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# Fisher High Pressure Commercial Regulators



#### **FISHER TYPE 64**

#### **FISHER TYPE 64SR**







Type 64 high pressure adjustable regulator used for high pressure burners as crop dryers or industrial burners. Suitable for liquid under 150° F. Does not have internal relief valve. Separate relief valve may be required by NFPA-58.

Type 64SR High pressure adjustable regulator with a built-in relief valve. Applications include high pressure burners in crop dryers and tobacco curers. Not suitable for liquid. May also be used as a first stage regulator when set at 10 PSIG or less.



#### FISHER TYPE 64 &64SR REGULATORS

Standard RMI Part No.	Part No. w/ Relief Valve	Inlet & Outlet	Pressure Setting	Pressure Range, PSI	Capacity* BTU/HR
64/33	64SR/21	½" FNPT	10	3-15	2,625,000
-	64SR/22	½" FNPT	15	5-20	3,000,000
64/35	64SR/23	½" FNPT	20	5-35	3,600,000
64/36	-	½" FNPT	40	30-60	4,150,000
64/222		½" FNPT	50	35-100	5,250,000

<sup>\*</sup>Based on inlet pressure 20# over outlet pressure with 20% droop.



#### FISHER 627

A popular regulator for many commercial and industrial loads. Field-proven over the years, reliable performance within their capacity range. Additional overpressure protection typically required.



Tel: 800-628-5044



#### FISHER 630

A high capacity regulator which offers reliable performance for large load commercial and industrial applications.



#### **FISHER TYPE 99**

A pilot-operated regulator, keeps constant outlet pressure with varying inlet pressure and flows, used as first, second or single stage service.

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RMI Part No.	Inlet /Outlet Connection	Orifice Size	Pressure Range, PSI	Pressure Setting, PSI	Internal Relief Valve	Capacity BTU/HR
627/5810	3/4"	3/8"	5-20	10	No	6,080,000
627/6210	3/4"	1/2"	5-20	10	No	10,755,000
627R-117	3/4"	1/2"	5-20	10	Yes	10,755,000
627/7710	1"	1/2"	5-20	10	No	10,773,000
627R-197	1"	1/2"	5-20	10	Yes	10,773,000
630-104/78	2"	1/2"	8-20	10	No	14,000,000
99-513P	2"	7/8"	2-10	10	No	36,368,000
99-512P	2"	7/8"	5-15	15	No	37,950,000
99-515P	2"	7/8"	10-20	20	No	41,112,000
99-903P	2"	7/8"	10-65	30	No	44,275,000
99-504PH	2"	1 1/8"	5-15	15	No	63,250,000
99-901PH	2"	1 1/8"	10-65	30	No	74,318,000

Capacity based on inlet pressure 20 PSI greater than setting pressure and 20% droop. Other spring ranges and orifice sizes available.

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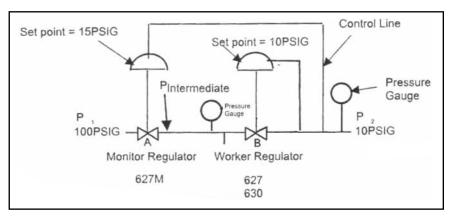
### TYPICAL WIDE OPEN UPSTREAM MONITOR INSTALLATION

Monitor regulator system provides overpressure protection for jurisdictional accounts with no release of gas like a relief valve would.

A monitor system consists of two regulators in series. The "worker" regulator controls downstream pressure during normal operating conditions. If the "worker" allows the pressure to build up downstream, the "monitor" regulator takes over control by sensing the higher pressure through the pilot control line and keeping the downstream pressure to a safe maximum pressure.

The "worker" regulator is usually set at 8-10 psi and the "monitor" regulator set at 13-15 psi. Because the monitor regulator is sensing the 8-10 psi setting of the operating regulator, it remains wide open due to its 15 psi set pressure. The "monitor" regulator will remain wide open unless the operating regulator looses pressure control and its outlet pressure climbs to 15 psi. The "monitor" regulator will start to function and limit the downstream pressure to 15 psi.





