

Type SR8 Sanitary Backpressure Regulator

✧ Sanitary Design Standards

✧ Superior Flow Performance and Accuracy

✧ Wide Control Range

✧ Diaphragm Cycle Life

✧ Highly Stable

✧ Large Turndown Ratio

✧ Tight Shutoff

✧ Easy Maintenance

✧ Covered Adjusting Screw

✧ Self-Draining



W8967

✧ Optional T-Handle Available

✧ Remote Setpoint Capability

✧ Nonporous Polished Body and Internals

✧ Optional Diaphragm Support

Figure 1. Type SR8 Sanitary Backpressure Regulator

Type SR8

Specifications

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

Body Size, Inlet and Outlet Connection

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

Service Media

All Sizes: Steam, Gas and Liquid

End Connection

Tri-Clamp® Sanitary connections⁽⁵⁾

Body Pressure/Temperature Ratings⁽¹⁾

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

Maximum Operating Pressures⁽¹⁾⁽³⁾

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

Set Pressure Ranges

See Table 1

Maximum Differential Pressures⁽¹⁾

See Table 1

Temperature Capabilities⁽¹⁾

See Table 2

Flow Coefficients

See Table 4

Construction Materials

See Table 3

Pressure Registration

Internal

Pressure Loaded Spring Case Option

Maximum Loading Pressure

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

125 psig / 8.6 bar

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

60 psig / 4.1 bar

1/4 NPT Tapped Vent Connection

Vacuum Protection Option

Maximum Vacuum Pressure:

14 psig / 1.0 bar (vacuum)

Certifications Available Upon Request

FDA approved elastomers/plastics

Material and Functional Test Certificates

USP Class VI approved elastomers/plastics⁽²⁾

ADI free compliant elastomers/plastics⁽²⁾

Spring Case Construction

Drilled untapped vent holes (**standard**)

1/4 NPT for Pressure Load Connection (optional)

Pressure Setting Adjustment

Adjusting screw with Electropolished

Cover (**standard**)

T-Handle adjusting screw (optional)

Shutoff Classification per ANSI/FCI 70-3-2003

Metal Seat: ANSI Class III

Polytetrafluoroethylene (PTFE) Soft Seat:

ANSI Class VI

Polyether Ether Ketone (PEEK) Soft Seat:

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

Approximate Weight

1/2 and 3/4 in. / 15 and 20 mm: 9 lbs / 4 kg

1 and 1-1/2 in. / 25 and 40 mm: 18 lbs / 8 kg

2 and 3 in. / 50 and 80 mm: 60 lbs / 27 kg

Options

Vacuum protection

Pressure Loaded spring case

T-handle adjusting screw

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

2. Contact your Local Sales Office for details on available constructions.

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

4. Polyether Ether Ketone (PEEK) Seat meets ANSI Class IV or better below 150°F / 66°C.

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

Features

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

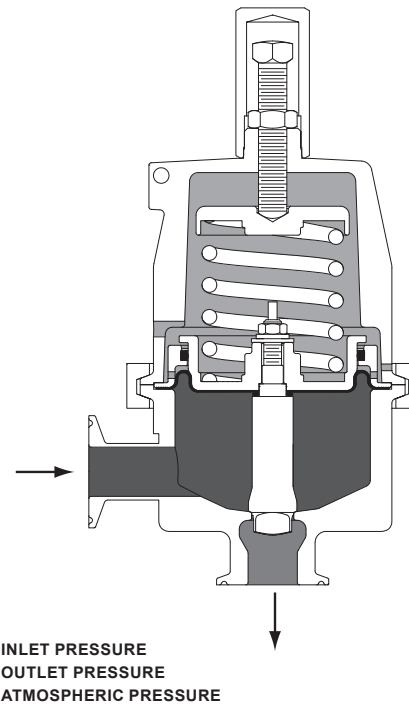


Figure 2. Type SR8 Operational Schematic

Introduction

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

Principle of Operation

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

Type SR8

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

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

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

Table 2. Temperature Capabilities

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

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

Table 3. Construction Materials

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

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Table 4. Flow Coefficients

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

Capacity Data

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

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

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

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

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

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

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

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

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

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

Installation

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

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

Type SR8

Table 5. C_v Coefficients

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

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

Table 5. C_v Coefficients (continued)

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

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

Table 5. C_v Coefficients (continued)

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

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

Table 5. C_v Coefficients (continued)

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

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

Type SR8

Table 5. C_v Coefficients (continued)

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

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

Table 5. C_v Coefficients (continued)

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

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

Table 5. C_v Coefficients (continued)

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

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

Table 6. Air Capacities

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

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

Table 6. Air Capacities (continued)

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

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

Type SR8

Table 6. Air Capacities (continued)

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

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

Table 6. Air Capacities (continued)

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

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

Table 6. Air Capacities (continued)

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

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

Table 6. Air Capacities (continued)

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

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

Table 6. Air Capacities (continued)

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

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

Type SR8

Table 7. Steam Capacities

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

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

Table 7. Steam Capacities (continued)

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

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

Table 7. Steam Capacities (continued)

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

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

Table 7. Steam Capacities (continued)

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

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

Type SR8

Table 7. Steam Capacities (continued)

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

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

Table 7. Steam Capacities (continued)

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

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

Table 7. Steam Capacities (continued)

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

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

Table 8. Liquid Capacities

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

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

Table 8. Liquid Capacities (continued)

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

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

Type SR8

Table 8. Liquid Capacities (continued)

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

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

Table 8. Liquid Capacities (continued)

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

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

Table 8. Liquid Capacities (continued)

