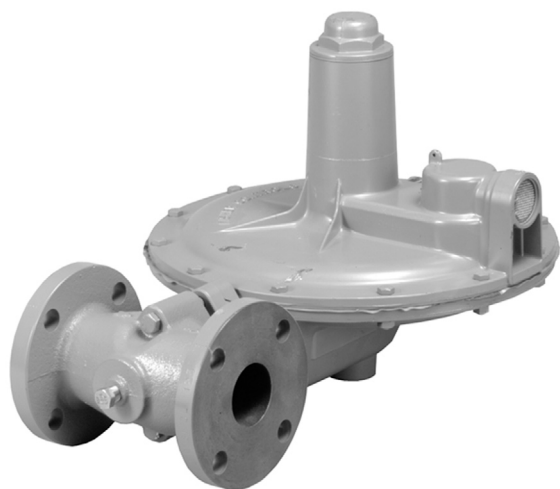


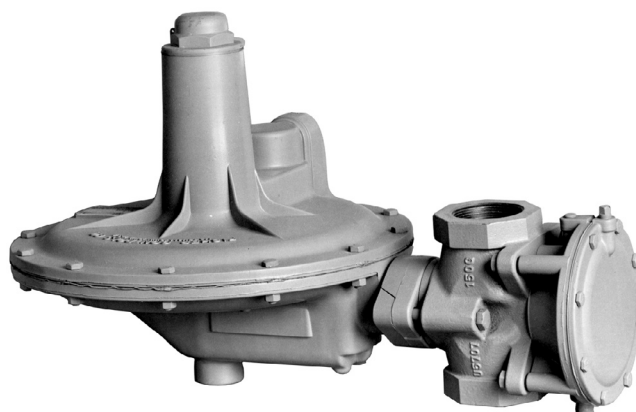
S200 Series Pressure Reducing Regulators



TYPICAL S200 SERIES REGULATOR

- Wide Variety of Body Materials and End Connections Styles Available
- Fixed Factor / PFM Accuracy

- On / Off Fast Acting Loads
- Commercial / Industrial Service



S200 SERIES REGULATOR WITH
"TRUE" MONITOR



S200 SERIES REGULATOR WITH
INTEGRAL SLAM-SHUT DEVICE

- Optional Internal Relief
- Optional "True" Monitor
- Optional Integral Slam-Shut Device



Introduction

The quick-reacting S200 Series pressure reducing service regulator is typically used in an industrial or commercial installation to minimize the shock effect of sudden downstream load changes that might otherwise activate safety shutoff equipment. In such an installation, where gas consumption varies from almost nothing to several thousand standard cubic feet per hour (SCFH) (or normal cubic meters per hour (Nm³/h), snap-acting solenoid valves can cause sudden load changes. The resulting shock pressures and regulator instability can cause safety equipment to shut the installation down. But with an S200 Series regulator, transmission of shock loads to downstream equipment is reduced, thereby helping maintain downstream pressures within desired limits.

The S200 Series regulators are available in several different configurations to meet the demands of varying services and overpressure protection requirements. Each configuration is made up of different construction features. The following section describes the available construction features.

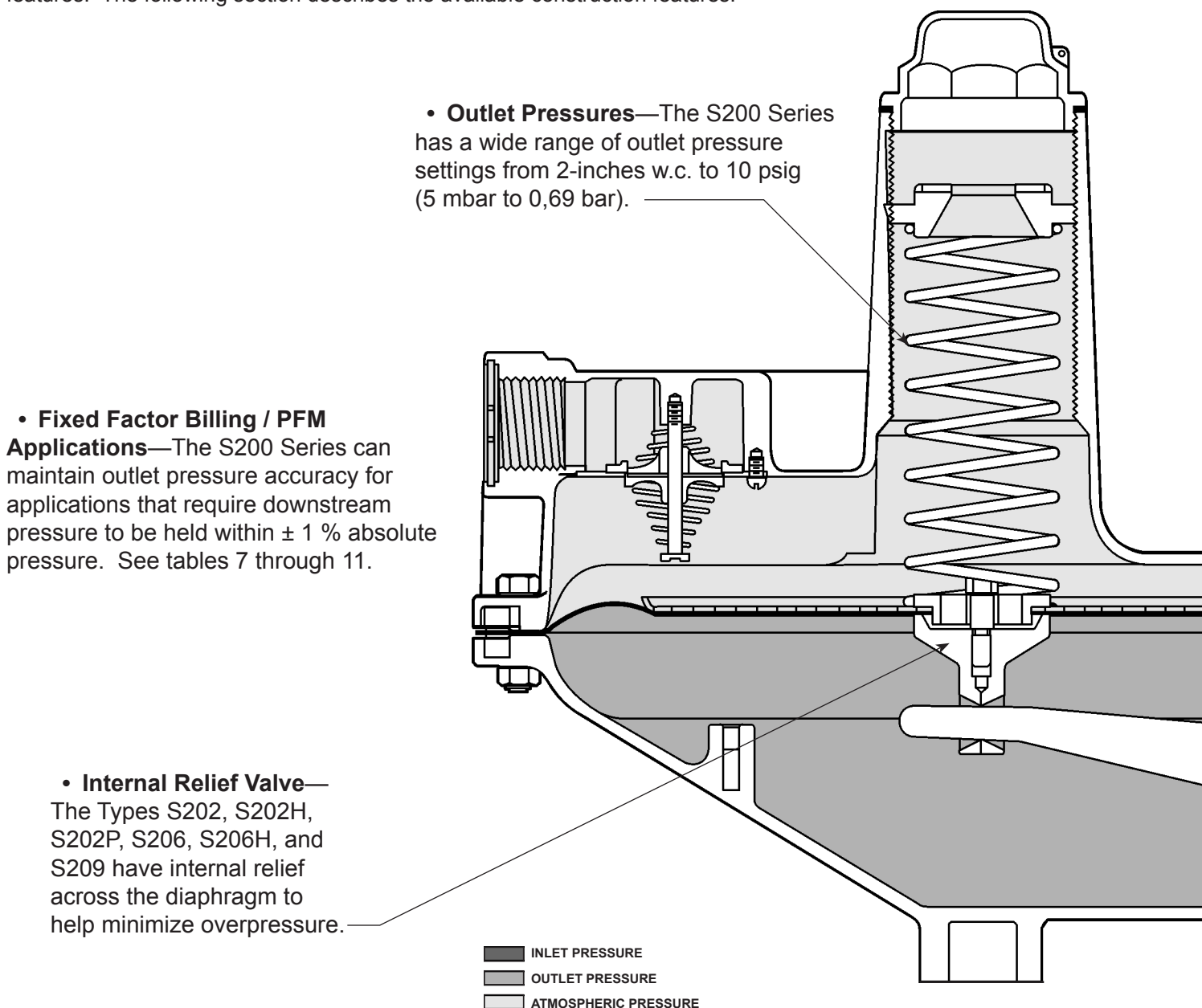
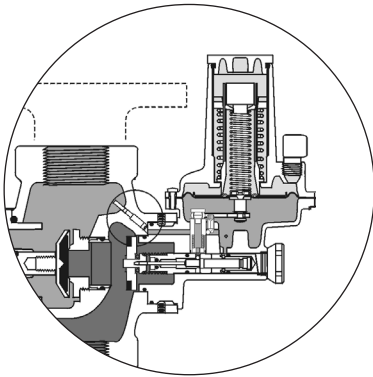
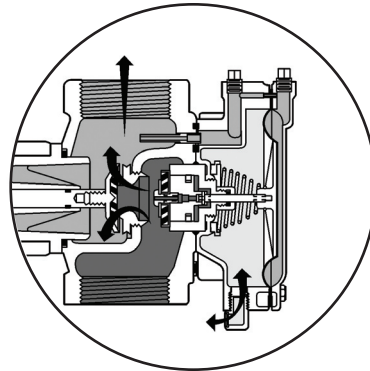


Figure 2. Type S201 Regulator (Basic S200 Series Construction)

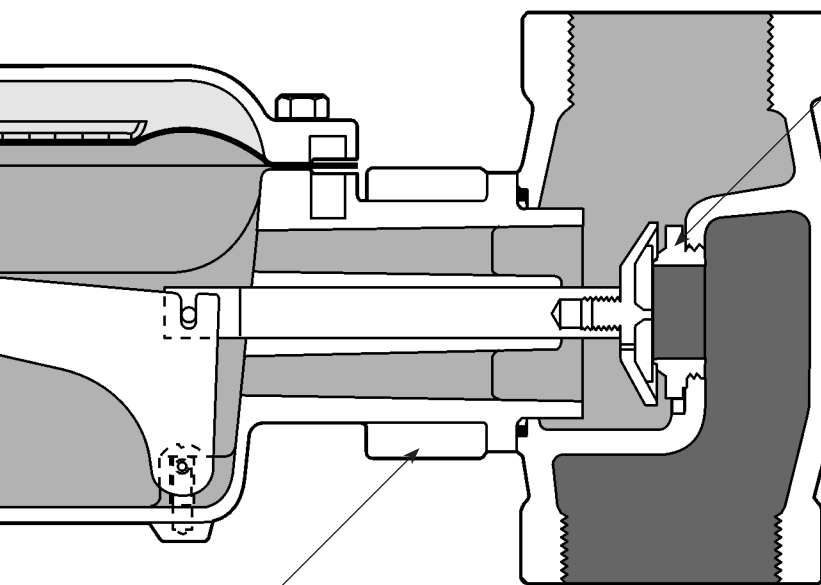
- **Application Flexibility**—A wide variety of sizes, body materials and end connection styles available: 1-1/4-inch, 1-1/2-inch, and 2-inch (DN 32, 40 and 50) body sizes available in ductile iron, steel, and cost effective cast iron available with NPT, BSP, ANSI Class 125 flat-face (available with 7.5-inch or 10-inch (191 or 254 mm) face-to-face dimensions), ANSI Class 150 raised-face, ANSI Class 250 raised-face, ANSI Class 300 raised-face, and PN 10-16 end connections. (Not all sizes and/or materials are available with all end connections. See tables 1 and 2 for available configurations.)



- **Integral Slam-Shut Device**—The S200 Series can be configured with a Type VSX-2 integral slam-shut device to provide Overpressure Shutoff (OPSO) or Over (OPSO) and Underpressure Shutoff (UPS0).



- **“True” Monitor**—The S200 Series can be configured with an integral monitor, which functions independently from the main regulator to limit downstream pressure.



- **Orifice**—Several choices of orifice sizes to accommodate wide range of flows and inlet pressures.

- **Retrofittable**—The S200 Series and the 299H Series use the same body and orifices. As a result, the S200 Series can easily be upgraded to a 299H Series without removing the regulator body from the pipeline.

- **Easy Inspection**—The S200 Series uses a rugged two-bolt actuator to body connection, which allows the easy and reliable access to the orifice and seat disk for inspection.

Specifications

Available Constructions (See table 1)

Type S201: Basic construction without internal relief for 2 to 30-inches w.c. (5 to 75 mbar) outlet pressures

Type S201H: Type S201 with a heavy diaphragm plate for 1 to 5 psig (0,07 to 0,35 bar) outlet pressures

Type S201K: Type S201 with a heavy diaphragm plate for 2 to 10 psig (0,14 to 0,69 bar) outlet pressures

Type S201P: Type S201 with downstream control line connection and O-ring stem seal for external pressure registration

Type S201PK: Combination of Types S201K and S201P

Types S202, S202H, S202P: Types S201, S201H, and S201P constructions with internal relief

Types S203, S203H, S203P: Types S201, S201H, and S201P constructions with “True” monitor regulator to provide overpressure protection. Available in Cast iron body only.

Types S204, S204H: Types S201 and S201H constructions with a low outlet pressure shutoff. Available in Cast iron body only.

Types S206, S206H: Types S202 and S202H constructions with a low outlet pressure shutoff with internal relief. Available in Cast iron body only.

Types S208, S208H, S208P, S208K, S208PK: Types S201, S201H, S201P, S201K, and S201PK constructions with a Type VSX-2 slam-shut device to provide overpressure (OPSO) or over and underpressure (UPSO) protection. Available in Ductile iron body only.

Types S209, S209H, S209P: Types S202, S202H, and S202P constructions with a Type VSX-2 slam-shut device to provide overpressure (OPSO) or over and underpressure (UPSO) protection. Available in Ductile iron body only.

Body Sizes and End Connection Styles⁽¹⁾

See table 2

Minimum and Maximum Inlet Pressures⁽¹⁾

Maximum Emergency (Body Rating) Inlet Pressure: 175 psig (12,1 bar)

Maximum Operating Inlet Pressure: See table 4

Types S204 and S206 Minimum Inlet Pressure Required to Prevent Shutoff: See figure 10

Maximum Outlet Pressure (Casing)⁽¹⁾

15 psig (1,03 bar)

Maximum Operating Outlet Pressure to Avoid Internal Part Damage⁽¹⁾

Light Diaphragm Plate: 2 psi (0,14 bar) above outlet pressure setting

Heavy Diaphragm Plate: 3 psi (0,21 bar) above outlet pressure setting

Outlet Pressure Ranges

See table 3

Integral Monitor Performance

See table 5 and figure 8

Internal Relief Performance

Internal relief valve opens at 7 to 28-inches w.c. (17 to 70 mbar) above outlet setting, depending on control spring; also see figure 6

Type VSX-2 Trip Pressure Ranges

See table 6

Capacities

See tables 7 through 11

Flow Coefficients and Orifice Diameters

See table 4

Construction Materials

S200 Series Main Valve and Actuator

Body: Cast iron, Ductile iron, or Steel; Refer to table 1 for available constructions

Spring Case, Lower Diaphragm Casing, Union Ring, Orifice, and Disk Holder(s): Aluminum
Disk(s), Diaphragm(s), and O-ring(s): Nitrile or Fluoroelastomer

Closing Cap Gasket: Neoprene

Monitor Regulator Piston Ring: Graphite

Stabilizer Vent Flappers: Nylon

Type VSX-2 Slam-Shut Device

Upper and Lower Casing: Aluminum

Valve Plug: Nitrile plug and Aluminum stem

Diaphragm and O-rings: Nitrile

Closing Cap: ABS plastic

Reset Button: Brass

Maximum Temperature Capabilities⁽¹⁾

Nitrile (NBR): –20° to 150°F (–29° to 66°C)

Fluoroelastomer (FKM): 0° to 200°F (–18° to 93°C)
(Upper temperature limitation due to nylon flappers)

Type VSX-2: –20° to 140°F (–29° to 60°C)

Spring Case Vent Locations and Pressure Connections

See figures 12 and 13

Approximate Weight

28 pounds (12,7 kg)

Options

- 1/8-inch NPT inlet test pressure connection
- TFE diaphragm protector

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

Table 1. Available Constructions

CONSTRUCTION FEATURES	TYPE NUMBER																	
	S201	S201H	S201K	S201P	S201PK	S202	S202H	S202P	S203	S203H	S203P	S204	S204H	S206	S206H	S208	S208H	S208K
Light diaphragm plate	X					X			X			X		X		X		
Heavy diaphragm plate		X	X		X		X			X			X		X		X	
Either light or heavy diaphragm plate depending on outlet pressure range				X				X			X							X
Internal registration	X	X	X			X	X		X	X		X	X	X	X	X	X	
External registration - O-ring stem seal and downstream control line connection				X	X			X			X							X
Internal relief - Full						X	X	X						X	X			
Internal relief - Token									X	X	X							X
""True"" monitor									X	X	X							
Low outlet pressure shutoff												X	X	X	X			
Type VSX-2																X	X	X
BODY MATERIALS																		
Cast Iron	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Ductile Iron	X	X	X	X	X	X	X	X								X	X	X
Steel	X	X	X	X	X	X	X	X										

Table 2. Body Sizes and End Connection Styles

BODY SIZE, INCHES (DN)	END CONNECTION STYLE		
	Cast Iron	Ductile Iron	Steel
1-1/4 (32) 1-1/2 (40) 1-1/2 x 2 (40 x 50)	NPT, BSP NPT, BSP -----	----- NPT, BSP NPT, BSP	----- NPT, BSP -----
2 (50)	NPT; BSP; or ANSI Class 125 ⁽¹⁾ FF, 250 RF flanged	NPT; BSP; ANSI Class 125 FF or 250 RF flanged; or PN 10-16 flanged	NPT; BSP; ANSI Class 150 RF or 300RF flanged; or PN 10-16 flanged
1. This flange is available with a face-to-face of 7.5-inches (191 mm) or 10-inches (254 mm).			

Table 3. Outlet Pressure Ranges

TYPE NUMBER	SPRING NUMBER	OUTLET PRESSURE RANGE	CONTROL SPRING	
			Part Number	Color Code
S201, S202, S203 ⁽¹⁾ , S208, S209, S201P, S202P, S203P, S208P, and S209P	----- 1 2 3 4	2 to 4.5-inches w.c. (5 to 11 mbar) ^(2,3) 3.5 to 6.5-inches w.c. (9 to 16 mbar) 5 to 9-inches w.c. (12 to 22 mbar) 8.5 to 18-inches w.c. (21 to 45 mbar) 14 to 30-inches w.c. (35 to 75 mbar)	1D892527022 1D892627022 1D892727012 1D893227032 1D893327032	Brown Red Black Gray Dark Green
S204 and S206	----- ----- ----- ----- -----	3.5 to 5-inches w.c. (9 to 12 mbar) ⁽²⁾ 5 to 7-inches w.c. (12 to 17 mbar) 6.5 to 9.5-inches w.c. (16 to 23 mbar) 8.5 to 18-inches w.c. (21 to 45 mbar) 14 to 30-inches w.c. (35 to 75 mbar)	1D892527022 1D892627022 1D892727012 1D893227032 1D893327032	Brown Red Black Gray Dark Green
S201H, S202H, S203H ⁽¹⁾ , S208H, S209H, S201P ⁽⁴⁾ , S202P ⁽⁴⁾ , S203P ⁽⁴⁾ , S204H, S206H, S208P ⁽⁴⁾ , and S209P ⁽⁴⁾	5 6 7	1 to 2 psig (0,069 to 0,14 bar) 1.5 to 3.25 psig (0,10 to 0,22 bar) 2 to 5 psig (0,14 to 0,34 bar) ⁽⁵⁾	1H975827032 1H975927032 1P615427142	Dark Blue Orange Yellow
S201K, S201PK, S208K, and S208PK	8 9	2 to 5.5 psig (0,14 to 0,38 bar) 4 to 10 psig (0,28 to 0,69 bar)	0Y066427022 1H8024000A2	Green Stripe Unpainted
S204H and S206H	----- -----	1 to 2 psig (0,069 to 0,14 bar) 1.5 to 3.25 psig (0,10 to 0,22 bar)	1H975827032 1H975927032	Dark Blue Orange
1. Types S203 and S203H outlet pressure ranges are a function of the monitor construction (monitor spring and the number of spring seats used). See table 5 for more information. 2. With regulator installed so control spring is on top of diaphragm. If installed so control spring is on bottom, lower end of outlet pressure range can be reduced by 1-inch w.c. (2,5 mbar) for regulator with light diaphragm plate or 2-inches w.c. (5 mbar) for regulator with heavy diaphragm plate. 3. Not available with Types S208 and S209. 4. Types S201P, S202P, S203P, S208P, and S209P require heavy diaphragm plate for outlet pressures over 1 psig (0,069 bar). 5. Not available for Types S203P, S204H, and S206H.				

Table 4. Additional Specifications

TYPE NUMBER	OUTLET PRESSURE SETTING	ORIFICE SIZE, INCHES (mm)	MAXIMUM OPERATING INLET PRESSURE TO OBTAIN OPTIMUM PERFORMANCE, PSIG (bar)	WIDE-OPEN C _g	WIDE-OPEN C _v	C _i
S201, S201P, S202, S202P, S203, S203P, S208, S208P, S209, S209P	2 to 30-inches w.c. (5 to 75 mbar)	1/4 (6,4) 3/8 (9,5) 1/2 (12,7) 3/4 (19,1) 1 (25,4) 1-3/16 (30,2)	125 (8,6) 125 (8,6) 100 (6,9) 60 (4,1) 25 (1,7) 13 (0,90)	53 110 190 415 700 910	1.51 3.14 5.43 11.9 20 26	35
S201H, S201P, S202H, S202P, S203H, S203P, S208H, S208P, S209H, S209P	1 to 3.25 psig (0,069 to 0,22 bar)	1/4 (6,4) 3/8 (9,5) 1/2 (12,7) 3/4 (19,1) 1 (25,4) 1-3/16 (30,2)	125 (8,6) 125 (8,6) 100 (6,9) 60 (4,1) 30 (2,1) 14 (1,0)	53 110 190 415 700 910	1.51 3.14 5.43 11.9 20 26	
	2 to 5 psig (0,14 to 0,34 bar)	1-3/16 (30,2)	20 (1,4)	910	26	
S201K, S201PK S208K, S208PK	All outlet pressure settings	1/4 (6,4) 3/8 (9,5) 1/2 (12,7) 3/4 (19,1) 1 (25,4)	125 (8,6) 125 (8,6) 100 (6,9) 60 (4,1) 30 (2,1)	53 110 190 415 700	1.51 3.14 5.43 11.9 20	
	2 to 5.5 psig (0,14 to 0,38 bar)	1-3/16 (30,2)	20 (1,4)	910	26	
	4 to 10 psig (0,28 to 0,69 bar)	1-3/16 (30,2)	25 (1,7)			
S204, S206	3.5 to 30-inches w.c. (9 to 75 mbar)	3/8 (9,5) 1/2 (12,7) 3/4 (19,1) 1 (25,4) 1-3/16 (30,2)	100 (6,9) 100 (6,9) 75 (5,2) 30 (2,1) 15 (1,0)	38 115 230 625 835	1.09 3.29 6.57 17.9 23.9	
S204H, S206H	1 to 3.25 psig (0,069 to 0,22 bar)	3/8 (9,5) 1/2 (12,7) 3/4 (19,1) 1 (25,4) 1-3/16 (30,2)	100 (6,9) 100 (6,9) 75 (5,2) 30 (2,1) 15 (1,0)	38 115 230 625 835	1.09 3.29 6.57 17.9 23.9	

Construction Features

Heavy-Duty Construction for Higher Outlet Pressures

An S200 Series regulator with an H or K (figure 3) in the type number can deliver air or gas at a higher outlet pressure setting than the basic Type S201 (see table 3). S200 Series regulators with an H or K in the type number have a heavy diaphragm plate, while most other S200 Series regulators have a light diaphragm plate. However, a regulator with a P in the type number will have a light diaphragm plate for outlet pressure ranges under 1 psig (0,069 bar) and a heavy diaphragm plate outlet pressure ranges over 1 psig (0,069 bar).

