Second-Stage Regulators



Types R222, R622, R642, R652, and HSRL Second-Stage regulators are Underwriters Laboratories (UL®) listed regulators designed to reduce the outlet pressure from a First-Stage regulator, usually 10 psig / 0.69 bar to 11 inches w.c. / 27 mbar, in domestic installations. Vents are screened with standard orientation over the inlet, but other orientations are available. Fisher® brand Second-Stage regulators are painted palm green for easy identification. Types R222, R622, R642, and R652 are equipped with a stainless steel inlet screen to reduce the amount of debris entering the regulator and have a temperature rating of -20 to 160°F / -29 to 71°C, but have passed Fisher internal testing for lockup, relief start-to-discharge and reseal down to -40°F / -40°C.

Type R222 is designed for small domestic applications up to 650,000 BTU per hour / 7.3 SCMH. The unit provides the same features as the Type R622 in a smaller package and its design provides a recommended replacement life of 20 years.

Type R622 is designed for Two-Stage domestic applications up to 1,400,000 BTU per hour / 15.8 SCMH. The Type R622's time proven design and corrosion resistant materials, provide a recommended replacement life of 20 years.

Type R622 contains a high performance relief valve and a large 3/4-inch screened vent to limit downstream pressure to less than

2 psig / 0.14 bar in an overpressure situation as required by NFPA 58. The relief valve design exceeds the industry standard by limiting the downstream pressure to 2 psig / 0.14 bar even in a double failure situation when used with a Type R622H or R122H First-Stage regulator. The Type R622 is adjustable from 9 to 20 inches w.c. / 22 to 50 mbar.

For easy system checks, the Type R622 has 1/8-inch NPT built-in gauge taps, orificed to a No. 54 drill size, on both the upstream and downstream sides. This regulator also features a large 3/4-inch drip-lip vent design.

Types R642 and R652 are designed for domestic applications up to 920,000 / 10.4 and 1,000,000 BTU per hour / 11.3 SCMH, respectively. These units provide all the same features as the Type R622, including the 20-year recommended replacement life and double failure protection, in an angle body for the Type R642 and backmounted design for the Type R652.

Type HSRL is an UL listed regulator designed for light commercial applications up to 2,600,000 BTU per hour / 29.3 SCMH. It utilizes a high strength cast iron body and a 3/4-inch NPT drip lip vent design. The PFC and SFC feature an angle-body design. The design also includes a high capacity internal relief valve and a 20-year recommended replacement life.

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TYPE NUMBER	CAPACITIES (PROPANE)(1)		INLET CONNECTION,	OUTLET CONNECTION,	OUTLET PRESSURE RANGE		OUTLET PRESSURE SETTING	
	BTU / hour	SCMH	INCHES	INCHES	Inches w.c.	mbar	Inches w.c.	mbar
R222-BAF	650,000	7.3	1/2 FNPT	1/2 FNPT	9.5 to 13	24 to 32	11 / 27	
R622-BCF	875,000	9.8	1/2 FNPT	1/2 FNPT		22 to 32		
R622-CFF	1,400,000	15.8	1/2 FNPT	3/4 FNPT	9 to 13			
R622-DFF			- 3/4 FNPT					
R642-DFF	920,000	10.4						
R652-CFF	1,000,000	11.3	1/2 FNPT					
R652-DFF			3/4 FNPT					
R622-CFGXA	1,125,000	12.7	1/2 FNPT	3/4 FNPT	13 to 20	32 to 50	18 /	45
HSRL-BFC	2,300,000	25.9	3/4 FNPT	3/4 FNPT	9 to 13	22 to 32	11 / 27	
HSRL-PFC								
HSRL-CFC	2,600,000	29.3	1 FNPT	1 FNPT				
HSRL-SFC								