

627 Series Pressure Reducing Regulators

Introduction

The 627 Series direct-operated pressure reducing regulators are for low-pressure and high-pressure systems. The 627 Series can be used as farm tap or small city gate regulators, monitoring regulators, or high-pressure industrial gases. See Table 1 for a description of the types.

Body Sizes and End Connection Styles

See Table 3

Flow Coefficients

See Table 4

Features

- Internal Relief Valve Available
- Relief Operation Indicator
- Easy to Maintain
- Installation Adaptability
- Application Versatility
- Tamper-Resistant
- Wide Range of Flow Capabilities
- Tight Shutoff Capability
- NACE Configuration Available
- DVGW Approved

Maximum Inlet Pressure

2000 psig (138 bar) for NPT screwed steel, 1480 psig (102 bar) for raised-face flanged steel, or 1000 psig (69 bar) for ductile iron

Maximum Outlet (Casing) Pressure

See Table 5

Outlet Pressure Range

5 to 500 psig (0,34 to 34,5 bar) in 6 ranges. See Table 6

Internal Relief Performance

Type 627R: See Table 7

Type 627MR: Limited by field-installed control line piping

Pressure Registration

See Table 1

Temperature Capabilities

-20° to 180°F (-29° to 82°C)

Additional Technical Data

For more technical information contact your Fisher Sales Representative, refer to Bulletin 71.1:627, or order your Fisher Regulator CD using the card in the back of this handbook.



Figure 1. Type 627 Direct-Operated Pressure Reducing Regulator

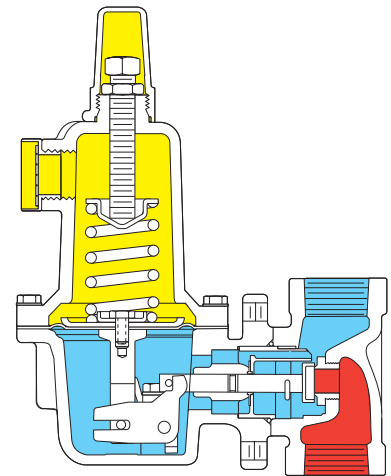


Figure 2. Type 627 Operational Schematic

Table 1. Available Configurations

TYPE NUMBER	CONFIGURATIONS
627	Type 627 with internal registration, equipped with a pitot tube for greater regulated capacities.
627R	Type 627 with internal relief, internal registration, and an open throat.
627M	Type 627 with external pressure registration.
627H	Type 627 with internal registration and a diaphragm limiter to deliver a higher outlet pressure.
627MR	Type 627M with internal relief and external registration.
627HM	Type 627M with external registration and a diaphragm limiter to deliver higher outlet pressure.
627LB	Type 627 with longer body. All other configurations are available in the LB version with NPT end connections.

Table 2. Construction Materials

BODY MATERIALS	SPRING AND DIAPHRAGM CASING	ORIFICE	DIAPHRAGM	DISK HOLDER	DISK
Ductile iron or Steel	Ductile iron, Aluminum, or Steel	Stainless steel or Aluminum	Nitrile	Aluminum or Stainless steel	Nylon or Nitrile

Table 3. Body Sizes and End Connection Styles

BODY SIZES, INCHES (DN)	END CONNECTION STYLES	
	Ductile Iron	WCB Steel
3/4 (20)	NPT screwed	NPT screwed, 300 RF, or 600 RF flanged
1 (25) or 2 (50)	NPT screwed	NPT screwed, 150 RF, 300 RF, 600 RF, or PN 16/25/40 flanged

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ORIFICE SIZE, INCHES (mm)	3/4-INCH (DN 20) BODY			1-INCH (DN 25) BODY			2-INCH (DN 50) BODY		
	Wide-Open C _g	Wide-Open C _v	C ₁	Wide-Open C _g	Wide-Open C _v	C ₁	Wide-Open C _g	Wide-Open C _v	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 (12,7)	190	4.87	39.0	190	5.29	35.9	200	5.01	39.9

MAXIMUM PRESSURE DESCRIPTION	SPRING AND DIAPHRAGM CASING STYLE	TYPE 627, PSIG (BAR)	TYPE 627R, PSIG (BAR)	TYPE 627M, PSIG (BAR)	TYPE 627MR, PSIG (BAR)	TYPE 627H AND 627HM, 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
	Die cast aluminum	250 (17,2)	250 (17,2)	250 (17,2)	Not Available	Not Available
	Steel	250 (17,2)	250 (17,2)	250 (17,2)	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)	465 (32)	465 (32)	465 (32)	Not Available
	Steel	1500 (103)	1500 (103)	1500 (103)	1500 (103)	1500 (103)
Maximum diaphragm casing overpressure (above setpoint) to prevent damage to internal parts	All styles	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 Fisher Sales Representative.

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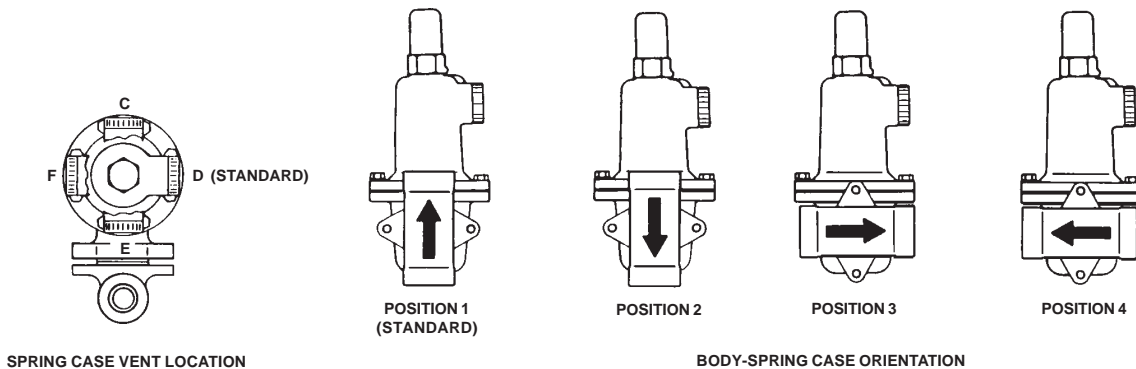


Figure 3. Spring Case and Vent Location

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Table 6. Maximum Inlet Pressures, Differential Pressures, and Outlet Pressure Ranges

