

## Types R622 and R652 Second-Stage Regulators

### Introduction

The Types R622 and R652 second-stage regulators are Underwriters Laboratories listed regulators designed for Two-Stage LP-Gas systems. These units are designed to reduce the outlet pressure from a first-stage regulator [usually 10 psig (0,69 bar)] to 11-inches w.c. (27,4 mbar). The Type R622 incorporates the standard straight-through body while the Type R652 is designed for back mount installations. Both designs have screened drip-lip vents oriented over the inlet as standard.



### Features

- **20-Year Recommended Replacement Life**—The Types R622 and R652 are designed using rugged time proven design concepts with enhancements to the corrosion resistance and durability of materials, both internally and externally. With proper installation and periodic inspection and maintenance the Types R622 and R652 designs have a 20-Year Recommended Replacement Life. In some environmental conditions earlier replacement may be required.
- **Improved Regulation**—Fisher’s® large molded fabric-reinforced diaphragm and spring assisted vent stabilizer deliver accurate and stable regulation.
- **Superior Overpressure Protection**—The combination of a high capacity relief valve and large vent provide overpressure protection which exceeds UL standards by limiting the downstream pressure to 2 psig (0,14 bar) even in a double failure situation when used with a Type R622H.

Figure 1. Types R622 and R652 Second-Stage Regulators

- **Corrosion-Resistant**—Added corrosion resistance with an internal and external coating process for all castings prior to painting, stainless steel relief valve spring and retainer and a non-corrosive relief valve seat.
- **Inlet Screen**—Fisher’s stainless steel inlet screen reduces the amount of debris that can enter the regulator.
- **Easy System Checks**—1/8-inch threaded NPT inlet and outlet gauge taps orificed to a number 54 drill size are easily accessible for gas system checks.
- **Positive Drainage**—When installed properly with the spring case pointed down the Fisher Positive Drainage design allows any moisture formed in the spring case to drain out eliminating the problems with corrosion and freezing of the water in the spring case.

Table 1. Ordering Information

TYPE NUMBER	CAPACITY BTU/hr (SCMH) PROPANE	CONNECTIONS INLET x OUTLET	OUTLET ADJUSTMENT SETTING	OUTLET PRESSURE RANGE
R622-BCF	875 000 (9,85)	1/2 x 1/2-inch FNPT	11-inches w.c. (27,4 mbar)	9 to 13-inches w.c. (22,4 to 32,4 mbar)
R622-CFF	1 400 000 (15,8)	1/2 x 3/4-inch FNPT		
R622-DFF		3/4 x 3/4-inch FNPT		
R652-DFF	1 000 000 (11,3)	1/2 x 3/4-inch FNPT		
R652-CFF		1/2 x 3/4-inch FNPT		
R622-CFGXA	1 125 000 (12,7)	1/2 x 3/4-inch FNPT	18-inches w.c. (45,8 mbar)	13 to 20-inches w.c. (32,4 to 49,8 mbar)

