

Series 6300 High-Pressure Regulator

CONTENTS

	PAGE
1.0 MODEL NUMBER INFORMATION	2
2.0 SPECIFICATIONS	3
2.1 GENERAL	3
2.2 OUTLET PRESSURE RANGES	3
2.3 MAXIMUM INLET & DIFFERENTIAL PRESSURES	3
2.4 MATERIALS OF CONSTRUCTION	3
3.0 INSTALLATION & SERVICE	4
3.1 INSTALLATION & STARTUP	4
3.2 DIAPHRAGM REPLACEMENT	4
4.0 PARTS LIST	5
5.0 FLOW CAPACITY DATA	6-9
6.0 DIMENSIONS	10

CAUTION!

The instructions provided herein should be completely reviewed and understood prior to installing, operating, or repairing this equipment. All CAUTION and WARNING notes (displayed in boxes) must be strictly observed to prevent serious injury or equipment malfunction.

CAUTION!

Series 6300 regulators have an outlet pressure rating that is lower than the inlet pressure rating. Overpressure protection is required if the actual inlet pressure can exceed the regulator's outlet pressure rating. To avoid overpressure, provide an appropriate protection device to ensure the limits listed in the specifications will not be exceeded.

INTRODUCTION

Scope

This instruction manual includes installation, operation and maintenance information for the Norriseal Series 6300 heavy-duty/high-pressure regulator.

Description

The Series 6300 heavy-duty/high-pressure regulator is a spring-loaded, self-contained, pressure-reducing regulator available in 1" and 2" NPT sizes. Ruggedly constructed to endure the most demanding environments, the Series 6300 regulator is commonly used for first-stage pressure reduction to manage natural gas pressures on process equipment. Inlet maximum pressure is 1,500 psig (103.4 bar) with outlet pressure ranging from 30 psig to 500 psig (2.1 to 34.5 bar).

The regulator may be installed in any position, noting that the spring case vent must be positioned to protect against flooding, drain water, ice formation, traffic, tampering, etc. The vent must also be protected against nest-building insects to prevent blockage and to minimize the chances of foreign material amassing in the vent side of the regulator diaphragm. Additionally, the flow of product through the regulator must be in the direction indicated by the arrow on the spring casing.



OPERATING AND MAINTENANCE MANUAL

Series 6300 High-Pressure Regulator

1.0 MODEL NUMBER INFORMATION

BODY END CONNECTION	
Type	Code
Threaded FNPT	S

BODY SIZE	
Size	Code
1 inch	1
2 inch	2

BODY PRESSURE RATING	
ANSI Class	Code
600	14

BODY MATERIAL	
Material	Code
Ductile Iron	D
WCC Carbon Steel	W

TRIM MATERIAL	
Material	Code
Stainless Steel/TFE (for pressure drops up to 1500 psi) [NACE]	W
Stainless Steel/Nylon (for pressure 200 to 1500 psi) [NACE]	X
Stainless Steel/Viton (for pressure below 200 psi) [NACE]	Y

OUTLET PRESSURE RANGE	
Code	High Pressure
E	30 to 50 psig (2.1 to 3.4 bar)
F	45 to 95 psig (3.1 to 6.5 bar)
G	90 to 150 psig (6.2 to 10.3 bar)
H	150 to 200 psig (10.3 to 13.8 bar)
J	200 to 275 psig (13.8 to 18.9 bar)
K	275 to 500 psig (18.9 to 34.5 bar)

ORIFICE SIZE	
Code	Size
1	1/8 inch
2	3/16 inch
3	1/4 inch
4	3/8 inch
5	1/2 inch

SERVICE	
Code	Type
S	Standard
N	Nace

6300-IS14D-E4WS

2.0 SPECIFICATIONS

2.1 GENERAL

End Connections	1.00" NPT Female 2.00" NPT Female
Maximum Emergency Outlet (Casing) Pressure	550 psig (37.8 Bar)
Operating Temperature Limits	-20° to 150°F (-20° to 65°C)

CAUTION

Over-pressuring the 6300 regulator may result in valve damage or personal injury due to failure of pressure-containing parts. Avoid over-pressuring by providing over-pressure protection devices to prevent exceeding the operating pressure limits stated in the specifications.

2.2 OUTLET PRESSURE RANGES

	Outlet Pressure psig (bar)	Maximum Outlet Pressure Over Pressure Setting ² psig	Maximum Emergency Outlet Pressure, psig
High Pressure	30-50 (2.1-3.4)	200	550
	45-95 (3.1-6.5)		
	90-150 (6.2-10.3)		
	150-200 (10.3-13.8)		
	200-275 (13.8-18.9)		
	275-500 (18.9-34.5)	200 ¹	

1. This applies to outlet pressure settings below 350 psig only. For pressure settings above 350 psig, outlet pressure is limited to 550 psig, the maximum emergency outlet pressure.

2. Internal parts of the regulator may be damaged if the outlet pressure exceeds the pressure setting beyond the amounts shown.

2.3 MAXIMUM OUTLET & DIFFERENTIAL PRESSURES

Orifice Size Inches (mm)	Maximum Allowable Inlet Pressure, psig ¹ (bar)	Maximum Allowable Pressure Drop, PSID	
		TFE or Nylon Disk	Viton disk
1/8 (3.2) or 3/16 (4.8)	1,500 (103.4)	1,500	200
1/4 (6.4)	1,500 (103.4)	1,000	
3/8 (9.5)	1,000 (68.9)	500	
1/2 (16.7)	750 (51.7)	250	

1. The sum of the outlet pressure setting and the maximum allowable pressure drop determines the maximum allowable inlet pressure for a given installation. For example, with a 1/2 in. port diameter (maximum pressure drop of 250 psi) and a 400 psig outlet pressure setting, the maximum inlet pressure is 650 psig (250 psi plus 400 psig).