TYPE NUMBER	OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR	ORIFICE SIZE, INCHES (mm)	MAXIMUM INLET PRESSURE, PSIG (BAR)	MAXIMUM DIFFERENTIAL PRESSURE, PSID (BAR)
627 and 627M ⁽³⁾	5 ⁽²⁾ to 20 psig (0,34 to 1,4 bar) 10B3076X012 Yellow	3/32 (2,4)	2000 (138) ⁽¹⁾	2000 (138) ⁽¹⁾
		1/8 (3,2)	1000 (69) ⁽¹⁾	1000 (69) ⁽¹⁾
		3/16 (4,8)	750 (51,7)	750 (51,7)
		1/4 (6,4)	500 (34,5)	500 (34,5)
		3/8 (9,5)	300 (20,7)	300 (20,7)
		1/2 (12,7)	250 (17,2)	250 (17,2)
	15 to 40 psig (1,0 to 2,8 bar) 10B3077X012 Green	3/32 (2,4)	2000 (138) ⁽¹⁾	2000 (138) ⁽¹⁾
		1/8 (3,2)	1500 (103) ⁽¹⁾	1500 (103) ⁽¹⁾
		3/16 (4,8)	1000 (69) ⁽¹⁾	1000 (69) ⁽¹⁾
		1/4 (6,4)	750 (51,7)	750 (51,7)
		3/8 (9,5)	500 (34,5)	500 (34,5)
		1/2 (12,7)	300 (20,7)	300 (20,7)
35 to 80 psig (2,4 to 5,5 bar) 10B3078X012 Blue	3/32 (2,4)	2000 (138) ⁽¹⁾	2000 (138) ⁽¹⁾	
	1/8 (3,2)	2000 (138) ⁽¹⁾	2000 (138) ⁽¹⁾	
	3/16 (4,8)	1750 (121) ⁽¹⁾	1750 (121) ⁽¹⁾	
	1/4 (6,4)	1500 (103) ⁽¹⁾	1500 (103) ⁽¹⁾	
	3/8 (9,5)	1000 (69) ⁽¹⁾	1000 (69) ⁽¹⁾	
	1/2 (12,7)	750 (51,7)	750 (51,7)	
70 to 150 psig (4,8 to 10,3 bar) 10B3079X012 Red	3/32 (2,4)	2000 (138) ⁽¹⁾	2000 (138) ⁽¹⁾	
	1/8 (3,2)	2000 (138) ⁽¹⁾	2000 (138) ⁽¹⁾	
	3/16 (4,8)	2000 (138) ⁽¹⁾	2000 (138) ⁽¹⁾	
	1/4 (6,4)	1750 (121) ⁽¹⁾	1750 (121) ⁽¹⁾	
	3/8 (9,5)	1250 (86,2) ⁽¹⁾	1250 (86,2) ⁽¹⁾	
	1/2 (12,7)	750 (51,7)	750 (51,7)	
627R and 627MR	5 ⁽²⁾ to 20 psig (0,34 to 1,4 bar) 10B3076X012 Yellow	3/32 (2,4)	2000 (138) ⁽¹⁾	2000 (138) ⁽¹⁾
		1/8 (3,2)	1000 (69) ⁽¹⁾	1000 (69) ⁽¹⁾
		3/16 (4,8)	750 (51,7)	750 (51,7)
		1/4 (6,4)	500 (34,5)	500 (34,5)
		3/8 (9,5)	300 (20,7)	300 (20,7)
		1/2 (12,7)	200 (13,8)	200 (13,8)
	15 to 40 psig (1,0 to 2,8 bar) 10B3077X012 Green	3/32 (2,4)	2000 (138) ⁽¹⁾	2000 (138) ⁽¹⁾
		1/8 (3,2)	1500 (103) ⁽¹⁾	1500 (103) ⁽¹⁾
		3/16 (4,8)	1000 (69) ⁽¹⁾	1000 (69) ⁽¹⁾
		1/4 (6,4)	750 (51,7)	750 (51,7)
		3/8 (9,5)	300 (20,7)	300 (20,7)
		1/2 (12,7)	200 (13,8)	200 (13,8)
35 to 80 psig (2,4 to 5,5 bar) 10B3078X012 Blue	3/32 (2,4)	2000 (138) ⁽¹⁾	2000 (138) ⁽¹⁾	
	1/8 (3,2)	1750 (121) ⁽¹⁾	1750 (121) ⁽¹⁾	
	3/16 (4,8)	1000 (69) ⁽¹⁾	1000 (69) ⁽¹⁾	
	1/4 (6,4)	750 (51,7)	750 (51,7)	
	3/8 (9,5)	300 (20,7)	300 (20,7)	
	1/2 (12,7)	200 (13,8)	200 (13,8)	
70 to 150 psig (4,8 to 10,3 bar) 10B3079X012 Red	3/32 (2,4)	2000 (138) ⁽¹⁾	2000 (138) ⁽¹⁾	
	1/8 (3,2)	1000 (69) ⁽¹⁾	1000 (69) ⁽¹⁾	
	3/16 (4,8)	500 (34,5)	500 (34,5)	
	1/4 (6,4)	300 (20,7)	300 (20,7)	
	3/8 (9,5)	200 (13,8)	200 (13,8)	
	1/2 (12,7)	200 (13,8)	200 (13,8)	
627H and 627MH ⁽³⁾	140 to 250 psig (9,7 to 17,2 bar) 10B3078X012 Blue	3/32 (2,4)	2000 (138) ⁽¹⁾	2000 (138) ⁽¹⁾
		1/8 (3,2)	2000 (138) ⁽¹⁾	2000 (138) ⁽¹⁾
		3/16 (4,8)	1750 (121) ⁽¹⁾	1750 (121) ⁽¹⁾
		1/4 (6,4)	1500 (103) ⁽¹⁾	1000 (69) ⁽¹⁾
		3/8 (9,5)	1000 (69) ⁽¹⁾	500 (34,5)
		1/2 (12,7)	750 (51,7)	250 (17,2)
240 to 500 psig (16,5 to 34,5 bar) 10B3079X012 Red	3/32 (2,4)	2000 (138) ⁽¹⁾	2000 (138) ⁽¹⁾	
	1/8 (3,2)	2000 (138) ⁽¹⁾	2000 (138) ⁽¹⁾	
	3/16 (4,8)	1750 (121) ⁽¹⁾	1750 (121) ⁽¹⁾	
	1/4 (6,4)	1500 (103) ⁽¹⁾	1000 (69) ⁽¹⁾	
	3/8 (9,5)	1000 (69) ⁽¹⁾	500 (34,5)	
	1/2 (12,7)	750 (51,7)	250 (17,2)	

1. For inlet pressure in excess of 1000 psig (69 bar), refer to the maximum body and disk pressure ratings in the specification table.
 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 627MH should have a 3/8-inch (9,5 mm) or larger orifice when used as a wide-open monitor.