Downstream Control Line Connection

An S200 Series regulator with a P or a PK in the type number has a blocked turbo-booster tube, an O-ring stem seal, and a 3/4-inch NPT control line tapping in the lower diaphragm casing. A regulator with a downstream control line is used for monitoring installations or other applications where there is other equipment installed between the regulator and the pressure control point. The O-ring stem seal helps separate body pressure from diaphragm case pressure on monitor installations where leakage cannot be tolerated.

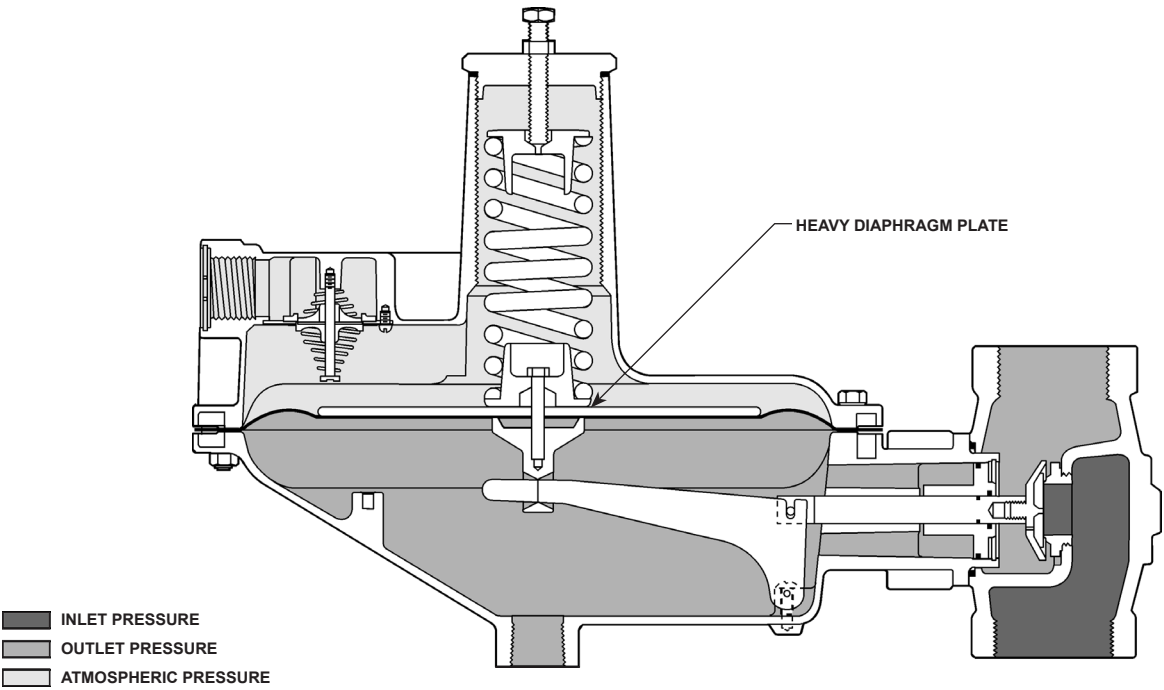


Figure 3. Type S201PK Regulator with Heavy Diaphragm Plate for Higher Outlet Pressures

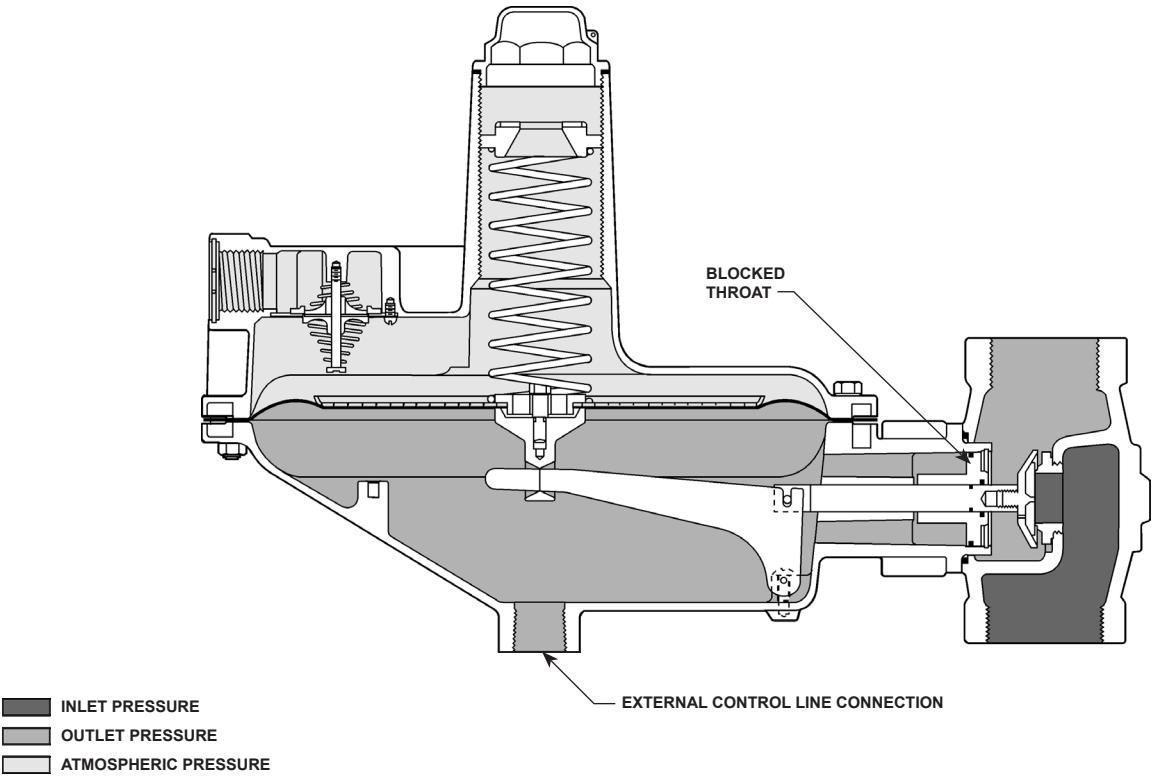


Figure 4. Type S201P Regulator with Downstream Control Line Connection

Internal Relief

Several S200 Series regulators have relief across the diaphragm (figure 5) to help minimize overpressure. Any outlet pressure above the start-to-discharge point of the nonadjustable relief spring moves the diaphragm off the relief seat, allowing excess pressure to bleed out through the screened stabilizer vent.

For extra protection, should emergency conditions exist which prevent normal operation of the regulator (for example, linkage becoming disconnected or disk broken off), the relief stem contacts the underside of the closing cap, limiting the rise of the relief. Since the diaphragm continues to rise as downstream pressure builds, it lifts off the relief, thereby opening the valve to provide relief operation.

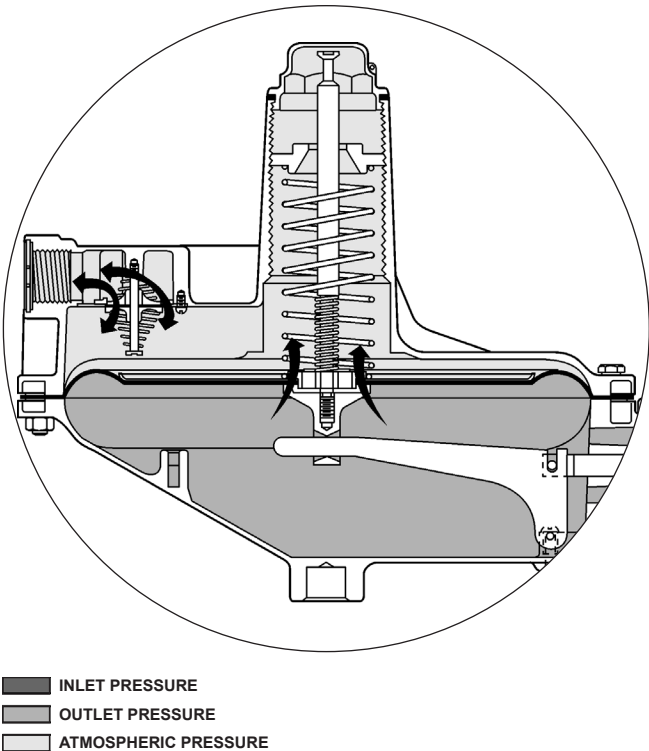


Figure 5. Type S202 Regulator with Internal Relief

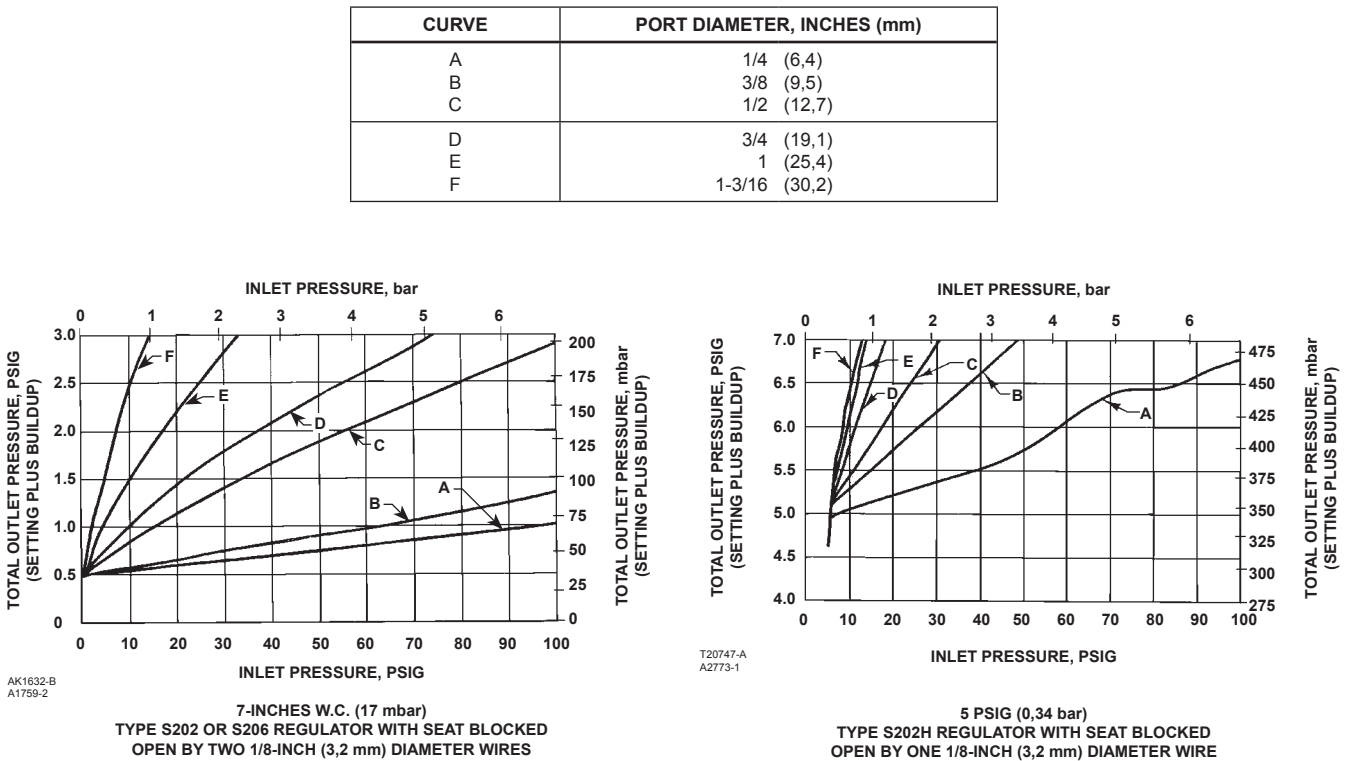


Figure 6. Internal Relief Performance for Types S202, S202H, and S206 Regulators Venting Directly to Atmosphere

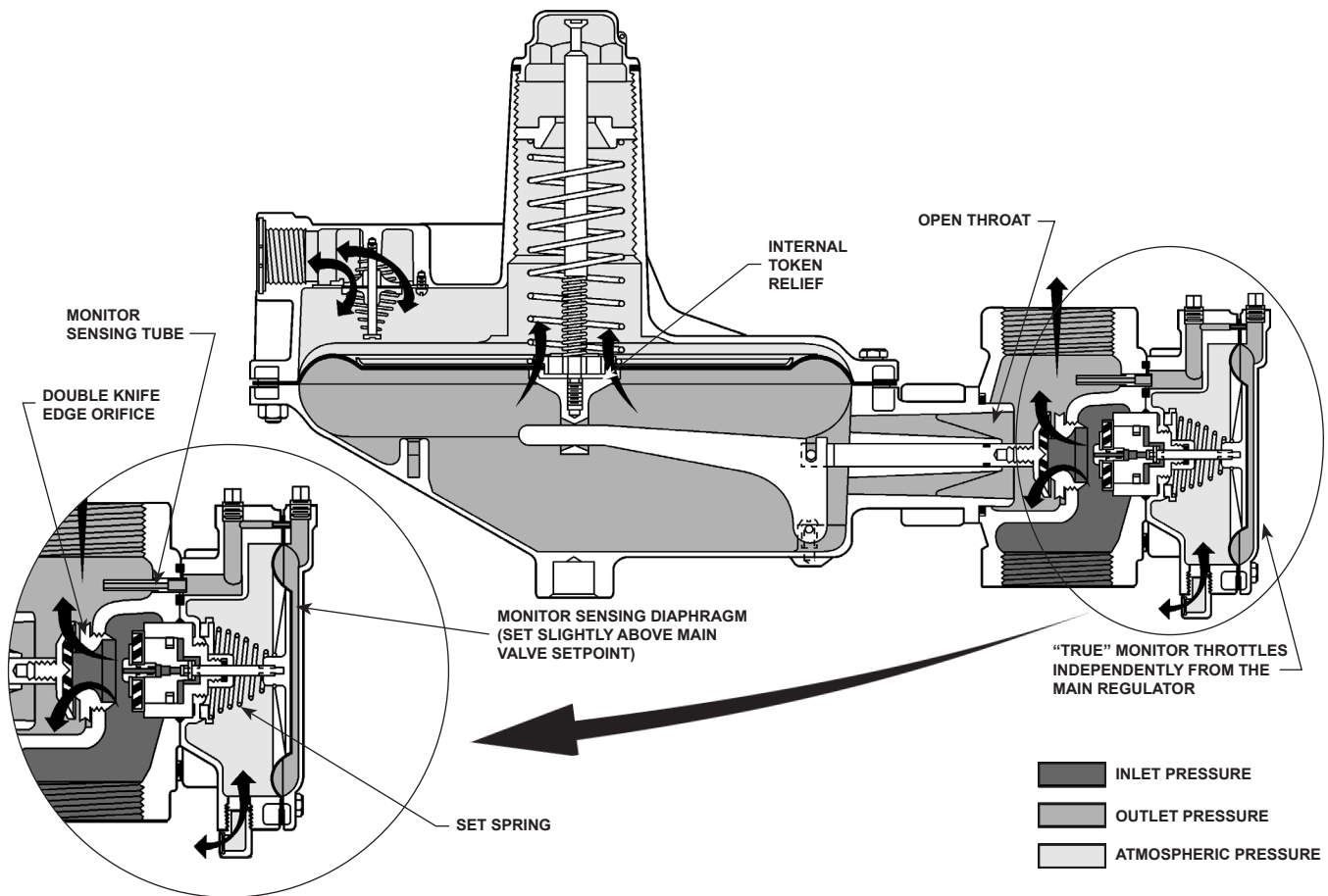


Figure 7. Type S203 Regulator with "True" Monitor

"True" Monitor

The Types S203, S203H and S203P are available with a "True" monitor regulator, which is integral yet acts independently of the main regulator. The monitor provides equivalent overpressure protection when compared to a standard two-regulator monitor setup. If one regulator fails, the other regulator provides control and overpressure protection. The monitor construction provides the following important features:

- Designed to Meet or Exceed Applicable Requirements of DOT 192.197**—In DOT 192.197 paragraph "b" which states "or if the gas contains material that seriously interferes with the operation of service regulators, there must be suitable protective devices to prevent unsafe overpressuring of the customer's appliances if the service regulator fails." The Type S203 is designed to address the above issue and other common types of failures found in service regulators, such as lever arm, pusher post, and stem failures.

- Minimizing of Hazardous Venting**—Required relief capacity is cut down without restricting total regulator capacity. The internal token relief and monitor work in combination to limit relief discharge to atmosphere. The internal token relief also acts as an alarm to indicate when the monitor is operating.

- Lower Controlled Downstream Pressure**—In the event of regulator failure, the monitor regulator limits downstream pressure.

- All-Dynamic Operation with Automatic Reset**—The monitor diaphragm and piston are in motion under normal operating conditions, prepared to provide overpressure protection when needed. No manual reset procedure is required to return the regulator to normal operation after relief of the overpressure condition.

As downstream pressure registers under the main diaphragm, it also registers on top of the monitor diaphragm through the pitot tube located near the body outlet. Under normal conditions as downstream pressure fluctuates due to load changes, the main regulator disk and the monitor piston move toward or away from the orifice.

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Table 5. Integral Monitor Data

TYPE NUMBER	CONTROL SPRING PART NUMBER AND COLOR (SEE TABLE 3 FOR RANGE)	OUTLET PRESSURE RANGE	MAXIMUM DOWNSTREAM PRESSURE WITH INTEGRAL MONITOR IN OPERATION, PSIG (bar)	MAXIMUM FLOW THROUGH INTERNAL RELIEF VALVE WITH INTEGRAL MONITOR IN OPERATION, SCFH (Nm ³ /h) ⁽¹⁾	RELIEF MONITOR SPRING PART NUMBER AND COLOR	NUMBER OF SPRING SEATS REQUIRED
S203, S203P	1D892527022, brown	0 to 5-inches w.c. (0 to 12 mbar)	0.8 (0,06)	950 (25,5)	1L255727132, green	0
	1D892627022, red / 1D892727012, black	4 to 9.5-inches w.c. (10 to 24 mbar)	⁽²⁾ ⁽²⁾	1000 (26,8)	1L255727132, green	1
	1D893227032, gray	8 to 14-inches w.c. (20 to 35 mbar)	⁽²⁾ ⁽²⁾	1200 (32,2)	1L255727132, green	2
		8 to 12-inches w.c. (20 to 30 mbar)	1.4 (0,10)	1350 (36,2)	1L255827132, red	0
		10 to 20-inches w.c. (25 to 50 mbar)	1.8 (0,12)	1600 (42,9)	1L255827132, red	1
		11 to 21-inches w.c. (27 to 52 mbar)	2.2 (0,15)	1800 (48,2)	1L255927132, blue	0
S203H, S203P	1D893327032, dark green	14 to 28-inches w.c. (35 to 70 mbar)	2.8 (0,19)	1900 (50,9)	1L255827132, red	2
		18 to 33-inches w.c. (45 to 82 mbar)	3.0 (0,21)	2000 (53,6)	1L255927132, blue	1
		0.5 to 1.0 psig (35 to 70 mbar)	3.0 (0,21)	2200 (60,0)	1V224227012, silver	0
		1.0 to 1.6 psig (70 to 110 mbar)	3.8 (0,26)	2200 (60,0)	1L255927132, blue	2
		0.75 to 1.6 psig (52 to 110 mbar)	4.0 (0,28)	2500 (67,0)	1V224227012, silver	1
S203H, S203P	1H975827032, dark blue	1.25 to 2.25 psig (86 to 155 mbar)	5.0 (0,35)	3000 (80,4)	1V224227012, silver	2
	1H975927032, orange	1.25 to 3.25 psig (86 to 224 mbar)	6.0 (0,41)	3000 (80,4)	1V224227012, silver	3

- Flow of 0.6 specific gravity natural gas in SCFH at 60°F and 14.7 psia and Nm³/h at 0°C and 0,01325 bar.
- See figure 8 for specific performance curves by port diameter.