#### MONITOR REGULATORS

RMI Part No.	Inlet Connection	Orifice Size	Pressure Range, PSI	Pressure Setting, PSI	Internal Relief Valve					
627M-421	3/4"	1/2"	5-20	15	No					
627M-471	1"	1/2"	5-20	15	No					
627M-267	2"	1/2"	5-20	15	No					
99-504PHM	2"	1 1/6"	5-15	15	No					

#### TYPICAL MONITOR SYSTEM

RMI Part No. Worker Regulator	Body Size NPT	Orifice Size Inches	Monitor Regulator	Body Size NPT	Orifice Size Inches	Regulating Capacity BTU - LP Gas*
627/5810	3/4"	3/8"	627M-421	3/4"	1/2"	5,750,000
627/6210	3/4"	1/2"	627M-421	3/4"	1/2"	7,050,000
627/7710	1"	1/2"	627M-471	1"	1/2"	7,050,000
630-104/78	2"	1/2"	627M-267	2"	1/2"	8,400,000
630-104/78	2"	1/2"	99-504PHM	2"	1 1/8"	13,500,000
99-504PH	2"	1 <sup>1</sup> / <sub>8</sub> "	99-504PHM	2"	1 <sup>1</sup> / <sub>8</sub> "	42,650,000

<sup>\*</sup> Capacities Calculated at 30 PSIG in and 8 PSIG out w/20% droop.



#### **FISHER LOW PRESSURE RELIEF VALVES**

#### **Diaphragm Relief Valves**

**Type 1805** relief valve is designed for installation between the First and Second Stage regulators or in the downstream line from a high pressure regulator used for a Final-Stage service. Available in 1" or 2" valve bodies.

**Type 289H** relief valve is designed for installation downstream of a large Second-Stage regulator. The larger diaphragm in this relief valve provides extremely sensitive operation.





RMI Part No.	Inlet/Outlet	<b>Relief Setting PSI</b>	<b>Relief Range PSI</b>
1805-19P	1"	30	10-60
1805-52	2"	30	10-50
289H/2	2"	1.5"	.5 - 2.25
289H/3	2"	1.5"	1.75 - 7
289H-43	1"	15	10-20

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### 7 Commercial/Industrial Regulators



#### FISHER HSRL

Type HSRL is an UL listed regulator designed for light commercial applications up to 2,100,000 BTU/HR. It utilizes a high strength cast iron body and a 3/4" NPT drip lip vent design with high capacity internal relief valve.

#### **COMMERCIAL & INDUSTRIAL REGULATORS**

RMI Part No.	Inlet/Outlet Size	Set Pressure	Outlet Adjustment	Orifice Size	Vent Location & Tap Size	Capacity** BTU/HR
HSRL-BFC*	3/4" FNPT	11" WC	9-13" WC	3/1	Over Inlet side,	2.100.000
HSRL-CFC*	1*	11" WC	9-13" WC	3/8"	3/4*	2,100,000



<sup>\*\*</sup> Capacity based upon 10 PSIG inlet and 20% droop, except PSIG regulators.



#### FISHER CS200, CS400 & CS800 SERIES COMMERCIAL / INDUSTRIAL REGULATORS







Fax: 800-243-8341

These direct-fired, springloaded regulators have been engineered to fit a multitude of pressure-reducing applications including commercial and industrial installations.

CS200 offers a full 360-degree of rotation of the actuator via the union ring connection between the body and casing, for ease of mainteneance and installation.

CS400 and CS800 provides flexibility with numerous body sizes, end connections, outlet pressure settings, orifice sizes, as well as the option for internal and external pressure regulation. In addition these models offer multiple overpressure protection options to meet the demands on many application requirements.