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Table 7. Type 627R Internal Relief Performance⁽¹⁾

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR	OUTLET PRESSURE SETTING, PSIG (BAR)	MAXIMUM ALLOWABLE DOWNSTREAM SYSTEM PRESSURE, PSIG (BAR)	MAXIMUM INLET PRESSURE TO KEEP MAXIMUM ALLOWABLE DOWNSTREAM SYSTEM PRESSURE FROM BEING EXCEEDED, PSIG (BAR) ⁽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 (12,7)
5 ⁽³⁾ to 20 psig (0,34 to 1,4 bar) 10B3076X012 Yellow	10 (0,69)	60 (4,1)	1250 (86,2)	740 (51,1)	320 (22,1)	190 (13,1)	95 (6,56)	75 (5,18)
		100 (6,9)	2000 (138)	1500 (103)	620 (42,7)	390 (26,9)	180 (12,4)	130 (8,97)
		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)	
20 (1,4)	60 (4,1)	850 (58,6)	490 (33,8)	210 (14,5)	130 (9,0)	80 (5,52)	65 (4,49)	
	100 (6,9)	2000 (138)	1300 (89,6)	600 (41,4)	360 (24,8)	170 (11,7)	120 (8,28)	
	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	20 (1,4)	60 (4,1)	630 (43,4)	200 (13,8)	150 (10,3)	100 (6,9)	70 (4,83)	65 (4,49)
		100 (6,9)	2000 (138)	1200 (82,7)	550 (37,9)	330 (22,8)	160 (11,0)	120 (8,28)
		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 (110)	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 (9,66)	110 (7,59)
		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 (49,3)	330 (22,8)	200 (13,8)	120 (8,28)	108 (7,45)
125 (8,6)		2000 (138)	1300 (89,6)	560 (38,6)	340 (23,4)	180 (12,4)	140 (9,66)	
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)	
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 (9,66)
		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)	310 (21,4)
	60 (4,1)	125 (8,6)	900 (62,1)	450 (31,1)	270 (18,6)	190 (13,1)	140 (9,66)	130 (8,97)
		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)
	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	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)
		150 (10,3)	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 bar), refer to the maximum body and disk pressure ratings in the specifications table.
 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] - Shaded areas indicate maximum inlet pressures allowed during system malfunction only. Table 6 gives the maximum inlet pressure for normal regulator operation.

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Table 8. Types 627, 627M, and 627MR Capacities for 3/4-Inch (DN 20) Body Sizes⁽¹⁾

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR	OUTLET PRESSURE SETTING, PSIG (BAR)	INLET PRESSURE, PSIG (BAR)	CAPACITIES IN SCFH (m ³ /h(n)) 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 (12,7)
5 to 20 psig (0,34 to 1,4 bar) 10B3076X012 Yellow	10 (0,69)	20 (1,4)	280 (7,50)	455 (12,2)	1130 (30,3)	1790 (48,0)	3000 (80,4)	4300 (115)
		60 (4,1)	640 (17,2)	1170 (31,4)	2550 (68,3)	4240 (114)	6270 (168)	7370 (198)
		100 (6,9)	990 (26,5)	1800 (48,2)	3800 (102)	5980 (160)	7440 (199)	7900 (212)
		200 (13,8)	1850 (49,6)	3370 (90,3)	6970 (187)	7250 (194)	8200 (220)	
		500 (34,5)	4010 (107)	8090 (217)	8060 (216)	8100 (217)		
		750 (51,7)	4400 (118)	8930 (239)	8950 (240)			
	20 (1,4)	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)					
		30 (2,1)	350 (9,38)	620 (16,6)	1400 (37,5)	2490 (66,7)	4360 (117)	6290 (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)	2330 (67,8)	4350 (117)	8140 (218)	9420 (252)
		100 (6,9)	990 (26,5)	1790 (48,0)	4070 (109)	7220 (193)	13,200 (354)	15,300 (410)
		200 (13,8)	1850 (49,6)	3370 (90,3)	7630 (204)	13,500 (362)	18,000 (482)	18,500 (496)
		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 (618)	24,200 (649)		
		1000 (69,0)	8700 (233)	16,000 (429)	24,400 (654)			
	60 (4,1)	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)					
		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)
35 to 80 psig (2,4 to 5,5 bar) 10B3078X012 Blue	80 (5,5)	200 (13,8)	1850 (49,6)	3370 (90,3)	7630 (204)	13,500 (362)	21,600 (579)	27,400 (734)
		500 (34,5)	4400 (118)	8090 (217)	18,300 (490)	28,100 (753)	28,900 (775)	33,400 (895)
		750 (51,8)	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)		
	100 (6,9)	1750 (121)	15,000 (402)	25,000 (670)	34,000 (911)			
		2000 (138)	17,000 (456)	28,000 (750)				
		100 (6,9)	900 (24,1)	1600 (42,9)	3750 (101)	6490 (174)	12,200 (327)	17,300 (464)
		200 (13,8)	1850 (49,6)	3370 (90,3)	7630 (204)	13,500 (362)	25,400 (681)	29,300 (785)
		500 (34,5)	4400 (118)	8090 (217)	18,300 (490)	31,900 (855)	36,000 (965)	36,700 (984)
		750 (51,8)	6600 (177)	12,000 (322)	27,200 (729)	35,000 (938)	44,000 (1179)	46,000 (1233)
70 to 150 psig (4,8 to 10,3 bar) 10B3079X012 Red	150 (10,3)	1000 (69,0)	8700 (233)	16,000 (429)	36,100 (967)	40,000 (1072)	40,500 (1085)	47,000 (1260)
		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)			
		200 (13,8)	1850 (49,6)	3370 (90,3)	7630 (204)	12,000 (322)	21,300 (571)	25,700 (689)
	150 (10,3)	500 (34,5)	4400 (118)	8090 (217)	18,300 (490)	31,800 (852)	39,000 (1045)	39,200 (1051)
		750 (51,8)	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)	47,000 (1260)
		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)		
10B3079X012 Red	150 (10,3)	2000 (138)	17,000 (456)	28,000 (750)	71,000 (1903)			
		200 (13,8)	1760 (47,2)	3200 (85,8)	7290 (195)	12,500 (335)	21,400 (574)	30,600 (820)
		500 (34,5)	4400 (118)	8090 (217)	18,300 (490)	32,500 (871)	48,900 (1311)	59,700 (1600)
		750 (51,8)	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)	
	150 (10,3)	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)				

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 7.

