

R627 High Flow Gas Regulator with Internal Relief



The R627 Relieving Regulator has an internal relief valve that provides protection against over pressurization. As output pressure builds up above the start-to-discharge point the relief seat disengages from the diaphragm and the excess pressure is relieved through the bonnet vent port. As a result, the output pressure reduces and returns to the initial setpoint. The relief seat then reseats against the diaphragm. The action of the R627 internal relief valve in many cases eliminates the need for an external relief valve. The R627 is available in spring ranges from 5-20 PSIG up to 70-150 PSIG.

The R627 contains a relief indicator that is attached to the R627 vent assembly. The indicator pops off the vent when the relief valve opens and serves as a visual indicator that the relief valve has operated.



Applications

- Farm Tap
- Gas Gathering
- City Gates
- District Gates

Materials of Construction

Body, Bonnet, Diaphragm Case	
Options	Steel Body, Bonnet & Diaphragm Case
	Cast Ductile Iron Body / Aluminum Bonnet & Diaphragm Case
	Steel Body / Aluminum Bonnet & Diaphragm Case (NACE only)
	Steel Casing / LCC Body
	Aluminum Casing / LCC Body
	CF8M Stainless Steel Body, Bonnet & Diaphragm Case
Diaphragm	
Option	Nitrile (low pressure)
Seat	
Options	Nitrile
	Nylon
	Fluorocarbon
Orifice	

Specifications

Maximum Inlet Body Pressure		
Nylon Seat	2000 PSIG	Steel
	1000 PSIG	Ductile Iron
	1485 PSIG	Flanged Steel
Nitrile Seat	1000 PSIG	All Units
Fluorocarbon Seat	300 PSIG	All Units
Outlet		
	5–150 PSIG	
Body Sizes		
	3/4 NPT	
	1 NPT	
	2 NPT	
Orifice Sizes		
	3/32"	
	1/8"	
	3/16"	
	1/4"	
	3/8"	
	1/2"	
Output		
	Outlet Range	Flow Range*
	5–20 PSIG	300–43,000
	15–40 PSIG	1,000–71,000
	35–80 PSIG	1,200–142,000
	10–95 PSIG	1,000–150,000
	70–150 PSIG	2,500–172,000
	* (SCFH of 0.6 S.G. Natural Gas)	
Temperature Range		
	-20° to 180°F	(-29° to 82°C)
Weight Approximate		
1"	5.3 lbs	2.39 kg
2"	8.8 lbs	3.96 kg

Maximum Bonnet and Diaphragm Casing Pressure	Spring & Diaphragm Casing Style	R627		R627M	
		PSIG	BAR	PSIG	BAR
Maximum pressure to spring and diaphragm casing to prevent leak to atmosphere (internal parts damage may occur).	Die Cast Aluminum	250	17.2	250	250
	Steel / SS	250	17.2	250	17.2
Maximum pressure to spring and diaphragm casings to prevent burst of casings during abnormal operation (leak to atmosphere and internal parts may occur).	Die Cast Aluminum	375	25.9	375	375
	Steel / SS	1200	82.7	1200	82.7
Maximum diaphragm casing overpressure to prevent damage to internal parts.	All	120	8.3	120	8.3

R627 Regulator Rebuild Kits

	Kit Includes	Part Number
R627 Nitrile	Nitrile diaphragms (2), Nitrile valve disk, O-rings, back-up rings, and retaining pin	971-R62-700
R627 Nylon	Nitrile diaphragms (2), Nylon valve disk, O-rings, back-up rings, and retaining pin.	971-R62-701

	Kit Includes	Part Number
R627 Nitrile NACE	Nitrile diaphragms (2), SS Nitrile valve disk, O-rings, back-up rings, and retaining pin	971-R62-7N0
R627 Nylon NACE	Nitrile diaphragms (2), SS Nylon valve disk, O-rings, back-up rings, and retaining pin	971-R62-7N1

