

Type SR5 Sanitary Pressure Regulator

✧ Sanitary Design Standards

✧ Superior Flow Performance and Accuracy

✧ Large Turndown Ratio

✧ Diaphragm Cycle Life

✧ Highly Stable

✧ Wide Control Range

✧ Tight Shutoff

✧ Easy Maintenance

✧ Covered Adjusting Screw

✧ Self-Draining

✧ Optional T-Handle Available

✧ Remote Setpoint Capability

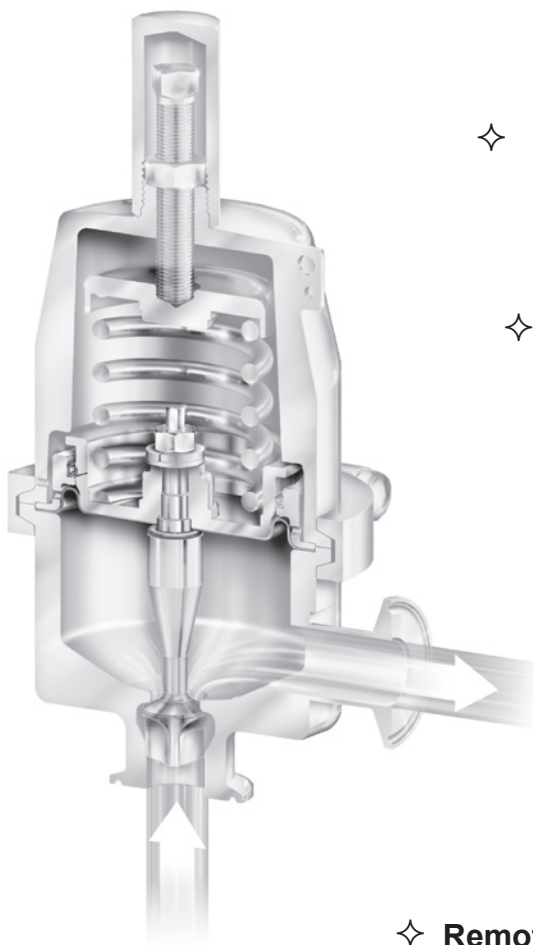


Figure 1. Type SR5

✧ Nonporous Polished Body and Internals

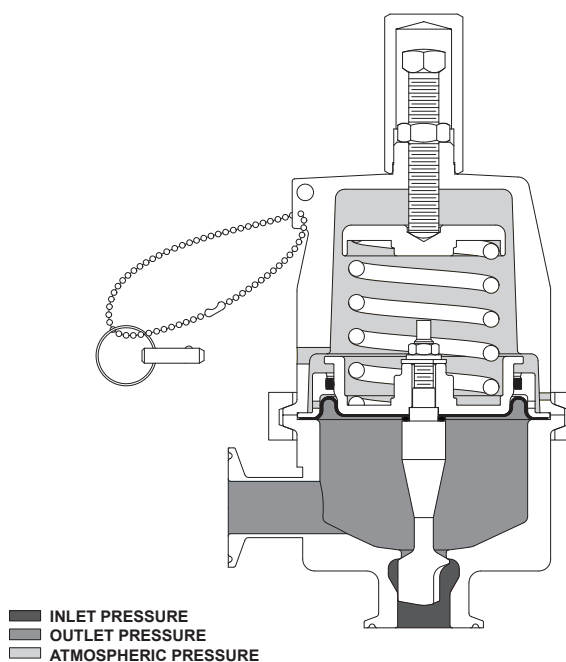
✧ Optional Diaphragm Support

Patents Pending



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Introduction

The Type SR5 regulator is a compact, large capacity, direct-operated pressure reducing regulator. It is designed for use in applications where a sanitary design is essential, such as pharmaceutical, biotech, or food and beverage industries. The unit is available in 1/2 through 3-inch (DN 15 through 80) sizes with end connections that will match up to Tri-Clamp® sanitary fittings. The Type SR5 is suitable for use in steam, liquid or gas service.

Principle of Operation

The Type SR5 is a direct operated regulator. Pressure in the controlled system (regulator outlet 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 outlet pressure, the spring will keep the valve plug open to permit additional flow to the downstream system. As downstream demand decreases the outlet pressure will increase, this increase registers on the diaphragm and the valve plug moves closer to the orifice to decrease the flow rate.

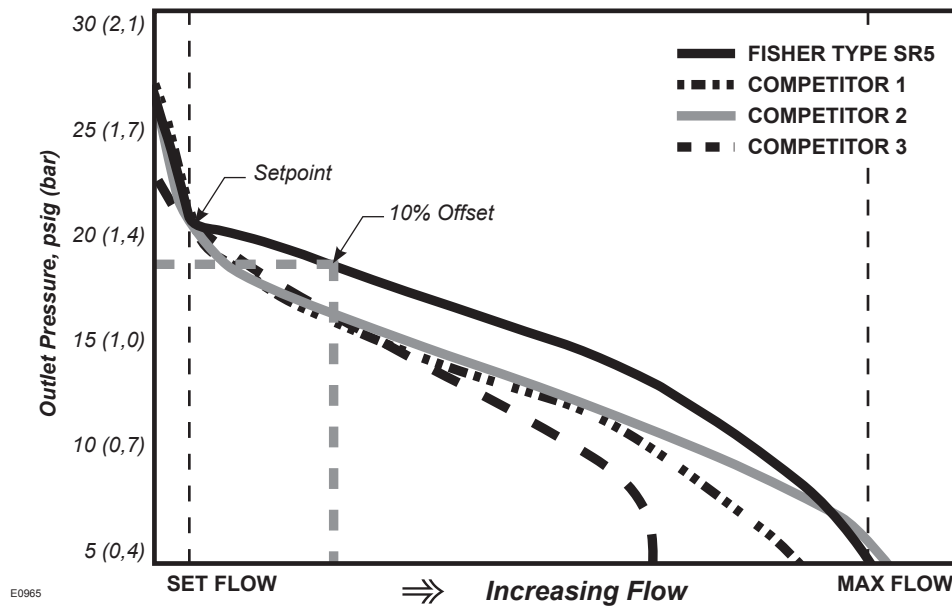


Figure 4. Type SR5 Performance Comparison

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 set points range from 2 to 135 psig (0,2 to 9,3 bar) to cover a wide range of applications.
- **Large Turndown Ratio**—No need for reduced C_v trims at low flows.
- **Self-Draining**—Fluids will drain toward the inlet of the body when the regulator is installed with the spring case in the upright vertical position.
- **Clean in Place or Steam in Place**—The lock in place pin can be inserted in the side of the spring case to prevent the valve plug from closing during cleaning.
- **Tight Shutoff**—Soft seat available to ensure better shutoff and prevent excess pressure buildup in deadend applications.
- **Highly Stable**—The upper guide ring provides for stable control over entire operating range.
- **Superior flow performance and accuracy**—The Type SR5 is designed to deliver high flows with minimal offset to maintain an even pressure over the full range of flow.
- **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.
- **Optional Diaphragm Support**—A diaphragm support is added to the regulator for installations that will be exposed to vacuum conditions.
- **Diaphragm Cycle Life**—Metal 316L Stainless Steel diaphragm is designed to maximize service life.
- **Covered Adjusting Screw**—Electropolished stainless steel adjusting screw cover improves the aesthetics and cleanability of the regulator.
- **Sanitary Design Standards**—Designed to meet 3A[®], ASME BPE, and European Hygienic Equipment Design Group criteria.
- **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.

Specifications

Body Size, Inlet and Outlet Connection

1/2 (DN 15), 3/4 (DN 20), 1 (DN 25), and
1-1/2-inch (DN 40) , 2 (DN 50), 3 (DN 80)

Service Media

1/2 (DN 15), 3/4 (DN 20), 1 (DN 25), and

1-1/2 x 1-inch (DN 40 x 25):

Steam, Gas, and Liquid

1-1/2-inch (DN 40) full port:

Steam and Gas only, Liquid not recommended

2 (DN 50) and 3 (DN 80):

Steam, Gas, and Liquid

End Connection

Tri-Clamp ® Sanitary connections⁽⁵⁾

Body Pressure/Temperature Ratings⁽¹⁾

MAX TEMP, °F(°C)	MAX INLET, PSIG (bar)	MAX OUTLET, 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⁾

See Table 1

Outlet Pressure Ranges

See Table 2

Maximum Differential Pressures⁽¹⁾

See Table 3

Regulator Temperature Capabilities⁽¹⁾

See Table 4

Pressure Registration

Internal

Options

Vacuum protection

Pressure Loaded spring case

T-handle adjusting screw

Pressure Loaded Spring Case Option

Maximum Loading Pressure

Size 1/2 to 1-inch (DN 15 to DN 25) body:

135 psig (9,31 bar)

Size 1-1/2-inch (DN 40) body:

100 psig (6,90 bar)

Size 2 and 3-inch (DN 50 and DN 80) body:

75 psig (5,17 bar)

1/4-inch NPT tapped vent connection

Vacuum Protection Option

Maximum vacuum pressure

14 psig (0,96 bar) vacuum

Certifications Available upon Request

3A certificate (EPDM or 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 hole (standard)

1/4 -inch 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

PTFE Soft Seat: ANSI Class VI

PEEK Soft Seat: ANSI Class VI (150-400°F)⁽⁴⁾

Construction Materials

See Table 5

Flow Coefficients

See Table 6

Approximate Weight

1/2 (DN 15) and 3/4-inch (DN 20): 9 lb (4 kg)

1 (DN 25) and 1-1/2 inch (DN 40): 18 lb (8 kg)

2 (DN 50) and 3 inch (DN 80): 60 lb (27 kg)

1. The pressure/temperature limits in this bulletin and any applicable standard or code limitation should not be exceeded.

2. Contact your Fisher Sales Representative for details on available constructions.

3. Maximum pressure to prevent damage to internal parts and leakage to atmosphere.

4. PEEK Seat meets ANSI Class IV or better below 150°F (65°).

5. End connection clamps and gaskets to be supplied by the user.

Table 1. Maximum Operating Pressures

BODY SIZE, INCHES (DN)	MAXIMUM TEMPERATURE, °F (°C)	MAXIMUM INLET PRESSURE, PSIG (bar)	MAXIMUM OUTLET PRESSURE, PSIG (bar)
1/2 through 1-1/2 inch (DN 15 through DN 40)	150 (65)	210 (14,5)	210 (14,5)
	275 (135)	180 (12,4)	180 (12,4)
	400 (204)	160 (11)	160 (11)
2 and 3-inch (DN 50 and DN 80)	150 (65)	210 (14,5)	150 (10,3)
	275 (135)	180 (12,4)	125 (8,62)
	400 (204)	160 (11)	110 (7,58)

Table 2. Outlet Pressure Ranges and Control Spring Data

BODY SIZE, INCHES (DN)	OUTLET PRESSURE RANGES, PSIG (bar)	COLOR	WIRE DIAMETER, INCH (mm)	FREE LENGTH, INCH (mm)	PART NUMBER
1/2 (15), 3/4 (20)	2-8 (0,2-0,5) ⁽¹⁾	Blue	0.138 (3,51)	2.75 (69,9)	GE06780X012
	5-25 (0,4-1,7)	Silver	0.177 (4,50)	2.75 (69,9)	GE06781X012
	10-50 (0,7-3,4)	Green	0.192 (4,88)	2.75 (69,9)	GE06782X012
	25-90 (1,7-6,2)	Red	0.225 (5,72)	2.75 (69,9)	GE06783X012
	35-135 (2,4-9,3)	Red/ Yellow	0.225 (5,72) 0.148 (3,76)	2.75 (69,9) 2.75 (69,9)	GE06783X012/ GE06784X012
1 (25), 1-1/2 x 1 (40 x 25)	2-8 (0,2-0,5) ⁽¹⁾	Blue	0.225 (5,72)	3.25 (82,6)	GE02763X012
	5-25 (0,4-1,7)	Silver	0.282 (7,16)	3.25 (82,6)	GE02764X012
	10-50 (0,7-3,4)	Green	0.331 (8,41)	3.25 (82,6)	GE02765X012
	25-90 (1,7-6,2)	Red	0.362 (9,19)	3.25 (82,6)	GE02766X012
	35-135 (2,4-9,3)	Red/ Yellow	0.362 (9,19) 0.250 (6,35)	3.25 (82,6) 3.25 (82,6)	GE02766X012/ GE06090X012
1-1/2 (40) full port	5-25 (0,4-1,7)	Silver	0.282 (7,16)	3.25 (82,6)	GE02764X012
	10-50 (0,7-3,4)	Green	0.331 (8,41)	3.25 (82,6)	GE02765X012
	25-75 (1,7-5,2)	Red	0.362 (9,19)	3.25 (82,6)	GE02766X012
	35-100 (2,4-6,9)	Green/ Yellow	0.331 (8,41) 0.250 (6,35)	3.25 (82,6) 3.25 (82,6)	GE02765X012/ GE06090X012
2 (50), 3 (80)	10-25 (0,7-1,7)	Silver	0.562 (14,3)	6.00 (152,4)	GE14003X012
	15-50 (1,0-3,4)	Green	0.625 (15,9)	6.00 (152,4)	GE14004X012
	25-75 (1,7-5,2)	Red	0.625 (15,9)	6.00 (152,4)	GE14005X012

1. The 2 to 8 psig (0,2 to 0,5 bar) spring is not available with the metal diaphragm.

Table 3. Maximum Differential Pressures

BODY SIZE, INCHES (DN)	OUTLET PRESSURE RANGES, PSIG (bar)	COLOR	MAXIMUM DIFFERENTIAL PRESSURE, PSID (bar d)
1/2 (15), 3/4 (20), 1 (25), and 1-1/2 x 1 (40 x 25)	2-8 (0,2-0,5)	Blue	50 (3,4)
	5-25 (0,4-1,7)	Silver	75 (5,2)
	10-50 (0,7-3,4)	Green	100 (6,9)
	25-90 (1,7-6,2)	Red	125 (8,6)
	35-135 (2,4-9,3)	Red/Yellow	125 (8,6)
1-1/2 (40) full port	5-25 (0,4-1,7)	Silver	75 (5,2)
	10-50 (0,7-3,4)	Green	100 (6,9)
	25-75 (1,7-5,2)	Red	125 (8,6)
	35-100 (2,4-6,9)	Green/Yellow	125 (8,6)
2 (50), 3 (80)	10-25 (0,7-1,7)	Silver	60 (4,1)
	15-50 (1,0-3,4)	Green	120 (8,3)
	25-75 (1,7-5,2)	Red	130 (9,0)

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Table 4. Temperature Capabilities

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

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

Table 5. Materials of Construction

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 PEEK
Diaphragm	EPDM(FDA), Virgin PTFE coated Fluoroelastomer, 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 Lock Nut	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	EPDM (FDA), Virgin PTFE encapsulated Fluoroelastomer, or Virgin PTFE
Piston Ring	PTFE with 302 Stainless Steel
Gaskets (SST diaphragm only)	Expanded Virgin PTFE
Bolted Clamp	304 Stainless Steel with Brass or Stainless Steel Nuts
Bead Chain and Ring Grip	300 Series Stainless Steel

Table 6. Flow Coefficients

SIZE, INCH (DN)	WIDE OPEN COEFFICIENTS (For Relief Valve Sizing)			C ₁	K _m	F _L	X _T	F _d
	C _g	C _v	C _s					
1/2 (15)	39	1.3	1.9	29.8	0.73	0.85	0.56	0.47
3/4 (20)	82	2.7	4.1	31.1	0.87	0.93	0.61	0.36
1 (25)	223	6.4	11.2	34.9	0.87	0.93	0.77	0.43
1-1/2 x 1 (40 x 25)	231	6.9	11.6	33.5	0.87	0.93	0.71	0.43
1-1/2 (40) full port	457	12.4	22.9	36.9	0.87	0.93	0.86	0.34
2 (50)	929	29.5	46	31.5	0.78	0.88	0.63	0.32
3 (80)	1108	34.2	55	32.4	0.69	0.83	0.66	0.36

Capacity Data

The capacity information on the following pages is based on three offset factors, 10, 20 and 30 percent. Flow capacity at set point (set flow) was approximately 10% of maximum flow. Offset, or droop, is deviation from the setpoint of the regulator, and is usually stated in percentage of set point value. To evaluate the performance of a regulator, compare the stated capacities at equivalent operating pressures and offset factors. Comparing the wide open C_v does not consider the overall accuracy.

For example, refer to the air flow rate curve in Figure 4. The regulator is set for 20 psig (1,4 bar) at the outlet. Capacity at 10 percent offset is read at the intersection of a line projected horizontally to the right from the 18 psig (1,2 bar) outlet pressure point. The 18 psig (1,2 bar) is derived by applying the offset factor of 10 percent to the regulator setting of 20 psig (1,4 bar).

For the most accurate control, use the lowest range spring that can be adjusted to the desired set point (See Table 2 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.

Sometimes it may be necessary to interpolate the capacity table data to determine capacity for outlet settings not given. To maintain accuracy, it is important when interpolating to stay within a spring range if possible. The following is a procedure for interpolating the data to calculate flow:

1. Determine which spring is to be used.
2. Find the two outlet settings (P_{2a} & P_{2b}) that bracket the actual outlet pressure P_2 .
3. For a given body size and inlet pressure, find the capacity Q_a for P_{2a} and Q_b for P_{2b} .
4. Use the following formula to determine the interpolated capacity (Q).

$$\frac{Q_b - Q_a}{P_{2b} - P_{2a}} = \frac{Q_b - Q}{P_{2b} - P_2}$$

Example:

$P_1 = 75$ psig
1 inch Type SR5 with 5 to 25 psig spring range with elastomer diaphragm (Table 8)
 $P_2 = 20$ psig
Determine air capacity, Q .

Solution:

$$Q_a = 3067 \text{ SCFH}$$

$$Q_b = 5546 \text{ SCFH}$$

$$P_{2a} = 15 \text{ psig}$$

$$P_{2b} = 25 \text{ psig}$$

$$\frac{5546 - 3067}{25 - 15} = \frac{5546 - Q}{25 - 20}$$

$$Q = 4307 \text{ SCFH}$$

NOTE

The same interpolation procedure can be used for different inlet pressures.

An alternative method for interpolating capacities is to use the C_v as shown in Table 7. Contact your Fisher Representative if you should have any questions about selecting the proper regulator.

Air Capacities

Regulating capacities at selected pressures and outlet pressure flows are given in Table 8. Capacities are provided 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. To determine the equivalent capacities for other gases, multiply the table capacities by 1.018 for nitrogen. For gases of other specific gravities, divide by the square root of the appropriate specific gravity.

To determine wide-open flow capacity for relief valve sizing of air at a temperature of 60°F, use one of the following equations:

For Critical Pressure Drops

Use this equation for critical pressure drops (absolute outlet pressure equal to one-half or less than one-half the absolute inlet pressure).

$$Q = P_{1(abs)} \times C_g$$

where,

Q = Gas flow, SCFH (60°F and 14.7 psia)

$P_{1(abs)}$ = Absolute inlet pressure psia (add 14.7 psi to gauge inlet pressure to obtain absolute inlet pressure)

C_g = Wide-open sizing coefficient from Table 6

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For Non-Critical Pressure Drops

For pressure drops lower than critical (absolute outlet pressure greater than one-half the absolute inlet pressure), use the following formula:

$$Q = \sqrt{\frac{520}{GT}} C_g P_1 \sin \left(\frac{3417}{C_1} \sqrt{\frac{\Delta P}{P_1}} \right) \text{ DEG}$$

where,

- Q = Gas flow, SCFH (60°F and 14.7 psia)
- G = Specific gravity of the gas
- T = Absolute temperature of gas at inlet, °Rankine
- C_g = Wide-open sizing coefficient from Table 6
- P₁ = Absolute inlet pressure, psia (add 14.7 psi to gauge inlet pressure to obtain absolute inlet pressure)
- C₁ = flow coefficient from Table 6
- ΔP = pressure drop across the regulator, psi

To obtain capacities in normal cubic meters per hour at 0°C and 1.01325 bar, multiply the capacity determined in SCFH by 0.0268.

Steam Capacities

Capacities in Table 9 are in pounds per hour and kilograms per hour of saturated steam. To determine wide-open flow capacity for relief valve sizing of steam, use the equation for critical pressure drops (absolute outlet pressure equal to one-half or less than one-half absolute inlet pressure).

$$Q = P_{1(\text{abs})} \times C_s$$

where,

- Q = Flow, lb/hr
- P_{1(abs)} = Absolute inlet pressure psia (add 14.7 psi to gauge inlet pressure to obtain absolute inlet pressure)
- C_s = Wide-open sizing coefficient from Table 6

Water Capacities

All water capacities in Table 10 are in gallons per minute and liters per minute. Use the following equation to determine flow capacity for liquid relief valve sizing:

$$Q = C_v \sqrt{\frac{\Delta P}{G}}$$

where,

- Q = Flow, gpm
- P_{1(abs)} = Absolute inlet pressure psia (add 14.7 psi to gauge inlet pressure to obtain absolute inlet pressure)
- C_v = Wide-open sizing coefficient from Table 6
- G = Specific gravity of the fluid
- ΔP = pressure drop across the regulator, psi

The K_m values listed in Table 6 can be used to predict choked flow on liquid service. See Fisher Catalog 10 for more information on liquid sizing. To convert capacities to liters per minute multiply gallons per minute by 3.785.

Installation

The Type SR5 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 outlet to inlet) 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.

Fisher 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.