1. Capacities are based on 10 psig (0,69 bar) inlet pressure and 2-inches w.c. (5,0 mbar).



# Bulletin LP-7: R622/R652

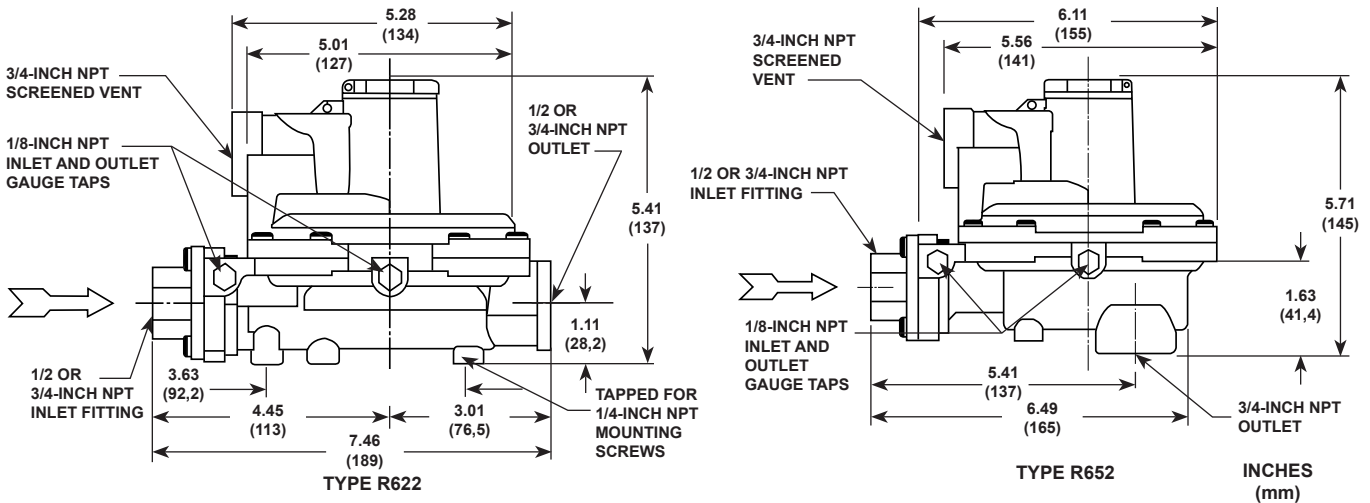


Figure 2. Dimensions

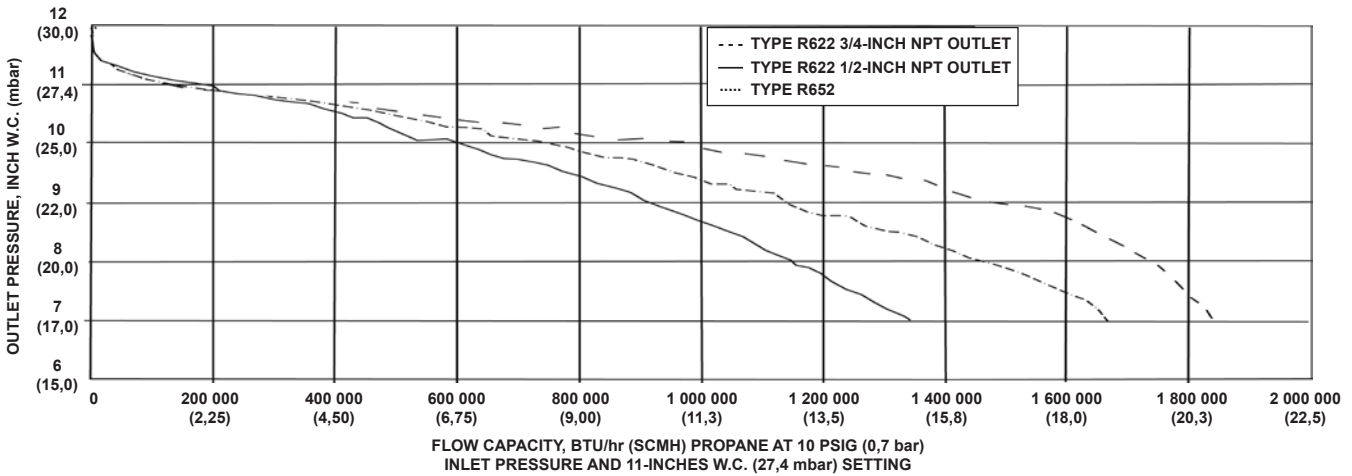


Figure 3. Flow Capacity Curve for Types R622 and R652

Table 2. Selected Capacities for Types R622/R652 Second-Stage Regulators

OUTLET PRESSURE SETTING, SPRING RANGE	INLET PRESSURE, PSIG (bar)	CAPACITIES IN BTU/hr (SCMH) PROPANE		
		Type R622		Type R652
		1/2-Inch Outlet	3/4-Inch Outlet	3/4-Inch Outlet
11-inches w.c. (27,4 mbar) setting,	2 (0,14)	510 000 (5,74)	630 000 (7,09)	580 000 (6,53)
	5 (0,34)	740 000 (8,33)	1 030 000 (11,6)	850 000 (9,57)
9 to 13-inches w.c. (22,4 to 32,4 mbar) spring range	10 (0,69)	875 000 (9,85)	1 470 000 (16,6)	1 080 000 (12,2)
	15 (1,03)	970 000 (10,9)	1 740 000 (19,6)	1 200 000 (13,5)
	20 (1,38)	1 000 000 (11,3)	2 110 000 (23,7)	1 240 000 (14,0)

1. Capacities are based on 2-inches w.c. (5,0 mbar) droop.

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