R627 Part Matrix

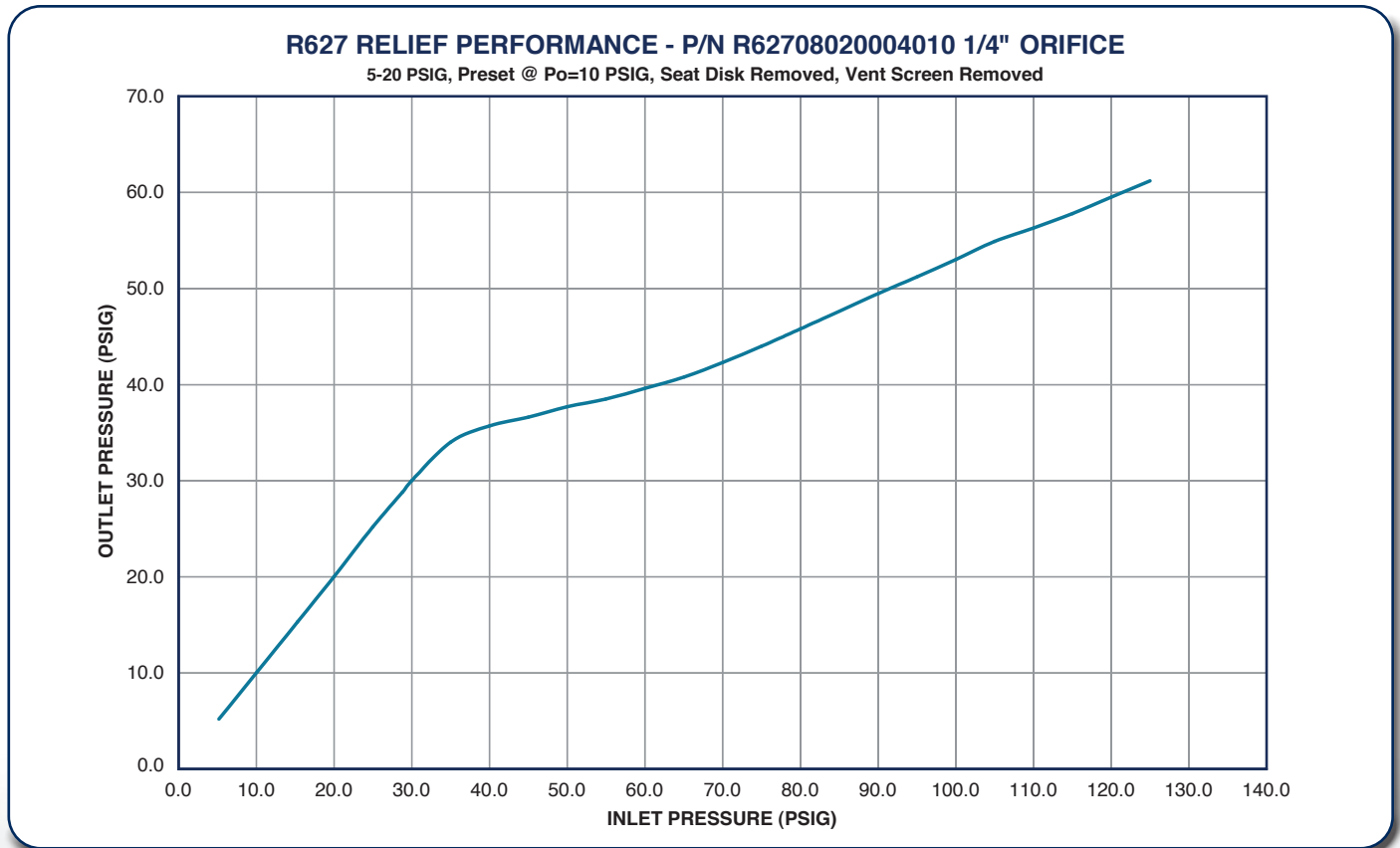
R627	1	
	↑	Port Size
06		3/4"
08		1"
16		2"
		Spring Range
		PSIG BAR
020		5 - 20 0.34 - 1.4
040		15 - 40 1 - 2.8
080		35 - 80 2.4 - 5.5
095		10 - 95 0.7 - 6.6
150		70 - 150 4.8 - 10.3
		NOTE: Nitrile or FKM is required for 5-20, 15-40 and 10-95 PSIG. Nylon is recommended only up to 1/8" orifice for these pressure ranges.
		Special Adders
0		None
2		Monitor
A		150 #RF*
B		300 #RF*
C		600 #RF*
D		Socket Weld*
E		900 #RTJ*
W		150 #RF & Monitor*
X		300 #RF & Monitor*
Y		600 #RF & Monitor*
Z		Socket Weld & Monitor*
		*Steel, LCC Steel or Stainless Steel Bodies Only
		Versions
0		Standard
N		NACE
F		NACE & Fluorocarbon
T		Stainless Trim
		Orifice
0		3/32"
2		1/8"
3		3/16"
4		1/4"
6		3/8"
8		1/2"
		Seat Material
0		Nitrile ¹
1		Nylon ^{2,3}
2		Fluorocarbon
		1
		Case / Body
0		Aluminum / Iron
1		Steel / Steel
2		Aluminum / Steel
6		Aluminum / LCC Steel
7		Steel / LCC Steel
8		Steel / Iron
9		Stainless / Stainless

1: Nitrile or FKM is recommended for 5-20, 15-40 and 10-95 PSIG. Nylon is recommended for pressures above 150 PSIG.

