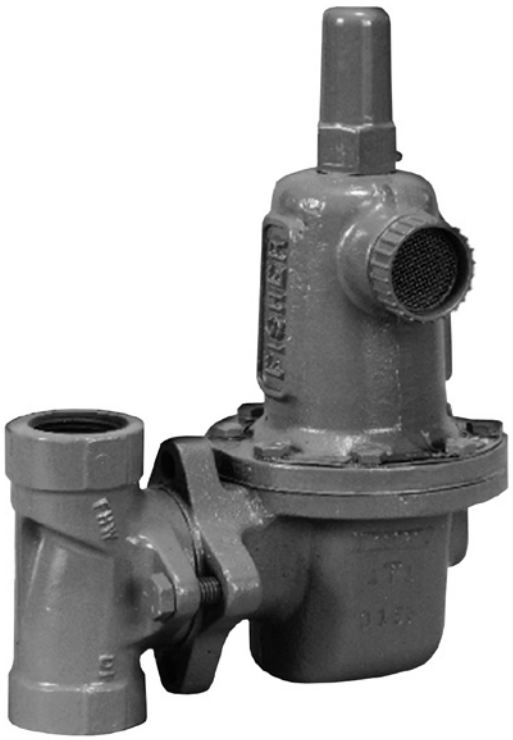
February 2011

627 Series Pressure Reducing Regulators

Introduction

The 627 Series direct-operated pressure reducing regulators (Figure 1) are for low and high-pressure systems. These regulators can be used with natural gas, air, or a variety of other gases. Performance characteristics vary according to construction (see the Specifications section).



W4793

Figure 1. *Typical 627 Direct-Operated Pressure Reducing Regulator*

Features

- **Internal Relief Valve**—Types 627R, 627LR, and 627MR regulators have an internal relief valve, which in many cases eliminates the usual requirement for an external relief valve, thereby reducing equipment and maintenance costs. Refer to the Specifications section for performance data.
- **Types 627R, 627LR, and 627MR Travel Stop**—The internal relief valve still works if the disk or linkage fails. The pusher post (Figure 6) contacts the travel stop of the lever retainer and, as the diaphragm continues to rise, it opens the relief valve.
- **Relief Operation Indicator**—A rubber cap (Figure 7) slipped on the vent assembly pops off when the relief valve opens, indicating the relief valve has opened since the last inspection.
- **Easy to Maintain**—Trim parts can be replaced without removing the regulator body from the pipeline. A two-bolt connection between the body and diaphragm casing simplifies disassembly for maintenance.
- **Installation Adaptability**—The diaphragm case and/or regulator body can be rotated in any of four positions to allow regulator installation in locations with limited space (Figure 8). The regulator may be installed in any position without affecting operation as long as the spring case vent is protected from the elements.
- **Application Versatility**—The different 627 Series constructions can be used as farm tap regulators, regulator-relief valves, monitoring regulators, or high-pressure industrial regulators.
- **Extended Body Option**—The Type 627 Long Body is available with same face-to-face dimensions as the Type 630 with threaded NPT end connections.
- **Tamper-Resistant**—An adjusting screw locknut and protective cap (Figure 2) is standard on all 627 Series regulators to discourage tampering with the pressure setting.
- **Wide Range of Flow Capabilities**—A selection of body sizes and orifice sizes is available to satisfy various flow requirements.
- **Tight Shutoff Capability**—A flat-faced disk of Nitrile (NBR), Nylon (PA), or Fluorocarbon (FKM) provides excellent shut-off capability.

D101331X012

Specifications

The Specifications section gives some general specifications for the 627 Series regulators. The nameplates give detailed information for a particular regulator as it comes from the factory.

Available Constructions

Type 627: Direct-operated pressure reducing regulator equipped with a pitot tube for greater regulated capacities (Figure 2).
Type 627R: Type 627 with internal relief and open throat (Figure 3).
Type 627LR: Type 627R with light rate relief spring (Figure 3).
Type 627M: Type 627 with a stem seal between the body outlet pressure and diaphragm case. Pressure is measured under the diaphragm through the 1/4 NPT downstream control line connection (Figure 2).
Type 627MR: Type 627M with internal relief (Figure 4).
Type 627H: Type 627 with a diaphragm limiter to deliver a higher outlet pressure (Figure 5).
Type 627HM: Type 627H with a stem seal between the body outlet pressure and diaphragm case. Pressure is measured under the diaphragm through two 1/4 NPT downstream control line connections (Figure 5).

Body Sizes and End Connection Styles

BODY SIZES,		END CONNECTION STYLES	CONSTRUCTION AVAILABLE
NPS	DN		
3/4	- - - -	NPT	All
1	25	NPT, CL150 RF, CL300 RF, CL600 RF, and Long Body	
2	50	NPT, CL150 RF, CL300 RF, CL600 RF, and Long Body	

Maximum Inlet Pressure(1) (Body Rating)

NPT Stainless Steel: 2000 psig / 138 bar
Flanged Stainless Steel: 1440 psig / 99,3 bar
NPT Steel: 2000 psig / 138 bar
Flanged Steel: 1500 psig / 103 bar
Ductile Iron: 1000 psig / 69,0 bar

Maximum Valve Disk Inlet Pressure Rating(1)

Nylon (PA) Disk: 2000 psig / 138 bar
Nitrile (NBR) Disk: 1000 psig / 69,0 bar
Fluorocarbon (FKM) Disk: 300 psig / 20,7 bar

Maximum Operating Inlet and Outlet Pressure Ranges(1)

See Table 2 for pressures by orifice size and spring range

Maximum Spring and Diaphragm Casing Pressure(1)

See Table 3

Maximum Body Outlet Pressure(1)(2) (Types 627M, 627MR, and 627HM Only)

NPT Steel: 2000 psig / 138 bar
Flanged Steel: 1500 psig / 103 bar
Ductile Iron: 1000 psig / 69,0 bar

Orifice Sizes

See Table 2

Internal Relief Performance

Type 627R: See Table 4 and Figure 9
Type 627LR: See Table 5
Type 627MR: Limited by field-installed control line piping

Regulator Capacities

Type 627, 627M, or 627MR: See Tables 6 to 9
Type 627H or 627HM: See Tables 10 to 12
Type 627R: See Tables 13 to 14

Flow Coefficients

See Table 15

IEC Sizing Coefficients

See Table 16

Construction Materials

Body: Ductile iron, WCC steel, stainless steel
Spring Case and Diaphragm Case: WCC steel, stainless steel, ductile iron, or die cast aluminum
Orifice: Aluminum **(standard)** or stainless steel
Disk Holder with Valve Disk:
2000 psig / 138 bar Maximum Pressure:
Aluminum or stainless steel with Nylon (PA)
1000 psig / 69,0 bar Maximum Pressure:
Aluminum **(standard)** or stainless steel with Nitrile (NBR)
300 psig / 20,7 bar Maximum Pressure:
Stainless steel or aluminum with Fluorocarbon (FKM) disk
O-Rings:
Nitrile (NBR) or Fluorocarbon (FKM)
Diaphragm:
Types 627H and 627HM: Neoprene(CR)
All Others: Nitrile (NBR) or Fluorocarbon (FKM)

1. The pressure/temperature limits in this Bulletin or any applicable standard limitation should not be exceeded.
2. Types 627, 627H, 627R, and 627LR are limited by maximum diaphragm casing pressure.

- continued -

Specifications (continued)

Relief Indicator

For Types 627R, 627LR, and 627MR (see Figure 7)

Elastomer Temperature Capabilities(1)(3)

MATERIAL	DISK/ DIAPHRAGM	TEMPERATURE	
		°F	°C
Nitrile (NBR)	Disk	-40 to 180	-40 to 82
	Dipahragm		
Fluorocarbon (FKM)	Disk	0 to 180	-18 to 82
	Diaphragm		
Nylon (PA)	Disk	-40 to 180	-40 to 82
Neoprene (CR) for Types 627H and 627HM only	Diaphragm	-40 to 180	-40 to 82

Pressure Registration

Type 627, 627H, 627R, or 627LR: Internal
Type 627M, 627HM, or 627MR: External through 1/4 NPT internal control line connection in the diaphragm casing

De-Icer System

See Figure 10 and Type 627M De-Icer System Application section

Spring Case Orientation and Vent Location

See Figure 8

Spring Case Vent Connection

3/4 NPT with removable screened vent assembly

Approximate Weight

Ductile Iron, Steel, or Stainless Steel Casings: 10 pounds / 5 kg
Aluminum Casing: 6.3 pounds / 3 kg

1. The pressure/temperature limits in this Bulletin or any applicable standard limitation should not be exceeded.
3. Stainless steel body is rated to -40°F / -40°C. Steel and Ductile Iron bodies are rated to -20°F / -29°C.

Principle of Operation

Refer to Figures 2 through 5. When downstream demand decreases, the pressure under the diaphragm increases. This pressure overcomes the regulator setting (which is set by a spring). Through the action of the pusher post assembly, lever, and valve stem the valve disk moves closer to the orifice and reduces gas flow. If demand downstream increases, pressure under the diaphragm decreases. Spring force pushes the pusher post assembly downward and the valve disk moves away from the orifice allowing more flow through the body to the downstream system.

Product Description

Types 627 and 627H Direct-Operated Pressure Reducing Regulators

The Types 627 and 627H regulators provide economical pressure reducing control for a variety of residential, commercial, and industrial applications. The regulator pitot tube located in a high velocity stream provides dynamic boost that compensates for outlet pressure drop (see Tables 6 through 12).

Type 627 Long Body

The Type 627 Long Body regulator can be used as a drop-in replacement for existing Type 630 installations without the need to modify piping.

Internal Relief for Type 627R, 627LR, or 627MR Regulator

The Types 627R and 627LR internal relief performance values (Tables 4 and 5) were obtained **by removing the disk assembly** from the regulator, see Figure 9. For the Type 627R, 627LR, or 627MR regulator, the internal relief across the diaphragm (Figure 3 or 4) provides overpressure protection in many applications. As outlet pressures build-up above the start-to-discharge point, the diaphragm moves off the relief valve seat allowing the excess pressure to bleed out through the screened vent.

For extra protection, should failure conditions exist which would prevent normal operation of the regulator (for example, disk broken off, or disk erosion), the pusher post contacts the lever retainer (Figure 6) causing the relief valve assembly to open. Since the diaphragm continues to rise as downstream pressure builds, it opens the relief valve, thereby opening the valve. This internal relief may be adequate for the application.

Downstream Control Line for Type 627M, 627HM, or 627MR Regulator

A Type 627M, 627HM, or 627MR regulator has a blocking throat stem seal with O-rings and a 1/4 NPT control line connection in the diaphragm case (Figure 4). A regulator with a downstream control line is used for monitoring applications or other applications where other equipment is installed between the regulator and the pressure control point. The stem seal separates the body outlet pressure from the diaphragm case.

Installation

Regulator operation within ratings does not preclude the possibility of damage from debris in the lines or from external sources. A regulator should be inspected for damage periodically and after any overpressure condition. Ensure that the operating temperature capabilities listed in Specifications section are not exceeded.