2.4 MATERIALS OF CONSTRUCTION

Part	Material
Body and Spring Case	Ductile Iron or WCC Steel
Inlet Adapter	A105 C.S.
Orifice	316 SST
Diaphragm Connector	Stainless Steel
Valve Disk & Holder	316 SST Holder w/TFE Disk 316 SST Holder w/Nylon Disk 316 SST Holder w/Viton Disk
Valve Carrier	316 SST
Lever	Zinc-Plated Steel
Diaphragm	Buna-N w/Embedded Nylon Fabric Viton w/Embedded Nylon Fabric

3.0 INSTALLATION & SERVICE

3.1 INSTALLATION & START-UP

1. Remove the shipping plugs from both the regulator inlet and outlet connections.
2. Make certain that the inside of the piping and the regulator inlet and outlet are clean —they must be free of dirt, pipe dope and other debris.
3. Use pipe joint material only on the male threads of the pipe used to connect the regulator.
4. Install the regulator in the line. The regulator may be installed in any position: right-side-up, up-side-down, vertical piping, diagonal piping, etc. **The diaphragm case vent must be positioned to protect against flooding, drain water, ice formation, traffic, tampering, etc. The vent must be protected against nest-building insects to prevent vent blockage and to minimize the chances of foreign material collecting in the vent side of the regulator diaphragm.**
5. Turn on the gas very slowly.

CAUTION CAUTION

If an outlet block valve is used, it should be opened first. Do not overload the diaphragm with a sudden surge of inlet pressure. Monitor the outlet pressure during start-up to prevent an outlet pressure overload.

6. Make certain that there are no leaks and that all connections are tight.
7. Adjust set point (outlet pressure) by turning adjustment screw. Turn clockwise to increase and counter clockwise to decrease. Be sure to tighten lock nut after adjustment is completed. Do not adjust when regulator is closed (no flow). Only adjust when gas is flowing through regulator.
8. The spring case housing vent connection is a potential escape path (in the event of diaphragm rupture) for flammable gas. The regulator must be located and/or vented so that potential discharge occurs in a safe area away from buildings, open flames, collection areas, arcing devices, etc.
Regulators that are installed indoors or in a non-vented area must be vented outside. Simply run vent piping (minimum 1/4" NPT) from the regulator vent to a non-hazardous location on the outside away from any potential sources of ignition. The outlet of the vent piping must allow for the free and unobstructed passage of air and gas.

9. For applications involving combustible gas with a specific gravity greater than 1.0 it is recommended that the gas be vented outdoors where the gas will not collect in low areas and away from possible ignition sources.

CAUTION

Regulators are pressure control devices with numerous moving parts subject to wear. Regulator wear is dependent upon particular operating conditions. To assure continuous satisfactory operation, a periodic inspection schedule must be adhered to with the frequency of inspection determined by the severity of the service and applicable laws and regulations.

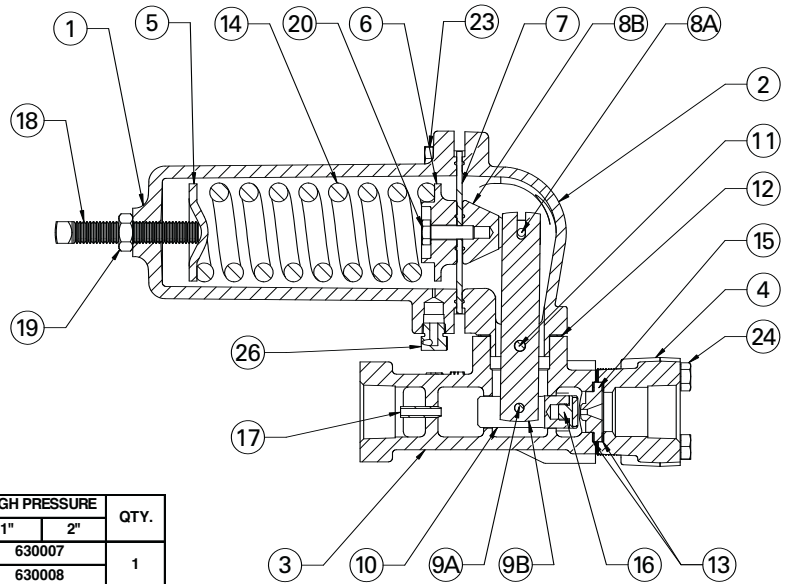
3.2 DIAPHRAGM REPLACEMENT

1. Relieve spring tension by loosening the locknut and turning the adjustment screw counter-clockwise.
2. Unscrew hex head screws and remove spring case housing.
3. Disconnect diaphragm from lever, connector head, and disassemble complete diaphragm assembly.
4. Reassemble using a new diaphragm with the following cautions in mind:
 - Connector head is engaged to lever
 - Diaphragm is centered
 - Diaphragm is not twisted
5. Tighten the spring case housing hex head screws finger tight only. Tighten the adjusting screw until it begins to stretch the diaphragm, then 2 more turns.
6. Tighten the spring case housing hex head screws.