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

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

Table 8. Liquid Capacities (continued)

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

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

Table 8. Liquid Capacities (continued)

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

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

Type SR8

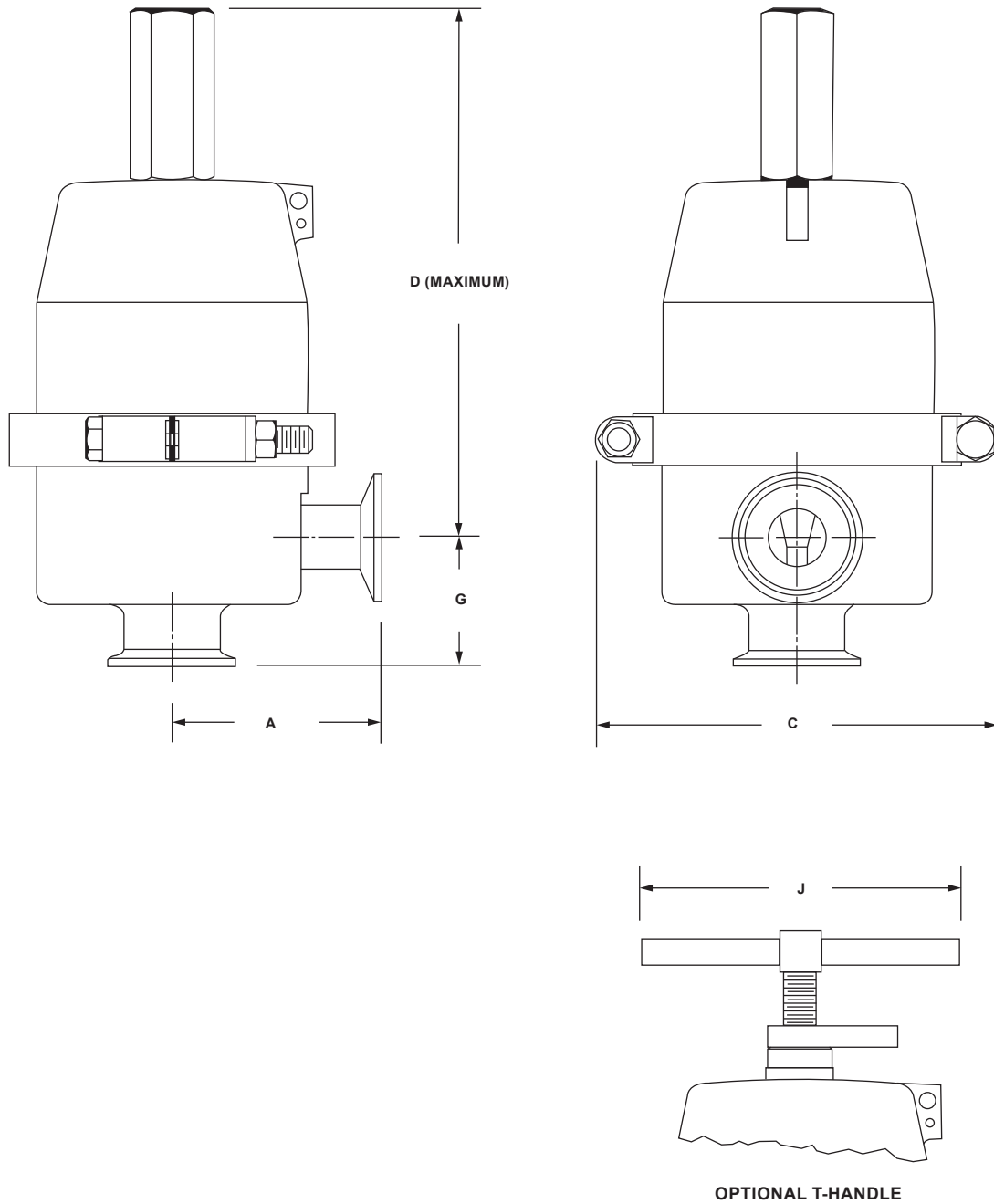


Figure 3. Dimensions

Table 9. Dimensions

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

Ordering Guide

Body Size (Select One)

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

Internal Finish (Select One)

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

Seat (Select One)

- Metal**
- Soft, Virgin PTFE**
- Soft Polyether Ether Ketone (PEEK)**

Diaphragm and O-ring Material (Select One)

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

Spring Range (Select One)

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

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

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

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

2 and 3 in. / 50 and 80 mm

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

T-handle Adjusting Screw (Optional)

- Yes**
- No

Pressure Loaded Spring Case (Optional)

- Yes*
- No

Vacuum Protection (Optional – elastomer diaphragm only)

- Yes*
- No

Certificates (Optional)

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

Parts Kit (Optional)

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

Type SR8

Ordering Guide (continued)

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

| Specification Worksheet |
|--|
| Application: |
| Specific Use _____ |
| Line Size _____ |
| Fluid Type and Specific Gravity _____ |
| Fluid Temperature _____ |
| Upstream Regulator Specifications: |
| Brand of Upstream Regulator? _____ |
| Orifice Size of the Upstream Regulator? _____ |
| Wide-Open Coefficient of the Upstream Regulator? _____ |
| Maximum Inlet Pressure (P_{1max}) _____ |
| Downstream Pressure Setting(s) (P_2) _____ |
| Maximum Flow (Q_{max}) _____ |
| Relief Valve Specifications: |
| Relief Valve Setpoint _____ |
| Accuracy Requirements? _____ |
| Need for Extremely Fast Response? _____ |
| Other Requirements: _____ |
| _____ |

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