / 263	790 / 359
	90 / 6.2	370 / 168	780 / 354	1170 / 531	1260 / 572	260 / 118	490 / 222	740 / 336	1010 / 459
35 to 100 / 2.4 to 6.9	35 / 2.4	100 / 45	170 / 77	270 / 123	370 / 168	73 / 33	110 / 50	150 / 68	200 / 91
	50 / 3.4	170 / 77	320 / 145	500 / 227	620 / 281	120 / 54	200 / 91	300 / 136	400 / 182
	75 / 5.2	290 / 132	560 / 254	880 / 400	1030 / 468	200 / 91	360 / 163	550 / 250	740 / 336
	100 / 6.9	400 / 182	810 / 368	1260 / 572	1380 / 627	280 / 127	520 / 236	800 / 363	1080 / 490
75 to 125 / 5.2 to 8.6	75 / 5.2	630 / 286	920 / 418	1000 / 454	1070 / 486	420 / 191	640 / 291	810 / 368	840 / 381
	100 / 6.9	910 / 413	1200 / 545	1290 / 586	1380 / 627	510 / 232	830 / 377	950 / 431	1150 / 522
	125 / 8.6	1100 / 499	1470 / 667	1580 / 717		660 / 300	1060 / 481	1270 / 577	

Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.

Table 7. Steam Capacities (continued)

SPRING RANGE, psig / bar	SET PRESSURE, psig / bar	CAPACITIES IN POUNDS PER HOUR / kg/h SATURATED STEAM AT % BUILD-UP							
		Elastomer Diaphragm				Metal Diaphragm			
		1-1/2 In. / 40 mm Reduced Port				1-1/2 In. / 40 mm Reduced Port			
		10%	20%	30%	40%	10%	20%	30%	40%
2 to 8 / 0.14 to 0.55	2 / 0.14	30 / 14	43 / 20	54 / 24	77 / 35	Not Available			
	5 / 0.34	46 / 21	83 / 38	120 / 54	160 / 73				
	8 / 0.55	68 / 31	120 / 54	180 / 82	230 / 104				
5 to 25 / 0.34 to 1.7	5 / 0.34	35 / 16	47 / 21	62 / 28	82 / 37	26 / 12	33 / 15	42 / 19	50 / 23
	15 / 1.0	72 / 33	130 / 59	210 / 95	260 / 118	47 / 21	67 / 30	98 / 44	130 / 59
	25 / 1.7	120 / 54	240 / 109	380 / 173	470 / 213	68 / 31	100 / 45	160 / 73	220 / 100
15 to 70 / 1.0 to 4.8	15 / 1.0	50 / 23	97 / 44	150 / 68	210 / 95	44 / 20	58 / 26	78 / 35	100 / 45
	30 / 2.1	130 / 59	280 / 127	380 / 173	460 / 209	100 / 45	160 / 73	240 / 109	320 / 145
	45 / 3.1	220 / 100	460 / 209	600 / 272	720 / 327	160 / 73	270 / 123	400 / 182	530 / 241
	50 / 3.4	240 / 109	520 / 236	680 / 309	800 / 363	180 / 82	300 / 136	450 / 204	600 / 272
	60 / 4.1	300 / 136	650 / 295	830 / 377	940 / 427	220 / 100	370 / 168	560 / 254	750 / 341
	70 / 4.8	360 / 163	770 / 350	980 / 445	1070 / 486	260 / 118	440 / 200	660 / 300	890 / 404
25 to 90 / 1.7 to 6.2	35 / 2.4	78 / 35	130 / 59	200 / 91	290 / 132	73 / 33	110 / 50	160 / 73	210 / 95
	50 / 3.4	170 / 77	330 / 150	500 / 227	610 / 277	130 / 59	220 / 100	340 / 154	460 / 209
	75 / 5.2	320 / 145	660 / 300	990 / 449	1140 / 518	230 / 104	420 / 191	640 / 291	870 / 395
	90 / 6.2	400 / 182	860 / 390	1250 / 568	1340 / 608	290 / 132	540 / 245	820 / 372	1110 / 504
35 to 100 / 2.4 to 6.9	35 / 2.4	110 / 50	190 / 86	290 / 132	400 / 182	80 / 36	120 / 54	170 / 77	220 / 100
	50 / 3.4	190 / 86	350 / 159	540 / 245	680 / 309	130 / 59	220 / 100	330 / 150	450 / 204
	75 / 5.2	320 / 145	620 / 281	970 / 440	1140 / 518	220 / 100	400 / 182	610 / 277	810 / 368
	100 / 6.9	440 / 200	890 / 404	1380 / 627	1470 / 667	310 / 141	570 / 259	880 / 400	1180 / 536
75 to 125 / 5.2 to 8.6	75 / 5.2	670 / 304	900 / 409	1050 / 477	1140 / 518	410 / 186	660 / 300	840 / 381	910 / 413
	100 / 6.9	850 / 386	1270 / 577	1380 / 627	1470 / 667	560 / 254	890 / 404	1060 / 481	1340 / 608
	125 / 8.6	1230 / 558	1570 / 713	1690 / 767		690 / 313	1010 / 459	1470 / 667	

Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.