OPERATING AND MAINTENANCE MANUAL

Series 6300 High-Pressure Regulator

4.0 PARTS LIST



(21)(22)(25)(27) - NOT SHOWN

ITEM	DESCRIPTION	MAT'L	HIGH PRESSURE		QTY.
			1"	2"	
1	SPRING CASE	D.I.	630007		1
		WCC C.S.	630008		
2	DIAPHRAGM ADAPTER	D.I.	630005		1
		WCC C.S.	630006		
3	BODY	D.I.	630002	630071	1
		WCC C.S.	630001	630074	
4	INLET ADAPTER	WCC C.S.	630009	630072	1
5	UPPER SPRING RETAINER	C.S. PLATED	630013		1
6	LOWER SPRING RETAINER	C.S. PLATED	630015		1
7*	DIAPHRAGM	BUNA	630016		1
		VITON	630046		
8	CONNECTOR HEAD ASSEMBLY	316 SST	630060		1
	A PIN .187 X .63	316 SST	630018		1
	B CONNECTOR HEAD	316 SST	630058		1
9	LEVER ASSEMBLY	1018/316	630084		1
	A PIN .218 X .75	316 SST	630020		1
	B LEVER	1018	630019		1
10	SEAT CARRIER	316 SST	630026		1
11	PIN (LEVER PIVOT) .246 X 1.31	SST	630021		1
12*	GASKET (BODY - DIAPHRAGM ADAPTER)	COMPOSITION	630022		1
13*	GASKET (ORIFICE)	COMPOSITION	630023		2
14	SPRING (HIGH PRESSURE)	27-50 PSI	OLIVE	630077	1
		46-95 PSI	RED	630078	
		90-150 PSI	SILVER	630014	
		150-200 PSI	GREEN	630079	
		200-275 PSI	BLUE	630080	
15*	ORIFICE	0.125	316 SST	630024	1
		0.188		630062	
		0.25		630048	
		0.375		630049	
		0.5		630050	
16*	SEAT	W/TFE	316 SST	630035	1
		W/NYLON		630034	
		W/VITON		630036	
17	PITOT TUBE (1" VALVE ONLY)	316 SST	630028		1
18	ADJ. SCREW .50-13 X 4.5	C.S. PLATED	630011		1
19	HEX JAM NUT (ADJUSTING SCREW) .50-13#15010	C.S. PLATED			1
20	CAP SCREW (DIAPHRAGM RETAINER) .31-24 X 1.00	C.S. PLATED	630033		1
21	CAP SCREW (BODY TO DIAPHRAGM ADAPTER) .38-16 X 1.25	C.S. PLATED	416225		2
22	CAP SCREW (SPRING CASE-LONG) .31-18 X 1.25	C.S. PLATED	415340		4
23	CAP SCREW (SPRING CASE - SHORT) .31-18 X 1.00	C.S. PLATED	425838		2
24	SCREW (INLET ADAPTER TO BODY) .38-16 X 2.50	C.S. PLATED	630029	630012	4
25	PIPE PLUG (2" VALVE ONLY) .125 NPT	A105 C.S.	415378		1
26	BREATHING PLUG .25 NPT	ALUM.	630027		1
27	NAMEPLATE	STEEL	630086		1

*INCLUDED IN SPARE PARTS KITS

OPERATING AND MAINTENANCE MANUAL

Series 6300 High-Pressure Regulator

5.0 FLOW CAPACITY DATA

Flow capacities are given in the following table in standard cubic feet per hour (scfh) and normal cubic meters per hour (m³/h(n)) of 0.6 specific gravity natural gas. To determine the equivalent flow rate for other gases, multiply the corresponding table value by the appropriate factor: air – 0.775; butane – 0.548; nitrogen – 0.789; propane – 0.628.