Products

627 Series Pressure Reducing Regulators

Table 9. Types 627, 627M, and 627MR Capacities for 1-Inch (DN 25) Body Sizes⁽¹⁾

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR	OUTLET PRESSURE SETTING, PSIG (BAR)	INLET PRESSURE, PSIG (BAR)	CAPACITIES IN SCFH (m³/h(n)) 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 (12,7)
5 to 20 psig (0,34 to 1,4 bar) 10B3076X012 Yellow	10 (0,69)	20 (1,4)	280 (7,50)	490 (13,1)	1150 (30,8)	2050 (54,9)	3380 (90,6)	4410 (118)
		60 (4,1)	640 (17,2)	1170 (31,4)	2600 (69,7)	4710 (126)	8140 (218)	13,700 (367)
		100 (6,9)	990 (26,5)	1800 (48,2)	4070 (109)	7310 (196)	12,500 (335)	16,000 (429)
		200 (13,8)	1850 (49,6)	3370 (90,3)	7630 (204)	13,700 (367)	18,000 (482)	18,500 (496)
		500 (34,5)	4400 (118)	8090 (217)	15,700 (421)			
		750 (51,7)	5400 (145)	12,000 (322)	18,000 (482)			
	20 (1,4)	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)					
		30 (2,1)	350 (9,38)	620 (16,6)	1450 (38,9)	2580 (69,1)	4360 (117)	6290 (169)
15 to 40 psig (1,0 to 2,8 bar) 10B3077X012 Green	40 (2,8)	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)
		200 (13,8)	1850 (49,6)	3370 (90,3)	7630 (204)	13,700 (367)	26,600 (713)	39,100 (1048)
		500 (34,5)	4400 (118)	8090 (217)	18,300 (490)	32,900 (882)		
		1000 (69,0)	6600 (177)	12,000 (322)	23,600 (632)			
		1000 (69,0)	8900 (239)	16,000 (429)				
	60 (4,1)	1250 (86,2)	10,000 (268)					
		1500 (103)	10,400 (279)					
		1750 (121)	12,000 (322)					
		2000 (138)	14,000 (375)					
		60 (4,1)	610 (16,3)	1090 (29,2)	2530 (67,8)	4510 (121)	9290 (249)	9420 (252)
		100 (6,9)	990 (26,5)	1790 (48,0)	4070 (109)	7310 (196)	14,700 (394)	21,900 (587)
35 to 80 psig (2,4 to 5,5 bar) 10B3078X012 Blue	60 (4,1)	200 (13,8)	1850 (49,6)	3370 (90,3)	7630 (204)	13,700 (367)	27,100 (726)	46,400 (1244)
		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)	45,000 (1206)			
		1500 (103)	13,000 (348)	22,000 (590)	54,000 (1447)			
	80 (5,5)	1750 (121)	15,000 (402)	25,000 (670)	63,000 (1688)			
		2000 (138)	17,000 (456)	28,000 (750)				
		100 (6,9)	900 (24,1)	1600 (42,9)	3750 (101)	6650 (178)	12,200 (327)	18,600 (498)
		200 (13,8)	1850 (49,6)	3370 (90,3)	7630 (204)	13,700 (367)	28,400 (761)	44,100 (1182)
		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)
70 to 150 psig (4,8 to 10,3 bar) 10B3079X012 Red	100 (6,9)	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)				
		200 (13,8)	1850 (49,6)	3370 (90,3)	7630 (204)	12,000 (322)	21,300 (571)	34,100 (914)
	150 (10,3)	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)	120,000 (3216)
		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)		
10B3079X012 Red	150 (10,3)	2000 (138)	17,000 (456)	28,000 (750)	71,000 (1903)			
		200 (13,8)	1760 (47,2)	3200 (85,8)	7290 (195)	12,900 (346)	21,400 (574)	33,600 (900)
		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 7.

627 Series Pressure Reducing Regulators

Table 10. Type 627 Capacities for 2-Inch (DN 50) Body Sizes⁽¹⁾

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR	OUTLET PRESSURE SETTING, PSIG (BAR)	INLET PRESSURE, PSIG (BAR)	CAPACITIES IN SCFH (m³/h(n)) 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 (12,7)
5 to 20 psig (0,34 to 1,4 bar) 10B3076X012 Yellow	10 (0,69)	20 (1,4)	280 (7,50)	490 (13,1)	1150 (30,8)	1880 (50,4)	2610 (69,9)	3830 (103)
		60 (4,1)	640 (17,2)	1170 (31,4)	2600 (69,7)	4750 (127)	7250 (194)	17,800 (477)
		100 (6,9)	990 (26,5)	1790 (48,0)	4070 (109)	7310 (196)	16,200 (434)	28,700 (769)
		200 (13,8)	1850 (49,6)	3370 (90,3)	7630 (204)	13,700 (367)	22,700 (608)	24,000 (643)
		500 (34,5)	4400 (118)	8090 (217)	18,300 (490)	21,000 (563)		
		750 (51,7)	6600 (177)	12,000 (322)	27,200 (729)			
	20 (1,4)	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)					
		30 (2,1)	350 (9,38)	620 (16,6)	1450 (38,9)	2350 (63,0)	4300 (115)	6110 (164)
15 to 40 psig (1,0 to 2,8 bar) 10B3077X012 Green	40 (2,8)	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)
		200 (13,8)	1850 (49,6)	3370 (90,3)	7630 (204)	13,700 (367)	24,000 (643)	33,000 (884)
		500 (34,5)	4400 (118)	8090 (217)	18,300 (490)	32,900 (882)		
		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)			
	60 (4,1)	1250 (86,2)	11,000 (295)					
		1500 (103)	13,000 (348)					
		1750 (121)	15,000 (402)					
		2000 (138)	6300 (169)					
		60 (4,1)	610 (16,3)	1090 (29,2)	2530 (67,8)	4370 (117)	8680 (233)	13,300 (356)
		100 (6,9)	990 (26,5)	1800 (48,2)	4070 (109)	7310 (196)	16,200 (434)	25,400 (681)
35 to 80 psig (2,4 to 5,5 bar) 10B3078X012 Blue	60 (4,1)	200 (13,8)	1850 (49,6)	3370 (90,3)	7630 (204)	13,700 (367)	30,400 (815)	53,900 (1445)
		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)					
		1500 (103)	13,000 (348)					
	80 (5,5)	1750 (121)	15,000 (402)	22,000 (590)	54,000 (1447)	43,000 (1152)		
		2000 (138)	17,000 (456)	28,000 (750)	26,000 (697)			
		100 (6,9)	900 (24,1)	1630 (43,7)	3750 (101)	6400 (172)	12,800 (343)	20,400 (547)
		200 (13,8)	1850 (49,6)	3370 (90,3)	7630 (204)	13,700 (367)	30,400 (815)	53,900 (1445)
		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)
70 to 150 psig (4,8 to 10,3 bar) 10B3079X012 Red	100 (6,9)	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)			
		200 (13,8)	1850 (49,6)	3370 (90,3)	7630 (204)	13,700 (367)	22,000 (590)	33,000 (884)
	150 (10,3)	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)		
		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)	112,000 (3002)		