Table 7. Cv Coefficients for 1/2-inch (DN 15) and 3/4-inch (DN 20) Bodies

SPRING RANGE, PSIG (bar)	SET PRESSURE, PSIG (bar)	INLET PRESSURE, PSIG (bar)	Cv AT % DROOP											
			1/2-inch (DN 15)						3/4-inch (DN 20)					
			Elastomer Diaphragm			Metal Diaphragm			Elastomer Diaphragm			Metal Diaphragm		
			10%	20%	30%	10%	20%	30%	10%	20%	30%	10%	20%	30%
2 to 8 (0,2 to 0,5)	2 (0,2)	10 (0,7)	0.22	0.31	0.40	Not Available			0.50	0.58	0.66	Not Available		
		25 (1,7)	0.20	0.27	0.30				0.34	0.39	0.45			
		50 (3,4)	0.13	0.18	0.20				0.28	0.30	0.35			
	5 (0,4)	10 (0,7)	0.39	0.57	0.71				0.83	1.04	1.41			
		25 (1,7)	0.24	0.34	0.43				0.48	0.67	0.89			
		50 (3,4)	0.19	0.25	0.31				0.35	0.55	0.70			
	8 (0,5)	10 (0,7)	0.59	0.83	1.09				1.24	1.89	2.25			
		25 (1,7)	0.29	0.43	0.57				0.55	0.90	1.22			
		50 (3,4)	0.24	0.33	0.40				0.40	0.63	0.91			
5 to 25 (0,4 to 1,7)	5 (0,4)	25 (1,7)	0.25	0.34	0.43	0.21	0.27	0.33	0.50	0.69	0.89	0.43	0.56	0.70
		50 (3,4)	0.19	0.24	0.29	0.16	0.21	0.25	0.46	0.59	0.72	0.39	0.48	0.56
		75 (5,2)	0.16	0.20	0.23	0.14	0.18	0.21	0.45	0.54	0.65	0.37	0.45	0.50
	15 (1,1)	25 (1,7)	0.51	0.76	0.90	0.31	0.48	0.63	0.94	1.49	2.11	0.66	0.92	1.19
		50 (3,4)	0.34	0.47	0.58	0.24	0.36	0.45	0.66	1.01	1.39	0.51	0.71	0.90
		75 (5,2)	0.29	0.38	0.45	0.23	0.32	0.38	0.58	0.86	1.14	0.47	0.65	0.81
	25 (1,7)	35 (2,4)	0.67	0.90	1.07	0.37	0.60	0.80	1.37	2.22	2.70	0.59	0.92	1.23
		50 (3,4)	0.48	0.66	0.81	0.30	0.47	0.62	0.95	1.62	2.05	0.53	0.81	1.10
		75 (5,2)	0.38	0.51	0.62	0.27	0.40	0.50	0.71	1.24	1.58	0.54	0.77	1.04
10 to 50 (0,7 to 3,4)	10 (0,7)	25 (1,7)	0.34	0.51	0.62	0.25	0.35	0.47	0.49	0.72	1.18	0.45	0.67	1.09
		50 (3,4)	0.25	0.35	0.42	0.19	0.26	0.33	0.39	0.52	0.75	0.36	0.48	0.69
		100 (6,9)	0.19	0.25	0.28	0.16	0.21	0.25	0.34	0.39	0.47	0.31	0.37	0.44
	25 (1,7)	50 (3,4)	0.48	0.68	0.80	0.28	0.46	0.59	0.73	1.30	1.93	0.67	1.14	1.56
		75 (5,2)	0.37	0.50	0.60	0.25	0.38	0.47	0.57	1.05	1.49	0.53	1.00	1.30
		100 (6,9)	0.31	0.41	0.49	0.24	0.34	0.40	0.50	0.93	1.26	0.46	0.94	1.17
	50 (3,4)	75 (5,2)	0.61	0.90	1.03	0.40	0.59	0.77	1.47	2.29	2.70	1.11	1.45	1.86
		100 (6,9)	0.48	0.69	0.81	0.34	0.49	0.63	1.16	1.81	2.23	0.83	1.19	1.56
		125 (8,6)	0.41	0.58	0.68	0.31	0.44	0.55	1.02	1.56	1.92	0.69	1.06	1.41
25 to 90 (1,7 to 6,2)	25 (1,7)	50 (3,4)	0.40	0.61	0.72	0.31	0.45	0.55	0.91	1.33	1.77	0.45	0.90	0.97
		100 (6,9)	0.28	0.39	0.45	0.24	0.31	0.37	0.68	0.95	1.22	0.46	0.73	0.88
		125 (8,6)	0.25	0.34	0.39	0.22	0.28	0.33	0.64	0.87	1.10	0.46	0.70	0.86
	50 (3,4)	75 (5,2)	0.58	0.81	0.98	0.40	0.57	0.72	1.27	1.87	2.47	0.79	1.24	1.71
		100 (6,9)	0.45	0.64	0.77	0.33	0.47	0.58	1.03	1.53	2.03	0.73	1.12	1.50
		125 (8,6)	0.39	0.55	0.65	0.30	0.42	0.50	0.92	1.36	1.79	0.72	1.07	1.39
		150 (10)	0.35	0.49	0.57	0.28	0.38	0.45	0.86	1.25	1.62	0.72	1.04	1.32
	75 (5,2)	100 (6,9)	0.66	0.91	1.09	0.41	0.63	0.80	1.64	2.47	2.70	0.98	1.45	1.93
		125 (8,6)	0.53	0.74	0.90	0.36	0.54	0.68	1.33	2.00	2.37	0.86	1.30	1.73
		150 (10)	0.47	0.64	0.78	0.34	0.49	0.61	1.17	1.74	2.07	0.82	1.23	1.62
		175 (12)	0.43	0.58	0.70	0.33	0.46	0.56	1.08	1.58	1.92	0.80	1.20	1.55
	90 (6,2)	100 (6,9)	0.84	1.08	1.12	0.52	0.76	0.96	2.16	2.70	2.70	1.42	2.00	2.57
		125 (8,6)	0.59	0.83	0.93	0.39	0.60	0.78	1.54	2.14	2.49	1.06	1.61	2.12
		150 (10)	0.50	0.71	0.83	0.36	0.53	0.68	1.31	1.88	2.30	0.94	1.45	1.89
		175 (12)	0.46	0.64	0.77	0.34	0.49	0.62	1.19	1.92	2.52	0.88	1.35	1.75
35 to 135 (2,4 to 9,3)	35 (2,4)	50 (3,4)	0.48	0.73	0.87	0.35	0.53	0.66	1.21	1.70	2.05	0.69	0.88	1.29
		75 (5,2)	0.37	0.54	0.65	0.27	0.40	0.50	0.89	1.31	1.62	0.64	0.86	1.18
		100 (6,9)	0.33	0.46	0.55	0.24	0.35	0.43	0.78	1.16	1.43	0.65	0.88	1.15
		125 (8,6)	0.30	0.41	0.48	0.23	0.32	0.38	0.72	1.07	1.31	0.66	0.90	1.14
	50 (3,4)	75 (5,2)	0.57	0.78	0.92	0.36	0.55	0.69	1.34	1.79	2.41	0.97	1.32	1.75
		100 (6,9)	0.45	0.62	0.73	0.31	0.46	0.57	1.04	1.45	1.94	0.80	1.13	1.49
		125 (8,6)	0.39	0.54	0.63	0.29	0.41	0.49	0.89	1.27	1.68	0.72	1.03	1.36
		150 (10)	0.36	0.48	0.55	0.28	0.38	0.44	0.80	1.16	1.49	0.68	0.97	1.26
	75 (5,2)	100 (6,9)	0.63	0.94	1.07	0.46	0.64	0.81	1.47	2.15	2.70	1.08	1.56	1.99
		125 (8,6)	0.50	0.76	0.89	0.37	0.54	0.68	1.16	1.78	2.32	0.91	1.35	1.75
		150 (10)	0.44	0.65	0.78	0.32	0.49	0.60	1.02	1.59	2.08	0.83	1.24	1.61
		175 (12)	0.40	0.59	0.70	0.30	0.45	0.54	0.92	1.46	1.92	0.78	1.17	1.53
	100 (6,9)	125 (8,6)	0.73	1.05	1.14	0.49	0.72	0.88	1.66	2.50	2.70	1.14	1.75	2.22
		150 (10)	0.60	0.88	0.99	0.42	0.61	0.76	1.37	2.08	2.49	0.95	1.51	1.98
		175 (12)	0.54	0.78	0.89	0.38	0.56	0.69	1.22	1.85	2.30	0.85	1.37	1.84
		200 (14)	0.50	0.72		0.36	0.52		1.13	1.69		0.80	1.29	
	135 (9,3)	150 (10)	0.87	1.12	1.15	0.60	0.83	1.01	2.27	2.70	2.70	1.33	2.05	2.61
		175 (12)	0.74	0.99	1.09	0.49	0.74	0.90	1.68	2.44	2.70	1.12	1.73	2.26
		200 (14)	0.69	0.94	1.06	0.45	0.69	0.83	1.39	2.28	2.67	1.03	1.56	2.04

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

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Table 7. Cv Coefficients for 1-inch (DN 25) and 1-1/2 x 1-inch (DN 40 x 25) Bodies (continued)

SPRING RANGE, PSIG (bar)	SET PRESSURE, PSIG (bar)	INLET PRESSURE, PSIG (bar)	Cv AT % DROOP														
			1-inch (DN 25)						1-1/2 x 1-inch (DN 40 x 25)								
			Elastomer Diaphragm			Metal Diaphragm			Elastomer Diaphragm			Metal Diaphragm					
			10%	20%	30%	10%	20%	30%	10%	20%	30%	10%	20%	30%			
2 to 8 (0,2 to 0,5)	2 (0,2)	10 (0,7)	0.85	0.86	0.89	Not Available						0.95	0.96	0.99	Not Available		
		25 (1,7)	0.77	0.93	0.95							0.88	1.06	1.08			
		50 (3,4)	0.78	1.03	1.03							0.89	1.17	1.18			
	5 (0,4)	10 (0,7)	1.00	1.03	2.11							1.11	1.14	2.35			
		25 (1,7)	0.69	0.87	1.43							0.78	0.99	1.61			
		50 (3,4)	0.62	0.88	1.21							0.70	1.01	1.38			
	8 (0,5)	10 (0,7)	3.00	3.54	3.52							3.31	3.92	3.90			
		25 (1,7)	1.57	1.78	1.83							1.76	2.00	2.07			
		50 (3,4)	1.33	1.34	1.34							1.52	1.53	1.53			
		5 to 25 (0,4 to 1,7)	5 (0,4)	25 (1,7)	0.76							0.93	1.42	0.69			
50 (3,4)	0.70			0.87	1.15	0.63	0.78	1.04	0.80	1.00	1.32	0.73	0.90	1.20			
75 (5,2)	0.69			0.86	1.05	0.62	0.77	0.95	0.79	0.98	1.21	0.72	0.89	1.10			
15 (1,1)	25 (1,7)		2.07	2.10	3.98	0.99	1.24	1.66	2.30	2.35	4.45	1.11	1.38	1.85			
	50 (3,4)		1.23	1.59	2.50	0.87	1.11	1.41	1.39	1.81	2.83	0.98	1.26	1.60			
	75 (5,2)		0.99	1.47	2.01	0.87	1.11	1.36	1.13	1.68	2.30	0.99	1.26	1.55			
25 (1,7)	35 (2,4)		3.11	4.40	5.67	1.06	1.49	2.33	3.46	4.91	6.33	1.18	1.66	2.61			
	50 (3,4)		2.27	3.24	4.23	0.98	1.34	2.00	2.55	3.64	4.76	1.10	1.51	2.25			
	75 (5,2)		1.82	2.51	3.24	0.99	1.29	1.81	2.06	2.85	3.69	1.12	1.47	2.05			
	10 to 50 (0,7 to 3,4)		10 (0,7)	25 (1,7)	1.30	1.92	2.91	0.93	0.98	1.21	1.45	2.15	3.27	1.04	1.10	1.36	
50 (3,4)		1.07		1.50	2.06	0.86	0.96	1.15	1.21	1.71	2.34	0.97	1.10	1.31			
100 (6,9)		0.98		1.30	1.59	0.85	1.00	1.15	1.12	1.49	1.82	0.98	1.14	1.31			
25 (1,7)		50 (3,4)	2.13	3.52	4.60	1.03	1.26	1.81	2.39	3.96	5.18	1.15	1.41	2.04			
		75 (5,2)	1.79	2.76	3.58	1.00	1.24	1.68	2.02	3.14	4.07	1.13	1.41	1.91			
		100 (6,9)	1.64	2.41	3.08	1.00	1.25	1.63	1.87	2.75	3.52	1.14	1.43	1.86			
50 (3,4)		75 (5,2)	3.64	5.53	6.40	1.52	2.28	3.31	4.06	6.19	6.90	1.69	2.56	3.72			
		100 (6,9)	2.95	4.38	5.16	1.25	1.88	2.70	3.32	4.95	5.83	1.40	2.12	3.06			
		125 (8,6)	2.64	3.80	4.65	1.13	1.68	2.38	2.98	4.32	5.28	1.28	1.90	2.70			
		25 to 90 (1,7 to 6,2)	25 (1,7)	50 (3,4)	1.22	2.39	3.85	1.22	1.76	2.44	1.37	2.69	4.34	1.37	1.98	2.75	
100 (6,9)	1.36			1.95	2.75	1.07	1.44	1.99	1.55	2.23	3.14	1.22	1.64	2.28			
125 (8,6)	1.41			1.88	2.53	1.05	1.39	1.91	1.61	2.15	2.90	1.21	1.59	2.19			
50 (3,4)	75 (5,2)		3.18	4.70	6.09	1.69	2.83	4.52	3.55	5.26	6.84	1.89	3.17	5.08			
	100 (6,9)		2.54	3.79	4.91	1.37	2.33	3.59	2.85	4.27	5.55	1.54	2.62	4.06			
	125 (8,6)		2.24	3.33	4.27	1.23	2.08	3.07	2.54	3.78	4.86	1.39	2.36	3.50			
75 (5,2)	150 (10)		2.06	3.05	3.86	1.15	1.92	2.74	2.35	3.47	4.41	1.30	2.19	3.13			
	100 (6,9)		3.75	5.47	6.31	1.96	3.18	4.72	4.17	6.10	6.90	2.19	3.55	5.29			
	125 (8,6)		3.06	4.61	5.49	1.73	2.77	4.04	3.43	5.18	6.19	1.94	3.11	4.55			
	150 (10)		2.74	4.17	5.03	1.64	2.56	3.65	3.08	4.71	5.70	1.85	2.89	4.14			
35 to 135 (2,4 to 9,3)	35 (2,4)	175 (12)	2.55	3.89	4.74	1.60	2.44	3.40	2.88	4.41	5.39	1.81	2.77	3.87			
		100 (6,9)	4.96	6.17	6.40	2.60	3.98	5.51	5.49	6.85	6.90	2.88	4.42	6.15			
		125 (8,6)	3.66	5.06	5.75	1.92	3.19	4.52	4.08	5.66	6.45	2.14	3.57	5.08			
	50 (3,4)	150 (10)	3.22	4.61	5.39	1.69	2.85	4.02	3.61	5.18	6.08	1.89	3.21	4.54			
		175 (12)	2.99	4.37	5.19	1.57	2.66	3.71	3.37	4.93	5.88	1.77	3.01	4.20			
		50 (3,4)	2.07	3.14	4.37	1.86	2.88	3.70	2.31	3.51	4.89	2.10	3.21	4.14			
	75 (5,2)	75 (5,2)	1.71	2.57	3.49	1.56	2.20	2.92	1.93	2.90	3.95	1.75	2.48	3.30			
		100 (6,9)	1.62	2.37	3.13	1.38	1.93	2.60	1.83	2.69	3.56	1.56	2.19	2.96			
		125 (8,6)	1.58	2.27	2.92	1.28	1.79	2.41	1.80	2.59	3.34	1.46	2.04	2.76			
		75 (5,2)	3.03	4.08	5.01	1.76	2.63	3.63	3.38	4.57	5.63	1.97	2.94	4.08			
35 to 135 (2,4 to 9,3)	50 (3,4)	100 (6,9)	2.30	3.33	4.17	1.54	2.27	3.08	2.59	3.75	4.71	1.74	2.56	3.48			
		125 (8,6)	1.96	2.95	3.72	1.46	2.10	2.79	2.21	3.35	4.23	1.65	2.38	3.17			
		150 (10)	1.74	2.72	3.44	1.42	2.01	2.61	1.98	3.10	3.93	1.61	2.28	2.98			
	75 (5,2)	100 (6,9)	3.44	5.26	6.30	1.61	2.64	4.07	3.82	5.88	6.90	1.80	2.95	4.56			
		125 (8,6)	2.85	4.37	5.44	1.59	2.51	3.71	3.20	4.91	6.14	1.78	2.82	4.19			
		150 (10)	2.59	3.90	4.96	1.62	2.48	3.53	2.92	4.40	5.62	1.83	2.80	4.00			
		175 (12)	2.44	3.60	4.65	1.66	2.48	3.43	2.76	4.08	5.29	1.88	2.81	3.90			
	100 (6,9)	125 (8,6)	3.85	5.92	6.40	2.25	3.45	4.62	4.28	6.60	6.90	2.50	3.84	5.17			
		150 (10)	3.15	5.02	6.18	1.94	3.08	4.19	3.52	5.63	6.90	2.17	3.45	4.71			
		175 (12)	2.81	4.53	5.75	1.80	2.90	3.94	3.15	5.10	6.50	2.02	3.26	4.46			
200 (14)		2.60	4.21		1.73	2.79		2.93	4.76		1.95	3.15					
135 (9,3)	150 (10)	2.65	6.40	6.40	2.38	4.38	5.69	2.93	6.90	6.90	2.67	4.87	6.36				
	175 (12)	3.40	6.08	6.40	2.43	3.86	5.27	3.78	6.79	6.90	2.70	4.32	5.91				
	200 (14)	3.96	5.84	6.40	2.20	3.61	5.05	4.43	6.55	6.90	2.46	4.05	5.68				
Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded																	

Table 7. Cv Coefficients for 1-1/2-inch (DN 40) Body (continued)

SPRING RANGE, PSIG (bar)	SET PRESSURE, PSIG (bar)	INLET PRESSURE, PSIG (bar)	Cv AT % DROOP					
			1-1/2-inch (DN 40) Full Port					
			Elastomer Diaphragm			Metal Diaphragm		
			10%	20%	30%	10%	20%	30%
5 to 25 (0,4 to 1,7)	5 (0,4)	25 (1,7)	0.59	1.02	1.24	1.36	1.38	1.40
		50 (3,4)	1.98	2.37	2.77	1.45	1.61	1.89
		75 (5,2)	1.86	2.10	2.39	1.51	1.72	2.12
	15 (1,0)	25 (1,7)	2.02	4.37	6.40	1.94	2.33	3.27
		50 (3,4)	2.23	3.42	4.60	1.76	2.21	2.97
		75 (5,2)	2.39	3.20	4.07	1.77	2.25	2.95
	25 (1,7)	25 (1,7)	3.48	6.14	7.55	1.80	2.47	4.08
		50 (3,4)	3.21	5.12	6.52	1.72	2.38	3.67
		75 (5,2)	3.21	4.60	5.94	1.77	2.44	3.48
10 to 50 (0,7 to 3,4)	10 (0,7)	25 (1,7)	1.50	2.14	3.22	1.52	2.16	3.27
		50 (3,4)	1.53	2.02	2.63	1.57	2.07	2.71
		100 (6,9)	1.57	2.01	2.45	1.63	2.08	2.54
	25 (1,7)	50 (3,4)	2.32	4.24	6.05	2.14	3.36	4.74
		75 (5,2)	2.35	3.65	4.94	1.94	2.91	4.07
		100 (6,9)	2.40	3.40	4.42	1.88	2.72	3.77
	50 (3,4)	75 (5,2)	6.00	9.26	11.53	3.35	5.09	6.76
		100 (6,9)	4.53	7.23	8.86	3.17	4.73	6.02
		125 (8,6)	3.84	6.21	7.41	3.15	4.60	5.65
25 to 75 (1,7 to 5,2)	25 (1,7)	50 (3,4)	3.78	4.97	6.67	2.47	4.43	5.47
		100 (6,9)	3.33	4.60	5.46	2.11	2.95	3.77
		125 (8,6)	3.28	4.57	5.25	2.06	2.67	3.43
	50 (3,4)	75 (5,2)	4.90	7.21	9.10	3.31	5.16	6.33
		100 (6,9)	3.88	6.03	7.45	2.40	4.12	5.24
		125 (8,6)	3.41	5.46	6.58	1.96	3.59	4.66
	75 (5,2)	150 (10)	3.13	5.12	6.03	1.68	3.27	4.30
		100 (6,9)	5.24	7.06	9.84	4.33	5.65	7.52
		125 (8,6)	4.83	6.52	8.70	3.58	5.00	6.62
35 to 100 (2,4 to 6,9)	35 (2,4)	150 (10)	4.72	6.30	8.09	3.23	4.69	6.12
		175 (12)	4.68	6.19	7.70	3.03	4.51	5.80
		50 (3,4)	3.51	5.27	7.12	3.53	4.57	6.02
		75 (5,2)	2.74	4.14	5.57	2.79	3.53	4.67
	50 (3,4)	100 (6,9)	2.50	3.72	4.92	2.56	3.13	4.11
		125 (8,6)	2.38	3.49	4.56	2.45	2.91	3.78
		75 (5,2)	4.88	6.88	8.31	2.90	3.97	5.58
		100 (6,9)	3.70	5.45	6.74	2.26	3.27	4.61
		125 (8,6)	3.14	4.74	5.91	1.97	2.92	4.10
	75 (5,2)	150 (10)	2.80	4.29	5.38	1.79	2.71	3.78
		100 (6,9)	5.88	8.19	10.19	3.09	4.76	6.70
		125 (8,6)	4.56	6.46	8.37	2.72	4.38	6.01
		150 (10)	3.91	5.52	7.33	2.58	4.23	5.65
	100 (6,9)	175 (12)	3.52	4.91	6.64	2.50	4.15	5.43
		125 (8,6)	4.56	7.66	10.59	4.41	6.37	8.21
		150 (10)	4.89	6.96	9.55	3.82	5.63	7.28
		175 (12)	5.20	6.62	8.96	3.57	5.25	6.74
		200 (14)	5.46	6.42		3.43	5.03	

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

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Table 7. Cv Coefficients for 2-inch (DN 50) Body (continued)

SPRING RANGE, PSIG (bar)	SET PRESSURE, PSIG (bar)	INLET PRESSURE, PSIG (bar)	Cv AT % DROOP					
			2-inch (DN 50)					
			Elastomer Diaphragm			Metal Diaphragm		
			10%	20%	30%	10%	20%	30%
10 to 25 (0,7 to 1,7)	10 (0,7)	25 (1,7)	7.97	11.12	15.04	6.71	9.41	11.05
		50 (3,4)	7.27	8.67	12.17	5.41	7.28	8.75
	15 (1,0)	25 (1,7)	10.97	15.05	20.61	7.51	10.76	14.75
		50 (3,4)	7.30	11.44	15.60	6.17	8.15	11.08
	25 (1,7)	50 (3,4)	10.15	17.09	22.48	7.64	10.47	15.10
		75 (5,2)	8.58	13.70	17.79	6.06	9.29	12.55
15 to 50 (1,0 to 3,4)	15 (1,0)	25 (1,7)	9.90	12.94	17.79	7.42	10.20	12.55
		50 (3,4)	7.12	9.44	13.05	5.80	7.57	9.75
		75 (5,2)	6.15	8.18	10.62	5.36	6.66	8.65
		100 (6,9)	5.47	7.31	9.10	5.02	6.03	7.85
		125 (8,6)	4.95	6.63	8.24	4.72	5.55	7.22
	25 (1,7)	50 (3,4)	7.70	14.67	18.37	7.12	9.86	13.81
		75 (5,2)	7.15	12.16	15.52	6.06	8.91	12.00
		100 (6,9)	6.69	10.71	13.65	5.37	8.19	10.56
		125 (8,6)	6.15	9.59	12.14	4.81	7.54	9.37
	50 (3,4)	75 (5,2)	12.15	19.35	24.67	8.06	13.57	19.05
		100 (6,9)	11.40	17.07	21.17	7.85	12.84	16.94
		125 (8,6)	10.41	15.11	18.78	7.36	11.79	15.27
		150 (10)	9.45	13.45	16.90	6.86	10.72	13.87
		50 (3,4)	8.87	13.48	16.78	6.70	8.94	12.52
25 to 75 (1,7 to 5,2)	25 (1,7)	75 (5,2)	7.06	11.43	14.81	6.19	8.32	11.08
		100 (6,9)	6.88	10.37	12.95	5.52	7.91	10.15
		125 (8,6)	6.51	9.53	11.31	4.88	7.41	9.33
		150 (10)	5.78	8.75	10.03	4.40	6.87	8.59
		75 (5,2)	11.63	18.55	23.38	7.80	13.00	18.36
	50 (3,4)	100 (6,9)	9.07	15.54	19.89	7.39	11.79	16.15
		125 (8,6)	8.64	14.03	18.04	7.08	10.94	14.62
		150 (10)	8.60	12.95	16.63	6.77	10.22	13.41
		175 (12)	8.38	12.01	15.26	6.46	9.60	12.49
	75 (5,2)	100 (6,9)	14.25	20.63	24.79	10.23	17.45	23.33
		125 (8,6)	11.53	18.18	22.23	8.94	14.73	20.52
		150 (10)	10.35	16.27	20.45	8.11	13.66	18.94
		175 (12)	9.74	14.90	18.89	7.69	12.90	17.53

Table 7. Cv Coefficients for 3-inch (DN 80) Body (continued)