Outlet Pressure Range, Part Number and Spring Color	Outlet Pressure psig (bar)	Inlet Pressure		1-inch Body Capabilities in SCFH (m ³ /h(n)) 0.6 Specific Gravity Natural Gas (20% Inherent Droop)									
		PSIG	Bar	SCFH	m ³ /h	SCFH	m ³ /h	SCFH	m ³ /h	SCFH	m ³ /h	SCFH	m ³ /h
30 to 50 psig (2.0 to 3.4 bars) 630077 Olive	50 (3.4)	60	4.1	900	25	2,000	57	3,100	88	5,200	147	8,100	229
		75	5.2	1,300	37	2,800	79	3,800	108	7,200	204	10,000	283
		100	6.9	1,700	48	3,500	99	5,700	161	10,500	297	13,000	368
		150	10.3	2,600	74	5,700	161	8,700	246	13,000	368	17,000	481
		200	13.8	3,500	99	7,800	221	11,000	312	16,000	453	19,000	538
		300	20.7	5,300	150	10,500	297	14,000	396	20,000	566	23,000	651
		400	27.6	6,900	195	13,000	368	17,000	481	23,000	651		
		550	37.9	9,600	272	16,000	453	20,000	566	26,000	736		
		600	41.4	9,800	278	17,000	481	21,000	596				
		1,050	72.4	17,000	481	23,000	651	27,000	765				
1,500	103.4	19,000	538	25,000	708								
45 to 95 psig (3.0 to 6.5 bars) 630078 Red	50 (3.4)	60	4.1	800	23	1,500	42	2,400	68	4,300	122	6,400	181
		75	5.2	1,200	34	2,100	59	3,100	88	5,500	156	8,000	227
		100	6.9	1,500	42	3,100	88	4,200	119	7,500	212	10,000	283
		150	10.3	2,400	68	4,500	127	6,700	190	11,000	312	14,000	396
		200	13.8	3,400	96	6,600	187	9,400	266	14,000	396	17,000	481
		300	20.7	5,200	147	8,900	252	11,000	312	16,000	453	20,000	566
		400	27.6	6,800	193	11,000	312	15,000	425	20,000	566		
		550	37.9	9,500	269	13,000	368	17,000	481	23,000	651		
		600	41.4	9,800	278	14,000	396	19,000	538				
		1,050	72.4	14,000	396	19,000	538	22,000	623				
	1,500	103.4	18,000	510	24,000	680							
	75 (5.2)	100	6.9	1,700	48	3,200	91	5,000	142	8,000	227	132,000	3,738
		125	8.6	2,200	62	4,300	122	6,700	190	10,000	283	15,000	425
		200	13.8	3,500	99	7,300	207	10,000	283	16,000	453	22,000	623
		250	17.2	4,400	125	9,400	266	13,000	368	19,000	538	24,000	680
		325	22.4	5,700	161	11,000	312	16,000	453	23,000	651	27,000	765
		400	27.6	7,100	201	14,000	396	19,000	538	27,000			
		575	39.6	9,700	275	18,000	510	23,000	651	30,000			
		600	41.4	9,900	280	19,000	538	25,000	708				
		1,075	74.1	18,000	510	27,000	765	32,000	906				
1,500		103.4	23,000	651	32,000	906							
90 to 150 psig (6.2 to 10.3 bars) 630018 Silver	100 (6.8)	125	8.6	2,000	57	3,600	102	5,500	156	9,200	261	13,000	368
		150	10.3	25,000	708	4,600	130	6,800	193	11,000	312	16,000	453
		200	13.8	3,600	102	6,600	187	9,400	266	13,000	368	22,000	623
		250	17.2	4,400	125	8,500	241	11,000	312	18,000	510	26,000	736
		300	20.7	5,300	150	9,800	278	14,000	396	21,000	595	30,000	850
		350	24.1	6,100	173	10,000	283	16,000	453	25,000	708	32,000	906
		400	27.6	7,000	198	13,000	368	18,000	510	27,000	765		
		600	41.4	9,500	269	18,000	510	23,000	651	35,000	991		
		1,100	75.8	19,500	552	28,000	793	35,000	991				
		1,500	103.4	25,000	708	35,000	991						
	125 (8.6)	150	10.3	2,400	68	4,600	130	6,700	190	11,000	312	17,000	481
		200	13.8	3,500	99	6,800	193	10,000	283	15,000	425	23,000	651
		250	17.2	4,300	122	8,900	252	12,000	340	19,000	538	29,000	821
		300	20.7	5,200	147	10,000	283	15,000	425	25,000	708	34,000	963
		375	25.9	6,600	187	13,000	368	18,500	524	28,000	793	39,000	1,104
		400	27.6	7,300	207	14,500	411	19,000	538	29,000	821		
		500	34.5	7,900	224	15,000	425	25,000	708	36,000	1,020		
		625	43.1	10,000	283	22,000	623	29,000	821	41,000	1,161		
		1,125	77.6	18,000	510	33,000	935	42,000	1,189				
		1,500	103.4	26,000	736	43,000	1,218						
	150 (10.3)	200	13.8	3,400	96	6,800	193	10,000	283	16,000	453	26,000	736
		250	17.2	4,400	125	8,800	249	13,000	368	20,000	566	32,000	906
		300	20.7	5,300	150	10,000	283	15,000	425	24,000	680	35,000	991
		400	27.6	7,100	201	14,000	296	22,000	623	34,000	963	42,000	1,189
		450	31.0	7,700	218	17,000	481	24,000	680	36,000	1,020		
		650	44.8	9,000	255	24,000	680	33,000	935	49,000	1,388		
		800	55.2	13,000	368	29,000	821	38,000	1,076				
		1,150	79.3	20,000	566	38,000	1,076	49,000	1,388				
1,500		103.4	26,000	736	47,000	1,331							
		1/8"	(3.2)	3/16"	(4.8)	1/4"	(6.4)	3/8"	(9.5)	1/2"	(12.7)		
Orifice Size, Inches (mm)													