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Table 7. Steam Capacities (continued)

SPRING RANGE, psig / bar	SET PRESSURE, psig / bar	CAPACITIES IN POUNDS PER HOUR / kg/h SATURATED STEAM AT % BUILD-UP							
		Elastomer Diaphragm				Metal Diaphragm			
		1-1/2 In. / 40 mm				1-1/2 In. / 40 mm			
		10%	20%	30%	40%	10%	20%	30%	40%
2 to 8 / 0.14 to 0.55	2 / 0.14	30 / 14	40 / 18	46 / 21	56 / 25	Not Available			
	5 / 0.34	36 / 16	66 / 30	120 / 54	170 / 77				
	8 / 0.55	42 / 19	91 / 41	200 / 91	290 / 132				
5 to 25 / 0.34 to 1.7	5 / 0.34	32 / 15	40 / 18	64 / 29	76 / 35	32 / 15	36 / 16	45 / 20	53 / 24
	15 / 1.0	72 / 33	170 / 77	310 / 141	360 / 163	51 / 23	68 / 31	102 / 46	140 / 64
	25 / 1.7	110 / 50	300 / 136	560 / 254	650 / 295	71 / 32	100 / 45	160 / 73	220 / 100
15 to 70 / 1.0 to 4.8	15 / 1.0	73 / 33	120 / 54	180 / 82	260 / 118	53 / 24	66 / 30	92 / 42	120 / 54
	30 / 2.1	290 / 132	460 / 209	520 / 236	620 / 281	100 / 45	160 / 73	250 / 114	340 / 154
	45 / 3.1	500 / 227	800 / 363	870 / 395	970 / 440	140 / 64	260 / 118	400 / 182	550 / 250
	50 / 3.4	570 / 259	910 / 413	990 / 449	1090 / 495	160 / 73	290 / 132	450 / 204	620 / 281
	60 / 4.1	720 / 327	1140 / 518	1220 / 554	1330 / 604	190 / 86	360 / 163	550 / 250	760 / 345
25 to 90 / 1.7 to 6.2	70 / 4.8	860 / 390	1350 / 613	1440 / 654	1540 / 699	220 / 100	430 / 195	660 / 300	910 / 413
	35 / 2.4	123 / 56	220 / 100	330 / 150	450 / 204	71 / 32	100 / 45	130 / 59	180 / 82
	50 / 3.4	310 / 141	610 / 277	740 / 336	870 / 395	130 / 59	210 / 95	310 / 141	430 / 195
	75 / 5.2	630 / 286	1240 / 563	1430 / 649	1560 / 708	220 / 100	400 / 182	610 / 277	850 / 386
35 to 100 / 2.4 to 6.9	90 / 6.2	820 / 372	1630 / 740	1800 / 817	1920 / 872	280 / 127	520 / 236	780 / 354	1100 / 499
	35 / 2.4	190 / 86	280 / 127	420 / 191	640 / 291	97 / 44	140 / 64	190 / 86	260 / 118
	50 / 3.4	360 / 163	600 / 272	790 / 359	990 / 449	140 / 64	230 / 104	360 / 163	500 / 227
	75 / 5.2	640 / 291	1130 / 513	1400 / 636	1580 / 717	220 / 100	380 / 173	630 / 286	910 / 413
75 to 125 / 5.2 to 8.6	100 / 6.9	910 / 413	1660 / 754	1980 / 899	2110 / 958	290 / 132	530 / 241	900 / 409	1310 / 595
	75 / 5.2	710 / 322	1250 / 568	1480 / 672	1580 / 717	440 / 200	680 / 309	870 / 395	960 / 436
	100 / 6.9	950 / 431	1770 / 804	1950 / 885	2020 / 917	610 / 277	860 / 390	1220 / 554	1530 / 695
	125 / 8.6	1420 / 645	2210 / 1003	2400 / 1090		760 / 345	1140 / 518	1630 / 740	

Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.

Table 7. Steam Capacities (continued)

SPRING RANGE, psig / bar	SET PRESSURE, psig / bar	CAPACITIES IN POUNDS PER HOUR / kg/h SATURATED STEAM AT % BUILD-UP							
		Elastomer Diaphragm				Metal Diaphragm			
		2 In. / 50 mm				2 In. / 50 mm			
		10%	20%	30%	40%	10%	20%	30%	40%
10 to 25 / 0.69 to 1.7	10 / 0.69	280 / 127	400 / 182	640 / 291	860 / 390	210 / 95	300 / 136	390 / 177	490 / 222
	15 / 1.0	500 / 227	950 / 431	1190 / 540	1240 / 563	330 / 150	440 / 200	570 / 259	720 / 327
	25 / 1.7	970 / 440	1560 / 708	1650 / 749	1740 / 790	460 / 209	660 / 300	910 / 413	1140 / 518
15 to 50 / 1.0 to 3.4	15 / 1.0	440 / 200	660 / 300	950 / 431	1190 / 540	250 / 114	370 / 168	460 / 209	510 / 232
	25 / 1.7	690 / 313	1240 / 563	1590 / 722	1730 / 785	410 / 186	590 / 268	820 / 372	1030 / 468
	50 / 3.4	1800 / 817	2500 / 1135	2780 / 1262	2940 / 1335	780 / 354	1340 / 608	1880 / 854	2380 / 1081
25 to 60 / 1.7 to 4.1	25 / 1.7	630 / 286	1130 / 513	1640 / 745	1740 / 790	410 / 186	590 / 268	830 / 377	1060 / 481
	50 / 3.4	1470 / 667	2600 / 1180	2800 / 1271	2970 / 1348	750 / 341	1250 / 568	1790 / 813	2290 / 1040
	60 / 4.1	2490 / 1130	3680 / 1671	3940 / 1789		1230 / 558	2160 / 981	3030 / 1376	

Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.