SPRING RANGE, PSIG (bar)	SET PRESSURE, PSIG (bar)	INLET PRESSURE, PSIG (bar)	Cv AT % DROOP					
			3-inch (DN 80)					
			Elastomer Diaphragm			Metal Diaphragm		
			10%	20%	30%	10%	20%	30%
10 to 25 (0,7 to 1,7)	10 (0,7)	25 (1,7)	8.43	12.71	17.90	6.27	8.80	10.95
		50 (3,4)	6.93	10.49	14.69	4.68	7.09	8.36
	15 (1,0)	25 (1,7)	10.67	16.78	24.05	7.28	10.12	14.69
		50 (3,4)	9.26	14.70	19.36	5.90	7.72	11.36
	25 (1,7)	50 (3,4)	13.92	21.21	25.93	7.51	10.34	15.45
		75 (5,2)	9.70	17.12	21.37	6.06	9.99	14.30
15 to 50 (1,0 to 3,4)	15 (1,0)	25 (1,7)	10.53	14.23	18.72	6.48	9.43	12.40
		50 (3,4)	7.14	10.68	15.02	5.73	7.79	10.59
		75 (5,2)	6.68	10.00	12.99	5.49	7.29	9.87
		100 (6,9)	6.61	9.75	11.63	5.19	6.86	9.23
		125 (8,6)	6.53	9.49	10.84	4.88	6.46	8.64
	25 (1,7)	50 (3,4)	9.50	16.34	21.67	7.70	9.87	13.71
		75 (5,2)	8.80	14.00	18.77	6.30	9.15	13.30
		100 (6,9)	7.82	12.62	16.66	5.66	8.88	12.49
		125 (8,6)	7.02	11.24	14.95	5.31	8.64	11.59
	50 (3,4)	75 (5,2)	15.49	22.85	28.52	7.82	13.73	19.79
		100 (6,9)	12.66	20.10	25.01	7.68	12.79	18.92
		125 (8,6)	11.51	18.19	23.26	7.28	12.06	17.63
		150 (10)	10.81	16.67	21.45	6.87	11.46	16.30
		50 (3,4)	8.93	15.32	21.23	7.25	10.80	14.66
25 to 75 (1,7 to 5,2)	25 (1,7)	75 (5,2)	7.29	12.62	17.15	5.96	9.48	13.02
		100 (6,9)	7.12	11.51	15.13	5.34	8.80	11.95
		125 (8,6)	7.33	10.85	13.83	5.07	8.32	11.08
		150 (10)	7.28	10.31	12.86	4.97	7.96	10.37
		75 (5,2)	13.39	20.76	26.00	7.72	13.23	18.78
	50 (3,4)	100 (6,9)	11.10	18.55	24.11	7.71	11.82	17.60
		125 (8,6)	10.99	17.03	22.02	7.21	11.43	16.56
		150 (10)	10.38	15.91	20.19	6.69	11.26	15.57
		175 (12)	9.69	15.17	18.93	6.40	11.02	14.75
	75 (5,2)	100 (6,9)	14.97	21.94	28.10	8.91	15.33	22.96
		125 (8,6)	12.68	21.25	26.29	8.42	14.21	21.98
		150 (10)	11.63	20.26	24.93	7.85	13.33	20.53
		175 (12)	11.00	18.91	23.64	7.99	12.88	18.61

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Table 8. Air Capacities for 1/2-inch (DN 15) Body

SPRING RANGE, PSIG (bar)	SET PRESSURE, PSIG (bar)	INLET, PSIG (bar)	CAPACITIES IN SCFH (Nm³/h) OF AIR AT % DROOP						
			1/2-inch (DN 15) Body						
			Elastomer Diaphragm			Metal Diaphragm			
			10%	20%	30%	10%	20%	30%	
2 to 8 (0,2 to 0,5)	2 (0,2)	10 (0,7)	150 (4,0)	210 (5,6)	280 (7,5)	Not Available			
		25 (1,7)	230 (6,2)	320 (8,6)	350 (9,4)				
		50 (3,4)	250 (6,7)	340 (9,1)	380 (10)				
	5 (0,4)	10 (0,7)	230 (6,2)	350 (9,4)	450 (12)				
		25 (1,7)	280 (7,5)	400 (11)	500 (13)				
		50 (3,4)	370 (9,9)	470 (13)	590 (16)				
	8 (0,5)	10 (0,7)	270 (7,2)	420 (11)	600 (16)				
		25 (1,7)	340 (9,1)	500 (13)	660 (18)				
		50 (3,4)	450 (12)	630 (17)	770 (21)				
5 to 25 (0,4 to 1,7)	5 (0,4)	25 (1,7)	290 (7,8)	400 (11)	500 (13)	250 (6,7)	310 (8,3)	390 (10)	
		50 (3,4)	360 (9,6)	460 (12)	560 (15)	320 (8,6)	400 (11)	480 (13)	
		75 (5,2)	430 (11)	520 (14)	610 (16)	380 (10)	480 (13)	560 (15)	
	15 (1,1)	25 (1,7)	530 (14)	820 (22)	1000 (27)	320 (8,6)	520 (14)	700 (19)	
		50 (3,4)	660 (18)	910 (24)	1100 (30)	470 (13)	680 (18)	850 (23)	
		75 (5,2)	780 (21)	1000 (27)	1210 (32)	610 (16)	840 (23)	1010 (27)	
	25 (1,7)	35 (2,4)	840 (22)	1200 (32)	1480 (40)	460 (12)	800 (21)	1100 (29)	
		50 (3,4)	900 (24)	1260 (34)	1540 (41)	560 (15)	900 (24)	1190 (32)	
		75 (5,2)	1000 (27)	1350 (36)	1650 (44)	730 (20)	1060 (28)	1330 (36)	
	10 to 50 (0,7 to 3,4)	10 (0,7)	25 (1,7)	380 (10)	580 (15)	720 (19)	280 (7,5)	400 (11)	540 (14)
			50 (3,4)	470 (13)	670 (18)	800 (21)	370 (9,9)	500 (13)	640 (17)
			100 (6,9)	650 (17)	850 (23)	950 (25)	550 (15)	700 (19)	840 (22)
25 (1,7)		50 (3,4)	900 (24)	1280 (34)	1520 (41)	520 (14)	870 (23)	1130 (30)	
		75 (5,2)	980 (26)	1340 (36)	1600 (43)	670 (18)	1010 (27)	1250 (33)	
		100 (6,9)	1070 (29)	1390 (37)	1670 (45)	820 (22)	1140 (31)	1360 (36)	
50 (3,4)		75 (5,2)	1500 (40)	2300 (62)	2700 (72)	1000 (27)	1520 (41)	2000 (54)	
		100 (6,9)	1610 (43)	2360 (63)	2770 (74)	1130 (30)	1680 (45)	2130 (57)	
		125 (8,6)	1720 (46)	2420 (65)	2830 (76)	1270 (34)	1840 (49)	2270 (61)	
25 to 90 (1,7 to 6,2)	25 (1,7)	50 (3,4)	750 (20)	1150 (31)	1370 (37)	580 (15)	850 (23)	1050 (28)	
		100 (6,9)	950 (25)	1310 (35)	1550 (41)	800 (21)	1050 (28)	1250 (33)	
		125 (8,6)	1050 (28)	1390 (37)	1630 (44)	910 (24)	1150 (31)	1350 (36)	
		75 (5,2)	1430 (38)	2080 (56)	2550 (68)	1000 (27)	1460 (39)	1880 (50)	
	50 (3,4)	100 (6,9)	1520 (41)	2180 (58)	2630 (70)	1130 (30)	1600 (43)	1990 (53)	
		125 (8,6)	1620 (43)	2280 (61)	2700 (72)	1250 (33)	1730 (46)	2090 (56)	
		150 (10)	1710 (46)	2380 (64)	2780 (74)	1380 (37)	1870 (50)	2200 (59)	
		100 (6,9)	2000 (54)	2900 (78)	3600 (96)	1250 (33)	2000 (54)	2650 (71)	
	75 (5,2)	125 (8,6)	2150 (58)	3020 (81)	3710 (99)	1450 (39)	2200 (59)	2810 (75)	
		150 (10)	2300 (62)	3140 (84)	3830 (103)	1650 (44)	2400 (64)	2980 (80)	
		175 (12)	2450 (66)	3250 (87)	3940 (106)	1850 (50)	2600 (70)	3140 (84)	
		100 (6,9)	2100 (56)	3100 (83)	3500 (94)	1300 (35)	2200 (59)	3000 (80)	
	90 (6,2)	125 (8,6)	2250 (60)	3270 (88)	3770 (101)	1500 (40)	2400 (64)	3160 (85)	
		150 (10)	2400 (64)	3450 (92)	4040 (108)	1690 (45)	2590 (69)	3330 (89)	
		175 (12)	2560 (69)	3620 (97)	4320 (116)	1890 (51)	2790 (75)	3490 (94)	
		35 to 135 (2,4 to 9,3)	35 (2,4)	50 (3,4)	820 (22)	1300 (35)	1600 (43)	600 (16)	940 (25)
	75 (5,2)			970 (26)	1440 (39)	1730 (46)	710 (19)	1060 (28)	1340 (36)
	100 (6,9)			1110 (30)	1580 (42)	1860 (50)	830 (22)	1190 (32)	1460 (39)
125 (8,6)	1260 (34)			1710 (46)	1990 (53)	940 (25)	1310 (35)	1580 (42)	
50 (3,4)	75 (5,2)		1400 (37)	2000 (54)	2400 (64)	900 (24)	1400 (37)	1800 (48)	
	100 (6,9)		1510 (40)	2110 (57)	2500 (67)	1050 (28)	1550 (41)	1930 (52)	
	125 (8,6)		1630 (44)	2230 (60)	2600 (70)	1200 (32)	1700 (46)	2050 (55)	
	150 (10)		1740 (47)	2340 (63)	2700 (72)	1350 (36)	1850 (50)	2180 (58)	
75 (5,2)	100 (6,9)		1900 (51)	3000 (80)	3550 (95)	1400 (37)	2050 (55)	2680 (72)	
	125 (8,6)		2030 (54)	3100 (83)	3680 (99)	1490 (40)	2210 (59)	2810 (75)	
	150 (10)		2150 (58)	3200 (86)	3800 (102)	1580 (42)	2380 (64)	2940 (79)	
	175 (12)		2280 (61)	3300 (88)	3930 (105)	1660 (44)	2540 (68)	3070 (82)	
100 (6,9)	125 (8,6)		2600 (70)	4000 (107)	4550 (122)	1750 (47)	2750 (74)	3500 (94)	
	150 (10)		2800 (75)	4200 (113)	4780 (128)	1930 (52)	2930 (79)	3700 (99)	
	175 (12)		3000 (80)	4400 (118)	5020 (135)	2120 (57)	3120 (84)	3900 (105)	
	200 (14)		3200 (86)	4600 (123)		2300 (62)	3300 (88)		
135 (9,3)	150 (10)	3200 (86)	4700 (126)	5250 (141)	2200 (59)	3500 (94)	4600 (123)		
	175 (12)	3700 (99)	5280 (142)	6000 (161)	2450 (66)	3900 (105)	4930 (132)		
	200 (14)	4200 (113)	5850 (157)	6750 (181)	2700 (72)	4300 (115)	5250 (141)		
Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.									

Table 8. Air Capacities for 3/4-inch (DN 20) Body (continued)

SPRING RANGE, PSIG (bar)	SET PRESSURE, PSIG (bar)	INLET, PSIG (bar)	CAPACITIES IN SCFH (Nm³/h) OF AIR AT % DROOP						
			3/4-inch (DN 20) Body						
			Elastomer Diaphragm			Metal Diaphragm			
			10%	20%	30%	10%	20%	30%	
2 to 8 (0,2 to 0,5)	2 (0,2)	10 (0,7)	340 (9,1)	400 (11)	460 (12)	Not Available			
		25 (1,7)	420 (11)	480 (13)	550 (15)				
		50 (3,4)	550 (15)	600 (16)	700 (19)				
	5 (0,4)	10 (0,7)	500 (13)	650 (17)	900 (24)				
		25 (1,7)	580 (16)	820 (22)	1090 (29)				
		50 (3,4)	700 (19)	1100 (29)	1400 (37)				
	8 (0,5)	10 (0,7)	570 (15)	970 (26)	1250 (33)				
		25 (1,7)	660 (18)	1080 (29)	1460 (39)				
		50 (3,4)	800 (21)	1250 (33)	1820 (49)				
5 to 25 (0,4 to 1,7)	5 (0,4)	25 (1,7)	600 (16)	840 (22)	1080 (29)	520 (14)	680 (18)	850 (23)	
		50 (3,4)	930 (25)	1170 (31)	1440 (39)	780 (21)	970 (26)	1130 (30)	
		75 (5,2)	1250 (33)	1500 (40)	1800 (48)	1040 (28)	1250 (33)	1400 (37)	
	15 (1,1)	25 (1,7)	1000 (27)	1650 (44)	2400 (64)	700 (19)	1020 (27)	1350 (36)	
		50 (3,4)	1310 (35)	2020 (54)	2780 (75)	1010 (27)	1420 (38)	1790 (48)	
		75 (5,2)	1620 (43)	2380 (64)	3170 (85)	1320 (35)	1810 (49)	2230 (60)	
	25 (1,7)	35 (2,4)	1750 (47)	3000 (80)	3850 (103)	750 (20)	1240 (33)	1730 (46)	
		50 (3,4)	1830 (49)	3160 (85)	4050 (109)	1030 (28)	1580 (42)	2160 (58)	
		75 (5,2)	1970 (53)	3430 (92)	4370 (117)	1490 (40)	2140 (57)	2880 (77)	
	10 to 50 (0,7 to 3,4)	10 (0,7)	25 (1,7)	570 (15)	850 (23)	1400 (37)	530 (14)	790 (21)	1300 (35)
			50 (3,4)	780 (21)	1030 (28)	1490 (40)	720 (19)	960 (26)	1380 (37)
			100 (6,9)	1200 (32)	1400 (37)	1670 (49)	1110 (30)	1300 (35)	1550 (42)
25 (1,7)		50 (3,4)	1400 (37)	2540 (68)	3800 (102)	1300 (35)	2230 (60)	3080 (82)	
		75 (5,2)	1590 (43)	2910 (78)	4130 (111)	1470 (39)	2790 (75)	3620 (97)	
		100 (6,9)	1780 (48)	3290 (88)	4470 (120)	1650 (44)	3340 (90)	4160 (111)	
50 (3,4)		75 (5,2)	3700 (99)	6000 (161)	7500 (201)	2800 (75)	3800 (102)	5000 (134)	
		100 (6,9)	4050 (109)	6370 (171)	7910 (212)	2900 (78)	4190 (112)	5540 (149)	
		125 (8,6)	4400 (118)	6730 (180)	8310 (223)	3000 (80)	4570 (122)	6090 (163)	
25 to 90 (1,7 to 6,2)	25 (1,7)	50 (3,4)	1750 (47)	2600 (70)	3500 (94)	860 (23)	1750 (47)	1920 (51)	
		100 (6,9)	2430 (65)	3380 (90)	4340 (116)	1620 (43)	2600 (70)	3120 (84)	
		125 (8,6)	2760 (74)	3760 (101)	4760 (128)	2000 (54)	3030 (81)	3720 (100)	
	50 (3,4)	75 (5,2)	3200 (86)	4900 (131)	6660 (178)	2000 (54)	3260 (87)	4600 (123)	
		100 (6,9)	3590 (96)	5400 (145)	7200 (193)	2550 (68)	3950 (106)	5310 (142)	
		125 (8,6)	3980 (107)	5900 (158)	7730 (207)	3100 (83)	4640 (124)	6020 (161)	
	75 (5,2)	150 (10)	4370 (117)	6400 (172)	8270 (222)	3650 (98)	5330 (143)	6720 (180)	
		100 (6,9)	5040 (135)	8060 (216)	9770 (262)	3000 (80)	4720 (126)	6560 (176)	
		125 (8,6)	5480 (147)	8460 (227)	10150 (272)	3570 (96)	5490 (147)	7420 (199)	
		150 (10)	5920 (159)	8870 (238)	10540 (282)	4150 (111)	6260 (168)	8280 (222)	
		175 (12)	6360 (170)	9270 (248)	11300 (303)	4720 (126)	7030 (188)	9140 (245)	
		100 (6,9)	5450 (146)	7980 (214)	9240 (248)	3600 (96)	5850 (157)	8210 (220)	
	90 (6,2)	125 (8,6)	5940 (159)	8690 (233)	10450 (280)	4100 (110)	6540 (175)	8900 (239)	
		150 (10)	6430 (172)	9400 (252)	11670 (313)	4600 (123)	7230 (194)	9600 (257)	
		175 (12)	6920 (185)	11250 (302)	14820 (397)	5110 (137)	7920 (212)	10290 (276)	
	35 to 135 (2,4 to 9,3)	35 (2,4)	50 (3,4)	2100 (56)	3100 (83)	3880 (104)	1190 (32)	1600 (43)	2440 (65)
			75 (5,2)	2440 (65)	3610 (97)	4480 (120)	1740 (47)	2370 (63)	3270 (88)
			100 (6,9)	2780 (75)	4120 (110)	5080 (136)	2290 (61)	3140 (84)	4100 (110)
125 (8,6)			3120 (84)	4620 (124)	5670 (152)	2840 (76)	3910 (105)	4920 (132)	
50 (3,4)		75 (5,2)	3370 (90)	4700 (126)	6500 (174)	2440 (65)	3460 (93)	4720 (126)	
		100 (6,9)	3620 (97)	5100 (137)	6880 (184)	2780 (75)	3960 (106)	5300 (142)	
		125 (8,6)	3860 (103)	5500 (147)	7250 (194)	3120 (84)	4470 (120)	5870 (157)	
		150 (10)	4110 (110)	5900 (158)	7630 (204)	3450 (92)	4970 (133)	6450 (173)	
75 (5,2)		100 (6,9)	4500 (121)	7000 (188)	9300 (249)	3330 (89)	5100 (137)	6750 (181)	
		125 (8,6)	4810 (129)	7530 (202)	9970 (267)	3750 (100)	5690 (152)	7490 (201)	
		150 (10)	5120 (137)	8070 (216)	10630 (285)	4170 (112)	6280 (168)	8240 (221)	
		175 (12)	5420 (145)	8600 (230)	11300 (303)	4580 (123)	6870 (184)	8980 (241)	
100 (6,9)		125 (8,6)	5980 (160)	9730 (261)	11500 (308)	4100 (110)	6800 (182)	9100 (244)	
		150 (10)	6470 (173)	10220 (274)	12500 (335)	4480 (120)	7390 (198)	9930 (266)	
		175 (12)	6960 (187)	10710 (287)	13500 (362)	4860 (130)	7970 (214)	10770 (289)	
		200 (14)	7450 (200)	11200 (300)		5240 (140)	8560 (229)		
135 (9,3)		150 (10)	8400 (225)	11800 (316)	13150 (352)	4920 (132)	8740 (234)	12100 (324)	
		175 (12)	8510 (228)	13200 (354)	15330 (411)	5660 (152)	9370 (251)	12750 (342)	
		200 (14)	8620 (231)	14600 (391)	17500 (469)	6400 (172)	10000 (268)	13400 (359)	
Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.									

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

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Table 8. Air Capacities for 1-inch (DN 25) Body (continued)

SPRING RANGE, PSIG (bar)	SET PRESSURE, PSIG (bar)	INLET, PSIG (bar)	CAPACITIES IN SCFH (Nm ³ /h) OF AIR AT % DROOP					
			1-inch (DN 25) Body					
			Elastomer Diaphragm			Metal Diaphragm		
			10%	20%	30%	10%	20%	30%
2 to 8 (0,2 to 0,5)	2 (0,2)	10 (0,7)	610 (16)	620 (17)	650 (17)	Not Available		
		25 (1,7)	1040 (28)	1250 (33)	1280 (34)			
		50 (3,4)	1750 (47)	2300 (62)	2320 (62)			
	5 (0,4)	10 (0,7)	620 (17)	660 (18)	1400 (37)			
		25 (1,7)	910 (24)	1150 (31)	1890 (51)			
		50 (3,4)	1380 (37)	1970 (53)	2700 (72)			
	8 (0,5)	10 (0,7)	1400 (37)	1850 (50)	2000 (54)			
		25 (1,7)	1990 (53)	2280 (61)	2380 (64)			
		50 (3,4)	2970 (80)	3000 (80)	3000 (80)			
5 to 25 (0,4 to 1,7)	5 (0,4)	25 (1,7)	1000 (27)	1230 (33)	1880 (50)	900 (24)	1110 (30)	1690 (45)
		50 (3,4)	1580 (42)	1950 (52)	2580 (69)	1420 (38)	1760 (47)	2320 (62)
		75 (5,2)	2150 (58)	2670 (72)	3280 (88)	1940 (52)	2400 (64)	2950 (79)
	15 (1,1)	25 (1,7)	2290 (61)	2430 (65)	4760 (128)	1100 (29)	1430 (38)	1980 (53)
		50 (3,4)	2680 (72)	3500 (94)	5510 (148)	1890 (51)	2430 (65)	3100 (83)
		75 (5,2)	3070 (83)	4560 (122)	6250 (168)	2680 (72)	3440 (92)	4230 (113)
	25 (1,7)	35 (2,4)	4100 (110)	6200 (166)	8400 (225)	1400 (36)	2100 (56)	3460 (93)
		50 (3,4)	4640 (124)	6770 (181)	9000 (241)	2000 (54)	2800 (75)	4250 (114)
		75 (5,2)	5550 (149)	7710 (207)	10000 (268)	3000 (80)	3960 (106)	5560 (149)
	10 (0,7)	25 (1,7)	1600 (43)	2400 (64)	3700 (99)	1140 (31)	1230 (33)	1540 (41)
		50 (3,4)	2370 (64)	3330 (89)	4580 (123)	1900 (51)	2140 (57)	2550 (68)
		100 (6,9)	3900 (105)	5200 (139)	6350 (170)	3410 (91)	3970 (106)	4580 (123)
		50 (3,4)	4360 (117)	7360 (197)	9800 (263)	2100 (56)	2630 (70)	3860 (103)
		75 (5,2)	5440 (146)	8470 (227)	11030 (296)	3030 (81)	3800 (102)	5170 (139)
		100 (6,9)	6520 (175)	9590 (257)	12270 (329)	3970 (106)	4970 (133)	6480 (174)
10 to 50 (0,7 to 3,4)	25 (1,7)	75 (5,2)	9600 (257)	15300 (410)	18800 (504)	4000 (107)	6320 (169)	9520 (255)
		100 (6,9)	11030 (296)	16730 (448)	19980 (535)	4670 (125)	7170 (192)	10480 (281)
		125 (8,6)	12470 (334)	18170 (487)	22350 (599)	5330 (143)	8010 (215)	11440 (307)
	50 (3,4)	50 (3,4)	2500 (67)	5000 (134)	8200 (220)	2490 (67)	3680 (99)	5200 (139)
		100 (6,9)	5400 (145)	7750 (208)	10950 (293)	4250 (114)	5730 (154)	7930 (212)
		125 (8,6)	6850 (184)	9130 (245)	12330 (330)	5120 (137)	6750 (181)	9290 (249)
	75 (5,2)	75 (5,2)	8400 (225)	13000 (348)	17500 (469)	4460 (120)	7840 (210)	13000 (348)
		100 (6,9)	9500 (255)	14450 (387)	19030 (510)	5140 (138)	8880 (238)	13890 (372)
		125 (8,6)	10600 (284)	15900 (426)	20550 (551)	5810 (156)	9920 (266)	14790 (396)
	90 (6,2)	150 (10)	11700 (314)	17350 (465)	22080 (592)	6490 (174)	10960 (294)	15680 (420)
		100 (6,9)	11950 (320)	18700 (501)	22750 (610)	6260 (168)	10880 (292)	17000 (456)
		125 (8,6)	13410 (359)	20880 (559)	25490 (683)	7590 (203)	12530 (336)	18750 (503)
	135 (9,3)	150 (10)	14880 (399)	23050 (618)	28230 (756)	8920 (239)	14180 (380)	20500 (549)
		175 (12)	16340 (438)	25230 (676)	30960 (830)	10240 (274)	15820 (424)	22250 (596)
	150 (10)	100 (6,9)	12800 (343)	18600 (498)	21800 (584)	6700 (180)	12000 (322)	18380 (493)
		125 (8,6)	14760 (395)	21670 (581)	25710 (689)	7740 (207)	13650 (366)	20240 (542)
		150 (10)	16710 (448)	24730 (663)	29630 (794)	8770 (235)	15300 (410)	22100 (592)
	175 (12)	175 (12)	18670 (500)	27800 (745)	33540 (899)	9810 (263)	16950 (454)	23960 (642)
		50 (3,4)	3730 (100)	6000 (161)	8740 (234)	3360 (90)	5500 (147)	7400 (198)
		75 (5,2)	5030 (135)	7670 (206)	10560 (283)	4570 (122)	6550 (176)	8840 (237)
35 to 135 (2,4 to 9,3)	35 (2,4)	100 (6,9)	6330 (170)	9330 (250)	12370 (332)	5380 (144)	7600 (204)	10280 (275)
		125 (8,6)	7620 (204)	11000 (295)	14190 (380)	6190 (166)	8650 (232)	11710 (314)
		150 (10)	8000 (214)	11300 (303)	14400 (386)	6500 (175)	9270 (250)	12500 (332)
	50 (3,4)	100 (6,9)	8630 (231)	12700 (340)	16150 (433)	5780 (155)	8650 (232)	11930 (320)
		125 (8,6)	9250 (248)	14100 (378)	17900 (480)	6920 (185)	10040 (269)	13430 (360)
		150 (10)	9880 (265)	15500 (415)	19650 (527)	8050 (216)	11420 (306)	14920 (400)
	75 (5,2)	100 (6,9)	10950 (293)	18000 (482)	22690 (608)	5140 (138)	9030 (242)	14650 (393)
		125 (8,6)	12510 (335)	19790 (530)	25260 (677)	6980 (187)	11370 (305)	17240 (462)
		150 (10)	14080 (377)	21570 (578)	27830 (746)	8820 (236)	13720 (368)	19830 (531)
	100 (6,9)	175 (12)	15640 (419)	23360 (626)	30400 (815)	10660 (286)	16060 (430)	22410 (601)
		125 (8,6)	14300 (383)	24050 (645)	29900 (801)	8350 (224)	14000 (375)	20000 (536)
		150 (10)	15700 (421)	26200 (702)	33330 (893)	9670 (259)	16070 (431)	22600 (606)
	135 (9,3)	175 (12)	17100 (458)	28350 (760)	36770 (985)	10980 (294)	18130 (486)	25200 (675)
		200 (14)	18500 (496)	30500 (817)		12300 (330)	20200 (541)	
		150 (10)	10000 (268)	29340 (786)	33600 (900)	9000 (241)	19300 (517)	27690 (742)
	150 (10)	175 (12)	17900 (480)	34570 (926)	41000 (1099)	12780 (343)	21970 (589)	31650 (848)
		200 (14)	25800 (691)	39800 (1067)	48400 (1297)	14350 (385)	24640 (660)	35600 (954)