CURVE	PORT DIAMETER, INCHES (mm)
A	1/4 (6,4)
B	3/8 (9,5)
C	1/2 (12,7)
D	3/4 (19,1)
E	1 (25,4)
F	1-3/16 (30,2)

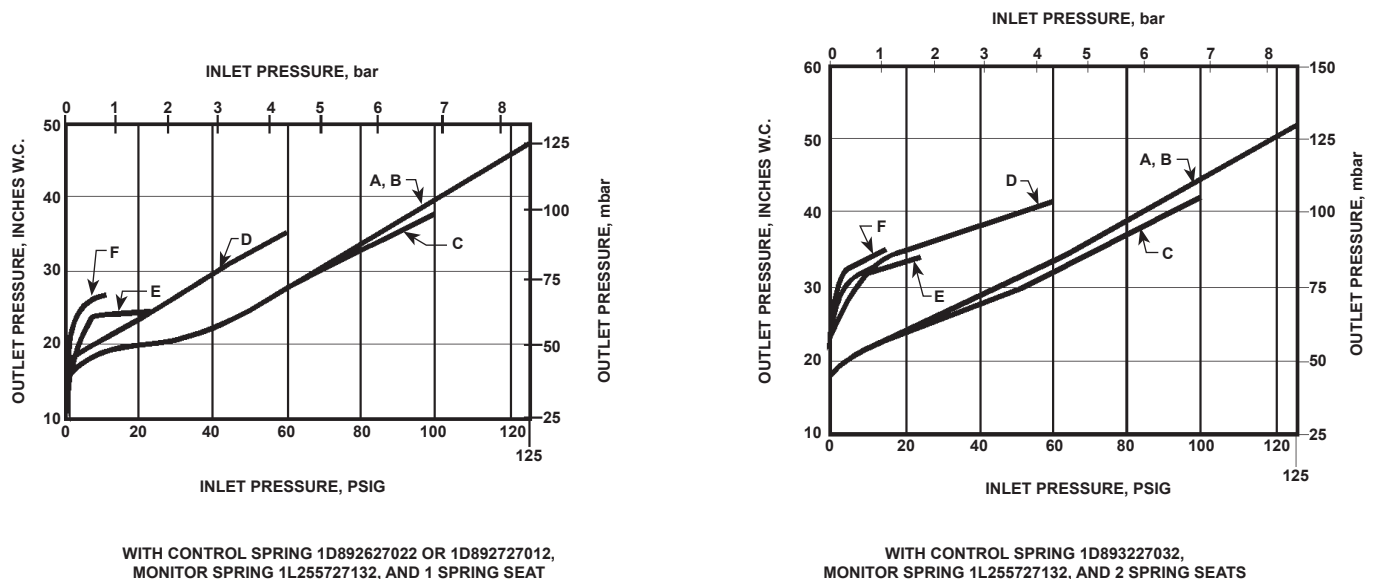


Figure 8. Integral Monitor Performance for Type S203 Regulator Blocked Wide Open and Venting Directly to Atmosphere

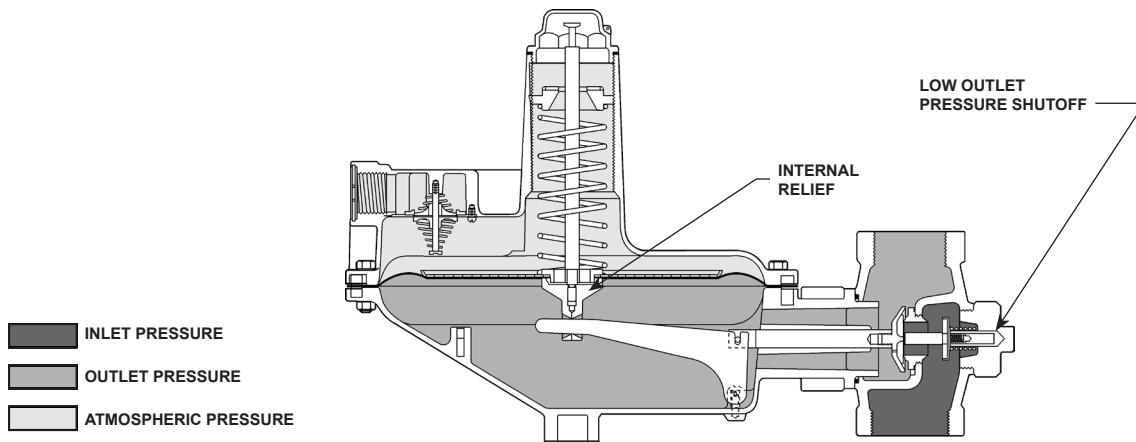


Figure 9. Type S206 Regulator with Low Outlet Pressure Shutoff and Internal Relief

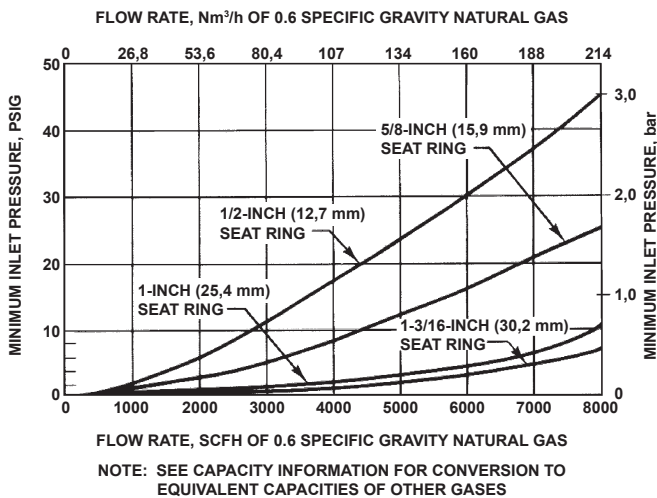


Figure 10. Minimum Inlet Pressure Required to Prevent Shutoff on all Sizes of Types S204, S204H, S206, and S206H Regulators at Indicated Flow

If downstream pressure begins to increase due to main regulator failure, and if the downstream pressure increases to 7 to 28-inches w.c. (17 to 70 mbar) above set pressure, the internal relief valve begins to open to limit downstream pressure. At the same time, the increasing pressure is sensed on the monitor diaphragm (see figure 7) causing the monitor piston to move towards the orifice to restrict the flow through the regulator to limit the downstream pressure. While the monitor is in operation, regardless of the downstream demand, the token internal relief valve will continuously operate due to the engineered bleed in the monitor piston. This bleed allows a minimal amount of flow to exhaust to atmosphere to notify the user that the regulator is operating in monitor mode.

As downstream pressure drops back to normal, the piston moves back away from the orifice and the

internal relief valve closes, automatically allowing normal operation again.

The combination of a restriction in the internal relief valve and the monitor piston positioned near the inlet side of the orifice limits the maximum downstream pressure and the related flow through the internal relief valve to the values shown in table 4 and figure 7.

Low Outlet Pressure Shutoff

On installations requiring a minimum outlet pressure, the Types S204 and S206 regulator (figure 9) and the Types S204H and S206H regulator with low outlet pressure shutoff shuts the regulator off if the required minimum outlet pressure cannot be maintained. With the flow shut off, the possibility of gas accumulation downstream of the regulator is minimized.

As downstream pressure drops under high demand or because the inlet pressure is too low, the diaphragm drops to its lowest position and the main disk moves to its farthest position from the orifice. This allows the spring in the back disk assembly to seat the back disk against the orifice and shut off flow. This condition is maintained until the regulator is manually reset by pulling upward on the pusher post extension in the spring case.

Type VSX-2 Slam-Shut Device

The Type VSX-2 slam-shut device on the Types S208 and S209 regulators is a fast acting shutoff valve which provides overpressure (OPSO) or over and underpressure (UPSO) protection by completely shutting off the flow of gas to the downstream system. The shutoff module's actions are independent of the Types S208 and S209 regulators

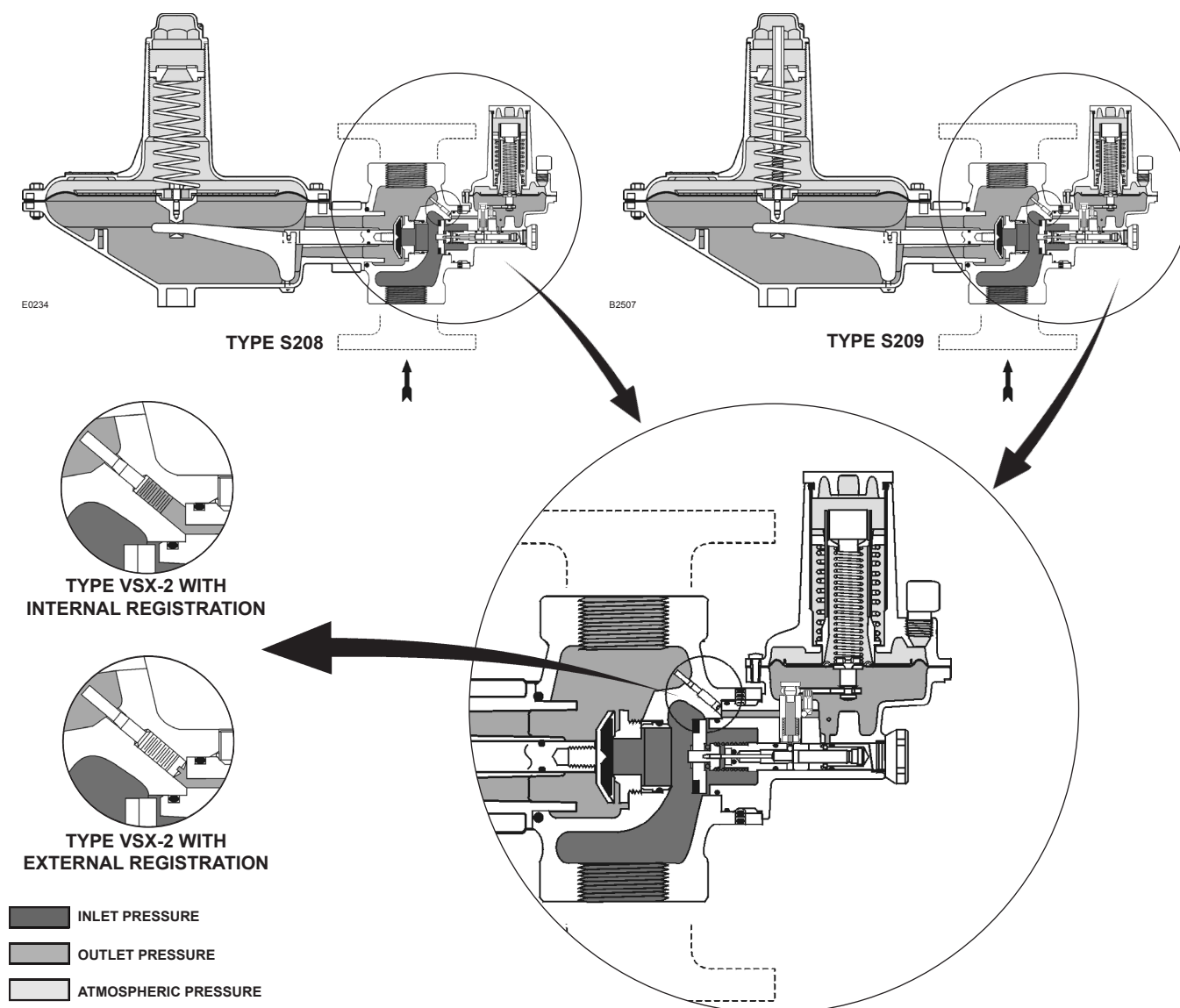


Figure 11. Type S208 Regulator with Type VSX-2 Slam-Shut Device (right) and Type S209 Regulator with Slam-Shut Device and Internal Token Relief (left)

Table 6. Type VSX-2 High and Low Trip Pressure Ranges

SETPOINT RANGES	SLAM-SHUT TYPE	USE WITH MAIN VALVE SPRING NUMBER ^(1,2)	MINIMUM TO MAXIMUM TRIP PRESSURE	TYPE VSX-2 SPRING PART NUMBER	SPRING COLOR	SPRING FREE LENGTH, INCHES (mm)	SPRING WIRE DIAMETER, INCHES (mm)
Overpressure Shutoff (OPSO)	LP	1, 2	12 to 25-inches w.c. (30 to 63 mbar)	T14162T0012	Black	3.15 (80)	0.067 (1,7)
		1, 2, 3, 4	20 to 52-inches w.c. (50 to 130 mbar)	T14163T0012	Brown	3.15 (80)	0.080 (2,0)
		3, 4, 5, 6	1.4 to 3.9 psig (97 to 270 mbar)	T14164T0012	Red	3.15 (80)	0.091 (2,3)
		5, 6, 7, 8, 9	3.8 to 8.7 psig (262 to 600 mbar)	T14165T0012	Orange	3.15 (80)	0.120 (3,0)
		9	5.8 to 16 psig (400 to 1103 mbar)	T14166T0012	Pink	3.15 (80)	0.138 (3,5)
Underpressure Shutoff (UPSO)	LP	2, 3	2 to 12-inches w.c. (6 to 30 mbar)	T14168T0012	White	3.15 (80)	0.043 (1,1)
		3, 4, 5, 6	4 to 30-inches w.c. (10 to 75 mbar)	T14169T0012	Blue	3.15 (80)	0.055 (1,4)
		5, 6, 7, 8	0.36 to 2.3 psig (25 to 160 mbar)	T14170T0012	Silver	3.15 (80)	0.067 (1,7)
		7, 8, 9	1.5 to 10.8 psig (103 to 750 mbar)	T14171T0012	Olive	3.15 (80)	0.125 (3,2)

1. See table 3 for main valve spring number.

2. For other spring combinations, contact your Fisher Sales Representative or Sales Office. Trip pressures 2 or 3 psig (0,14 or 0,21 bar) over set pressure may result in internal parts damage.

and of variations to the inlet pressure. The Type VSX-2 has internal or external registration. External registration requires a downstream sensing line.

The shutoff disk is held in the open position (reset position) by a small ball holding the disk stem. If the pressure below the diaphragm increases (or decreases) reaching the Type VSX-2 setpoint, the diaphragm will travel upwards (or downwards) operating a lever which in turn releases the ball.

Once the ball is released, the spring force on the stem will push the stem and disk against the seat, shutting off all gas flow. The manual reset has an internal bypass to equalize the reset pressure on either side on the shutoff disk.

Overpressure Protection

The S200 Series regulators have outlet pressure ratings that are lower than their inlet pressure ratings. A pressure relieving or pressure limiting device is needed for Types S201, S201H, S201K, S201P, S201PK, S204, and S204H if inlet pressure can exceed the outlet pressure rating, since these regulators do not have internal relief, high outlet pressure shutoff, or integral slam-shut device.

Type S202, S202H, S202P, S203, S203H, or S203P, Types S206 and S206H have internal relief or relief monitoring to provide partial capacity relief, limiting total outlet pressure as shown in figures 6 and 8. This partial internal relief may be adequate; if not, an additional pressure relieving or pressure limiting device should be installed downstream.

Types S208 and S209 regulators rely on the Type VSX-2 slam-shut device for overpressure protection. The Type VSX-2 will shut the system down until the problem can be rectified and the Type VSX-2 is reset. Type S209 regulators have internal relief which provides token capacity relief for thermal expansion.

Overpressuring any portion of a regulator or associated equipment may cause personal injury, leakage, or property damage due to bursting of pressure-containing parts or explosion of accumulated gas. Provide appropriate pressure relieving or pressure limiting devices to ensure that the limits in the Specifications or table 4 are not exceeded. Regulator operation within ratings does not prevent the possibility of damage from external sources or from debris in the pipeline.

Refer to the relief sizing coefficients and the Capacity Information section to determine the required relief valve capacity.

Capacity Information

Tables 7 through 11 give the natural gas regulating capacities of S200 Series regulators at selected inlet pressures and outlet pressure settings. Flows are in SCFH (60°F and 14.7 psia) and Nm³/h (0°C and 1,01325 bar) of 0.6 specific gravity natural gas. To determine equivalent capacities for air, propane, butane, or nitrogen, multiply the SCFH table capacity by the following appropriate conversion factor: 0.775 for air, 0.628 for propane, 0.548 for butane, or 0.789 for nitrogen. For gases of other specific gravities, multiply the given capacity by 0.775, and divide by the square root of the appropriate specific gravity.

For Critical Pressure Drops—Use this equation (absolute outlet pressure equal to one-half or less than one-half the absolute inlet pressure).

$$Q = P_{1(abs)} C_g (1.29)$$

For Non-Critical Pressure Drops—Use this equation (absolute outlet pressure greater than one-half of absolute inlet pressure):

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

where:

- Q = gas flow rate, SCFH
- C_g = gas sizing coefficient
- P₁ = absolute inlet pressure, psia
- G = specific gravity of the gas
- T = absolute temperature of gas at inlet, °Rankine
- C₁ = flow coefficient
- ΔP = pressure drop across the regulator, psi

Installation

These regulators may be installed in any position. If gas escaping through the internal relief valve could constitute a hazard, the vent must be piped to a location where escaping gas will not be hazardous. In this case, obstruction-free tubing or piping of at least the same diameter as the vent size with a minimum number of bends should be used, and a screened vent should be installed on the end of the vent pipe. On all installations, the vent or the end of the vent pipe must be protected from anything that might clog it.

Ordering Information

Refer to the Specifications section on page 4 and to each referenced table. Then, complete the Ordering Guide on pages 30 and 31.

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Table 7. Types S201, S202, S203, S208, and S209 Flow Capacities

OUTLET PRESSURE, SPRING PART NUMBER, AND ACCURACY	INLET PRESSURE, PSIG (bar)	CAPACITIES IN SCFH (Nm ³ /h) OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
		1-1/2-Inch (DN 40) Body Size					
		Orifice Size, Inches (mm)					
		1/4 (6,35)	3/8 (9,52)	1/2 (12,7)	3/4 (19,1)	1 (25,4)	1-3/16 (30,2)
4-inches w.c. (10 mbar) 1D892527022 or 1D892627022 1-inch w.c. (2,5 mbar) droop 2-inches w.c. (5 mbar) boost	0.4 (0,028)				1000 (26,8)	1400 (37,5)	1600 (42,8)
	0.5 (0,034)				1400 (37,5)	1600 (42,8)	1800 (48,2)
	1 (0,07)	400 (10,7)	800 (21,4)	1200 (32,2)	2100 (56,3)	2500 (67,0)	2700 (72,4)
	1.5 (0,10)	500 (13,4)	1050 (28,1)	1600 (42,9)	2500 (67,0)	3000 (80,4)	3200 (85,8)
	2 (0,14)	600 (16,1)	1300 (34,8)	2100 (56,3)	2800 (75,0)	3500 (93,8)	3800 (102)
	5 (0,34)	1150 (30,8)	2200 (58,9)	3300 (88,4)	4500 (121)	5300 (142)	6000 (161)
	13 (0,90)	1600 (42,8)	3600 (96,4)	6200 (166)	7000 (188)	6000 (161)	6850 (184)
	25 (1,72)	2550 (68,3)	5000 (134)	7350 (197)	8950 (240)	9000 (241)	
	60 (4,14)	4750 (127)	5100 (137)	7050 (189)	5600 (150) ⁽¹⁾		
	100 (6,90)	6650 (178)	7300 (196)	5200 (139) ⁽¹⁾			
	125 (8,62)	6950 (186)	8300 (222)				
7-inches w.c. (17 mbar) 1D892727012 1-inch w.c. (2,5 mbar) droop 2-inches w.c. (5 mbar) boost	0.4 (0,028)				900 (24,1)	1300 (34,8)	1450 (38,9)
	0.5 (0,034)				1200 (32,2)	1550 (41,5)	1750 (46,9)
	1 (0,07)	400 (10,7)	800 (21,4)	1100 (29,5)	1900 (50,9)	2300 (61,6)	2500 (67,0)
	1.5 (0,10)	500 (13,4)	1050 (28,1)	1500 (40,2)	2300 (61,6)	2800 (75,0)	1800 (48,2)
	2 (0,14)	600 (16,1)	1300 (34,8)	1900 (50,9)	2100 (56,3)	3300 (88,4)	1800 (48,2)
	5 (0,34)	950 (25,5)	2100 (56,3)	3200 (85,8)	3350 (89,8)	5100 (137)	4500 (121)
	13 (0,90)	1600 (42,8)	2200 (58,9)	3300 (88,4)	5800 (155)	8000 (214)	8000 (214)
	25 (1,72)	2200 (58,9)	5200 (139)	6800 (182)	8400 (225)	8750 (235)	
	60 (4,14)	4300 (115)	9200 (247)	10100 (271)	9900 (265)		
	100 (6,90)	7500 (201)	10500 (281)	9200 (247) ⁽¹⁾			
	125 (8,62)	9050 (243)	9800 (263) ⁽¹⁾				
11-inches w.c. (27 mbar) 1D893227032 ± 2-inches w.c. (5 mbar)	0.5 (0,03)				800 (21,4)	1500 (40,2)	1700 (45,6)
	1 (0,07)	400 (10,7)	700 (18,7)	1100 (29,5)	1800 (48,2)	2200 (58,9)	2450 (65,7)
	1.5 (0,10)	500 (13,4)	950 (25,5)	1450 (38,9)	2300 (61,6)	2800 (75,0)	2600 (69,7)
	2 (0,14)	600 (16,1)	1200 (32,2)	1700 (45,6)	1950 (52,3)	3200 (85,8)	2750 (73,7)
	5 (0,34)	950 (25,5)	2000 (53,6)	2900 (77,7)	3800 (102)	5100 (137)	5150 (138)
	13 (0,90)	1600 (42,8)	3400 (91,1)	3700 (99,2)	6100 (163)	7250 (194)	7650 (205)
	25 (1,72)	2100 (56,3)	5150 (138)	7100 (190)	7950 (213)	9400 (252)	
	60 (4,14)	4400 (118)	9250 (248)	9400 (252)	10400 (279)		
	100 (6,90)	7300 (196)	10000 (268)	10100 (271)			
	125 (8,62)	9050 (243)	10800 (289)				
14-inches w.c. (35 mbar) 1D893227032 ± 2-inches w.c. (5 mbar)	1 (0,07)	450 (12,1)	800 (21,4)	1000 (26,8)	1250 (33,5)	1500 (40,2)	1950 (52,3)
	1.5 (0,10)	500 (13,4)	850 (22,8)	1050 (28,1)	1550 (41,5)	1650 (44,2)	2350 (62,9)
	2 (0,14)	550 (14,7)	1150 (30,8)	1400 (37,5)	1750 (46,9)	2300 (61,6)	2500 (67,0)
	5 (0,34)	1000 (26,8)	1200 (32,2)	2050 (54,9)	3000 (80,4)	4300 (115)	4750 (127)
	13 (0,90)	1750 (46,9)	3050 (81,7)	4250 (114)	6100 (163)	7300 (196)	7850 (210)
	25 (1,72)	2500 (67,0)	4750 (127)	5650 (151)	8700 (233)	8700 (233)	
	60 (4,14)	4750 (127)	9450 (253)	9950 (267)	10550 (283)		
	100 (6,90)	7450 (200)	10400 (279)	10600 (284)			
	125 (8,62)	9050 (243)	10450 (280)				
20-inches w.c. (50 mbar) 1D893327032 ± 3-inches w.c. (7,5 mbar)	1 (0,07)	300 (8,04)	500 (13,4)	750 (20,1)	1000 (26,8)	1300 (34,8)	1700 (45,6)
	2 (0,14)	500 (13,4)	950 (25,5)	1400 (37,5)	2000 (53,6)	2800 (75,0)	3100 (83,1)
	5 (0,34)	900 (24,1)	1700 (45,6)	2500 (67,0)	4200 (113)	5000 (134)	5500 (147)
	13 (0,90)	1500 (40,2)	3200 (85,8)	5400 (145)	6500 (174)	7000 (188)	7100 (190)
	25 (1,72)	2100 (56,3)	4700 (126)	7000 (188)	8250 (221)	9350 (251)	
	60 (4,14)	4750 (127)	8900 (239)	9950 (267)	10600 (284)		
	100 (6,90)	7400 (198)	10500 (281)	10800 (289)			
	125 (8,62)	9200 (247)	10950 (293)				