OPERATING AND MAINTENANCE MANUAL

Series 6300 High-Pressure Regulator

Outlet Pressure Range, Part Number and Spring Color	Outlet Pressure psig (bar)	Inlet Pressure		1-inch Body Capabilities in SCFH (m³/h(n)) 0.6 Specific Gravity Natural Gas (20% Inherent Droop)										
		PSIG	Bar	SCFH	m³/h	SCFH	m³/h	SCFH	m³/h	SCFH	m³/h	SCFH	m³/h	
		150 to 200 psig (10.3 to 13.8 bars) 630079 Green	150 (10.3)	200	13.8	3,400	96	6,200	176	9,300	263	7,500	453	26,000
250	17.2			4,300	122	8,800	249	12,000	340	20,000	566	27,000	765	
300	20.7			5,300	150	10,000	283	15,000	425	24,000	680	30,000	850	
400	27.6			7,100	201	14,000	396	21,000	595	32,000	906	38,000	1,076	
450	31.0			7,600	215	15,000	425	24,000	680	36,000	1,020			
650	44.8			9,000	255	21,000	595	33,000	935	48,000	1,359			
800	55.2			13,000	368	27,000	765	37,000	1,048					
1,150	79.3			19,500	552	34,000	963	49,000	1,388					
1,500	103.4			26,000	736	44,000	1,246							
200 (13.7)	250		8.6	4,200	119	8,300	235	12,000	340	20,000	566	30,000	850	
	300		10.3	5,200	147	10,000	283	16,000	453	25,000	708	35,000	991	
	450		13.8	7,800	221	16,000	453	26,000	736	43,000	1,218	50,000	1,416	
	600		17.2	9,500	269	22,000	623	34,000	963	55,000	1,558			
	700		20.7	11,000	312	25,000	708	40,000	1,133	61,000	1,728			
	800		24.1	13,000	368	30,000	850	43,000	1,218					
	1,000		27.6	16,000	453	37,000	1,048	50,000	1,416					
	1,200		41.1	20,000	566	41,000	1,161	59,000	1,671					
	1,500		75.8	26,000	736	53,000	1,501							
200 to 275 psig (13.8 to 19.0 bars) 630080 Blue	200 (13.7)	250	17.2	4,200	119	8,200	232	11,000	312	20,000	566	29,000	821	
		300	20.7	5,200	147	10,000	283	14,500	411	25,000	708	35,000	991	
		450	31.0	7,700	218	16,000	453	24,000	680	40,000	1,133	50,000	1,416	
		600	41.4	9,500	269	22,000	623	31,000	878	51,000	1,444			
		700	48.3	11,000	312	25,000	708	35,000	991	55,000	1,558			
		800	55.2	13,000	368	29,000	821	42,000	1,189					
		1,000	69.0	16,000	453	36,000	1,020	50,000	1,416					
		1,200	82.7	19,000	538	41,000	1,161	55,000	1,558					
		1,500	103.4	26,000	736	51,000	1,444							
	250 (17.2)	300	20.7	4,900	139	9,000	255	15,000	425	28,000	793	42,000	1,189	
		400	27.6	7,000	198	14,000	396	23,000	651	40,000	1,133	56,000	1,586	
		500	34.5	8,500	241	18,000	510	29,000	821	51,000	1,444	65,000	1,841	
		600	41.4	9,500	269	22,000	623	34,000	963	59,000	1,671			
		750	51.7	12,500	354	28,000	793	44,000	1,246	69,000	1,954			
		1,000	69.0	16,000	453	39,000	1,104	58,000	1,643					
		1,250	86.2	21,000	595	49,000	1,388	69,000	1,954					
	1,500	103.4	26,000	736	59,000	1,671								
	275 (18.9)	300	20.7	4,700	133	9,000	255	15,000	425	28,000	793	39,000	1,104	
		400	27.6	6,900	195	14,000	396	25,000	708	40,000	1,133	54,000	1,529	
		525	36.2	8,600	244	18,000	510	35,000	991	68,000	1,926	94,000	2,662	
		725	53.4	11,000	312	28,000	793	51,000	1,444	95,000	963	42,000		
		1,000	69.0	16,000	453	39,000	1,104	67,000	1,897		2,690			
		1,275	87.9	21,000	595	50,000	1,416	87,000	2,464					
		1,500	103.4	26,000	736	60,000	1,699							
	275 to 500 psig (18.9 to 34.5 bars) 630081 YELLOW	275 (18.9)	300	20.7	4,500	127	7,500	212	10,000	283	20,000	566	31,000	878
			400	27.6	6,600	187	12,000	340	16,000	453	31,000	878	43,000	1,218
			525	36.2	8,600	244	16,000	453	21,000	595	39,000	1,104	56,000	1,586
775			53.4	11,000	312	24,000	680	32,000	906	55,000	1,558			
1,000			103.4	17,000	481	32,000	906	43,000	1,218					
1,275			87.9	21,000	595	40,000	1,133	53,000	1,501					
300 (20.6)		400	27.6	6,600	187	11,000	312	16,000	453	31,000	878	42,000	1,189	
		550	37.9	9,700	275	18,000	510	23,000	651	44,000	1,246	63,000	1,784	
		600	41.4	9,900	280	19,000	538	26,000	736	48,000	1,359			
		700	48.3	11,000	312	23,000	651	30,000	850	54,000	1,529			
		800	55.2	13,000	368	26,000	736	35,000	991	61,000	1,728			
		900	62.1	15,000	425	29,000	821	39,000	1,104					
		1,300	89.6	22,000	623	43,000	1,218	58,000	1,643					
1,500		103.4	26,000	736	49,000	1,388								
400 (27.6)		500	34.5	8,300	235	16,000	453	24,000	680	44,000	1,246	62,000	1,756	
		650	44.8	10,000	283	24,000	680	33,000	935	61,000	1,728	86,000	2,436	
		800	55.2	13,000	368	30,000	850	41,000	1,161	76,000	2,152			
		900	62.1	15,000	425	34,000	963	49,000	1,388	85,000	1,407			
		1,000	69.0	17,000	481	38,000	1,076	54,000	1,529					
		1,200	82.7	20,000	566	46,000	1,303	63,000	1,784					
		1,400	96.5	24,000	680	55,000	1,558	76,000	2,152					
1,500		103.4	26,000	736	60,000	1,699								
500 (34.5)		550	37.9	8,700	246	16,000	453	26,000	736	50,000	1,416	77,000	2,181	
		750	51.7	12,000	340	28,000	793	40,000	1,133	78,000	2,209	100,000	2,832	
		900	62.1	15,000	425	34,000	963	52,000	1,473	92,000	2,605			
		1,000	69.0	17,000	481	39,000	1,104	60,000	1,699	100,000	2,832			
		1,500	103.4	26,000	736	59,000	1,671	72,000	2,039					
				1/8" (3.2)		3/16" (4.8)		1/4" (6.4)		3/8" (9.5)		1/2" (12.7)		
Orifice Size, Inches (mm)														