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

Table 8. Air Capacities for 1-1/2 x 1-inch (DN 40 x 25) Body (continued)

SPRING RANGE, PSIG (bar)	SET PRESSURE, PSIG (bar)	INLET, PSIG (bar)	CAPACITIES IN SCFH (Nm ³ /h) OF AIR AT % DROOP					
			1-1/2 x 1-inch (DN 40 x 25) Body					
			Elastomer Diaphragm			Metal Diaphragm		
			10%	20%	30%	10%	20%	30%
2 to 8 (0,2 to 0,5)	2 (0,2)	10 (0,7)	670 (18)	680 (18)	720 (19)	Not Available		
		25 (1,7)	1140 (31)	1380 (37)	1400 (38)			
		50 (3,4)	1930 (52)	2530 (68)	2550 (68)			
	5 (0,4)	10 (0,7)	680 (18)	730 (20)	1540 (41)			
		25 (1,7)	1000 (27)	1270 (34)	2080 (56)			
		50 (3,4)	1520 (41)	2170 (58)	2970 (80)			
	8 (0,5)	10 (0,7)	1540 (41)	2040 (55)	2200 (59)			
		25 (1,7)	2190 (59)	2510 (67)	2610 (70)			
		50 (3,4)	3270 (88)	3300 (88)	3300 (88)			
5 to 25 (0,4 to 1,7)	5 (0,4)	25 (1,7)	1100 (29)	1350 (36)	2070 (55)	1000 (27)	1230 (33)	1880 (50)
		50 (3,4)	1730 (46)	2150 (58)	2840 (76)	1580 (42)	1950 (52)	2580 (69)
		75 (5,2)	2370 (63)	2940 (79)	3610 (97)	2150 (58)	2670 (72)	3280 (88)
	15 (1,1)	25 (1,7)	2520 (67)	2670 (72)	5240 (140)	1210 (32)	1570 (42)	2180 (58)
		50 (3,4)	2950 (79)	3840 (103)	6060 (162)	2080 (56)	2680 (72)	3410 (91)
		75 (5,2)	3370 (90)	5020 (135)	6880 (184)	2950 (79)	3780 (101)	4650 (125)
	25 (1,7)	35 (2,4)	4510 (121)	6820 (183)	9240 (248)	1540 (41)	2310 (62)	3810 (102)
		50 (3,4)	5110 (137)	7440 (199)	9900 (265)	2200 (59)	3080 (83)	4670 (125)
		75 (5,2)	6100 (163)	8480 (227)	11000 (295)	3300 (88)	4360 (117)	6120 (164)
	10 (0,7)	25 (1,7)	1760 (47)	2640 (70,8)	4070 (109)	1250 (34)	1350 (36)	1690 (45)
		50 (3,4)	2600 (70)	3670 (98,3)	5040 (135)	2090 (56)	2360 (63)	2810 (75)
		100 (6,9)	4290 (115)	5720 (153)	6990 (187)	3750 (101)	4370 (117)	5040 (135)
	25 (1,7)	50 (3,4)	4800 (129)	8100 (217)	10780 (289)	2310 (62)	2890 (77)	4250 (114)
		75 (5,2)	5980 (160)	9320 (250)	12140 (325)	3340 (89)	4180 (112)	5690 (152)
		100 (6,9)	7170 (192)	10550 (283)	13490 (362)	4360 (117)	5470 (147)	7130 (191)
10 to 50 (0,7 to 3,4)	50 (3,4)	75 (5,2)	10560 (283)	16830 (451)	20680 (554)	4400 (118)	6950 (186)	10470 (281)
		100 (6,9)	12140 (325)	18410 (493)	21980 (589)	5130 (138)	7880 (211)	11530 (309)
		125 (8,6)	13710 (367)	19980 (535)	24590 (659)	5870 (157)	8810 (236)	12580 (337)
	25 (1,7)	50 (3,4)	2750 (74)	5500 (147)	9020 (242)	2740 (73)	4050 (109)	5720 (153)
		100 (6,9)	5940 (159)	8530 (229)	12050 (323)	4670 (125)	6300 (169)	8720 (234)
		125 (8,6)	7540 (202)	10040 (269)	13560 (363)	5630 (151)	7420 (199)	10220 (274)
	50 (3,4)	75 (5,2)	9240 (248)	14300 (383)	19250 (516)	4910 (131)	8620 (231)	14300 (383)
		100 (6,9)	10450 (280)	15900 (426)	20930 (561)	5650 (151)	9770 (262)	15280 (410)
		125 (8,6)	11660 (312)	17490 (469)	22610 (606)	6390 (171)	10910 (292)	16260 (436)
	75 (5,2)	150 (10)	12870 (345)	19090 (512)	24280 (651)	7140 (191)	12060 (323)	17250 (462)
		100 (6,9)	13150 (352)	20570 (551)	25030 (671)	6890 (185)	11970 (321)	18700 (501)
		125 (8,6)	14750 (395)	22960 (615)	28040 (751)	8350 (224)	13780 (369)	20630 (553)
	90 (6,2)	150 (10)	16360 (438)	25360 (680)	31050 (832)	9810 (263)	15590 (418)	22550 (604)
		175 (12)	17970 (482)	27750 (744)	34060 (913)	11270 (302)	17400 (466)	24480 (656)
		100 (6,9)	14080 (377)	20460 (548)	23980 (643)	7370 (198)	13200 (354)	20220 (542)
	35 (2,4)	125 (8,6)	16230 (435)	23830 (639)	28280 (758)	8510 (228)	15020 (402)	22260 (597)
		150 (10)	18380 (493)	27200 (729)	32590 (873)	9650 (259)	16830 (451)	24310 (652)
		175 (12)	20540 (550)	30580 (820)	36890 (989)	10790 (289)	18650 (500)	26360 (706)
35 to 135 (2,4 to 9,3)	50 (3,4)	50 (3,4)	4100 (110)	6600 (177)	9610 (258)	3730 (100)	6050 (162)	8140 (218)
		75 (5,2)	5530 (148)	8430 (226)	11610 (311)	5030 (135)	7210 (193)	9720 (261)
		100 (6,9)	6960 (187)	10260 (275)	13610 (365)	5920 (159)	8360 (224)	11300 (303)
	35 (2,4)	125 (8,6)	8380 (225)	12090 (324)	15600 (418)	6810 (182)	9520 (255)	12880 (345)
		75 (5,2)	8800 (236)	12430 (333)	15840 (425)	5120 (137)	8000 (214)	11470 (307)
		100 (6,9)	9490 (254)	13970 (374)	17770 (476)	6360 (170)	9520 (255)	13120 (352)
	50 (3,4)	125 (8,6)	10180 (273)	15510 (416)	19690 (528)	7610 (204)	11040 (296)	14770 (396)
		150 (10)	10860 (291)	17050 (457)	21620 (579)	8850 (237)	12560 (337)	16410 (440)
		100 (6,9)	12050 (323)	19800 (531)	24960 (669)	5650 (151)	9930 (266)	16120 (432)
	75 (5,2)	125 (8,6)	13760 (369)	21760 (583)	27790 (745)	7680 (206)	12510 (335)	18960 (508)
		150 (10)	15480 (415)	23730 (636)	30610 (820)	9700 (260)	15090 (404)	21810 (584)
		175 (12)	17200 (461)	25690 (689)	33440 (896)	11730 (314)	17660 (473)	24650 (661)
	100 (6,9)	125 (8,6)	15730 (422)	26460 (709)	32890 (881)	9190 (246)	15400 (413)	22000 (590)
		150 (10)	17270 (463)	28820 (772)	36670 (983)	10630 (285)	17670 (474)	24860 (666)
		175 (12)	18810 (504)	31190 (836)	40440 (1084)	12080 (324)	19950 (535)	27720 (743)
	135 (9,3)	200 (14)	20350 (545)	33550 (899)		13530 (363)	22220 (595)	
		150 (10)	11000 (295)	32270 (865)	36960 (991)	10000 (268)	21230 (569)	30460 (816)
		175 (12)	19690 (528)	38030 (1019)	45100 (1209)	14050 (377)	24170 (648)	34810 (933)
	200 (14)	200 (14)	28380 (761)	43780 (1173)	53240 (1427)	15790 (423)	27100 (726)	39160 (1049)

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

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Table 8. Air Capacities for 1-1/2-inch (DN 40) Body with Full Port (continued)

SPRING RANGE, PSIG (bar)	SET PRESSURE, PSIG (bar)	INLET PRESSURE, PSIG (bar)	CAPACITIES IN SCFH (Nm ³ /h) OF AIR AT % DROOP					
			1-1/2-inch (DN 40) Body					
			Elastomer Diaphragm			Metal Diaphragm		
			10%	20%	30%	10%	20%	30%
5 to 25 (0,4 to 1,7)	5 (0,4)	25 (1,7)	2500 (67)	4340 (116)	5320 (143)	1840 (49)	1870 (50)	1910 (51)
		50 (3,4)	4830 (129)	5790 (155)	6780 (182)	3400 (91)	3770 (101)	4440 (119)
		75 (5,2)	6400 (172)	7230 (194)	8230 (221)	4950 (133)	5660 (152)	6960 (187)
	15 (1,0)	25 (1,7)	2300 (62)	5220 (140)	7950 (213)	2180 (58)	2740 (73)	3990 (107)
		50 (3,4)	5170 (139)	8020 (215)	10880 (292)	3960 (106)	5030 (135)	6800 (182)
		75 (5,2)	8050 (216)	10820 (290)	13810 (370)	5730 (154)	7320 (196)	9610 (258)
	25 (1,7)	25 (1,7)	4700 (126)	8900 (239)	11600 (311)	2400 (64)	3530 (95)	6160 (165)
		50 (3,4)	6850 (183)	11230 (301)	14650 (393)	3600 (96)	5120 (137)	8040 (215)
		75 (5,2)	10420 (279)	15120 (405)	19720 (528)	5590 (150)	7760 (208)	11170 (299)
10 to 50 (0,7 to 3,4)	10 (0,7)	25 (1,7)	1930 (52)	2800 (75)	4300 (115)	1910 (51)	2780 (74)	4260 (114)
		50 (3,4)	3640 (98)	4830 (130)	6340 (170)	3610 (97)	4790 (128)	6290 (169)
		100 (6,9)	5360 (144)	6870 (184)	8390 (225)	5310 (142)	6810 (183)	8310 (223)
	25 (1,7)	50 (3,4)	4950 (133)	9300 (249)	13600 (364)	4480 (120)	7200 (193)	10400 (279)
		75 (5,2)	7630 (204)	11990 (321)	16400 (440)	6120 (164)	9260 (248)	13070 (350)
		100 (6,9)	10310 (276)	14670 (393)	19200 (515)	7760 (208)	11320 (303)	15730 (422)
	50 (3,4)	75 (5,2)	16360 (438)	26660 (714)	34700 (930)	9000 (241)	14400 (386)	19910 (534)
		100 (6,9)	17850 (478)	29220 (783)	36540 (979)	12200 (327)	18600 (498)	24110 (646)
		125 (8,6)	19330 (518)	31770 (851)	38380 (1029)	15400 (413)	22800 (611)	28300 (759)
25 to 75 (1,7 to 5,2)	25 (1,7)	50 (3,4)	8080 (217)	10900 (292)	15000 (402)	5160 (138)	9500 (255)	12000 (322)
		100 (6,9)	14290 (383)	19850 (532)	23720 (636)	8720 (234)	12250 (328)	15710 (421)
		125 (8,6)	17400 (466)	24330 (652)	28070 (752)	10500 (281)	13630 (365)	17570 (471)
	50 (3,4)	75 (5,2)	13370 (358)	20780 (557)	27400 (734)	8900 (239)	14600 (391)	18640 (500)
		100 (6,9)	15280 (410)	24360 (653)	30750 (824)	9240 (248)	16200 (434)	20980 (562)
		125 (8,6)	17190 (461)	27940 (749)	34100 (914)	9580 (257)	17800 (477)	23320 (625)
	75 (5,2)	150 (10)	19090 (512)	31520 (845)	37450 (1004)	9920 (266)	19400 (520)	25660 (688)
		100 (6,9)	17160 (460)	25000 (670)	37000 (992)	14000 (375)	19700 (528)	27740 (743)
		125 (8,6)	22110 (593)	31000 (831)	42740 (1145)	16040 (430)	23250 (623)	31660 (848)
35 to 100 (2,4 to 6,9)	35 (2,4)	150 (10)	27050 (725)	37000 (992)	48480 (1299)	18080 (485)	26800 (718)	35570 (953)
		175 (12)	32000 (858)	43000 (1152)	54220 (1453)	20120 (539)	30340 (813)	39490 (1058)
		50 (3,4)	6500 (174)	10410 (279)	14820 (397)	6440 (173)	8900 (239)	12300 (330)
	50 (3,4)	75 (5,2)	8480 (227)	13060 (350)	17920 (480)	8400 (225)	10850 (291)	14610 (392)
		100 (6,9)	10450 (280)	15710 (421)	21020 (563)	10360 (278)	12800 (343)	16930 (454)
		125 (8,6)	12430 (333)	18350 (492)	24120 (646)	12320 (330)	14750 (395)	19240 (516)
	75 (5,2)	75 (5,2)	13300 (356)	19820 (531)	25000 (670)	7780 (209)	11240 (301)	16430 (440)
		100 (6,9)	14560 (390)	22020 (590)	27800 (745)	8710 (233)	12850 (344)	18490 (496)
		125 (8,6)	15810 (424)	24230 (649)	30610 (820)	9640 (258)	14460 (388)	20540 (550)
	100 (6,9)	150 (10)	17070 (457)	26430 (708)	33410 (895)	10570 (283)	16060 (430)	22600 (606)
		100 (6,9)	19270 (516)	29000 (777)	38300 (1026)	10000 (268)	16580 (444)	24700 (662)
		125 (8,6)	20860 (559)	30700 (823)	41120 (1102)	12200 (327)	20360 (546)	28780 (771)
	100 (6,9)	150 (10)	22440 (601)	32410 (869)	43930 (1177)	14400 (386)	24140 (647)	32850 (880)
		175 (12)	24030 (644)	34110 (914)	46750 (1253)	16600 (445)	27920 (748)	36930 (990)
		125 (8,6)	17350 (465)	32130 (861)	47700 (1278)	16580 (444)	26300 (705)	36280 (972)
	100 (6,9)	150 (10)	25270 (677)	37920 (1016)	54270 (1454)	19430 (521)	30080 (806)	40390 (1082)
		175 (12)	33200 (890)	43710 (1171)	60850 (1631)	22280 (597)	33850 (907)	44490 (1192)
		200 (14)	41120 (1102)	49500 (1327)		25130 (673)	37630 (1008)	

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

Table 8. Air Capacities for 2-inch (DN 50) Body (continued)

SPRING RANGE, PSIG (bar)	SET PRESSURE, PSIG (bar)	INLET PRESSURE, PSIG (bar)	CAPACITIES IN SCFH (Nm ³ /h) OF AIR AT % DROOP					
			2-inch (DN 50)					
			Elastomer Diaphragm			Metal Diaphragm		
			10%	20%	30%	10%	20%	30%
10 to 25 (0,7 to 1,7)	10 (0,7)	25 (1,7)	9310 (250)	13150 (352)	17990 (482)	7870 (211)	11180 (300)	13280 (356)
		50 (3,4)	14650 (393)	17460 (468)	24520 (657)	10980 (294)	14780 (396)	17760 (476)
	15 (1,0)	25 (1,7)	11720 (314)	16680 (447)	23520 (630)	8050 (216)	11960 (321)	16900 (453)
		50 (3,4)	14650 (393)	23000 (616)	31400 (842)	12480 (334)	16510 (442)	22470 (602)
	25 (1,7)	50 (3,4)	19600 (525)	33540 (899)	44640 (1196)	14830 (397)	20650 (553)	30160 (808)
		75 (5,2)	23950 (642)	38310 (1027)	49770 (1334)	17040 (457)	26160 (701)	35390 (948)
15 to 50 (1,0 to 3,4)	15 (1,0)	25 (1,7)	10570 (283)	14340 (384)	20300 (544)	7950 (213)	11350 (304)	14380 (385)
		50 (3,4)	14280 (383)	18980 (509)	26270 (704)	11720 (314)	15340 (411)	19780 (530)
		75 (5,2)	17210 (461)	22890 (613)	29710 (796)	15100 (405)	18780 (503)	24380 (653)
		100 (6,9)	19580 (525)	26170 (701)	32570 (873)	18110 (485)	21770 (583)	28330 (759)
		125 (8,6)	21610 (579)	28930 (775)	35940 (963)	20770 (557)	24390 (654)	31770 (851)
	25 (1,7)	50 (3,4)	14860 (398)	28790 (772)	36470 (977)	13820 (370)	19440 (521)	27580 (739)
		75 (5,2)	19980 (535)	33980 (911)	43410 (1163)	17050 (457)	25100 (673)	33830 (907)
		100 (6,9)	23970 (642)	38340 (1028)	48870 (1310)	19370 (519)	29570 (792)	38100 (1021)
		125 (8,6)	26830 (719)	41850 (1122)	52960 (1419)	21170 (567)	33180 (889)	41200 (1104)
	50 (3,4)	75 (5,2)	30740 (824)	50930 (1365)	66750 (1789)	20460 (548)	35870 (961)	51800 (1388)
		100 (6,9)	39970 (1071)	60520 (1622)	75540 (2024)	27670 (742)	45800 (1227)	60890 (1632)
		125 (8,6)	45320 (1215)	65880 (1766)	81940 (2196)	32270 (865)	51810 (1389)	67170 (1800)
		150 (10)	48660 (1304)	69210 (1855)	86990 (2331)	35590 (954)	55590 (1490)	71960 (1929)
25 to 75 (1,7 to 5,2)	25 (1,7)	50 (3,4)	17140 (459)	26450 (709)	33320 (893)	13000 (348)	17640 (473)	25000 (670)
		75 (5,2)	19700 (528)	31970 (857)	41420 (1110)	17410 (467)	23440 (628)	31250 (838)
		100 (6,9)	24650 (661)	37110 (995)	46370 (1243)	19920 (534)	28550 (765)	36640 (982)
		125 (8,6)	28390 (761)	41570 (1114)	49360 (1323)	21470 (575)	32600 (874)	41030 (1100)
		150 (10)	29760 (798)	45030 (1207)	51620 (1383)	22840 (612)	35630 (955)	44580 (1195)
	50 (3,4)	75 (5,2)	29410 (788)	48810 (1308)	63270 (1696)	19790 (530)	34350 (921)	49930 (1338)
		100 (6,9)	31800 (852)	55090 (1476)	70980 (1902)	26040 (698)	42040 (1127)	58050 (1556)
		125 (8,6)	37590 (1007)	61160 (1639)	78730 (2110)	31040 (832)	48080 (1289)	64300 (1723)
		150 (10)	44250 (1186)	66660 (1786)	85560 (2293)	35110 (941)	53000 (1420)	69560 (1864)
		175 (12)	49680 (1331)	71210 (1908)	90510 (2426)	38610 (1035)	57360 (1537)	74660 (2001)
	75 (5,2)	100 (6,9)	43890 (1176)	67540 (1810)	84590 (2267)	31590 (847)	57340 (1537)	79980 (2143)
		125 (8,6)	47900 (1284)	77270 (2071)	95970 (2572)	37290 (999)	62940 (1687)	89110 (2388)
		150 (10)	52450 (1406)	83240 (2231)	105110 (2817)	41370 (1109)	70360 (1886)	98080 (2629)
		175 (12)	57560 (1543)	88270 (2366)	112010 (3002)	45800 (1227)	77020 (2064)	104780 (2808)

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Table 8. Air Capacities for 3-inch (DN 80) Body (continued)