1. Capacity is based on 20% droop unless otherwise noted below.
 [Blank] - Blank areas indicate where maximum operating inlet pressure for a given orifice is exceeded.
 [Shaded] - Shaded areas indicate where capacities are based on 25% boost if setting is less than 12 psig (0,8 bar), 3 psig (0,2 bar) boost if setting is from 12 to 60 psig (0,2 to 4,1 bar), and 5% boost if setting is greater than 60 psig (4,1 bar).

Products

627 Series Pressure Reducing Regulators

Table 11. Types 627M and 627MR Capacities for 2-Inch (DN 50) Body Sizes⁽¹⁾

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR	OUTLET PRESSURE SETTING, PSIG (BAR)	INLET PRESSURE, PSIG (BAR)	CAPACITIES IN SCFH (m³/h(n)) 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 (12,7)
5 to 20 psig (0,34 to 1,4 bar) 10B3076X012 Yellow	10 (0,69)	20 (1,4)	280 (7,50)	490 (13,1)	1150 (30,8)	1880 (50,4)	2610 (69,9)	3830 (103)
		60 (4,1)	640 (17,2)	1170 (31,4)	2600 (69,7)	4750 (127)	7250 (194)	15,000 (402)
		100 (6,9)	990 (26,5)	1790 (48,0)	4070 (109)	7310 (196)	14,600 (391)	23,000 (616)
		200 (13,8)	1850 (49,6)	3370 (90,3)	7630 (204)	13,700 (367)	27,300 (732)	43,000 (1152)
		500 (34,5)	4400 (118)	8090 (217)	18,300 (490)	32,900 (882)		
		2000 (138)	17,000 (456)	12,000 (322)	27,200 (729)			
	20 (1,4)	30 (2,1)	350 (9,38)	620 (16,6)	1450 (38,9)	2480 (66,5)	4300 (115)	6110 (164)
		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)
		200 (13,8)	1850 (49,6)	3370 (90,3)	7630 (204)	13,700 (367)	27,300 (732)	43,000 (1152)
		500 (34,5)	4400 (118)	8090 (217)	18,300 (490)	32,900 (882)		
		2000 (138)	17,000 (456)	12,000 (322)	27,200 (729)			
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)
		100 (6,9)	990 (26,5)	1800 (48,2)	4070 (109)	7310 (196)	14,600 (391)	25,400 (681)
		200 (13,8)	1850 (49,6)	3370 (90,3)	7630 (204)	13,700 (367)	27,300 (732)	48,000 (1286)
		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)			
	60 (4,1)	100 (6,9)	970 (26,0)	1740 (46,6)	4010 (107)	7000 (188)	15,000 (402)	20,400 (547)
		200 (13,8)	1850 (49,6)	3370 (90,3)	7630 (204)	13,700 (367)	30,400 (815)	48,500 (1300)
		500 (34,5)	4400 (118)	8090 (217)	18,300 (490)	32,900 (882)	73,000 (1956)	116,000 (3109)
		750 (51,8)	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)		
35 to 80 psig (2,4 to 5,5 bar) 10B3078X012 Blue	80 (5,5)	100 (6,9)	900 (24,1)	1630 (43,7)	3750 (101)	6400 (172)	12,800 (343)	20,400 (547)
		200 (13,8)	1850 (49,6)	3370 (90,3)	7630 (204)	13,700 (367)	30,400 (815)	48,500 (1300)
		500 (34,5)	4400 (118)	8090 (217)	18,300 (490)	32,900 (882)	73,000 (1956)	116,000 (3109)
		750 (51,8)	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)		
	100 (6,9)	200 (13,8)	1850 (49,6)	3370 (90,3)	7630 (204)	13,700 (367)	22,000 (590)	33,000 (884)
		500 (34,5)	4400 (118)	8090 (217)	18,300 (490)	32,900 (882)	73,000 (1956)	116,000 (3109)
		750 (51,8)	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)		
70 to 150 psig (4,8 to 10,3 bar) 10B3079X012 Red	150 (10,3)	200 (13,8)	1760 (47,2)	3200 (85,8)	7290 (195)	13,000 (348)	24,000 (643)	38,000 (1018)
		500 (34,5)	4400 (118)	8090 (217)	18,300 (490)	32,900 (882)	73,000 (1956)	116,000 (3109)
		750 (51,8)	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)		
	150 (10,3)	200 (13,8)	17,000 (456)	28,000 (750)	71,000 (1903)	112,000 (3002)		
		500 (34,5)	4400 (118)	8090 (217)	18,300 (490)	32,900 (882)		
		750 (51,8)	6600 (177)	12,000 (322)	27,200 (729)	48,900 (1311)		
		1000 (69,0)	8700 (233)	16,000 (429)	36,100 (967)	64,800 (1737)		
		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)		

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 5

627 Series Pressure Reducing Regulators

Table 12. Types 627H and 627HM Capacities for 3/4-Inch (DN 20) Body Sizes⁽¹⁾

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR	OUTLET PRESSURE SETTING, PSIG (BAR)	INLET PRESSURE, PSIG (BAR)	CAPACITIES IN SCFH (m³/h(n)) 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 (12,7)	
140 to 250 psig (9.7 to 17.2 bar) 10B3078X012 Blue	150 (10,3)	200 (13,8)	1760 (47,2) ⁽²⁾	3200 (85,8)	7290 (195)	11,500 (308)	21,600 (579)	31,000 (831)	
		250 (17,2)	2260 (60,6) ⁽²⁾	4100 (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)						
	250 (17,2)	2160 (57,9) ⁽²⁾	3850 (103) ⁽²⁾	8400 (225)	15,000 (402)	31,000 (831)	41,000 (1099)		
	300 (20,7)	2700 (72,4) ⁽²⁾	4910 (132) ⁽²⁾	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)						
	240 to 500 psig (16,5 to 34,5 bar) 10B3079X012 Red	250 (17,2)	300 (20,7)	2500 (67,0) ⁽²⁾	4500 (121) ⁽²⁾	9900 (265)	18,500 (496)	37,000 (992)	52,000 (1394)
			400 (27,6)	3600 (96,5) ⁽²⁾	6400 (172) ⁽²⁾	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)			
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 (115) ⁽²⁾	7700 (206) ⁽²⁾	16,800 (450)	33,000 (884)	62,000 (1662)	90,000 (2412)	
		600 (41,4)	4900 (131) ⁽²⁾	8800 (236) ⁽²⁾	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.

