

# GAS PRESSURE REGULATORS CATALOG

2<sup>nd</sup> EDITION





**⚠ WARNING**

**Service and installation must be performed by a trained/experienced service technician.**

All products used with combustible gas **must** be installed and used **strictly** in accordance with the instructions of the Original Equipment Manufacturer (OEM) and with all applicable government codes and regulations, e.g. plumbing, mechanical, and electrical codes and practices. Maxitrol products should be installed and operated in accordance with Maxitrol Safety Warning Instructions.

Maxitrol Company is NOT responsible for any errors or omissions in reliance by anyone of any information set forth in this catalog without additional reference to local requirements and applicable ordinances or codes.

**Other worldwide approvals and certifications available upon inquiry.**



# SR SERIES

## 2 Stage Design

An ideal replacement for dual manifold systems, the SR Series combines gas pressure regulating and flame staging in a single unit. Applications include direct-fired heaters with two speed fans, hi-lo control for outdoor heaters, LP natural gas switchover and industrial processing.



**SR400**

## Specifications

**Pipe Sizes** ..... 3/8" thru 1" threaded connections with NPT or ISO7-1 threads.

**Housing Material** ..... SR400, SR500, SR600: aluminum.

**Mounting** ..... Mount in an upright position only.

**NOTE:** All Maxitrol gas pressure regulators should be installed and operated in accordance with Maxitrol Safety Warning Instructions (see SELMMRSR\_MI\_EN.FR.ES).

**Certifications** ..... SR400, SR500, SR600: ANSI Z21.18/CSA 6.3 Gas Appliance Pressure Regulators (except suffix -2 models).

**Gas Types** ..... Suitable for natural, manufactured, mixed gases, liquefied petroleum gases, and LP gas-air mixtures.

**Maximum Inlet Pressure** ..... CSA Certified: 1/2 psi (3.4 kPa)  
Maxitrol Tested: 1 psi (6.9 kPa)

**Flow Rates**..... up to 1,000 CFH (28.32 m<sup>3</sup>/h)

**Emergency Exposure Limits**..... 2.5 psi (17.2 kPa)

**Ambient Temperature Ranges**..... -40 to 175°F (-40 to 79°C)

**Minimum Regulation**..... SR400, SR500: 5 CFH; SR600: 60 CFH

**NOTE:** SR400-2, SR500-2, SR600-2 models are designed primarily for LP gas applications.

**NOTE:** 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 high fire. Continuous regulation is maintained to hold the electrically set outlet pressure constant.



## Capacities and Pressure Drop: inches w.c. (kPa)

Model Number	Pipe Size	Flow Rate - CFH (m <sup>3</sup> /h)								
		CSA MAX	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"	150 (4.2)	0.33 (0.08)	1.30 (0.32)	---	---	---	---	---	---
	1/2" x 1/2"	170 (4.8)	0.27 (0.07)	1.10 (0.27)	---	---	---	---	---	---
SR500	1/2" x 1/2"	360 (10.2)	0.08 (0.02)	0.30 (0.08)	0.68 (0.17)	1.20 (0.30)	---	---	---	---
	3/4" x 3/4"	400 (11.2)	0.05 (0.01)	0.21 (0.05)	0.47 (0.12)	0.83 (0.20)	1.30 (0.32)	---	---	---
SR600	3/4" x 3/4"	600 (16.8)	---	0.09 (0.02)	0.20 (0.05)	0.36 (0.09)	0.56 (0.14)	0.81 (0.20)	1.25 (0.31)	---
	1" x 1"	600 (16.8)	---	0.07 (0.02)	0.16 (0.04)	0.29 (0.07)	0.45 (0.11)	0.66 (0.16)	1.00 (0.25)	1.75 (0.44)

**NOTE:** Capacities expressed in CFH (m<sup>3</sup>/h) @ 0.64 sp gr gas

CSA maximum capacities vary with spring range and pipe size. Please contact Maxitrol directly for CSA maximums. See pages 58-59 for Regulator Sizing Requirements and Examples.