SPRING RANGE, PSIG (bar)	SET PRESSURE, PSIG (bar)	INLET PRESSURE, PSIG (bar)	CAPACITIES IN SCFH (Nm ³ /h) OF AIR AT % DROOP					
			3-inch (DN 80)					
			Elastomer Diaphragm			Metal Diaphragm		
			10%	20%	30%	10%	20%	30%
10 to 25 (0,7 to 1,7)	10 (0,7)	25 (1,7)	10330 (277)	15820 (424)	22610 (606)	7360 (197)	10460 (280)	13160 (353)
		50 (3,4)	15200 (407)	23070 (618)	32390 (868)	9500 (255)	14400 (386)	16980 (455)
	15 (1,0)	25 (1,7)	11770 (315)	19290 (517)	28620 (767)	7800 (209)	11260 (302)	16830 (451)
		50 (3,4)	20010 (536)	31950 (856)	42310 (1134)	11930 (320)	15640 (419)	23040 (617)
	25 (1,7)	50 (3,4)	28270 (758)	44040 (1180)	54820 (1469)	14580 (391)	20410 (547)	30850 (827)
		75 (5,2)	29260 (784)	51980 (1393)	65180 (1747)	17040 (457)	28150 (754)	40320 (1081)
15 to 50 (1,0 to 3,4)	15 (1,0)	25 (1,7)	11610 (311)	16360 (438)	22280 (597)	6940 (186)	10480 (281)	14210 (381)
		50 (3,4)	15430 (414)	23210 (622)	32820 (880)	11580 (310)	15790 (423)	21480 (576)
		75 (5,2)	20490 (549)	30710 (823)	39920 (1070)	15470 (415)	20550 (551)	27820 (746)
		100 (6,9)	26040 (698)	38370 (1028)	45810 (1228)	18730 (502)	24750 (663)	33300 (892)
		125 (8,6)	31340 (840)	45530 (1220)	52030 (1394)	21450 (575)	28410 (761)	38010 (1019)
	25 (1,7)	50 (3,4)	19300 (517)	33920 (909)	45800 (1227)	14930 (400)	19480 (522)	27370 (734)
		75 (5,2)	26550 (712)	42510 (1139)	57260 (1535)	17730 (475)	25770 (691)	37500 (1005)
		100 (6,9)	30680 (822)	49600 (1329)	65540 (1756)	20430 (548)	32050 (859)	45090 (1208)
		125 (8,6)	33650 (902)	53920 (1445)	71750 (1923)	23360 (626)	37990 (1018)	50980 (1366)
	50 (3,4)	75 (5,2)	40670 (1090)	62920 (1686)	81420 (2182)	19840 (532)	36300 (973)	53810 (1442)
		100 (6,9)	47050 (1261)	76120 (2040)	96060 (2574)	27060 (725)	45620 (1223)	68010 (1823)
		125 (8,6)	53980 (1447)	86050 (2306)	110740 (2968)	31910 (855)	52980 (1420)	77540 (2078)
		150 (10)	60610 (1624)	93900 (2517)	121170 (3247)	35630 (955)	59430 (1593)	84540 (2266)
		175 (12)	68110 (1811)	105110 (2811)	137110 (3641)	40000 (1072)	68630 (1839)	106340 (2850)
25 to 75 (1,7 to 5,2)	25 (1,7)	50 (3,4)	18130 (486)	31820 (853)	44870 (1203)	14070 (377)	21300 (571)	29290 (785)
		75 (5,2)	22000 (590)	38310 (1027)	52320 (1402)	16780 (450)	26700 (716)	36700 (984)
		100 (6,9)	27910 (748)	45220 (1212)	59530 (1595)	19280 (517)	31760 (851)	43110 (1155)
		125 (8,6)	35170 (943)	52060 (1395)	66380 (1779)	22280 (597)	36580 (980)	48740 (1306)
		150 (10)	41190 (1104)	58350 (1564)	72790 (1951)	25790 (691)	41290 (1107)	53820 (1442)
	50 (3,4)	75 (5,2)	35150 (942)	57170 (1532)	74230 (1989)	19600 (525)	34970 (937)	51080 (1369)
		100 (6,9)	41260 (1106)	70230 (1882)	92620 (2482)	27180 (728)	42170 (1130)	63270 (1696)
		125 (8,6)	51510 (1380)	80560 (2159)	104840 (2810)	31610 (847)	50250 (1347)	72830 (1952)
		150 (10)	58210 (1560)	89600 (2401)	114040 (3056)	34710 (930)	58400 (1565)	80800 (2165)
		175 (12)	63000 (1688)	98770 (2647)	123380 (3307)	38270 (1026)	65840 (1765)	88170 (2363)
	75 (5,2)	100 (6,9)	47530 (1274)	74720 (2002)	100670 (2698)	27500 (737)	50390 (1350)	78720 (2110)
		125 (8,6)	55240 (1480)	95570 (2561)	121120 (3246)	35110 (941)	60710 (1627)	95460 (2558)
		150 (10)	62730 (1681)	111140 (2979)	138550 (3713)	40000 (1072)	68630 (1839)	106340 (2850)
		175 (12)	69980 (1875)	121490 (3256)	152970 (4100)	47550 (1274)	76930 (2062)	111250 (2982)

Table 9. Steam Capacities for 1/2-inch (DN 15) Body

SPRING RANGE, PSIG (bar)	SET PRESSURE, PSIG (bar)	INLET, PSIG (bar)	CAPACITIES IN POUNDS PER HOUR (kg/h) OF SATURATED STEAM AT % DROOP					
			1/2-inch (DN 15) Body					
			Elastomer Diaphragm			Metal Diaphragm		
			10%	20%	30%	10%	20%	30%
2 to 8 (0,2 to 0,5)	2 (0,2)	10 (0,7)	7 (3,2)	10 (4,5)	12 (5,4)	Not Available		
		25 (1,7)	10 (4,5)	14 (6,4)	15 (6,8)			
		50 (3,4)	11 (5,0)	15 (6,8)	17 (7,7)			
	5 (0,4)	10 (0,7)	11 (5,0)	16 (7,3)	21 (9,5)			
		25 (1,7)	13 (5,9)	18 (8,2)	22 (10)			
		50 (3,4)	16 (7,3)	21 (9,5)	26 (12)			
	8 (0,5)	10 (0,7)	13 (5,9)	19 (8,6)	28 (13)			
		25 (1,7)	15 (6,8)	22 (10)	30 (14)			
		50 (3,4)	20 (9,1)	28 (13)	34 (15)			
5 to 25 (0,4 to 1,7)	5 (0,4)	25 (1,7)	13 (5,9)	18 (8,2)	22 (10)	11 (5,0)	14 (6,4)	17 (7,7)
		50 (3,4)	16 (7,3)	20 (9,1)	25 (11)	14 (6,4)	17 (7,7)	21 (9,5)
		75 (5,2)	19 (8,6)	23 (10)	27 (12)	17 (7,7)	21 (9,5)	25 (11)
	15 (1,1)	25 (1,7)	24 (11)	37 (17)	45 (20)	15 (6,8)	24 (11)	32 (15)
		50 (3,4)	29 (13)	40 (18)	49 (22)	21 (9,5)	30 (14)	38 (17)
		75 (5,2)	35 (16)	44 (20)	53 (24)	27 (12)	37 (17)	45 (20)
	25 (1,7)	35 (2,4)	39 (18)	55 (25)	67 (30)	21 (9,5)	36 (16)	50 (23)
		50 (3,4)	40 (18)	56 (25)	69 (31)	25 (11)	40 (18)	53 (24)
		75 (5,2)	44 (20)	60 (27)	73 (33)	32 (15)	47 (21)	59 (27)
10 to 50 (0,7 to 3,4)	10 (0,7)	25 (1,7)	17 (7,7)	26 (12)	32 (15)	13 (5,9)	18 (8,2)	24 (11)
		50 (3,4)	21 (9,5)	30 (14)	35 (16)	16 (7,3)	22 (10)	28 (13)
		100 (6,9)	29 (13)	38 (17)	42 (19)	24 (11)	31 (14)	37 (17)
	25 (1,7)	50 (3,4)	40 (18)	57 (26)	68 (31)	23 (10)	39 (18)	50 (23)
		75 (5,2)	44 (20)	59 (27)	71 (32)	30 (14)	45 (20)	55 (25)
		100 (6,9)	47 (21)	62 (28)	74 (34)	36 (16)	51 (23)	60 (27)
	50 (3,4)	75 (5,2)	68 (31)	104 (47)	121 (55)	45 (20)	69 (31)	90 (41)
		100 (6,9)	72 (33)	105 (48)	122 (55)	51 (23)	75 (34)	94 (43)
		125 (8,6)	76 (34)	107 (49)	125 (57)	56 (25)	81 (37)	100 (45)
25 to 90 (1,7 to 6,2)	25 (1,7)	50 (3,4)	34 (15)	51 (23)	61 (28)	26 (12)	38 (17)	47 (21)
		100 (6,9)	42 (19)	58 (26)	68 (31)	35 (16)	46 (21)	55 (25)
		125 (8,6)	46 (21)	62 (28)	72 (33)	40 (18)	51 (23)	60 (27)
	50 (3,4)	75 (5,2)	65 (29)	94 (43)	114 (52)	45 (20)	66 (30)	84 (38)
		100 (6,9)	68 (31)	97 (44)	116 (53)	50 (23)	71 (32)	88 (40)
		125 (8,6)	71 (32)	101 (46)	119 (54)	55 (25)	77 (35)	92 (42)
	75 (5,2)	150 (10)	76 (34)	105 (48)	123 (56)	61 (28)	83 (38)	97 (44)
		100 (6,9)	91 (41)	132 (60)	162 (74)	57 (26)	91 (41)	119 (54)
		125 (8,6)	97 (44)	135 (61)	165 (75)	65 (30)	98 (44)	125 (57)
	90 (6,2)	150 (10)	102 (46)	139 (63)	169 (77)	73 (33)	106 (48)	132 (60)
		175 (12)	108 (49)	144 (65)	174 (79)	82 (37)	115 (52)	139 (63)
		100 (6,9)	97 (44)	142 (64)	159 (72)	60 (27)	101 (46)	136 (62)
		125 (8,6)	103 (47)	148 (67)	169 (77)	68 (31)	108 (49)	142 (64)
		150 (10)	108 (49)	154 (70)	179 (81)	76 (35)	116 (53)	147 (67)
		175 (12)	114 (52)	160 (73)	191 (87)	84 (38)	123 (56)	154 (70)
35 to 135 (2,4 to 9,3)	35 (2,4)	50 (3,4)	37 (17)	59 (27)	72 (33)	27 (12)	43 (20)	55 (25)
		75 (5,2)	43 (20)	64 (29)	77 (35)	32 (15)	47 (21)	59 (27)
		100 (6,9)	49 (22)	70 (32)	82 (37)	37 (17)	52 (24)	65 (30)
		125 (8,6)	56 (25)	76 (34)	88 (40)	41 (19)	58 (26)	70 (32)
	50 (3,4)	75 (5,2)	64 (29)	90 (41)	108 (49)	41 (19)	63 (29)	81 (37)
		100 (6,9)	67 (30)	94 (43)	111 (50)	47 (21)	69 (31)	85 (39)
		125 (8,6)	72 (33)	98 (44)	115 (52)	53 (24)	75 (34)	91 (41)
		150 (10)	77 (35)	103 (47)	119 (54)	60 (27)	82 (37)	96 (44)
	75 (5,2)	100 (6,9)	87 (39)	136 (62)	160 (73)	64 (29)	93 (42)	121 (55)
		125 (8,6)	91 (41)	138 (63)	163 (74)	67 (30)	99 (45)	125 (57)
		150 (10)	96 (44)	142 (64)	168 (76)	70 (32)	105 (48)	130 (59)
		175 (12)	101 (46)	146 (66)	174 (79)	74 (34)	112 (51)	136 (62)
	100 (6,9)	125 (8,6)	119 (54)	182 (83)	205 (93)	80 (36)	125 (57)	158 (72)
		150 (10)	127 (58)	189 (86)	213 (97)	88 (40)	132 (60)	165 (75)
		175 (12)	134 (61)	196 (89)	222 (101)	95 (43)	139 (63)	173 (79)
200 (14)		142 (64)	204 (93)		102 (46)	146 (66)		
135 (9,3)	150 (10)	148 (67)	215 (98)	238 (108)	102 (46)	160 (73)	209 (95)	
	175 (12)	169 (77)	239 (108)	270 (123)	112 (51)	177 (80)	221 (100)	
	200 (14)	190 (86)	263 (119)	300 (136)	122 (55)	193 (88)	234 (106)	
Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.								

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

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Table 9. Steam Capacities for 3/4-inch (DN 20) Body (continued)

SPRING RANGE, PSIG (bar)	SET PRESSURE, PSIG (bar)	INLET, PSIG (bar)	CAPACITIES IN POUNDS PER HOUR (kg/h) OF SATURATED STEAM AT % DROOP						
			3/4-inch (DN 20) Body						
			Elastomer Diaphragm			Metal Diaphragm			
			10%	20%	30%	10%	20%	30%	
2 to 8 (0,2 to 0,5)	2 (0,2)	10 (0,7)	15 (6,8)	18 (8,2)	21 (9,5)	Not Available			
		25 (1,7)	19 (8,6)	21 (9,5)	24 (11)				
		50 (3,4)	24 (11)	27 (12)	31 (14)				
	5 (0,4)	10 (0,7)	23 (10)	30 (14)	41 (19)				
		25 (1,7)	26 (12)	36 (16)	48 (22)				
		50 (3,4)	31 (14)	49 (22)	62 (28)				
	8 (0,5)	10 (0,7)	26 (12)	45 (20)	58 (26)				
		25 (1,7)	30 (14)	48 (22)	66 (30)				
		50 (3,4)	35 (16)	55 (25)	81 (37)				
5 to 25 (0,4 to 1,7)	5 (0,4)	25 (1,7)	27 (12)	37 (17)	48 (22)	23 (10)	30 (14)	38 (17)	
		50 (3,4)	41 (19)	52 (24)	64 (29)	35 (16)	43 (20)	50 (23)	
		75 (5,2)	55 (25)	66 (30)	80 (36)	46 (21)	55 (25)	62 (28)	
	15 (1,1)	25 (1,7)	46 (21)	75 (34)	110 (50)	32 (15)	47 (21)	61 (28)	
		50 (3,4)	58 (26)	89 (40)	120 (54)	45 (20)	63 (29)	79 (36)	
		75 (5,2)	71 (32)	110 (50)	140 (64)	58 (26)	80 (36)	99 (45)	
	25 (1,7)	35 (2,4)	80 (36)	140 (64)	170 (77)	34 (15)	57 (26)	79 (36)	
		50 (3,4)	83 (38)	140 (64)	180 (82)	46 (21)	71 (32)	97 (44)	
		75 (5,2)	87 (39)	150 (68)	190 (86)	66 (30)	95 (43)	130 (59)	
10 to 50 (0,7 to 3,4)	10 (0,7)	25 (1,7)	26 (12)	38 (17)	63 (29)	24 (11)	35 (16)	58 (26)	
		50 (3,4)	35 (16)	46 (21)	66 (30)	32 (15)	42 (19)	61 (28)	
		100 (6,9)	53 (24)	62 (28)	74 (34)	49 (22)	57 (26)	70 (32)	
	25 (1,7)	50 (3,4)	63 (29)	110 (50)	170 (77)	58 (26)	100 (45)	140 (64)	
		75 (5,2)	70 (32)	130 (59)	180 (82)	65 (29)	120 (54)	160 (73)	
		100 (6,9)	79 (36)	150 (68)	200 (91)	70 (32)	150 (68)	180 (82)	
	50 (3,4)	75 (5,2)	170 (77)	270 (123)	330 (150)	130 (59)	170 (77)	230 (104)	
		100 (6,9)	180 (82)	280 (127)	350 (159)	130 (59)	190 (86)	250 (114)	
		125 (8,6)	200 (91)	300 (136)	370 (168)	130 (59)	200 (91)	270 (123)	
25 to 90 (1,7 to 6,2)	25 (1,7)	50 (3,4)	79 (36)	120 (54)	160 (73)	39 (18)	79 (36)	86 (39)	
		100 (6,9)	110 (50)	150 (68)	190 (86)	72 (33)	120 (54)	140 (64)	
		125 (8,6)	120 (54)	170 (77)	210 (95)	89 (40)	130 (59)	160 (73)	
	50 (3,4)	75 (5,2)	150 (68)	220 (100)	300 (136)	91 (41)	150 (68)	210 (95)	
		100 (6,9)	160 (73)	240 (109)	320 (145)	110 (50)	180 (82)	240 (109)	
		125 (8,6)	180 (82)	260 (118)	340 (154)	140 (64)	210 (95)	270 (123)	
	75 (5,2)	150 (10)	190 (86)	280 (127)	370 (168)	160 (73)	240 (109)	300 (136)	
		100 (6,9)	230 (104)	370 (168)	410 (186)	140 (64)	210 (95)	300 (136)	
		125 (8,6)	250 (114)	380 (173)	450 (204)	160 (73)	250 (114)	330 (150)	
	90 (6,2)	150 (10)	260 (118)	390 (177)	470 (213)	190 (86)	280 (127)	370 (168)	
		175 (12)	280 (127)	410 (186)	500 (227)	210 (95)	310 (141)	400 (182)	
		100 (6,9)	250 (114)	360 (163)	390 (177)	170 (77)	270 (123)	370 (168)	
	35 to 135 (2,4 to 9,3)	35 (2,4)	125 (8,6)	270 (123)	390 (177)	470 (213)	190 (86)	300 (136)	400 (182)
			150 (10)	290 (132)	420 (191)	520 (236)	210 (95)	320 (145)	430 (195)
			175 (12)	310 (141)	500 (227)	660 (300)	230 (104)	350 (159)	460 (209)
		50 (3,4)	50 (3,4)	96 (44)	140 (64)	180 (82)	54 (25)	73 (33)	110 (50)
			75 (5,2)	110 (50)	160 (73)	200 (91)	78 (35)	110 (50)	140 (64)
			100 (6,9)	120 (54)	180 (82)	220 (100)	100 (45)	140 (64)	180 (82)
75 (5,2)		125 (8,6)	140 (64)	200 (91)	250 (114)	130 (59)	170 (77)	220 (100)	
		75 (5,2)	150 (68)	210 (95)	290 (132)	110 (50)	160 (73)	210 (95)	
		100 (6,9)	160 (73)	230 (104)	300 (136)	120 (54)	180 (82)	230 (104)	
100 (6,9)		125 (8,6)	170 (77)	240 (109)	320 (145)	140 (64)	200 (91)	260 (118)	
		150 (10)	180 (82)	260 (118)	340 (154)	150 (68)	220 (100)	290 (132)	
		100 (6,9)	210 (95)	320 (145)	410 (186)	150 (68)	230 (104)	310 (141)	
135 (9,3)		125 (8,6)	220 (100)	340 (154)	440 (200)	170 (77)	260 (118)	330 (150)	
		150 (10)	230 (104)	360 (163)	470 (213)	190 (86)	280 (127)	360 (163)	
		175 (12)	240 (109)	380 (173)	500 (227)	200 (91)	300 (136)	400 (182)	
Shaded areas indicate conditions where maximum differential pressure for the spring range is exceeded.									

Table 9. Steam Capacities for 1-inch (DN 25) Body (continued)

SPRING RANGE, PSIG (bar)	SET PRESSURE, PSIG (bar)	INLET, PSIG (bar)	CAPACITIES IN POUNDS PER HOUR (kg/h) OF SATURATED STEAM AT % DROOP					
			1-inch (DN 25) Body					
			Elastomer Diaphragm			Metal Diaphragm		
			10%	20%	30%	10%	20%	30%
2 to 8 (0,2 to 0,5)	2 (0,2)	10 (0,7)	28 (13)	28 (13)	30 (14)	Not Available		
		25 (1,7)	47 (21)	56 (25)	57 (26)			
		50 (3,4)	78 (35)	102 (46)	103 (47)			
	5 (0,4)	10 (0,7)	29 (13)	30 (14)	65 (30)			
		25 (1,7)	41 (19)	52 (24)	85 (39)			
		50 (3,4)	61 (28)	87 (39)	120 (54)			
	8 (0,5)	10 (0,7)	65 (30)	86 (39)	93 (42)			
		25 (1,7)	90 (41)	100 (45)	110 (50)			
		50 (3,4)	132 (60)	134 (61)	133 (60)			
5 to 25 (0,4 to 1,7)	5 (0,4)	25 (1,7)	45 (20)	56 (25)	85 (39)	41 (19)	50 (23)	76 (34)
		50 (3,4)	70 (32)	87 (39)	110 (50)	63 (29)	78 (35)	100 (45)
		75 (5,2)	95 (43)	120 (54)	150 (68)	90 (41)	110 (50)	130 (59)
	15 (1,1)	25 (1,7)	110 (50)	110 (50)	220 (100)	51 (23)	66 (30)	91 (41)
		50 (3,4)	120 (54)	160 (73)	250 (114)	85 (39)	110 (50)	140 (64)
		75 (5,2)	140 (64)	200 (91)	280 (127)	120 (54)	150 (68)	190 (86)
	25 (1,7)	35 (2,4)	190 (86)	290 (132)	380 (173)	65 (30)	97 (44)	160 (73)
		50 (3,4)	210 (95)	310 (141)	410 (186)	91 (41)	130 (59)	190 (86)
		75 (5,2)	250 (114)	350 (159)	450 (204)	130 (59)	180 (82)	250 (114)
10 to 50 (0,7 to 3,4)	10 (0,7)	25 (1,7)	73 (33)	110 (50)	168 (76)	52 (24)	56 (25)	70 (32)
		50 (3,4)	110 (50)	150 (68)	204 (93)	85 (39)	96 (44)	110 (50)
		100 (6,9)	170 (77)	230 (104)	281 (128)	151 (69)	180 (82)	200 (91)
	25 (1,7)	50 (3,4)	200 (91)	330 (150)	440 (200)	96 (44)	120 (54)	170 (77)
		75 (5,2)	240 (109)	380 (173)	490 (222)	136 (62)	170 (77)	230 (104)
		100 (6,9)	290 (132)	430 (195)	540 (245)	180 (82)	220 (100)	290 (132)
	50 (3,4)	75 (5,2)	440 (200)	700 (318)	840 (381)	180 (82)	290 (132)	430 (195)
		100 (6,9)	500 (227)	760 (345)	900 (409)	210 (95)	320 (145)	470 (213)
		125 (8,6)	560 (254)	810 (368)	1000 (454)	240 (109)	360 (163)	510 (232)
25 to 90 (1,7 to 6,2)	25 (1,7)	50 (3,4)	110 (50)	230 (104)	370 (168)	113 (51)	170 (77)	240 (109)
		100 (6,9)	240 (109)	340 (154)	490 (222)	189 (86)	250 (114)	350 (159)
		125 (8,6)	300 (136)	400 (182)	550 (250)	227 (103)	300 (136)	410 (186)
	50 (3,4)	75 (5,2)	390 (177)	590 (268)	800 (363)	205 (93)	360 (163)	590 (268)
		100 (6,9)	430 (195)	650 (295)	860 (390)	230 (104)	400 (182)	630 (286)
		125 (8,6)	480 (218)	710 (322)	920 (418)	260 (118)	440 (200)	660 (300)
	75 (5,2)	150 (10)	520 (236)	770 (350)	980 (445)	290 (132)	490 (222)	700 (318)
		100 (6,9)	550 (250)	860 (390)	1040 (472)	290 (132)	500 (227)	780 (354)
		125 (8,6)	610 (277)	950 (431)	1150 (522)	350 (159)	570 (259)	850 (386)
	90 (6,2)	150 (10)	670 (304)	1040 (472)	1270 (577)	400 (182)	640 (291)	920 (418)
		175 (12)	740 (336)	1130 (513)	1380 (627)	460 (209)	710 (322)	990 (449)
		100 (6,9)	590 (268)	860 (390)	980 (445)	310 (141)	550 (250)	840 (381)
	135 (9,3)	125 (8,6)	680 (309)	990 (449)	1170 (531)	360 (163)	620 (281)	920 (418)
		150 (10)	760 (345)	1120 (508)	1340 (608)	400 (182)	690 (313)	1000 (454)
		175 (12)	850 (386)	1250 (568)	1510 (686)	440 (200)	760 (345)	1080 (490)
35 to 135 (2,4 to 9,3)	35 (2,4)	50 (3,4)	170 (77)	280 (127)	400 (182)	150 (68)	250 (114)	340 (154)
		75 (5,2)	230 (104)	350 (159)	480 (218)	210 (95)	300 (136)	400 (182)
		100 (6,9)	280 (127)	420 (191)	550 (250)	240 (109)	340 (154)	460 (209)
	50 (3,4)	125 (8,6)	340 (154)	490 (222)	630 (286)	280 (127)	380 (173)	520 (236)
		75 (5,2)	370 (168)	520 (236)	660 (300)	210 (95)	330 (150)	470 (213)
		100 (6,9)	390 (177)	570 (259)	730 (331)	260 (118)	390 (177)	540 (245)
	75 (5,2)	125 (8,6)	420 (191)	630 (286)	800 (363)	310 (141)	450 (204)	600 (272)
		150 (10)	440 (200)	690 (313)	870 (395)	360 (163)	510 (232)	660 (300)
		100 (6,9)	500 (227)	830 (377)	1030 (468)	240 (109)	410 (186)	670 (304)
	100 (6,9)	125 (8,6)	570 (259)	900 (409)	1140 (518)	320 (145)	520 (236)	780 (354)
		150 (10)	640 (291)	970 (440)	1250 (568)	400 (182)	620 (281)	890 (404)
		175 (12)	700 (318)	1050 (477)	1360 (617)	480 (218)	720 (327)	1000 (454)
	135 (9,3)	125 (8,6)	660 (300)	1100 (499)	1270 (577)	390 (177)	640 (291)	910 (413)
		150 (10)	720 (327)	1190 (540)	1510 (686)	440 (200)	730 (331)	1020 (463)
		175 (12)	780 (354)	1280 (581)	1660 (754)	500 (227)	820 (372)	1140 (518)
	175 (12)	200 (14)	840 (381)	1370 (622)		560 (254)	910 (413)	
		150 (10)	460 (209)	1300 (590)	1430 (649)	420 (191)	890 (404)	1270 (577)
		175 (12)	820 (372)	1580 (717)	1750 (795)	590 (268)	1010 (459)	1440 (654)
		200 (14)	1180 (536)	1810 (822)	2050 (931)	660 (300)	1120 (508)	1610 (731)