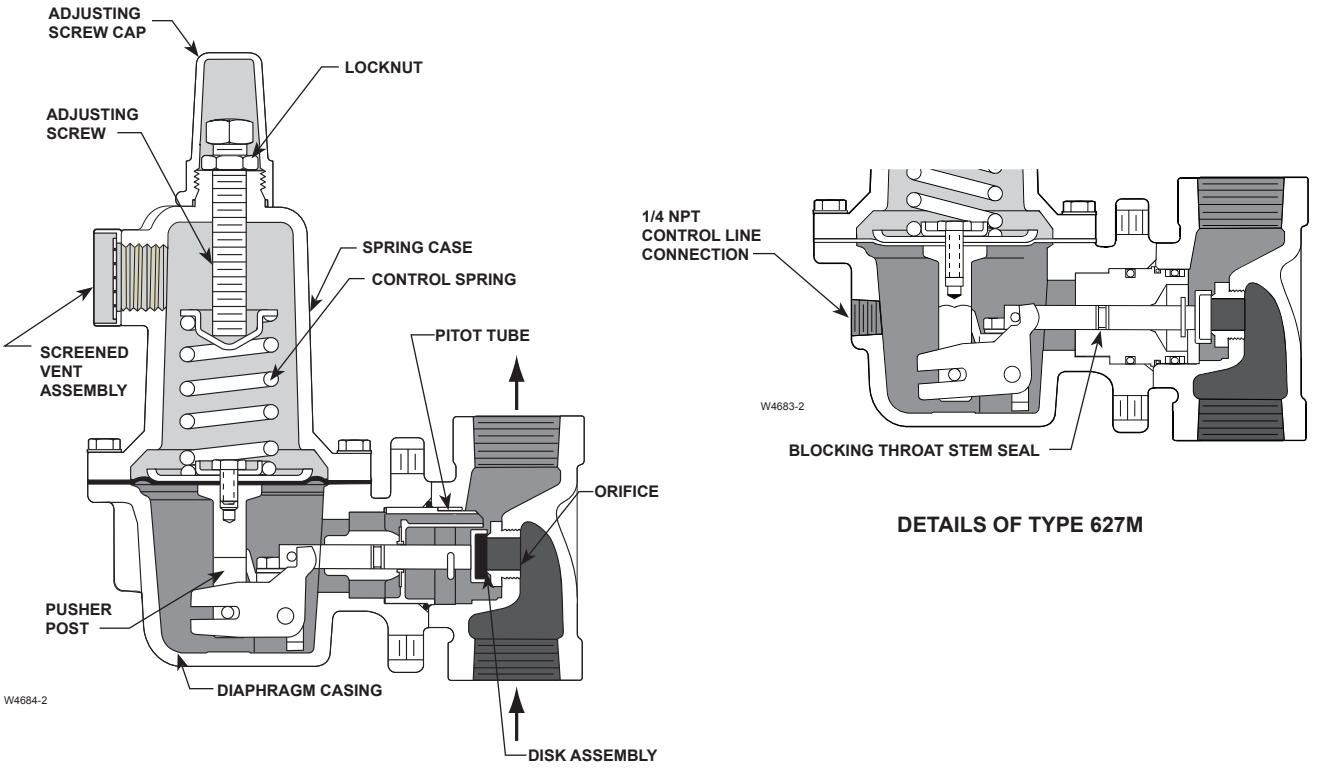


Figure 2. *Types 627 and 627M Operational Schematics*

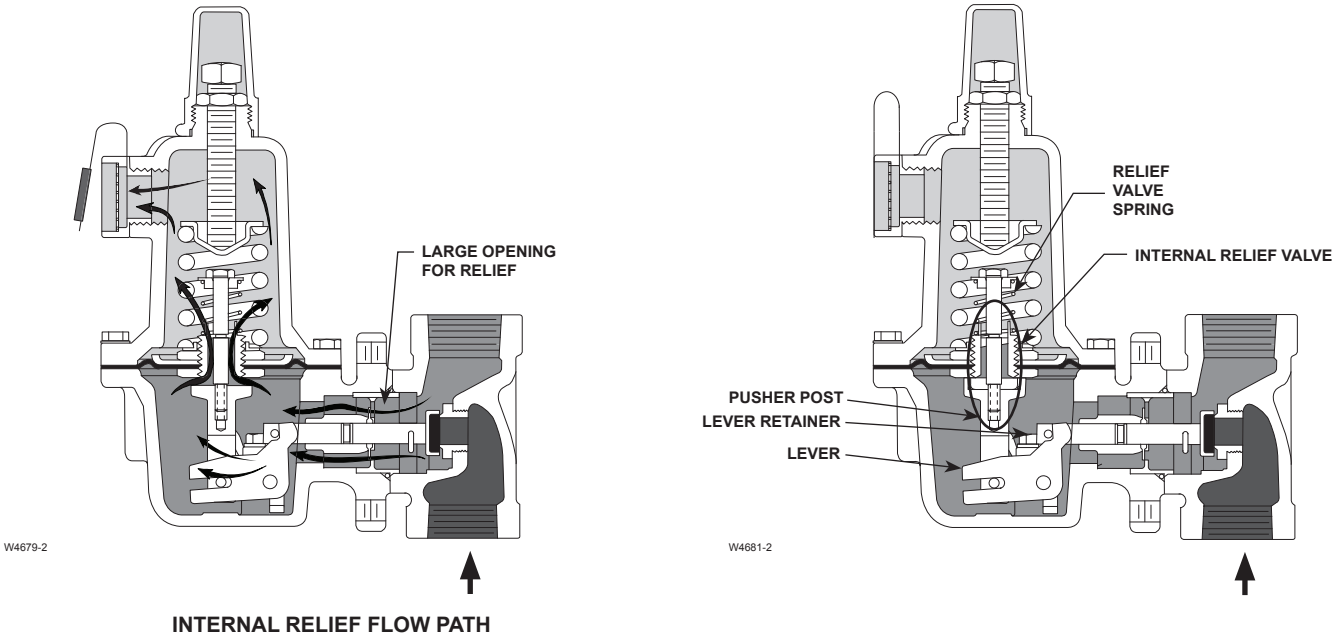


Figure 3. *Types 627R and 627LR Operational Schematics*

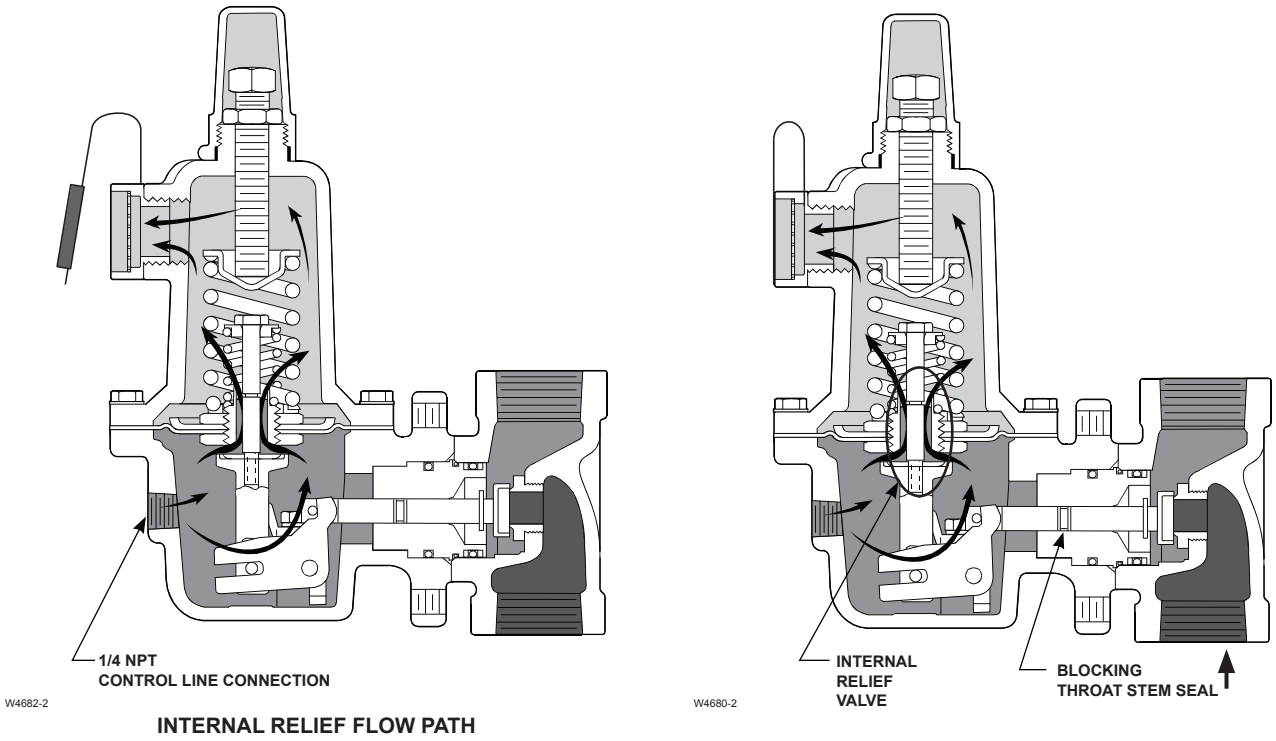


Figure 4. *Type 627MR Operational Schematics*

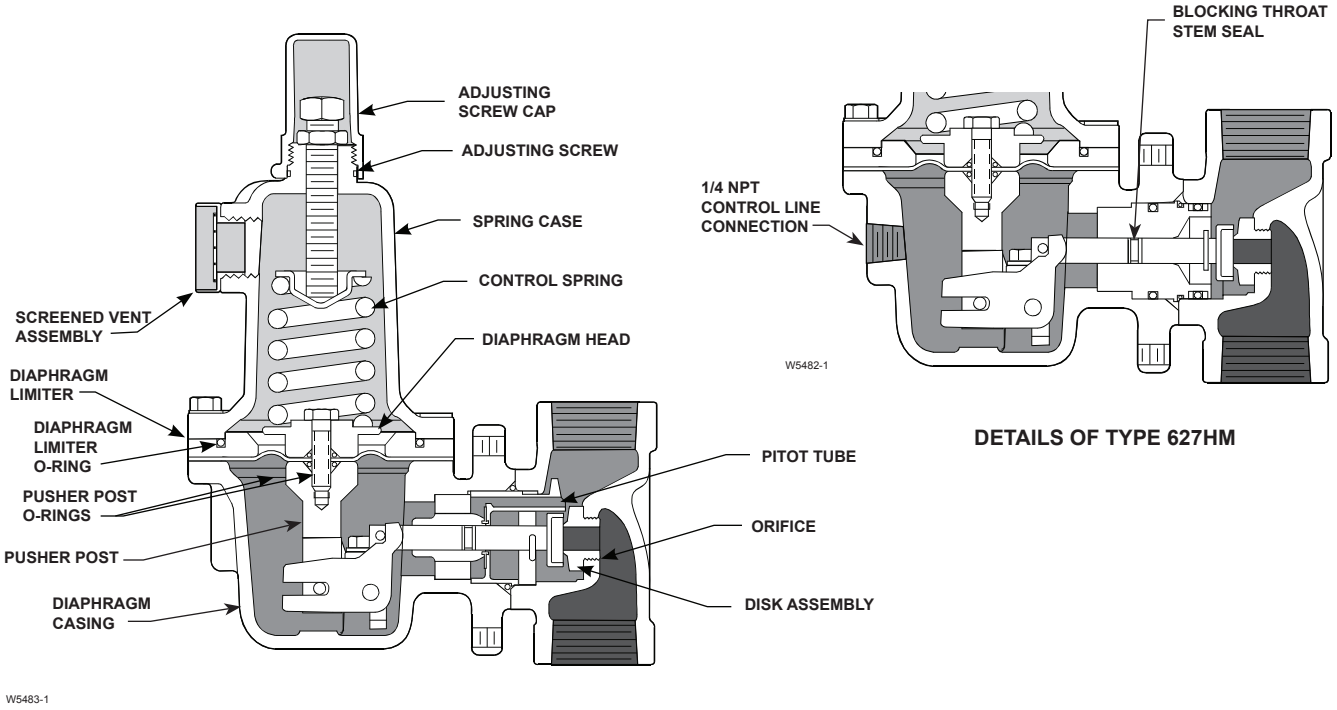


Figure 5. *Types 627H and 627HM Operational Schematics*

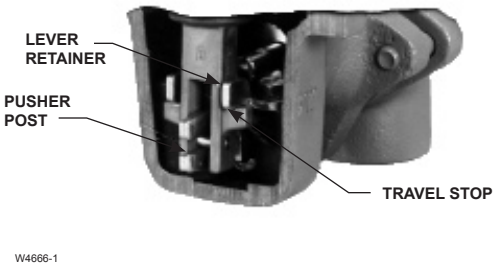


Figure 6. *Internal Relief Construction Feature*

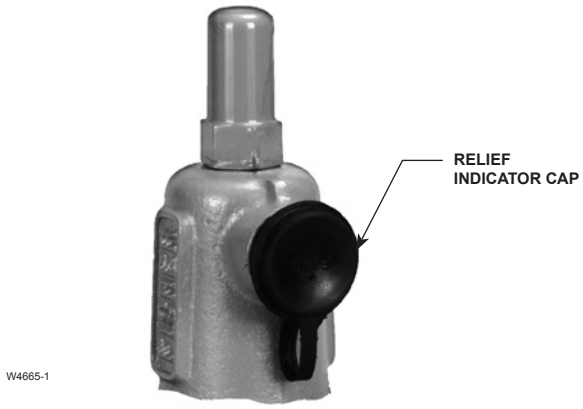


Figure 7. *Relief Indicator*

Table 1. *Maximum Cold Working Pressure of Body Inlet (Body Rating)*[1][2]

BODY SIZE		BODY MATERIAL	END CONNECTION	MAXIMUM INLET PRESSURE	
NPS	DN			psig	bar
3/4	20	Ductile iron	NPT	1000	69,0
		Steel	NPT	2000	138
		Stainless Steel	NPT	2000	138
1 2	25 50	Ductile iron	NPT	1000	69,0
		Steel	NPT	2000	138
			CL150 RF	290	20,0
			CL300 RF	750	51,7
			CL600 RF	1500	103
			PN 16/25/40	580	40,0
1 2	25 50	Stainless Steel	CL150 RF	275	19,0
			CL300 RF	720	49,6
			CL600 RF	1440	99,3
			PN 16/25/40	580	40,0

1. The pressure/temperature limits in this bulletin, and any applicable standard or code should not be exceeded.
2. Temperature may decrease these maximum pressures.

Note

If the regulator is shipped mounted on another unit, install that unit according to the appropriate Instruction manual.

Overpressure Protection

627 Series regulators have outlet pressure ratings that are lower than their inlet pressure ratings. A pressure-relieving or pressure-limiting device must be provided by the user for the Types 627, 627H, 627M, and 627HM regulators if the inlet pressure can exceed the outlet pressure rating, since these regulators do not have internal relief.

Types 627R and 627LR regulators provide internal relief which limits the total outlet pressure build-up over setpoint. Use Table 4 or 5 and the following example to determine the maximum inlet pressure allowed to keep the maximum allowable downstream pressure from being exceeded.

Given:

Desired outlet pressure setting : 40 psig / 2,8 bar
Maximum allowable downstream pressure : 125 psig / 8,6 bar
Orifice size : 1/4-inch / 6,35 mm

What is the maximum inlet pressure?

Control spring range (first column) : 35 to 80 psig / 2,4 to 5,5 bar
Outlet pressure setting (second column) : 40 psig / 2,8 bar
Maximum allowable downstream pressure (third column) : 125 psig / 8,6 bar
Orifice size column across from the 125 psig / 8,6 bar maximum allowable pressure and the column under 1/4-inch / 6,4 mm orifice size : 1/4-inch / 6,4 mm

From Table 4, the maximum inlet pressure for this example is 300 psig / 20,7 bar.

In many cases the internal relief of Types 627R and 627LR offers full capacity overpressure protection. No additional relief capacity is needed if the actual inlet pressure is equal to or less than the inlet pressure shown under the Maximum Inlet Pressure column heading in Tables 4 and 5.

If the maximum allowable downstream system pressure is less than any of the pressures shown in the third column

Table 2. *Maximum Inlet Pressures and Outlet Pressure Ranges*

TYPES	OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR CODE	ORIFICE SIZE		MAXIMUM INLET PRESSURE(1)					
				Nylon (PA) Disk		Nitrile (NBR) Disk		Fluorocarbon (FKM) Disk	
		Inches	mm	psig	bar	psig	bar	psig	bar
627 and 627M(3)	5(2) to 20 psig / 0,34 to 1,4 bar 10B3076X012 Yellow	3/32	2,4	2000	138	1000	69,0	300	20,7
		1/8	3,2	1000	69,0	1000	69,0	300	20,7
		3/16	4,8	750	51,7	750	51,7	300	20,7
		1/4	6,4	500	34,5	500	34,5	300	20,7
		3/8	9,5	300	20,7	300	20,7	300	20,7
		1/2	13	250	17,2	250	17,2	250	17,2
	15 to 40 psig / 1,0 to 2,8 bar 10B3077X012 Green	3/32	2,4	2000	138	1000	69,0	300	20,7
		1/8	3,2	1500	103	1000	69,0	300	20,7
		3/16	4,8	1000	69,0	1000	69,0	300	20,7
		1/4	6,4	750	51,7	750	51,7	300	20,7
		3/8	9,5	500	34,5	500	34,5	300	20,7
		1/2	13	300	20,7	300	20,7	300	20,7
	35 to 80 psig / 2,4 to 5,5 bar 10B3078X012 Blue	3/32	2,4	2000	138	1000	69,0	300	20,7
		1/8	3,2	2000	138	1000	69,0	300	20,7
		3/16	4,8	1750	121	1000	69,0	300	20,7
		1/4	6,4	1500	103	1000	69,0	300	20,7
		3/8	9,5	1000	69,0	1000	69,0	300	20,7
		1/2	13	750	51,7	750	51,7	300	20,7
	70 to 150 psig / 4,8 to 10,3 bar 10B3079X012 Red	3/32	2,4	2000	138	1000	69,0	300	20,7
		1/8	3,2	2000	138	1000	69,0	300	20,7
		3/16	4,8	2000	138	1000	69,0	300	20,7
		1/4	6,4	1750	121	1000	69,0	300	20,7
		3/8	9,5	1250	86,2	1000	69,0	300	20,7
		1/2	13	750	51,7	750	51,7	300	20,7
627R and 627MR	5(2) to 20 psig / 0,34 to 1,4 bar 10B3076X012 Yellow	3/32	2,4	2000	138	1000	69,0	300	20,7
		1/8	3,2	1000	69,0	1000	69,0	300	20,7
		3/16	4,8	750	51,7	750	51,7	300	20,7
		1/4	6,4	500	34,5	500	34,5	300	20,7
		3/8	9,5	300	20,7	300	20,7	300	20,7
		1/2	13	200	13,8	200	13,8	200	13,8
	15 to 40 psig / 1,0 to 2,8 bar 10B3077X012 Green	3/32	2,4	2000	138	1000	69,0	300	20,7
		1/8	3,2	1500	103	1000	69,0	300	20,7
		3/16	4,8	1000	69,0	1000	69,0	300	20,7
		1/4	6,4	750	51,7	750	51,7	300	20,7
		3/8	9,5	300	20,7	300	20,7	300	20,7
		1/2	13	200	13,8	200	13,8	200	13,8
	35 to 80 psig / 2,4 to 5,5 bar 10B3078X012 Blue	3/32	2,4	2000	138	1000	69,0	300	20,7
		1/8	3,2	1750	121	1000	69,0	300	20,7
		3/16	4,8	1000	69,0	1000	69,0	300	20,7
		1/4	6,4	750	51,7	750	51,7	300	20,7
		3/8	9,5	300	20,7	300	20,7	300	20,7
		1/2	13	200	13,8	200	13,8	200	13,8
	70 to 150 psig / 4,8 to 10,3 bar 10B3079X012 Red	3/32	2,4	2000	138	1000	69,0	300	20,7
		1/8	3,2	1000	69,0	1000	69,0	300	20,7
		3/16	4,8	500	34,5	500	34,5	300	20,7
		1/4	6,4	300	20,7	300	20,7	300	20,7
		3/8	9,5	200	13,8	200	13,8	200	13,8
		1/2	13	200	13,8	200	13,8	200	13,8
627LR	15 to 40 psig / 1,0 to 2,8 bar 10B3077X012 Green	3/32	2,4			1000	69,0	300	20,7
		1/8	3,2			1000	69,0	300	20,7
		3/16	4,8			750	51,7	300	20,7
		1/4	6,4			500	34,5	300	20,7
627H and 627HM(3)	140 to 250 psig / 9,7 to 17,2 bar 10B3078X012 Blue	3/32	2,4	2000	138	1000	69,0		
		1/8	3,2	2000	138	1000	69,0		
		3/16	4,8	1750	121	1000	69,0		
		1/4	6,4	1500	103	1000	69,0		
		3/8	9,5	1000	69,0	300	20,7		
		1/2	13	750	51,7	200	13,8		
	240 to 500 psig / 16,5 to 34,5 bar 10B3079X012 Red	3/32	2,4	2000	138	1000	69,0		
		1/8	3,2	2000	138	1000	69,0		
		3/16	4,8	1750	121	1000	69,0		
		1/4	6,4	1500	103	1000	69,0		
		3/8	9,5	1000	69,0	1000	69,0		
		1/2	13	750	51,7	750	51,7		

1. For inlet pressure in excess of 1000 psig / 69,0 bar, refer to the maximum body and disk pressure ratings in the Specifications section.
2. For pressure settings under 10 psig / 0,69 bar, inlet pressure should be limited to approximately 100 psig / 6,9 bar so the setpoint adjustment can be obtained.
3. The unbalance forces change from the wide-open monitor mode to an active regulator mode such that the Type 627M or 627HM should have a 3/8-inch / 9,5 mm or larger orifice.

▭ - Shaded areas indicate that Fluorocarbon (FKM) and Nylon (PA) disk material are not available.

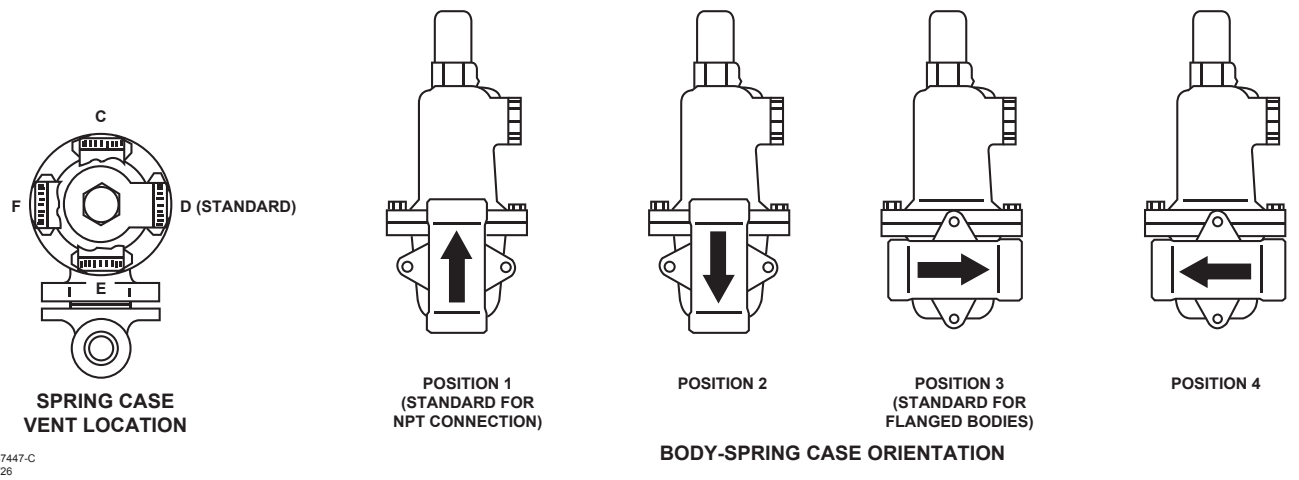


Figure 8. *627 Series Spring Case and Vent Location*

of Tables 4 and 5, use a separate relief valve or a monitor regulator since the internal relief will not open at pressures lower than shown in the table.

If the actual inlet pressure is higher than the pressure shown, in the Maximum Inlet Pressure column, to protect to the level shown, an additional relief valve is needed to supplement the relief capacity of the Type 627R or 627LR internal relief or a full capacity separate relief valve or monitor regulator may be used.

To size a supplemental relief valve to use with the Type 627R or 627LR:

1. Use the universal sizing equation to calculate the wide-open capacity of the regulator port (Q_1) using:
   a. Actual inlet pressure (P_1), psia
   b. Maximum allowable downstream system pressure (P_2) from Table 4 or 5, column 3
   c. C_g from Table 15
2. Use the universal sizing equation to calculate the internal relief flow (Q_2) using:
   a. Maximum inlet pressure (P_1) from Table 4 columns 4 through 9 for Type 627R or Table 5 columns 4 through 7 for Type 627LR (use the pressure from the table even though the actual pressure will be higher). Remember the equation requires pressures to be converted to psia.
   b. Maximum allowable downstream system pressure (P_2) from Table 4 or 5
   c. C_g from Table 15
3. Calculate supplemental relief capacity:
   a. Q supplemental relief = $Q_1 – Q_2$

Example:

Outlet pressure setting	:	10 psig / 0,69 bar
Maximum allowable downstream system pressure	:	60 psig / 4,1 bar
Inlet pressure	:	300 psig / 20,7 bar
Orifice size	:	1/4-inch / 6,4 mm

Step 1.
P_1 = 300 psig / 20,7 bar
P_2 = 60 psig / 4,1 bar
C_g, 1/4-inch / 6,4 mm orifice = 50
Q_1 = 20 300 SCFH / 544 Nm^3/h

Step 2.
P_1 = 190 psig / 13,1 bar
P_2 = 60 psig / 4,1 bar
C_g, 1/4-inch / 6,4 mm orifice = 50
Q_2 = 13 200 SCFH / 354 Nm^3/h

Step 3.
Q supplemental relief = $Q_1 – Q_2$
Q supplemental relief = 20 300 – 13 200 = 7100 SCFH / 544 - 354 = 190 Nm^3/h

Overpressurizing 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.

If needed, provide appropriate pressure-relieving or pressure-limiting devices to ensure that none of the specifications are exceeded. Regulator operation within ratings does not prevent the possibility of damage from external sources such as debris in the pipeline.

Refer to the relief sizing coefficients in Table 15 and the Capacity Information section to determine the required external relief valve capacity.

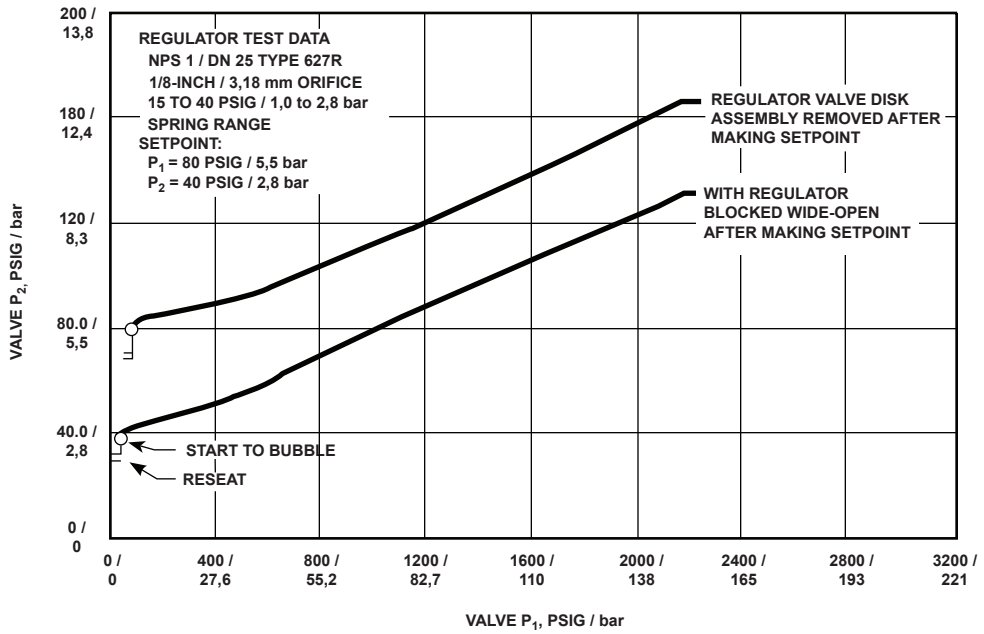


Figure 9. *Relief Testing Methods, Outlet vs. Inlet Pressures*

Capacity Information

Natural gas regulating capacities at selected inlet pressures and outlet pressure settings are given in Tables 6 to 9 for the Type 627 or 627M, in Tables 10 to 12 for the Type 627H, and in Tables 13 to 14 for the Type 627R regulators. Flows are in SCFH (60°F and 14.7 psia) and Nm^3/h (0°C and 1,01325 bar) of 0.6 specific gravity natural gas.