Table 7. Steam Capacities (continued)

SPRING RANGE, psig / bar	SET PRESSURE, psig / bar	CAPACITIES IN POUNDS PER HOUR / kg/h SATURATED STEAM AT % BUILD-UP							
		Elastomer Diaphragm				Metal Diaphragm			
		3 In. / 80 mm				3 In. / 80 mm			
		10%	20%	30%	40%	10%	20%	30%	40%
10 to 25 / 0.69 to 1.7	10 / 0.69	400 / 182	560 / 254	820 / 372	1000 / 454	270 / 123	470 / 213	630 / 286	770 / 350
	15 / 1.0	510 / 232	860 / 390	1190 / 540	1540 / 699	440 / 200	680 / 309	890 / 404	1080 / 490
	25 / 1.7	930 / 422	1570 / 713	2210 / 1003	2410 / 1094	660 / 300	1040 / 472	1370 / 622	1700 / 772
15 to 50 / 1.0 to 3.4	15 / 1.0	390 / 177	620 / 281	940 / 427	1260 / 572	420 / 191	640 / 291	840 / 381	1020 / 463
	25 / 1.7	630 / 286	1280 / 581	1950 / 885	2410 / 1094	550 / 250	980 / 445	1270 / 577	1620 / 735
	50 / 3.4	1080 / 490	2410 / 1094	3800 / 1725	4100 / 1861	1240 / 563	2140 / 972	2800 / 1271	3430 / 1557
25 to 60 / 1.7 to 4.1	25 / 1.7	590 / 268	1130 / 513	1660 / 754	2190 / 994	550 / 250	930 / 422	1280 / 581	1580 / 717
	50 / 3.4	1150 / 522	2390 / 1085	3710 / 1684	4100 / 1861	1150 / 522	1950 / 885	2660 / 1208	3270 / 1485
	60 / 4.1	2950 / 1339	4520 / 2052	5460 / 2479		1840 / 835	3050 / 1385	4090 / 1857	

Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.

Table 8. Liquid Capacities

SPRING RANGE, psig / bar	SET PRESSURE, psig / bar	CAPACITIES IN GPM / l/min WATER AT % BUILD-UP							
		Elastomer Diaphragm				Metal Diaphragm			
		1/2 In. / 15 mm				1/2 In. / 15 mm			
		10%	20%	30%	40%	10%	20%	30%	40%
2 to 8 / 0.14 to 0.55	2 / 0.14	0.7 / 2.6	0.9 / 3.4	1.1 / 4.2	1.2 / 4.5	Not Available			
	5 / 0.34	1.1 / 4.2	1.6 / 6.1	2.1 / 7.9	2.6 / 9.8				
	8 / 0.55	1.5 / 5.7	2.5 / 9.5	3.3 / 12	4.1 / 16				
5 to 25 / 0.34 to 1.7	5 / 0.34	0.8 / 3.0	1.2 / 4.5	1.6 / 6.1	2.1 / 7.9	0.7 / 2.6	0.9 / 3.4	1.0 / 3.8	1.2 / 4.5
	15 / 1.0	2.4 / 9.1	3.9 / 15	4.8 / 18	5.5 / 21	1.6 / 6.1	2.3 / 8.7	2.8 / 11	3.5 / 13
	25 / 1.7	3.3 / 12	5.6 / 21	6.8 / 26	7.2 / 27	2.1 / 7.9	3.1 / 12	3.9 / 15	4.9 / 19
10 to 50 / 0.69 to 3.4	10 / 0.69	1.3 / 4.9	2.2 / 8.3	3.1 / 12	4.1 / 16	1.2 / 4.5	1.4 / 5.3	1.8 / 6.8	2.1 / 7.9
	15 / 1.0	2.2 / 8.3	3.6 / 14	4.4 / 17	5.2 / 20	1.5 / 5.7	2.0 / 7.6	2.6 / 9.8	3.2 / 12
	30 / 2.1	3.8 / 14	6.3 / 24	6.9 / 26	7.5 / 28	2.1 / 7.9	3.1 / 12	4.3 / 16	5.4 / 20
	45 / 3.1	5.0 / 19	8.4 / 32	8.7 / 33	9.0 / 34	2.6 / 10	3.9 / 15	5.6 / 21	7.0 / 26
35 to 100 / 2.4 to 6.9	50 / 3.4	5.4 / 20	8.8 / 33	9.1 / 34	9.4 / 36	2.8 / 11	4.1 / 16	6.0 / 23	7.5 / 28
	35 / 2.4	3.2 / 12	5.2 / 20	7.0 / 26	8.1 / 31	2.2 / 8.3	3.3 / 12	4.2 / 16	5.4 / 20
	50 / 3.4	4.2 / 16	6.9 / 26	8.8 / 33	9.4 / 36	2.8 / 11	4.3 / 16	5.8 / 22	7.5 / 28
	75 / 5.2	5.6 / 21	9.1 / 34	11 / 42	11 / 42	3.6 / 14	5.8 / 22	7.9 / 30	10 / 38
75 to 125 / 5.2 to 8.6	100 / 6.9	6.7 / 25	11 / 42	12 / 45	13 / 49	4.3 / 16	6.9 / 26	9.5 / 36	12 / 45
	75 / 5.2	8.3 / 31	10 / 38	11 / 42	11 / 42	8.0 / 30	10 / 38	11 / 42	11 / 42
	100 / 6.9	9.2 / 35	12 / 45	12 / 45	13 / 49	8.9 / 34	12 / 45	12 / 45	13 / 49
	125 / 8.6	11 / 42	13 / 49	13 / 49		9.2 / 35	13 / 49	14 / 53	

Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.