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

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Table 9. Steam Capacities for 1-1/2 x 1-inch (DN 40 x 25) Body (continued)

SPRING RANGE, PSIG (bar)	SET PRESSURE, PSIG (bar)	INLET, PSIG (bar)	CAPACITIES IN POUNDS PER HOUR (kg/h) OF SATURATED STEAM AT % DROOP					
			1-1/2 x 1-inch (DN 40 x 25) Body					
			Elastomer Diaphragm			Metal Diaphragm		
			10%	20%	30%	10%	20%	30%
2 to 8 (0,2 to 0,5)	2 (0,2)	10 (0,7)	31 (14)	31 (14)	33 (15)	Not Available		
		25 (1,7)	51 (23)	61 (28)	63 (29)			
		50 (3,4)	85 (39)	112 (51)	113 (51)			
	5 (0,4)	10 (0,7)	31 (14)	33 (15)	71 (32)			
		25 (1,7)	45 (20)	57 (26)	93 (42)			
		50 (3,4)	67 (30)	96 (44)	131 (59)			
	8 (0,5)	10 (0,7)	72 (33)	94 (43)	102 (46)			
		25 (1,7)	99 (45)	110 (50)	120 (54)			
		50 (3,4)	145 (66)	146 (66)	146 (66)			
5 to 25 (0,4 to 1,7)	5 (0,4)	25 (1,7)	50 (23)	61 (28)	93 (42)	45 (20)	55 (25)	84 (38)
		50 (3,4)	77 (35)	95 (43)	130 (59)	70 (32)	86 (39)	110 (50)
		75 (5,2)	105 (48)	130 (59)	160 (73)	100 (45)	120 (54)	150 (68)
	15 (1,1)	25 (1,7)	120 (54)	120 (54)	240 (109)	56 (25)	72 (33)	99 (45)
		50 (3,4)	130 (59)	170 (77)	270 (123)	93 (42)	120 (54)	150 (68)
		75 (5,2)	150 (68)	220 (100)	300 (136)	130 (59)	170 (77)	210 (95)
	25 (1,7)	35 (2,4)	210 (95)	310 (141)	420 (191)	71 (32)	106 (48)	170 (77)
		50 (3,4)	230 (104)	340 (154)	450 (204)	100 (45)	140 (64)	210 (95)
		75 (5,2)	270 (123)	380 (173)	490 (222)	150 (68)	190 (86)	270 (123)
10 to 50 (0,7 to 3,4)	10 (0,7)	25 (1,7)	80 (36)	120 (54)	184 (84)	57 (26)	61 (28)	77 (35)
		50 (3,4)	120 (54)	160 (73)	224 (102)	93 (42)	105 (48)	120 (54)
		100 (6,9)	190 (86)	250 (114)	309 (140)	166 (75)	190 (86)	220 (100)
	25 (1,7)	50 (3,4)	220 (100)	370 (168)	490 (222)	105 (48)	130 (59)	190 (86)
		75 (5,2)	270 (123)	420 (191)	540 (245)	149 (68)	190 (86)	250 (114)
		100 (6,9)	320 (145)	470 (213)	600 (272)	190 (86)	240 (109)	320 (145)
	50 (3,4)	75 (5,2)	480 (218)	770 (350)	880 (400)	200 (91)	320 (145)	470 (213)
		100 (6,9)	550 (250)	830 (377)	980 (445)	230 (104)	350 (159)	520 (236)
		125 (8,6)	610 (277)	890 (404)	1090 (495)	260 (118)	390 (177)	560 (254)
25 to 90 (1,7 to 6,2)	25 (1,7)	50 (3,4)	120 (54)	250 (114)	410 (186)	124 (56)	180 (82)	260 (118)
		100 (6,9)	260 (118)	380 (173)	530 (241)	207 (94)	280 (127)	390 (177)
		125 (8,6)	330 (150)	440 (200)	600 (272)	249 (113)	330 (150)	450 (204)
	50 (3,4)	75 (5,2)	420 (191)	650 (295)	870 (395)	225 (102)	390 (177)	650 (295)
		100 (6,9)	470 (213)	720 (327)	940 (427)	260 (118)	440 (200)	680 (309)
		125 (8,6)	520 (236)	780 (354)	1000 (454)	290 (132)	490 (222)	720 (327)
	75 (5,2)	150 (10)	570 (259)	850 (386)	1080 (490)	320 (145)	530 (241)	760 (345)
		100 (6,9)	600 (272)	940 (427)	1110 (504)	320 (145)	550 (250)	850 (386)
		125 (8,6)	670 (304)	1040 (472)	1260 (572)	380 (173)	620 (281)	930 (422)
35 to 135 (2,4 to 9,3)	35 (2,4)	150 (10)	740 (336)	1140 (518)	1390 (631)	440 (200)	700 (318)	1010 (459)
		175 (12)	810 (368)	1240 (563)	1510 (686)	500 (227)	780 (354)	1090 (495)
		100 (6,9)	650 (295)	940 (427)	1040 (472)	340 (154)	610 (277)	930 (422)
	50 (3,4)	125 (8,6)	740 (336)	1090 (495)	1280 (581)	390 (177)	680 (309)	1010 (459)
		150 (10)	840 (381)	1230 (558)	1470 (667)	440 (200)	760 (345)	1090 (495)
		175 (12)	930 (422)	1370 (622)	1650 (749)	490 (222)	840 (381)	1180 (536)
	75 (5,2)	50 (3,4)	190 (86)	300 (136)	440 (200)	170 (77)	280 (127)	370 (168)
		75 (5,2)	250 (114)	380 (173)	520 (236)	230 (104)	320 (145)	440 (200)
		100 (6,9)	310 (141)	460 (209)	600 (272)	260 (118)	370 (168)	500 (227)
	50 (3,4)	125 (8,6)	370 (168)	540 (245)	690 (313)	300 (136)	420 (191)	570 (259)
		75 (5,2)	400 (182)	570 (259)	720 (327)	230 (104)	360 (163)	520 (236)
		100 (6,9)	430 (195)	630 (286)	800 (363)	290 (132)	430 (195)	590 (268)
	75 (5,2)	125 (8,6)	460 (209)	690 (313)	870 (395)	340 (154)	490 (222)	660 (300)
		150 (10)	480 (218)	760 (345)	960 (436)	390 (177)	560 (254)	730 (331)
		100 (6,9)	550 (250)	910 (413)	1110 (504)	260 (118)	450 (204)	730 (331)
	100 (6,9)	125 (8,6)	630 (286)	990 (449)	1250 (568)	350 (159)	570 (259)	850 (386)
		150 (10)	700 (318)	1070 (486)	1370 (622)	440 (200)	680 (309)	970 (440)
		175 (12)	770 (350)	1150 (522)	1490 (676)	530 (241)	790 (359)	1090 (495)
	135 (9,3)	125 (8,6)	720 (327)	1210 (549)	1340 (608)	420 (191)	710 (322)	1000 (454)
		150 (10)	790 (359)	1310 (595)	1640 (745)	490 (222)	800 (363)	1120 (508)
		175 (12)	850 (386)	1410 (640)	1810 (822)	550 (250)	900 (409)	1240 (563)
		200 (14)	920 (418)	1500 (681)		610 (277)	1000 (454)	
		150 (10)	510 (232)	1390 (631)	1510 (686)	460 (209)	980 (445)	1390 (631)
		175 (12)	910 (413)	1740 (790)	1850 (840)	650 (295)	1100 (499)	1580 (717)
		200 (14)	1300 (590)	1990 (903)	2150 (976)	720 (327)	1230 (558)	1770 (804)

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

Table 9. Steam Capacities for 1-1/2-inch (DN 40) Body with Full Port (continued)

SPRING RANGE, PSIG (bar)	SET PRESSURE, PSIG (bar)	INLET PRESSURE, PSIG (bar)	CAPACITIES IN POUNDS PER HOUR (kg/h) OF SATURATED STEAM AT % DROOP					
			1-1/2-inch (DN 40) Body					
			Elastomer Diaphragm			Metal Diaphragm		
			10%	20%	30%	10%	20%	30%
5 to 25 (0,4 to 1,7)	5 (0,4)	25 (1,7)	110 (50)	200 (91)	240 (109)	84 (38)	80 (36)	90 (41)
		50 (3,4)	220 (100)	260 (118)	300 (136)	150 (68)	170 (77)	200 (91)
		75 (5,2)	290 (132)	320 (145)	370 (168)	220 (100)	250 (114)	310 (141)
	15 (1,0)	25 (1,7)	110 (50)	240 (109)	370 (168)	100 (45)	130 (59)	180 (82)
		50 (3,4)	240 (109)	360 (163)	490 (222)	180 (82)	230 (104)	310 (141)
		75 (5,2)	360 (163)	490 (222)	620 (281)	260 (118)	330 (150)	430 (195)
	25 (1,7)	25 (1,7)	220 (100)	410 (186)	530 (241)	110 (50)	160 (73)	280 (127)
		50 (3,4)	310 (141)	510 (232)	670 (304)	160 (73)	230 (104)	370 (168)
		75 (5,2)	470 (213)	680 (309)	890 (404)	250 (114)	350 (159)	500 (227)
10 to 50 (0,7 to 3,4)	10 (0,7)	25 (1,7)	89 (40)	130 (59)	200 (91)	90 (41)	130 (59)	190 (86)
		50 (3,4)	160 (73)	220 (100)	290 (132)	160 (73)	220 (100)	280 (127)
		100 (6,9)	240 (109)	310 (141)	380 (173)	240 (109)	300 (136)	370 (168)
	25 (1,7)	50 (3,4)	230 (104)	430 (195)	620 (281)	200 (91)	330 (150)	470 (213)
		75 (5,2)	350 (159)	540 (245)	740 (336)	280 (127)	420 (191)	590 (268)
		100 (6,9)	470 (213)	660 (300)	860 (390)	350 (159)	510 (232)	700 (318)
	50 (3,4)	75 (5,2)	750 (341)	1230 (558)	1590 (722)	410 (186)	660 (300)	910 (413)
		100 (6,9)	820 (372)	1330 (604)	1660 (754)	560 (254)	840 (381)	1090 (495)
		125 (8,6)	880 (400)	1440 (654)	1740 (790)	700 (318)	1030 (468)	1270 (577)
25 to 75 (1,7 to 5,2)	25 (1,7)	50 (3,4)	370 (168)	500 (227)	680 (309)	240 (109)	430 (195)	550 (250)
		100 (6,9)	640 (291)	890 (404)	1070 (486)	390 (177)	550 (250)	700 (318)
		125 (8,6)	780 (354)	1090 (495)	1260 (572)	470 (213)	610 (277)	780 (354)
	50 (3,4)	75 (5,2)	620 (281)	950 (431)	1260 (572)	410 (186)	670 (304)	850 (386)
		100 (6,9)	700 (318)	1110 (504)	1400 (636)	420 (191)	740 (336)	950 (431)
		125 (8,6)	780 (354)	1270 (577)	1540 (699)	430 (195)	800 (363)	1050 (477)
	75 (5,2)	150 (10)	860 (390)	1420 (645)	1690 (767)	450 (204)	870 (395)	1150 (522)
		100 (6,9)	790 (359)	1150 (522)	1700 (772)	650 (295)	910 (413)	1270 (577)
		125 (8,6)	1010 (459)	1420 (645)	1950 (885)	730 (331)	1060 (481)	1440 (654)
35 to 100 (2,4 to 6,9)	35 (2,4)	150 (10)	1230 (558)	1680 (763)	2200 (999)	820 (372)	1210 (549)	1610 (731)
		175 (12)	1450 (658)	1950 (885)	2450 (1112)	910 (413)	1370 (622)	1780 (808)
		50 (3,4)	300 (136)	480 (218)	680 (309)	300 (136)	410 (186)	560 (254)
		75 (5,2)	390 (177)	600 (272)	810 (368)	380 (172)	490 (222)	660 (300)
	50 (3,4)	100 (6,9)	470 (213)	710 (322)	950 (431)	470 (213)	580 (263)	760 (345)
		125 (8,6)	560 (254)	830 (377)	1080 (490)	550 (249)	660 (300)	860 (390)
		75 (5,2)	610 (277)	910 (413)	1150 (522)	360 (163)	520 (236)	750 (341)
		100 (6,9)	670 (304)	1000 (454)	1260 (572)	400 (182)	580 (263)	840 (381)
	75 (5,2)	125 (8,6)	720 (327)	1100 (499)	1380 (627)	440 (200)	650 (295)	920 (418)
		150 (10)	770 (350)	1190 (540)	1500 (681)	480 (218)	720 (327)	1010 (459)
		100 (6,9)	890 (404)	1340 (608)	1760 (799)	460 (209)	760 (345)	1130 (513)
		125 (8,6)	960 (436)	1400 (636)	1870 (849)	560 (254)	930 (422)	1310 (595)
	100 (6,9)	150 (10)	1020 (463)	1480 (672)	1990 (903)	650 (295)	1090 (495)	1480 (672)
		175 (12)	1090 (495)	1550 (704)	2110 (958)	750 (341)	1260 (572)	1660 (754)
		125 (8,6)	800 (363)	1480 (672)	2190 (994)	770 (350)	1210 (549)	1660 (754)
		150 (10)	1160 (527)	1740 (790)	2480 (1126)	890 (404)	1380 (627)	1840 (835)
		175 (12)	1520 (690)	2000 (908)	2770 (1258)	1020 (463)	1540 (699)	2020 (917)
		200 (14)	1880 (854)	2250 (1022)		1140 (518)	1700 (772)	

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

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Table 9. Steam Capacities for 2-inch (DN 50) Body (continued)

SPRING RANGE, PSIG (bar)	SET PRESSURE, PSIG (bar)	INLET PRESSURE, PSIG (bar)	CAPACITIES IN POUNDS PER HOUR (kg/h) OF SATURATED STEAM AT % DROOP					
			2-inch (DN 50)					
			Elastomer Diaphragm			Metal Diaphragm		
			10%	20%	30%	10%	20%	30%
10 to 25 (0,7 to 1,7)	10 (0,7)	25 (1,7)	420 (191)	590 (268)	810 (368)	360 (163)	510 (232)	600 (272)
		50 (3,4)	650 (295)	770 (350)	1090 (495)	490 (222)	650 (295)	790 (359)
	15 (1,0)	25 (1,7)	540 (245)	760 (345)	1070 (486)	370 (168)	550 (250)	770 (350)
		50 (3,4)	650 (295)	1020 (463)	1390 (631)	550 (250)	730 (331)	1000 (454)
	25 (1,7)	50 (3,4)	890 (404)	1510 (686)	2000 (908)	670 (304)	930 (422)	1350 (613)
		75 (5,2)	1060 (481)	1700 (772)	2200 (999)	760 (345)	1160 (527)	1570 (713)
15 to 50 (1,0 to 3,4)	15 (1,0)	25 (1,7)	480 (218)	650 (295)	920 (418)	360 (163)	520 (236)	650 (295)
		50 (3,4)	630 (286)	840 (381)	1160 (527)	520 (236)	680 (309)	880 (400)
		75 (5,2)	760 (345)	1010 (459)	1310 (595)	670 (304)	830 (377)	1080 (490)
		100 (6,9)	870 (395)	1160 (527)	1440 (654)	800 (363)	960 (436)	1250 (568)
		125 (8,6)	960 (436)	1280 (581)	1590 (722)	920 (418)	1080 (490)	1410 (640)
	25 (1,7)	50 (3,4)	670 (304)	1290 (586)	1630 (740)	620 (281)	870 (395)	1240 (563)
		75 (5,2)	890 (404)	1500 (681)	1920 (872)	760 (345)	1110 (504)	1500 (681)
		100 (6,9)	1060 (481)	1700 (772)	2160 (981)	860 (390)	1310 (595)	1690 (767)
		125 (8,6)	1190 (540)	1850 (840)	2340 (1062)	940 (427)	1470 (667)	1820 (826)
	50 (3,4)	75 (5,2)	1400 (636)	2310 (1049)	3010 (1367)	930 (422)	1630 (740)	2340 (1062)
		100 (6,9)	1790 (813)	2700 (1226)	3350 (1521)	1240 (563)	2050 (931)	2710 (1230)
		125 (8,6)	2010 (913)	2920 (1326)	3630 (1648)	1430 (649)	2300 (1044)	2970 (1348)
		150 (10)	2150 (976)	3060 (1389)	3850 (1748)	1580 (717)	2460 (1117)	3180 (1444)
		50 (3,4)	770 (350)	1190 (540)	1490 (676)	590 (268)	790 (359)	1120 (508)
25 to 75 (1,7 to 5,2)	25 (1,7)	75 (5,2)	870 (395)	1420 (645)	1830 (831)	770 (350)	1040 (472)	1380 (627)
		100 (6,9)	1090 (495)	1640 (745)	2050 (931)	880 (400)	1260 (572)	1620 (735)
		125 (8,6)	1260 (572)	1840 (835)	2180 (990)	950 (431)	1440 (654)	1820 (826)
		150 (10)	1320 (599)	1990 (903)	2280 (1035)	1010 (459)	1580 (717)	1970 (894)
		75 (5,2)	1340 (608)	2210 (1003)	2850 (1294)	900 (409)	1560 (708)	2250 (1022)
	50 (3,4)	100 (6,9)	1430 (649)	2460 (1117)	3150 (1430)	1170 (531)	1880 (854)	2580 (1171)
		125 (8,6)	1670 (758)	2710 (1230)	3480 (1580)	1380 (627)	2130 (967)	2850 (1294)
		150 (10)	1960 (890)	2950 (1339)	3790 (1721)	1550 (704)	2350 (1067)	3080 (1398)
		175 (12)	2200 (999)	3150 (1430)	4010 (1821)	1710 (776)	2540 (1153)	3300 (1498)
	75 (5,2)	100 (6,9)	2010 (913)	3080 (1398)	3830 (1739)	1450 (658)	2610 (1185)	3620 (1643)
		125 (8,6)	2170 (985)	3470 (1575)	4290 (1948)	1690 (767)	2830 (1285)	3980 (1807)
		150 (10)	2350 (1067)	3700 (1680)	4660 (2116)	1850 (840)	3130 (1421)	4350 (1975)
		175 (12)	2560 (1162)	3910 (1775)	4960 (2252)	2040 (926)	3410 (1548)	4640 (2107)

Table 9. Steam Capacities for 3-inch (DN 80) Body (continued)

SPRING RANGE, PSIG (bar)	SET PRESSURE, PSIG (bar)	INLET PRESSURE, PSIG (bar)	CAPACITIES IN POUNDS PER HOUR (kg/h) OF SATURATED STEAM AT % DROOP					
			3-inch (DN 80)					
			Elastomer Diaphragm			Metal Diaphragm		
			10%	20%	30%	10%	20%	30%
10 to 25 (0,7 to 1,7)	10 (0,7)	25 (1,7)	470 (213)	720 (327)	1030 (468)	330 (150)	470 (213)	590 (268)
		50 (3,4)	680 (309)	1030 (468)	1440 (654)	420 (191)	640 (291)	750 (341)
	15 (1,0)	25 (1,7)	540 (245)	890 (404)	1310 (595)	360 (163)	510 (232)	770 (350)
		50 (3,4)	900 (409)	1430 (649)	1890 (858)	530 (241)	690 (313)	1020 (463)
	25 (1,7)	50 (3,4)	1290 (586)	2000 (908)	2480 (1126)	660 (300)	920 (418)	1380 (627)
		75 (5,2)	1310 (595)	2320 (1053)	2910 (1321)	760 (345)	1250 (568)	1780 (808)
15 to 50 (1,0 to 3,4)	15 (1,0)	25 (1,7)	530 (241)	750 (341)	1020 (463)	320 (145)	480 (218)	650 (295)
		50 (3,4)	690 (313)	1040 (472)	1470 (667)	510 (232)	700 (318)	950 (431)
		75 (5,2)	910 (413)	1360 (617)	1770 (804)	680 (309)	910 (413)	1230 (558)
		100 (6,9)	1150 (522)	1700 (772)	2030 (922)	830 (377)	1100 (499)	1470 (667)
		125 (8,6)	1390 (631)	2010 (913)	2300 (1044)	950 (431)	1260 (572)	1680 (763)
	25 (1,7)	50 (3,4)	880 (400)	1540 (699)	2070 (940)	670 (304)	880 (400)	1230 (558)
		75 (5,2)	1190 (540)	1900 (863)	2550 (1158)	790 (359)	1140 (518)	1660 (754)
		100 (6,9)	1360 (617)	2200 (999)	2900 (1317)	900 (409)	1420 (645)	2000 (908)
		125 (8,6)	1490 (676)	2390 (1085)	3180 (1444)	1030 (468)	1680 (763)	2260 (1026)
	50 (3,4)	75 (5,2)	1860 (844)	2870 (1303)	3700 (1680)	910 (413)	1650 (749)	2430 (1103)
		100 (6,9)	2130 (967)	3440 (1562)	4320 (1961)	1220 (554)	2040 (926)	3020 (1371)
		125 (8,6)	2420 (1099)	3850 (1748)	4940 (2243)	1420 (645)	2350 (1067)	3430 (1557)
		150 (10)	2700 (1226)	4180 (1898)	5370 (2438)	1580 (717)	2630 (1194)	3740 (1698)
		50 (3,4)	830 (377)	1440 (654)	2030 (922)	640 (291)	960 (436)	1310 (595)
25 to 75 (1,7 to 5,2)	25 (1,7)	75 (5,2)	990 (449)	1710 (776)	2330 (1058)	740 (336)	1180 (536)	1620 (735)
		100 (6,9)	1240 (563)	2010 (913)	2640 (1199)	850 (386)	1410 (640)	1910 (867)
		125 (8,6)	1560 (708)	2300 (1044)	2940 (1335)	990 (449)	1620 (735)	2160 (981)
		150 (10)	1820 (826)	2580 (1171)	3220 (1462)	1140 (518)	1830 (831)	2380 (1081)
		75 (5,2)	1610 (731)	2610 (1185)	3370 (1530)	890 (404)	1590 (722)	2300 (1044)
	50 (3,4)	100 (6,9)	1870 (849)	3170 (1439)	4160 (1889)	1220 (554)	1880 (854)	2810 (1276)
		125 (8,6)	2310 (1049)	3600 (1634)	4670 (2120)	1400 (636)	2230 (1012)	3220 (1462)
		150 (10)	2600 (1180)	3990 (1811)	5060 (2297)	1540 (699)	2580 (1171)	3580 (1625)
		175 (12)	2800 (1271)	4380 (1989)	5460 (2479)	1690 (767)	2910 (1321)	3900 (1771)
	75 (5,2)	100 (6,9)	2190 (994)	3420 (1553)	4590 (2084)	1260 (572)	2300 (1044)	3560 (1616)
		125 (8,6)	2520 (1144)	4340 (1970)	5470 (2483)	1590 (722)	2730 (1239)	4270 (1939)
		150 (10)	2840 (1289)	5000 (2270)	6210 (2819)	1790 (813)	3060 (1389)	4710 (2138)
		175 (12)	3140 (1426)	5440 (2470)	6820 (3096)	2110 (958)	3410 (1548)	4920 (2234)

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Table 10. Water Capacities for 1/2-inch (DN 15) Body