1. Limited due to boost.
 - Shaded areas show where indicated droop would be exceeded regardless of capacity.
 - Shaded areas show where maximum operating inlet pressure for a given port diameter is exceeded.

- continued -

Table 7. Types S201, S202, S203, S208, and S209 Flow Capacities (continued)

OUTLET PRESSURE, SPRING PART NUMBER, AND ACCURACY	INLET PRESSURE, PSIG (bar)	CAPACITIES IN SCFH (Nm ³ /h) OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
		2-Inch (DN 50) Body Size					
		Orifice Size, Inches (mm)					
		1/4 (6,35)	3/8 (9,52)	1/2 (12,7)	3/4 (19,1)	1 (25,4)	1-3/16 (30,2)
4-inches w.c. (10 mbar) 1D892527022 or 1D892627022 1-inch w.c. (2,5 mbar) droop 2-inches w.c. (5 mbar) boost	0.4 (0,028)				1200 (32,2)	1600 (42,8)	1800 (48,2)
	0.5 (0,034)				1700 (45,6)	2200 (58,9)	2400 (64,3)
	1 (0,07)	400 (10,7)	900 (24,1)	1300 (34,8)	2800 (75,0)	3200 (85,8)	3800 (102)
	1.5 (0,10)	500 (13,4)	1100 (29,5)	1700 (45,6)	3600 (96,5)	4300 (115)	5000 (134)
	2 (0,14)	600 (16,1)	1400 (37,5)	2200 (58,9)	4500 (121)	5500 (147)	6400 (172)
	5 (0,34)	1000 (26,8)	2300 (61,6)	3700 (99,2)	7800 (209)	9500 (255)	12700 (340)
	13 (0,90)	1650 (44,2)	3700 (99,2)	6500 (174)	13000 (348)	14000 (375)	14500 (389)
	25 (1,72)	2400 (64,3)	5200 (139)	9200 (247)	13000 (348)	18000 (482)	
	60 (4,14)	4450 (119)	9000 (241)	14550 (390)	15000 (402)		
	100 (6,90)	5500 (147)	9500 (255)	12900 (346) ⁽¹⁾			
	125 (8,62)	7250 (194)	3900 (105) ⁽¹⁾				
7-inches w.c. (17 mbar) 1D892727012 1-inch w.c. (2,5 mbar) droop 2-inches w.c. (5 mbar) boost	0.4 (0,028)				950 (25,5)	1400 (37,5)	1600 (42,8)
	0.5 (0,034)				1500 (40,2)	1800 (48,2)	2000 (53,6)
	1 (0,07)	400 (10,7)	800 (21,4)	1200 (32,2)	2300 (61,6)	2800 (75,0)	3300 (88,4)
	1.5 (0,10)	500 (13,4)	1050 (28,1)	1600 (42,8)	3100 (83,1)	3600 (96,5)	4500 (121)
	2 (0,14)	600 (16,1)	1300 (34,8)	2000 (53,6)	4000 (107)	4500 (121)	6000 (161)
	5 (0,34)	1000 (26,8)	2100 (56,3)	3500 (93,8)	7700 (206)	9400 (252)	9400 (252)
	13 (0,90)	1650 (44,2)	3500 (93,8)	6400 (172)	10000 (268)	20200 (541)	21200 (568)
	25 (1,72)	2400 (64,3)	5200 (139)	10300 (276)	20000 (536)	11800 (316) ⁽¹⁾	
	60 (4,14)	4450 (119)	9000 (241)	12000 (322)	20700 (555)		
	100 (6,90)	7500 (201)	10000 (268)	13100 (351)			
	125 (8,62)	9500 (255)	10300 (276)				
11-inches w.c. (27 mbar) 1D893227032 ± 2-inches w.c. (5 mbar)	0.5 (0,03)				800 (21,4)	1500 (40,2)	1600 (42,8)
	1 (0,07)	400 (10,7)	750 (20,1)	1100 (29,5)	1800 (48,2)	2500 (67,0)	2600 (69,7)
	1.5 (0,10)	500 (13,4)	1000 (26,8)	1450 (38,9)	2500 (67,0)	3400 (91,1)	3350 (89,8)
	2 (0,14)	600 (16,1)	1200 (32,2)	1700 (45,6)	3100 (83,1)	4200 (113)	3750 (101)
	5 (0,34)	1000 (26,8)	2000 (53,6)	3000 (80,4)	7300 (196)	7000 (188)	8500 (228)
	13 (0,90)	1600 (42,9)	3400 (91,1)	6200 (166)	10350 (277)	17650 (473)	18100 (485)
	25 (1,72)	2400 (64,3)	5650 (151)	10350 (277)	19300 (517)	23450 (628)	
	60 (4,14)	4450 (119)	11350 (304)	19300 (517)	20200 (541)		
	100 (6,90)	7450 (200)	16650 (446)	20200 (541)			
	125 (8,62)	9500 (255)	17500 (469)				
14-inches w.c. (35 mbar) 1D893227032 ± 2-inches w.c. (5 mbar)	1 (0,07)	450 (12,1)	700 (18,8)	1100 (29,5)	1500 (40,2)	1700 (45,6)	2700 (72,4)
	1.5 (0,10)	550 (14,7)	850 (22,8)	1200 (32,2)	1900 (50,9)	2700 (72,4)	3600 (96,5)
	2 (0,14)	600 (16,1)	1000 (26,8)	1900 (50,9)	2800 (75,0)	3800 (102)	3800 (102)
	5 (0,34)	1050 (28,1)	1750 (46,9)	2800 (75,0)	4000 (107)	5300 (142)	10600 (284)
	13 (0,90)	1750 (46,9)	3700 (99,2)	5700 (153)	14400 (386)	18000 (482)	18500 (496)
	25 (1,72)	2600 (69,7)	5700 (153)	10200 (273)	18000 (482)	25400 (681)	
	60 (4,14)	4800 (129)	10900 (292)	11000 (295)	19600 (525)		
	100 (6,90)	7400 (198)	16500 (442)	14100 (378)			
	125 (8,62)	9100 (244)	18000 (482)				
20-inches w.c. (50 mbar) 1D893327032 ± 3-inches w.c. (7,5 mbar)	1 (0,07)	300 (8,04)	750 (20,1)	550 (14,7)	1250 (33,5)	1700 (45,6)	1800 (48,2)
	2 (0,14)	500 (13,4)	1150 (30,8)	1700 (45,6)	1900 (50,9)	2350 (62,9)	3250 (87,1)
	5 (0,34)	900 (24,1)	1650 (44,2)	2150 (57,6)	3250 (87,1)	6400 (172)	6700 (180)
	13 (0,90)	1500 (40,2)	2550 (68,3)	4350 (117)	5950 (159)	10150 (272)	10500 (281)
	25 (1,72)	2450 (65,7)	4850 (130)	7200 (193)	18100 (485)	19200 (515)	
	60 (4,14)	4900 (131)	9400 (252)	19600 (525)	22700 (608)		
	100 (6,90)	7500 (201)	17400 (466)	13800 (370)			
	125 (8,62)	9150 (245)	5500 (147) ⁽¹⁾				

1. Limited due to boost.
 - Shaded areas show where indicated droop would be exceeded regardless of capacity.
 - Shaded areas show where maximum operating inlet pressure for a given port diameter is exceeded.

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Table 7. Types S201, S202, S203, S208, and S209 Flow Capacities (continued)

OUTLET PRESSURE, SPRING PART NUMBER, AND ACCURACY	INLET PRESSURE, PSIG (bar)	CAPACITIES IN SCFH (Nm ³ /h) OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
		1-1/2-Inch (DN 40) Body Size					
		Orifice Size, Inches (mm)					
		1/4 (6,35)	3/8 (9,52)	1/2 (12,7)	3/4 (19,1)	1 (25,4)	1-3/16 (30,2)
1 psig (0,069 bar) 1D893337032 ± 0.2 psig (0,014 bar)	2 (0,14)	700 (18,8)	1250 (33,5)	1550 (41,5)	2900 (77,7)	3050 (81,7)	3250 (87,1)
	5 (0,34)	1050 (28,1)	2150 (57,6)	2800 (75,0)	4800 (129)	5600 (150)	6300 (169)
	10 (0,69)	1650 (44,2)	3200 (85,8)	4400 (118)	6550 (176)	7800 (209)	8150 (218)
	15 (1,03)	2000 (53,6)	4100 (110)	5750 (154)	8000 (214)	9400 (252)	10250 (275)
	20 (1,38)	2300 (61,6)	4750 (127)	6100 (163)	8700 (233)	10950 (293)	
	25 (1,72)	2600 (69,7)	5500 (147)	8200 (220)	9950 (267)	11550 (310)	
	30 (2,07)	2900 (77,7)	6250 (168)	8350 (224)	10800 (289)	12250 (328)	
	40 (2,76)	3600 (96,5)	7500 (201)	9350 (251)	10850 (291)		
	45 (3,10)	3900 (105)	8400 (225)	10350 (277)	11000 (295)		
	50 (3,45)	4250 (114)	8900 (239)	10950 (293)	11050 (296)		
	60 (4,14)	4950 (133)	10000 (268)	11000 (295)	11400 (306)		
	80 (5,52)	6150 (165)	11150 (299)	11350 (304)			
1 psig (0,069 bar) 1D893337032 ± 1 % ABS ± 0.16 psia (0,011 bar)	2 (0,14)	650 (17,4)	1050 (28,1)	1350 (36,2)	2450 (65,7)	2700 (72,4)	3000 (80,4)
	5 (0,34)	1050 (28,1)	2100 (56,3)	2700 (72,4)	3800 (102)	4700 (126)	5200 (139)
	10 (0,69)	1500 (40,2)	2800 (75,0)	3700 (99,2)	5600 (150)	7000 (188)	7300 (196)
	15 (1,03)	1950 (52,3)	3750 (101)	4900 (131)	6900 (185)	8500 (228)	8750 (235)
	20 (1,38)	2200 (58,9)	4600 (123)	5800 (155)	8150 (218)	10350 (277)	
	25 (1,72)	2500 (67,0)	5000 (134)	7250 (194)	9050 (243)	10850 (291)	
	30 (2,07)	2800 (75,0)	6000 (161)	8200 (220)	9400 (252)	11000 (295)	
	40 (2,76)	3550 (95,1)	7350 (197)	9100 (244)	9500 (255)		
	45 (3,10)	3900 (105)	8250 (221)	9650 (259)	10100 (271)		
	50 (3,45)	4050 (109)	8450 (226)	10300 (276)	10300 (276)		
	60 (4,14)	4800 (129)	9050 (243)	10450 (280)	10550 (283)		
	80 (5,52)	5900 (158)	11000 (295)	11100 (297)			
1 psig (0,069 bar) 1D893337032 ± 2 % ABS ± 0.31 psia (0,021 bar)	2 (0,14)	750 (20,1)	1450 (38,9)	2100 (56,3)	3700 (99,2)	4650 (125)	5350 (143)
	5 (0,34)	1250 (33,5)	2500 (67,0)	3550 (95,1)	6050 (162)	7900 (212)	7900 (212)
	10 (0,69)	1750 (46,9)	3450 (92,5)	5100 (137)	8550 (229)	9550 (256)	10100 (271)
	15 (1,03)	2050 (54,9)	4350 (117)	6700 (180)	9400 (252)	11250 (302)	11400 (306)
	20 (1,38)	2500 (67,0)	5150 (138)	8100 (217)	10500 (281)	12200 (327)	
	25 (1,72)	2700 (72,4)	5800 (155)	10100 (271)	11550 (310)	12600 (338)	
	30 (2,07)	3050 (81,7)	6650 (178)	10550 (283)	12350 (331)	13100 (351)	
	40 (2,76)	3700 (99,2)	7950 (213)	10550 (283)	12350 (331)		
	45 (3,10)	4100 (110)	8800 (236)	11800 (316)	12700 (340)		
	50 (3,45)	4550 (122)	9250 (248)	12000 (322)	13000 (348)		
	60 (4,14)	5000 (134)	10900 (292)	12600 (338)	13000 (348)		
	80 (5,52)	6450 (173)	12550 (336)	13000 (348)			
1 psig (0,069 bar) 1H975827032 ± 0.2 psig (0,014 bar)	2 (0,14)	500 (13,4)	750 (20,1)	1750 (46,9)	2250 (60,3)	2400 (64,3)	2850 (76,4)
	5 (0,34)	1100 (29,5)	1800 (48,2)	2300 (61,6)	3400 (91,1)	4850 (130)	5350 (143)
	10 (1,03)	1600 (42,9)	3200 (85,8)	4600 (123)	7250 (194)	8800 (236)	8800 (236)
	30 (2,07)	2800 (75,0)	6300 (169)	7800 (209)	10400 (279)	11250 (302)	
	60 (4,14)	4900 (131)	9600 (257)	9650 (259)	11000 (295)		
	100 (6,90)	7300 (196)	11200 (300)	11950 (320)			
	125 (8,62)	9100 (244)	10550 (283) ⁽¹⁾				

1. Limited due to boost.

— Shaded areas show where indicated droop would be exceeded regardless of capacity.

— Shaded areas show where maximum operating inlet pressure for a given port diameter is exceeded.

- continued -

Table 7. Types S201, S202, S203, S208, and S209 Flow Capacities (continued)

OUTLET PRESSURE, SPRING PART NUMBER, AND ACCURACY	INLET PRESSURE, PSIG (bar)	CAPACITIES IN SCFH (Nm ³ /h) OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
		2-Inch (DN 50) Body Size					
		Orifice Size, Inches (mm)					
		1/4 (6,35)	3/8 (9,52)	1/2 (12,7)	3/4 (19,1)	1 (25,4)	1-3/16 (30,2)
1 psig (0,069 bar) 1D893337032 ± 0.2 psig (0,014 bar)	2 (0,14)	650 (17,4)	1200 (32,2)	2200 (58,9)	3200 (85,8)	3600 (96,5)	4500 (121)
	5 (0,34)	1100 (29,5)	2300 (61,6)	3200 (85,8)	4800 (129)	7700 (206)	10000 (268)
	10 (0,69)	1600 (42,9)	3000 (80,4)	4300 (115)	11400 (306)	15200 (407)	16300 (437)
	15 (1,03)	1900 (50,9)	4000 (107)	6900 (185)	15600 (418)	20800 (557)	22300 (598)
	20 (1,38)	2300 (61,6)	4900 (131)	9100 (244)	19000 (509)	24000 (643)	
	25 (1,72)	2600 (69,7)	5600 (150)	10500 (281)	21700 (582)	27400 (734)	
	30 (2,07)	2900 (77,7)	6500 (174)	11800 (316)	25300 (678)	32800 (879)	
	40 (2,76)	3700 (99,2)	8000 (214)	14500 (389)	27000 (724)		
	45 (3,10)	4000 (107)	8800 (236)	15800 (423)	27000 (724)		
	50 (3,45)	4300 (115)	9300 (249)	16600 (445)	28000 (750)		
	60 (4,14)	4900 (131)	11300 (303)	19500 (523)	31600 (847)		
	80 (5,52)	6300 (169)	14200 (381)	24000 (643)			
1 psig (0,069 bar) 1D893337032 ± 1 % ABS ± 0.16 psia (0,011 bar)	2 (0,14)	570 (15,3)	1100 (29,5)	2000 (53,6)	2750 (73,7)	3100 (83,1)	4000 (107)
	5 (0,34)	1050 (28,1)	2200 (58,9)	2750 (73,7)	4100 (110)	6250 (168)	9000 (241)
	10 (0,69)	1500 (40,2)	2500 (67,0)	4050 (109)	8500 (228)	13250 (355)	13700 (367)
	15 (1,03)	1900 (50,9)	3450 (92,5)	5800 (155)	15500 (415)	16000 (429)	16300 (437)
	20 (1,38)	2300 (61,6)	4800 (129)	7700 (206)	18300 (490)	20850 (559)	
	25 (1,72)	2500 (67,0)	5600 (150)	10400 (279)	21500 (576)	22800 (611)	
	30 (2,07)	2900 (77,7)	6350 (170)	11950 (320)	23800 (638)	24300 (651)	
	40 (2,76)	3650 (97,8)	7850 (210)	14550 (390)	24300 (651)		
	45 (3,10)	3850 (103)	8400 (225)	15600 (418)	25400 (681)		
	50 (3,45)	4250 (114)	9350 (251)	16700 (448)	26000 (697)		
	60 (4,14)	4900 (131)	11200 (300)	19400 (520)	32000 (858)		
	80 (5,52)	6200 (166)	14250 (382)	24600 (659)			
1 psig (0,069 bar) 1D893337032 ± 2 % ABS ± 0.31 psia (0,021 bar)	2 (0,14)	700 (18,8)	1450 (38,9)	2450 (65,7)	4100 (110)	5600 (150)	7900 (212)
	5 (0,34)	1150 (30,8)	2550 (68,3)	4000 (107)	8000 (214)	11700 (314)	14300 (383)
	10 (0,69)	1800 (48,2)	3550 (95,1)	6200 (166)	12300 (330)	18400 (493)	20000 (536)
	15 (1,03)	2050 (54,9)	4450 (119)	7850 (210)	15900 (426)	22000 (590)	24600 (659)
	20 (1,38)	2400 (64,3)	5250 (141)	9100 (244)	19200 (515)	25800 (691)	
	25 (1,72)	2750 (73,7)	5900 (158)	10300 (276)	21800 (584)	31200 (836)	
	30 (2,07)	3150 (84,4)	6550 (176)	11800 (316)	26200 (702)	35000 (938)	
	40 (2,76)	3750 (101)	8200 (220)	14300 (383)	30500 (817)		
	45 (3,10)	4050 (109)	8800 (236)	15600 (418)	28100 (753)		
	50 (3,45)	4400 (118)	9300 (249)	16700 (448)	33900 (909)		
	60 (4,14)	5050 (135)	10850 (291)	19500 (523)	34200 (917)		
	80 (5,52)	6350 (170)	13600 (364)	24600 (659)			
1 psig (0,069 bar) 1H975827032 ± 0.2 psig (0,014 bar)	2 (0,14)	500 (13,4)	1050 (28,1)	1400 (37,5)	2200 (58,9)	2900 (77,7)	3700 (99,2)
	5 (0,34)	1100 (29,5)	2000 (53,6)	2200 (58,9)	4500 (121)	6600 (177)	7000 (188)
	10 (1,03)	1600 (42,9)	3500 (93,8)	5700 (153)	9700 (260)	13000 (348)	13300 (356)
	30 (2,07)	2800 (75,0)	6200 (166)	11700 (314)	20000 (536)	23000 (616)	
	60 (4,14)	4900 (131)	10900 (292)	19300 (517)	20600 (552)		
	100 (6,90)	7500 (201)	17300 (464)	23900 (641)			
	125 (8,62)	9000 (241)	19900 (533)				

 - Shaded areas show where indicated droop would be exceeded regardless of capacity.
 - Shaded areas show where maximum operating inlet pressure for a given port diameter is exceeded.