Table 8. Liquid Capacities (continued)

SPRING RANGE, psig / bar	SET PRESSURE, psig / bar	CAPACITIES IN GPM / l/min WATER AT % BUILD-UP							
		Elastomer Diaphragm				Metal Diaphragm			
		3/4 In. / 20 mm				3/4 In. / 20 mm			
		10%	20%	30%	40%	10%	20%	30%	40%
2 to 8 / 0.14 to 0.55	2 / 0.14	0.9 / 3.4	1.0 / 3.8	1.4 / 5.3	1.8 / 6.8	Not Available			
	5 / 0.34	1.9 / 7.2	3.4 / 13	5.3 / 20	6.0 / 23				
	8 / 0.55	3.1 / 12	6.0 / 23	9.5 / 36	10 / 38				
5 to 25 / 0.34 to 1.7	5 / 0.34	1.4 / 5.3	2.1 / 7.9	3.0 / 11	3.8 / 14	1.2 / 4.5	1.4 / 5.3	1.6 / 6.1	2.0 / 7.6
	15 / 1.0	4.2 / 16	8.9 / 34	12 / 45	13 / 49	2.3 / 8.7	3.0 / 11	3.8 / 14	4.7 / 18
	25 / 1.7	6.3 / 24	14 / 53	16 / 61	17 / 64	2.9 / 11	3.9 / 15	5.1 / 19	6.3 / 24
10 to 50 / 0.69 to 3.4	10 / 0.69	2.1 / 7.9	3.2 / 12	4.6 / 17	6.4 / 24	1.5 / 5.7	1.9 / 7.2	2.2 / 8.3	2.7 / 10
	15 / 1.0	3.3 / 12	5.7 / 22	7.5 / 28	9.7 / 37	2.1 / 7.9	2.7 / 10	3.4 / 13	4.3 / 16
	30 / 2.1	5.8 / 22	11 / 42	13 / 49	16 / 61	3.1 / 12	4.4 / 17	5.8 / 22	7.2 / 27
	45 / 3.1	7.7 / 29	15 / 57	18 / 68	21 / 79	3.9 / 15	5.6 / 21	7.5 / 28	9.4 / 36
35 to 100 / 2.4 to 6.9	50 / 3.4	8.2 / 31	16 / 61	19 / 72	22 / 83	4.1 / 16	5.9 / 22	8.0 / 30	10 / 38
	35 / 2.4	5.2 / 20	11 / 42	16 / 61	19 / 72	3.2 / 12	4.3 / 16	5.4 / 20	6.6 / 25
	50 / 3.4	8.7 / 33	16 / 61	21 / 79	22 / 83	4.0 / 15	5.6 / 21	7.6 / 29	9.6 / 36
	75 / 5.2	13 / 49	23 / 87	26 / 98	26 / 98	5.2 / 20	7.4 / 28	10 / 38	14 / 53
75 to 125 / 5.2 to 8.6	100 / 6.9	17 / 64	28 / 106	29 / 110	30 / 114	6.1 / 23	8.8 / 33	13 / 49	17 / 64
	75 / 5.2	13 / 49	22 / 83	25 / 95	26 / 98	7.8 / 30	13 / 49	16 / 61	18 / 68
	100 / 6.9	17 / 64	28 / 106	29 / 110	30 / 114	8.7 / 33	12 / 45	17 / 64	21 / 79
	125 / 8.6	21 / 79	31 / 117	32 / 121		9.7 / 37	15 / 57	20 / 76	

Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.

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Table 8. Liquid Capacities (continued)