SPRING RANGE, PSIG (bar)	SET PRESSURE, PSIG (bar)	INLET, PSIG (bar)	CAPACITIES IN GPM (l/min) OF WATER AT % DROOP					
			1/2-inch (DN 15) Body					
			Elastomer Diaphragm			Metal Diaphragm		
			10%	20%	30%	10%	20%	30%
2 to 8 (0,2 to 0,5)	2 (0,2)	10 (0,7)	0.6 (2,3)	0.9 (3,4)	1.2 (4,5)	Not Available		
		25 (1,7)	0.9 (3,4)	1.3 (4,9)	1.5 (5,7)			
		50 (3,4)	0.9 (3,4)	1.2 (4,5)	1.3 (4,9)			
	5 (0,4)	10 (0,7)	0.9 (3,4)	1.4 (5,3)	1.8 (6,8)			
		25 (1,7)	1.1 (4,2)	1.5 (5,7)	2.0 (7,6)			
		50 (3,4)	1.3 (4,9)	1.7 (6,4)	2.1 (7,9)			
	8 (0,5)	10 (0,7)	1.0 (3,8)	1.6 (6,1)	2.3 (8,7)			
		25 (1,7)	1.2 (4,5)	1.9 (7,2)	2.5 (9,5)			
		50 (3,4)	1.5 (5,7)	2.2 (8,3)	2.7 (10)			
5 to 25 (0,4 to 1,7)	5 (0,4)	25 (1,7)	1.1 (4,2)	1.6 (6,1)	2.0 (7,6)	1.0 (3,8)	1.2 (4,5)	1.5 (5,7)
		50 (3,4)	1.3 (4,9)	1.6 (6,1)	2.0 (7,6)	1.1 (4,2)	1.4 (5,3)	1.7 (6,4)
		75 (5,2)	1.3 (4,9)	1.6 (6,1)	1.8 (6,8)	1.1 (4,2)	1.4 (5,3)	1.7 (6,4)
	15 (1,1)	25 (1,7)	1.7 (6,4)	2.7 (10)	3.4 (13)	1.0 (3,8)	1.7 (6,4)	2.4 (9,1)
		50 (3,4)	2.1 (7,9)	2.9 (11)	3.6 (14)	1.5 (5,7)	2.2 (8,3)	2.8 (11)
		75 (5,2)	2.3 (8,7)	3.0 (11)	3.6 (14)	1.8 (6,8)	2.5 (9,5)	3.0 (11)
	25 (1,7)	35 (2,4)	2.4 (9,1)	3.5 (13)	4.5 (17)	1.3 (4,9)	2.3 (8,7)	3.3 (12)
		50 (3,4)	2.5 (9,5)	3.6 (14)	4.6 (17)	1.6 (6,1)	2.6 (9,8)	3.6 (14)
		75 (5,2)	2.7 (10)	3.8 (14)	4.7 (18)	2.0 (7,6)	3.0 (11)	3.8 (14)
	10 (0,7)	25 (1,7)	1.3 (4,9)	2.1 (7,9)	2.6 (9,8)	1.0 (3,8)	1.4 (5,3)	2.0 (7,6)
		50 (3,4)	1.6 (6,1)	2.3 (8,7)	2.7 (10)	1.2 (4,5)	1.7 (6,4)	2.2 (8,3)
		100 (6,9)	1.7 (6,4)	2.3 (8,7)	2.5 (9,5)	1.5 (5,7)	1.9 (7,2)	2.2 (8,3)
10 to 50 (0,7 to 3,4)	25 (1,7)	50 (3,4)	2.5 (9,5)	3.7 (14)	4.5 (17)	1.5 (5,7)	2.5 (9,5)	3.4 (13)
		75 (5,2)	2.7 (10)	3.7 (14)	4.6 (17)	1.8 (6,8)	2.8 (11)	3.6 (14)
		100 (6,9)	2.8 (11)	3.7 (14)	4.5 (17)	2.1 (7,9)	3.0 (11)	3.6 (14)
	50 (3,4)	75 (5,2)	3.3 (12)	5.3 (20)	6.5 (25)	2.2 (8,3)	3.5 (13)	4.8 (18)
		100 (6,9)	3.5 (13)	5.4 (20)	6.6 (25)	2.5 (9,5)	3.8 (14)	5.1 (19)
		125 (8,6)	3.7 (14)	5.4 (20)	6.5 (25)	2.7 (10)	4.1 (16)	5.2 (20)
	25 (1,7)	50 (3,4)	2.1 (7,9)	3.3 (12)	4.1 (16)	1.6 (6,1)	2.5 (9,5)	3.1 (12)
		100 (6,9)	2.5 (9,5)	3.5 (13)	4.1 (16)	2.1 (7,9)	2.8 (11)	3.3 (12)
		125 (8,6)	2.5 (9,5)	3.4 (13)	3.9 (15)	2.2 (8,3)	2.8 (11)	3.3 (12)
	50 (3,4)	75 (5,2)	3.2 (12)	4.8 (18)	6.2 (23)	2.2 (8,3)	3.4 (13)	4.5 (17)
		100 (6,9)	3.3 (12)	5.0 (19)	6.2 (23)	2.5 (9,5)	3.6 (14)	4.7 (18)
		125 (8,6)	3.5 (13)	5.1 (19)	6.2 (23)	2.7 (10)	3.8 (14)	4.8 (18)
25 to 90 (1,7 to 6,2)	75 (5,2)	150 (10)	3.6 (14)	5.1 (19)	6.1 (23)	2.9 (11)	4.0 (15)	4.8 (18)
		100 (6,9)	3.8 (14)	5.7 (22)	7.5 (28)	2.4 (9,1)	4.0 (15)	5.5 (21)
		125 (8,6)	4.0 (15)	5.9 (22)	7.6 (29)	2.7 (10)	4.3 (16)	5.8 (22)
	90 (6,2)	150 (10)	4.3 (16)	6.1 (23)	7.7 (29)	3.1 (12)	4.7 (18)	6.0 (23)
		175 (12)	4.5 (17)	6.2 (23)	7.7 (29)	3.4 (13)	4.9 (19)	6.2 (23)
		100 (6,9)	3.7 (14)	5.7 (22)	6.8 (26)	2.3 (8,7)	4.0 (15)	5.8 (22)
	35 (2,4)	125 (8,6)	3.9 (15)	6.0 (23)	7.3 (28)	2.6 (9,8)	4.4 (17)	6.1 (23)
		150 (10)	4.2 (16)	6.3 (24)	7.7 (29)	2.9 (11)	4.7 (18)	6.4 (24)
		175 (12)	4.4 (17)	6.5 (25)	8.1 (31)	3.3 (12)	5.0 (19)	6.6 (25)
	50 (3,4)	50 (3,4)	2.1 (8,0)	3.4 (13)	4.4 (17)	1.5 (5,7)	2.5 (9,5)	3.3 (12)
		75 (5,2)	2.4 (9,0)	3.7 (14)	4.6 (17)	1.8 (6,8)	2.7 (10)	3.6 (14)
		100 (6,9)	2.7 (10)	3.9 (15)	4.7 (18)	2.0 (7,6)	3.0 (11)	3.7 (14)
35 to 135 (2,4 to 9,3)	100 (6,9)	125 (8,6)	2.9 (11)	4.1 (16)	4.8 (18)	2.2 (8,3)	3.1 (12)	3.8 (14)
		75 (5,2)	3.1 (12)	4.6 (17)	5.8 (22)	2.0 (7,6)	3.2 (12)	4.4 (17)
		100 (6,9)	3.3 (12)	4.8 (18)	5.9 (22)	2.3 (8,7)	3.5 (13)	4.6 (17)
	135 (9,3)	125 (8,6)	3.5 (13)	4.9 (19)	5.9 (22)	2.6 (9,8)	3.8 (14)	4.7 (18)
		150 (10)	3.6 (14)	5.0 (19)	5.9 (22)	2.8 (11)	4.0 (15)	4.8 (18)
		100 (6,9)	3.6 (14)	5.9 (22)	7.4 (28)	2.6 (9,8)	4.1 (16)	5.6 (21)
	75 (5,2)	125 (8,6)	3.8 (14)	6.1 (23)	7.6 (29)	2.8 (11)	4.4 (17)	5.8 (22)
		150 (10)	4.0 (15)	6.2 (23)	7.7 (29)	2.9 (11)	4.6 (17)	5.9 (22)
		175 (12)	4.2 (16)	6.3 (24)	7.7 (29)	3.1 (12)	4.8 (18)	6.0 (23)
	35 (2,4)	125 (8,6)	4.3 (16)	7.0 (26)	8.4 (32)	2.9 (11)	4.8 (18)	6.5 (25)
		150 (10)	4.7 (18)	7.4 (28)	8.8 (33)	3.2 (12)	5.1 (19)	6.8 (26)
		175 (12)	5.0 (19)	7.6 (29)	9.1 (34)	3.5 (13)	5.4 (20)	7.1 (27)
	50 (3,4)	200 (14)	5.3 (20)	7.9 (30)		3.8 (14)	5.7 (22)	
		150 (10)	4.7 (18)	7.3 (28)	8.6 (33)	3.2 (12)	5.4 (20)	7.5 (28)
		175 (12)	5.4 (20)	8.1 (31)	9.8 (37)	3.6 (14)	6.0 (23)	8.0 (30)
	100 (6,9)	200 (14)	6.2 (23)	9.0 (34)	11 (42)	4.0 (15)	6.6 (25)	8.5 (32)

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

Table 10. Water Capacities for 3/4-inch (DN 20) Body (continued)

SPRING RANGE, PSIG (bar)	SET PRESSURE, PSIG (bar)	INLET, PSIG (bar)	CAPACITIES IN GPM (l/min) OF WATER AT % DROOP					
			3/4-inch (DN 20) Body					
			Elastomer Diaphragm			Metal Diaphragm		
			10%	20%	30%	10%	20%	30%
2 to 8 (0,2 to 0,5)	2 (0,2)	10 (0,7)	1.4 (5,3)	1.7 (6,4)	1.9 (7,2)	Not Available		
		25 (1,7)	1.7 (6,4)	1.9 (7,2)	2.2 (8,3)			
		50 (3,4)	1.9 (7,2)	2.1 (7,9)	2.4 (9,1)			
	5 (0,4)	10 (0,7)	1.9 (7,2)	2.6 (9,8)	3.6 (14)			
		25 (1,7)	2.2 (8,3)	3.1 (12)	4.1 (16)			
		50 (3,4)	2.4 (9,1)	3.7 (14)	4.8 (18)			
	8 (0,5)	10 (0,7)	2.1 (7,9)	3.6 (14)	4.7 (18)			
		25 (1,7)	2.3 (8,7)	3.9 (15)	5.4 (20)			
		50 (3,4)	2.6 (9,8)	4.1 (16)	6.1 (23)			
5 to 25 (0,4 to 1,7)	5 (0,4)	25 (1,7)	2.2 (8,3)	3.2 (12)	4.1 (16)	1.9 (7,2)	2.6 (9,8)	3.2 (12)
		50 (3,4)	3.1 (12)	4.0 (15)	4.9 (19)	2.6 (9,8)	3.3 (12)	3.8 (14)
		75 (5,2)	3.8 (14)	4.6 (17)	5.5 (21)	3.1 (12)	3.8 (14)	4.3 (16)
	15 (1,1)	25 (1,7)	3.2 (12)	5.4 (20)	8.0 (30)	2.2 (8,3)	3.3 (12)	4.5 (17)
		50 (3,4)	4.0 (15)	6.2 (23)	8.8 (33)	3.1 (12)	4.4 (17)	5.6 (21)
		75 (5,2)	4.6 (17)	6.8 (26)	9.2 (35)	3.7 (14)	5.2 (20)	6.5 (25)
	25 (1,7)	35 (2,4)	4.9 (19)	8.6 (33)	11.3 (43)	2.1 (7,9)	3.6 (14)	5.1 (19)
		50 (3,4)	5.0 (19)	8.9 (34)	11.7 (44)	2.8 (11)	4.4 (17)	6.2 (23)
		75 (5,2)	5.1 (19)	9.2 (35)	12.0 (45)	3.9 (15)	5.7 (22)	7.9 (30)
10 to 50 (0,7 to 3,4)	10 (0,7)	25 (1,7)	2.0 (7,6)	3.0 (11)	5.0 (19)	1.8 (6,8)	2.8 (11)	4.6 (17)
		50 (3,4)	2.5 (9,5)	3.4 (13)	4.9 (19)	2.3 (8,7)	3.1 (12)	4.5 (17)
		100 (6,9)	3.2 (12)	3.8 (14)	4.5 (17)	3.0 (11)	3.5 (13)	4.2 (16)
	25 (1,7)	50 (3,4)	3.8 (14)	7.1 (27)	11.0 (42)	3.5 (13)	6.3 (24)	8.9 (34)
		75 (5,2)	4.2 (16)	7.8 (30)	11.3 (43)	3.8 (14)	7.4 (28)	9.9 (37)
		100 (6,9)	4.4 (17)	8.3 (31)	11.4 (43)	4.1 (16)	8.4 (32)	10.6 (40)
	50 (3,4)	75 (5,2)	8.0 (30)	13.5 (51)	17.1 (65)	6.1 (23)	8.6 (33)	11.7 (44)
		100 (6,9)	8.6 (33)	14.0 (53)	18.0 (68)	6.2 (23)	9.2 (35)	12.6 (48)
		125 (8,6)	9.1 (34)	14.3 (54)	18.2 (69)	6.2 (23)	9.7 (37)	13.3 (50)
25 to 90 (1,7 to 6,2)	25 (1,7)	50 (3,4)	4.8 (18)	7.3 (28)	10.1 (38)	2.3 (8,7)	4.9 (19)	5.5 (21)
		100 (6,9)	6.0 (23)	8.5 (32)	11.1 (42)	4.0 (15)	6.5 (25)	8.0 (30)
		125 (8,6)	6.5 (25)	8.9 (34)	11.4 (43)	4.7 (18)	7.2 (27)	8.9 (34)
	50 (3,4)	75 (5,2)	7.0 (26)	11.1 (42)	15.6 (59)	4.3 (16)	7.4 (28)	10.8 (41)
		100 (6,9)	7.6 (29)	11.9 (45)	16.4 (62)	5.4 (20)	8.7 (33)	12.1 (46)
		125 (8,6)	8.2 (31)	12.6 (48)	16.9 (64)	6.4 (24)	9.9 (37)	13.2 (50)
	75 (5,2)	150 (10)	8.8 (33)	13.1 (50)	17.4 (66)	7.3 (28)	11.0 (42)	14.1 (53)
		100 (6,9)	9.4 (36)	15.6 (59)	18.6 (70)	5.6 (21)	9.2 (35)	13.3 (50)
		125 (8,6)	10.1 (38)	16.1 (61)	20.2 (76)	6.6 (25)	10.5 (40)	14.7 (56)
	90 (6,2)	150 (10)	10.7 (40)	16.6 (63)	20.4 (77)	7.5 (28)	11.7 (44)	16.0 (61)
		175 (12)	11.2 (42)	16.9 (64)	21.3 (81)	8.3 (31)	12.8 (48)	17.2 (65)
		100 (6,9)	9.4 (36)	14.3 (54)	16.4 (62)	6.2 (23)	10.6 (40)	15.6 (59)
		125 (8,6)	10.2 (39)	15.6 (59)	19.6 (74)	7.0 (26)	11.7 (44)	16.7 (63)
		150 (10)	10.9 (41)	16.6 (63)	21.5 (81)	7.8 (30)	12.8 (48)	17.7 (67)
		175 (12)	11.6 (44)	19.5 (74)	26.7 (101)	8.5 (32)	13.7 (52)	18.5 (70)
35 to 135 (2,4 to 9,3)	35 (2,4)	50 (3,4)	5.2 (20)	8.0 (30)	10.4 (39)	3.0 (11)	4.1 (16)	6.5 (25)
		75 (5,2)	5.9 (22)	9.0 (34)	11.5 (44)	4.2 (16)	5.9 (22)	8.4 (32)
		100 (6,9)	6.5 (25)	9.8 (37)	12.4 (47)	5.3 (20)	7.5 (28)	10.0 (38)
	50 (3,4)	125 (8,6)	7.0 (26)	10.5 (40)	13.1 (50)	6.3 (24)	8.9 (34)	11.4 (43)
		75 (5,2)	7.3 (28)	10.6 (40)	15.3 (58)	5.3 (20)	7.8 (30)	11.1 (42)
		100 (6,9)	7.7 (29)	11.2 (42)	15.6 (59)	5.9 (22)	8.7 (33)	12.0 (45)
	75 (5,2)	125 (8,6)	8.0 (30)	11.7 (44)	15.9 (60)	6.4 (24)	9.5 (36)	12.9 (49)
		150 (10)	8.2 (31)	12.1 (46)	16.0 (61)	6.9 (26)	10.2 (39)	13.5 (51)
		100 (6,9)	8.4 (32)	13.6 (51)	18.6 (70)	6.2 (23)	9.9 (37)	13.7 (52)
	100 (6,9)	125 (8,6)	8.8 (33)	14.4 (55)	19.8 (75)	6.9 (26)	10.9 (41)	14.9 (56)
		150 (10)	9.2 (35)	15.1 (57)	20.6 (78)	7.5 (28)	11.7 (44)	15.9 (60)
		175 (12)	9.6 (36)	15.7 (59)	21.3 (81)	8.1 (31)	12.5 (47)	16.9 (64)
	135 (9,3)	125 (8,6)	9.8 (37)	16.8 (64)	20.0 (76)	6.8 (26)	11.7 (44)	16.5 (62)
		150 (10)	10.6 (40)	17.4 (66)	22.3 (84)	7.3 (28)	12.6 (48)	17.7 (67)
		175 (12)	11.2 (42)	18.0 (68)	23.6 (89)	7.8 (30)	13.4 (51)	18.8 (71)
		200 (14)	11.9 (45)	18.5 (70)		8.3 (31)	14.1 (53)	
		150 (10)	12.1 (46)	17.5 (66)	20.1 (76)	7.1 (27)	13.3 (50)	19.4 (73)
		175 (12)	12.3 (47)	19.9 (75)	24.2 (92)	8.2 (31)	14.2 (54)	20.2 (76)
		200 (14)	12.3 (47)	21.8 (83)	27.0 (102)	9.2 (35)	15.0 (57)	21.0 (79)

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

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Table 10. Water Capacities for 1-inch (DN 25) Body (continued)

SPRING RANGE, PSIG (bar)	SET PRESSURE, PSIG (bar)	INLET, PSIG (bar)	CAPACITIES IN GPM (l/min) OF WATER AT % DROOP					
			1-inch (DN 25) Body					
			Elastomer Diaphragm			Metal Diaphragm		
			10%	20%	30%	10%	20%	30%
2 to 8 (0,2 to 0,5)	2 (0,2)	10 (0,7)	2.4 (9,1)	2.5 (9,5)	2.6 (9,8)	Not Available		
		25 (1,7)	3.7 (14)	4.5 (17)	4.6 (17)			
		50 (3,4)	5.4 (20)	7.1 (27)	7.2 (27)			
	5 (0,4)	10 (0,7)	2.3 (8,7)	2.5 (9,5)	5.4 (20)			
		25 (1,7)	3.1 (12)	4.0 (15)	6.6 (25)			
		50 (3,4)	4.2 (16)	6.0 (23)	8.2 (31)			
	8 (0,5)	10 (0,7)	5.0 (19)	6.7 (25)	7.4 (28)			
		25 (1,7)	6.6 (25)	7.7 (29)	8.1 (31)			
		50 (3,4)	8.7 (33)	8.9 (34)	8.9 (34)			
5 to 25 (0,4 to 1,7)	5 (0,4)	25 (1,7)	3.5 (13)	4.3 (16)	6.6 (25)	3.1 (12)	3.9 (15)	5.9 (22)
		50 (3,4)	4.7 (18)	5.9 (22)	7.9 (30)	4.3 (16)	5.3 (20)	7.1 (27)
		75 (5,2)	5.8 (22)	7.2 (27)	8.9 (34)	5.2 (20)	6.5 (25)	8.0 (30)
	15 (1,1)	25 (1,7)	7.0 (26)	7.6 (29)	15 (57)	3.4 (13)	4.5 (17)	6.3 (24)
		50 (3,4)	7.4 (28)	9.8 (37)	16 (61)	5.2 (20)	6.8 (26)	8.8 (33)
		75 (5,2)	7.8 (30)	12 (45)	16 (61)	6.8 (26)	8.8 (33)	11 (42)
	25 (1,7)	35 (2,4)	11 (42)	17 (64)	24 (91)	3.8 (14)	5.8 (22)	9.8 (37)
		50 (3,4)	12 (45)	18 (68)	24 (91)	5.1 (19)	7.3 (28)	11 (42)
		75 (5,2)	13 (49)	19 (72)	25 (95)	7.1 (27)	9.6 (36)	14 (53)
	10 (0,7)	25 (1,7)	5.2 (20)	7.9 (30)	12 (45)	3.7 (14)	4.0 (15)	5.1 (19)
		50 (3,4)	6.8 (26)	9.7 (37)	13 (49)	5.5 (21)	6.2 (23)	7.5 (28)
		100 (6,9)	9.3 (35)	13 (49)	15 (57)	8.2 (31)	9.5 (36)	11 (42)
10 to 50 (0,7 to 3,4)	25 (1,7)	50 (3,4)	11 (42)	19 (72)	26 (98)	5.4 (20)	6.9 (26)	10 (38)
		75 (5,2)	13 (49)	21 (79)	27 (102)	7.2 (27)	9.2 (35)	13 (49)
		100 (6,9)	14 (53)	22 (83)	28 (106)	8.8 (33)	11 (42)	15 (57)
	50 (3,4)	75 (5,2)	20 (76)	33 (125)	40 (151)	8.3 (31)	14 (53)	21 (79)
		100 (6,9)	22 (83)	34 (129)	42 (159)	9.2 (35)	15 (57)	22 (83)
		125 (8,6)	24 (91)	35 (132)	44 (167)	10 (38)	15 (57)	23 (87)
	25 (1,7)	50 (3,4)	6.4 (24)	13 (49)	22 (83)	6.4 (24)	9.6 (36)	14 (53)
		100 (6,9)	12 (45)	17 (64)	25 (95)	9.4 (36)	13 (49)	18 (68)
		125 (8,6)	14 (53)	19 (72)	26 (98)	11 (42)	14 (53)	20 (76)
	50 (3,4)	75 (5,2)	17 (64)	28 (106)	39 (148)	9.3 (35)	17 (64)	29 (110)
		100 (6,9)	19 (72)	29 (110)	40 (151)	10 (38)	18 (68)	29 (110)
		125 (8,6)	20 (76)	31 (117)	41 (155)	11 (42)	19 (72)	29 (110)
25 to 90 (1,7 to 6,2)	75 (5,2)	150 (10)	21 (79)	32 (121)	41 (155)	12 (45)	20 (76)	29 (110)
		100 (6,9)	21 (79)	35 (132)	44 (167)	11 (42)	20 (76)	33 (125)
		125 (8,6)	23 (87)	37 (140)	47 (178)	13 (49)	22 (83)	34 (129)
	90 (6,2)	150 (10)	25 (95)	40 (151)	50 (189)	15 (57)	24 (91)	36 (136)
		175 (12)	26 (98)	42 (159)	52 (197)	17 (64)	26 (98)	38 (144)
		100 (6,9)	22 (83)	33 (125)	39 (148)	11 (42)	21 (79)	34 (129)
	35 (2,4)	125 (8,6)	24 (91)	37 (140)	45 (170)	13 (49)	23 (87)	36 (136)
		150 (10)	27 (102)	41 (155)	50 (189)	14 (53)	25 (95)	38 (144)
		175 (12)	29 (110)	44 (167)	55 (208)	15 (57)	27 (102)	39 (148)
	50 (3,4)	50 (3,4)	8.9 (34)	15 (57)	22 (83)	8.0 (30)	14 (53)	19 (72)
		75 (5,2)	11 (42)	18 (68)	25 (95)	10 (38)	15 (57)	21 (79)
		100 (6,9)	13 (49)	20 (76)	27 (102)	11 (42)	16 (61)	23 (87)
35 to 135 (2,4 to 9,3)	135 (9,3)	125 (8,6)	15 (57)	22 (83)	29 (110)	12 (45)	18 (68)	24 (91)
		75 (5,2)	17 (64)	24 (91)	32 (121)	9.7 (37)	16 (61)	23 (87)
		100 (6,9)	17 (64)	26 (98)	34 (129)	11 (42)	18 (68)	25 (95)
	75 (5,2)	125 (8,6)	17 (64)	27 (102)	35 (132)	13 (49)	19 (72)	26 (98)
		150 (10)	18 (68)	29 (110)	37 (140)	15 (57)	21 (79)	28 (106)
		100 (6,9)	20 (76)	33 (125)	43 (163)	9.2 (35)	17 (64)	28 (106)
	100 (6,9)	125 (8,6)	22 (83)	35 (132)	46 (174)	12 (45)	20 (76)	32 (121)
		150 (10)	24 (91)	37 (140)	49 (185)	15 (57)	24 (91)	35 (132)
		175 (12)	25 (95)	39 (148)	51 (193)	17 (64)	27 (102)	38 (144)
	35 (2,4)	125 (8,6)	23 (87)	40 (151)	47 (178)	13 (49)	23 (87)	34 (129)
		150 (10)	24 (91)	42 (159)	55 (208)	15 (57)	26 (98)	37 (140)
		175 (12)	26 (98)	44 (167)	59 (223)	17 (64)	28 (106)	40 (151)
	50 (3,4)	200 (14)	27 (102)	46 (174)		18 (68)	31 (117)	
		150 (10)	14 (53)	41 (155)	48 (182)	13 (49)	28 (106)	42 (159)
		175 (12)	25 (95)	50 (189)	57 (216)	18 (68)	32 (121)	47 (178)
	135 (9,3)	200 (14)	35 (132)	56 (212)	66 (250)	20 (76)	35 (132)	52 (197)