Bulletin 71.1:S200

Table 8. Types S201H, S202H, S203H, S208H, and S209H Capacities

OUTLET PRESSURE, SPRING PART NUMBER, AND ACCURACY	INLET PRESSURE, PSIG (bar)	CAPACITIES IN SCFH (Nm ³ /h) OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
		1-1/2-Inch (DN 40) Body Size					
		Orifice Size, Inches (mm)					
		1/4 (6,35)	3/8 (9,52)	1/2 (12,7)	3/4 (19,1)	1 (25,4)	1-3/16 (30,2)
2 psig (0,14 bar) 1H975827032 ± 0.2 psig (0,014 bar)	5 (0,34)	850 (22,8)	1600 (42,9)	1650 (44,2)	2400 (64,3)	2450 (65,7)	3900 (105)
	10 (0,69)	1450 (38,9)	2050 (54,9)	3250 (87,1)	5400 (145)	5750 (154)	6650 (178)
	15 (1,03)	1650 (44,2)	3000 (80,4)	4300 (115)	7000 (188)	8200 (220)	8200 (220)
	20 (1,38)	2050 (54,9)	3850 (103)	5650 (151)	7500 (201)	9050 (243)	
	25 (1,72)	2500 (67,0)	4600 (123)	6500 (174)	9600 (257)	9700 (260)	
	30 (2,07)	2750 (73,7)	5650 (151)	6500 (174)	9600 (257)	10850 (291)	
	40 (2,76)	3500 (93,8)	7000 (188)	8400 (225)	10150 (272)		
	45 (3,10)	3750 (101)	7800 (209)	9150 (245)	10500 (281)		
	50 (3,45)	4250 (114)	8500 (228)	9600 (257)	10500 (281)		
	60 (4,14)	4850 (130)	8800 (236)	9700 (260)	11400 (306)		
	80 (5,52)	6150 (165)	10000 (268)	11250 (302)			
	100 (6,90)	7600 (204)	10800 (289)	11250 (302)			
	125 (8,62)	9300 (249)	12200 (327)				
2 psig (0,14 bar) 1H975827032 ± 0.4 psig (0,028 bar)	5 (0,34)	1100 (29,5)	2200 (58,9)	2800 (75,0)	4550 (122)	5600 (150)	6550 (176)
	10 (0,69)	1750 (46,9)	3150 (84,4)	4600 (123)	7550 (202)	9050 (243)	10150 (272)
	15 (1,03)	2000 (53,6)	4200 (113)	6400 (172)	10050 (269)	11000 (295)	11200 (300)
	20 (1,38)	2400 (64,3)	5000 (134)	7550 (202)	11700 (314)	12200 (327)	
	25 (1,72)	2700 (72,4)	5750 (154)	9600 (257)	11900 (319)	12950 (347)	
	30 (2,07)	3100 (83,1)	6700 (180)	9600 (257)	11900 (319)	13300 (356)	
	40 (2,76)	3750 (101)	7950 (213)	10750 (288)	13000 (348)		
	45 (3,10)	4100 (110)	8750 (235)	10750 (288)	13000 (348)		
	50 (3,45)	4550 (122)	9550 (256)	12700 (340)	13000 (348)		
	60 (4,14)	5150 (138)	11250 (302)	13300 (356)	14400 (386)		
	80 (5,52)	6450 (173)	12750 (342)	13300 (356)			
	100 (6,90)	7750 (208)	14450 (387)	13300 (356)			
	125 (8,62)	9400 (252)	14600 (391)				
2 psig (0,14 bar) 1H975827032 ± 1 % ABS ± 0.17 psia (0,012 bar)	5 (0,34)	850 (22,8)	1400 (37,5)	1450 (38,9)	2250 (60,3)	2450 (65,7)	3300 (88,4)
	10 (0,69)	1400 (37,5)	1650 (44,2)	2550 (68,3)	4350 (117)	5250 (141)	5600 (150)
	15 (1,03)	1500 (40,2)	2700 (72,4)	3800 (102)	6000 (161)	5400 (145)	8000 (214)
	20 (1,38)	2000 (53,6)	3600 (96,5)	5200 (139)	7200 (193)	8200 (220)	
	25 (1,72)	2400 (64,3)	4500 (121)	6400 (172)	9000 (241)	9550 (256)	
	30 (2,07)	2800 (75,0)	5600 (150)	7500 (201)	10000 (268)	10400 (279)	
	40 (2,76)	3600 (96,5)	7800 (209)	9200 (247)	10150 (272)		
	45 (3,10)	3900 (105)	8400 (225)	9800 (263)	10900 (292)		
	50 (3,45)	4300 (115)	9100 (244)	10300 (276)	10600 (284)		
	60 (4,14)	5000 (134)	10200 (273)	11400 (306)	11300 (303)		
	80 (5,52)	6400 (172)	12000 (322)	10300 (276) ⁽¹⁾			
	100 (6,90)	7900 (212)	13000 (348)	11150 (299) ⁽¹⁾			
	125 (8,62)	9600 (257)	11950 (320) ⁽¹⁾				
2 psig (0,14 bar) 1H975827032 ± 2 % ABS ± 0.33 psia (0,023 bar)	5 (0,34)	1050 (28,1)	2100 (56,3)	2500 (67,0)	4100 (110)	5200 (139)	6250 (168)
	10 (0,69)	1650 (44,2)	3050 (81,7)	4200 (113)	6400 (172)	8350 (224)	8850 (237)
	15 (1,03)	1900 (50,9)	4200 (113)	6200 (166)	8800 (236)	10500 (281)	10750 (288)
	20 (1,38)	2200 (58,9)	5100 (137)	7600 (204)	10300 (276)	12000 (322)	
	25 (1,72)	2500 (67,0)	5800 (155)	8700 (233)	11800 (316)	12050 (323)	
	30 (2,07)	3000 (80,4)	6500 (174)	9600 (257)	12600 (338)	12700 (340)	
	40 (2,76)	3600 (96,5)	8100 (217)	11500 (308)	12700 (340)		
	45 (3,10)	3900 (105)	8800 (236)	12000 (322)	12800 (343)		
	50 (3,45)	4300 (115)	9700 (260)	12600 (338)	12900 (346)		
	60 (4,14)	5000 (134)	11300 (303)	13600 (364)	13700 (367)		
	80 (5,52)	6400 (172)	14200 (381)	12650 (339)			
	100 (6,90)	7900 (212)	15500 (415)	12950 (347)			
	125 (8,62)	9600 (257)	14200 (381) ⁽¹⁾				

1. Limited due to boost.
 - Shaded areas show where indicated droop would be exceeded regardless of capacity.
 - Shaded areas show where maximum operating inlet pressure for a given port diameter is exceeded.

- continued -

Table 8. Types S201H, S202H, S203H, S208H, and S209H Capacities (continued)

OUTLET PRESSURE, SPRING PART NUMBER, AND ACCURACY	INLET PRESSURE, PSIG (bar)	CAPACITIES IN SCFH (Nm ³ /h) OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
		2-Inch (DN 50) Body Size					
		Orifice Size, Inches (mm)					
		1/4 (6,35)	3/8 (9,52)	1/2 (12,7)	3/4 (19,1)	1 (25,4)	1-3/16 (30,2)
2 psig (0,14 bar) 1H975827032 ± 0.2 psig (0,014 bar)	5 (0,34)	850 (22,8)	1800 (48,2)	1800 (48,2)	2950 (79,1)	4250 (114)	5200 (139)
	10 (0,69)	1350 (36,2)	1900 (50,9)	3000 (80,4)	5200 (139)	6600 (177)	7800 (209)
	15 (1,03)	1700 (45,6)	2800 (75,0)	3700 (99,2)	6900 (185)	7200 (193)	9500 (255)
	20 (1,38)	2000 (53,6)	3800 (102)	5300 (142)	9000 (241)	9800 (263)	
	25 (1,72)	2450 (65,7)	4500 (121)	6800 (182)	12500 (335)	14200 (381)	
	30 (2,07)	2650 (71,0)	5200 (139)	7500 (201)	16000 (429)	16100 (431)	
	40 (2,76)	3400 (91,1)	7400 (198)	13200 (354)	21600 (579)		
	45 (3,10)	3600 (96,5)	8000 (214)	15500 (415)	21600 (579)		
	50 (3,45)	4000 (107)	8500 (228)	16700 (448)	21900 (587)		
	60 (4,14)	4600 (123)	10700 (287)	19200 (515)	18800 (504) ⁽¹⁾		
	80 (5,52)	5800 (155)	13100 (351)	24800 (665)			
	100 (6,90)	7100 (190)	16200 (434)	25600 (686)			
	125 (8,62)	9000 (241)	19900 (533)				
2 psig (0,14 bar) 1H975827032 ± 0.4 psig (0,028 bar)	5 (0,34)	1100 (29,5)	2250 (60,3)	3200 (85,8)	5500 (147)	7800 (209)	10100 (271)
	10 (0,69)	1600 (42,9)	3250 (87,1)	5400 (145)	10000 (268)	14100 (378)	15100 (405)
	15 (1,03)	2000 (53,6)	4150 (111)	7200 (193)	14400 (386)	18600 (498)	22100 (592)
	20 (1,38)	2300 (61,6)	4950 (133)	9000 (241)	17500 (469)	24000 (643)	
	25 (1,72)	2650 (71,0)	5800 (155)	10200 (273)	20700 (555)	28000 (750)	
	30 (2,07)	3100 (83,1)	6600 (177)	11800 (316)	24900 (667)	28500 (764)	
	40 (2,76)	3600 (96,5)	8100 (217)	14600 (391)	28000 (750)		
	45 (3,10)	4100 (110)	8850 (237)	15800 (423)	29000 (777)		
	50 (3,45)	4400 (118)	9850 (264)	17200 (461)	29200 (783)		
	60 (4,14)	4900 (131)	11300 (303)	19500 (523)	29300 (785)		
	80 (5,52)	6400 (172)	14300 (383)	24500 (657)			
	100 (6,90)	7600 (204)	17200 (461)	29700 (796)			
	125 (8,62)	9400 (252)	20500 (549)				
2 psig (0,14 bar) 1H975827032 ± 1 % ABS ± 0.17 psia (0,012 bar)	5 (0,34)	750 (20,1)	1600 (42,9)	1600 (42,9)	2400 (64,3)	3000 (80,4)	4100 (110)
	10 (0,69)	1250 (33,5)	1600 (42,9)	2550 (68,3)	4250 (114)	5000 (134)	6100 (163)
	15 (1,03)	1600 (42,9)	2700 (72,4)	3800 (102)	5200 (139)	6900 (185)	7600 (204)
	20 (1,38)	2000 (53,6)	3600 (96,5)	5200 (139)	6900 (185)	9400 (252)	
	25 (1,72)	2450 (65,7)	4400 (118)	7500 (201)	9600 (257)	10650 (285)	
	30 (2,07)	2800 (75,0)	5200 (139)	8600 (230)	11800 (316)	16100 (431)	
	40 (2,76)	3700 (99,2)	7500 (201)	12200 (327)	16200 (434)		
	45 (3,10)	4100 (110)	8400 (225)	15200 (407)	18350 (492)		
	50 (3,45)	4400 (118)	9000 (241)	16900 (453)	21000 (563)		
	60 (4,14)	5100 (137)	11000 (295)	20800 (557)	21000 (563)		
	80 (5,52)	6500 (174)	14600 (391)	24800 (665)			
	100 (6,90)	8000 (214)	18000 (482)	29300 (785)			
	125 (8,62)	9800 (263)	20500 (549)				
2 psig (0,14 bar) 1H975827032 ± 2 % ABS ± 0.33 psia (0,023 bar)	5 (0,34)	1000 (26,8)	2150 (57,6)	2750 (73,7)	5000 (134)	6200 (166)	7900 (212)
	10 (0,69)	1550 (41,5)	3050 (81,7)	5000 (134)	8600 (230)	12750 (342)	13800 (370)
	15 (1,03)	1900 (50,9)	4200 (113)	7200 (193)	11000 (295)	11750 (315)	21700 (582)
	20 (1,38)	2300 (61,6)	5100 (137)	9200 (247)	14200 (381)	16000 (429)	
	25 (1,72)	2600 (69,7)	5900 (158)	10700 (287)	16400 (440)	25400 (681)	
	30 (2,07)	3000 (80,4)	6600 (177)	12100 (324)	19700 (528)	27900 (748)	
	40 (2,76)	3700 (99,2)	8200 (220)	12200 (327)	27200 (729)		
	45 (3,10)	4100 (110)	9000 (241)	15200 (407)	27200 (729)		
	50 (3,45)	4400 (118)	9700 (260)	16900 (453)	27400 (734)		
	60 (4,14)	5100 (137)	11300 (303)	20800 (557)	27400 (734)		
	80 (5,52)	6500 (174)	14600 (391)	24500 (657)			
	100 (6,90)	8000 (214)	18000 (482)	29600 (793)			
	125 (8,62)	9800 (263)	20500 (549)				

1. Limited due to boost.

— Shaded areas show where indicated droop would be exceeded regardless of capacity.

— Shaded areas show where maximum operating inlet pressure for a given port diameter is exceeded.

- continued -

Bulletin 71.1:S200

Table 8. Types S201H, S202H, S203H, S208H, and S209H Capacities (continued)

OUTLET PRESSURE, SPRING PART NUMBER, AND ACCURACY	INLET PRESSURE, PSIG (bar)	CAPACITIES IN SCFH (Nm ³ /h) OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
		1-1/2-Inch (DN 40) Body Size					
		Orifice Size, Inches (mm)					
		1/4 (6,35)	3/8 (9,52)	1/2 (12,7)	3/4 (19,1)	1 (25,4)	1-3/16 (30,2)
3 psig (0,21 bar) 1H975927032 ± 0.3 psig (0,021 bar)	5 (0,34)	800 (21,4)	1350 (36,2)	1650 (44,2)	2500 (67,0)	2500 (67,0)	3850 (103)
	10 (0,69)	1200 (32,2)	1800 (48,2)	2650 (71,0)	4600 (123)	6050 (162)	6600 (177)
	15 (1,03)	1650 (44,2)	2300 (61,6)	3750 (101)	6500 (174)	9200 (247)	8200 (220)
	20 (1,38)	1950 (52,3)	3500 (93,8)	5000 (134)	8350 (224)	9200 (247)	
	25 (1,72)	2150 (57,6)	4400 (118)	6500 (174)	8150 (218)	10050 (269)	
	30 (2,07)	2700 (72,4)	5600 (150)	6700 (180)	10050 (269)	11250 (302)	
	40 (2,76)	3300 (88,4)	6900 (185)	7900 (212)	10300 (276)		
	45 (3,10)	3550 (95,1)	7000 (188)	8650 (232)	11000 (295)		
	50 (3,45)	4050 (109)	7800 (209)	9700 (260)	11000 (295)		
	60 (4,14)	4250 (114)	8200 (220)	9900 (265)	11450 (307)		
	80 (5,52)	5950 (159)	10000 (268)	11600 (311)			
	100 (6,90)	7450 (200)	11750 (315)	11900 (319)			
	125 (8,62)	8800 (236)	12200 (327)				
3 psig (0,21 bar) 1H975927032 ± 0.6 psig (0,041 bar)	5 (0,34)	1100 (29,5)	1950 (52,3)	2800 (75,0)	4250 (114)	5400 (145)	7200 (193)
	10 (0,69)	1650 (44,2)	3100 (83,1)	4650 (125)	7750 (208)	8700 (233)	9100 (244)
	15 (1,03)	2050 (54,9)	4100 (110)	5950 (159)	9550 (256)	11150 (299)	11800 (316)
	20 (1,38)	2400 (64,3)	4900 (131)	7800 (209)	10650 (285)	12350 (331)	
	25 (1,72)	2600 (69,7)	5750 (154)	8700 (233)	11950 (320)	14050 (377)	
	30 (2,07)	3100 (83,1)	6550 (176)	10250 (275)	12050 (323)	14400 (386)	
	40 (2,76)	3150 (84,4)	7850 (210)	11300 (303)	13800 (370)		
	45 (3,10)	4150 (111)	8400 (225)	12450 (334)	14150 (379)		
	50 (3,45)	4400 (118)	9300 (249)	12450 (334)	14150 (379)		
	60 (4,14)	5000 (134)	10700 (287)	13000 (348)	15350 (411)		
	80 (5,52)	6400 (172)	13050 (350)	16000 (429)			
	100 (6,90)	7650 (205)	15400 (413)	16050 (430)			
	125 (8,62)	9200 (247)	16050 (430)				
3 psig (0,21 bar) 1H975927032 ± 1 % ABS ± 0.18 psia (0,012 bar)	5 (0,34)	500 (13,4)	1150 (30,8)	1200 (32,2)	1450 (38,9)	1550 (41,5)	2100 (56,3)
	10 (0,69)	900 (24,1)	1350 (36,2)	1500 (40,2)	2750 (73,7)	3200 (85,8)	3400 (91,1)
	15 (1,03)	1200 (32,2)	1700 (45,6)	2200 (58,9)	3900 (105)	4900 (131)	4950 (133)
	20 (1,38)	1500 (40,2)	2100 (56,3)	2900 (77,7)	5300 (142)	8000 (214)	
	25 (1,72)	1900 (50,9)	2600 (69,7)	4300 (115)	7400 (198)	9350 (251)	
	30 (2,07)	2200 (58,9)	3100 (83,1)	5100 (137)	8400 (225)	8650 (232) ⁽¹⁾	
	40 (2,76)	2900 (77,7)	4800 (129)	8000 (214)	8750 (235)		
	45 (3,10)	3300 (88,4)	5800 (155)	9300 (249)	9900 (265)		
	50 (3,45)	3700 (99,2)	6800 (182)	10200 (273)	10600 (284)		
	60 (4,14)	4400 (118)	8400 (225)	11600 (311)	10700 (287)		
	80 (5,52)	6300 (169)	10800 (289)	9400 (252) ⁽¹⁾			
	100 (6,90)	8100 (217)	12100 (324)	11750 (315)			
	125 (8,62)	10000 (268)	10750 (288) ⁽¹⁾				
3 psig (0,21 bar) 1H975927032 ± 2 % ABS ± 0.35 psia (0,024 bar)	5 (0,34)	900 (24,1)	1450 (38,9)	1800 (48,2)	3000 (80,4)	3000 (80,4)	4650 (125)
	10 (0,69)	1250 (33,5)	2050 (54,9)	3150 (84,4)	5150 (138)	6450 (173)	6650 (178)
	15 (1,03)	1800 (48,2)	3100 (83,1)	4400 (118)	7200 (193)	8700 (233)	8700 (233)
	20 (1,38)	2200 (58,9)	3800 (102)	6100 (163)	8600 (230)	11000 (295)	
	25 (1,72)	2600 (69,7)	5000 (134)	7600 (204)	9700 (260)	11050 (296)	
	30 (2,07)	2900 (77,7)	5800 (155)	8700 (233)	11200 (300)	11450 (307)	
	40 (2,76)	3600 (96,5)	7800 (209)	10800 (289)	11600 (311)		
	45 (3,10)	4000 (107)	8400 (225)	11600 (311)	11600 (311)		
	50 (3,45)	4600 (123)	9400 (252)	12400 (332)	11750 (315)		
	60 (4,14)	5100 (137)	10600 (284)	13800 (370)	13250 (355)		
	80 (5,52)	6500 (174)	12700 (340)	12600 (338) ⁽¹⁾			
	100 (6,90)	8100 (217)	14400 (386)	12550 (336) ⁽¹⁾			
	125 (8,62)	10000 (268)	12500 (335) ⁽¹⁾				

1. Limited due to boost.
 - Shaded areas show where indicated droop would be exceeded regardless of capacity.
 - Shaded areas show where maximum operating inlet pressure for a given port diameter is exceeded.