SPRING RANGE, psig / bar	SET PRESSURE, psig / bar	CAPACITIES IN GPM / l/min WATER AT % BUILD-UP							
		Elastomer Diaphragm				Metal Diaphragm			
		1 In. / 25 mm				1 In. / 25 mm			
		10%	20%	30%	40%	10%	20%	30%	40%
2 to 8 / 0.14 to 0.55	2 / 0.14	2.7 / 10	3.8 / 14	4.9 / 19	6.9 / 26	Not Available			
	5 / 0.34	4.3 / 16	7.7 / 29	11 / 42	15 / 57				
	8 / 0.55	6.5 / 25	11 / 42	17 / 64	22 / 83				
5 to 25 / 0.34 to 1.7	5 / 0.34	3.2 / 12	4.4 / 17	5.8 / 22	7.7 / 29	2.4 / 9.1	3.1 / 12	3.9 / 15	4.7 / 18
	15 / 1.0	6.9 / 26	13 / 49	20 / 76	25 / 95	4.5 / 17	6.4 / 24	9.4 / 36	13 / 49
	25 / 1.7	11 / 42	21 / 79	32 / 121	40 / 151	6.1 / 23	8.8 / 33	13 / 49	18 / 68
15 to 70 / 1.0 to 4.8	15 / 1.0	4.8 / 18	9.3 / 35	15 / 57	20 / 76	4.2 / 16	5.6 / 21	7.4 / 28	9.7 / 37
	30 / 2.1	11 / 42	23 / 87	30 / 114	35 / 132	8.7 / 33	13 / 49	19 / 72	24 / 91
	45 / 3.1	16 / 61	32 / 121	41 / 155	47 / 178	12 / 45	19 / 72	27 / 102	35 / 132
	50 / 3.4	17 / 64	35 / 132	44 / 167	50 / 189	13 / 49	20 / 76	29 / 110	38 / 144
	60 / 4.1	19 / 72	40 / 151	50 / 189	56 / 212	14 / 53	23 / 87	33 / 125	43 / 163
25 to 90 / 1.7 to 6.2	70 / 4.8	21 / 79	45 / 170	55 / 208	60 / 227	16 / 61	25 / 95	37 / 140	48 / 182
	35 / 2.4	6.2 / 23	10 / 38	15 / 57	21 / 79	5.8 / 22	8.2 / 31	12 / 45	16 / 61
	50 / 3.4	12 / 45	22 / 83	32 / 121	38 / 144	9.1 / 34	15 / 57	22 / 83	29 / 110
	75 / 5.2	18 / 68	37 / 140	54 / 204	60 / 227	13 / 49	24 / 91	35 / 132	46 / 174
35 to 100 / 2.4 to 6.9	90 / 6.2	22 / 83	45 / 170	65 / 246	67 / 254	16 / 61	28 / 106	41 / 155	54 / 204
	35 / 2.4	8.9 / 34	15 / 57	22 / 83	29 / 110	6.4 / 24	9.0 / 34	12 / 45	16 / 61
	50 / 3.4	13 / 49	23 / 87	35 / 132	43 / 163	9.2 / 35	15 / 57	21 / 79	28 / 106
	75 / 5.2	18 / 68	35 / 132	53 / 201	60 / 227	13 / 49	22 / 83	33 / 125	43 / 163
75 to 125 / 5.2 to 8.6	100 / 6.9	23 / 87	44 / 167	67 / 254	71 / 269	16 / 61	29 / 110	42 / 159	55 / 208
	75 / 5.2	40 / 151	57 / 216	60 / 227	62 / 235	27 / 102	40 / 151	49 / 185	49 / 185
	100 / 6.9	52 / 197	66 / 250	68 / 257	71 / 269	29 / 110	45 / 170	50 / 189	59 / 223
	125 / 8.6	57 / 216	73 / 276	76 / 288		34 / 129	52 / 197	61 / 231	

Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.

Table 8. Liquid Capacities (continued)

SPRING RANGE, psig / bar	SET PRESSURE, psig / bar	CAPACITIES IN GPM / l/min WATER AT % BUILD-UP							
		Elastomer Diaphragm				Metal Diaphragm			
		1-1/2 In. / 40 mm Reduced Port				1-1/2 In. / 40 mm Reduced Port			
		10%	20%	30%	40%	10%	20%	30%	40%
2 to 8 / 0.14 to 0.55	2 / 0.14	2.9 / 11	4.2 / 16	5.3 / 20	7.6 / 29	Not Available			
	5 / 0.34	4.7 / 18	8.4 / 32	12 / 45	17 / 64				
	8 / 0.55	7.1 / 27	13 / 49	19 / 72	24 / 91				
5 to 25 / 0.34 to 1.7	5 / 0.34	3.5 / 13	4.8 / 18	6.4 / 24	8.4 / 32	2.6 / 9.8	3.3 / 12	4.3 / 16	5.1 / 19
	15 / 1.0	7.5 / 28	14 / 53	22 / 83	27 / 102	4.9 / 19	7.0 / 26	10 / 38	14 / 53
	25 / 1.7	11 / 42	22 / 83	34 / 129	41 / 155	6.4 / 24	9.4 / 36	14 / 53	19 / 72
15 to 70 / 1.0 to 4.8	15 / 1.0	5.3 / 20	10 / 38	16 / 61	21 / 79	4.6 / 17	6.1 / 23	8.1 / 31	11 / 42
	30 / 2.1	12 / 45	24 / 91	32 / 121	38 / 144	9.2 / 35	14 / 53	20 / 76	26 / 98
	45 / 3.1	17 / 64	34 / 129	43 / 163	50 / 189	12 / 45	20 / 76	28 / 106	37 / 140
	50 / 3.4	18 / 68	37 / 140	47 / 178	53 / 201	13 / 49	21 / 79	31 / 117	40 / 151
	60 / 4.1	20 / 76	43 / 163	53 / 201	58 / 220	15 / 57	24 / 91	35 / 132	46 / 174
25 to 90 / 1.7 to 6.2	70 / 4.8	23 / 87	47 / 178	58 / 220	62 / 235	17 / 64	27 / 102	39 / 148	51 / 193
	35 / 2.4	6.5 / 25	11 / 42	16 / 61	22 / 83	6.1 / 23	8.7 / 33	12 / 45	16 / 61
	50 / 3.4	12 / 45	23 / 87	34 / 129	41 / 155	9.7 / 37	16 / 61	23 / 87	31 / 117
	75 / 5.2	20 / 76	39 / 148	57 / 216	64 / 242	14 / 53	25 / 95	37 / 140	49 / 185
35 to 100 / 2.4 to 6.9	90 / 6.2	23 / 87	47 / 178	67 / 254	69 / 261	17 / 64	30 / 114	44 / 167	58 / 220
	35 / 2.4	9.4 / 36	15 / 57	23 / 87	31 / 117	6.8 / 26	9.5 / 36	13 / 49	17 / 64
	50 / 3.4	14 / 53	25 / 95	37 / 140	45 / 170	9.8 / 37	16 / 61	23 / 87	30 / 114
	75 / 5.2	20 / 76	37 / 140	56 / 212	64 / 242	14 / 53	24 / 91	35 / 132	46 / 174
75 to 125 / 5.2 to 8.6	100 / 6.9	24 / 91	47 / 178	70 / 265	73 / 276	17 / 64	30 / 114	45 / 170	58 / 220
	75 / 5.2	42 / 159	54 / 204	61 / 231	64 / 242	26 / 98	40 / 151	49 / 185	51 / 193
	100 / 6.9	47 / 178	67 / 254	70 / 265	73 / 276	31 / 117	47 / 178	54 / 204	66 / 250
	125 / 8.6	61 / 231	75 / 284	78 / 295		34 / 129	48 / 182	68 / 257	

Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.