OPERATING AND MAINTENANCE MANUAL

Series 6300 High-Pressure Regulator

Outlet Pressure Range, Part Number and Spring Color	Outlet Pressure psig (bar)	Inlet Pressure		2-inch Body Capabilities in SCFH (m³/h(n))									
				0.6 Specific Gravity Natural Gas (20% Inherent Droop)									
		PSIG	Bar	SCFH	m³/h	SCFH	m³/h	SCFH	m³/h	SCFH	m³/h	SCFH	m³/h
30 to 50 psig (2.0 to 3.4 bars) 630077 Olive	50 (3.4)	60	4.1	1,000	28	2,100	59	3,200	91	5,300	150	12,000	340
		75	5.2	1,400	40	2,900	82	3,900	110	7,300	207	16,000	453
		100	6.9	1,800	51	3,600	102	5,800	164	10,000	283	21,000	595
		150	10.3	2,700	76	5,800	164	9,000	255	15,000	425	36,000	1,020
		200	13.8	3,600	102	7,900	224	12,000	340	21,000	595	55,000	1,558
		300	20.7	5,500	156	11,000	312	19,000	538	48,000	1,359	83,000	2,351
		400	27.6	7,000	198	15,000	425	27,000	765	63,000	1,784		
		550	37.9	9,700	275	21,000	595	38,000	1,076	88,000	2,492		
		600	41.4	10,000	283	23,000	651	42,000	1,189				
		1,050	72.4	19,000	538	42,000	1,189	74,000	2,096				
		1,500	103.4	27,000	765	60,000	1,699						
45 to 95 psig (3.0 to 6.5 bars) 630078 Red	50 (3.4)	60	4.1	900	25	1,600	45	2,500	71	4,400	125	7,300	207
		75	5.2	1,300	37	2,200	62	3,200	91	6,100	173	9,300	263
		100	6.9	1,600	45	3,400	96	4,300	122	7,600	215	12,000	340
		150	10.3	2,500	71	4,600	130	7,100	201	12,000	340	19,000	538
		200	13.8	3,500	99	6,700	190	9,600	272	16,000	453	27,000	765
		300	20.7	5,300	150	10,000	283	14,000	396	27,000	765	51,000	1,444
		400	27.6	6,900	195	13,000	368	21,000	595	46,000	1,303		
		550	37.9	9,600	272	18,000	510	29,000	821	87,000	2,464		
		600	41.4	10,000	283	20,000	566	35,000	991				
		1,050	72.4	18,000	510	41,000	1,161	73,000	2,067				
		1,500	103.4	26,000	736	59,000	1,671						
	75 (5.2)	100	6.9	1,800	51	3,300	93	5,200	147	9,000	255	14,000	396
		125	8.6	2,300	65	4,400	125	6,900	195	11,000	312	18,000	510
		200	13.8	3,600	102	7,400	210	11,000	312	19,000	538	30,000	850
		250	17.2	4,500	127	9,500	269	14,000	396	26,000	736	44,000	1,246
		325	22.4	5,800	164	12,000	340	18,000	510	36,000	1,020	67,000	1,897
		400	27.6	7,200	204	15,000	425	24,000	680	47,000			
		575	39.6	9,800	278	22,000	623	37,000	1,048	92,000			
		600	41.4	10,000	283	23,000	651	39,000	1,104				
		1,075	74.1	19,000	538	42,000	1,189	75,000	2,124				
		1,500	103.4	24,000	680	60,000	1,699						
90 to 150 psig (6.2 to 10.3 bars) 630018 Silver	100 (6.8)	125	8.6	2,100	59	3,700	105	5,600	159	9,800	278	15,000	425
		150	10.3	2,600	74	4,900	139	7,400	210	12,000	340	18,000	510
		200	13.8	3,700	105	6,900	195	10,000	283	17,000	481	27,000	765
		250	17.2	4,500	127	8,700	246	13,000	368	22,000	623	34,000	963
		300	20.7	5,400	153	10,000	283	16,000	453	27,000	765	44,000	1,246
		350	24.1	6,300	178	12,000	340	19,000	538	33,000	935	57,000	1,614
		400	27.6	7,200	204	14,000	396	21,000	595	39,000	1,104		
		600	41.4	10,000	283	21,000	595	34,000	963	69,000	1,954		
		1,100	75.8	19,000	538	43,000	1,218	74,000	2,096				
		1,500	103.4	27,000	765	59,000	1,671						
		125 (8.6)	150	10.3	2,500	71	5,000	142	8,100	229	12,000	340	20,000
	200		13.8	3,600	102	7,400	210	11,000	312	19,000	538	30,000	850
	250		17.2	4,400	125	9,400	266	14,000	396	24,000	680	39,000	1,104
	300		20.7	5,300	150	11,000	312	17,000	481	31,000	878	48,000	1,359
	375		25.9	6,500	184	13,600	385	21,400	606	38,000	1,085	59,400	1,682
	400		27.6	7,000	198	15,000	425	24,000	680	43,000	1,218	65,000	1,841
	500		34.5	8,800	249	19,000	538	30,000	850	59,000	1,671		
	625		43.1	11,000	312	24,000	680	40,000	1,133	79,000	2,237		
	1,125		77.6	19,000	538	44,000	1,246	79,000	2,237				
	1,500		103.4	27,000	765	60,000	1,699						
	150 (10.3)	200	13.8	3,500	99	7,300	207	11,000	312	18,000	510	30,000	850
		250	17.2	4,500	127	9,500	269	15,000	425	26,000	736	38,000	1,076
		300	20.7	5,400	153	11,000	312	19,000	538	32,000	906	52,000	1,473
		400	27.6	7,200	204	15,000	425	26,000	736	46,000	1,303	77,000	2,181
		450	31.0	8,100	229	18,000	510	29,000	821	54,000	1,529		
		650	44.8	10,000	283	25,000	708	44,000	1,246	88,000	2,492		
		800	55.2	14,000	396	30,000	850	54,000	1,529				
1,150		79.3	21,000	595	46,000	1,303	78,000	2,209					
1,500	103.4	27,000	765	60,000	1,699								
				1/8" (3.2)		3/16" (4.8)		1/4" (6.4)		3/8" (9.5)		1/2" (12.7)	
Orifice Size, Inches (mm)													