- continued -

Table 8. Types S201H, S202H, S203H, S208H, and S209H Capacities (continued)

OUTLET PRESSURE, SPRING PART NUMBER, AND ACCURACY	INLET PRESSURE, PSIG (bar)	CAPACITIES IN SCFH (Nm ³ /h) OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
		2-Inch (DN 50) Body Size					
		Orifice Size, Inches (mm)					
		1/4 (6,35)	3/8 (9,52)	1/2 (12,7)	3/4 (19,1)	1 (25,4)	1-3/16 (30,2)
3 psig (0,21 bar) 1H975927032 ± 0.3 psig (0,021 bar)	5 (0,34)	750 (20,1)	1400 (37,5)	1600 (42,9)	2400 (64,3)	2900 (77,7)	3500 (93,8)
	10 (0,69)	1200 (32,2)	1900 (50,9)	2750 (73,7)	5000 (134)	6400 (171)	6900 (185)
	15 (1,03)	1400 (37,5)	2000 (53,6)	3100 (83,1)	5900 (158)	7700 (206)	9800 (263)
	20 (1,38)	1850 (49,6)	3000 (80,4)	4150 (111)	7700 (206)	7900 (212)	
	25 (1,72)	2050 (54,9)	3900 (105)	5000 (134)	9100 (244)	9750 (261)	
	30 (2,07)	2550 (68,3)	4800 (129)	6700 (180)	10100 (271)	17200 (461)	
	40 (2,76)	3150 (84,4)	6250 (168)	8700 (233)	11600 (311)		
	45 (3,10)	3400 (91,1)	6750 (181)	9900 (265)	14500 (389)		
	50 (3,45)	3900 (105)	6750 (181)	12300 (330)	13900 (373)		
	60 (4,14)	4350 (117)	9400 (252)	12700 (340)	18300 (490)		
	80 (5,52)	5600 (150)	12700 (340)	18800 (504)			
	100 (6,90)	7000 (188)	14800 (397)	18800 (504)			
	125 (8,62)	8650 (232)	18800 (504)				
3 psig (0,21 bar) 1H975927032 ± 0.6 psig (0,041 bar)	5 (0,34)	1100 (29,5)	1950 (52,3)	2550 (68,3)	4700 (126)	6000 (161)	7450 (200)
	10 (0,69)	1550 (41,5)	3000 (80,4)	4750 (127)	8600 (230)	12200 (327)	15400 (413)
	15 (1,03)	2050 (54,9)	3850 (103)	5950 (159)	12600 (338)	16200 (434)	20300 (544)
	20 (1,38)	2400 (64,3)	4850 (130)	8200 (220)	17000 (456)	21800 (584)	
	25 (1,72)	2800 (75,0)	5750 (154)	9800 (263)	19700 (528)	23000 (616)	
	30 (2,07)	3150 (84,4)	6450 (173)	11600 (311)	22500 (603)	26500 (710)	
	40 (2,76)	3650 (97,8)	7850 (210)	14300 (383)	26400 (708)		
	45 (3,10)	4100 (110)	8900 (239)	15500 (415)	28500 (764)		
	50 (3,45)	4350 (117)	9450 (253)	17000 (456)	29600 (793)		
	60 (4,14)	5100 (137)	11100 (297)	19850 (532)	29900 (801)		
	80 (5,52)	6350 (170)	14350 (385)	25200 (675)			
	100 (6,90)	7250 (194)	17250 (462)	29400 (788)			
	125 (8,62)	9400 (252)	21000 (563)				
3 psig (0,21 bar) 1H975927032 ± 1 % ABS ± 0.18 psia (0,012 bar)	5 (0,34)	650 (17,4)	1100 (29,5)	790 (21,2)	1500 (40,2)	1700 (45,6)	1750 (46,9)
	10 (0,69)	1000 (26,8)	1250 (33,5)	1500 (40,2)	2500 (67,0)	3700 (99,2)	4300 (115)
	15 (1,03)	1250 (33,5)	1750 (46,9)	2000 (53,6)	2900 (77,7)	3750 (101)	6000 (161)
	20 (1,38)	1450 (38,9)	2400 (64,3)	2200 (58,9)	4100 (110)	5750 (154)	
	25 (1,72)	1600 (42,8)	2900 (77,7)	4000 (107)	6900 (185)	6400 (172)	
	30 (2,07)	1950 (52,3)	3550 (95,1)	4400 (118)	8700 (233)	6700 (180)	
	40 (2,76)	2700 (72,4)	3850 (103)	5500 (147)	6450 (173)		
	45 (3,10)	2900 (77,7)	5400 (145)	9000 (241)	8000 (214)		
	50 (3,45)	3300 (88,4)	5700 (153)	9100 (244)	7900 (212)		
	60 (4,14)	3900 (105)	7200 (193)	11500 (308)	10300 (276)		
	80 (5,52)	5250 (141)	9200 (247)	9800 (263) ⁽¹⁾			
	100 (6,90)	6250 (168)	11300 (303)	10900 (292) ⁽¹⁾			
	125 (8,62)	7750 (208)	12650 (339)				
3 psig (0,21 bar) 1H975927032 ± 2 % ABS ± 0.35 psia (0,024 bar)	5 (0,34)	800 (21,4)	1450 (38,9)	1700 (45,6)	3150 (84,4)	3250 (87,1)	4000 (107)
	10 (0,69)	1300 (34,8)	2150 (57,6)	3200 (85,8)	5550 (149)	7200 (193)	9000 (241)
	15 (1,03)	1550 (41,5)	2850 (76,4)	4050 (109)	6800 (182)	8250 (221)	10800 (289)
	20 (1,38)	1850 (49,6)	3300 (88,4)	5400 (145)	9300 (249)	10900 (292)	
	25 (1,72)	2350 (62,9)	4650 (125)	6700 (180)	11250 (302)	15600 (418)	
	30 (2,07)	2450 (65,7)	5100 (137)	8600 (230)	12250 (328)	17350 (465)	
	40 (2,76)	3150 (84,4)	6950 (186)	11400 (306)	15150 (406)		
	45 (3,10)	3400 (91,1)	7650 (205)	11900 (319)	18150 (486)		
	50 (3,45)	3800 (102)	8500 (228)	14000 (375)	20200 (541)		
	60 (4,14)	4300 (115)	9850 (264)	19000 (509)	21150 (567)		
	80 (5,52)	5500 (147)	12600 (338)	23100 (619)			
	100 (6,90)	6500 (174)	15500 (415)	23650 (634)			
	125 (8,62)	8100 (217)	20650 (553)				

1. Limited due to boost.

 Shaded areas show where indicated droop would be exceeded regardless of capacity.

 Shaded areas show where maximum operating inlet pressure for a given port diameter is exceeded.

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Bulletin 71.1:S200

Table 8. Types S201H, S202H, S203H, S208H, and S209H Capacities (continued)

OUTLET PRESSURE, SPRING PART NUMBER, AND ACCURACY	INLET PRESSURE, PSIG (bar)	CAPACITIES IN SCFH (Nm ³ /h) OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
		1-1/2-Inch (DN 40) Body Size					
		Orifice Size, Inches (mm)					
		1/4 (6,35)	3/8 (9,52)	1/2 (12,7)	3/4 (19,1)	1 (25,4)	1-3/16 (30,2)
5 psig (0,34 bar) 1P615427142 ± 0.5 psig (0,034 bar)	10 (0,69)	1200 (32,2)	1850 (49,6)	2300 (61,6)	3350 (89,8)	4750 (127)	5500 (147)
	15 (1,03)	1350 (36,2)	2450 (65,7)	3200 (85,8)	5250 (141)	6650 (178)	7550 (202)
	20 (1,38)	1850 (49,6)	3200 (85,8)	3900 (105)	6700 (180)	8600 (230)	
	25 (1,72)	2200 (58,9)	3600 (96,5)	4900 (131)	8250 (221)	10000 (268)	
	30 (2,07)	2500 (67,0)	5100 (137)	6500 (174)	8800 (236)	11450 (307)	
	40 (2,76)	3250 (87,1)	6100 (163)	7650 (205)	10650 (285)		
	45 (3,10)	3650 (97,8)	6950 (186)	8500 (228)	11200 (300)		
	50 (3,45)	3850 (103)	7550 (202)	9250 (248)	12250 (328)		
	60 (4,14)	4600 (123)	8550 (229)	10300 (276)	12950 (347)		
	80 (5,52)	5900 (158)	10550 (283)	12500 (335)			
	100 (6,90)	7250 (194)	12000 (322)	12550 (336)			
	125 (8,62)	9000 (241)	13300 (356)				
5 psig (0,34 bar) 1P615427142 ± 1 psig (0,69 bar)	10 (0,69)	1550 (41,5)	2850 (76,4)	4050 (109)	6450 (173)	8450 (226)	9800 (263)
	15 (1,03)	2000 (53,6)	3850 (103)	5800 (155)	9250 (248)	11150 (299)	12400 (332)
	20 (1,38)	2450 (65,7)	4750 (127)	7150 (192)	11400 (306)	13250 (355)	
	25 (1,72)	2800 (75,0)	5700 (153)	8600 (230)	12800 (343)	15250 (409)	
	30 (2,07)	3100 (83,1)	6400 (172)	10050 (269)	13550 (363)	16800 (450)	
	40 (2,76)	3700 (99,2)	7850 (210)	12350 (331)	15650 (419)		
	45 (3,10)	4050 (109)	8600 (230)	13000 (348)	15950 (427)		
	50 (3,45)	4450 (119)	9400 (252)	13650 (366)	16300 (437)		
	60 (4,14)	5050 (135)	10700 (287)	15100 (405)	18200 (488)		
	80 (5,52)	6300 (169)	13400 (359)	17650 (473)			
	100 (6,90)	7600 (204)	15950 (427)	17650 (473)			
	125 (8,62)	9200 (247)	17800 (477)				
5 psig (0,34 bar) 1P615427142 ± 1 % ABS ± 0.20 psia (0,014 bar)	10 (0,69)	650 (17,4)	900 (24,1)	1050 (28,1)	1200 (32,2)	1950 (52,3)	2200 (58,9)
	15 (1,03)	800 (21,4)	1100 (29,5)	1500 (40,2)	2000 (53,6)	2600 (69,7)	3400 (91,1)
	20 (1,38)	1050 (28,1)	1400 (37,5)	2050 (54,9)	2800 (75,0)	3800 (102)	
	25 (1,72)	1200 (32,2)	1800 (48,2)	2350 (62,9)	3800 (102)	4400 (118)	
	30 (2,07)	1450 (38,9)	2200 (58,9)	3000 (80,4)	4900 (131)	5250 (141)	
	40 (2,76)	1950 (52,3)	2950 (79,1)	4400 (118)	5750 (154)		
	45 (3,10)	2200 (58,9)	3300 (88,4)	5000 (134)	6550 (176)		
	50 (3,45)	2400 (64,3)	3850 (103)	6200 (166)	8200 (220)		
	60 (4,14)	2950 (79,1)	4800 (129)	8400 (225)	9250 (248)		
	80 (5,52)	4000 (107)	7400 (198)	7800 (209)			
	100 (6,90)	5300 (142)	10700 (287)	9200 (247)			
	125 (8,62)	7200 (193)	6150 (165) ⁽¹⁾				
5 psig (0,34 bar) 1P615427142 ± 2 % ABS ± 0.39 psia (0,028 bar)	10 (0,69)	1050 (28,1)	1650 (44,2)	1950 (52,3)	2600 (69,7)	3700 (99,2)	4900 (131)
	15 (1,03)	1350 (36,2)	2050 (54,9)	2900 (77,7)	4300 (115)	5600 (150)	6350 (170)
	20 (1,38)	1750 (46,9)	2700 (72,4)	3900 (105)	5800 (155)	7400 (198)	
	25 (1,72)	2100 (56,3)	3350 (89,8)	4850 (130)	7300 (196)	8750 (235)	
	30 (2,07)	2400 (64,3)	4050 (109)	5750 (154)	8700 (233)	10150 (272)	
	40 (2,76)	3200 (85,8)	5300 (142)	8000 (214)	9800 (263)		
	45 (3,10)	3500 (93,8)	6050 (162)	8950 (240)	10750 (288)		
	50 (3,45)	3900 (105)	6800 (182)	9800 (263)	11000 (295)		
	60 (4,14)	4700 (126)	8400 (225)	11500 (308)	12100 (324)		
	80 (5,52)	6150 (165)	11100 (297)	10300 (276) ⁽¹⁾			
	100 (6,90)	7900 (212)	13100 (351)	11200 (300) ⁽¹⁾			
	125 (8,62)	9700 (260)	11950 (320) ⁽¹⁾				

1. Limited due to boost.

— Shaded areas show where indicated droop would be exceeded regardless of capacity.

— Shaded areas show where maximum operating inlet pressure for a given port diameter is exceeded.

- continued -

Table 8. Types S201H, S202H, S203H, S208H, and S209H Capacities (continued)

OUTLET PRESSURE, SPRING PART NUMBER, AND ACCURACY	INLET PRESSURE, PSIG (bar)	CAPACITIES IN SCFH (Nm ³ /h) OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
		2-Inch (DN 50) Body Size					
		Orifice Size, Inches (mm)					
		1/4 (6,35)	3/8 (9,52)	1/2 (12,7)	3/4 (19,1)	1 (25,4)	1-3/16 (30,2)
5 psig (0,34 bar) 1P615427142 ± 0.5 psig (0,034 bar)	10 (0,69)	1200 (32,2)	1700 (45,6)	2200 (58,9)	3750 (101)	5300 (142)	5800 (155)
	15 (1,03)	1400 (37,5)	2100 (56,3)	2850 (76,4)	5500 (147)	6850 (184)	8150 (218)
	20 (1,38)	1800 (48,2)	2850 (76,4)	3750 (101)	7000 (188)	7700 (206)	
	25 (1,72)	2050 (54,9)	3750 (101)	4550 (122)	7900 (212)	9750 (261)	
	30 (2,07)	2500 (67,0)	4550 (122)	5800 (155)	8500 (228)	10750 (288)	
	40 (2,76)	3150 (84,4)	5800 (155)	6200 (166)	12000 (322)		
	45 (3,10)	3500 (93,8)	6200 (166)	7000 (188)	12850 (344)		
	50 (3,45)	3900 (105)	7000 (188)	7700 (206)	14200 (381)		
	60 (4,14)	4350 (117)	7700 (206)	10950 (293)	16650 (446)		
	80 (5,52)	5850 (157)	10950 (293)	13500 (362)			
	100 (6,90)	7150 (192)	13500 (362)	16400 (440)			
	125 (8,62)	8900 (239)	16400 (440)				
5 psig (0,34 bar) 1P615427142 ± 1 psig (0,69 bar)	10 (0,69)	1500 (40,2)	2800 (75,0)	4050 (109)	7350 (197)	9400 (252)	12400 (332)
	15 (1,03)	2050 (54,9)	3950 (106)	5700 (153)	10750 (288)	12950 (347)	17100 (458)
	20 (1,38)	2400 (64,3)	4750 (127)	7300 (196)	13550 (363)	18450 (494)	
	25 (1,72)	2750 (73,7)	5450 (146)	9100 (244)	16200 (434)	20400 (547)	
	30 (2,07)	3100 (83,1)	6500 (174)	10500 (281)	19200 (515)	24700 (662)	
	40 (2,76)	3750 (101)	7850 (210)	13700 (367)	25250 (677)		
	45 (3,10)	4050 (109)	8550 (229)	15150 (406)	25700 (689)		
	50 (3,45)	4400 (118)	9600 (257)	16650 (446)	27950 (749)		
	60 (4,14)	4950 (133)	10850 (291)	19150 (513)	30550 (819)		
	80 (5,52)	6450 (173)	14000 (375)	24150 (647)			
	100 (6,90)	7700 (206)	17000 (456)	29400 (788)			
	125 (8,62)	9250 (248)	20700 (555)				
5 psig (0,34 bar) 1P615427142 ± 1 % ABS ± 0.20 psia (0,014 bar)	10 (0,69)	500 (13,4)	850 (22,8)	1000 (26,8)	1500 (40,2)	2000 (53,6)	2200 (58,9)
	15 (1,03)	750 (20,1)	1200 (32,2)	1400 (37,5)	1900 (50,9)	2300 (61,6)	2900 (77,7)
	20 (1,38)	1000 (26,8)	1550 (41,5)	1900 (50,9)	2700 (72,4)	3000 (80,4)	
	25 (1,72)	1250 (33,5)	1950 (52,3)	2300 (61,6)	3400 (91,1)	3700 (99,2)	
	30 (2,07)	1450 (38,9)	2200 (58,9)	2800 (75,0)	4100 (110)	4000 (107)	
	40 (2,76)	1900 (50,9)	3100 (83,1)	4000 (107)	3300 (88,4)		
	45 (3,10)	2100 (56,3)	3400 (91,1)	4400 (118)	4600 (123)		
	50 (3,45)	2400 (64,3)	3800 (102)	5000 (134)	5300 (142)		
	60 (4,14)	2800 (75,0)	4700 (126)	6600 (177)	7250 (194)		
	80 (5,52)	3900 (105)	7300 (196)	5050 (135) ⁽¹⁾			
	100 (6,90)	5000 (134)	9300 (249)	6400 (172) ⁽¹⁾			
	125 (8,62)	7000 (188)	6000 (161) ⁽¹⁾				
5 psig (0,34 bar) 1P615427142 ± 2 % ABS ± 0.39 psia (0,028 bar)	10 (0,69)	1000 (26,8)	1400 (37,5)	1650 (44,2)	2900 (77,7)	3500 (93,8)	4500 (121)
	15 (1,03)	1300 (34,8)	2100 (56,3)	2800 (75,0)	3900 (105)	5500 (147)	5850 (157)
	20 (1,38)	1650 (44,2)	2750 (73,7)	3600 (96,5)	5300 (142)	7400 (198)	
	25 (1,72)	2050 (54,9)	3400 (91,1)	4400 (118)	6800 (182)	7400 (198)	
	30 (2,07)	2400 (64,3)	4000 (107)	5500 (147)	7900 (212)	8350 (224)	
	40 (2,76)	3100 (83,1)	5400 (145)	7200 (193)	9300 (249)		
	45 (3,10)	3250 (87,1)	6100 (163)	8300 (222)	9850 (264)		
	50 (3,45)	3850 (103)	6700 (180)	9400 (252)	10650 (285)		
	60 (4,14)	4450 (119)	8200 (220)	11500 (308)	14550 (390)		
	80 (5,52)	6100 (163)	11000 (295)	10850 (291) ⁽¹⁾			
	100 (6,90)	7600 (204)	14000 (375)	11800 (316)			
	125 (8,62)	9600 (257)	11650 (312) ⁽¹⁾				

1. Limited due to boost.

— Shaded areas show where indicated droop would be exceeded regardless of capacity.

— Shaded areas show where maximum operating inlet pressure for a given port diameter is exceeded.