To determine the equivalent capacities for other gases, multiply the table capacity by the following appropriate conversion factor: 0.775 for air, 0.789 for nitrogen, 0.628 for propane, or 0.548 for butane. For gases of other specific gravities, multiply the given capacity by 0.775, and divide by the square root of the appropriate specific gravity.

Then, if capacity is desired in Nm^3/h at 0°C and 1,01325 bar, multiply the values in SCFH by 0.0268.

To determine wide-open flow capacities for relief sizing use the following formula:

$$Q = \sqrt{\frac{520}{GT}}\, C_g P_1 SIN\left(\frac{3417}{C_1}\sqrt{\frac{\triangle P}{P_1}}\right) DEG$$

where,

Q = gas flow rate, SCFH
G = specific gravity of the gas
T = absolute temperature of gas at inlet, °Rankine
C_g = gas sizing coefficient
P_1 = absolute inlet pressure, psia
C_1 = flow coefficient ($C_g \div C_v$)
ΔP = pressure drop across the regulator, psi

To obtain the published capacities, the inlet and outlet piping should be the same as the regulator size.

Table 3. *Maximum Spring and Diaphragm Casing Pressure(1)*

MAXIMUM PRESSURE DESCRIPTION	DIAPHRAGM CASING MATERIAL	TYPE 627		TYPES 627R AND 627LR		TYPE 627M		TYPE 627MR		TYPES 627H AND 627HM	
		psig	bar	psig	bar	psig	bar	psig	bar	psig	bar
Maximum pressure to spring and diaphragm casings to prevent leak to atmosphere other than relief action (internal parts damage may occur)	Die cast aluminum	250	17,2	250	17,2	Not Available		Not Available		Not Available	
	Ductile iron					250	17,2				
	Steel or Stainless steel							250	17,2	800	55,2
Maximum pressure to spring and diaphragm casings to prevent burst of casings during abnormal operation (leak to atmosphere and internal parts damage may occur)	Die cast aluminum	375	25,9	375	25,9	Not Available		Not Available		Not Available	
	Ductile iron	465	32,1	465	32,1	465	32,1	465	32,1		
	Steel or Stainless steel	1500	103	1500	103	1500	103	1500	103	1500	103
Maximum diaphragm casing overpressure (above setpoint) to prevent damage to internal parts	All materials	60	4,1	120	8,3	60	4,1	120	8,3	120	8,3

1. If the spring case is pressurized, a metal adjusting screw cap is required. Contact your local Sales Office for details.

Table 4. *Type 627R Internal Relief Performance(1)*

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR CODE	OUTLET PRESSURE SETTING		MAXIMUM ALLOWABLE DOWNSTREAM SYSTEM PRESSURE		MAXIMUM INLET PRESSURE TO KEEP MAXIMUM ALLOWABLE DOWNSTREAM SYSTEM PRESSURE FROM BEING EXCEEDED(2)											
					Orifice Size, Inches / mm											
					3/32 / 2,4		1/8 / 3,2		3/16 / 4,8		1/4 / 6,4		3/8 / 9,5		1/2 / 13	
	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar
5(3) to 20 psig / 0,34 to 1,4 bar 10B3076X012 Yellow	10	0,69	60	4,1	1250	86,2	740	51,0	320	22,1	190	13,1	95	6,6	75	5,2
			100	6,9	2000	138	1500	103	620	42,7	390	26,9	180	12,4	130	9,0
			125	8,6	2000	138	1900	131	830	57,2	480	33,1	220	15,2	160	11,0
			175	12,1	2000	138	2000	138	1100	75,8	670	46,2	320	22,1	220	15,2
			200	13,8	2000	138	2000	138	1300	89,6	770	53,1	360	24,8	260	17,9
			250	17,2	2000	138	2000	138	1600	110	960	66,2	450	31,0	320	22,1
	15	1,0	60	4,1	1000	69,0	620	42,7	260	17,9	170	11,7	90	6,2	70	4,8
			100	6,9	2000	138	1400	96,5	610	42,1	370	25,5	170	11,7	130	9,0
			125	8,6	2000	138	1900	131	810	55,8	480	33,1	220	15,2	160	11,0
			175	12,1	2000	138	2000	138	1100	75,8	670	46,2	320	22,1	220	15,2
			200	13,8	2000	138	2000	138	1300	89,6	770	53,1	360	24,8	260	17,9
			250	17,2	2000	138	2000	138	1600	110	960	66,2	450	31,0	320	22,1
	20	1,4	60	4,1	850	58,6	490	33,8	210	14,5	130	9,0	80	5,5	65	4,5
			100	6,9	2000	138	1300	89,6	600	41,4	360	24,8	170	11,7	120	8,3
			125	8,6	2000	138	1800	124	800	55,2	480	33,1	220	15,2	160	11,0
			175	12,1	2000	138	2000	138	1100	75,8	670	46,2	320	22,1	220	15,2
			200	13,8	2000	138	2000	138	1300	89,6	770	53,1	360	24,8	260	17,9
			250	17,2	2000	138	2000	138	1600	110	960	66,2	450	31,0	320	22,1
15 to 40 psig / 1,0 to 2,8 bar 10B3077X012 Green	15	1,0	60	4,1	1000	69,0	380	26,2	210	14,5	130	9,0	80	5,5	65	4,5
			100	6,9	2000	138	1300	89,6	590	40,7	350	24,1	170	11,7	120	8,3
			125	8,6	2000	138	1800	124	800	55,2	470	32,4	220	15,2	160	11,0
			175	12,1	2000	138	2000	138	1100	75,8	640	44,1	320	22,1	220	15,2
			200	13,8	2000	138	2000	138	1300	89,6	780	53,8	370	25,5	260	17,9
			250	17,2	2000	138	2000	138	1600	66,2	960	66,2	450	31,0	320	22,1
	20	1,4	60	4,1	630	43,4	200	13,8	150	10,3	100	6,9	70	4,8	65	4,5
			100	6,9	2000	138	1200	82,7	550	37,9	330	22,8	160	11,0	120	8,3
			125	8,6	2000	138	1700	117	760	52,4	450	31,1	210	14,5	160	11,0
			175	12,1	2000	138	2000	138	1100	75,8	630	43,4	320	22,1	220	15,2
			200	13,8	2000	138	2000	138	1300	89,6	770	53,1	360	24,8	260	17,9
			250	17,2	2000	138	2000	138	1600	66,2	960	66,2	460	31,7	320	22,1
	30	2,1	100	6,9	2000	138	950	65,5	450	31,1	260	17,9	140	9,7	110	7,6
			125	8,6	2000	138	1500	103	670	46,2	400	27,6	190	13,1	150	10,3
			175	12,1	2000	138	2000	138	1000	69,0	610	42,1	300	20,7	220	15,2
			200	13,8	2000	138	2000	138	1200	82,7	760	52,4	360	24,8	260	17,9
			250	17,2	2000	138	2000	138	1600	110	970	66,9	460	31,7	320	22,1
	40	2,8	100	6,9	1500	103	700	48,3	330	22,8	200	13,8	120	8,3	108	7,4
			125	8,6	2000	138	1300	89,6	560	38,6	340	23,4	180	12,4	140	9,7
			175	12,1	2000	138	1800	124	1000	69,0	550	37,9	290	20,0	220	15,2
			200	13,8	2000	138	2000	138	1200	82,7	730	50,3	350	24,1	250	17,2
			250	17,2	2000	138	2000	138	1600	110	970	66,9	460	31,7	320	22,1

1. The internal relief performance values are obtained by removing the disk assembly.
2. For inlet pressures in excess of 1000 psig / 69,0 bar, refer to the maximum body and disk pressure ratings in the Specifications section.
3. For pressure settings under 10 psig / 0,69 bar, inlet pressure should be limited to approximately 100 psig / 6,9 bar so the setpoint adjustment can be obtained.

▭ - Shaded areas indicate maximum inlet pressures allowed during system malfunction only. Table 1 gives the maximum inlet pressure for normal regulator operation.

- continued -

Table 4. *Type 627R Internal Relief Performance[1][3] (continued)*

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR CODE	OUTLET PRESSURE SETTING		MAXIMUM ALLOWABLE DOWNSTREAM SYSTEM PRESSURE		MAXIMUM INLET PRESSURE TO KEEP MAXIMUM ALLOWABLE DOWNSTREAM SYSTEM PRESSURE FROM BEING EXCEEDED[2][3]											
					Orifice Size, Inches / mm											
					3/32 / 2,4		1/8 / 3,2		3/16 / 4,8		1/4 / 6,4		3/8 / 9,5		1/2 / 13	
	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar
35 to 80 psig / 2,4 to 5,5 bar 10B3078X012 Blue	40	2,8	125	8,6	2000	138	1100	75,8	500	34,5	300	20,7	170	11,7	140	9,7
			150	10,3	2000	138	1600	110	750	51,7	440	30,3	230	15,9	180	12,4
			175	12,1	2000	138	2000	138	980	67,6	580	40,0	290	20,0	220	15,2
			200	13,8	2000	138	2000	138	1200	82,7	720	49,6	340	23,4	250	17,2
			250	17,2	2000	138	2000	138	1600	110	940	64,8	450	31,0	320	22,1
	50	3,4	125	8,6	1400	96,5	820	56,5	400	27,6	230	15,9	150	10,3	140	9,7
			150	10,3	2000	138	1400	96,5	650	44,8	370	25,5	210	14,5	170	11,7
			175	12,1	2000	138	1900	131	700	48,3	530	36,5	270	18,6	210	14,5
			200	13,8	2000	138	2000	138	1100	75,8	670	46,2	330	22,8	240	16,5
			250	17,2	2000	138	2000	138	1500	103	920	63,4	430	29,6	320	22,1
	60	4,1	125	8,6	900	62,1	450	31,0	270	18,6	190	13,1	140	9,7	130	9,0
			150	10,3	1700	117	1100	75,8	540	37,2	300	20,7	190	13,1	160	11,0
			175	12,1	2000	138	1700	117	780	53,8	470	32,4	250	17,2	200	13,8
			200	13,8	2000	138	2000	138	1000	69,0	610	42,1	310	21,4	230	15,9
			250	17,2	2000	138	2000	138	1400	96,5	880	60,7	420	29,0	310	21,4
	70	4,8	150	10,3	1200	82,7	850	58,6	430	29,6	250	17,2	170	11,7	160	11,0
			175	12,1	2000	138	1400	96,5	670	46,2	400	27,6	230	15,9	190	13,1
			200	13,8	2000	138	2000	138	920	63,4	550	37,9	280	19,3	230	15,9
			250	17,2	2000	138	2000	138	1300	89,6	830	57,2	400	27,6	310	21,4
	80	5,5	150	10,3	800	55,2	500	34,5	300	20,7	200	13,8	160	11,0	150	10,3
			175	12,1	1500	103	1200	82,7	550	37,9	330	22,8	210	14,5	190	13,1
			200	13,8	2000	138	1700	117	800	55,2	480	33,1	270	18,6	220	15,2
			250	17,2	2000	138	2000	138	1200	82,7	770	53,1	390	26,9	300	20,7
70 to 150 psig / 4,8 to 10,3 bar 10B3079X012 Red	70	4,8	175	12,1	1900	131	600	41,4	400	27,6	260	17,9	200	13,8	175	12,1
			200	13,8	2000	138	1200	82,7	630	43,4	380	26,2	250	17,2	210	14,5
			250	17,2	2000	138	2000	138	1100	75,8	680	46,9	360	24,8	290	20,0
	80	5,5	175	12,1	1400	96,5	250	17,2	240	16,5	200	13,8	190	13,1	175	12,1
			200	13,8	2000	138	960	66,2	520	35,9	330	22,8	240	16,5	210	14,5
			250	17,2	2000	138	2000	138	1000	69,0	620	42,7	350	24,1	280	19,3
	100	6,9	200	13,8	1500	103	250	17,2	240	16,5	230	15,9	210	14,5	210	14,5
			250	17,2	2000	138	1600	110	770	53,1	520	35,9	320	22,1	270	18,6
	125	8,6	250	17,2	2000	138	1000	69,0	500	34,5	390	26,9	290	20,0	260	17,9
	150	10,3	250	17,2	1200	82,7	260	17,9	260	17,9	260	17,9	260	17,9	260	17,9

1. The internal relief performance values are obtained by removing the disk assembly.
2. For inlet pressures in excess of 1000 psig / 69,0 bar, refer to the maximum body and disk pressure ratings in the Specifications section.
3. For pressure settings under 10 psig / 0,69 bar, inlet pressure should be limited to approximately 100 psig / 6,9 bar so the setpoint adjustment can be obtained.

▭ - Shaded areas indicate maximum inlet pressures allowed during system malfunction only. Table 1 gives the maximum inlet pressure for normal regulator operation.

Table 5. *Type 627LR Internal Relief Performance[1]*

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR CODE	OUTLET PRESSURE SETTING		MAXIMUM ALLOWABLE DOWNSTREAM SYSTEM PRESSURE		MAXIMUM INLET PRESSURE TO KEEP MAXIMUM ALLOWABLE DOWNSTREAM SYSTEM PRESSURE FROM BEING EXCEEDED[2]							
					Orifice Size, Inches / mm							
					3/32 / 2,4		1/8 / 3,2		3/16 / 4,8		1/4 / 6,4	
	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar
15 to 40 psig / 1,03 to 2,8 bar 10B3077X012 Green	30	2,1	55	3,8	500	34,5	270	18,6	110	7,6	80	5,5
			60	4,1	850	58,6	480	33,1	200	13,8	120	8,3
			66	4,5	1000	69,0	660	45,5	290	20,0	175	12,1
	40	2,8	66	4,5	380	26,2	190	13,1	85	5,9	80	5,5
			70	4,8	700	48,3	370	25,5	150	10,3	115	7,9
			75	5,2	1000	69,0	560	38,6	240	16,5	160	11,0

1. The internal relief performance values are obtained by removing the disk assembly.
2. For inlet pressures in excess of 1000 psig / 69,0 bar, refer to the maximum body and disk pressure ratings in the Specifications section.

Table 6. *Types 627, 627M, and 627MR Capacities for 3/4 NPT Body Size*[1]

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR CODE	OUTLET PRESSURE SETTING, psig / bar	INLET PRESSURE, psig / bar	CAPACITIES IN SCFH / Nm³/h OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
			Orifice Size, Inches / mm					
			3/32 / 2,4	1/8 / 3,2	3/16 / 4,8	1/4 / 6,4	3/8 / 9,5	1/2 / 13
5 to 20 psig[2] / 0,34 to 1,4 bar 10B3076X012 Yellow	5 / 0,34[3]	10 / 0,69	170 / 4,56	320 / 8,58	700 / 18,8	1060 / 28,4	1540 / 41,3	1900 / 50,9
		15 / 1,0	240 / 6,43	330 / 8,84	810 / 21,7	1300 / 34,8	2150 / 57,6	3350 / 89,8
		20 / 1,4	290 / 7,77	460 / 12,3	1140 / 30,6	1800 / 48,2	3050 / 81,7	4350 / 117
		30 / 2,1	380 / 10,2	610 / 16,3	1530 / 41,0	2490 / 66,7	3880 / 104	6850 / 184
		60 / 4,1	640 / 17,2	1170 / 31,4	2550 / 68,3	4240 / 114	6270 / 168	7370 / 198
		75 / 5,2	770 / 20,6	1410 / 37,8	3020 / 80,9	5100 / 137	6620 / 177	7700 / 206
		100 / 6,9	990 / 26,5	1800 / 48,2	3800 / 102	5980 / 160	7440 / 199	7900 / 212
	10 / 0,69	15 / 1,0	210 / 5,63	320 / 8,6	800 / 21,4	1290 / 34,6	2100 / 56,3	3300 / 88,4
		20 / 1,4	280 / 7,50	455 / 12,2	1130 / 30,3	1790 / 48,0	3000 / 80,4	4300 / 115
		30 / 2,1	380 / 10,2	610 / 16,3	1530 / 41,0	2480 / 66,5	3860 / 103	6830 / 183
		60 / 4,1	640 / 17,2	1170 / 31,4	2550 / 68,3	4240 / 114	6270 / 168	7370 / 198
		75 / 5,2	770 / 20,6	1410 / 37,8	3020 / 80,9	5100 / 137	6620 / 177	7700 / 206
		100 / 6,9	990 / 26,5	1800 / 48,2	3800 / 102	5980 / 160	7440 / 199	7900 / 212
		150 / 10,3	1420 / 38,1	2580 / 69,1	5700 / 153	7130 / 191	8180 / 219	8200 / 220
		200 / 13,8	1850 / 49,6	3370 / 90,3	6970 / 187	7250 / 194	8200 / 220	8300 / 222
		300 / 20,7	2700 / 72,4	4910 / 132	8000 / 214	8050 / 216	8250 / 221	
		500 / 34,5	4010 / 107	8090 / 217	8060 / 216	8100 / 217		
		750 / 51,7	4400 / 118	8930 / 239	8950 / 240			
		1000 / 69,0	4450 / 119	10 300 / 276				
		1250 / 86,2	4540 / 122					
		1500 / 103	4880 / 131					
		1750 / 121	5230 / 140					
		2000 / 138	5900 / 158					
	20 / 1,4	30 / 2,1	350 / 9,38	620 / 16,6	1400 / 37,5	2490 / 66,7	4360 / 117	6290 / 169
		50 / 3,4	550 / 14,7	1000 / 26,8	2280 / 61,1	4010 / 107	7870 / 211	8500 / 228
		60 / 4,1	640 / 17,2	1170 / 31,4	2640 / 70,8	4680 / 125	8340 / 224	8940 / 240
		100 / 6,9	990 / 26,5	1800 / 48,2	3980 / 107	7220 / 193	11 500 / 308	12 600 / 338
		150 / 10,3	1420 / 38,1	2580 / 69,1	5850 / 157	10 400 / 279	12 100 / 324	13 100 / 351
		200 / 13,8	1850 / 49,6	3370 / 90,3	7340 / 197	12 000 / 322	13 200 / 354	13 700 / 367
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	13 000 / 348	15 600 / 418	
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	15 100 / 405		
		750 / 51,7	6600 / 177	12 000 / 322	14 200 / 381			
		1000 / 69,0	7300 / 196	14 600 / 391				
		1250 / 86,2	7500 / 201					
		1500 / 103	7800 / 209					
		1750 / 121	8400 / 225					
		2000 / 138	8600 / 230					
15 to 40 psig / 1,0 to 2,8 bar 10B3077X012 Green	40 / 2,8	60 / 4,1	610 / 16,3	1090 / 29,2	2530 / 67,8	4350 / 117	8140 / 218	9420 / 252
		75 / 5,2	760 / 20,4	1370 / 36,7	3080 / 82,5	5510 / 148	10 300 / 276	13 600 / 364
		100 / 6,9	990 / 26,5	1790 / 48,0	4070 / 109	7220 / 193	13 200 / 354	15 300 / 410
		150 / 10,3	1420 / 38,1	2580 / 69,1	5850 / 157	10 400 / 279	17 400 / 466	18 200 / 488
		200 / 13,8	1850 / 49,6	3370 / 90,3	7630 / 204	13 500 / 362	18 000 / 482	18 500 / 496
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	18 500 / 496	20 000 / 536	20 700 / 555
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	24 000 / 643	27 000 / 724	
		750 / 51,7	6600 / 177	12 000 / 322	23 000 / 616	24 200 / 649		
		1000 / 69,0	8700 / 233	16 000 / 429	24 400 / 654			
		1250 / 86,2	11 000 / 295	18 000 / 482				
		1500 / 103	12 000 / 322	21 000 / 563				
		1750 / 121	13 000 / 348					
		2000 / 138	14 000 / 375					

1. Capacity is based on 20% droop unless otherwise noted below.
2. For pressure settings under 10 psig / 0,69 bar, inlet pressure should be limited to approximately 100 psig / 6,9 bar so the setpoint adjustment can be obtained.
3. For 5 psig / 0,34 bar pressure setpoint the droop is 2 psig / 0,14 bar.