Table 8. Liquid Capacities (continued)

SPRING RANGE, psig / bar	SET PRESSURE, psig / bar	CAPACITIES IN GPM / l/min WATER AT % BUILD-UP							
		Elastomer Diaphragm				Metal Diaphragm			
		1-1/2 In. / 40 mm				1-1/2 In. / 40 mm			
		10%	20%	30%	40%	10%	20%	30%	40%
2 to 8 / 0.14 to 0.55	2 / 0.14	2.9 / 11	3.9 / 15	4.5 / 17	5.5 / 21	Not Available			
	5 / 0.34	3.6 / 14	6.7 / 25	12 / 45	18 / 68				
	8 / 0.55	4.4 / 17	9.4 / 36	20 / 76	30 / 114				
5 to 25 / 0.34 to 1.7	5 / 0.34	3.2 / 12	4.0 / 15	6.5 / 25	7.8 / 30	3.2 / 12	3.7 / 14	4.6 / 17	5.5 / 21
	15 / 1.0	7.6 / 29	18 / 68	32 / 121	37 / 140	5.3 / 20	7.1 / 27	11 / 42	14 / 53
	25 / 1.7	11 / 42	29 / 110	53 / 201	60 / 227	7.1 / 27	9.9 / 37	15 / 57	21 / 79
15 to 70 / 1.0 to 4.8	15 / 1.0	7.6 / 29	12 / 45	18 / 68	27 / 102	5.6 / 21	6.9 / 26	9.5 / 36	13 / 49
	30 / 2.1	27 / 102	42 / 159	47 / 178	53 / 201	9.4 / 36	15 / 57	22 / 83	29 / 110
	45 / 3.1	41 / 155	63 / 238	67 / 254	72 / 273	12 / 45	21 / 79	30 / 114	41 / 155
	50 / 3.4	45 / 170	69 / 261	72 / 273	77 / 291	13 / 49	22 / 83	33 / 125	44 / 167
	60 / 4.1	52 / 197	80 / 303	83 / 314	87 / 329	14 / 53	25 / 95	38 / 144	50 / 189
25 to 90 / 1.7 to 6.2	70 / 4.8	59 / 223	89 / 337	92 / 348	95 / 360	15 / 57	28 / 106	42 / 159	56 / 212
	35 / 2.4	11 / 42	19 / 72	28 / 106	37 / 140	6.3 / 24	8.6 / 33	11 / 42	15 / 57
	50 / 3.4	25 / 95	46 / 174	54 / 204	61 / 231	10 / 38	16 / 61	23 / 87	30 / 114
	75 / 5.2	42 / 159	79 / 299	88 / 333	93 / 352	15 / 57	26 / 98	37 / 140	51 / 193
35 to 100 / 2.4 to 6.9	90 / 6.2	50 / 189	96 / 363	100 / 379	110 / 416	17 / 64	31 / 117	45 / 170	60 / 227
	35 / 2.4	17 / 64	24 / 91	35 / 132	53 / 201	8.7 / 33	12 / 45	16 / 61	21 / 79
	50 / 3.4	28 / 106	45 / 170	58 / 220	70 / 265	11 / 42	17 / 64	26 / 98	36 / 136
	75 / 5.2	42 / 159	72 / 273	86 / 326	94 / 356	14 / 53	24 / 91	39 / 148	54 / 204
75 to 125 / 5.2 to 8.6	100 / 6.9	53 / 201	93 / 352	110 / 416	110 / 416	17 / 64	30 / 114	49 / 185	69 / 261
	75 / 5.2	47 / 178	80 / 303	91 / 344	94 / 356	29 / 110	44 / 167	54 / 204	57 / 216
	100 / 6.9	55 / 208	100 / 379	110 / 416	110 / 416	36 / 136	48 / 182	66 / 250	80 / 303
	125 / 8.6	75 / 284	110 / 416	120 / 454		40 / 151	58 / 220	80 / 303	

Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.

Table 8. Liquid Capacities (continued)

SPRING RANGE, psig / bar	SET PRESSURE, psig / bar	CAPACITIES IN GPM / l/min WATER AT % BUILD-UP							
		Elastomer Diaphragm				Metal Diaphragm			
		2 In. / 50 mm				2 In. / 50 mm			
		10%	20%	30%	40%	10%	20%	30%	40%
10 to 25 / 0.69 to 1.7	10 / 0.69	32 / 121	45 / 170	72 / 273	95 / 360	23 / 87	33 / 125	42 / 159	52 / 197
	15 / 1.0	53 / 201	99 / 375	120 / 454	120 / 454	34 / 129	44 / 167	55 / 208	69 / 261
	25 / 1.7	88 / 333	140 / 530	140 / 530	150 / 568	41 / 155	56 / 212	75 / 284	92 / 348
15 to 50 / 1.0 to 3.4	15 / 1.0	46 / 174	68 / 257	96 / 363	120 / 454	26 / 98	37 / 140	45 / 170	49 / 185
	25 / 1.7	63 / 238	110 / 416	140 / 530	150 / 568	36 / 136	50 / 189	68 / 257	83 / 314
	50 / 3.4	130 / 492	170 / 643	180 / 681	190 / 719	53 / 201	88 / 333	120 / 454	150 / 568
25 to 60 / 1.7 to 4.1	25 / 1.7	58 / 220	100 / 379	140 / 530	150 / 568	36 / 136	50 / 189	69 / 261	85 / 322
	50 / 3.4	100 / 379	180 / 681	190 / 719	190 / 719	51 / 193	82 / 310	110 / 416	140 / 530
	60 / 4.1	150 / 568	210 / 795	220 / 833		71 / 269	120 / 454	160 / 606	

Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.