Bulletin 71.1:S200

Table 9. Types S201K and S208K Capacities

OUTLET PRESSURE, SPRING PART NUMBER, AND ACCURACY	INLET PRESSURE, PSIG (bar)	CAPACITIES IN SCFH (Nm ³ /h) OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
		1-1/2 and 2-Inch (DN 40 and 50) Body Size					
		Orifice Size, Inches (mm)					
		1/4 (6,35)	3/8 (9,52)	1/2 (12,7)	3/4 (19,1)	1 (25,4)	1-3/16 (30,2)
5 psig (0,34 bar) 0Y066427022 ± 0.5 psig (0,034 bar)	10 (0,69)	500 (13,4)	1000 (26,8)	1250 (33,5)	1900 (50,9)	2150 (57,6)	2550 (68,3)
	15 (1,03)	550 (14,7)	1300 (34,8)	1650 (44,2)	2650 (71,0)	3200 (85,8)	4000 (107)
	20 (1,38)	600 (16,1)	1650 (44,2)	1950 (52,3)	3300 (88,4)	4100 (110)	5000 (134)
	25 (1,72)	800 (21,4)	1950 (52,3)	2150 (57,6)	3950 (106)	4650 (125)	
	30 (2,07)	1600 (42,9)	2150 (57,6)	2650 (71,0)	4500 (121)	5500 (147)	
	40 (2,76)	1950 (52,3)	2650 (71,0)	2900 (77,7)	5800 (155)		
	45 (3,10)	2250 (60,3)	2900 (77,7)	3450 (92,5)	6200 (166)		
	50 (3,45)	2450 (65,7)	3450 (92,5)	3800 (102)	6600 (177)		
	60 (4,14)	2600 (69,7)	3800 (102)	5350 (143)	8700 (233)		
	80 (5,52)	3700 (99,2)	5350 (143)	5900 (158)			
	100 (6,90)	4100 (110)	5900 (158)	7950 (213)			
	125 (8,62)	5450 (146)	7950 (213)				
5 psig (0,34 bar) 0Y066427022 ± 1 psig (0,69 bar)	10 (0,69)	1150 (30,8)	1700 (45,6)	2250 (60,3)	3400 (91,1)	4550 (122)	5650 (151)
	15 (1,03)	1300 (34,8)	2550 (68,3)	3150 (84,4)	5200 (139)	6350 (170)	8100 (217)
	20 (1,38)	1900 (50,9)	2950 (79,1)	3950 (106)	6000 (161)	8300 (222)	9950 (267)
	25 (1,72)	2200 (58,9)	3650 (97,8)	4850 (130)	7050 (189)	9950 (267)	
	30 (2,07)	2650 (71,0)	4000 (107)	5500 (147)	8750 (235)	11750 (315)	
	40 (2,76)	3100 (83,1)	5000 (134)	6900 (185)	10850 (291)		
	45 (3,10)	3450 (92,5)	5800 (155)	7650 (205)	11700 (314)		
	50 (3,45)	3800 (102)	6450 (173)	8900 (239)	14100 (378)		
	60 (4,14)	4400 (118)	7450 (200)	9800 (263)	14900 (399)		
	80 (5,52)	5950 (159)	9300 (249)	12000 (322)			
	100 (6,90)	7000 (188)	11250 (302)	14750 (395)			
	125 (8,62)	8450 (226)	13800 (370)				
5 psig (0,34 bar) 0Y066427022 ± 1 % ABS ± 0.20 psia (0,014 bar)	10 (0,69)	350 (9,38)	400 (10,7)	650 (17,4)	800 (21,4)	1050 (28,1)	1300 (34,8)
	15 (1,03)	350 (9,38)	750 (20,1)	850 (22,8)	1250 (33,5)	1550 (41,5)	1650 (44,2)
	20 (1,38)	500 (13,4)	900 (24,1)	1050 (28,1)	1650 (44,2)	1800 (48,2)	2050 (54,9)
	25 (1,72)	600 (16,1)	1000 (26,8)	1200 (32,2)	1650 (44,2)	1950 (52,3)	
	30 (2,07)	700 (18,8)	1100 (29,5)	1300 (34,8)	1950 (52,3)	2550 (68,3)	
	40 (2,76)	1000 (26,8)	1350 (36,2)	1350 (36,2)	2450 (65,7)		
	45 (3,10)	1100 (29,5)	1450 (38,9)	1550 (41,5)	2550 (68,3)		
	50 (3,45)	1150 (30,8)	1600 (42,9)	1600 (42,9)	3050 (81,7)		
	60 (4,14)	1150 (30,8)	1750 (46,9)	2250 (60,3)	2400 (64,3) ⁽¹⁾		
	80 (5,52)	1600 (42,9)	2350 (62,9)	2750 (73,7)			
	100 (6,90)	1650 (44,2)	2400 (64,3)	3250 (87,1)			
	125 (8,62)	2150 (57,6)	3050 (81,7)				
5 psig (0,34 bar) 0Y066427022 ± 2 % ABS ± 0.39 psia (0,028 bar)	10 (0,69)	450 (12,1)	450 (12,1)	1100 (29,5)	1500 (40,2)	1700 (45,6)	2250 (60,3)
	15 (1,03)	450 (12,1)	1150 (30,8)	1500 (40,2)	2150 (57,6)	2500 (67,0)	3300 (88,4)
	20 (1,38)	550 (14,7)	1400 (37,5)	1700 (45,6)	2800 (75,0)	3350 (89,8)	3900 (105)
	25 (1,72)	1250 (33,5)	1650 (44,2)	2050 (54,9)	3050 (81,7)	4200 (113)	
	30 (2,07)	1350 (36,2)	1850 (49,6)	2500 (67,0)	3750 (101)	4350 (117)	
	40 (2,76)	1700 (45,6)	2200 (58,9)	2900 (77,7)	4700 (126)		
	45 (3,10)	1800 (48,2)	2350 (62,9)	3500 (93,8)	5200 (139)		
	50 (3,45)	1900 (50,9)	2850 (76,4)	3850 (103)	5900 (158)		
	60 (4,14)	2100 (56,3)	2900 (77,7)	4300 (115)	6900 (185)		
	80 (5,52)	3100 (83,1)	4050 (109)	5500 (147)			
	100 (6,90)	3400 (91,1)	4800 (129)	6050 (162)			
	125 (8,62)	4400 (118)	5750 (154)				

1. Limited due to boost.
 - Shaded areas show where indicated droop would be exceeded regardless of capacity.
 - Shaded areas show where maximum operating inlet pressure for a given port diameter is exceeded.

- continued -

Table 9. Types S201K and S208K Capacities (continued)

OUTLET PRESSURE, SPRING PART NUMBER, AND ACCURACY	INLET PRESSURE, PSIG (bar)	CAPACITIES IN SCFH (Nm ³ /h) OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
		1-1/2 and 2-Inch (DN 40 and 50) Body Size					
		Orifice Size, Inches (mm)					
		1/4 (6,35)	3/8 (9,52)	1/2 (12,7)	3/4 (19,1)	1 (25,4)	1-3/16 (30,2)
10 psig (0,69 bar) ± 1 psig (0,069 bar) 1H802400A2	10 (0,69)	550 (14,7)	800 (21,4)	1050 (28,1)	1200 (32,2)	1350 (36,2)	1750 (46,9)
	15 (1,03)	700 (18,8)	1200 (32,2)	1650 (44,2)	2500 (67,0)	2950 (79,1)	3800 (102)
	20 (1,38)	800 (21,4)	1650 (44,2)	2100 (56,3)	3150 (84,4)	4450 (119)	5350 (143)
	25 (1,72)	1500 (40,2)	2000 (53,6)	2750 (73,7)	4350 (117)	4900 (131)	6500 (174)
	30 (2,07)	1850 (49,6)	2300 (61,6)	3000 (80,4)	4850 (130)	6200 (166)	
	40 (2,76)	2150 (57,6)	3050 (81,7)	4100 (110)	6400 (172)		
	45 (3,10)	2300 (61,6)	3400 (91,1)	4600 (123)	7150 (192)		
	50 (3,45)	2500 (67,0)	3950 (106)	5100 (137)	7650 (205)		
	60 (4,14)	2900 (77,7)	4350 (117)	6000 (161)	8550 (229)		
	80 (5,52)	3900 (105)	5950 (159)	7550 (202)			
	100 (6,90)	4650 (125)	6800 (182)	9650 (259)			
	125 (8,62)	5300 (142)	8200 (220)				
10 psig (0,69 bar) ± 2 psig (0,14 bar) 1H802400A2	10 (0,69)	950 (25,5)	1600 (42,9)	2450 (65,7)	3550 (95,1)	3600 (96,5)	4250 (114)
	15 (1,03)	1550 (41,5)	2350 (62,9)	2900 (77,7)	4900 (131)	6450 (173)	7600 (204)
	20 (1,38)	1900 (50,9)	3000 (80,4)	4000 (107)	6700 (180)	9000 (241)	10400 (279)
	25 (1,72)	2300 (61,6)	3800 (102)	5250 (141)	8150 (218)	10300 (276)	13050 (350)
	30 (2,07)	2750 (73,7)	4750 (127)	6000 (161)	9700 (260)	12200 (327)	
	40 (2,76)	3400 (91,1)	5850 (157)	7550 (202)	12250 (328)		
	45 (3,10)	3650 (97,8)	6300 (169)	8800 (236)	13650 (366)		
	50 (3,45)	3950 (106)	7250 (194)	9300 (249)	15100 (405)		
	60 (4,14)	4650 (125)	8150 (218)	11000 (295)	16650 (446)		
	80 (5,52)	5850 (157)	10750 (288)	13750 (369)			
	100 (6,90)	7250 (194)	12850 (344)	17100 (458)			
	125 (8,62)	8700 (233)	15750 (422)				
10 psig (0,69 bar) ± 1 % ABS ± 1.5 psia (0,10 bar) 1H802400A2	10 (0,69)	300 (8,04)	400 (10,7)	350 (9,38)	400 (10,7)	400 (10,7)	450 (12,1)
	15 (1,03)	350 (9,38)	450 (12,1)	650 (17,4)	750 (20,1)	850 (22,8)	1100 (29,5)
	20 (1,38)	350 (9,38)	650 (17,4)	700 (18,8)	900 (24,1)	1350 (36,2)	1350 (36,2)
	25 (1,72)	450 (12,1)	800 (21,4)	950 (25,5)	1200 (32,2)	1500 (40,2)	1900 (50,9)
	30 (2,07)	700 (18,8)	900 (24,1)	1050 (28,1)	1200 (32,2)	1900 (50,9)	
	40 (2,76)	700 (18,8)	1100 (29,5)	1150 (30,8)	1850 (49,6)		
	45 (3,10)	750 (20,1)	1100 (29,5)	1300 (34,8)	2100 (56,3)		
	50 (3,45)	800 (21,4)	1200 (32,2)	1300 (34,8)	2300 (61,6)		
	60 (4,14)	850 (22,8)	1300 (34,8)	1450 (38,9)	2300 (61,6)		
	80 (5,52)	950 (25,5)	1600 (42,9)	1600 (42,9)			
	100 (6,90)	1050 (28,1)	1950 (52,3)	2600 (69,7)			
	125 (8,62)	1050 (28,1)	2350 (62,9)				
10 psig (0,69 bar) ± 2 % ABS ± 2.9 psia (0,20 bar) 1H802400A2	10 (0,69)	400 (10,7)	500 (13,4)	650 (17,4)	900 (24,1)	650 (17,4)	900 (24,1)
	15 (1,03)	450 (12,1)	550 (14,7)	850 (22,8)	1300 (34,8)	1550 (41,5)	1850 (49,6)
	20 (1,38)	450 (12,1)	1000 (26,8)	1100 (29,5)	1750 (46,9)	2200 (58,9)	2400 (64,3)
	25 (1,72)	550 (14,7)	1250 (33,5)	1600 (42,9)	2300 (61,6)	2700 (72,4)	3550 (95,1)
	30 (2,07)	800 (21,4)	1350 (36,2)	1800 (48,2)	2800 (75,0)	2800 (75,0)	
	40 (2,76)	1050 (28,1)	1650 (44,2)	2150 (57,6)	3500 (93,8)		
	45 (3,10)	1350 (36,2)	1900 (50,9)	2600 (69,7)	3700 (99,2)		
	50 (3,45)	1450 (38,9)	2100 (56,3)	2850 (76,4)	4300 (115)		
	60 (4,14)	1600 (42,9)	2300 (61,6)	3100 (83,1)	4400 (118)		
	80 (5,52)	2150 (57,6)	3000 (80,4)	4000 (107)			
	100 (6,90)	2450 (65,7)	3700 (99,2)	4950 (133)			
	125 (8,62)	2600 (69,7)	4450 (119)				

 - Shaded areas show where indicated droop would be exceeded regardless of capacity.
 - Shaded areas show where maximum operating inlet pressure for a given port diameter is exceeded.

Bulletin 71.1:S200

Table 10. Types S201P, S202P, S203P, S208P, and S209P Capacities

OUTLET PRESSURE, SPRING PART NUMBER, AND ACCURACY	INLET PRESSURE, PSIG (bar)	CAPACITIES IN SCFH (Nm ³ /h) OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
		1-1/2 and 2-Inch (DN 40 and 50) Body Size					
		Orifice Size, Inches (mm)					
		1/4 (6,35)	3/8 (9,52)	1/2 (12,7)	3/4 (19,1)	1 (25,4)	1-3/16 (30,2)
6-inches w.c. (15 mbar) 1D892627022 ± 1-inch w.c. (2,5 mbar)	0.4 (0,028)				1200 (32,2)	1500 (40,2)	1750 (46,9)
	0.5 (0,034)				1600 (42,9)	1900 (50,9)	2200 (59,0)
	1.0 (0,069)	400 (10,7)	900 (24,1)	1300 (34,8)	2300 (61,6)	2900 (77,7)	3300 (88,4)
	1.5 (0,10)	500 (13,4)	1150 (30,8)	1650 (44,2)	3000 (80,4)	3600 (96,5)	4300 (115)
	2.0 (0,14)	600 (16,1)	1400 (37,5)	2000 (53,6)	3500 (93,8)	4200 (113)	5500 (147)
	5.0 (0,34)	1000 (26,8)	2300 (61,6)	3500 (93,8)	5700 (153)	7300 (196)	7700 (206)
	13 (0,90)	1650 (44,2)	3700 (99,2)	6200 (166)	10000 (268)	13500 (362)	13500 (362)
	25 (1,72)	2400 (64,3)	5200 (139)	9000 (241)	13500 (362)	13500 (362)	
	60 (4,14)	4400 (118)	9600 (257)	13500 (362)	13500 (362)		
	100 (6,90)	7000 (188)	13500 (362)	13500 (362)			
	125 (8,62)	7000 (188)	13500 (362)				
7-inches w.c. (17 mbar) 1D892727012 ± 1-inch w.c. (2,5 mbar)	0.4 (0,028)				950 (25,5)	1350 (36,2)	1550 (41,5)
	0.5 (0,034)				1500 (40,2)	1700 (45,6)	1950 (52,3)
	1.0 (0,069)	400 (10,7)	800 (21,4)	1200 (32,2)	2000 (53,6)	2600 (69,7)	3000 (80,4)
	1.5 (0,10)	500 (13,4)	1050 (28,1)	1500 (40,2)	2550 (68,3)	3200 (85,8)	4100 (110)
	2.0 (0,14)	600 (16,1)	1300 (34,8)	1800 (48,2)	3000 (80,4)	3700 (99,2)	5000 (134)
	5.0 (0,34)	1000 (26,8)	2100 (56,3)	3100 (83,1)	5000 (134)	6500 (174)	7000 (188)
	13 (0,90)	1650 (44,2)	3300 (88,4)	5500 (147)	8600 (230)	12000 (322)	13500 (362)
	25 (1,72)	2400 (64,3)	5000 (134)	8000 (214)	13500 (362)	13500 (362)	
	60 (4,14)	4400 (118)	9400 (252)	13500 (362)	13500 (362)		
	100 (6,90)	7000 (188)	13500 (362)	13500 (362)			
	125 (8,62)	7000 (188)	13500 (362)				
11-inches w.c. (27 mbar) 1D893227032 ± 2-inches w.c. (5 mbar)	0.5 (0,034)				1450 (38,9)	1650 (44,2)	1850 (49,6)
	1.0 (0,069)	375 (10,1)	750 (20,1)	1100 (29,5)	1800 (48,2)	2500 (67,0)	2900 (77,7)
	1.5 (0,10)	475 (12,7)	1000 (26,8)	1450 (38,9)	2400 (64,3)	3100 (83,1)	3900 (105)
	2.0 (0,14)	550 (14,7)	1250 (33,5)	1700 (45,6)	3000 (80,4)	3600 (96,5)	4800 (129)
	5.0 (0,34)	950 (25,5)	2000 (53,6)	2900 (77,7)	4800 (129)	6500 (174)	6700 (180)
	13 (0,90)	1550 (41,5)	3100 (83,1)	5100 (137)	9000 (241)	11000 (295)	13500 (362)
	25 (1,72)	2260 (60,6)	4700 (126)	8000 (214)	13500 (362)	13500 (362)	
	60 (4,14)	4200 (113)	8900 (239)	13500 (362)	13500 (362)		
	100 (6,90)	6600 (177)	13500 (362)	13500 (362)			
	125 (8,62)	6600 (177)	13500 (362)				
20-inches w.c. (50 mbar) 1D893327032 ± 3-inches w.c. (7,5 mbar)	1.0 (0,069)	300 (8,04)	500 (13,4)	950 (25,5)	1000 (26,8)	1300 (34,8)	2000 (53,6)
	2.0 (0,14)	500 (13,4)	950 (25,5)	1500 (40,2)	2000 (53,6)	2900 (77,7)	4000 (107)
	5.0 (0,34)	850 (22,8)	1700 (45,6)	2400 (64,3)	4000 (107)	5000 (134)	5300 (142)
	13 (0,90)	1350 (36,2)	2800 (75,0)	4400 (118)	6500 (174)	8700 (233)	13500 (362)
	25 (1,72)	2000 (53,6)	4800 (129)	6600 (177)	10000 (268)	13500 (362)	
	60 (4,14)	3700 (99,2)	9000 (241)	12700 (340)	13500 (362)		
	100 (6,90)	6000 (161)	13500 (362)	13500 (362)			
	125 (8,62)	6000 (161)	13500 (362)				
1 psig (0,069 bar) 1H975827032 ± 0.2 psig (0,014 bar)	2.0 (0,14)	500 (13,4)	750 (20,1)	1100 (29,5)	1400 (37,5)	2400 (64,3)	3000 (80,4)
	6.0 (0,41)	1100 (29,5)	1800 (48,2)	2500 (67,0)	4000 (107)	5200 (139)	7000 (188)
	14 (0,97)	1500 (40,2)	3000 (80,4)	4500 (121)	7000 (188)	9000 (241)	13500 (362)
	30 (2,07)	2300 (61,6)	4800 (129)	7000 (188)	11000 (295)	13500 (362)	
	60 (4,14)	4400 (118)	9200 (247)	10500 (281)	13500 (362)		
	100 (6,90)	7000 (188)	13500 (362)	13500 (362)			
	125 (8,62)	7000 (188)	13500 (362)				
3 psig ⁽¹⁾ (0,21 bar) ⁽¹⁾ 1H975927032 ± 0.6 psig (0,041 bar)	3.0 (0,21)	500 (13,4)	1000 (26,8)	1500 (40,2)	2000 (53,6)	3200 (85,8)	3600 (96,5)
	7.0 (0,48)	1000 (26,8)	2200 (59,0)	3400 (91,1)	5700 (153)	7000 (188)	8800 (236)
	14 (0,97)	1500 (40,2)	3000 (80,4)	5700 (153)	10000 (268)	11000 (295)	13500 (362)
	30 (2,07)	2400 (64,3)	5000 (134)	7500 (201)	13500 (362)	13500 (362)	
	60 (4,14)	4300 (115)	9400 (252)	11500 (308)	13500 (362)		
	100 (6,90)	6800 (182)	11400 (306)	13500 (362)			
	125 (8,62)	6800 (182)	11400 (306)				

1. Type S203P is limited to 2 psig (0,14 bar).
 - Shaded areas indicate where droop would be exceeded regardless of capacity.
 - Shaded areas indicate where maximum operating inlet pressure for a given orifice size is exceeded.

Table 11. Types S204, S204H, S206, and S206H Capacities

TYPE	OUTLET PRESSURE, SPRING PART NUMBER, AND ACCURACY	INLET PRESSURE, PSIG (bar)	CAPACITIES IN SCFH (Nm ³ /h) OF 0.6 SPECIFIC GRAVITY NATURAL GAS				
			1-1/2-Inch (DN 40) Body Size				
			Orifice Size, Inches (mm)				
			3/8 (9,52)	1/2 (12,7)	5/8 (15,9)	1 (25,4)	1-3/16 (30,2)
S204, S206	5-inches w.c. (12 mbar) 1D892527022 or 1D892627022 ± 1-inch w.c. (2,5 mbar)	0.5 (0,034)				1400 (37,5)	1700 (45,6)
		1.0 (0,069)				2200 (59,0)	2300 (61,6)
		2.0 (0,14)				3000 (80,4)	3200 (85,8)
		5.0 (0,34)			3000 (80,4)	3850 (103)	4100 (110)
		7 (0,48)		2000 (53,6)	3500 (93,8)	4100 (110)	4400 (118)
		15 (1,03)	1200 (32,2)	3400 (91,1)	3800 (102)	4600 (123)	4600 (123)
	7-inches w.c. (17 mbar) 1D892727012 ± 1-inch w.c. (2,5 mbar)	20 (1,38)	1500 (40,2)	3800 (102)	4300 (115)	4800 (129)	
		30 (2,07)	1900 (50,9)	4000 (107)	4600 (123)	4900 (131)	
		60 (4,14)	3000 (80,4)	4700 (126)	5100 (137)		
		75 (5,17)	3800 (102)	5500 (147)	5800 (155)		
		100 (6,90)	4800 (129)	7000 (188)			
	11-inches w.c. (27 mbar) 1D893227032 ± 2-inches w.c. (5 mbar)	0.5 (0,034)				1000 (26,8)	1100 (29,5)
		1.0 (0,069)				1700 (45,6)	2000 (53,6)
		2.0 (0,14)				2700 (72,4)	3000 (80,4)
		5.0 (0,34)			2800 (75,0)	4100 (110)	4500 (121)
		7 (0,48)		2000 (53,6)	3000 (80,4)	4600 (123)	5000 (134)
		15 (1,03)	1200 (32,2)	3400 (91,1)	4400 (118)	5200 (139)	5400 (145)
	20-inches w.c. (50 mbar) 1D893327032 ± 3-inches w.c. (7,5 mbar)	20 (1,38)	1400 (37,5)	4000 (107)	5000 (134)	5800 (155)	
		30 (2,07)	1800 (48,2)	5300 (142)	5800 (155)	6400 (172)	
		60 (4,14)	3000 (80,4)	6100 (164)	6700 (180)		
		75 (5,17)	3600 (96,5)	6800 (182)	7400 (198)		
		100 (6,90)	4500 (121)	8400 (225)			
S204H, S206H	1 psig (0,069 bar) 1H975827032 ± 0.2 psi (0,014 bar)	1.0 (0,069)				1600 (42,9)	1900 (50,9)
		2.0 (0,14)				2600 (69,7)	2800 (75,0)
		5.0 (0,34)			2500 (67,0)	4000 (107)	4300 (115)
		7 (0,48)		2000 (53,6)	3100 (83,1)	4500 (121)	4700 (126)
		15 (1,03)	1100 (29,5)	3400 (91,1)	4400 (118)	5500 (147)	5900 (158)
	3 psig (0,21 bar) 1H975927032 ± 0.6 psi (0,041 bar)	20 (1,38)	1300 (34,8)	4000 (107)	5000 (134)	6000 (161)	
		30 (2,07)	1700 (45,6)	5200 (139)	5900 (158)	6800 (182)	
		60 (4,14)	3000 (80,4)	6700 (180)	7300 (196)		
		75 (5,17)	3500 (93,8)	7750 (208)	7750 (208)		
		100 (6,90)	4400 (118)	8800 (236)			
	1 psig (0,069 bar) 1H975827032 ± 0.2 psi (0,014 bar)	2 (0,14)			2000 (53,6)	1600 (42,9)	1900 (50,9)
		5 (0,34)			2400 (64,3)	4000 (107)	4500 (121)
		8 (0,55)		2000 (53,6)	2400 (64,3)	4900 (131)	5500 (147)
		15 (1,02)	1200 (32,2)	3400 (91,1)	4400 (118)	6300 (169)	7000 (188)
		20 (1,38)	1400 (37,5)	3800 (102)	5000 (134)	6900 (185)	
	3 psig (0,21 bar) 1H975927032 ± 0.6 psi (0,041 bar)	30 (2,07)	1800 (48,2)	5300 (142)	6200 (166)	8300 (222)	
		60 (4,14)	3000 (80,4)	7400 (198)	8800 (236)		
		75 (5,17)	3600 (96,5)	8500 (228)	9500 (255)		
		100 (6,90)	4600 (123)	9600 (257)			

— Shaded areas indicate where droop would be exceeded regardless of capacity.