☐ - Blank areas indicate where maximum operating inlet pressure for a given orifice is exceeded.

▒ - Shaded areas indicate where a Type 627MR regulator should not be used because unbalanced forces can cause the internal relief valve to start-to-discharge during normal operation. Refer to Table 4.

- continued -

Table 6. *Types 627, 627M, and 627MR Capacities for 3/4 NPT Body Size[1] (continued)*

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR CODE	OUTLET PRESSURE SETTING, psig / bar	INLET PRESSURE, psig / bar	CAPACITIES IN SCFH / Nm³/h OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
			Orifice Size, Inches / mm					
			3/32 / 2,4	1/8 / 3,2	3/16 / 4,8	1/4 / 6,4	3/8 / 9,5	1/2 / 13
35 to 80 psig / 2,4 to 5,5 bar 10B3078X012 Blue	60 / 4,1	75 / 5,2	700 / 18,8	1230 / 33,0	2760 / 74,0	4750 / 127	8620 / 231	15 200 / 407
		100 / 6,9	970 / 26,0	1740 / 46,6	4010 / 107	6990 / 187	12 800 / 343	17 300 / 464
		150 / 10,3	1420 / 38,1	2580 / 69,1	5850 / 157	10 300 / 276	18 600 / 498	23 000 / 616
		200 / 13,8	1850 / 49,6	3370 / 90,3	7630 / 204	13 500 / 362	21 600 / 579	27 400 / 734
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	19 800 / 531	26 100 / 699	30 100 / 807
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	28 100 / 753	28 900 / 775	33 400 / 895
		750 / 51,7	6600 / 177	12 000 / 322	26 300 / 705	30 000 / 804	37 000 / 992	45 000 / 1206
		1000 / 69,0	8700 / 233	16 000 / 429	30 000 / 804	31 200 / 836	37 400 / 1002	
		1250 / 86,2	11 000 / 295	19 000 / 509	31 600 / 847	34 000 / 911		
		1500 / 103	13 000 / 348	22 000 / 590	30 400 / 815	36 000 / 965		
		1750 / 121	15 000 / 402	25 000 / 670	34 000 / 911			
		2000 / 138	17 000 / 456	28 000 / 750				
	80 / 5,5	100 / 6,9	900 / 24,1	1600 / 42,9	3750 / 101	6490 / 174	12 200 / 327	17 300 / 464
		150 / 10,3	1410 / 37,8	2580 / 69,1	5850 / 157	10 200 / 273	19 600 / 525	25 700 / 689
		200 / 13,8	1850 / 49,6	3370 / 90,3	7630 / 204	13 500 / 362	25 400 / 681	29 300 / 785
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	19 800 / 531	32 700 / 876	33 500 / 898
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	31 900 / 855	36 000 / 965	36 700 / 984
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	35 000 / 938	44 000 / 1179	46 000 / 1233
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	38 000 / 1018	56 200 / 1506	
		1250 / 86,2	11 000 / 295	19 000 / 509	37 000 / 992	40 000 / 1072		
		1500 / 103	13 000 / 348	22 000 / 590	38 000 / 1018	44 000 / 1179		
		1750 / 121	15 000 / 402	25 000 / 670	42 000 / 1126			
		2000 / 138	17 000 / 456	28 000 / 750				
70 to 150 psig / 4,8 to 10, bar 10B3079X012 Red	100 / 6,9	150 / 10,3	1170 / 31,4	2510 / 67,3	5540 / 148	8710 / 233	16 000 / 429	20 300 / 544
		200 / 13,8	1850 / 49,6	3370 / 90,3	7630 / 204	12 000 / 322	21 300 / 571	25 700 / 689
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	19 400 / 520	30 000 / 804	31 700 / 850
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	31 800 / 852	39 000 / 1045	39 200 / 1051
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	39 000 / 1045	39 200 / 1051	45 900 / 1230
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	40 000 / 1072	40 500 / 1085	
		1250 / 86,2	11 000 / 295	19 000 / 509	39 000 / 1045	40 500 / 1085	41 000 / 1099	
		1500 / 103	13 000 / 348	22 000 / 590	43 000 / 1152	44 000 / 1179		
		1750 / 121	15 000 / 402	25 000 / 670	45 000 / 1206	47 000 / 1260		
		2000 / 138	17 000 / 456	28 000 / 750	46 000 / 1233			
	125 / 8,6	150 / 10,3	1250 / 33,5	2340 / 62,7	5340 / 143	9130 / 245	15 700 / 421	20 800 / 557
		200 / 13,8	1830 / 49,0	3320 / 89,0	7550 / 202	13 160 / 353	22 500 / 603	28 600 / 766
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	19 800 / 531	32 700 / 876	38 000 / 1018
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	32 500 / 871	43 800 / 1174	51 700 / 1386
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	48 300 / 1294	49 900 / 1337	71 400 / 1914
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	50 000 / 1340	52 900 / 1418	72 000 / 1930
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	53 000 / 1420	58 000 / 1554	
		1500 / 103	13 000 / 348	22 000 / 590	51 000 / 1367	56 000 / 1501		
		1750 / 121	15 000 / 402	25 000 / 670	52 000 / 1394	60 000 / 1608		
		2000 / 138	17 000 / 456	28 000 / 750	53 000 / 1420			
	150 / 10,3	200 / 13,8	1760 / 47,2	3200 / 85,8	7290 / 195	12 500 / 335	21 400 / 574	30 600 / 820
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	17 200 / 461	34 700 / 930	46 000 / 1233
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	32 500 / 871	48 900 / 1311	59 700 / 1600
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	48 300 / 1294	59 000 / 1581	72 000 / 1930
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	64 100 / 1718	81 100 / 2173	85 000 / 2278
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	68 000 / 1822	90 000 / 2412	
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447	72 000 / 1930		
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688	77 000 / 2064		
		2000 / 138	17 000 / 456	28 000 / 750	71 000 / 1903			

1. Capacity is based on 20% droop unless otherwise noted below.
□ - Blank areas indicate where maximum operating inlet pressure for a given orifice is exceeded.
▨ - Shaded areas indicate where a Type 627MR regulator should not be used because unbalanced forces can cause the internal relief valve to start-to-discharge during normal operation. Refer to Table 4.

Table 7. *Types 627, 627M, and 627MR Capacities for NPS 1 / DN 25 Body Size*[1]

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR CODE	OUTLET PRESSURE SETTING, psig / bar	INLET PRESSURE, psig / bar	CAPACITIES IN SCFH / Nm³/h OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
			Orifice Size, Inches / mm					
			3/32 / 2,4	1/8 / 3,2	3/16 / 4,8	1/4 / 6,4	3/8 / 9,5	1/2 / 13
5 to 20 psig[2] / 0,34 to 1,4 bar 10B3076X012 Yellow	5 / 0,34[3]	10 / 0,69	170 / 4,6	330 / 8,8	710 / 19,0	1100 / 29,5	1900 / 50,9	2500 / 67,0
		15 / 1,0	240 / 6,4	390 / 10,5	890 / 23,9	1600 / 42,9	2500 / 67,0	3350 / 89,8
		20 / 1,4	290 / 7,8	500 / 13,4	1160 / 31,1	2060 / 55,2	3400 / 91,1	4450 / 119
		30 / 2,1	380 / 10,2	670 / 18,0	1560 / 41,8	2800 / 75,0	4750 / 127	6900 / 185
		60 / 4,1	640 / 17,2	1170 / 31,4	2600 / 69,7	4710 / 126	8140 / 218	13 700 / 367
		75 / 5,2	770 / 20,6	1410 / 37,8	3150 / 84,4	5710 / 153	9790 / 262	14 500 / 389
		100 / 6,9	990 / 26,5	1800 / 48,2	4070 / 109	7310 / 196	12 500 / 335	16 000 / 429
	10 / 0,7	15 / 1,0	210 / 5,6	375 / 10,1	880 / 23,6	1590 / 42,6	2480 / 66,5	3300 / 88,4
		20 / 1,4	280 / 7,5	490 / 13,1	1150 / 30,8	2050 / 54,9	3380 / 90,6	4410 / 118
		30 / 2,1	380 / 10,2	670 / 18,0	1560 / 41,8	2800 / 75,0	4720 / 126	6840 / 183
		60 / 4,1	640 / 17,2	1170 / 31,4	2600 / 69,7	4710 / 126	8140 / 218	13 700 / 367
		75 / 5,2	770 / 20,6	1410 / 37,8	3150 / 84,4	5710 / 153	9790 / 262	14 500 / 389
		100 / 6,9	990 / 26,5	1800 / 48,2	4070 / 109	7310 / 196	12 500 / 335	16 000 / 429
		150 / 10,3	1420 / 38,1	2580 / 69,1	5850 / 157	10 500 / 281	17 000 / 456	18 000 / 482
		200 / 13,8	1850 / 49,6	3370 / 90,3	7630 / 204	13 700 / 367	18 000 / 482	18 500 / 496
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	19 800 / 531	20 000 / 536	
		500 / 34,5	4400 / 118	8090 / 217	15 700 / 421	20 000 / 536		
		750 / 51,7	5400 / 145	12 000 / 322	18 000 / 482			
		1000 / 69,0	5800 / 155	14 000 / 375				
		1250 / 86,2	6300 / 169					
		1500 / 103	6600 / 177					
		1750 / 121	6800 / 182					
		2000 / 138	7600 / 204					
	20 / 1,4	30 / 2,1	350 / 9,4	620 / 16,6	1450 / 38,9	2580 / 69,1	4360 / 117	6290 / 169
		50 / 3,4	550 / 14,7	1000 / 26,8	2280 / 61,1	4090 / 110	7870 / 211	14 100 / 378
		60 / 4,1	640 / 17,2	1170 / 31,4	2640 / 70,8	4750 / 127	9690 / 260	14 500 / 389
		100 / 6,9	990 / 26,5	1800 / 48,2	4070 / 109	7310 / 196	13 900 / 373	23 300 / 624
		150 / 10,3	1420 / 38,1	2580 / 69,1	5850 / 157	10 500 / 281	17 700 / 474	34 200 / 917
		200 / 13,8	1850 / 49,6	3370 / 90,3	7630 / 204	13 700 / 367	26 600 / 713	39 100 / 1048
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	20 100 / 539	37 000 / 992	
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	32 900 / 882		
		750 / 51,7	6600 / 177	12 000 / 322	23 600 / 632			
		1000 / 69,0	8900 / 239	16 000 / 429				
		1250 / 86,2	10 000 / 268					
		1500 / 103	10 400 / 279					
		1750 / 121	12 000 / 322					
		2000 / 138	14 000 / 375					
15 to 40 psig / 1,0 to 2,8 bar 10B3077X012 Green	40 / 2,8	60 / 4,1	610 / 16,3	1090 / 29,2	2530 / 67,8	4510 / 121	9290 / 249	9420 / 252
		75 / 5,2	760 / 20,4	1370 / 36,7	3080 / 82,5	5640 / 151	10 800 / 289	16 500 / 442
		100 / 6,9	990 / 26,5	1790 / 48,0	4070 / 109	7310 / 196	14 700 / 394	21 900 / 587
		150 / 10,3	1420 / 38,1	2580 / 69,1	5850 / 157	10 500 / 281	20 500 / 549	34 500 / 925
		200 / 13,8	1850 / 49,6	3370 / 90,3	7630 / 204	13 700 / 367	27 100 / 726	46 400 / 1244
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	20 100 / 539	40 100 / 1075	67 100 / 1798
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	32 900 / 882	63 900 / 1713	
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	39 400 / 1056		
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967			
		1250 / 86,2	11 000 / 295	19 000 / 509				
		1500 / 103	13 000 / 348	22 000 / 590				
		1750 / 121	15 000 / 402					
		2000 / 138	17 000 / 456					

1. Capacity is based on 20% droop unless otherwise noted below.
2. For pressure settings under 10 psig / 0,69 bar, inlet pressure should be limited to approximately 100 psig / 6,9 bar so the setpoint adjustment can be obtained.
3. For 5 psig / 0,34 bar pressure setpoint the droop is 2 psig / 0,14 bar.

□ - Blank areas indicate where maximum operating inlet pressure for a given orifice is exceeded.

▨ - Shaded areas indicate where a Type 627MR regulator should not be used because unbalanced forces can cause the internal relief valve to start-to-discharge during normal operation. Refer to Table 4.

- continued -

Table 7. *Types 627, 627M, and 627MR Capacities for NPS 1 / DN 25 Body Size[1] (continued)*

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR CODE	OUTLET PRESSURE SETTING, psig / bar	INLET PRESSURE, psig / bar	CAPACITIES IN SCFH / Nm³/h OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
			Orifice Size, Inches / mm					
			3/32 / 2,4	1/8 / 3,2	3/16 / 4,8	1/4 / 6,4	3/8 / 9,5	1/2 / 13
35 to 80 psig / 2,4 to 5,5 bar 10B3078X012 Blue	60 / 4,1	75 / 5,2	700 / 18,8	1230 / 33,0	2760 / 74,0	4880 / 131	8630 / 231	16 100 / 431
		100 / 6,9	970 / 26,0	1740 / 46,6	4010 / 107	7000 / 188	13 000 / 348	19 300 / 517
		150 / 10,3	1420 / 38,1	2580 / 69,1	5850 / 157	10 500 / 281	18 900 / 507	32 800 / 879
		200 / 13,8	1850 / 49,6	3370 / 90,3	7630 / 204	13 700 / 367	24 000 / 643	42 200 / 1131
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	20 100 / 539	32 500 / 871	69 100 / 1852
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	32 900 / 882	64 000 / 1715	94 300 / 2527
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	43 380 / 1163	66 000 / 1769	130 000 / 3484
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	50 300 / 1348	67 700 / 1814	
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	57 000 / 1528		
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447	63 000 / 1688		
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688			
		2000 / 138	17 000 / 456	28 000 / 750				
	80 / 5,5	100 / 6,9	900 / 24,1	1600 / 42,9	3750 / 101	6650 / 178	12 200 / 327	18 600 / 498
		150 / 10,3	1410 / 37,8	2580 / 69,1	5850 / 157	10 500 / 281	21 100 / 565	33 600 / 900
		200 / 13,8	1850 / 49,6	3370 / 90,3	7630 / 204	13 700 / 367	28 400 / 761	44 100 / 1182
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	20 100 / 539	43 300 / 1160	75 400 / 2021
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	32 900 / 882	71 600 / 1919	110 000 / 2948
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	48 900 / 1311	105 500 / 2827	135 000 / 3618
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	64 900 / 1739	118 000 / 3162	
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	80 000 / 2144		
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447	96 000 / 2573		
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688			
		2000 / 138	17 000 / 456	28 000 / 750				
70 to 150 psig / 4,8 to 10,3 bar 10B3079X012 Red	100 / 6,9	150 / 10,3	1170 / 31,4	2510 / 67,3	5540 / 148	8710 / 233	16 000 / 429	24 000 / 643
		200 / 13,8	1850 / 49,6	3370 / 90,3	7630 / 204	12 000 / 322	21 300 / 571	34 100 / 914
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	19 400 / 520	30 100 / 807	53 200 / 1426
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	31 800 / 852	66 500 / 1782	83 900 / 2249
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	47 300 / 1268	95 300 / 2554	117 000 / 3136
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	59 700 / 1600	100 000 / 2680	
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	72 000 / 1930	114 000 / 3055	
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447	86 000 / 2305		
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688	95 000 / 2546		
		2000 / 138	17 000 / 456	28 000 / 750	71 000 / 1903			
	125 / 8,6	150 / 10,3	1250 / 33,5	2340 / 62,7	5340 / 143	9470 / 254	15 700 / 421	20 800 / 557
		200 / 13,8	1830 / 49,0	3320 / 89,0	7550 / 202	13 400 / 359	28 100 / 753	32 800 / 879
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	20 100 / 539	36 300 / 973	52 600 / 1410
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	32 900 / 882	70 800 / 1897	109 000 / 2921
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	48 900 / 1311	104 000 / 2787	158 000 / 4234
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	64 800 / 1737	138 000 / 3698	160 000 / 4288
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	80 000 / 2144	145 000 / 3886	
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447	96 000 / 2573		
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688	112 000 / 3002		
		2000 / 138	17 000 / 456	28 000 / 750	71 000 / 1903			
	150 / 10,3	200 / 13,8	1760 / 47,2	3200 / 85,8	7290 / 195	12 900 / 346	21 400 / 574	33 600 / 900
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	17 200 / 461	40 100 / 1075	55 900 / 1498
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	32 900 / 882	70 300 / 1884	111 000 / 2975
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	48 900 / 1311	104 000 / 2787	160 000 / 4288
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	64 800 / 1737	138 000 / 3698	162 000 / 4342
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	80 000 / 2144	150 000 / 4020	
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447	96 000 / 2573		
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688	112 000 / 3002		
		2000 / 138	17 000 / 456	28 000 / 750	71 000 / 1903			

1. Capacity is based on 20% droop unless otherwise noted below.
□ - Blank areas indicate where maximum operating inlet pressure for a given orifice is exceeded.
▨ - Shaded areas indicate where a Type 627MR regulator should not be used because unbalanced forces can cause the internal relief valve to start-to-discharge during normal operation. Refer to Table 4.

