

Commercial Low-Pressure Regulators

Regulators

FISHER™



TYPE CS200



TYPE CS400



TYPE CS800

Emerson has a wide range of low-pressure regulators to meet almost any commercial or industrial application. For ease of reference, only the most popular commercial and industrial regulators are shown on this page. Other orifice sizes, body sizes and outlet pressure ranges are available. See the product guides on pages 36 and 38. The Commercial Service (CS) Regulator Series 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.

Note: Because of various spring ranges and orifice sizes, all commercial and industrial regulators should be individually sized for the particular installation. Consult specific product bulletins for maximum pressures ratings. Contact your local LPG Equipment Distributor for assistance.

Type CS400 – The Type CS400 is a medium capacity low-pressure, direct-operated regulator designed for loads up to 7,800,000 BTU per hour / 88 SCMH, ideal for installations at schools, bakeries and many other commercial/industrial applications. Available in 1-1/4, 1-1/2 and 2 in. body sizes with spring ranges from 4.5 in. w.c. to 5.5 psig / 11 mbar to 0.38 bar.

Type CS200 – The Type CS200 is a medium capacity low-pressure, direct-operated regulator designed for loads up to 3,800,000 BTU per hour / 44 SCMH, ideal for installations on smaller commercial/industrial applications. Available in 3/4, 1 and 1-1/4 in. body sizes with spring ranges from 3.5 in. w.c. to 2 psig / 9 mbar to 0.14 bar.

Flanged Bodies – The Types CS400 and CS800 are available with a flanged body. Flanges are available in 2 in. / DN 50 body size and CL125 FF end connection.

Type CS800 – The Type CS800 is a direct-operated, spring-loaded regulator which has been engineered for low-pressure commercial service applications. This regulator can accommodate up to 21,600,000 BTU per hour / 243 SCMH of flow capacity and is available in 1-1/2 and 2 in. body sizes with 8 in. w.c. to 5.5 psig / 20 mbar to 0.38 bar pressure ranges.

Note: Types CS200, CS400 and CS800 regulators should be installed with additional/external overpressure protection. These units when installed as part of a two-stage system in fixed piping serving 14 in. w.c. / 35 mbar appliance systems require additional overpressure protection to make the system compliant with NFPA 58 requirements for a two-stage system. Please consult with your LPG Equipment Distributor for more information.

Low-Pressure Commercial Regulators

TYPE	CAPACITIES (PROPANE) ⁽¹⁾		ORIFICE SIZE		INLET AND OUTLET CONNECTION, IN.	OUTLET PRESSURE RANGE		OUTLET PRESSURE SETTING		MAXIMUM OPERATING INLET PRESSURE	
	BTU / hr	SCMH	In.	mm		psig	bar	psig	bar	psig	bar
CS200IR-6EC1	2,500,000	28	1/2	13	3/4 FNPT	10 to 14 in. w.c.	25 to 35 mbar	11 in. w.c.	27 mbar	40	2.8
CS200IR-6EC3	3,800,000	43			1 FNPT						
CS200IR-6EC6	3,900,000	44			1-1/4 FNPT						
CS400IR-8EC6	6,800,000	76	3/4	19.1	1-1/4 FNPT	8 to 12 in. w.c.	20 to 30 mbar	2	0.14	20	1.4
CS400IR-8EC7	7,600,000	85			1-1/2 FNPT						
CS400IR-8EC8	7,600,000	85			2 FNPT						
CS800IR-8CC7	10,460,000	118	1	25.4	1-1/2 FNPT	1 to 2	0.06 to 0.14	2	0.14	30	2.1
CS800IR-8CC8	21,809,000	245			2 FNPT						
CS200IR-6HC1	3,760,000	42	1/2	13	3/4 FNPT	1 to 2.5	0.06 to 0.17	5	0.35	40	2.8
CS200IR-6HC3	4,780,000	54			1 FNPT						
CS200IR-6HC6	5,327,000	60			1-1/4 FNPT						
CS400IR-8HC6	9,715,000	109	3/4	19.1	1-1/4 FNPT	2 to 5.5	0.14 to 0.38	5	0.35	20	1.4
CS400IR-8HC7	10,500,000	118			1-1/2 FNPT						
CS400IR-8HC8	8,775,000	99			2 FNPT						
CS820IR-8FC7	15,011,000	169	1	25.4	1-1/2 FNPT	2.5 to 5.5	0.17 to 0.38	5	0.35	30	2.1
CS820IR-8FC8	21,436,000	241			2 FNPT						
CS400IR-8IC6	7,365,000	83	3/4	19.1	1-1/4 FNPT	1 to 2.5	0.06 to 0.17	5	0.35	40	2.8
CS400IR-8IC7	6,895,000	77			1-1/2 FNPT						
CS400IR-8IC8	7,365,000 ⁽²⁾	83 ⁽²⁾			2 FNPT						
CS820IR-8HC7	15,262,000	171	1	25.4	1-1/2 FNPT	2.5 to 5.5	0.17 to 0.38	5	0.35	30	2.1
CS820IR-8HC8	16,532,000	186			2 FNPT						

1. Capacities are based on 10 psig / 0.69 bar and 2 in. w.c. / 5 mbar droop.

2. Capacities are based on 10 psig / 0.69 bar and 20% droop.

NOTE: Additional combinations of body sizes, spring ranges and orifice sizes are available. See guides on the next page. Consult your LPG Equipment distributor for more information.