2: Nylon is recommended for the following condition(s): If Inlet Pressure is \geq 500 PSIG, If Outlet Pressure is \geq 150 PSIG, If Differential Pressure is \geq 150 PSIG

3: Nylon is NOT recommended for the following condition(s): If Outlet Pressure is \leq 15 PSIG

R627 Relief Performance - 1/4" Orifice



R627 Internal Relief Performance¹

Outlet Pressure Spring Range	Outlet Pressure Setting		Maximum Allowable Down-stream Pressure		Maximum Inlet Pressure to Keep Maximum Allowable Downstream Pressure from Being Exceeded ²					
					R627					
					Port Diameter, inches					
PSIG	BAR	PSIG	BAR	3/32	1/8	3/16	1/4	3/8	1/2	
5 to 20 PSIG ³ (.03 to 1.4 BAR)	10	0.7	60	4.1	1250	740	320	190	95	75
			100	6.9	2000	1500	620	390	180	130
			125	8.6	2000	1900	830	480	220	160
			175	12.1	2000	2000	1100	670	320	220
			200	13.8	2000	2000	1300	770	360	260
			250	17.2	2000	2000	1600	960	450	320
	15	1.0	60	4.1	1000	620	260	170	90	70
			100	6.9	2000	1400	610	370	170	130
			125	8.6	2000	1900	810	480	220	160
			175	12.1	2000	2000	1100	670	320	220
			200	13.8	2000	2000	1300	770	360	260
			250	17.2	2000	2000	1600	960	450	320
	20	1.4	60	4.1	850	490	210	130	80	65
			100	6.9	2000	1300	600	360	170	120
			125	8.6	2000	1800	800	480	220	160
			175	12.1	2000	2000	1100	670	320	220
200			13.8	2000	2000	1300	770	360	260	
250			17.2	2000	2000	1600	960	450	320	

Outlet Pressure Spring Range	Outlet Pressure Setting		Maximum Allowable Down-stream Pressure		Maximum Inlet Pressure to Keep Maximum Allowable Downstream Pressure from Being Exceeded ²					
					R627					
					Port Diameter, inches					
PSIG	BAR	PSIG	BAR	3/32	1/8	3/16	1/4	3/8	1/2	
15 to 40 PSIG (1.0 to 2.8 BAR)	15	1.0	60	4.1	1000	380	210	130	80	65
			100	6.9	2000	1300	590	350	170	120
			125	8.6	2000	1800	800	470	220	160
			175	12.1	2000	2000	1100	640	320	220
			200	13.8	2000	2000	1300	780	370	260
			250	17.2	2000	2000	1600	960	450	320
	20	1.4	60	4.1	630	200	150	100	70	65
			100	6.9	2000	1200	550	330	160	120
			125	8.6	2000	1700	760	450	210	160
			175	12.1	2000	2000	1100	630	320	220
			200	13.8	2000	2000	1300	770	360	260
			250	17.2	2000	2000	1600	960	450	320
	30	2.1	100	6.9	2000	950	450	260	140	110
			125	8.6	2000	1500	670	400	190	150
			175	12.1	2000	2000	1000	610	300	220
			200	13.8	2000	2000	1200	760	360	260
			250	17.2	2000	2000	1600	970	450	320
			100	6.9	1500	700	330	200	120	108
40	2.8	125	8.62	2000	1300	560	340	180	140	
		175	12.1	2000	1800	1000	550	290	220	
		200	13.8	2000	2000	1200	730	350	250	
		250	17.2	2000	2000	1600	970	460	320	

- The internal relief performance values are obtained by removing the disk assembly.
- For inlet pressure in excess of 1000 PSIG (69.0 BAR) refer to the maximum body and disk pressure ratings in the specifications section.
- For pressure settings under 10 PSIG (0.69 BAR) inlet pressure should be limited to approximately 100 PSIG (6.90 BAR) so the set point adjustment can be obtained.
- Shaded areas indicate maximum inlet pressures allowed during system failure only.

R627 Internal Relief Performance¹

Outlet Pressure Spring Range	Outlet Pressure Setting		Maximum Allowable Downstream Pressure		Maximum Inlet Pressure to Keep Maximum Allowable Downstream Pressure from Being Exceeded ²					
					R627					
					Port Diameter, inches					
PSIG	BAR	PSIG	BAR	3/32	1/8	3/16	1/4	3/8	1/2	
35 to 80 PSIG (2.4 to 5.5 BAR)	40	2.8	125	8.6	2000	1100	500	300	170	140
			150	10.3	2000	1600	750	440	230	180
			175	12.1	2000	2000	980	580	290	220
			200	13.8	2000	2000	1200	720	340	250
			250	17.2	2000	2000	1600	940	450	320
	50	3.4	125	8.6	1400	820	400	230	150	140
			150	10.3	2000	1400	650	370	210	170
			175	12.1	2000	1900	700	530	270	210
			200	13.8	2000	2000	1100	670	330	240
			250	17.2	2000	2000	1500	920	430	320
	60	4.1	125	8.6	900	450	270	190	140	130
			150	10.3	1700	1100	540	300	190	160
			175	12.1	2000	1700	780	470	250	200
			200	13.8	2000	2000	1000	610	310	230
			250	17.2	2000	2000	1400	880	420	310
	70	4.8	150	10.3	1200	850	430	250	170	160
			175	12.1	2000	1400	670	400	230	190
			200	13.8	2000	2000	920	550	280	230
			250	17.2	2000	2000	1300	830	400	310
	80	5.5	150	10.3	800	500	300	200	160	150
			175	12.1	1500	1200	550	330	210	190
			200	13.8	2000	1700	800	480	270	220
			250	17.2	2000	2000	1200	770	390	300
	70 to 150 PSIG (4.8 to 10.3 BAR)	70	4.8	175	12.1	1900	600	400	260	200
200				13.8	2000	1200	630	380	250	210
250				17.2	2000	2000	1100	680	360	290
80		5.5	175	12.1	1400	250	240	200	190	175
			200	13.8	2000	960	250	330	240	210
			250	17.2	2000	2000	1000	620	350	280
100		6.9	200	13.8	1500	250	240	230	210	210
			250	17.2	2000	1600	770	520	320	270
125		8.6	250	17.2	2000	1000	500	390	290	260
150		10.3	250	17.2	1200	260	260	260	260	260