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

Table 10. Water Capacities for 1-1/2 x 1-inch (DN 40 x 25) Body (continued)

SPRING RANGE, PSIG (bar)	SET PRESSURE, PSIG (bar)	INLET, PSIG (bar)	CAPACITIES IN GPM (l/min) OF WATER AT % DROOP					
			1-1/2 x 1-inch (DN 40 x 25) Body					
			Elastomer Diaphragm			Metal Diaphragm		
			10%	20%	30%	10%	20%	30%
2 to 8 (0,2 to 0,5)	2 (0,2)	10 (0,7)	2.7 (10)	2.8 (11)	2.9 (11)	Not Available		
		25 (1,7)	4.2 (16)	5.1 (19)	5.2 (20)			
		50 (3,4)	6.2 (23)	8.2 (31)	8.3 (31)			
	5 (0,4)	10 (0,7)	2.6 (10)	2.8 (11)	6.0 (23)			
		25 (1,7)	3.5 (13)	4.5 (17)	7.5 (28)			
		50 (3,4)	4.8 (18)	6.8 (26)	9.4 (36)			
	8 (0,5)	10 (0,7)	5.5 (21)	7.4 (28)	8.2 (31)			
		25 (1,7)	7.4 (28)	8.6 (33)	9.1 (34)			
		50 (3,4)	9.9 (37)	10 (38)	10 (38)			
5 to 25 (0,4 to 1,7)	5 (0,4)	25 (1,7)	3.9 (15)	4.8 (18)	7.4 (28)	3.5 (13)	4.4 (17)	6.8 (26)
		50 (3,4)	5.4 (20)	6.8 (26)	9.0 (34)	4.9 (19)	6.1 (23)	8.2 (31)
		75 (5,2)	6.6 (25)	8.3 (31)	10 (38)	6.0 (23)	7.5 (28)	9.0 (34)
	15 (1,1)	25 (1,7)	7.8 (30)	8.5 (32)	17 (64)	3.8 (14)	5.0 (19)	7.0 (26)
		50 (3,4)	8.4 (32)	11 (42)	18 (68)	5.9 (22)	7.7 (29)	10 (38)
		75 (5,2)	8.8 (33)	13 (49)	18 (68)	7.7 (29)	10 (38)	12 (45)
	25 (1,7)	35 (2,4)	12 (45)	19 (72)	26 (98)	4.2 (16)	6.4 (24)	11 (42)
		50 (3,4)	13 (49)	20 (76)	27 (102)	5.8 (22)	8.2 (31)	13 (49)
		75 (5,2)	15 (57)	21 (79)	28 (106)	8.1 (31)	10.9 (41)	16 (61)
10 to 50 (0,7 to 3,4)	10 (0,7)	25 (1,7)	5.8 (22)	8.9 (34)	14 (53)	4.1 (16)	4.5 (17)	5.8 (22)
		50 (3,4)	7.8 (30)	11 (42)	15 (57)	6.2 (23)	7.1 (27)	8.6 (33)
		100 (6,9)	11 (42)	14 (53)	18 (68)	9.3 (35)	11 (42)	13 (49)
	25 (1,7)	50 (3,4)	13 (49)	22 (83)	30 (114)	6.0 (23)	7.7 (29)	12 (45)
		75 (5,2)	15 (57)	23 (87)	31 (117)	8.2 (31)	10 (38)	14 (53)
		100 (6,9)	17 (64)	25 (95)	32 (121)	10 (38)	13 (49)	17 (64)
	50 (3,4)	75 (5,2)	22 (83)	37 (140)	44 (167)	9.3 (35)	15 (57)	24 (91)
		100 (6,9)	25 (95)	38 (144)	47 (178)	10 (38)	16 (61)	25 (95)
		125 (8,6)	27 (102)	40 (151)	50 (189)	11 (42)	18 (68)	26 (98)
25 to 90 (1,7 to 6,2)	25 (1,7)	50 (3,4)	7.2 (27)	15 (57)	25 (95)	7.2 (27)	11 (42)	16 (61)
		100 (6,9)	14 (53)	20 (76)	29 (110)	11 (42)	15 (57)	21 (79)
		125 (8,6)	16 (61)	22 (83)	30 (114)	12 (45)	16 (61)	23 (87)
	50 (3,4)	75 (5,2)	19 (72)	31 (117)	43 (163)	10 (38)	19 (72)	32 (121)
		100 (6,9)	21 (79)	33 (125)	45 (170)	11 (42)	20 (76)	33 (125)
		125 (8,6)	23 (87)	35 (132)	46 (174)	12 (45)	22 (83)	33 (125)
	75 (5,2)	150 (10)	24 (91)	36 (136)	47 (178)	13 (49)	23 (87)	34 (129)
		100 (6,9)	24 (91)	39 (148)	48 (182)	12 (45)	22 (83)	36 (136)
		125 (8,6)	26 (98)	42 (159)	53 (201)	15 (57)	25 (95)	39 (148)
	90 (6,2)	150 (10)	28 (106)	45 (170)	56 (212)	17 (64)	27 (102)	41 (155)
		175 (12)	30 (114)	47 (178)	60 (227)	19 (72)	30 (114)	43 (163)
		100 (6,9)	24 (91)	36 (136)	42 (159)	13 (49)	23 (87)	37 (140)
		125 (8,6)	27 (102)	41 (155)	51 (193)	14 (53)	26 (98)	40 (151)
		150 (10)	30 (114)	46 (174)	57 (216)	16 (61)	28 (106)	42 (159)
		175 (12)	33 (125)	50 (189)	62 (235)	17 (64)	31 (117)	44 (167)
35 to 135 (2,4 to 9,3)	35 (2,4)	50 (3,4)	9.9 (37)	16 (61)	25 (95)	9.0 (34)	15 (57)	21 (79)
		75 (5,2)	13 (49)	20 (76)	28 (106)	12 (45)	17 (64)	23 (87)
		100 (6,9)	15 (57)	23 (87)	31 (117)	13 (49)	19 (72)	26 (98)
		125 (8,6)	17 (64)	26 (98)	34 (129)	14 (53)	20 (76)	28 (106)
	50 (3,4)	75 (5,2)	19 (72)	27 (102)	36 (136)	11 (42)	17 (64)	26 (98)
		100 (6,9)	19 (72)	29 (110)	38 (144)	13 (49)	20 (76)	28 (106)
		125 (8,6)	20 (76)	31 (117)	40 (151)	15 (57)	22 (83)	30 (114)
		150 (10)	20 (76)	33 (125)	42 (159)	17 (64)	24 (91)	32 (121)
	75 (5,2)	100 (6,9)	22 (83)	37 (140)	48 (182)	10 (38)	19 (72)	31 (117)
		125 (8,6)	24 (91)	40 (151)	52 (197)	14 (53)	23 (87)	36 (136)
		150 (10)	27 (102)	42 (159)	56 (212)	17 (64)	27 (102)	40 (151)
		175 (12)	29 (110)	44 (167)	59 (223)	19 (72)	30 (114)	43 (163)
	100 (6,9)	125 (8,6)	25 (95)	44 (167)	51 (193)	15 (57)	26 (98)	38 (144)
		150 (10)	27 (102)	47 (178)	62 (235)	17 (64)	29 (110)	42 (159)
		175 (12)	29 (110)	50 (189)	67 (254)	19 (72)	32 (121)	46 (174)
		200 (14)	31 (117)	52 (197)		20 (76)	35 (132)	
	135 (9,3)	150 (10)	16 (61)	45 (170)	51 (193)	14 (53)	32 (121)	47 (178)
		175 (12)	28 (106)	56 (212)	62 (235)	20 (76)	35 (132)	53 (201)
		200 (14)	39 (148)	63 (238)	71 (269)	22 (83)	39 (148)	58 (220)

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

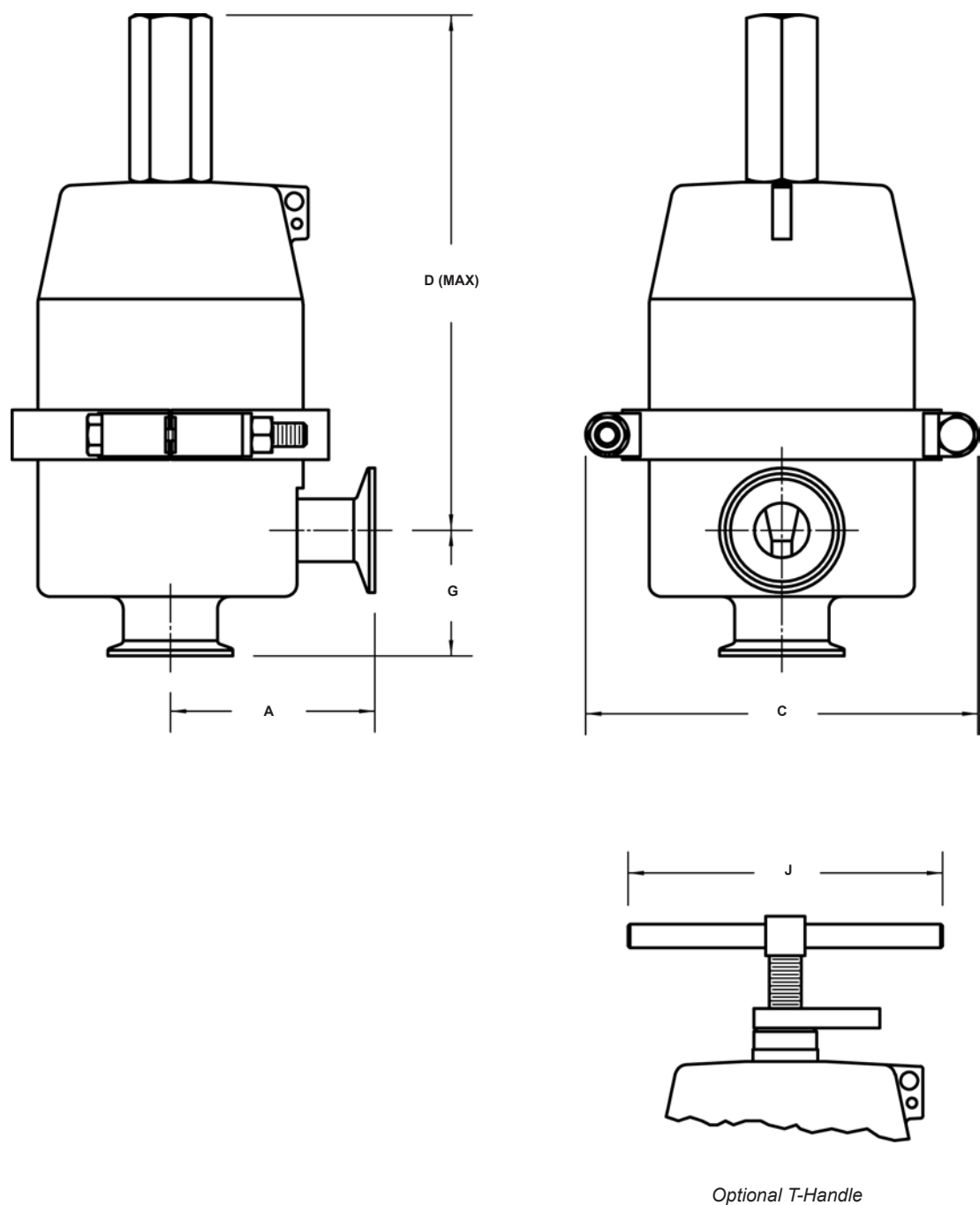
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Table 10. Water Capacities for 2-inch (DN 50) Body (continued)

SPRING RANGE, PSIG (bar)	SET PRESSURE, PSIG (bar)	INLET PRESSURE, PSIG (bar)	CAPACITIES IN GPM (l/min) OF WATER AT % DROOP					
			2-inch (DN 50)					
			Elastomer Diaphragm			Metal Diaphragm		
			10%	20%	30%	10%	20%	30%
10 to 25 (0,7 to 1,7)	10 (0,7)	25 (1,7)	32 (121)	46 (174)	64 (242)	27 (102)	39 (148)	47 (178)
		50 (3,4)	47 (178)	56 (212)	80 (303)	35 (132)	47 (178)	56 (212)
	15 (1,0)	25 (1,7)	37 (140)	54 (204)	78 (295)	25 (95)	39 (148)	56 (212)
		50 (3,4)	44 (167)	70 (265)	98 (371)	37 (140)	50 (189)	70 (265)
	25 (1,7)	50 (3,4)	53 (201)	94 (356)	128 (484)	40 (151)	57 (216)	86 (326)
		75 (5,2)	62 (235)	102 (386)	135 (511)	44 (167)	69 (261)	95 (360)
15 to 50 (1,0 to 3,4)	15 (1,0)	25 (1,7)	34 (129)	47 (178)	68 (257)	25 (95)	37 (140)	48 (182)
		50 (3,4)	43 (163)	58 (220)	82 (310)	35 (132)	47 (178)	61 (231)
		75 (5,2)	48 (182)	63 (238)	82 (310)	40 (151)	50 (189)	65 (246)
		100 (6,9)	48 (182)	64 (242)	80 (303)	43 (163)	52 (197)	67 (254)
		125 (8,6)	48 (182)	64 (242)	80 (303)	45 (170)	52 (197)	68 (257)
	25 (1,7)	50 (3,4)	40 (151)	80 (303)	105 (397)	37 (140)	54 (204)	79 (299)
		75 (5,2)	52 (197)	90 (341)	118 (447)	44 (167)	66 (250)	91 (344)
		100 (6,9)	59 (223)	94 (356)	120 (454)	46 (174)	70 (265)	90 (341)
		125 (8,6)	59 (223)	93 (352)	117 (443)	45 (170)	71 (269)	88 (333)
	50 (3,4)	75 (5,2)	67 (254)	114 (431)	156 (590)	44 (167)	80 (303)	120 (454)
		100 (6,9)	85 (322)	132 (500)	171 (647)	58 (220)	99 (375)	137 (519)
		125 (8,6)	93 (352)	139 (526)	178 (674)	66 (250)	109 (413)	144 (545)
		150 (10)	97 (367)	141 (534)	178 (674)	70 (265)	110 (416)	142 (537)
		50 (3,4)	47 (178)	74 (280)	96 (363)	35 (132)	49 (185)	71 (269)
25 to 75 (1,7 to 5,2)	25 (1,7)	75 (5,2)	51 (193)	85 (322)	112 (424)	45 (170)	62 (235)	84 (318)
		100 (6,9)	60 (227)	91 (344)	113 (428)	47 (178)	68 (257)	87 (329)
		125 (8,6)	63 (238)	92 (348)	109 (413)	46 (174)	70 (265)	88 (333)
		150 (10)	61 (231)	92 (348)	105 (397)	45 (170)	70 (265)	88 (333)
		75 (5,2)	64 (242)	110 (416)	148 (560)	43 (163)	77 (291)	116 (439)
	50 (3,4)	100 (6,9)	67 (254)	120 (454)	160 (606)	55 (208)	91 (344)	130 (492)
		125 (8,6)	77 (291)	129 (488)	171 (647)	63 (238)	101 (382)	138 (522)
		150 (10)	88 (333)	136 (515)	175 (662)	69 (261)	105 (397)	137 (519)
		175 (12)	94 (356)	135 (511)	172 (651)	71 (269)	106 (401)	137 (519)
	75 (5,2)	100 (6,9)	81 (307)	130 (492)	171 (647)	58 (220)	110 (416)	161 (609)
		125 (8,6)	87 (329)	147 (556)	189 (715)	68 (257)	119 (450)	175 (662)
		150 (10)	94 (356)	154 (583)	202 (765)	74 (280)	130 (492)	187 (708)
		175 (12)	101 (382)	160 (606)	209 (791)	80 (303)	138 (522)	193 (731)

Table 10. Water Capacities for 3-inch (DN 80) Body (continued)

SPRING RANGE, PSIG (bar)	SET PRESSURE, PSIG (bar)	INLET PRESSURE, PSIG (bar)	CAPACITIES IN GPM (l/min) OF WATER AT % DROOP					
			3-inch (DN 80)					
			Elastomer Diaphragm			Metal Diaphragm		
			10%	20%	30%	10%	20%	30%
10 to 25 (0,7 to 1,7)	10 (0,7)	25 (1,7)	34 (129)	52 (197)	76 (288)	25 (95)	36 (136)	46 (174)
		50 (3,4)	44 (167)	68 (257)	96 (363)	30 (114)	46 (174)	55 (208)
	15 (1,0)	25 (1,7)	36 (136)	61 (231)	92 (348)	25 (95)	36 (136)	56 (212)
		50 (3,4)	56 (212)	91 (344)	122 (462)	36 (136)	48 (182)	71 (269)
	25 (1,7)	50 (3,4)	73 (276)	116 (439)	148 (560)	39 (148)	57 (216)	88 (333)
		75 (5,2)	70 (265)	127 (481)	162 (613)	44 (167)	74 (280)	108 (409)
15 to 50 (1,0 to 3,4)	15 (1,0)	25 (1,7)	36 (136)	51 (193)	71 (269)	22 (83)	34 (129)	47 (178)
		50 (3,4)	43 (163)	66 (250)	94 (356)	35 (132)	48 (182)	67 (254)
		75 (5,2)	52 (197)	79 (299)	104 (394)	43 (163)	58 (220)	79 (299)
		100 (6,9)	60 (227)	88 (333)	106 (401)	48 (182)	64 (242)	87 (329)
		125 (8,6)	65 (246)	95 (360)	109 (413)	51 (193)	68 (257)	91 (344)
	25 (1,7)	50 (3,4)	50 (189)	89 (337)	124 (469)	40 (151)	54 (204)	78 (295)
		75 (5,2)	64 (242)	104 (394)	142 (537)	46 (174)	68 (257)	101 (382)
		100 (6,9)	69 (261)	113 (428)	151 (572)	50 (189)	79 (299)	113 (428)
		125 (8,6)	70 (265)	113 (428)	150 (568)	54 (204)	89 (337)	120 (454)
	50 (3,4)	75 (5,2)	85 (322)	135 (511)	180 (681)	43 (163)	81 (307)	125 (473)
		100 (6,9)	94 (356)	156 (590)	202 (765)	57 (216)	99 (375)	153 (579)
		125 (8,6)	103 (390)	168 (636)	221 (836)	65 (246)	111 (420)	167 (632)
		150 (10)	111 (420)	175 (662)	230 (871)	70 (265)	120 (454)	175 (662)
		50 (3,4)	47 (178)	84 (318)	121 (458)	38 (144)	59 (223)	84 (318)
25 to 75 (1,7 to 5,2)	25 (1,7)	75 (5,2)	53 (201)	94 (356)	130 (492)	43 (163)	70 (265)	99 (375)
		100 (6,9)	63 (238)	103 (390)	137 (519)	47 (178)	79 (299)	109 (413)
		125 (8,6)	74 (280)	109 (413)	139 (526)	51 (193)	85 (322)	115 (435)
		150 (10)	79 (299)	112 (424)	140 (530)	56 (212)	91 (344)	118 (447)
		75 (5,2)	73 (276)	123 (466)	164 (621)	42 (159)	78 (295)	119 (450)
	50 (3,4)	100 (6,9)	82 (310)	144 (545)	194 (734)	57 (216)	92 (348)	142 (537)
		125 (8,6)	98 (371)	157 (594)	209 (791)	65 (246)	105 (397)	157 (594)
		150 (10)	106 (401)	167 (632)	217 (821)	69 (261)	118 (447)	167 (632)
		175 (12)	111 (420)	176 (666)	221 (836)	73 (276)	128 (484)	175 (662)
	75 (5,2)	100 (6,9)	85 (322)	139 (526)	194 (734)	51 (193)	97 (367)	158 (598)
		125 (8,6)	96 (363)	171 (647)	224 (848)	64 (242)	115 (435)	187 (708)
		150 (10)	106 (401)	192 (727)	246 (931)	71 (269)	126 (477)	203 (768)
		175 (12)	114 (431)	203 (768)	262 (992)	83 (314)	138 (522)	206 (780)



SIZE, INCHES (DN)	DIMENSIONS, INCHES (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)	10.60 (269)	13.76 (350)	4.00 (102)	5.00 (127)
3 (80)	5.50 (140)	10.60 (269)	13.76 (350)	4.00 (102)	5.00 (127)

Figure 5. Dimensions

Product Ordering Guide

Body Size (Select One)

- ☐ 1/2-inch (DN 15)**
- ☐ 3/4-inch (DN 20)**
- ☐ 1-inch (DN 25)**
- ☐ 1-1/2 x 1-inch (DN 40 x 25)**
- ☐ 1-1/2-inch (DN 40) Full port**
- ☐ 2-inch (DN 50)**
- ☐ 3-inch (DN 80)**

Internal Finish (Select One)

- ☐ 20 µin (0,5 µm) Ra**
- ☐ Other, please specify _____

Seat (Select One)

- ☐ Metal**
- ☐ Soft Virgin PTFE**
- ☐ Soft PEEK**

Diaphragm and O-ring Material (Select One)

- ☐ EPDM (FDA)**
- ☐ PTFE coated Fluoroelastomer (1/2 through 1-1/2-inch only)**
- ☐ 316L Stainless Steel with PTFE/FKM O-ring**

Spring Range (Select One)

1/2 (DN 15), 3/4 (DN 20), 1 (25), 1-1/2 x 1-inch (DN 40 x 25)

- ☐ 2 to 8 psig (0,2 to 0,5 bar) (Not available with metal diaphragm)**
- ☐ 5 to 25 psig (0,4 to 1,7 bar)**
- ☐ 10 to 50 psig (0,7 to 3,4 bar)**
- ☐ 25 to 90 psig (1,7 to 6,2 bar)**
- ☐ 35 to 135 psig (2,4 to 9,3 bar)**

1-1/2-inch (DN 40) Full port

- ☐ 5 to 25 psig (0,4 to 1,7 bar)**
- ☐ 10 to 50 psig (0,7 to 3,4 bar)**
- ☐ 25 to 75 psig (1,7 to 5,2 bar)**
- ☐ 35 to 100 psig (2,4 to 6,9 bar)**

2 (DN 50), 3-inch (DN 80)

- ☐ 10-25 psig (0,7 to 1,7 bar)**
- ☐ 15-50 psig (1,0 to 3,4 bar)**
- ☐ 25-75 psig (1,7 to 5,2 bar)**

T-handle Adjusting Screw (Optional)

- ☐ Yes**
- ☐ No

Pressure Loaded Spring Case (Optional)

- ☐ Yes*
- ☐ No

Vacuum Protection (Optional - for use with elastomer diaphragm only)

- ☐ Yes*
- ☐ No

Certificate (Optional - select all that are required)

- ☐ 3A (EPDM and 316L Stainless Steel diaphragm only)**
- ☐ 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

Fisher Regulators Quick Order Guide	
***	Standard – Readily Available for Shipment
**	Non-Standard – Allow Additional Time for Shipment
*	Special Order – Constructed from Non-Stocked Parts. Consult your Fisher Sales Representative 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: _____

Does the application require overpressure protection? _____

Regulator Specifications

Maximum Inlet Pressure: _____

Minimum Inlet Pressure: _____

Differential Pressure: _____

Set Pressure: _____

Maximum Flow: _____

Accuracy Requirements

Less than or equal to: ☐ 10%, ☐ 20%, ☐ 30%

Other Requirements: _____

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