Table 8. *Type 627 Capacities for NPS 2 / DN 50 Body Size*[1]

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR CODE	OUTLET PRESSURE SETTING, psig / bar	INLET PRESSURE, psig / bar	CAPACITIES IN SCFH / Nm³/h OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
			Orifice Size, Inches / mm					
			3/32 / 2,4	1/8 / 3,2	3/16 / 4,8	1/4 / 6,4	3/8 / 9,5	1/2 / 13
5 to 20 psig[2] / 0,34 to 1,4 bar 10B3076X012 Yellow	5 / 0,34[3]	10 / 0,69	170 / 4,6	330 / 8,8	710 / 19,0	1080 / 28,9	1700 / 45,6	2400 / 64,3
		15 / 1,0	240 / 6,4	390 / 10,5	890 / 23,9	1250 / 33,5	1900 / 50,9	2700 / 72,4
		20 / 1,4	290 / 7,8	500 / 13,4	1160 / 31,1	1900 / 50,9	2650 / 71,0	3900 / 105
		30 / 2,1	380 / 10,2	670 / 18,0	1560 / 41,8	2800 / 75,0	3680 / 98,6	6500 / 174
		60 / 4,1	640 / 17,2	1170 / 31,4	2600 / 69,7	4750 / 127	7250 / 194	17 800 / 477
		75 / 5,2	770 / 20,6	1410 / 37,8	3150 / 84,4	5700 / 153	8060 / 216	22 400 / 600
		100 / 6,9	990 / 26,5	1790 / 48,0	4070 / 109	7310 / 196	16 200 / 434	28 700 / 769
	10 / 0,69	15 / 1,0	210 / 5,6	375 / 10,1	880 / 23,6	1220 / 32,7	1860 / 49,8	2670 / 71,6
		20 / 1,4	280 / 7,5	490 / 13,1	1150 / 30,8	1880 / 50,4	2610 / 69,9	3830 / 103
		30 / 2,1	380 / 10,2	670 / 18,0	1560 / 41,8	2760 / 74,0	3640 / 97,6	6460 / 173
		60 / 4,1	640 / 17,2	1170 / 31,4	2600 / 69,7	4750 / 127	7250 / 194	17 800 / 477
		75 / 5,2	770 / 20,6	1410 / 37,8	3150 / 84,4	5700 / 153	8060 / 216	22 400 / 600
		100 / 6,9	990 / 26,5	1790 / 48,0	4070 / 109	7310 / 196	16 200 / 434	28 700 / 769
		150 / 10,3	1420 / 38,1	2580 / 69,1	5850 / 157	10 500 / 281	23 300 / 624	25 900 / 694
		200 / 13,8	1850 / 49,6	3370 / 90,3	7630 / 204	13 700 / 367	22 700 / 608	24 000 / 643
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	10 300 / 276	12 800 / 343	
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	21 000 / 563		
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729			
		1000 / 69,0	8700 / 233	16 000 / 429				
		1250 / 86,2	11 000 / 295					
		1500 / 103	13 000 / 348					
		1750 / 121	15 000 / 402					
		2000 / 138	6300 / 169					
	20 / 1,4	30 / 2,1	350 / 9,4	620 / 16,6	1450 / 38,9	2350 / 63,0	4300 / 115	6110 / 164
		50 / 3,4	550 / 14,7	1000 / 26,8	2280 / 61,1	4040 / 108	7100 / 190	12 800 / 343
		60 / 4,1	640 / 17,2	1170 / 31,4	2640 / 70,8	4750 / 127	8400 / 225	15 700 / 421
		100 / 6,9	990 / 26,5	1800 / 48,2	4070 / 109	7310 / 196	16 200 / 434	28 700 / 769
		150 / 10,3	1420 / 38,1	2580 / 69,1	5850 / 157	10 500 / 281	23 300 / 624	29 000 / 777
		200 / 13,8	1850 / 49,6	3370 / 90,3	7630 / 204	13 700 / 367	24 000 / 643	33 000 / 884
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	20 100 / 539	19 600 / 525	
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	32 900 / 882		
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729			
		1000 / 69,0	8700 / 233	16 000 / 429				
		1250 / 86,2	11 000 / 295					
		1500 / 103	13 000 / 348					
		1750 / 121	15 000 / 402					
		2000 / 138	6300 / 169					
15 to 40 psig / 1,0 to 2,8 bar 10B3077X012 Green	40 / 2,8	60 / 4,1	610 / 16,3	1090 / 29,2	2530 / 67,8	4370 / 117	8680 / 233	13 300 / 356
		75 / 5,2	760 / 20,4	1370 / 36,7	3080 / 82,5	5540 / 148	11 900 / 319	19 300 / 517
		100 / 6,9	990 / 26,5	1800 / 48,2	4070 / 109	7310 / 196	16 200 / 434	25 400 / 681
		150 / 10,3	1420 / 38,1	2580 / 69,1	5850 / 157	10 500 / 281	23 300 / 624	41 300 / 1107
		200 / 13,8	1850 / 49,6	3370 / 90,3	7630 / 204	13 700 / 367	30 400 / 815	53 900 / 1445
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	20 100 / 539	44 600 / 1195	46 000 / 1233
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	32 900 / 882	22 000 / 590	
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	28 000 / 750		
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967			
		1250 / 86,2	11 000 / 295	19 000 / 509				
		1500 / 103	13 000 / 348	22 000 / 590				
		1750 / 121	15 000 / 402					
		2000 / 138	17 000 / 456					

1. Capacity is based on 20% droop unless otherwise noted below.
2. For pressure settings under 10 psig / 0,69 bar, inlet pressure should be limited to approximately 100 psig / 6,9 bar so the setpoint adjustment can be obtained.
3. For 5 psig / 0,34 bar pressure setpoint the droop is 2 psig / 0,14 bar.

☐ - Blank areas indicate where maximum operating inlet pressure for a given orifice is exceeded.

- continued -

Table 8. *Type 627 Capacities for NPS 2 / DN 50 Body Size[1] (continued)*

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR CODE	OUTLET PRESSURE SETTING, psig / bar	INLET PRESSURE, psig / bar	CAPACITIES IN SCFH / Nm³/h OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
			Orifice Size, Inches / mm					
			3/32 / 2,4	1/8 / 3,2	3/16 / 4,8	1/4 / 6,4	3/8 / 9,5	1/2 / 13
35 to 80 psig / 2,4 to 5,5 bar 10B3078X012 Blue	60 / 4,1	75 / 5,2	700 / 18,8	1260 / 33,8	2760 / 74,0	4900 / 131	9000 / 241	12 300 / 330
		100 / 6,9	970 / 26,0	1740 / 46,6	4010 / 107	7000 / 188	15 000 / 402	20 400 / 547
		150 / 10,3	1420 / 38,1	2580 / 69,1	5850 / 157	10 500 / 281	23 300 / 624	35 200 / 943
		200 / 13,8	1850 / 49,6	3370 / 90,3	7630 / 204	13 700 / 367	30 400 / 815	53 900 / 1445
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	20 100 / 539	44 600 / 1195	79 000 / 2117
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	32 900 / 882	73 000 / 1956	38 800 / 1040
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	48 900 / 1311	53 000 / 1420	32 000 / 858
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	43 000 / 1152	52 000 / 1394	
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	70 000 / 1876		
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447	43 000 / 1152		
		1750 / 121	15 000 / 402	25 000 / 670	26 000 / 697			
		2000 / 138	17 000 / 456	28 000 / 750				
	80 / 5,5	100 / 6,9	900 / 24,1	1630 / 43,7	3750 / 101	6400 / 172	12 800 / 343	20 400 / 547
		150 / 10,3	1410 / 37,8	2580 / 69,1	5850 / 157	10 500 / 281	23 300 / 624	41 300 / 1107
		200 / 13,8	1850 / 49,6	3370 / 90,3	7630 / 204	13 700 / 367	30 400 / 815	53 900 / 1445
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	20 100 / 539	44 600 / 1195	79 000 / 2117
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	32 900 / 882	73 000 / 1956	48 000 / 1286
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	48 900 / 1311	87 000 / 2332	44 000 / 1179
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	65 000 / 1742	63 000 / 1688	
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	63 000 / 1688		
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447	86 000 / 2305		
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688			
		2000 / 138	17 000 / 456	28 000 / 750				
70 to 150 psig / 4,8 to 10,3 bar 10B3079X012 Red	100 / 6,9	150 / 10,3	1170 / 31,4	2510 / 67,3	5540 / 148	8600 / 230	16 000 / 429	22 000 / 590
		200 / 13,8	1850 / 49,6	3370 / 90,3	7630 / 204	13 700 / 367	22 000 / 590	33 000 / 884
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	20 100 / 539	35 000 / 938	65 300 / 1750
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	32 900 / 882	73 000 / 1956	129 000 / 3457
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	48 900 / 1311	108 000 / 2894	54 000 / 1447
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	64 800 / 1737	82 000 / 2198	
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	80 000 / 2144	110 000 / 2948	
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447	96 000 / 2573		
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688	112 000 / 3002		
		2000 / 138	17 000 / 456	28 000 / 750	71 000 / 1903			
	125 / 8,6	150 / 10,3	1250 / 33,5	2340 / 62,7	5340 / 143	8600 / 230	16 000 / 429	24 000 / 643
		200 / 13,8	1830 / 49,0	3320 / 89,0	7550 / 202	13 700 / 367	24 000 / 643	36 000 / 965
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	20 100 / 539	39 000 / 1045	65 300 / 1750
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	32 900 / 882	73 000 / 1956	129 000 / 3457
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	48 900 / 1311	108 000 / 2894	59 000 / 1581
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	64 800 / 1737	58 000 / 1554	
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	80 000 / 2144	75 000 / 2010	
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447	96 000 / 2573		
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688	112 000 / 3002		
		2000 / 138	17 000 / 456	28 000 / 750	71 000 / 1903			
	150 / 10,3	200 / 13,8	1760 / 47,2	3200 / 85,8	7290 / 195	13 000 / 348	24 000 / 643	38 000 / 1018
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	20 100 / 539	44 600 / 1195	64 200 / 1721
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	32 900 / 882	73 000 / 1956	129 000 / 3457
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	48 900 / 1311	108 000 / 2894	62 000 / 1662
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	64 800 / 1737	144 000 / 3859	
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	80 000 / 2144	81 000 / 2171	
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447	96 000 / 2573		
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688	112 000 / 3002		
		2000 / 138	17 000 / 456	28 000 / 750	71 000 / 1903			

1. Capacity is based on 20% droop unless otherwise noted below.
- Blank areas indicate where maximum operating inlet pressure for a given orifice is exceeded.

Table 9. *Types 627M and 627MR Capacities for NPS 2 / DN 50 Body Size*[1]

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR CODE	OUTLET PRESSURE SETTING, psig / bar	INLET PRESSURE, psig / bar	CAPACITIES IN SCFH / Nm³/h OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
			Orifice Size, Inches / mm					
			3/32 / 2,4	1/8 / 3,2	3/16 / 4,8	1/4 / 6,4	3/8 / 9,5	1/2 / 13
5 to 20 psig[2] / 0,34 to 1,4 bar 10B3076X012 Yellow	5 / 0,34[3]	10 / 0,69	170 / 4,6	330 / 8,8	710 / 19,0	1080 / 28,9	1700 / 45,6	2400 / 64,3
		15 / 1,0	240 / 6,4	390 / 10,5	890 / 23,9	1250 / 33,5	1900 / 50,9	2700 / 72,4
		20 / 1,4	290 / 7,8	500 / 13,4	1160 / 31,1	1900 / 50,9	2650 / 71,0	3900 / 105
		30 / 2,1	380 / 10,2	670 / 18,0	1560 / 41,8	2800 / 75,0	3680 / 98,6	6500 / 174
		60 / 4,1	640 / 17,2	1170 / 31,4	2600 / 69,7	4750 / 127	7250 / 194	15 000 / 402
		75 / 5,2	770 / 20,6	1410 / 37,8	3150 / 84,4	5700 / 153	8060 / 216	17 900 / 480
		100 / 6,9	990 / 26,5	1790 / 48,0	4070 / 109	7310 / 196	14 600 / 391	23 000 / 616
	10 / 0,69	15 / 1,0	210 / 5,6	375 / 10,1	880 / 23,6	1220 / 32,7	1860 / 49,8	2670 / 71,6
		20 / 1,4	280 / 7,5	490 / 13,1	1150 / 30,8	1880 / 50,4	2610 / 69,9	3830 / 103
		30 / 2,1	380 / 10,2	670 / 18,0	1560 / 41,8	2760 / 74,0	3640 / 97,6	6460 / 173
		60 / 4,1	640 / 17,2	1170 / 31,4	2600 / 69,7	4750 / 127	7250 / 194	15 000 / 402
		75 / 5,2	770 / 20,6	1410 / 37,8	3150 / 84,4	5700 / 153	8060 / 216	17 900 / 480
		100 / 6,9	990 / 26,5	1790 / 48,0	4070 / 109	7310 / 196	14 600 / 391	23 000 / 616
		150 / 10,3	1420 / 38,1	2580 / 69,1	5850 / 157	10 500 / 281	21 000 / 563	33 000 / 884
		200 / 13,8	1850 / 49,6	3370 / 90,3	7630 / 204	13 700 / 367	27 300 / 732	43 000 / 1152
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	20 100 / 539	40 100 / 1075	
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	32 900 / 882		
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729			
		1000 / 69,0	8700 / 233	16 000 / 429				
		1250 / 86,2	11 000 / 295					
		1500 / 103	13 000 / 348					
		1750 / 121	15 000 / 402					
		2000 / 138	17 000 / 456					
	20 / 1,4	30 / 2,1	350 / 9,4	620 / 16,6	1450 / 38,9	2480 / 66,5	4300 / 115	6110 / 164
		50 / 3,4	550 / 14,7	1000 / 26,8	2280 / 61,1	4040 / 108	7100 / 190	12 800 / 343
		60 / 4,1	640 / 17,2	1170 / 31,4	2640 / 70,8	4750 / 127	8400 / 225	15 000 / 402
		100 / 6,9	990 / 26,5	1800 / 48,2	4070 / 109	7310 / 196	14 600 / 391	23 000 / 616
		150 / 10,3	1420 / 38,1	2580 / 69,1	5850 / 157	10 500 / 281	21 000 / 563	33 000 / 884
		200 / 13,8	1850 / 49,6	3370 / 90,3	7630 / 204	13 700 / 367	27 300 / 732	43 000 / 1152
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	20 100 / 539	40 100 / 1075	
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	32 900 / 882		
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729			
		1000 / 69,0	8700 / 233	16 000 / 429				
		1250 / 86,2	11 000 / 295					
		1500 / 103	13 000 / 348					
		1750 / 121	15 000 / 402					
		2000 / 138	17 000 / 456					
15 to 40 psig / 1,0 to 2,8 bar 10B3077X012 Green	40 / 2,8	60 / 4,1	610 / 16,3	1090 / 29,2	2530 / 67,8	4370 / 117	8680 / 233	13 300 / 356
		75 / 5,2	760 / 20,4	1370 / 36,7	3080 / 82,5	5540 / 148	10 700 / 287	19 300 / 517
		100 / 6,9	990 / 26,5	1800 / 48,2	4070 / 109	7310 / 196	14 600 / 391	25 400 / 681
		150 / 10,3	1420 / 38,1	2580 / 69,1	5850 / 157	10 500 / 281	21 000 / 563	37 000 / 992
		200 / 13,8	1850 / 49,6	3370 / 90,3	7630 / 204	13 700 / 367	27 300 / 732	48 000 / 1286
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	20 100 / 539	40 100 / 1075	71 000 / 1903
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	32 900 / 882	65 000 / 1742	
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	48 900 / 1311		
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967			
		1250 / 86,2	11 000 / 295	19 000 / 509				
		1500 / 103	13 000 / 348	22 000 / 590				
		1750 / 121	15 000 / 402					
		2000 / 138	17 000 / 456					

1. Capacity is based on 20% droop unless otherwise noted below.
2. For pressure settings under 10 psig / 0,69 bar, inlet pressure should be limited to approximately 100 psig / 6,9 bar so the setpoint adjustment can be obtained.
3. For 5 psig / 0,34 bar pressure setpoint the droop is 2 psig / 0,14 bar.

☐ - Blank areas indicate where maximum operating inlet pressure for a given orifice is exceeded.

▒ - Shaded areas indicate where a Type 627MR regulator should not be used because unbalanced forces can cause the internal relief valve to start-to-discharge during normal operation. Refer to Table 4.

- continued -

Table 9. *Types 627M and 627MR Capacities for NPS 2 / DN 50 Body Size[1] (continued)*

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR CODE	OUTLET PRESSURE SETTING, psig / bar	INLET PRESSURE, psig / bar	CAPACITIES IN SCFH / Nm³/h OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
			Orifice Size, Inches / mm					
			3/32 / 2,4	1/8 / 3,2	3/16 / 4,8	1/4 / 6,4	3/8 / 9,5	1/2 / 13
35 to 80 psig / 2,4 to 5,5 bar 10B3078X012 Blue	60 / 4,1	75 / 5,2	700 / 18,8	1230 / 33,0	2760 / 74,0	4900 / 131	9000 / 241	12 300 / 330
		100 / 6,9	970 / 26,0	1740 / 46,6	4010 / 107	7000 / 188	15 000 / 402	20 400 / 547
		150 / 10,3	1420 / 38,1	2580 / 69,1	5850 / 157	10 500 / 281	23 300 / 624	35 200 / 943
		200 / 13,8	1850 / 49,6	3370 / 90,3	7630 / 204	13 700 / 367	30 400 / 815	48 500 / 1300
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	20 100 / 539	44 600 / 1195	71 000 / 1903
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	32 900 / 882	73 000 / 1956	116 000 / 3109
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	48 900 / 1311	108 000 / 2894	172 000 / 4610
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	65 000 / 1742	144 000 / 3859	
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	81 000 / 2171		
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447	97 000 / 2600		
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688			
		2000 / 138	17 000 / 456	28 000 / 750				
	80 / 5,5	100 / 6,9	900 / 24,1	1630 / 43,7	3750 / 101	6400 / 172	12 800 / 343	20 400 / 547
		150 / 10,3	1410 / 37,8	2580 / 69,1	5850 / 157	10 500 / 281	23 300 / 624	37 200 / 997
		200 / 13,8	1850 / 49,6	3370 / 90,3	7630 / 204	13 700 / 367	30 400 / 815	48 500 / 1300
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	20 100 / 539	44 600 / 1195	71 000 / 1903
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	32 900 / 882	73 000 / 1956	116 000 / 3109
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	48 900 / 1311	108 000 / 2894	172 000 / 4610
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	65 000 / 1742	144 000 / 3859	
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	81 000 / 2171		
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447	97 000 / 2600		
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688			
		2000 / 138	17 000 / 456	28 000 / 750				
70 to 150 psig / 4,8 to 10,3 bar 10B3079X012 Red	100 / 6,9	150 / 10,3	1170 / 31,4	2510 / 67,3	5540 / 148	8600 / 230	16 000 / 429	22 000 / 590
		200 / 13,8	1850 / 49,6	3370 / 90,3	7630 / 204	13 700 / 367	22 000 / 590	33 000 / 884
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	20 100 / 539	35 000 / 938	59 000 / 1581
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	32 900 / 882	73 000 / 1956	116 000 / 3109
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	48 900 / 1311	108 000 / 2894	172 000 / 4610
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	64 800 / 1737	144 000 / 3859	
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	80 000 / 2144	179 000 / 4797	
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447	96 000 / 2573		
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688	112 000 / 3002		
		2000 / 138	17 000 / 456	28 000 / 750	71 000 / 1903			
	125 / 8,6	150 / 10,3	1250 / 33,5	2340 / 62,7	5340 / 143	8600 / 230	16 000 / 429	24 000 / 643
		200 / 13,8	1830 / 49,0	3320 / 89,0	7550 / 202	13 700 / 367	24 000 / 643	36 000 / 965
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	20 100 / 539	39 000 / 1045	59 000 / 1581
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	32 900 / 882	73 000 / 1956	116 000 / 3109
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	48 900 / 1311	108 000 / 2894	172 000 / 4610
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	64 800 / 1737	144 000 / 3859	
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	80 000 / 2144	179 000 / 4797	
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447	96 000 / 2573		
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688	112 000 / 3002		
		2000 / 138	17 000 / 456	28 000 / 750	71 000 / 1903			
	150 / 10,3	200 / 13,8	1760 / 47,2	3200 / 85,8	7290 / 195	13 000 / 348	24 000 / 643	38 000 / 1018
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	20 100 / 539	44 600 / 1195	58 000 / 1554
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	32 900 / 882	73 000 / 1956	116 000 / 3109
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	48 900 / 1311	108 000 / 2894	172 000 / 4610
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	64 800 / 1737	144 000 / 3859	
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	80 000 / 2144	179 000 / 4797	
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447	96 000 / 2573		
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688	112 000 / 3002		
		2000 / 138	17 000 / 456	28 000 / 750	71 000 / 1903			

1. Capacity is based on 20% droop unless otherwise noted below.
- Blank areas indicate where maximum operating inlet pressure for a given orifice is exceeded.
- Shaded areas indicate where a Type 627MR regulator should not be used because unbalanced forces can cause the internal relief valve to start-to-discharge during normal operation. Refer to Table 4.