1. The internal relief performance values are obtained by removing the disk assembly.
2. For inlet pressure 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 (6.90 BAR) so the set point adjustment can be obtained.
4. - Shaded areas indicate maximum inlet pressures allowed during system failure only.

R627 Capacities for 3/4-inch Body Size¹

Outlet Pressure Spring Range	Outlet Pressure Setting		Inlet Pressure		Capacities in SCFH (Nm ³ /h) of 0.6 Specific Gravity Natural Gas 3/4"						
					Body Size						
					Orifice Size, Inches						
PSIG	BAR	PSIG	BAR	3/32	1/8	3/16	1/4	3/8	1/2		
5 to 20 PSIG ² (.03 to 1.4 BAR)	5	0.3	10	0.7	170	320	710	1050	1500	1850	
			15	1.0	240	330	810	1290	2100	2850	
			20	1.4	290	460	1090	1750	2750	3850	
			30	2.1	380	610	1470	2490	3600	4800	
			60	4.1	640	1170	2460	3690	5270	6120	
			75	5.2	770	1410	2880	4150	5760	6900	
			100	6.9	990	1690	3540	4790	6200	7600	
			15	1.0	210	320	800	1290	2100	2820	
			20	1.4	280	450	1070	1740	2700	3800	
			30	2.1	380	610	1470	2430	3550	4780	
			60	4.1	640	1170	2460	3690	5270	6120	
			75	5.2	770	1410	2880	4150	5760	6900	
	100	6.9	990	1690	3540	4790	6200	7600			
	150	10.3	1420	2430	4000	5680	6250	7630			
	200	13.8	1850	3070	4200	6200	6380	7680			
	300	20.7	2700	3970	4270	6250	6500				
	500	34.5	4010	4240	5640	6520					
	750	51.7	4400	5120	6400						
	1000	69.0	4450	6220							
	1250	86.2	4540								
	1500	103	4880								
	1750	121	5230								
	2000	138	5900								
	20	1.4	30	2.1	350	590	1390	2480	4350	4970	
			50	3.5	550	980	2240	4000	7450	8000	
			60	4.1	640	1170	2610	4680	7800	8900	
			100	6.9	990	1800	3980	6700	9750	10400	
			150	10.3	1420	2580	5600	8790	10000	10800	
			200	13.8	1850	3370	7050	9000	10200	10800	
			300	20.7	2700	4910	7300	9500	10500		
			500	34.5	4400	5200	7400	9760			
			750	51.7	6600	5360	8870				
			1000	69.0	7300	6500					
			1250	86.2	7500						
			1500	130	7800						
	1750	121	8400								
	2000	138	8600								
	15 to 40 PSIG (1.0 to 2.8 BAR)	40	2.8	60	4.1	610	1090	2270	4230	8100	9100
				75	5.2	760	1370	3080	5330	10300	11600
				100	6.9	990	1790	4070	6840	11900	13400
				150	10.3	1420	2580	5850	9320	13500	13800
				200	13.8	1850	3370	7630	11000	16300	17100
				300	20.7	2700	4910	11200	14700	17800	
				500	34.5	4400	8090	14500	14800		
				750	51.7	6600	10800	14800	14900		
				1000	69.0	8700	13100	16300			
				1250	86.2	11000	13800				
				1500	130	12000	14000				
1750				121	13000						
2000	138	14000									
35 to 80 PSIG (2.4 to 5.5 BAR)	60	4.1	75	5.2	700	1230	2760	4700	8170	12600	
			100	6.9	970	1740	3910	6690	11900	14400	
			150	10.3	1420	2580	5850	9740	15700	18700	
			200	13.8	1850	3370	7630	12400	18400	21200	
			300	20.7	2700	4910	11200	17700	20200		
			500	34.5	4400	8090	18300	20000			
			750	51.7	6600	12000	18900	21400			
			1000	69.0	8700	16000	19000				
			1250	86.2	11000	18700					
			1500	130	13000	19000					
			1750	121	15000	20000					
			2000	138	17000						