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#### **COMMERCIAL & INDUSTRIAL REGULATORS**

RMI Part No.	Inlet/Outlet Size	Outlet Ad Range	ljustment Set	Orifice Size	Vent Size	Pressure Tap	Capacity @ 20% droop*	Capacity @ 1% droop
CS200IR-6EC1	3/4" FNPT	10-14" WC	11"wc	1/2"	1" FNPT	1/4" inlet	2,551,250	n/a
CS200IR-6EC3	12	10-14" WC	11"wc	1/2"	4'	1/4" inlet	3,768,000	n/a
CS200IR-6EC6	1 1/4"	10-14" WC	11"wc	1/2"	্ৰ'	1/4" inlet	3,846,500	n/a
CS400IR-6EC6	1 1/4"	10-14" WC	11"wc	1/2"	1	1/4" inlet	5,495,000	n/a
CS400IR-8EC6	1 1/4"	10-14" WC	11"wc	3/4"	1'	1/4" inlet	6,437,000	n/a
CS400IR-8EC7	1 1/2"	10-14" WC	11"wc	3/4"	1	1/4" inlet	7,065,000	n/a
CS400IR-8EC8	2"	10-14" WC	11"wc	3/4"	1'	1/4" inlet	7,065,000	n/a
CS800IR-8CC7	1 1/2"	8-12" WC	11"wc	1"	1"	¥	9,106,000	n/a
CS800IR-8CC8	2"	8-12" WC	11"wc	1"	1'	×	18,290,500	n/a
CS820IR-8GC7	1 1/2"	1.5-3.5 #	2 psi	1"	1'		15,040,600	8,242,500
CS820IR-9GC7	1 1/2"	1.5-3.5 #	2 psi	1-3/8"	1"		17,615,400	10,095,100
CS820IR-8GC8	2"	1.5-3.5 #	2 psi	1"	1"	-	21,477,600	14,491,100
CS820IR-9GC8	2"	1.2-3.5 #	2 psi	1-3/8"	1"	-	28,511,200	16,956,000
CS820IR-8HC7	1 1/2"	2.5-5.5 #	5 psi	1"	1"		15,291,800	3,752,300
CS820IR-9HC7	1 1/2"	2.5-5.5 #	5 psi	1-3/8"	1"		18,902,800	5,181,000
CS820IR-8HC8	2"	2.5-5.5 #	5 psi	1"	1"	*	16,563,500	3,752,300
CS820IR-9HC8	2"	2.5-5.5 #	5 psi	1-3/8"	1		21,336,300	5,086,800

Capacities are based on 10 psig inlet pressure.

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<sup>\*</sup> For pounds-to-inches regulators, capacity is for 2" wc droop



# Fisher Industrial Low Pressure Regulator





#### **FISHER TYPE 299**

Pilot-operated unit keeps outlet pressure constant despite varying flow rates and inlet pressures. A lightweight (19 lbs.), yet dependable regulator for applications from large commercial sites to smaller multi-dwelling establishments. Maximum inlet pressure 150 PSI.



#### **FISHER TYPE 99**

Pilot-operated regulator, keeps constant outlet pressure with varying inlet pressure and flows, used as first, second and single stage service.



#### **FISHER TYPE 133**

Self-operated 2nd stage regulator for either low pressure or pounds to pounds service. Maximum inlet pressure is 60 psig, and a downstream control line is required.

Fax: 800-243-8341

#### **COMMERCIAL AND INDUSTRIAL REGULATORS**

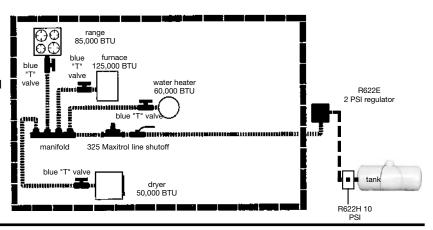
RMI Part No.	Inlet	Outlet	Orifice Size	Pressure Setting	Registration	Range	Capacity BTU/HR	
299H-101	11/2"	11/2"			Internal		13,100,000	
299H-102	2"	2"	3/4"	11" W.C.	IIILEIIIAI	9-20" W.C.	19,700,000	
299H-105	11/2"	1 <sup>1</sup> / <sub>2</sub> "	74	74	II VV.G.		9-20 W.G.	20,400,000
299H-106	2"	2"			Fustamal		20,400,000	
99-510P	2"	2"	7/8"	1 PSI	External	1/4 0 DCI	29,400,000	
99-501P	-	2	1 <sup>1</sup> / <sub>8</sub> "		1 731		1/4 - 2 PSI	49,000,000
133L-4				8.5-18" W.C.		Over outlet	70,875,000	
133H-1	2"	2"	2"	1.5-3 PSIG	N/A	1" FNPT	112 400 000	
133H-2				2-5 PSIG		Screened	113,400,000	