Table 10. *Types 627H and 627HM Capacities for 3/4 NPT Body Size[1]*

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR CODE	OUTLET PRESSURE SETTING, psig / bar	INLET PRESSURE, psig / bar	CAPACITIES IN SCFH / Nm³/h OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
			Orifice Size, Inches / mm					
			3/32 / 2,4	1/8 / 3,2	3/16 / 4,8	1/4 / 6,4	3/8 / 9,5	1/2 / 13
140 to 250 psig / 9,6 to 17,2 bar 10B3078X012 Blue	150 / 10,3	200 / 13,8	1760[2] / 47,2	3200[2] / 85,8	7290 / 195	11 500 / 308	21 600 / 579	31 000 / 831
		250 / 17,2	2260[2] / 60,6	4100[2] / 110	9200 / 247	15 400 / 413	28 600 / 766	40 000 / 1072
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	19 300 / 517	31 000 / 831	46 000 / 1233
		400 / 27,6	3600 / 96,5	6500 / 174	14 800 / 397	24 700 / 662	40 000 / 1072	50 000 / 1340
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	29 700 / 796	51 000 / 1367	
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	43 000 / 1152		
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	57 000 / 1528		
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206			
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447			
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688			
		2000 / 138	17 000 / 456	28 000 / 750				
	200 / 13,8	250 / 17,2	2160[2] / 57,9	3850[2] / 103	8400 / 225	15 000 / 402	31 000 / 831	41 000 / 1099
		300 / 20,7	2700[2] / 72,4	4910[2] / 132	11 200 / 300	19 500 / 523	36 000 / 965	52 000 / 1394
		400 / 27,6	3600 / 96,5	6500 / 174	14 800 / 397	25 500 / 683	52 000 / 1394	68 000 / 1822
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	31 000 / 831	61 000 / 1635	
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	45 500 / 1219		
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	60 000 / 1608		
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206			
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447			
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688			
		2000 / 138	17 000 / 456	28 000 / 750				
	250 / 17,2	300 / 20,7	2500[2] / 67	4500[2] / 121	9900 / 265	18 500 / 496	37 000 / 992	52 000 / 1394
		400 / 27,6	3600[2] / 96,5	6400[2] / 172	14 300 / 383	26 000 / 697	55 000 / 1474	74 000 / 1983
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	33 000 / 884	64 000 / 1715	87 000 / 2332
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	49 000 / 1313	93 000 / 2492	
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	65 000 / 1742		
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	81 000 / 2171		
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447			
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688			
		2000 / 138	17 000 / 456	28 000 / 750	71 000 / 1903			
240 to 500 psig / 16,5 to 34,5 bar 10B3079X012 Red	250 / 17,2	300 / 20,7	2500[2] / 67,0	4500[2] / 121	9300 / 249	14 000 / 375	25 000 / 670	37 000 / 992
		400 / 27,6	3600[2] / 96,5	6400[2] / 172	14 300 / 383	21 400 / 574	36 000 / 965	49 000 / 1313
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	26 300 / 705	42 000 / 1126	62 000 / 1662
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	37 100 / 994	57 000 / 1528	
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	47 400 / 1270		
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	57 000 / 1528		
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447			
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688			
		2000 / 138	17 000 / 456	28 000 / 750	71 000 / 1903			
	300 / 20,7	350 / 24,1	2900[2] / 77,7	5150[2] / 138	11 300 / 303	18 400 / 493	31 000 / 831	45 000 / 1206
		400 / 27,6	3500[2] / 93,8	6200[2] / 166	13 700 / 367	23 400 / 627	40 000 / 1072	52 000 / 1394
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	32 000 / 858	53 000 / 1420	67 000 / 1796
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	48 000 / 1286	80 000 / 2144	
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	62 000 / 1662		
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	79 000 / 2117		
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447			
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688			
		2000 / 138	17 000 / 456	28 000 / 750	71 000 / 1903			

1. Capacity is based on 20% droop unless otherwise noted below.
2. Small orifices and low pressure drops may cause the setpoint to shift ±15 psig / 1,0 bar.

☐ - Blank areas indicate where maximum operating inlet pressure for a given orifice is exceeded.

- continued -

Table 10. *Types 627H and 627HM Capacities for 3/4 NPT Body Size[1] (continued)*

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR CODE	OUTLET PRESSURE SETTING, psig / bar	INLET PRESSURE, psig / bar	CAPACITIES IN SCFH / Nm³/h OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
			Orifice Size, Inches / mm					
			3/32 / 2,4	1/8 / 3,2	3/16 / 4,8	1/4 / 6,4	3/8 / 9,5	1/2 / 13
240 to 500 psig / 16,5 to 34,5 bar 10B3079X012 Red	400 / 27,6	450 / 31,0	3600[2] / 96,5	6400[2] / 172	14 000 / 375	25 000 / 670	47 000 / 1260	67 000 / 1796
		500 / 34,5	4400[2] / 118	8090[2] / 217	18 300 / 490	32 000 / 858	54 000 / 1447	77 000 / 2064
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	49 000 / 1313	91 000 / 2439	
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	65 000 / 1742		
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	81 000 / 2171		
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447			
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688			
		2000 / 138	17 000 / 456	28 000 / 750	71 000 / 1903			
	500 / 34,5	550 / 37,9	4300[2] / 115	7700[2] / 206	16 800 / 450	33 000 / 884	62 000 / 1662	90 000 / 2412
		600 / 41,4	4900[2] / 131	8800[2] / 236	19 400 / 520	37 000 / 992	70 000 / 1876	104 000 / 2787
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	49 000 / 1313	88 000 / 2358	137 000 / 3672
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	65 000 / 1742	130 000 / 3484	
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	81 000 / 2171		
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447	97 000 / 2600		
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688			
		2000 / 138	17 000 / 456	28 000 / 750	71 000 / 1903			

1. Capacity is based on 20% droop unless otherwise noted below.
2. Small orifices and low pressure drops may cause the setpoint to shift ±15 psig / 1,0 bar.

☐ - Blank areas indicate where maximum operating inlet pressure for a given orifice is exceeded.

Table 11. *Types 627H and 627HM Capacities for NPS 1 / DN 25 Body Size[1]*

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR CODE	OUTLET PRESSURE SETTING, PSIG / bar	INLET PRESSURE, PSIG / bar	CAPACITIES IN SCFH / Nm³/h OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
			Orifice Size, Inches / mm					
			3/32 / 2,4	1/8 / 3,2	3/16 / 4,8	1/4 / 6,4	3/8 / 9,5	1/2 / 13
140 to 250 psig / 9,7 to 17,2 bar 10B3078X012 Blue	150 / 10,3	200 / 13,8	1760[2] / 47,2	3200[2] / 85,8	7290 / 195	11 500 / 308	21 600 / 579	31 000 / 831
		250 / 17,2	2260[2] / 60,6	4100[2] / 110	9200 / 247	15 400 / 413	28 600 / 766	40 000 / 1072
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	19 300 / 517	31 000 / 831	46 000 / 1233
		400 / 27,6	3600 / 96,5	6500 / 174	14 800 / 397	25 000 / 670	40 000 / 1072	50 000 / 1340
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	32 000 / 858	51 000 / 1367	
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	46 000 / 1233		
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	57 000 / 1528		
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206			
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447			
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688			
		2000 / 138	17 000 / 456	28 000 / 750				
140 to 250 psig / 9,6 to 17,2 bar 10B3078X012 Blue	200 / 13,8	250 / 17,2	2160[2] / 57,9	3850[2] / 103	8400 / 225	15 000 / 402	31 000 / 831	41 000 / 1099
		300 / 20,7	2700[2] / 72,4	4910[2] / 132	11 200 / 300	19 500 / 523	36 000 / 965	52 000 / 1394
		400 / 27,6	3600 / 96,5	6500 / 174	14 800 / 397	26 500 / 710	52 000 / 1394	68 000 / 1822
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	33 000 / 884	61 000 / 1635	
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	49 000 / 1313		
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	65 000 / 1742		
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206			
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447			
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688			
		2000 / 138	17 000 / 456	28 000 / 750				
	250 / 17,2	300 / 20,7	2500[2] / 67,0	4500[2] / 121	9900 / 265	18 500 / 496	37 000 / 992	52 000 / 1394
		400 / 27,6	3600[2] / 96,5	6400[2] / 172	14 300 / 383	26 000 / 697	55 000 / 1474	74 000 / 1983
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	33 000 / 884	64 000 / 1715	87 000 / 2332
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	49 000 / 1313	93 000 / 2492	
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	65 000 / 1742		
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	81 000 / 2171		
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447			
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688			
		2000 / 138	17 000 / 456	28 000 / 750	71 000 / 1903			

1. Capacity is based on 20% droop unless otherwise noted below.
2. Small orifices and low pressure drops may cause the setpoint to shift ±15 psig / 1,0 bar.

☐ - Blank areas indicate where maximum operating inlet pressure for a given orifice is exceeded.

- continued -

Table 11. *Types 627H and 627HM Capacities for NPS 1 / DN 25 Body Size(1) (continued)*

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR CODE	OUTLET PRESSURE SETTING, psig / bar	INLET PRESSURE, psig / bar	CAPACITIES IN SCFH / Nm³/h OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
			Orifice Size, Inches / mm					
			3/32 / 2,4	1/8 / 3,2	3/16 / 4,8	1/4 / 6,4	3/8 / 9,5	1/2 / 13
240 to 500 psig / 16,5 to 34,5 bar 10B3079X012 Red	250 / 17,2	300 / 20,7	2500(2) / 67,0	4500(2) / 121	9300 / 249	14 000 / 375	25 000 / 670	37 000 / 992
		400 / 27,6	3600(2) / 96,5	6400(2) / 172	14 300 / 383	21 400 / 574	36 000 / 965	49 000 / 1313
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	26 300 / 705	42 000 / 1126	62 000 / 1662
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	37 100 / 994	57 000 / 1528	
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	47 400 / 1270		
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	57 000 / 1528		
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447			
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688			
		2000 / 138	17 000 / 456	28 000 / 750	71 000 / 1903			
	300 / 20,7	350 / 24,1	2900(2) / 77,7	5150(2) / 138	11 300 / 303	18 400 / 493	31 000 / 831	45 000 / 1206
		400 / 27,6	3500(2) / 93,8	6200(2) / 166	13 700 / 367	23 400 / 627	40 000 / 1072	52 000 / 1394
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	32 000 / 858	53 000 / 1420	67 000 / 1796
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	48 000 / 1286	80 000 / 2144	
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	62 000 / 1662		
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	79 000 / 2117		
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447			
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688			
		2000 / 138	17 000 / 456	28 000 / 750	71 000 / 1903			
	400 / 27,6	450 / 31,0	3600(2) / 96,5	6400(2) / 172	14 000 / 375	25 000 / 670	47 000 / 1260	67 000 / 1796
		500 / 34,5	4400(2) / 118	8090(2) / 217	18 300 / 490	32 000 / 858	54 000 / 1447	77 000 / 2064
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	49 000 / 1313	91 000 / 2439	
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	65 000 / 1742		
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	81 000 / 2171		
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447			
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688			
		2000 / 138	17 000 / 456	28 000 / 750	71 000 / 1903			
	500 / 34,5	550 / 37,9	4300(2) / 115	7700(2) / 206	16 800 / 450	33 000 / 884	62 000 / 1662	90 000 / 2412
		600 / 41,4	4900(2) / 131	8800(2) / 236	19 400 / 520	37 000 / 992	70 000 / 1876	104 000 / 2787
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	49 000 / 1313	88 000 / 2358	140 000 / 3752
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	65 000 / 1742	130 000 / 3484	
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	81 000 / 2171		
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447	97 000 / 2600		
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688			
		2000 / 138	17 000 / 456	28 000 / 750	71 000 / 1903			

1. Capacity is based on 20% droop unless otherwise noted below.
2. Small orifices and low pressure drops may cause the setpoint to shift ±15 psig / 1,0 bar.

☐ - Blank areas indicate where maximum operating inlet pressure for a given orifice is exceeded.

Table 12. *Types 627H and 627HM Capacities for NPS 2 / DN 50 Body Size(1)*

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR CODE	OUTLET PRESSURE SETTING, psig / bar	INLET PRESSURE, psig / bar	CAPACITIES IN SCFH / Nm³/h OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
			Orifice Size, Inches / mm					
			3/32 / 2,4	1/8 / 3,2	3/16 / 4,8	1/4 / 6,4	3/8 / 9,5	1/2 / 13
140 to 250 psig / 9,6 to 17,2 bar 10B3078X012 Blue	150 / 10,3	200 / 13,8	1760(2) / 47,2	3200(2) / 85,8	7290 / 195	13 700 / 367	24 100 / 646	31 000 / 831
		250 / 17,2	2260(2) / 60,6	4100(2) / 110	9200 / 247	16 100 / 431	28 600 / 766	40 000 / 1072
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	19 300 / 517	31 000 / 831	46 000 / 1233
		400 / 27,6	3600 / 96,5	6500 / 174	14 800 / 397	25 000 / 670	40 000 / 1072	50 000 / 1340
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	32 000 / 858		
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	48 000 / 1286		
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	65 000 / 1742		
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206			
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447			
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688			
		2000 / 138	17 000 / 456	28 000 / 750				

1. Capacity is based on 20% droop unless otherwise noted below.
2. Small orifices and low pressure drops may cause the setpoint to shift ±15 psig / 1,0 bar.

☐ - Blank areas indicate where maximum operating inlet pressure for a given orifice is exceeded.

- continued -

Table 12. *Types 627H and 627HM Capacities for NPS 2 / DN 50 Body Size[1] (continued)*

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR CODE	OUTLET PRESSURE SETTING, psig / bar	INLET PRESSURE, psig / bar	CAPACITIES IN SCFH / Nm³/h OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
			Orifice Size, Inches / mm					
			3/32 / 2,4	1/8 / 3,2	3/16 / 4,8	1/4 / 6,4	3/8 / 9,5	1/2 / 13
140 to 250 psig / 9,6 to 17,2 bar 10B3078X012 Blue	200 / 13,8	250 / 17,2	2160[2] / 57,9	3850[2] / 103	8400 / 225	16 100 / 431	33 000 / 884	41 000 / 1099
		300 / 20,7	2700[2] / 72,4	4910[2] / 132	11 200 / 300	20 100 / 539	36 000 / 965	52 000 / 1394
		400 / 27,6	3600 / 96,5	6500 / 174	14 800 / 397	26 500 / 710	52 000 / 1394	68 000 / 1822
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	33 000 / 884	61 000 / 1635	
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	49 000 / 1313		
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	65 000 / 1742		
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206			
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447			
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688			
		2000 / 138	17 000 / 456	28 000 / 750				
	250 / 17,2	300 / 20,7	2500[2] / 67,0	4500[2] / 121	9900 / 265	18 500 / 496	37 000 / 992	75 000 / 2010
		400 / 27,6	3600[2] / 96,5	6400[2] / 172	14 300 / 383	26 000 / 697	55 000 / 1474	81 000 / 2171
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	33 000 / 884	64 000 / 1715	95 000 / 2546
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	49 000 / 1313	102 000 / 2734	
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	65 000 / 1742		
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	81 000 / 2171		
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447			
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688			
		2000 / 138	17 000 / 456	28 000 / 750	71 000 / 1903			
240 to 500 psig / 16,5 to 34,5 bar 10B3079X012 Red	250 / 17,2	300 / 20,7	2500[2] / 67,0	4500[2] / 121	9300 / 249	14 000 / 375	25 000 / 670	37 000 / 992
		400 / 27,6	3600[2] / 96,5	6400[2] / 172	14 300 / 383	21 400 / 574	36 000 / 965	49 000 / 1313
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	26 300 / 705	42 000 / 1126	62 000 / 1662
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	37 100 / 994	57 000 / 1528	
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	47 400 / 1270		
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	57 000 / 1528		
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447			
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688			
		2000 / 138	17 000 / 456	28 000 / 750	71 000 / 1903			
	300 / 20, 7	350 / 24,1	2900[2] / 77,7	5150[2] / 138	11 300 / 303	18 400 / 493	31 000 / 831	45 000 / 1206
		400 / 27,6	3500[2] / 93,8	6200[2] / 166	13 700 / 367	23 400 / 627	40 000 / 1072	52 000 / 1394
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	32 000 / 858	53 000 / 1420	67 000 / 1796
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	48 000 / 1286	80 000 / 2144	
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	62 000 / 1662		
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	79 000 / 2117		
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447			
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688			
		2000 / 138	17 000 / 456	28 000 / 750	71 000 / 1903			
240 to 500 psig / 16,5 to 34,5 bar 10B3079X012 Red	400 / 27,6	450 / 31,0	3600[2] / 96,5	6400[2] / 172	14 000 / 375	25 000 / 670	47 000 / 1260	67 000 / 1796
		500 / 34,5	4400[2] / 118	8090[2] / 217	18 300 / 490	32 000 / 858	54 000 / 1447	77 000 / 2064
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	49 000 / 1313	91 000 / 2439	
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	65 000 / 1742		
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	81 000 / 2171		
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447			
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688			
		2000 / 138	17 000 / 456	28 000 / 750	71 000 / 1903			
	500 / 34,5	550 / 37,9	4300[2] / 115	7700[2] / 206	16 800 / 450	33 000 / 884	62 000 / 1662	90 000 / 2412
		600 / 41,4	4900[2] / 131	8800[2] / 236	19 400 / 520	37 000 / 992	70 000 / 1876	104 000 / 2787
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	49 000 / 1313	88 000 / 2358	140 000 / 3752
		1000 / 69,0	8700 / 233	16 000 / 429	36 100 / 967	65 000 / 1742	130 000 / 3484	
		1250 / 86,2	11 000 / 295	19 000 / 509	45 000 / 1206	81 000 / 2171		
		1500 / 103	13 000 / 348	22 000 / 590	54 000 / 1447	97 000 / 2600		
		1750 / 121	15 000 / 402	25 000 / 670	63 000 / 1688			
		2000 / 138	17 000 / 456	28 000 / 750	71 000 / 1903			

1. Capacity is based on 20% droop unless otherwise noted below.
2. Small orifices and low pressure drops may cause the setpoint to shift ±15 psig / 1,0 bar.

☐ - Blank areas indicate where maximum operating inlet pressure for a given orifice is exceeded.