Table Continued

R627 Capacities for 3/4-inch Body Size¹

Outlet Pressure Spring Range	Outlet Pressure Setting		Inlet Pressure		Capacities in SCFH (Nm ³ /h) of 0.6 Specific Gravity Natural Gas 3/4"					
					Body Size					
					Orifice Size, Inches					
PSIG	BAR	PSIG	BAR	3/32	1/8	3/16	1/4	3/8	1/2	
35 to 80 PSIG (2.4 to 5.5 BAR)	80	5.5	100	6.90	900	1630	3570	6490	12000	17200
			150	10.3	1410	2580	5780	10500	18900	25000
			200	13.8	1850	3370	7630	13700	23000	29000
			300	20.7	2700	4910	11200	20100	26000	
			500	34.5	4400	8090	18300	29000		
			750	51.7	6600	12000	23100	30900		
			1000	69.0	8700	16000	27400			
			1250	86.2	11000	19000				
			1500	130	13000	22000				
			1750	121	15000	25000				
			2000	138	17000					
			70 to 150 PSIG (4.8 to 10.3 BAR)	100	6.9	150	10.3	1170	2510	5540
200	13.8	1850				3370	7630	12000	20100	25700
300	20.7	2700				4910	11200	18200		
500	34.5	4400				8090	18300			
750	51.7	6600				12000				
1000	69.0	8700				16000				
1250	86.2	11000								
1500	130	13000								
1750	121	15000								
2000	138	17000								
125	8.6	200		13.8	1250	2330	5090	9130	15700	20800
300		20.7		2700	4910	11200	19700			
500		34.5	4400	8090	18300					
750		51.7	6600	12000						
1000		69.0	8700	16000						
1250		86.2	11000							
1500	130	13000								
1750	121	15000								
2000	138	17000								
150	10.3	200	13.8	1760	3200	7020	12500	21400	30600	
300		20.7	2700	4910	11200	17200				
500		34.5	4400	8090	18300					
750		51.7	6600	12000						
1000		69.0	8700	16000						
1250		86.2	11000							
1500	130	13000								
1750	121	15000								
2000	138	17000								

1. Capacity is based on 20% droop unless otherwise noted below.
2. For pressure setting under 10 PSIG (06.9 BAR) inlet pressure should be limited to approximately 100 PSIG (6.90 BAR) so that setpoint adjustment can be obtained.
3. [] - Blank areas indicate where maximum operating inlet pressure for a given orifice is exceeded.

R627 Capacities for 1 and 2 Inch Body Sizes¹

Outlet Pressure Spring Range	Outlet Pressure Setting		Inlet Pressure		Capacities in SCFH (Nm ³ /h) of 0.6 Specific Gravity Natural Gas 1 & 2"					
					Body Size					
					Orifice Size, Inches					
PSIG	BAR	PSIG	BAR	3/32	1/8	3/16	1/4	3/8	1/2	
5 to 20 PSIG ² (.03 to 1.4 BAR)	5	0.3	10	0.7	170	330	710	1080	2000	2150
			15	1.0	240	390	890	1500	2350	3000
			20	1.4	290	500	1160	1900	2750	3900
			30	2.0	380	690	1500	2500	3600	4900
			60	4.1	640	1170	2460	3690	5650	6900
			75	5.2	770	1410	2880	4150	6450	7490
			100	6.9	990	1800	3540	5790	7520	8150
			15	1.0	210	390	840	1480	2300	2930
			20	1.4	280	500	1100	1880	2700	3830
			30	2.0	380	690	1500	2460	3550	4840
			60	4.1	640	1170	2460	3690	5650	6900
			75	5.2	770	1410	2880	4150	6450	7490
	100	6.9	990	1800	3540	4790	7520	8150		
	150	10.3	1420	2580	4660	5680	9980	10800		
	200	13.8	1850	3370	5620	6360	11000	12900		
	300	20.7	2700	4880	6890	7780	13600			
	500	34.5	4400	6720	8570	11600				
	750	51.7	5400	8850	9000					
	1000	69.0	5800	9500						
	1250	86.2	6300							
	1500	103	6600							
	1750	121	6800							
	2000	138	7600							
	20	1.4	30	2.07	350	600	1390	2580	4350	6290
50	3.45		550	1000	2250	4090	7600	8000		
60	4.14		640	1170	2630	4750	7800	10600		
100	6.90		990	1800	4070	7310	10800	13400		
150	10.3		1420	2580	5720	10300	13500	14000		
200	13.8		1850	3370	7050	10500	14000	14000		
300	20.7		2700	4910	9250	10800	14900			
500	34.5		4400	7830	11800	13000				
750	51.7		6600	9000	12000					
1000	69.0		8700	9660						
1250	86.2		10000							
1500	103		10400							
1750	121	12000								
2000	138	14000								
15 to 40 PSIG (1.0 to 2.8 BAR)	40	2.8	60	4.1	610	1090	2430	4510	9200	9400
75			5.2	760	1370	3080	5640	10800	16300	
100			6.9	990	1790	4070	7310	13500	17600	
150			10.3	1420	2580	5850	10500	18000	22200	
200			13.8	1850	3370	7630	11000	21400	24600	
300			20.7	2700	4910	11200	14900	24400		
500			34.5	4400	8090	16300	21800			
750			51.7	6600	12000	20200	23600			
1000			69.0	8700	16000	23200				
1250			86.2	11000	19000					
1500			103	13000	21000					
1750			121	15000						
2000	138	17000								
35 to 80 PSIG (2.4 to 5.5 BAR)	60	4.1	75	5.2	700	1230	2760	4860	8600	12800
100			6.9	970	1740	3910	7000	12500	16700	
150			10.3	1420	2580	5850	10500	16800	2300	
200			13.8	1850	3370	7630	13700	20900	27700	
300			20.7	2700	4910	11200	20100	28100		
500			34.5	4400	8090	18300	28500			
750			51.7	6600	12000	22800	29500			
1000			69.0	8700	16000	26800				
1250			86.2	11000	19000					
1500			103	13000	22000					
1750			121	15000	25000					
2000			138	17000						