— Shaded areas indicate where maximum operating inlet pressure for a given orifice size is exceeded.

- continued -

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Table 11. Types S204, S204H, S206, and S206H Capacities (continued)

TYPE	OUTLET PRESSURE, SPRING PART NUMBER, AND ACCURACY	INLET PRESSURE, PSIG (bar)	CAPACITIES IN SCFH (Nm³/h) OF 0.6 SPECIFIC GRAVITY NATURAL GAS				
			1-1/2-Inch (DN 40) Body Size				
			Orifice Size, Inches (mm)				
			3/8 (9,52)	1/2 (12,7)	5/8 (15,9)	1 (25,4)	1-3/16 (30,2)
S204, S206	5-inches w.c. (12 mbar) 1D892527022 or 1D892627022 ± 1-inch w.c. (2,5 mbar)	0.5 (0,034)				1400 (37,5)	1800 (48,2)
		1.0 (0,069)				2400 (64,3)	2800 (75,0)
		2.0 (0,14)				3500 (93,8)	3800 (102)
		5.0 (0,34)			3000 (80,4)	4000 (107)	4200 (113)
		7 (0,48)		2100 (56,3)	3600 (96,5)	4300 (115)	4500 (121)
		15 (1,03)	1200 (32,2)	3500 (93,8)	4000 (107)	4800 (129)	5000 (134)
	7-inches w.c. (17 mbar) 1D892727012 ± 1-inch w.c. (2,5 mbar)	20 (1,38)	1500 (40,2)	4000 (107)	4500 (121)	5000 (134)	
		30 (2,07)	1900 (50,9)	4200 (113)	4800 (129)	5000 (134)	
		60 (4,14)	3200 (85,8)	4900 (131)	5300 (142)		
		75 (5,17)	3900 (105)	5800 (155)	6000 (161)		
		100 (6,90)	4900 (131)	7200 (193)			
	11-inches w.c. (27 mbar) 1D893227032 ± 2-inches w.c. (5 mbar)	0.5 (0,034)				1100 (29,5)	1400 (37,5)
		1.0 (0,069)				2100 (56,3)	2500 (67,0)
		2.0 (0,14)				3500 (93,8)	3900 (105)
		5.0 (0,34)			2800 (75,0)	4500 (121)	5000 (134)
		7 (0,48)		2000 (53,6)	3100 (83,1)	4900 (131)	5200 (139)
		15 (1,03)	1200 (32,2)	3500 (93,8)	4500 (121)	5400 (145)	5500 (147)
	20-inches w.c. (50 mbar) 1D893327032 ± 3-inches w.c. (7,5 mbar)	20 (1,38)	1400 (37,5)	4000 (107)	5200 (139)	6000 (161)	
		30 (2,07)	1800 (48,2)	5400 (145)	6000 (161)	6500 (174)	
		60 (4,14)	3000 (80,4)	6200 (166)	6800 (182)		
		75 (5,17)	3600 (96,5)	7000 (188)	7500 (201)		
		100 (6,90)	4500 (121)	8800 (236)			
	1 psig (0,069 bar) 1H975827032 ± 0.2 psi (0,014 bar)	1.0 (0,069)				1600 (42,9)	1750 (46,9)
		2.0 (0,14)				2700 (72,4)	3200 (85,8)
		5.0 (0,34)			2500 (67,0)	4100 (110)	4500 (121)
		7 (0,48)		2000 (53,6)	3100 (83,1)	4600 (123)	4800 (129)
		15 (1,03)	1100 (29,5)	3500 (93,8)	4500 (121)	5800 (155)	6000 (161)
S204H, S206H	3 psig (0,21 bar) 1H975927032 ± 0.6 psi (0,041 bar)	20 (1,38)	1300 (34,8)	4000 (107)	5200 (139)	6200 (166)	
		30 (2,07)	1700 (45,6)	5400 (145)	6000 (161)	7000 (188)	
		60 (4,14)	3000 (80,4)	6900 (185)	7700 (206)		
		75 (5,17)	3500 (93,8)	7750 (208)	7750 (208)		
		100 (6,90)	4400 (118)	9500 (255)			
	1 psig (0,069 bar) 1H975827032 ± 0.2 psi (0,014 bar)	2 (0,14)			2000 (53,6)	1800 (48,2)	2100 (56,3)
		5 (0,34)			2400 (64,3)	4200 (113)	4800 (129)
		8 (0,55)		2000 (53,6)	2400 (64,3)	5200 (139)	6000 (161)
		15 (1,02)	1200 (32,2)	3500 (93,8)	4500 (121)	6500 (174)	7500 (201)
		20 (1,38)	1400 (37,5)	4000 (107)	5200 (139)	7200 (193)	
	3 psig (0,21 bar) 1H975927032 ± 0.6 psi (0,041 bar)	30 (2,07)	1800 (48,2)	5500 (147)	6500 (174)	8500 (228)	
		60 (4,14)	3000 (80,4)	7500 (201)	9200 (247)		
		75 (5,17)	3600 (96,5)	9000 (241)	10000 (268)		
		100 (6,90)	4600 (123)	10000 (268)			
	3 psig (0,21 bar) 1H975927032 ± 0.6 psi (0,041 bar)	3 (0,21)			2200 (59,0)	2000 (53,6)	2500 (67,0)
		5 (0,34)			3100 (83,1)	4500 (121)	5500 (147)
		8 (0,55)		2600 (69,7)	3100 (83,1)	7000 (188)	8400 (225)
		15 (1,02)	1200 (32,2)	4000 (107)	5000 (134)	10000 (268)	13000 (348)
		20 (1,38)	1400 (37,5)	4700 (126)	6200 (166)	12000 (322)	
	3 psig (0,21 bar) 1H975927032 ± 0.6 psi (0,041 bar)	30 (2,07)	1900 (50,9)	7000 (188)	8500 (228)	16000 (429)	
		60 (4,14)	3100 (83,1)	9200 (247)	13000 (348)		
		75 (5,17)	3800 (102)	12000 (322)	16000 (429)		
		100 (6,90)	4800 (129)	13500 (362)			

 – Shaded areas indicate where droop would be exceeded regardless of capacity.
 – Shaded areas indicate where maximum operating inlet pressure for a given orifice size is exceeded.

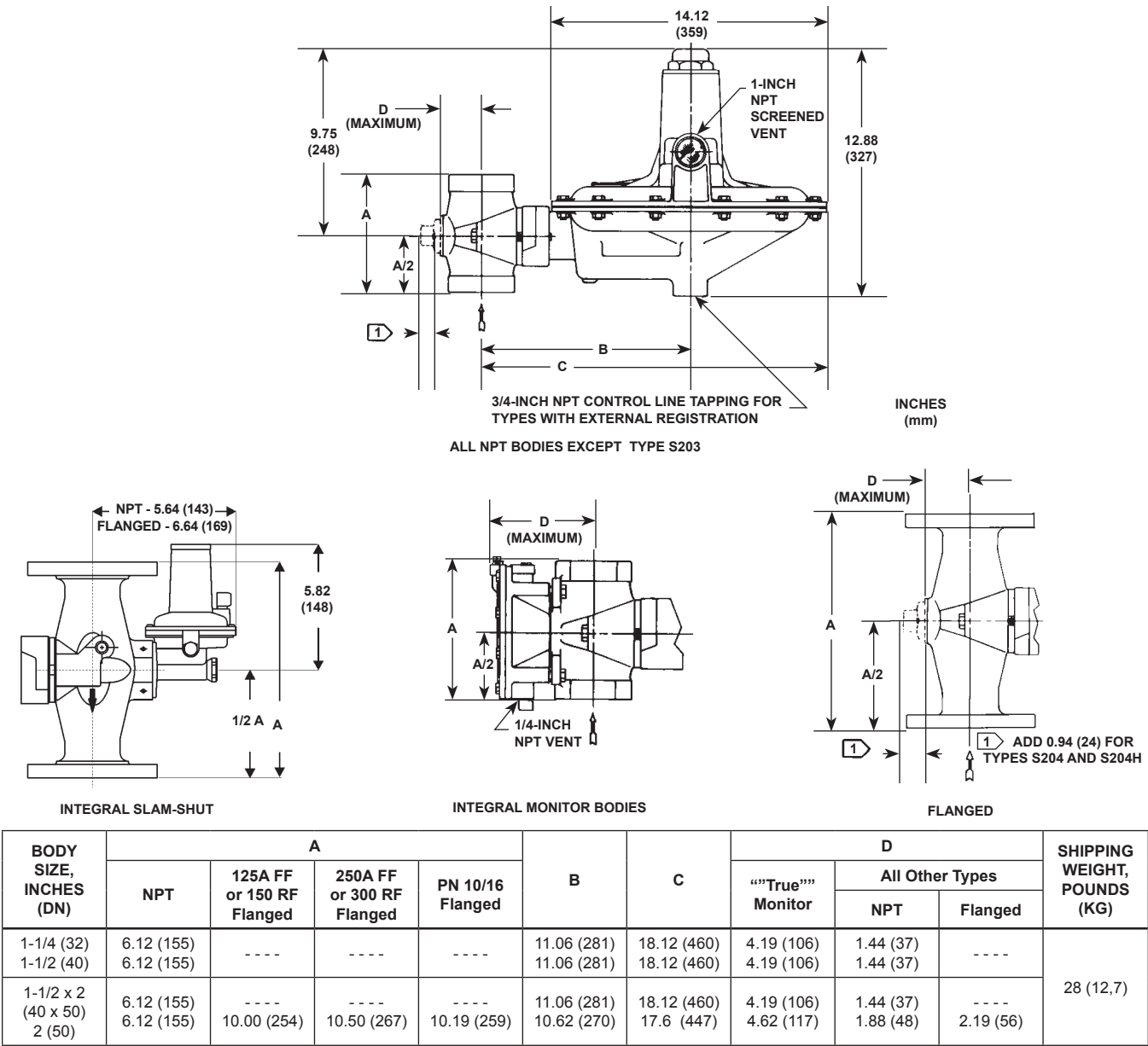


Figure 12. S200 Series Dimensions

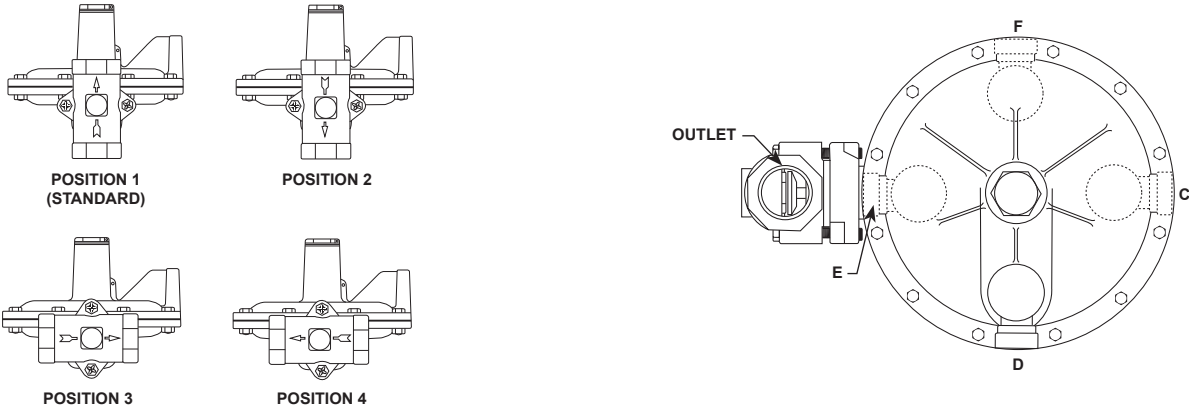


Figure 13. Body Positions and Spring Case Vent Locations

Ordering Guide

Type, See table 1 (Select One)

- ☐ Type S201 (without internal relief)
- ☐ Type S201H (Type S201 for outlet pressures up to 5 psig (0,35 bar))
- ☐ Type S201K (Type S201 for outlet pressures up to 10 psig (0,69 bar))
- ☐ Type S201KP (Type S201K with external pressure registration)
- ☐ Type S201P (Type S201 with external pressure registration)
- ☐ Type S202 (Type S201 with internal relief)
- ☐ Type S202H (Type S202 for outlet pressures up to 5 psig (0,35 bar))
- ☐ Type S202P (Type S202 with internal relief)
- ☐ Type S203 (Type S201 with integral monitor)
- ☐ Type S203H (Type S203 for outlet pressures up to 5 psig (0,35 bar))
- ☐ Type S203P (Type S203 with external registration)
- ☐ Type S204 (Type S201 with low outlet pressure shutoff)
- ☐ Type S204H (Type S204 for outlet pressures up to 3.25 psig (0,22 bar))
- ☐ Type S206 (Type S204 with internal relief)
- ☐ Type S206H (Type S206 for outlet pressures up to 3.25 psig (0,22 bar))
- ☐ Type S208 (Type S201 with slam-shut device)
- ☐ Type S208H (Type S208 for outlet pressures up to 5 psig (0,35 bar))
- ☐ Type S208K (Type S208 for outlet pressures up to 10 psig (0,69 bar))
- ☐ Type S208P (Type S208 or S208H with external pressure registration)
- ☐ Type S208PK (Type S208K with external pressure registration)
- ☐ Type S209 (Type S208 with internal relief)
- ☐ Type S209H (Type S209 for outlet pressures up to 5 psig (0,35 bar))
- ☐ Type S209P (Type S209 or S209H with external pressure registration)

Body Size, Material, and End Connections -See table 1 (Select One)

1-1/4-inch (DN 32) Cast Iron (not available for Type S208 or S209)

- ☐ NPT***
- ☐ BSP*

1-1/2-inch (DN 40) Cast Iron (not available for Type S208 or S209)

- ☐ NPT***
- ☐ BSP*

1-1/2-inch (DN 40) Ductile Iron (not available for Type S203, S204, or S206)

- ☐ NPT***
- ☐ BSP*

1-1/2-inch (DN 40) Steel (not available for Type S204, S206, S208, or S209)

- ☐ NPT***
- ☐ BSP*

1-1/2 x 2-inch (DN 40 x 50) Ductile Iron (not available for Type S203, S204, or S206)

- ☐ NPT***
- ☐ BSP*

2-inch (DN 50) Cast Iron (not available for Type S208 or S209)

- ☐ NPT***
- ☐ BSP*
- ☐ 125B FF-7.5-inches***
- ☐ 125B FF-10-inches***
- ☐ 250B RF***

2-inch (DN 50) Ductile Iron (not available for Type S203, S204, or S206)

- ☐ NPT***
- ☐ BSP*
- ☐ 125 FF***
- ☐ 250 RF***
- ☐ PN 10-16***

2-inch (DN 50) Steel (not available for Type S204, S206, S208, or S209)

- ☐ NPT***
- ☐ BSP*
- ☐ 150 RF***
- ☐ 300 RF***
- ☐ PN 10-16***

Outlet Pressure Ranges (Select One)

Type S201, S201P, S202, or S202P

- ☐ 2 to 4.5-inches w.c. (5 to 11 mbar)***
- ☐ 3.5 to 6.5-inches w.c. (9 to 16 mbar)***
- ☐ 5 to 9-inches w.c. (12 to 22 mbar)***
- ☐ 8.5 to 18-inches w.c. (21 to 45 mbar)***
- ☐ 14 to 30-inches w.c. (35 to 75 mbar)***

Type S201H, S201P, S202H, or S202P

- ☐ 1 to 2 psig (0,069 to 0,14 bar)***
- ☐ 1.5 to 3.25 psig (0,10 to 0,22 bar)***
- ☐ 2 to 5 psig (0,14 to 0,34 bar)***

Type S201K or S201PK

- ☐ 2 to 5.5 psig (0,14 to 0,38 bar)***
- ☐ 4 to 10 psig (0,28 to 0,69 bar)***

Type S203 or S203P

- ☐ 2 to 4.5-inches w.c. (5 to 11 mbar)***
- ☐ 3.5 to 6.5-inches w.c. (9 to 16 mbar)***
- ☐ 5 to 9-inches w.c. (12 to 22 mbar)***
- ☐ 8.5 to 18-inches w.c. (21 to 45 mbar)***
- ☐ 14 to 30-inches w.c. (35 to 75 mbar)***

- continued -

Outlet Pressure Ranges (Select One) (continued)

Type S203H or S203P

- ☐ 1 to 2 psig (0,069 to 0,14 bar)***
- ☐ 1.5 to 2.25 psig (0,10 to 0,16 bar)***
- ☐ 1.5 to 3.25 psig (0,10 to 0,22 bar)***

Types S204 and S206

- ☐ 3.5 to 5-inches w.c. (9 to 12 mbar)***
- ☐ 5 to 7-inches w.c. (12 to 17 mbar)***
- ☐ 6.5 to 9.5-inches w.c. (16 to 23 mbar)***
- ☐ 8.5 to 18-inches w.c. (21 to 45 mbar)***
- ☐ 14 to 30-inches w.c. (35 to 75 mbar)***

Types S204H and S206H

- ☐ 1 to 2 psig (0,069 to 0,14 bar)***
- ☐ 1.5 to 3.25 psig (0,10 to 0,22 bar)***

Type S208, S208P, S209, or S209P

- ☐ 3.5 to 6.5-inches w.c. (9 to 16 mbar)***
- ☐ 5 to 9-inches w.c. (12 to 22 mbar)***
- ☐ 8.5 to 18-inches w.c. (21 to 45 mbar)***
- ☐ 14 to 30-inches w.c. (35 to 75 mbar)***

Type S208H, S208P, S209H, or S209P

- ☐ 1 to 2 psig (0,069 to 0,14 bar)***
- ☐ 1.5 to 3.25 psig (0,10 to 0,22 bar)***
- ☐ 2 to 5 psig (0,14 to 0,34 bar)***

Type S208K or S208PK

- ☐ 2 to 5.5 psig (0,14 to 0,38 bar)***
- ☐ 4 to 10 psig (0,28 to 0,69 bar)***

Orifice Size (Select One)

- ☐ 1/4-inch⁽¹⁾ (6,4 mm)^{(1)***}
- ☐ 3/8-inch (9,5 mm)***
- ☐ 1/2-inch (12,7 mm)***
- ☐ 3/4-inch (19,1 mm)***
- ☐ 1-inch (25,4 mm)***
- ☐ 1-3/16-inch (30,2 mm)***

1. 1/4-inch (6,4 mm) orifice not available for Types S204 and S206

Body Position (Select One)

- ☐ Position 1 (standard)***
- ☐ Position 2**
- ☐ Position 3**
- ☐ Position 4**

Vent Position (Select One)

- ☐ Position C**
- ☐ Position D (standard)***
- ☐ Position E**
- ☐ Position F**

Type VSX-2 Trip Spring Range (Select One)

- ☐ Overpressure (OPSO) Trip Only
(supply high trip pressure)
Indicate trip point
- ☐ Over and Underpressure (UPS0) Trip
(supply high and low trip pressure)
Indicate trip points
over _____ under _____

Type VSX-2 Pressure Registration (Select One)

- ☐ Internal***
- ☐ External***

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 _____

Gas Type and Specific Gravity _____

Gas Temperature _____

Does the Application Require Overpressure Protection?

☐ Yes ☐ No If yes, which is preferred:

☐ Relief Valve ☐ Monitor Regulator ☐ Shutoff Device
Is overpressure protection equipment selection assistance desired? _____

Pressure:

Maximum Inlet Pressure (P_{1max}) _____

Minimum Inlet Pressure (P_{1min}) _____

Downstream Pressure Setting(s) (P_2) _____

Maximum Flow (Q_{max}) _____

Performance Required:

Accuracy Requirements? _____

Need for Extremely Fast Response? _____

Other Requirements: _____

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Natural Gas Technologies

USA - Headquarters
McKinney, Texas 75050
Tel: 1-800-558-5856
Outside U.S. 1-469-293-4201

Asia-Pacific
Singapore, Singapore 128461
Tel: +65 6777 8211

Europe
Bologna, Italy 40013
Tel: 39 051 4190611
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Tel: +33 (0)2 37 33 47 00

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