## Regulators - 2 PSI Systems



#### **DUAL PRESSURE SYSTEMS** (2 PSI SYSTEMS)

Elevated pressure systems (2 psi for residential and up to 5 psi for commercial installations) are usually piped with one or more house line regulators (poundsto-inches) followed by a manifold and runs to each of the appliances. It is possible that these runs to appliances may contain tee branching off to an additional appliance where gas loads permit.



#### **FISHER RESIDENTIAL 2 PSI REGULATORS**

2 PSI service regulators have an internal relief valve, and are designed to serve as intermediate regulators installed on the exterior of the building structure. These regulators supply propane to a manifold (located inside the structure) where piping such as corrugated stainless steel tubing (CSST) is routed to a line regulator supplying approximately 11" w.c. to appliances throughout the structure.



#### 2 PSI INTEGRAL 2 STAGE

RMI Part No.	Inlet Connection	Outlet Connection	Outlet Pressure Range	Vent	Capacity BTU/hr Propane
R232E-BBH	1/4" FNPT	1/2" FNPT	2 psig	Over	500,000
R232E-HBH	F. POL	1/2" FNPT	0.14 bar	Outlet	500,000
R632E-BCH	1/4" FNPT	1/2" FNPT			850,000
R632E-HCH	F. POL	1/2" FNPT	2 psig	Over Outlet	900,000
R632E-CFH	1/4" FNPT	3/4" FNPT	0.14 bar		850,000
R632E-JFH	F. POL	3/4" FNPT			850,000

(1) Capacities based on 30 psig / 2.07 bar inlet pressure and 20% droop.

#### 2 PSI 2nd STAGE

RMI Part No.	Inlet Connection	Outlet Connection	Outlet Pressure Range	Vent	Capacity BTU/hr Propane
R622E-BCH	1/2" FNPT	1/2" FNPT			1,250,000
R622E-DCH	3/4" FNPT	3/4" FNPT	1.5 - 2.5 psig	Over Inlet	1,500,000
R652E-DFH	3/4" FNPT	3/4" BACK			1,400,000

#### **MAXITROL 325 SERIES LINE REGULATORS**

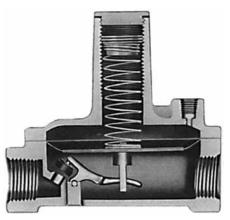
Lever Acting Design - Line Certified

Used in 2 PSIG piping systems for propane installations. 325 Series can only be used as an appliance regulator with a maximum 2 PSIG inlet pressure. 325 Series does not have an internal relief valve and can not be used as a second stage regulator.

RMI Part No. w/vent limit installed	Vent Port	Inlet/ Outlet	Propane Spring Range	Spring Setting	Operating Inlet PSI**	BTU Capacity Single Appliance	BTU Capacity Total Combined All Appliances
325-3L-3/8	1/ <sub>8</sub> " limiter	3/8"				140,000	250,000
325-3L-1/2	included	1/2"				140,000	250,000
325-5AL-1/2	2/11 12 21	1/2"				300,000	425,000
325-5AL-3/4	%" limiter included	3/4"	7"-11" WC	11" WC	2 PSI	300,000	550,000
325-5AL-1	Illoludeu	1"				300,000	550,000
325-7-1.25		11/4"				900,000	1,000,000
325-7-1.5	½" must vent to	11/2"				900,000	1,000,000
325-7AL-1.25	atmosphere	11/4"				900,000	1,000,000

Regulator must be mounted in horizontal position and vent limiter must be mounted in upright position for best performance. Otherwise vent to outside building.

<sup>\*\*</sup> Maximum inlet pressure is 10 PSI



325 Series

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