Table Continued

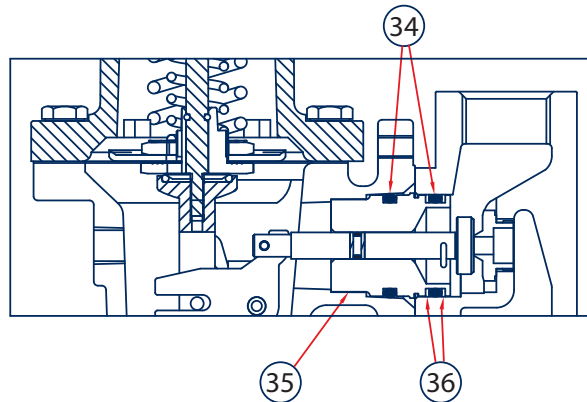
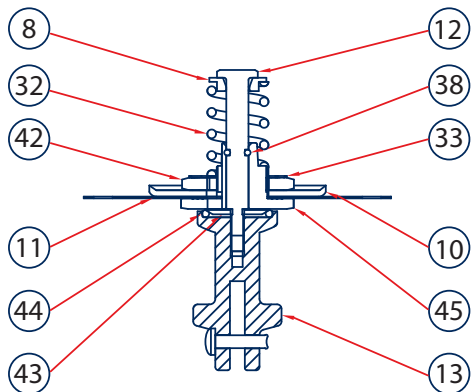
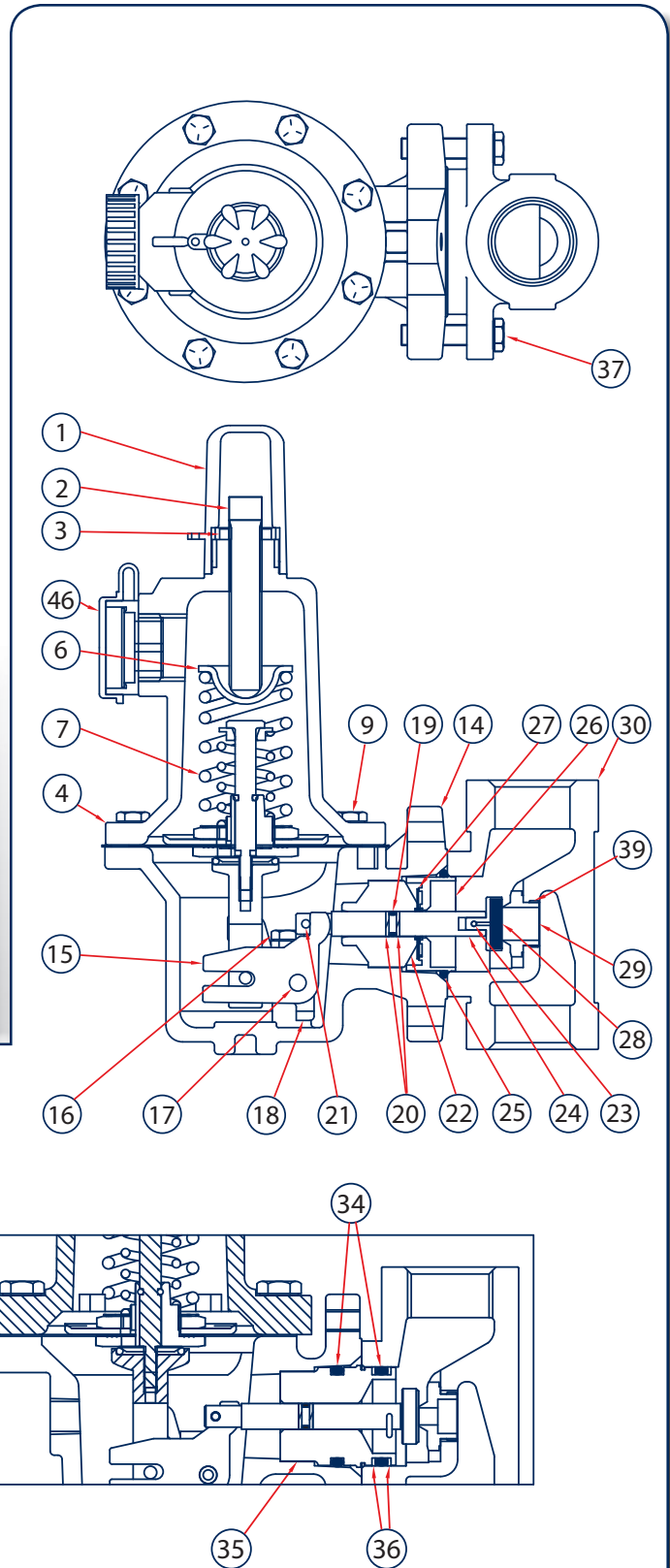
- Capacity is based on 20% droop unless otherwise noted below.
- For pressure setting under 10 PSIG (06.9 BAR) inlet pressure should be limited to approximately 100 PSIF (6.90 BAR) so that setpoint adjustment can be obtained.
- [] - Blank areas indicate where maximum operating inlet pressure for a given orifice is exceeded.

