INTEGRAL Two-Stage Regulators



Integral Two-Stage regulators combine a First-Stage regulator and a Second-Stage regulator into one compact unit. Recommended for installations where piping distance is short, integral Two-Stage regulators provide all of the advantages of Two-Stage regulation (refer to page 23). Fisher® brand integral Two-Stage regulators are color coded gray for easy identification. Vents are screened with standard Second-Stage vent orientation over the outlet. The Types R632A and R232A first-stage screened vent is threaded to accept a 1/4-inch OD copper tube inverted flare with a 7/16-24 UN thread. The Types R232A and R632A 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 R632A – is an Underwriters Laboratories (UL®) listed regulator with a capacity of up to 950,000 BTU per hour / 10.7 SCMH, recommended for on-site cylinder installations, mobile homes and domestic installations, where separation of the First and Second-Stage is not cost effective. This unit offers a POL inlet connection for the easy drop-in replacement of Single-Stage regulators.

Type R632A's high capacity relief valve and large 3/4-inch screened vent limit downstream pressure to less than 2 psig / 0.14 bar in an overpressure situation as required by NFPA 58. Type R632A is adjustable from 9 to 13 inches w.c. / 22 to 32 mbar, with a factory setpoint of 11 inches w.c. / 27 mbar. The Type R632A features include the 20-year recommended replacement life.



Type R632A has 1/8-inch NPT built-in gauge taps, orificed to a No. 54 drill size, on the upstream and downstream sides. These taps provide easy access for testing the proper operation of the First and Second-Stage while the system is pressurized. This regulator also features a large 3/4-inch drip-lip vent to reduce the chance of blockage by freezing rain or sleet when properly installed with the vent pointing down.

Type R232A – Designed for installations with small capacity loads up to 550,000 BTU per hour / 6.2 SCMH. With an overall length of 6.5 or 7 inches / 165 or 178 mm for NPT or FPOL connections respectively, this compact unit fits easily into confined spaces and is ideal for ASME tanks used on small domestic loads. Intermediate and outlet gauge taps facilitate easy system testing. A 3/8-inch NPT vent allows easy installation of vent piping. Use of a valve stem and lever provide stable regulation and excellent durability. A large fabric-reinforced diaphragm provides accurate regulation. The large orifice assists in minimizing freeze problems. Stainless steel internal and corrosion resistant coatings provide excellent corrosion resistance. The Type R232A also has the design that provides a recommended replacement life of 20 years.

Twin Cylinder Installations – The Type R232A can also be used on twin cylinder hook-ups found on travel trailers and stationary applications. These units offer a drip-lip vent style for installations without a vent protector. Proper installation requires the vent to be pointed down in a vertical position. Additional protection may be required if road splatter is a problem.

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TYPE NUMBER	CAPACITIES (PROPANE)(1)		INLET CONNECTION,	OUTLET CONNECTION,	OUTLET ADJUSTMENT RANGE		OUTLET PRESSURE SETTING	
	BTU / hour	SCMH	INCHES	INCHES	inches w.c.	mbar	inches w.c.	mbar
R232A-BBF	550,000	6.2	1/4 FNPT	- 1/2 FNPT	9.5 to 13	24 to 32	11	27
R232A-BBFXA ⁽²⁾								
R232A-HBF			FPOL					
R232A-HBFXA ⁽²⁾								
R632A-BCF	850,000	9.6	- 1/4 FNPT	1/2 FNPT	9 to 13	22 to 32		
R632A-BCFXA ⁽²⁾								
R632A-CFF	950,000	10.7		3/4 FNPT				
R632A-CFFXA(2)								
R632A-HCF	850,000	9.6	FPOL	1/2 FNPT				
R632A-HCFXA(2)								
R632A-JFF	850,000	9.6		3/4 FNPT				
R632A-JFFXA(2)								

^{1.} Based on 30 psig / 2.1 bar inlet pressure and 2 inches w.c. / 5 mbar droop.

^{2.} First and Second-Stage spring case vents opposite gauge taps.