

627 Series Commercial/Industrial Regulators



Introduction

The 627 Series commercial/industrial regulator is a large capacity, high-pressure unit for use in conjunction with S302G or S202G Series regulators. It can also be used on final-stage (psi to psi) service. A 1805 Series relief valve is recommended to prevent excessive build-up in the downstream line.

The diaphragm case and/or regulator body on the 627 Series can be rotated in any of four positions to allow installation in locations with limited space.

Body Sizes and End Connection Style

See Table 1

Flow Capacities

See Table 4

Maximum Allowable Inlet Pressure

250 psig (17,2 bar)

Outlet Pressure Range

See Table 3

Temperature Capabilities

-20° to 180°F (-29° to 82°C)

Additional Technical Data

For more technical information, contact your local LP-Gas Equipment Distributor or log on to: www.emersonprocess.com/regulators/lp



Figure 1. 627 Series Commercial/Industrial Regulator

Features

- Rugged Construction
- Field Adjustable
- Easy Maintenance
- Tight Shutoff Capability
- UL Listed

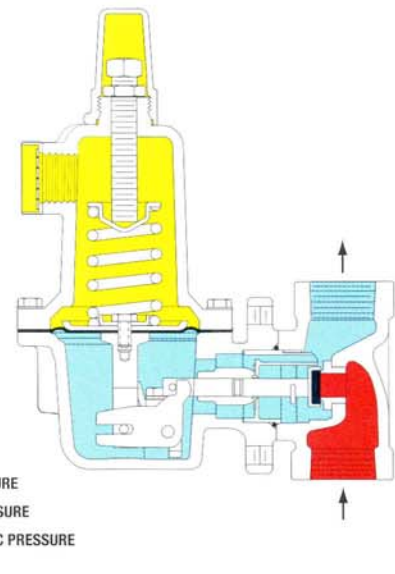


Figure 2. Operational Schematic

Table 1. Body Size and End Connection Style

TYPE NUMBER	BODY SIZE	END CONNECTION STYLE
627-5810	3/4-inch	FNPT
627-6210		
627-7710	1-inch	

Table 2. Construction Materials

BODY MATERIALS	SPRING CASING AND DIAPHRAGM CASING	ORIFICE	DIAPHRAGM AND O-RINGS	DISK HOLDER	DISK
Ductile iron	Aluminum	Aluminum	Nitrile (NBR)	Aluminum	Nitrile (NBR)

Table 3. Outlet Pressure Range

OUTLET PRESSURE RANGE	PART NUMBER	SPRING COLOR CODE	SPRING WIRE DIAMETER	SPRING FREE LENGTH
5 to 20 psig (0,3 to 1,4 bar)	10B3076X012	Yellow	0.170-inch (0,432 cm)	3.19-inches (8,10 cm)

Table 4. Capacities

TYPE NUMBER	OUTLET PRESSURE SETTING	OUTLET PRESSURE RANGE	ORIFICE DIAMETER, INCHES (mm)	CAPACITY IN BTU/hr (SCMH) OF PROPANE ⁽¹⁾⁽²⁾
627-5810	10 psig (0,7 bar)	5 to 20 psig (0,3 to 1,4 bar)	3/8 (9,53)	6 080 000 (68,4)
627-6210			1/2 (12,7)	10 755 000 (121)
627-7710			1/2 (12,7)	10 773 000 (121)

1. Capacities based on inlet pressure 20 psig (1,4 bar) greater than outlet pressure and 20% droop.
2. Metric conversion is based on 2516 BTU/ft³ of gas at 60° (16°C).

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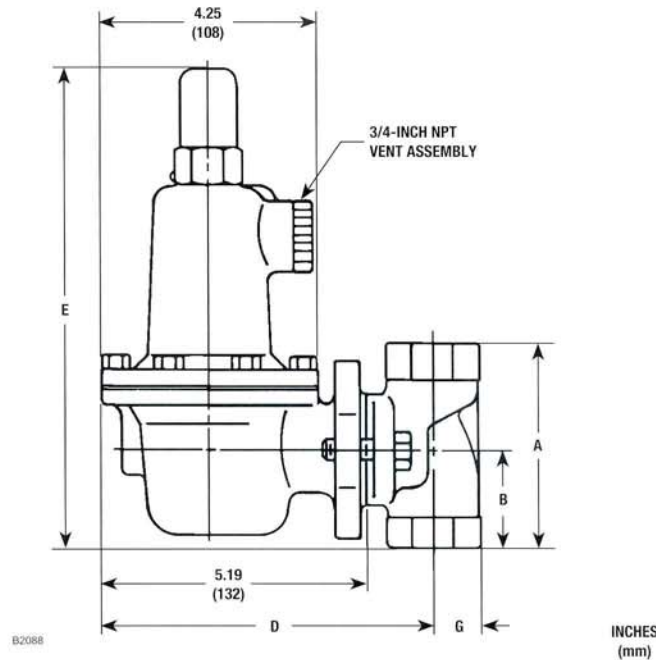


Figure 3. Dimensions

Table 5. Dimensions and Approximate Weight

BODY SIZE, INCHES	DIMENSIONS, INCHES (mm)					APPROXIMATE WEIGHT, POUNDS (kg)
	A	B	D	E	G	
3/4 and 1	4.06 (103)	1.94 (49)	6.50 (165)	9.56 (243)	1.00 (25)	10 (4,54)

Ordering Guide

Ordering Information

TYPE NUMBER	ORIFICE SIZE, INCHES (mm)	BODY SIZES AND END CONNECTION STYLE	APPROXIMATE WEIGHT, POUNDS (kg)
627-5810	3/8 (9,53)	3/4-inch FNPT	10 (4,54)
627-6210	1/2 (12,7)	3/4-inch FNPT	
627-7710	1/2 (12,7)	1-inch FNPT	

1. Capacities based on inlet pressure 20 psig (1,4 bar) greater than outlet pressure and 20% droop.

To order, refer to the Ordering Information table above and specify the type number that satisfies your requirement. Then, contact or visit your local LP-Gas Equipment Distributor for availability.