R627 Capacities for 1 and 2 Inch Body Sizes¹

Outlet Pressure Spring Range	Outlet Pressure Setting		Inlet Pressure		Capacities in SCFH (Nm ³ /h) of 0.6 Specific Gravity Natural Gas 1 & 2" Body Size					
					Orifice Size, Inches					
					3/32	1/8	3/16	1/4	3/8	1/2
35 to 80 PSIG (2.4 to 5.5 BAR)	80	5.5	100	6.9	900	1630	3570	6650	12000	17400
			150	10.3	1410	2580	5750	10500	20100	26000
			200	13.8	1850	3370	7630	13700	25100	31800
			300	20.7	2700	4910	11200	20100	32600	
			500	34.5	4400	8090	18300	30300		
			750	51.7	6600	12000	27200	37400		
			1000	69.0	8700	16000	33300			
			1250	86.2	11000	19000				
			1500	103	13000	22000				
			1750	121	15000	25000				
2000	138	17000								
70 to 100 PSIG (4.8 to 6.9 BAR)	100	6.9	150	10.3	1170	2510	5540	8310	15500	20300
			200	13.8	1850	3370	7630	12000	20100	26700
			300	20.7	2700	4910	11200	18200		
			500	34.5	4400	8090	18300			
			750	51.7	6600	12000				
			1000	69.0	8700	16000				
			1250	86.2	11000					
			1500	103	13000					
			1750	121	15000					
			2000	138	17000					
70 to 150 PSIG (4.8 to 10.3 BAR)	125	8.6	150	10.3	1250	2330	5090	9470	15700	20800
			200	13.8	1830	3320	7360	13400	23600	31300
			300	20.7	2700	4910	11200	19700		
			500	34.5	4400	8090	18300			
			750	51.7	6600	12000				
			1000	69.0	8700	16000				
			1250	86.2	11000					
			1500	103	13000					
			1750	121	15000					
			2000	138	17000					
70 to 150 PSIG (4.8 to 10.3 BAR)	150	10.3	200	13.8	1760	3200	7020	12900	21400	33300
			300	20.7	2700	4910	11200	17200		
			500	34.5	4400	8090	18300			
			750	51.7	6600	12000				
			1000	69.0	8700	16000				
			1250	86.2	11000					
			1500	103	13000					
			1750	121	15000					
			2000	138	17000					

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.