2. Small orifices and low-pressure drops may cause the setpoint to shift ±15 psig (1,03 bar).

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

Products

627 Series Pressure Reducing Regulators

Table 13. Types 627H and 627HM Capacities for 1-Inch (DN 25) Body Sizes⁽¹⁾

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR	OUTLET PRESSURE SETTING, PSIG (BAR)	INLET PRESSURE, PSIG (BAR)	CAPACITIES IN SCFH (m³/h(n)) 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 (12,7)
140 to 250 psig (9.7 to 17.2 bar) 10B3078X012 Blue	150 (10,3)	200 (13,8)	1760 (47,2) ⁽²⁾	3200 (85,8) ⁽²⁾	7290 (195)	11,500 (308)	21,600 (579)	31,000 (831)
		250 (17,2)	2260 (60,6) ⁽²⁾	4100 (110) ⁽²⁾	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)		
	250 (17,2)	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)	71,000 (1903)			
		300 (20,7)	2500 (67,0) ⁽²⁾	4500 (121) ⁽²⁾	9900 (265)	18,500 (496)	37,000 (992)	75,000 (2010)
		400 (27,6)	3600 (96,5) ⁽²⁾	6400 (172) ⁽²⁾	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)
240 to 500 psig (16,5 to 34,5 bar) 10B3079X012 Red	250 (17,2)	300 (20,7)	2500 (67,0) ⁽²⁾	4500 (121) ⁽²⁾	9300 (249)	14,000 (375)	25,000 (670)	37,000 (992)
		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)			
	500 (34,5)	1750 (121)	15,000 (402)	25,000 (670)	63,000 (1688)			
		2000 (138)	17,000 (456)	28,000 (750)	71,000 (1903)			
		550 (37,9)	4300 (115) ⁽²⁾	7700 (206) ⁽²⁾	16,800 (450)	33,000 (884)	62,000 (1662)	90,000 (2412)
		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.
 2. Small orifices and low-pressure drops may cause the setpoint to shift ±15 psig (1,03 bar).
 [] - Blank areas indicate where maximum operating inlet pressure for a given orifice is exceeded.

Fisher Tips

26. Cutting the supply pressure to a pilot-operated regulator reduces the regulator gain or sensitivity and, thus, may improve regulator stability. (This can only be used with two path control.)



627 Series Pressure Reducing Regulators

Table 14. Types 627H and 627HM Capacities for 2-Inch (DN 50) Body Sizes⁽¹⁾

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR	OUTLET PRESSURE SETTING, PSIG (BAR)	INLET PRESSURE, PSIG (BAR)	CAPACITIES IN SCFH (m³/h(n)) 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 (12,7)
140 to 250 psig (9,7 to 17,2 bar) 10B3078X012 Blue	150 (10,3)	200 (13,8)	1760 (47,2) ⁽²⁾	3200 (85,8) ⁽²⁾	7290 (195)	13,700 (367)	24,100 (646)	31,000 (831)
		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)			
	250 (17,2)	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)	2500 (67,0) ⁽²⁾	4500 (121) ⁽²⁾	9900 (265)	18,500 (496)	37,000 (992)	75,000 (2010)
		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)	
240 to 500 psig (16,5 to 34,5 bar) 10B3079X012 Red	250 (17,2)	300 (20,7)	2500 (67,0) ⁽²⁾	4500 (121) ⁽²⁾	9300 (249)	14,000 (375)	25,000 (670)	37,000 (992)
		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)			
	300 (20,7)	1750 (121)	15,000 (402)	25,000 (670)	63,000 (1688)			
		2000 (138)	17,000 (456)	28,000 (750)	71,000 (1903)			
		350 (24,2)	2900 (77,7) ⁽²⁾	5150 (138) ⁽²⁾	11,300 (303)	18,400 (493)	31,000 (831)	45,000 (1206)
		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)		
	400 (27,6)	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)			
		450 (31,1)	3600 (96,5) ⁽²⁾	6400 (172) ⁽²⁾	14,000 (375)	25,000 (670)	47,000 (1260)	67,000 (1796)
		500 (34,5)	4400 (118) ⁽²⁾	8090 (217) ⁽²⁾	18,300 (490)	32,000 (858)	54,000 (1447)	77,000 (2064)
	500 (34,5)	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 (115) ⁽²⁾	7700 (206) ⁽²⁾	16,800 (450)	33,000 (884)	62,000 (1662)	90,000 (2412)	
	600 (41,4)	4900 (131) ⁽²⁾	8800 (236) ⁽²⁾	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)			

1. Capacity is based on 20% droop.
 2. Small orifices and low-pressure drops may cause the setpoint to shift ±15 psig (1,03 bar).
 [] - Blank areas indicate where maximum operating inlet pressure for a given orifice is exceeded.