Table 8. Liquid Capacities (continued)

SPRING RANGE, psig / bar	SET PRESSURE, psig / bar	CAPACITIES IN GPM / l/min WATER AT % BUILD-UP							
		Elastomer Diaphragm				Metal Diaphragm			
		3 In. / 80 mm				3 In. / 80 mm			
		10%	20%	30%	40%	10%	20%	30%	40%
10 to 25 / 0.69 to 1.7	10 / 0.69	42 / 159	60 / 227	85 / 322	100 / 379	28 / 106	48 / 182	64 / 242	77 / 291
	15 / 1.0	50 / 189	82 / 310	110 / 416	140 / 530	42 / 159	64 / 242	81 / 307	97 / 367
	25 / 1.7	78 / 295	130 / 492	180 / 681	190 / 719	55 / 208	83 / 314	110 / 416	130 / 492
15 to 50 / 1.0 to 3.4	15 / 1.0	38 / 144	59 / 223	88 / 333	120 / 454	40 / 151	60 / 227	77 / 291	91 / 344
	25 / 1.7	53 / 201	100 / 379	160 / 606	190 / 719	45 / 170	78 / 295	98 / 371	120 / 454
	50 / 3.4	70 / 265	150 / 568	230 / 871	240 / 908	79 / 299	130 / 492	170 / 643	200 / 757
25 to 60 / 1.7 to 4.1	25 / 1.7	49 / 185	90 / 341	130 / 492	170 / 643	45 / 170	74 / 280	99 / 375	120 / 454
	50 / 3.4	75 / 284	150 / 568	230 / 871	240 / 908	73 / 276	120 / 454	160 / 606	190 / 719
	60 / 4.1	160 / 606	240 / 908	280 / 1060		99 / 375	160 / 606	210 / 795	

Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.

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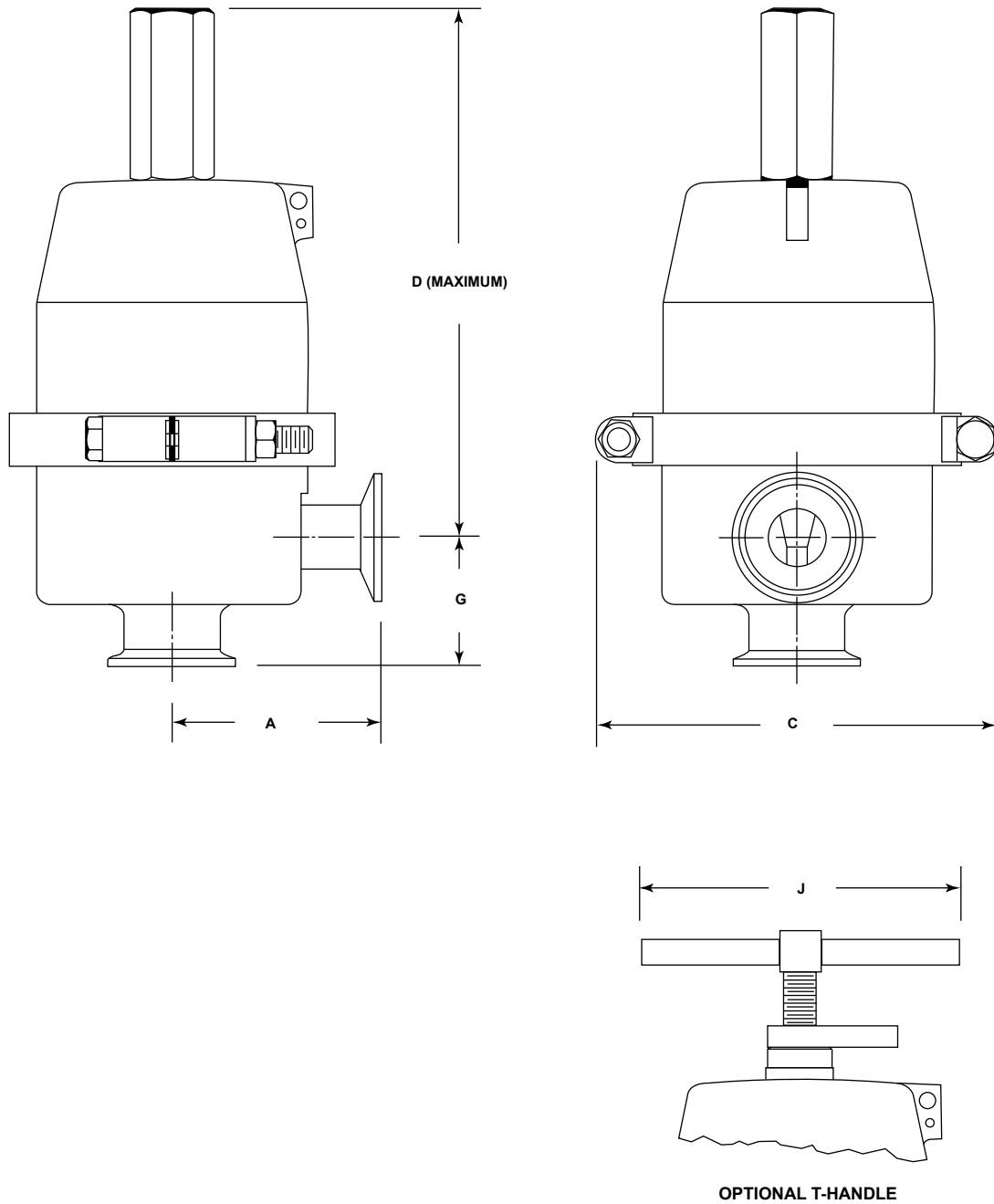


