## **First-Stage Regulators**

Regulators







Types R122H, R222H and R622H First-Stage Regulators are Underwriters Laboratories (UL®) listed regulators designed for Two-Stage LPG systems. These First-Stage regulators reduce tank pressure to a lower pressure (usually 10 psig / 0.69 bar) for a Second-Stage regulator. Maximum allowable inlet pressure is 250 psig / 17.2 bar. Fisher™ First-Stage regulators are painted red for easy identification. Vents are screened with standard orientation over the outlet. The Types R122H, R222H and R622H regulators 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. The design's superior relief performance exceeds UL requirements and provides double failure overpressure protection (pressure downstream of the second regulator will be limited close to 2 psig / 0.14 bar, even if both regulators are damaged) when used with R600 Series Second-Stage regulator. Corrosion and wear resistant materials and stainless steel internal parts provide a recommended replacement life of 20 years. A large fabric reinforced diaphragm with molded lips provide precise regulation. The large precision machined orifice assists in minimizing freeze problems. 1/8 in. inlet and outlet gauge taps allow easy system testing. Large inlet and outlet wrench

flats for easy installation. The unit's Fluorocarbon (FKM) valve disc provides better lockup performance and durability in contaminated gas. The vent is with 3/8 in. NPT for easy installation of vent piping.

**Type R122H** – Designed for use in domestic applications, the Type R122H's size makes it perfect for tight installations. Its non-adjustable setpoint makes the unit virtually tamper proof. The outlet pressure setpoint remains at a nominal factory setting of 10 psig / 0.69 bar.

**Type R222H** – First stage regulator with all Type R622H benefits stated above, but with a compact profile. 65% greater flow than typical compact regulators but with a 40% smaller footprint. It is perfect for underground tanks or limited dome spaces.

**Type R622H** – High Flow First-Stage regulator with multiple end connections and adjustable outlet pressure spring ranges. A large 3/4 in. FNPT drip-lip vent reduces the chance of blockage by freezing rain or sleet when properly installed with the vent pointing down. Each Type R622H is equipped with a corrosion-resistant internal relief valve that provides high capacity relief and a travel stop on the closing cap. Its size and configuration make it ideal for under-the-dome installations.

First-Stage Regulators										
ТҮРЕ	CAPACITIES (PROPANE)(1)(3)		INLET	OUTLET	OUTLET ADJUSTMENT RANGE		OUTLET PRESSURE SETTING		NOMINAL RELIEF VALVE START-TO-DISCHARGE	
	BTU / hr	SCMH	CONNECTION, IN.	CONNECTION, IN.	psig	bar	psig	bar	psig	bar
R122H-AAJ	1,100,000	12.4	1/4 FNPT	1/2 FNPT	Non-Adjustable		10	0.69		
R122H-AAJXB <sup>(2)</sup>	1,100,000	12.4	1/21/01				10	0.03		
R222H-BGK	1,700,000	19.1	1/2 FNPT	1/2 FNPT	4 to 6	0.28 to 0.41	5	0.34	9	0.62
R222H-BGJ	1,800,000	20.2			8 to 12	0.55 to 0.82	10	0.69	16	1.10
R222H-HGK	1,700,000	19.1	FPOL	1/2 FNPT	4 to 6	0.28 to 0.41	5	0.34	9	0.62
R222H-HGJ	1,800,000	20.2			8 to 12	0.55 to 0.82	10	0.69	16	1.10
R222H-JGK	1,875,000	21.1	FPOL	3/4 FNPT	4 to 6	0.28 to 0.41	5	0.34	9	0.62
R222H-JGJ	1,875,000	21.1			8 to 12	0.55 to 0.82	10	0.69	16	1.10
R222H-DGK	2,000,000	22.5	3/4 FNPT	3/4 FNPT	4 to 6	0.28 to 0.41	5	0.34	9	0.62
R222H-DGJ	2,000,000	22.5			8 to 12	0.55 to 0.82	10	0.69	16	1.10
R622H-BGK	2,000,000	22.5	1/2 FNPT	1/2 FNPT	4 to 6	0.28 to 0.41	5	0.34		
R622H-HGK			FPOL							
R622H-JGK	2,250,000	25.3	FPOL	3/4 FNPT						
R622H-BGJ	2,100,000	23.6	1/2 FNPT	1/2 FNPT		0.55 to 0.83	10	0.69		
R622H-DGJ	2,400,000	27.0	3/4 FNPT	3/4 FNPT	8 to 12					
R622H-HGJ	2,100,000	23.6	- FPOL	1/2 FNPT						
R622H-JGJ	2,250,000	25.3		3/4 FNPT						

<sup>1.</sup> Based on 30 psig / 2.1 bar inlet pressure and 20% droop.

<sup>3.</sup> Metric conversion is based on 2516 BTU/ft³ of gas at 60°F / 16°C.



<sup>2.</sup> Vent over gauge taps.