MAXITROL

Gas Appliance Regulators

SR Series SR400, SR500 & SR600

COMBINES GAS PRESSURE REGULATING AND FLAME STAGING IN A SINGLE UNIT



design certified

MAXIMUM INLET PRESSURE:

CSA Certified SR400, 500 & 6001/2 psi (34 mbar) Maxitrol-tested SR400, 500 & 6001 psi (69 mbar)

EMERGENCY EXPOSURE LIMITS:

SR400, 500 & 6002.5 psi (172 mbar)

OUTLET PRESSURES:

Low Fire	(standard)	0.2"	to	1.2"	w.c.
	(-1)	.1.0"	to	2.8"	w.c.
	(-2)	.2.2"	to	4.5"	w.c.
High Fire	(SR400, 500 & 600)				
•	(SR400, 500 & 600 -1 & -2)				



2-stage regulators

The SR Series provides an economical means of flame staging where infinite modulation is not required. Turn down on low fire is from 25% to 75% of high fire — flow rates to 1,000 CFH.

The SR Series regulator can serve as an alternative to double manifolds on applications requiring dual stages or settings by combining gas pressure regulating and flame staging in a single unit. Examples of 2-stage heating requiring dual gas pressure include direct-fired heaters with two speed fans, hi-lo control for door heaters, LP-Nat. gas switchover and industrial processing.

In the SR400, 500 & 600 group, energization of the solenoid unloads the maximum adjustment spring and resets the outlet pressure to its minimum setting. Since both high and low stages are adjustable, the degree of staging can be easily

altered by simple spring adjustments. No complicated orifice changes are required. These models are CSA design certified for maximum inlet pressure of 1/2 psi and capacities up to 600,000 Btu/h.

All models may be powered by a 24 volt AC transformer. When the coil is energized, the appliance is at low fire. When the coil is de-energized, it is at high fire. Continuous regulation is maintained to hold the electrically set outlet pressure constant against variations.

The regulators are of balanced valve construction — enabling precision performance over wide variation of inlet pressures and flow rates.

The SR400-2, SR500-2, and SR600-2 models are designed primarily for LP gas applications.

Dimensions and Pressure Drop

DIMENSIONS — inches (millimeters)

Model	Call-Outs					
	Α	В	С	D		
SR400	3.98	2	2.19	.95		
	(101.1)	(50.8)	(55.6)	(24.1)		
SR500	5.31	3.25	3.38	1.19		
	(134.9)	(82.6)	(85.9)	(30.2)		
SR600	7.08	3.88	4.03	1.46		
	(179.8)	(98.3)	(102.4)	(3.71)		



NOTE: Models having the suffix letter W indicate covered wire terminal connections.

PRESSURE DROP — values expressed in inches w.c. (mbar)

Model Number and Pipe Size		Flow Rate — CFH (m³/h)							
		100 (2.83)	200 (5.66)	300 (8.50)	400 (11.33)	500 (14.16)	600 (16.99)	750 (21.24)	1000 (28.32)
SR400	3/8 x 3/8 1/2 x 1/2	0.33 (.82) 0.27 (.67)	1.30 (3.24) 1.10 (2.74)						
SR500	1/2 x 1/2 3/4 x 3/4	0.08 (.20) 0.05 (.12)	0.30 (.75) 0.21 (.52)	0.68 (1.69) 0.47 (1.17)	1.20 (2.99) 0.83 (2.07)	1.30 (3.24)			
SR600	3/4 x 3/4 1 x 1		0.09 (.22) 0.07 (.17)	0.20 (.50) 0.16 (.40)	0.36 (.90) 0.29 (.72)	0.56 (1.39) 0.45 (1.12)	0.81 (2.02) 0.66 (1.64)	1.25 (3.11) 1.0 (2.49)	1.75 (4.36)

Specifications

PRESSURE ADJUSTMENT RANGES: (STANDARD)

Minimum Spring Range NAT 0.2" to 1.2" w.c. LP 1.0" to 2.8" w.c.

Maximum Spring Range NAT 3.0" to 5.0" w.c. LP 7.5" to 12" w.c.

See Maxitrol's "Spring Chart" for other available ranges.

PRESSURE LIMITS:

Maximum Operating Inlet	1.0 psi (69 mbar)
Emergency Exposure	2.5 psi (172 mbar)

AMBIENT TEMPERATURE LIMITS:

Operating-40° to 175°F (-40° to 79°C)

VENTS: Models SR400, 500 & 600 — vertical vent outlet tapped 1/8" NPT. 12A06 vent limiter installed.

MOUNTING: Mounting in horizontal pipe run in upright position. Not suitable for multi-poise mounting. Flow direction orientated as marked on bottom casting.

GASES: Suitable for application in natural, manufactured, mixed gases, liquefied petroleum gases and LP gas-air mixture piping systems.

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