Figure 3. Dimensions

Table 9. Dimensions

SIZE		DIMENSIONS, IN. / mm				
In.	mm	A	C	D	G	J
1/2	15	3.00 / 76	5.11 / 130	7.17 / 182	1.50 / 38	4.00 / 102
3/4	20	3.00 / 76	5.11 / 130	7.17 / 182	1.50 / 38	4.00 / 102
1	25	3.25 / 83	6.20 / 158	8.20 / 208	2.00 / 51	5.00 / 127
1-1/2	40	3.25 / 83	6.20 / 158	8.20 / 208	2.50 / 64	5.00 / 127
1-1/2 x 1	40 x 25	3.25 / 83	6.20 / 158	8.20 / 208	2.50 / 64	5.00 / 127
2	50	5.50 / 140	10.6 / 269	13.76 / 350	4.00 / 102	5.00 / 127
3	80	5.50 / 140	10.6 / 269	13.76 / 350	4.00 / 102	5.00 / 127

Ordering Guide

Body Size (Select One)

- 1/2 in. / 15 mm**
- 3/4 in. / 20 mm**
- 1 in. / 25 mm**
- 1-1/2 x 1 in. / 40 x 25 mm**
- 1-1/2 in. / 40 mm full port**
- 2 in. / 50 mm**
- 3 in. / 80 mm**

Internal Finish (Select One)

- 20 µin / 0.5 µm Ra**
- Other, please specify _____

Seat (Select One)

- Metal**
- Soft, Virgin PTFE**
- Soft Polyetheretherketone (PEEK)**

Diaphragm and O-ring Material (Select One)

- Ethylenepropylene (EPDM) (FDA)**
- PTFE coated Fluorocarbon (FKM)
(1/2 through 1-1/2 in. / 15 through 40 mm only)**
- 316L Stainless Steel with
PTFE/Fluorocarbon (FKM) O-ring**

Spring Range (Select One)

1/2 and 3/4 in. / 15 and 20 mm

- 2 to 8 psig / 0.14 to 0.55 bar (Not available with metal diaphragm)**
- 5 to 25 psig / 0.34 to 1.7 bar**
- 10 to 50 psig / 0.69 to 3.4 bar**
- 35 to 100 psig / 2.4 to 6.9 bar**
- 75 to 125 psig / 5.2 to 8.6 bar**

1, 1-1/2 and 1-1/2 x 1 in. / 25, 40 and 40 x 25 mm

- 2 to 8 psig / 0.14 to 0.55 bar (Not available with metal diaphragm)**
- 5 to 25 psig / 0.34 to 1.7 bar**
- 15 to 70 psig / 1.0 to 4.8 bar**
- 25 to 90 psig / 1.7 to 6.2 bar**
- 35 to 100 psig / 2.4 to 6.9 bar**
- 75 to 125 psig / 5.2 to 8.6 bar**

2 and 3 in. / 50 and 80 mm

- 10 to 25 psig / 0.69 to 1.7 bar**
- 15 to 50 psig / 1.0 to 3.4 bar**
- 25 to 60 psig / 1.7 to 4.1 bar**

T-handle Adjusting Screw (Optional)

- Yes**
- No

Pressure Loaded Spring Case (Optional)

- Yes*
- No

Vacuum Protection (Optional – elastomer diaphragm only)

- Yes*
- No

Certificates (Optional)

- FDA Elastomers/Plastics**
- Materials**
- Functional Test**
- USP Class VI Elastomers/Plastics**

Parts Kit (Optional)

- Yes, please send a parts kit to match this order.**
- No

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Ordering Guide (continued)

Regulators Quick Order Guide	
***	Readily Available for Shipment
**	Allow Additional Time for Shipment
*	Special Order, Constructed from Non-Stocked Parts. Consult your local Sales Office for Availability.
Availability of the product being ordered is determined by the component with the longest shipping time for the requested construction.	

Specification Worksheet	
Application:	
Specific Use	_____
Line Size	_____
Fluid Type and Specific Gravity	_____
Fluid Temperature	_____
Upstream Regulator Specifications:	
Brand of Upstream Regulator?	_____
Orifice Size of the Upstream Regulator?	_____
Wide-Open Coefficient of the Upstream Regulator?	

Maximum Inlet Pressure (P_{1max})	_____
Downstream Pressure Setting(s) (P_2)	_____
Maximum Flow (Q_{max})	_____
Relief Valve Specifications:	
Relief Valve Setpoint	_____
Accuracy Requirements?	_____
Need for Extremely Fast Response?	_____
Other Requirements: _____	

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