OPERATING AND MAINTENANCE MANUAL

Series 6300 High-Pressure Regulator

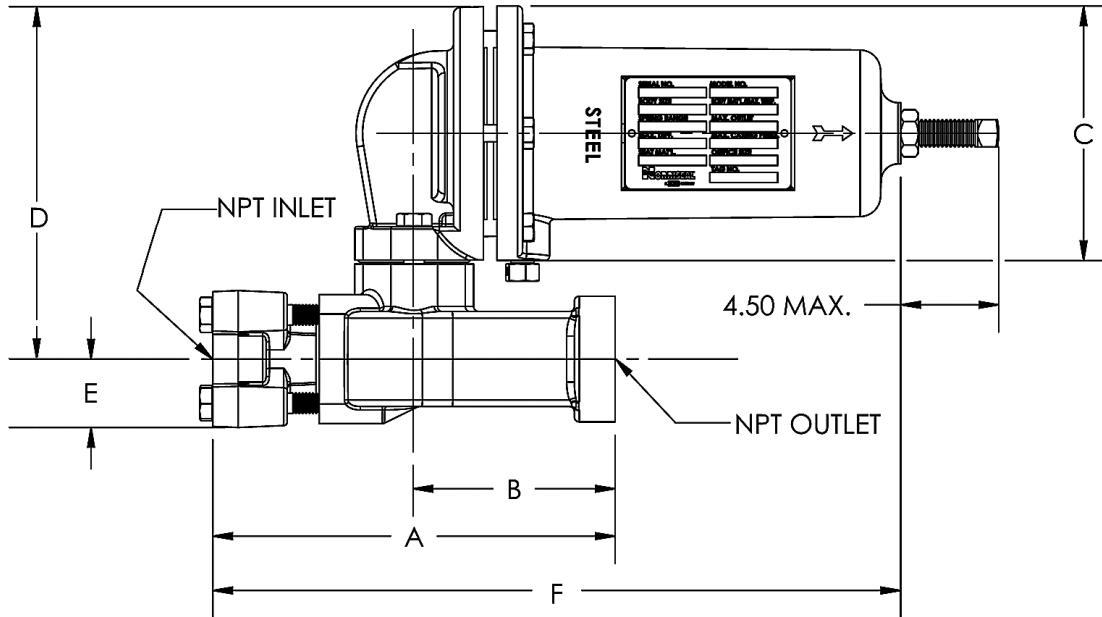
Outlet Pressure Range, Part Number and Spring Color	Outlet Pressure psig (bar)	Inlet Pressure		2-inch Body Capabilities in SCFH (m³/h(n)) 0.6 Specific Gravity Natural Gas (20% Inherent Droop)										
		PSIG	Bar	SCFH	m³/h	SCFH	m³/h	SCFH	m³/h	SCFH	m³/h	SCFH	m³/h	
		150 to 200 psig (10.3 to 13.8 bars) 630079 Green	150 (10.3)	200	13.8	3,500	99	6,900	195	10,000	283	17,000	481	28,000
250	17.2			4,400	125	9,000	255	13,000	368	23,000	651	36,000	1,020	
300	20.7			5,400	153	11,000	312	17,000	481	28,000	793	47,000	1,331	
400	27.6			7,200	204	15,000	425	24,000	680	40,000	1,133	66,000	1,869	
450	31.0			8,000	227	17,000	481	27,000	765	46,000	1,303			
650	44.8			10,000	283	22,000	623	40,000	1,133	74,000	2,096			
800	55.2			14,000	396	30,000	850	51,000	1,444					
1,150	79.3			20,000	566	45,000	1,274	78,000	2,209					
1,500	103.4		27,000	765	60,000	1,699								
200 (13.7)	250		8.6	4,300	122	9,100	258	13,000	368	23,000	651	42,000	1,189	
	300		10.3	5,300	150	11,000	312	18,000	510	33,000	935	52,000	1,473	
	450		13.8	7,900	224	17,000	481	29,000	821	52,000	1,473	84,000	2,379	
	600		17.2	10,000	283	23,000	651	40,000	1,133	75,000	2,124			
	700		20.7	12,000	340	27,000	765	47,000	1,331	90,000	2,549			
	800		24.1	14,000	396	31,000	878	54,000	1,529					
	1,000		27.6	17,000	481	39,000	1,104	69,000	1,954					
	1,200		41.1	21,000	595	48,000	1,359	83,000	2,351					
1,500	75.8		27,000	765	60,000	1,699								
200 to 275 psig (13.8 to 19.0 bars) 630080 Blue	200 (13.7)	250	17.2	4,300	122	8,900	252	12,000	340	23,000	651	35,000	991	
		300	20.7	5,300	150	11,000	312	18,000	510	31,000	878	46,000	1,303	
		450	31.0	7,800	221	17,000	481	28,000	793	50,000	1,416	78,000	2,209	
		600	41.4	10,000	283	23,000	651	38,000	1,076	70,000	1,982			
		700	48.3	12,000	340	27,000	765	45,000	1,274	83,000	2,351			
		800	55.2	14,000	396	31,000	878	52,000	1,473					
		1,000	69.0	17,000	481	39,000	1,104	68,000	1,926					
		1,200	82.7	20,000	566	46,000	1,303	83,000	2,351					
	1,500	103.4	27,000	765	60,000	1,699								
	250 (17.2)	300	20.7	5,000	142	10,000	283	17,000	481	30,000	850	52,000	1,473	
		400	27.6	7,100	201	15,000	425	25,000	708	47,000	1,331	76,000	2,152	
		500	34.5	8,600	244	19,000	538	34,000	963	62,000	1,756	103,000	2,917	
		600	41.4	10,000	283	23,000	651	41,000	1,161	78,000	2,209			
		750	51.7	13,000	368	29,000	821	51,000	1,444	106,000	3,002			
		1,000	69.0	17,000	481	40,000	1,133	68,000	1,926					
		1,250	86.2	22,000	623	50,000	1,416	87,000	2,464					
		1,500	103.4	27,000	765	60,000	1,699							
	275 (18.9)	300	20.7	4,800	136	10,000	283	17,000	481	29,000	821	43,000	1,218	
		400	27.6	7,000	198	15,000	425	26,000	736	47,000	1,331	73,000	2,067	
		525	36.2	9,200	261	20,000	566	36,000	1,020	69,000	1,954	112,000	3,172	