Table 13. *Type 627R Capacities for 3/4 NPT Body Size*[1]

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR CODE	OUTLET PRESSURE SETTING, psig / bar	INLET PRESSURE, psig / bar	CAPACITIES IN SCFH / Nm³/h OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
			Orifice Size, Inches / mm					
			3/32 / 2,4	1/8 / 3,2	3/16 / 4,8	1/4 / 6,4	3/8 / 9,5	1/2 / 13
5 to 20 psig[2] / 0,34 to 1,4 bar 10B3076X012 Yellow	5 / 0,34	10 / 0,69	170 / 4,6	320 / 8,6	710 / 19,0	1050 / 28,1	1500 / 40,2	1850 / 49,6
		15 / 1,0	240 / 6,4	330 / 8,8	810 / 21,7	1290 / 34,6	2100 / 56,3	2850 / 76,4
		20 / 1,4	290 / 7,8	460 / 12,3	1090 / 29,2	1750 / 46,9	2750 / 73,7	3850 / 103
		30 / 2,1	380 / 10,2	610 / 16,3	1470 / 39,4	2490 / 66,7	3600 / 96,5	4800 / 129
		60 / 4,1	640 / 17,2	1170 / 31,4	2460 / 65,9	3690 / 98,9	5270 / 141	6120 / 164
		75 / 5,2	770 / 20,6	1410 / 37,8	2880 / 77,2	4150 / 111	5760 / 154	6900 / 185
		100 / 6,9	990 / 26,5	1690 / 45,3	3540 / 94,9	4790 / 128	6200 / 166	7600 / 204
	10 / 0,69	15 / 1,0	210 / 5,6	320 / 8,6	800 / 21,4	1290 / 34,6	2100 / 56,3	2820 / 75,6
		20 / 1,4	280 / 7,5	450 / 12,1	1070 / 28,7	1740 / 46,6	2700 / 72,4	3800 / 102
		30 / 2,1	380 / 10,2	610 / 16,3	1470 / 39,4	2430 / 65,1	3550 / 95,1	4780 / 128
		60 / 4,1	640 / 17,2	1170 / 31,4	2460 / 65,9	3690 / 98,9	5270 / 141	6120 / 164
		75 / 5,2	770 / 20,6	1410 / 37,8	2880 / 77,2	4150 / 111	5760 / 154	6900 / 185
		100 / 6,9	990 / 26,5	1690 / 45,3	3540 / 94,9	4790 / 128	6200 / 166	7600 / 204
		150 / 10,3	1420 / 38,1	2430 / 65,1	4000 / 107	5680 / 152	6250 / 168	7630 / 204
		200 / 13,8	1850 / 49,6	3070 / 82,3	4200 / 113	6200 / 166	6380 / 171	7680 / 206
		300 / 20,7	2700 / 72,4	3970 / 106	4270 / 114	6250 / 168	6500 / 174	
		500 / 34,5	4010 / 107	4240 / 114	5640 / 151	6520 / 175		
		750 / 51,7	4400 / 118	5120 / 137	6400 / 172			
		1000 / 69,0	4450 / 119	6220 / 167				
		1250 / 86,2	4540 / 122					
		1500 / 103	4880 / 131					
		1750 / 121	5230 / 140					
		2000 / 138	5900 / 158					
	20 / 1,4	30 / 2,1	350 / 9,4	590 / 15,8	1390 / 37,3	2480 / 66,5	4350 / 117	4970 / 133
		50 / 3,4	550 / 14,7	980 / 26,3	2240 / 60,0	4000 / 107	7450 / 200	8000 / 214
		60 / 4,1	640 / 17,2	1170 / 31,4	2610 / 69,9	4680 / 125	7800 / 209	8900 / 239
		100 / 6,9	990 / 26,5	1800 / 48,2	3980 / 107	6700 / 180	9750 / 261	10 400 / 279
		150 / 10,3	1420 / 38,1	2580 / 69,1	5600 / 150	8790 / 236	10 000 / 268	10 800 / 289
5 to 20 psig[2] / 0,34 to 1,4 bar 10B3076X012 Yellow	20 / 1,4	200 / 13,8	1850 / 49,6	3370 / 90,3	7050 / 189	9000 / 241	10 200 / 273	10 800 / 289
		300 / 20,7	2700 / 72,4	4910 / 132	7300 / 196	9500 / 255	10 500 / 281	
		500 / 34,5	4400 / 118	5200 / 139	7400 / 198	9760 / 262		
		750 / 51,7	6600 / 177	5360 / 144	8870 / 238			
		1000 / 69,0	7300 / 196	6500 / 174				
		1250 / 86,2	7500 / 201					
		1500 / 103	7800 / 209					
		1750 / 121	8400 / 225					
		2000 / 138	8600 / 230					
15 to 40 psig / 1,0 to 2,8 bar 10B3077X012 Green	40 / 2,8	60 / 4,1	610 / 16,3	1090 / 29,2	2270 / 60,8	4230 / 113	8100 / 217	9100 / 244
		75 / 5,2	760 / 20,4	1370 / 36,7	3080 / 82,5	5330 / 143	10 300 / 276	11 600 / 311
		100 / 6,9	990 / 26,5	1790 / 48,0	4070 / 109	6840 / 183	11 900 / 319	13 400 / 359
		150 / 10,3	1420 / 38,1	2580 / 69,1	5850 / 157	9320 / 250	13 500 / 362	13 800 / 370
		200 / 13,8	1850 / 49,6	3370 / 90,3	7630 / 204	11 000 / 295	16 300 / 437	17 100 / 458
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	14 700 / 394	17 800 / 477	
		500 / 34,5	4400 / 118	8090 / 217	14 500 / 389	14 800 / 397		
		750 / 51,7	6600 / 177	10 800 / 289	14 800 / 397	14 900 / 399		
		1000 / 69,0	8700 / 233	13 100 / 351	16 300 / 437			
		1250 / 86,2	11 000 / 295	13 800 / 370				
		1500 / 103	12 000 / 322	14 000 / 375				
		1750 / 121	13 000 / 348					
		2000 / 138	14 000 / 375					

1. Capacity is based on 20% droop unless otherwise noted below.
2. For pressure setting under 10 psig / 0,69 bar, inlet pressure should be limited to approximately 100 psig / 6,9 bar so that setpoint adjustment can be obtained.

☐ - Blank areas indicate where maximum operating inlet pressure for a given orifice is exceeded.

- continued -

Table 13. *Type 627R Capacities for 3/4 NPT Body Size[1] (continued)*

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR CODE	OUTLET PRESSURE SETTING, psig / bar	INLET PRESSURE, psig / bar	CAPACITIES IN SCFH / Nm³/h OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
			Orifice Size, Inches / mm					
			3/32 / 2,4	1/8 / 3,2	3/16 / 4,8	1/4 / 6,4	3/8 / 9,5	1/2 / 13
35 to 80 psig / 2,4 to 5,5 bar 10B3078X012 Blue	60 / 4,1	75 / 5,2	700 / 18,8	1230 / 33,0	2760 / 74,0	4700 / 126	8170 / 219	12 600 / 338
		100 / 6,9	970 / 26,0	1740 / 46,6	3910 / 105	6690 / 179	11 900 / 319	14 400 / 386
		150 / 10,3	1420 / 38,1	2580 / 69,1	5850 / 157	9740 / 261	15 700 / 421	18 700 / 501
		200 / 13,8	1850 / 49,6	3370 / 90,3	7630 / 204	12 400 / 332	18 400 / 493	21 200 / 568
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	17 700 / 474	20 200 / 541	
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	20 000 / 536		
		750 / 51,7	6600 / 177	12 000 / 322	18 900 / 507	21 400 / 574		
		1000 / 69,0	8700 / 233	16 000 / 429	19 000 / 509			
		1250 / 86,2	11 000 / 295	18 700 / 501				
		1500 / 103	13 000 / 348	19 000 / 509				
		1750 / 121	15 000 / 402	20 000 / 536				
		2000 / 138	17 000 / 456					
	80 / 5,5	100 / 6,9	900 / 24,1	1630 / 43,7	3570 / 95,7	6490 / 174	12 000 / 322	17 200 / 461
		150 / 10,3	1410 / 37,8	2580 / 69,1	5750 / 154	10 500 / 281	18 900 / 507	25 000 / 670
		200 / 13,8	1850 / 49,6	3370 / 90,3	7630 / 204	13 700 / 367	23 000 / 616	29 000 / 777
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	20 100 / 539	26 000 / 697	
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	29 000 / 777		
		750 / 51,7	6600 / 177	12 000 / 322	23 100 / 619	30 900 / 828		
		1000 / 69,0	8700 / 233	16 000 / 429	27 400 / 734			
		1250 / 86,2	11 000 / 295	19 000 / 509				
		1500 / 103	13 000 / 348	22 000 / 590				
		1750 / 121	15 000 / 402	25 000 / 670				
		2000 / 138	17 000 / 456					
70 to 150 psig / 4,8 to 10,3 bar 10B3079X012 Red	100 / 6,9	150 / 10,3	1170 / 31,4	2510 / 67,3	5540 / 148	8310 / 223	15 500 / 415	20 300 / 544
		200 / 13,8	1850 / 49,6	3370 / 90,3	7630 / 204	12 000 / 322	20 100 / 539	25 700 / 689
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	18 200 / 488		
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490			
		750 / 51,7	6600 / 177	12 000 / 322				
		1000 / 69,0	8700 / 233	16 000 / 429				
		1250 / 86,2	11 000 / 295					
		1500 / 103	13 000 / 348					
		1750 / 121	15 000 / 402					
		2000 / 138	17 000 / 456					
70 to 150 psig / 4,8 to 10,3 bar 10B3079X012 Red	125 / 8,6	150 / 10,3	1250 / 33,5	2330 / 62,4	5090 / 136	9130 / 245	15 700 / 421	20 800 / 557
		200 / 13,8	1830 / 49,0	3320 / 89,0	7360 / 197	13 160 / 353	22 400 / 600	28 600 / 766
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	19 700 / 528		
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490			
		750 / 51,7	6600 / 177	12 000 / 322				
		1000 / 69,0	8700 / 233	16 000 / 429				
		1250 / 86,2	11 000 / 295					
		1500 / 103	13 000 / 348					
		1750 / 121	15 000 / 402					
		2000 / 138	17 000 / 456					
	150 / 10,3	200 / 13,8	1760 / 47,2	3200 / 85,8	7020 / 188	12 500 / 335	21 400 / 574	30 600 / 820
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	17 200 / 461		
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490			
		750 / 51,7	6600 / 177	12 000 / 322				
		1000 / 69,0	8700 / 233	16 000 / 429				
		1250 / 86,2	11 000 / 295					
		1500 / 103	13 000 / 348					
		1750 / 121	15 000 / 402					
		2000 / 138	17 000 / 456					

1. Capacity is based on 20% droop unless otherwise noted below.
☐ - Blank areas indicate where maximum operating inlet pressure for a given orifice is exceeded.

Table 14. *Type 627R Capacities for NPS 1 and 2 / DN 25 and 50 Body Sizes*[1]

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR CODE	OUTLET PRESSURE SETTING, psig / bar	INLET PRESSURE, psig / bar	CAPACITIES IN SCFH / Nm³/h OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
			Orifice Size, Inches / mm					
			3/32 / 2,4	1/8 / 3,2	3/16 / 4,8	1/4 / 6,4	3/8 / 9,5	1/2 / 13
5 to 20 psig[2] / 0,34 to 1,4 bar 10B3076X012 Yellow	5 / 0,34	10 / 0,69	170 / 4,6	330 / 8,8	710 / 19,0	1080 / 28,9	2000 / 53,6	2150 / 57,6
		15 / 1,0	240 / 6,4	390 / 10,5	890 / 23,9	1500 / 40,2	2350 / 63,0	3000 / 80,4
		20 / 1,4	290 / 7,8	500 / 13,4	1160 / 31,1	1900 / 50,9	2750 / 73,7	3900 / 105
		30 / 2,1	380 / 10,2	690 / 18,5	1500 / 40,2	2500 / 67,0	3600 / 96,5	4900 / 131
		60 / 4,1	640 / 17,2	1170 / 31,4	2460 / 65,9	3690 / 98,9	5650 / 151	6900 / 185
		75 / 5,2	770 / 20,6	1410 / 37,8	2880 / 77,2	4150 / 111	6450 / 173	7490 / 201
		100 / 6,9	990 / 26,5	1800 / 48,2	3540 / 94,9	5790 / 155	7520 / 202	8150 / 218
	10 / 0,69	15 / 1,0	210 / 5,6	390 / 10,5	840 / 22,5	1480 / 39,7	2300 / 61,6	2930 / 78,5
		20 / 1,4	280 / 7,5	500 / 13,4	1100 / 29,5	1880 / 50,4	2700 / 72,4	3830 / 103
		30 / 2,1	380 / 10,2	690 / 18,5	1500 / 40,2	2460 / 65,9	3550 / 95,1	4840 / 130
		60 / 4,1	640 / 17,2	1170 / 31,4	2460 / 65,9	3690 / 98,9	5650 / 151	6900 / 185
		75 / 5,2	770 / 20,6	1410 / 37,8	2880 / 77,2	4150 / 111	6450 / 173	7490 / 201
		100 / 6,9	990 / 26,5	1800 / 48,2	3540 / 94,9	4790 / 128	7520 / 202	8150 / 218
		150 / 10,3	1420 / 38,1	2580 / 69,1	4660 / 125	5680 / 152	9980 / 267	10 800 / 289
		200 / 13,8	1850 / 49,6	3370 / 90,3	5620 / 151	6360 / 170	11 000 / 295	12 900 / 346
		300 / 20,7	2700 / 72,4	4880 / 131	6890 / 185	7780 / 209	13 600 / 364	
		500 / 34,5	4400 / 118	6720 / 180	8570 / 230	11 600 / 311		
		750 / 51,7	5400 / 145	8850 / 237	9000 / 241			
		1000 / 69,0	5800 / 155	9500 / 255				
		1250 / 86,2	6300 / 169					
		1500 / 103	6600 / 177					
		1750 / 121	6800 / 182					
		2000 / 138	7600 / 204					
5 to 20 psig[2] / 0,34 to 1,4 bar 10B3076X012 Yellow	20 / 1,4	30 / 2,1	350 / 9,4	600 / 16,1	1390 / 37,3	2580 / 69,1	4350 / 117	6290 / 169
		50 / 3,4	550 / 14,7	1000 / 26,8	2250 / 60,3	4090 / 110	7600 / 204	8000 / 214
		60 / 4,1	640 / 17,2	1170 / 31,4	2630 / 70,5	4750 / 127	7800 / 209	10 600 / 284
		100 / 6,9	990 / 26,5	1800 / 48,2	4070 / 109	7310 / 196	10 800 / 289	13 400 / 359
		150 / 10,3	1420 / 38,1	2580 / 69,1	5720 / 153	10 300 / 276	13 500 / 362	14 000 / 375
		200 / 13,8	1850 / 49,6	3370 / 90,3	7050 / 189	10 500 / 281	14 000 / 375	14 400 / 386
		300 / 20,7	2700 / 72,4	4910 / 132	9250 / 248	10 800 / 289	14 900 / 399	
		500 / 34,5	4400 / 118	7830 / 210	11 800 / 316	13 300 / 356		
		750 / 51,7	6600 / 177	9000 / 241	12 000 / 322			
		1000 / 69,0	8700 / 233	9660 / 259				
		1250 / 86,2	10 000 / 268					
		1500 / 103	10 400 / 279					
		1750 / 121	12 000 / 322					
		2000 / 138	14 000 / 375					
15 to 40 psig / 1,0 to 2,8 bar 10B3077X012 Green	40 / 2,8	60 / 4,1	610 / 16,3	1090 / 29,2	2430 / 65,1	4510 / 121	9200 / 247	9400 / 252
		75 / 5,2	760 / 20,4	1370 / 36,7	3080 / 82,5	5640 / 151	10 800 / 289	16 300 / 437
		100 / 6,9	990 / 26,5	1790 / 48,0	4070 / 109	7310 / 196	13 500 / 362	17 600 / 472
		150 / 10,3	1420 / 38,1	2580 / 69,1	5850 / 157	10 500 / 281	18 000 / 482	22 200 / 595
		200 / 13,8	1850 / 49.6	3370 / 90,3	7630 / 204	11 000 / 295	21 400 / 574	24 600 / 659
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	14 900 / 399	24 400 / 654	
		500 / 34,5	4400 / 118	8090 / 217	16 300 / 437	21 800 / 584		
		750 / 51,7	6600 / 177	12 000 / 322	20 200 / 541	23 600 / 632		
		1000 / 69,0	8700 / 233	16 000 / 429	23 200 / 622			
		1250 / 86,2	11 000 / 295	19 000 / 509				
		1500 / 103	13 000 / 348	21 000 / 563				
		1750 / 121	15 000 / 402					
		2000 / 138	17 000 / 456					

1. Capacity is based on 20% droop unless otherwise noted below.
2. For pressure setting under 10 psig / 0,69 bar, inlet pressure should be limited to approximately 100 psig / 6,9 bar so that setpoint adjustment can be obtained.

☐ - Blank areas indicate where maximum operating inlet pressure for a given orifice is exceeded.

- continued -

Table 14. *Type 627R Capacities for NPS 1 and 2 / DN 25 and 50 Body Sizes(1) (continued)*

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR CODE	OUTLET PRESSURE SETTING, psig / bar	INLET PRESSURE, psig / bar	CAPACITIES IN SCFH / Nm³/h OF 0.6 SPECIFIC GRAVITY NATURAL GAS					
			Orifice Size, Inches / mm					
			3/32 / 2,4	1/8 / 3,2	3/16 / 4,8	1/4 / 6,4	3/8 / 9,5	1/2 / 13
35 to 80 psig / 2,4 to 5,5 bar 10B3078X012 Blue	60 / 4,1	75 / 5,2	700 / 18,8	1230 / 33,0	2760 / 74,0	4860 / 130	8600 / 230	12 800 / 343
		100 / 6,9	970 / 26,0	1740 / 46,6	3910 / 105	7000 / 188	12 500 / 335	16 700 / 448
		150 / 10,3	1420 / 38,1	2580 / 69,1	5850 / 157	10 500 / 281	16 800 / 450	23 000 / 616
		200 / 13,8	1850 / 49.6	3370 / 90,3	7630 / 204	13 700 / 367	20 900 / 560	27 700 / 742
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	20 100 / 539	28 100 / 753	
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	28 500 / 764		
		750 / 51,7	6600 / 177	12 000 / 322	22 800 / 611	29 500 / 791		
		1000 / 69,0	8700 / 233	16 000 / 429	26 800 / 718			
		1250 / 86,2	11 000 / 295	19 000 / 509				
		1500 / 103	13 000 / 348	22 000 / 590				
		1750 / 121	15 000 / 402	25 000 / 670				
		2000 / 138	17 000 / 456					
	80 / 5,5	100 / 6,9	900 / 24,1	1630 / 43,7	3570 / 95,7	6650 / 178	12 000 / 322	17 400 / 466
		150 / 10,3	1410 / 37,8	2580 / 69,1	5750 / 154	10 500 / 281	20 100 / 539	26 000 / 697
		200 / 13,8	1850 / 49,6	3370 / 90,3	7630 / 204	13 700 / 367	25 100 / 673	31 800 / 852
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	20 100 / 539	32 600 / 874	
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490	30 300 / 812		
		750 / 51,7	6600 / 177	12 000 / 322	27 200 / 729	37 400 / 1002		
		1000 / 69,0	8700 / 233	16 000 / 429	33 300 / 892			
		1250 / 86,2	11 000 / 295	19 000 / 509				
		1500 / 103	13 000 / 348	22 000 / 590				
		1750 / 121	15 000 / 402	25 000 / 670				
		2000 / 138	17 000 / 456					
70 to 150 psig / 4,8 to 10,3 bar 10B3079X012 Red	100 / 6,9	150 / 10,3	1170 / 31,4	2510 / 67,3	5540 / 148	8310 / 223	15 500 / 415	20 300 / 544
		200 / 13,8	1850 / 49,6	3370 / 90,3	7630 / 204	12 000 / 322	20 100 / 539	26 700 / 716
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	18 200 / 488		
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490			
		750 / 51,7	6600 / 177	12 000 / 322				
		1000 / 69,0	8700 / 233	16 000 / 429				
		1250 / 86,2	11 000 / 295					
		1500 / 103	13 000 / 348					
		1750 / 121	15 000 / 402					
		2000 / 138	17 000 / 456					
	125 / 8,6	150 / 10,3	1250 / 33,5	2330 / 62,4	5090 / 136	9470 / 254	15 700 / 421	20 800 / 557
		200 / 13,8	1830 / 49,0	3320 / 89,0	7360 / 197	13 400 / 359	23 600 / 632	31 300 / 839
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	19 700 / 528		
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490			
		750 / 51,7	6600 / 177	12 000 / 322				
		1000 / 69,0	8700 / 233	16 000 / 429				
		1250 / 86,2	11 000 / 295					
		1500 / 103	13 000 / 348					
		1750 / 121	15 000 / 402					
		2000 / 138	17 000 / 456					
	150 / 10,3	200 / 13,8	1760 / 47,2	3200 / 85,8	7020 / 188	12 900 / 346	21 400 / 574	33 300 / 892
		300 / 20,7	2700 / 72,4	4910 / 132	11 200 / 300	17 200 / 461		
		500 / 34,5	4400 / 118	8090 / 217	18 300 / 490			
		750 / 51,7	6600 / 177	12 000 / 322				
		1000 / 69,0	8700 / 233	16 000 / 429				
		1250 / 86,2	11 000 / 295					
		1500 / 103	13 000 / 348					
		1750 / 121	15 000 / 402					
		2000 / 138	17 000 / 456					

1. Capacity is based on 20% droop unless otherwise noted below.
☐ - Blank areas indicate where maximum operating inlet pressure for a given orifice is exceeded.