Products

627 Series Pressure Reducing Regulators

Table 15. Type 627R Capacities for 3/4-Inch (DN 20) Body Sizes⁽¹⁾

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR	OUTLET PRESSURE SETTING, PSIG (BAR)	INLET PRESSURE, PSIG (BAR)	CAPACITIES IN SCFH (m ³ /h(n)) 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 (12,7)
5 ⁽²⁾ to 20 psig (0,34 to 1,4 bar) 10B3076X012 Yellow	10 (0,69)	20 (1,4)	280 (7,50)	450 (12,1)	1070 (28,7)	1740 (46,6)	2700 (72,4)	3800 (102)
		60 (4,1)	640 (17,2)	1170 (31,4)	2460 (65,9)	3690 (98,9)	5270 (141)	6120 (164)
		100 (6,9)	990 (26,5)	1690 (45,3)	3540 (94,9)	4790 (128)	6200 (166)	7600 (204)
		200 (13,8)	1850 (49,6)	3070 (82,3)	4200 (113)	6200 (166)	6380 (171)	7680 (206)
		500 (34,5)	4010 (107)	4240 (114)	5640 (151)	6520 (175)		
		750 (51,7)	4400 (118)	5120 (137)	6400 (172)			
	20 (1,4)	1000 (69,0)	4450 (119)	6220 (167)				
		1250 (86,2)	4540 (122)					
		1500 (103)	4880 (131)					
		1750 (121)	5230 (140)					
		2000 (138)	5900 (158)					
		30 (2,1)	350 (9,38)	590 (15,8)	1390 (37,3)	2480 (66,5)	4350 (117)	4970 (133)
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)
		100 (6,9)	990 (26,5)	1790 (48,0)	4070 (109)	6840 (183)	11,900 (319)	13,400 (359)
		200 (13,8)	1850 (49,6)	3370 (90,3)	7630 (204)	11,000 (295)	16,300 (437)	17,100 (458)
		500 (34,5)	4400 (118)	8090 (217)	14,500 (389)	14,800 (397)		
		750 (51,8)	6600 (177)	10,800 (289)	14,800 (397)	14,900 (399)		
		1000 (69,0)	8700 (233)	13,100 (351)	16,300 (437)			
	60 (4,1)	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)					
		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)
35 to 80 psig (2,4 to 5,5 bar) 10B3078X012 Blue	80 (5,5)	200 (13,8)	1850 (49,6)	3370 (90,3)	7630 (204)	12,400 (332)	18,400 (493)	21,200 (568)
		500 (34,5)	4400 (118)	8090 (217)	18,300 (490)	20,000 (536)		
		750 (51,8)	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)				
	100 (6,9)	1750 (121)	15,000 (402)	20,000 (536)				
		2000 (138)	17,000 (456)					
		100 (6,9)	900 (24,1)	1630 (43,7)	3570 (95,7)	6490 (174)	12,000 (322)	17,200 (461)
		200 (13,8)	1850 (49,6)	3370 (90,3)	7630 (204)	13,700 (367)	23,000 (616)	29,000 (777)
		500 (34,5)	4400 (118)	8090 (217)	18,300 (490)	29,000 (777)		
		750 (51,8)	6600 (177)	12,000 (322)	23,100 (619)	30,900 (828)		
70 to 150 psig (4,8 to 10,3 bar) 10B3079X012 Red	150 (10,3)	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)					
		200 (13,8)	1760 (47,2)	3200 (85,8)	7020 (188)	12,500 (335)	21,400 (574)	30,600 (820)
	150 (10,3)	500 (34,5)	4400 (118)	8090 (217)	18,300 (490)			
		750 (51,8)	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. Capacities are based on 20% droop.

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.

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



627 Series Pressure Reducing Regulators

Table 16. Type 627R Capacities for 1 and 2-Inch (DN 25 and 50) Body Sizes⁽¹⁾

OUTLET PRESSURE RANGE, SPRING PART NUMBER, AND COLOR	OUTLET PRESSURE SETTING, PSIG (BAR)	INLET PRESSURE, PSIG (BAR)	CAPACITIES IN SCFH (m ³ /h(n)) 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 (12,7)
5 to 20 psig ⁽²⁾ (0,34 to 1,4 bar) 10B3076X012 Yellow	10 (0,69)	15 (1,0)	210 (5,63)	390 (10,5)	840 (22,5)	1480 (39,7)	2300 (61,6)	2930 (78,5)
		20 (1,4)	280 (7,50)	500 (13,4)	1100 (29,5)	1880 (50,4)	2700 (72,4)	3830 (103)
		60 (4,1)	640 (17,2)	1170 (31,4)	2460 (65,9)	3690 (98,9)	5650 (151)	6900 (185)
		100 (6,9)	990 (26,5)	1800 (48,2)	3540 (94,9)	4790 (128)	7520 (202)	8150 (218)
		200 (13,8)	1850 (49,6)	3370 (90,3)	5620 (151)	6360 (170)	11,000 (295)	12,900 (346)
		500 (34,5)	4400 (118)	6720 (180)	8570 (230)	11,600 (311)		
	20 (1,4)	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)					
15 to 40 psig (1,0 to 2,8 bar) 10B3077X012 Green	40 (2,8)	30 (2,1)	350 (9,38)	600 (16,1)	1390 (37,3)	2580 (69,1)	4350 (117)	6290 (169)
		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)
		200 (13,8)	1850 (49,6)	3370 (90,3)	7050 (189)	10,500 (281)	14,000 (375)	14,400 (386)
		500 (34,5)	4400 (118)	7830 (210)	11,800 (316)	13,300 (356)		
		750 (51,7)	6600 (177)	9000 (241)	12,000 (322)			
35 to 80 psig (2,4 to 5,5 bar) 10B3078X012 Blue	60 (4,1)	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)					
		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)	4070 (109)	7000 (188)	12,500 (335)	16,700 (448)		
200 (13,8)	1850 (49,6)	3370 (90,3)	7630 (204)	13,700 (367)	20,900 (560)	27,700 (742)		
500 (34,5)	4400 (118)	8090 (217)	18,300 (490)	28,500 (764)				
70 to 150 psig (4,8 to 10,3 bar) 10B3079X012 Red	100 (6,9)	750 (51,8)	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)					
10B3079X012 Red	150 (10,3)	100 (6,9)	900 (24,1)	1630 (43,7)	3570 (95,7)	6650 (178)	12,000 (322)	17,400 (466)
		200 (13,8)	1850 (49,6)	3370 (90,3)	7630 (204)	13,700 (367)	25,100 (673)	31,800 (852)
		500 (34,5)	4400 (118)	8090 (217)	18,300 (490)	30,300 (812)		
		750 (51,8)	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)				
10B3079X012 Red	150 (10,3)	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)
		500 (34,5)	4400 (118)	8090 (217)	18,300 (490)			
		750 (51,8)	6600 (177)	12,000 (322)				
		1000 (69,0)	8700 (233)	16,000 (429)				
		1250 (86,2)	11,000 (295)					
10B3079X012 Red	150 (10,3)	200 (13,8)	1760 (47,2)	3200 (85,8)	7020 (188)	12,900 (346)	21,400 (574)	33,300 (892)
		500 (34,5)	4400 (118)	8090 (217)	18,300 (490)			
		750 (51,8)	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. Capacities are based on 20% droop.

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.