R627 Parts



R627 Parts

Item	Description	Qty.	Part Number
1	Cover Adj. Screw, Plastic	1	610-053-000
2	Adjustment Screw	1	648-520-000
3	Locknut	1	634-154-000
4	Bonnet, R627 - Aluminum	1	604-210-000
	Bonnet, R627M - Steel		604-211-000
	Bonnet, R627 - Stainless		604-266-000
5	Vent Screw Assembly	1	836-005-000
6	Spring Guide, Upper	1	626-079-000
7	Range Spring	1	
	5-20 PSIG–Yellow		655-661-000
	15-40 PSIG–Green		655-661-001
	35-80 PSIG & 10-95–PSIG Blue		655-661-002
	70-150 PSIG–Red		655-661-003
	140-250 PSIG–Blue		655-661-002
	240-500 PSIG–Red	655-661-003	
8	Spring Guide, Lower (R627 or R627M only)	1	626-101-000
9	Al Spring Case Screws - R627	8	648-466-000
	Stl Spring Case Screws - R627 or R627M		648-467-003
	SS Spring Case Screws - R627 or R627M		648-550-000
10	Diaphragm Piston (R627 or R627M only)	1	637-322-000
11	Diaphragm R627 & R627M Aluminum / Iron Case	1	618-079-000
	Diaphragm R627 & R627M Steel Case		618-080-000
	Diaphragm R627 & R627M Al / Iron (Fluoro)		618-080-001
	Diaphragm R627 & R627M Steel (Fluoro)		618-079-001
12	Diaphragm Retainer	1	648-521-000
13	Post, Pusher R627 & R627M Assy	1	827-011-000
14	Diaphragm Case R627 - Aluminum	1	629-202-000
	Diaphragm Case R627 - Steel		629-203-000
	Diaphragm Case R627M - Steel		629-204-000
	Diaphragm Case, Aluminum (for Steel Body)		629-215-000
	Diaphragm Case R627 - Stainless		629-242-000
	Diaphragm Case R627M - Stainless		629-243-000
15	Lever	1	703-004-000
	Lever, NACE		703-005-000
16	Lever Screw	2	648-466-002
	Lever Screw, NACE		648-474-000
17	Pin, Lever	1	635-053-000
	Pin, Lever, NACE		635-057-000
18	Lever Retainer	1	643-192-000
	Lever Retainer, NACE		643-194-000
19	Stem O-ring, Nitrile	1	649-000-003
	Stem O-ring, Fluorocarbon		649-000-343
20	Stem Backup Ring, TFE	2	644-047-000
21	Pin, Groove	1	635-054-000
	Pin, Groove NACE		635-058-000
22	Stem Guide	1	626-083-000
23	Pin Clip	1	635-055-000
	Pin Clip NACE		635-056-000
24	Stem, 316SS	1	689-005-000
25	Diaphragm Case O-ring, Nitrile (R627 & R627H)	1	649-280-000
	Diaphragm Case O-ring, Fluorocarbon (R627 & R627H)		649-280-001
26	Boost Body R627	1	686-004-000
27	Stabilizer, Nitrile R627	1	649-278-000
	Stabilizer, Fluorocarbon R627		649-278-001

Item	Description	Qty.	Part Number
28	Seat assembly - Aluminum holder/nitrile disk	1	822-019-000
	Seat assembly - Aluminum/nylon		822-019-001
	Seat assembly - Aluminum/Fluorocarbon		822-040-000
	Seat assembly - 316SS Holder/Nitrile		822-020-000
	Seat assembly - 316SS/Nylon		822-020-001
	Seat assembly - 316SS/Fluorocarbon	822-040-001	
29	Orifice - Aluminum - 3/32"	1	688-013-005
	Orifice - Aluminum - 1/8"		688-013-004
	Orifice - Aluminum - 3/16"		688-013-003
	Orifice - Aluminum - 1/4"		688-013-002
	Orifice - Aluminum - 3/8"		688-013-001
	Orifice - Aluminum - 1/2"		688-013-000
	Orifice - 316SS - 3/32"		688-014-005
	Orifice - 316SS - 1/8"		688-014-004
	Orifice - 316SS - 3/16"		688-014-003
	Orifice - 316SS - 1/4"		688-014-002
	Orifice - 316SS - 3/8"		688-014-001
	Orifice - 316SS - 1/2"		688-014-000
30	Iron Body - 3/4 NPT	1	664-280-000
	Iron Body - 1 NPT		664-280-001
	Iron Body - 2 NPT		664-282-000
	Steel Body - 3/4 NPT		664-281-000
	Steel Body - 1 NPT		664-281-001
	Steel Body - 2 NPT		664-283-000
	LCC Body - 3/4 NPT		664-325-000
	LCC Body - 1 NPT LCC		664-325-001
	LCC Body - 2 NPT LCC		664-326-000
	Stainless Body - 3/4 NPT		664-394-000
	Stainless Body - 1 NPT		664-394-001
	Stainless Body - 2 NPT		664-395-000
	Steel - 3/4 NPT Socket Weld		664-356-000
	Steel - 1 NPT Socket Weld		664-358-000
	Steel - 2 NPT Socket Weld		664-359-000
	Stainless - 3/4" Socket Weld		664-422-000
Stainless - 1" Socket Weld	664-423-000		
Stainless - 2" Socket Weld	664-424-000		
31	Nameplate (not shown)	1	632-474-000
32	Relief Spring	1	655-709-000
33	Lower Spring Seat	1	626-102-000
34	O-ring, Throat Block, Nitrile	2	649-281-000
	O-ring, Throat Block, Fluorocarbon		649-281-001
35	Throat Block (R627M only)	1	626-081-000
36	Backup Ring, Throat Block	2	644-048-000
37	Build Screw, 3/4" & 1" Aluminum unit	2	648-466-001
	Build Screw 2" Aluminum unit		648-466-003
	Build Screw, all Steel Bodies		648-467-001
	Build Screw, all Stainless Bodies		648-549-000
38	O-ring, Nitrile	1	649-000-001
	O-ring, Fluorocarbon		649-000-226
40	Name Plate Drive Screw (not shown)	2	648-464-000
41	NACE Tag (not shown)	1	632-503-000
42	Diaphragm Connecting Nut	1	634-182-000
43	Relief Seal Retainer	1	643-198-000
44	Relief Seal O-ring, Nitrile	1	649-308-000
	Relief Seal O-ring, Fluorocarbon		649-308-001
45	Diaphragm Connector	1	650-150-000
46	Relief Cap	1	614-064-000