		725	53.4	12,000	340	30,000	850	52,000	1,473	112,000	3,172			
		1,000	69.0	17,000	481	40,000	1,133	68,000	1,926					
		1,275	87.9	22,000	623	51,000	1,444	89,000	2,520					
		1,500	103.4	26,000	736	61,000	1,728							
275 to 500 psig (18.9 to 34.5 bars) 630081 YELLOW	275 (18.9)	300	20.7	4,600	130	8,400	238	13,000	368	23,000	651	37,000	1,048	
		400	27.6	7,700	198	13,000	368	20,000	566	32,000	906	53,000	1,501	
		525	36.2	9,300	263	18,000	510	27,000	765	46,000	1,303	73,000	2,067	
		775	53.4	13,000	368	28,000	793	44,000	1,246	73,000	2,067			
		1,000	103.4	18,000	510	37,000	1,048	57,000	1,614					
		1,275	87.9	22,000	623	48,000	1,359	77,000	2,181					
	1,500	103.4	27,000	765	57,000	1,614								
	300 (20.6)	400	27.6	7,000	198	13,000	368	21,000	595	35,000	991	54,000	1,529	
		550	37.9	9,800	278	20,000	566	30,000	850	52,000	1,473	78,000	2,209	
		600	41.4	10,000	283	21,000	595	34,000	963	59,000	1,671			
		700	48.3	12,000	340	26,000	736	40,000	1,133	72,000	2,039			
		800	55.2	14,000	396	29,000	821	47,000	1,331	81,000	2,294			
		900	62.1	16,000	453	34,000	963	53,000	1,501					
		1,300	89.6	23,000	651	50,000	1,416	80,000	2,266					
		1,500	103.4	27,000	765	58,000	1,643							
	400 (27.6)	500	34.5	8,800	249	17,000	481	28,000	793	49,000	1,388	77,000	2,181	
		650	44.8	11,000	312	25,000	708	40,000	1,133	75,000	2,124	112,000	3,172	
		800	55.2	14,000	396	31,000	878	51,000	1,444	95,000	2,690			
		900	62.1	16,000	453	36,000	1,020	58,000	1,643	110,000	3,115			
		1,000	69.0	18,000	510	40,000	1,133	66,000	1,869					
		1,200	82.7	21,000	595	48,000	1,359	80,000	2,266					
		1,400	96.5	25,000	708	57,000	1,614	96,000	2,719					
		1,500	103.4	27,000	765	61,000	1,728							
	500 (34.5)	550	37.9	9,000	255	18,000	510	30,000	850	53,000	1,501	89,000	2,520	
		750	51.7	13,000	368	29,000	821	48,000	1,359	90,000	2,549	141,000	3,993	
		900	62.1	16,000	453	35,000	991	60,000	1,699	113,000	3,200			
		1,000	69.0	18,000	510	40,000	1,133	67,000	1,897	130,000	3,682			
		1,500	103.4	27,000	765	60,000	1,699	82,000	2,322					
					1/8" (3.2)		3/16" (4.8)		1/4" (6.4)		3/8" (9.5)		1/2" (12.7)	
	Orifice Size, Inches (mm)													

OPERATING AND MAINTENANCE MANUAL

Series 6300 High-Pressure Regulator

6.0 DIMENSIONS

Body Size	A Inches (mm)	B Inches (mm)	C Inches (mm)	D Inches (mm)	E Inches (mm)	F Inches (mm)	Weight lbs (kg)
1" NPT	7.41 (188)	3.72 (94)	4.69 (119)	7.17 (182)	1.26 (32)	12.67 (322)	22 (10.0)
2" NPT	7.87 (200)	3.96 (101)	4.69 (119)	7.17 (182)	1.94 (49)	12.90 (328)	29 (13.2)



HEADQUARTERS, MANUFACTURING PLANT AND SALES



11122 West Little York • Houston, Texas USA 77041
 Tel: 713-466-3552 • Fax: 713-896-7386
www.norriseal.com

Due to the continuous improvement at Norriseal, specifications and/or prices are subject to change without notice or obligation.

©2008 Norriseal. All rights reserved.
 ™ Norriseal is a mark of Dover Corporation.