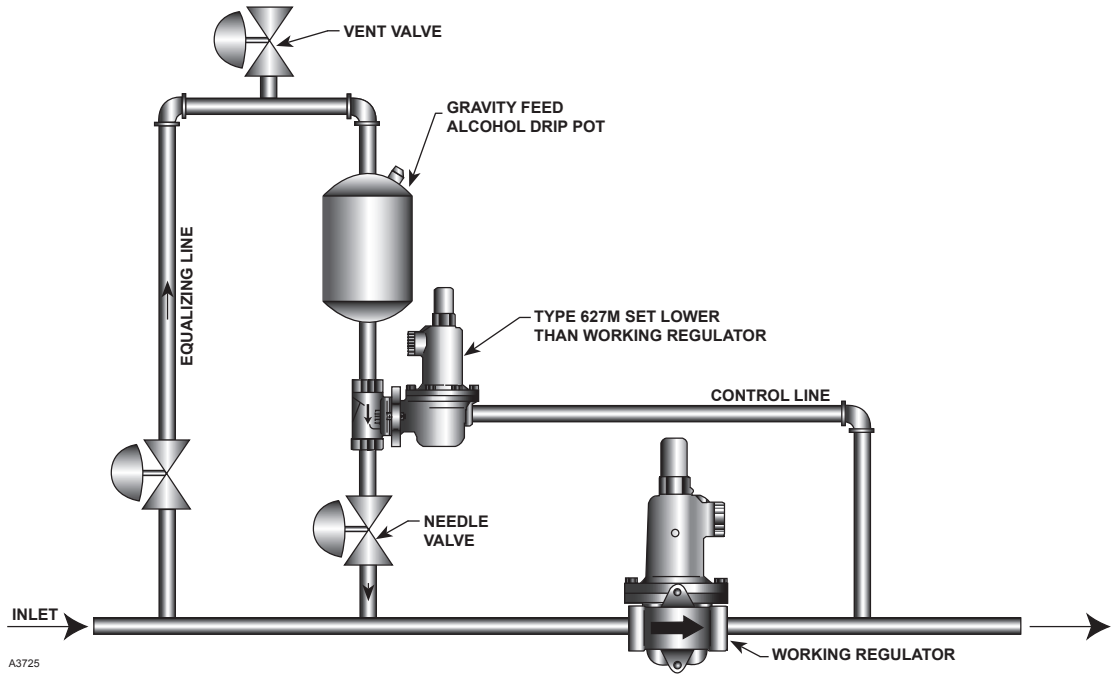


Figure 10. *De-Icer System Installation Schematic*

Table 15. *Flow Coefficients*

ORIFICE SIZE, Inch / mm	NPS 3/4 / DN 20 BODY			NPS 1 / DN 25 BODY			NPS 2 / DN 50 BODY		
	Wide-Open C_g for External Relief Sizing	Wide-Open C_v for External Relief Sizing	C_1	Wide-Open C_g for External Relief Sizing	Wide-Open C_v for External Relief Sizing	C_1	Wide-Open C_g for External Relief Sizing	Wide-Open C_v for External Relief Sizing	C_1
3/32 / 2,4	6.9	0.24	29.2	6.9	0.24	28.5	6.9	0.23	29.7
1/8 / 3,2	12.5	0.43	29.1	12.5	0.43	29.4	12.5	0.42	29.5
3/16 / 4,8	29	1.01	28.6	29	0.93	31.2	29	1.02	28.5
1/4 / 6,4	50	1.63	30.6	50	1.71	29.3	52	1.66	31.3
3/8 / 9,5	108	2.99	36.1	108	3.42	31.6	115	3.39	33.9
1/2 / 13	190	4.87	39.0	190	5.29	35.9	200	5.01	39.9

Table 16. *IEC Sizing Coefficients*

ORIFICE SIZE, Inch / mm	X_T			F_D	F_L
	NPS 3/4 / DN 20 Body	NPS 1 / DN 25 Body	NPS 2 / DN 50 Body		
3/32 / 2,4	0.539	0.514	0.558	0.50	0.85
1/8 / 3,2	0.536	0.547	0.539		0.79
3/16 / 4,8	0.517	0.616	0.514		0.85
1/4 / 6,4	0.592	0.543	0.620		0.87
3/8 / 9,5	0.824	0.632	0.727		0.89
1/2 / 13	0.962	0.815	1.01		0.86

Type 627M or 627HM De-Icer System Application

A 627 Series regulator can be used in a de-icer application as shown in Figure 10. As the orifice in the working regulator begins to freeze, ice formation decreases the orifice size so that the working regulator is unable to supply enough flow to satisfy the downstream demand. When downstream pressure falls below the outlet pressure setting of the Type 627M regulator, the disk of the Type 627M regulator moves off its orifice and lets alcohol flow into the main gas line. The alcohol carried to the working regulator by the flow stream helps prevent additional ice formation on the orifice. Normal flow then resumes, and as pressure in the downstream system is restored, the Type 627M regulator shuts off. This is an economy feature which conserves both the alcohol and the number of man hours required to maintain the alcohol supply. The alcohol is supplied to the working regulator only when icing conditions exist.

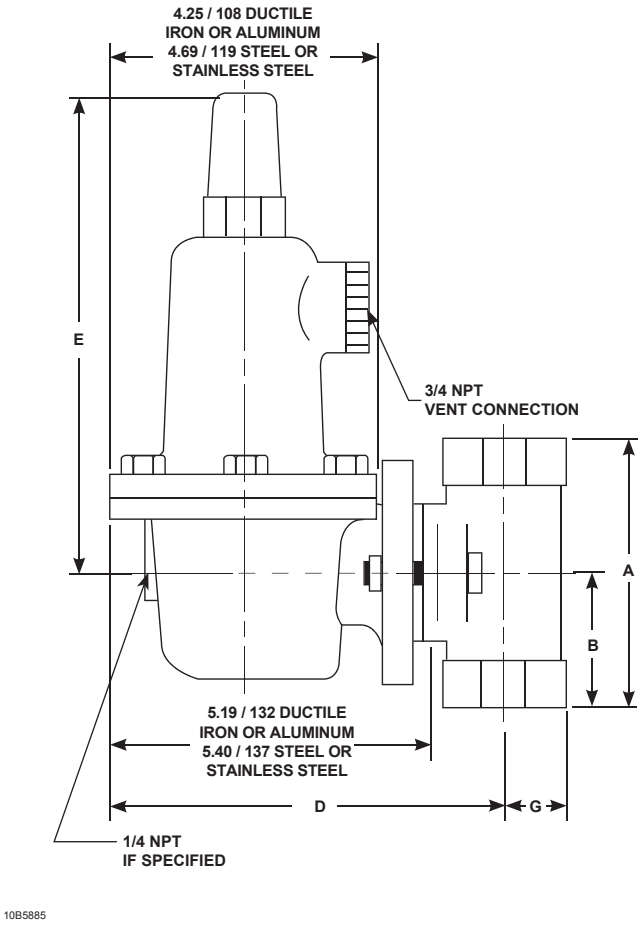


Figure 11. *NPT Dimensions*

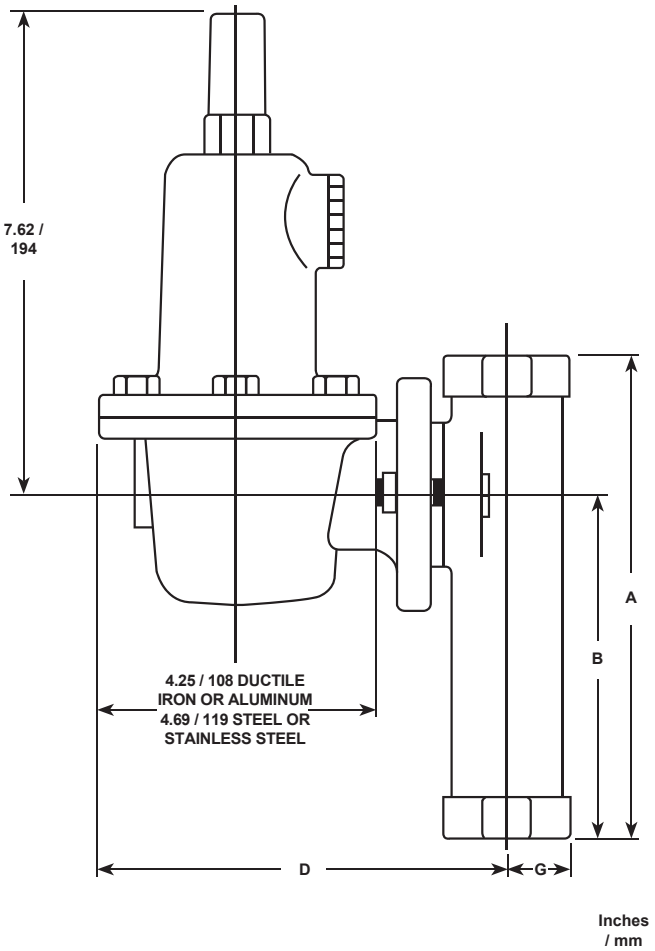


Figure 12. *Long Body Dimensions*

Table 17. *NPT Body Dimensions*

BODY SIZE, NPT	DIMENSIONS, Inch / mm						
	A	B	D		E		G
			Aluminum/ Ductile Iron	Steel/ Stainless Steel	Types 627, 627R, 627LR, 627M, and 627MR	Types 627H and 627HM	
3/4 and 1	4.06 / 103	2.03 / 51,6	6.50 / 165	6.75 / 171	7.62 / 194	7.94 / 202	1.00 / 25,4
2	5.00 / 127	2.50 / 63,5	6.88 / 175	7.12 / 181			1.69 / 42,9

Table 18. *Long Body Dimensions*

BODY SIZE, NPT	DIMENSIONS, Inch / mm				
	A	B	D		G
			Aluminum/ Ductile Iron	Steel/ Stainless Steel	
1	7.38 / 187	5.25 / 133	6.50 / 165	6.75 / 171	1.00 / 25,4
2	7.88 / 200	5.38 / 137	6.88 / 175	7.12 / 181	1.69 / 42,9

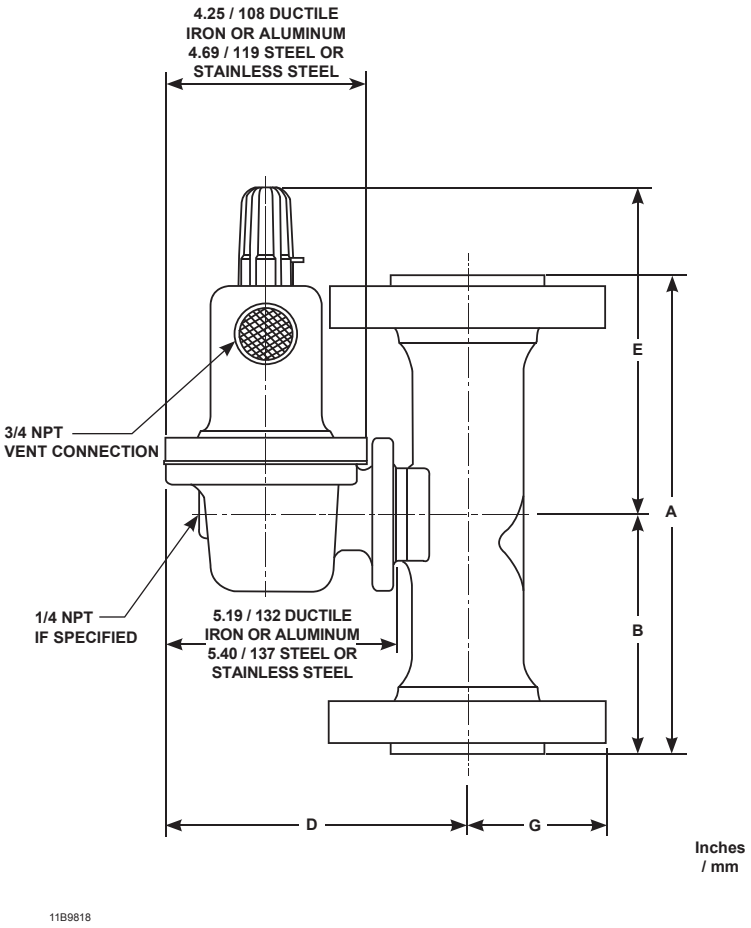


Figure 13. *Flanged Dimensions*

Table 19. *Flanged Body Dimensions*

BODY SIZE, NPS / DN	DIMENSIONS, Inches / mm												
	A			B			D		E		G		
	CL150 RF	CL300 RF	CL600 RF	CL150 RF	CL300 RF	CL600 RF	Aluminum/ Ductile Iron	Steel/ Stainless Steel	Types 627, 627R, 627LR 627M, and 627MR	Types 627H and 627HM	CL150 RF	CL300 RF	CL600 RF
1 / 25	7.25 / 184	7.75 / 197	8.25 / 210	3.62 / 91,9	3.88 / 98,6	4.12 / 105	6.50 / 165	6.75 / 171	7.62 / 194	7.94 / 202	2.12 / 53,8	2.44 / 62,0	2.44 / 62,0
2 / 50	10 / 254	10.5 / 267	11.25 / 286	5 / 127	5.25 / 133	5.62 / 143	6.88 / 175	7.12 / 181			3 / 76,2	3.25 / 82,6	3.25 / 82,6

Ordering Information

Application

When ordering, specify:

1. Type of regulator
2. Body size
3. Body material and trim material
4. Orifice size in inches / millimeters
5. Control spring range in psig / bar

Ordering Guide

Type (Select One)

☐ Type 627 (basic construction)***
☐ Type 627H (high-pressure version) (WCC steel/Stainless steel only)***
☐ Type 627M (external pressure registration)***
☐ Type 627HM***
☐ Type 627R (internal relief)***
☐ Type 627LR***
☐ Type 627MR***

Body Size (Select One)

☐ 3/4 (NPT only)***
☐ NPS 1 / DN 25***
☐ NPS 2 / DN 50***
☐ 1 NPT Long Body**
☐ 2 NPT Long Body**

Body Material and End Connection Styles (Select One)

Ductile Iron (not available for Types 627H and 627HM)

☐ NPT (available end connection for Type 627 long body)***

WCC Steel (required for Types 627H and 627HM)

☐ NPT (available end connection for Type 627 long body)***
☐ CL150 RF**
☐ CL300 RF***
☐ CL600 RF***
☐ PN 16/25/40**
☐ BWE*

Stainless Steel (Available only for Types 627, 627R, and 627H)

☐ NPT***
☐ CL150 RF**
☐ CL300 RF***
☐ CL600 RF***
☐ PN 16/25/40**

Spring Case and Diaphragm Casing Material (Select One)

☐ Aluminum (Types 627, 627R, and 627LR only)***
☐ Ductile iron***
☐ WCC steel***
☐ Stainless Steel (Types 627, 627R, and 627H only)***

Diaphragm Material (Select One)

☐ Nitrile (NBR)***
☐ Fluorocarbon (FKM)***
☐ Neoprene (CR) (For Types 627H and 627HM only)***

Construction

Refer to the Specifications section and to each referenced table; specify the desired selection whenever there is a choice to be made. The standard assembly position is 1D for NPT connection and 3D for flanged bodies, as shown in Figure 8, but an alternate assembly position may be factory-ordered or can be accomplished in the field by unbolting the body or spring case using the instructions in the appropriate section of the instruction manual. For installation dimensions, refer to Figures 11 to 13.

Trim Material (Select One)

☐ Aluminum (Types 627, 627R, and 627LR only)***
☐ Stainless steel***

Valve Disk Material (Select One)

☐ Nitrile (NBR)***
☐ Nylon (PA) (not available to Type 627LR)***
☐ Fluorocarbon (FKM) (not available to Types 627H and 627HM)**

Orifice Size (Select One)

☐ 3/32-inch / 2,4 mm***
☐ 1/8-inch / 3,2 mm***
☐ 3/16-inch / 4,8 mm***
☐ 1/4-inch / 6,4 mm***
☐ 3/8-inch / 9,5 mm (not available to Type 627LR)***
☐ 1/2-inch / 13 mm (not available to Type 627LR)***

Outlet Pressure Range (Select One)

Types 627, 627M, 627R, and 627MR

☐ 5 to 20 psig / 0,34 to 1,4 bar, Yellow***
☐ 15 to 40 psig / 1,0 to 2,8 bar, Green***
☐ 35 to 80 psig / 2,4 to 5,5 bar, Blue***
☐ 70 to 150 psig / 4,8 to 10,3 bar, Red***

Type 627LR

☐ 15 to 40 psig / 1,0 to 2,8 bar, Green***

Types 627H and 627HM

☐ 140 to 250 psig / 9,7 to 17,2 bar, Blue***
☐ 240 to 500 psig / 16,5 to 34,5 bar, Red***

Body Position (Select One)

☐ Position 1 (standard for NPT connections)***
☐ Position 2**
☐ Position 3 (standard for flanged bodies)**
☐ Position 4**

Vent Position (Select One)

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

DVGW Approval Required (Optional)

☐ Yes*

Replacement Parts Kit (Optional)

☐ Yes, send one replacement parts kit to match this order.

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

Specification Worksheet

Application:

Specific Use _____

Line Size _____

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: _____

_____

Industrial Regulators

Emerson Process Management
Regulator Technologies, Inc.

USA - Headquarters
McKinney, Texas 75069-1872, USA
Tel: +1 800 558 5853
Outside U.S. +1 972 548 3574

Asia-Pacific
Shanghai 201206, China
Tel: +86 21 2892 9000

Europe
Bologna 40013, Italy
Tel: +39 051 419 0611

Middle East and Africa
Dubai, United Arab Emirates
Tel: +971 4811 8100

Natural Gas Technologies

Emerson Process Management
Regulator Technologies, Inc.

USA - Headquarters
McKinney, Texas 75069-1872, USA
Tel: +1 800 558 5853
Outside U.S. +1 972 548 3574

Asia-Pacific
Singapore 128461, Singapore
Tel: +65 6770 8337

Europe
Bologna 40013, Italy
Tel: +39 051 419 0611
Gallardon 28320, France
Tel: +33 2 37 33 47 00

TESCOM

Emerson Process Management
Tescom Corporation

USA - Headquarters
Elk River, Minnesota 55330-2445, USA
Tels: +1 763 241 3238
+1 800 447 1250

Europe
Selmsdorf 23923, Germany
Tel: +49 38823 31 287

Asia-Pacific
Shanghai 201206, China
Tel: +86 21 2892 9499

For further information visit www.fisherregulators.com