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

Products

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Table 17. NPT Screwed Dimensions for Types 627, 627R, 627M, and 627MR

TYPE	BODY SIZE, INCHES (DN)	DIMENSIONS, INCHES (mm)					
		A	B	D		E	G
				Ductile Iron	Steel		
627	3/4 (20) and 1 (25)	4.06 (103)	1.94 (49)	6.50 (165)	6.75 (172)	9.56 (243)	1.00 (25)
	2 (50)	5.00 (127)	2.50 (64)	6.88 (175)	7.12 (181)	10.12 (257)	1.69 (43)
627LB	3/4 (20) and 1 (25)	7.38 (187)	3.69 (94)	6.50 (165)	6.75 (172)	9.56 (243)	1.00 (25)
	2 (50)	7.88 (200)	3.94 (100)	6.88 (175)	7.12 (181)	10.12 (257)	1.69 (43)

Table 18. NPT Screwed Dimensions for Types 627H and 627HM

TYPE	BODY SIZE, INCHES (DN)	DIMENSIONS, INCHES (mm)				
		A	B	D	E	G
627	3/4 (20) and 1 (25)	4.06 (103)	1.94 (49)	6.75 (172)	9.56 (243)	1.00 (25)
	2 (50)	5.00 (127)	2.50 (64)	7.12 (181)	10.44 (265)	1.69 (43)
627LB	3/4 (20) and 1 (25)	7.38 (187)	3.69 (94)	6.75 (172)	9.56 (243)	1.00 (25)
	2 (50)	7.88 (200)	3.94 (100)	7.12 (181)	10.44 (265)	1.69 (43)

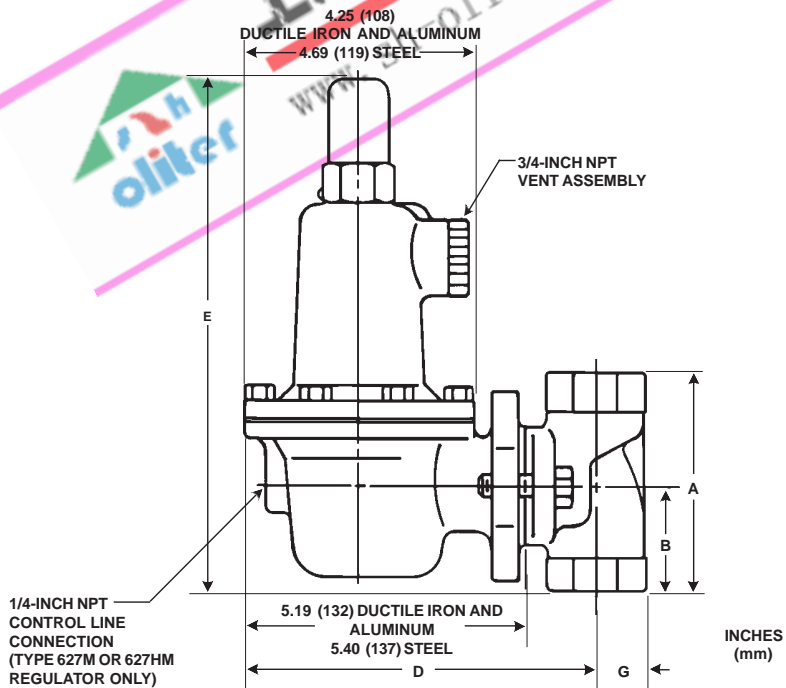


Figure 4. NPT Screwed Dimensions

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627 Series Pressure Reducing Regulators

Table 19. Types 627, 627R, 627M, and 627MR Flanged Dimensions									
BODY SIZE, INCHES (DN)	DIMENSIONS, INCHES (mm)								
	A		B		D		E		G
	Class 300	Class 600	Class 300	Class 600	Ductile Iron	Steel	Class 300	Class 600	
1 (25)	7.75 (197)	8.25 (210)	3.88 (99)	4.12 (105)	6.50 (165)	6.75 (172)	11.50 (292)	11.75 (298)	2.44 (62)
2 (50)	10.50 (267)	11.25 (286)	5.25 (134)	5.62 (143)	6.88 (175)	7.12 (181)	12.88 (327)	13.25 (337)	3.25 (83)

Table 20. Types 627H and 627HM Flanged Dimensions								
BODY SIZE, INCHES (DN)	DIMENSIONS, INCHES (mm)							
	A		B		D	E		G
	Class 300	Class 600	Class 300	Class 600		Class 300	Class 600	
1 (25)	7.75 (197)	8.25 (210)	3.88 (99)	4.12 (105)	6.75 (172)	11.82 (300)	12.06 (306)	2.44 (62)
2 (50)	10.50 (267)	11.25 (286)	5.25 (134)	5.62 (143)	7.12 (181)	13.19 (335)	13.56 (344)	3.25 (83)

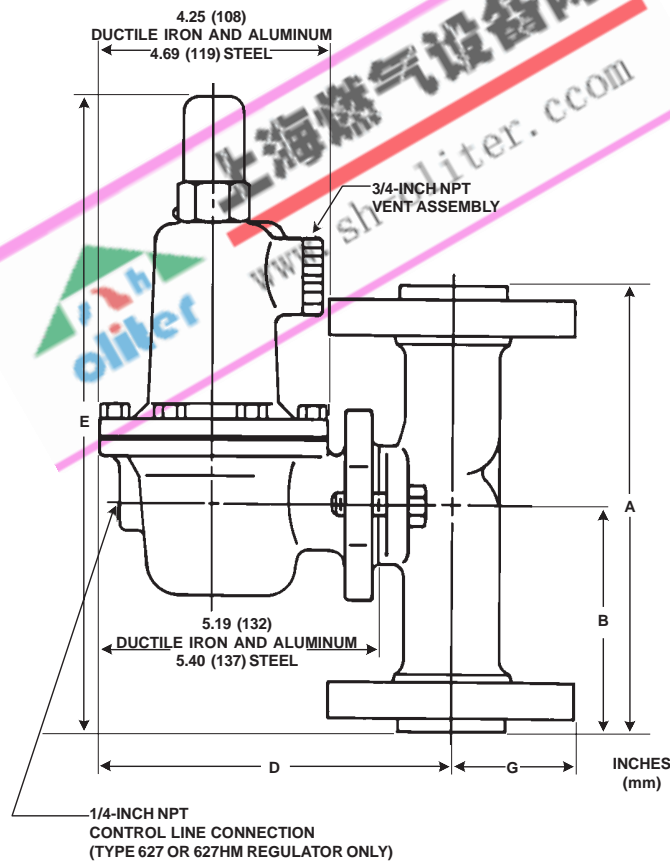


Figure 5. Flanged Dimensions