## Spring Selection: inches w.c. (kPa)

Model	Available Springs					
SR400	Maximum	3 to 5 (0.75 to 1.25) S. Steel	2.5 to 3.5 (0.62 to 0.87) White	4 to 6 (1 to 1.5) S. Steel	3 to 5 (0.75 to 1.25) White	---
	Minimum	0.3 to 1.2 (0.07 to 0.3) Plated	0.3 to 1.2 (0.07 to 0.3) Plated	1 to 2.8 (0.25 to 0.7) Blue	1 to 2.8 (0.25 to 0.7) Blue	2.5 to 4 (0.62 to 1) Black
SR400-2*	Maximum	7.5 to 12 (1.87 to 3) - Blue				
SR500	Maximum	3 to 5 (0.75 to 1.25) S. Steel	1.5 to 3.5 (0.37 to 0.87) White	3.5 to 6 (0.87 to 1.5) S. Steel	2 to 4.5 (0.5 to 1.12) White	---
	Minimum	0.3 to 1.2 (0.07 to 0.3) Plated	0.3 to 1.2 (0.07 to 0.3) Plated	1 to 2.8 (0.25 to 0.7) Plated	1 to 2.8 (0.25 to 0.7) Blue	---
SR500-2*	Maximum	7.5 to 12 (1.87 to 3) - Black				
SR600	Maximum	3 to 5 (0.75 to 1.25) S. Steel	2.5 to 4 (0.62 to 1) Plated	4 to 6 (1 to 1.5) S. Steel	3 to 5.5 (0.75 to 1.37) White	---
	Minimum	0.5 to 1.2 (0.12 to 0.3) Plated	0.3 to 1.2 (0.07 to 0.3) Plated	1 to 2.8 (0.25 to 0.7) Plated	1 to 2.8 (0.25 to 0.7) Blue	---

\* For LP application - may be used with any minimum spring.

**NOTE:** See pages 56-57 for complete Spring Selection Chart.

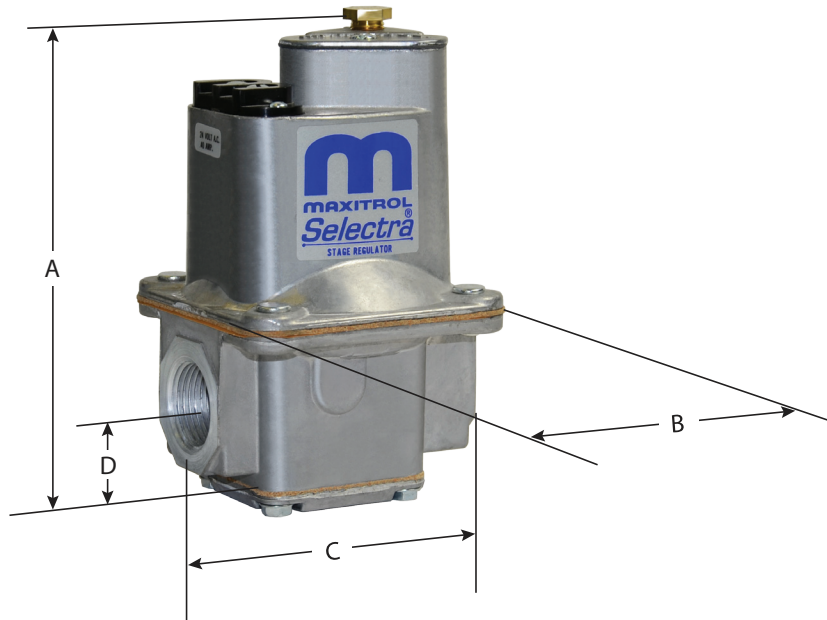
# SR SERIES

2 Stage Design

## Dimensions

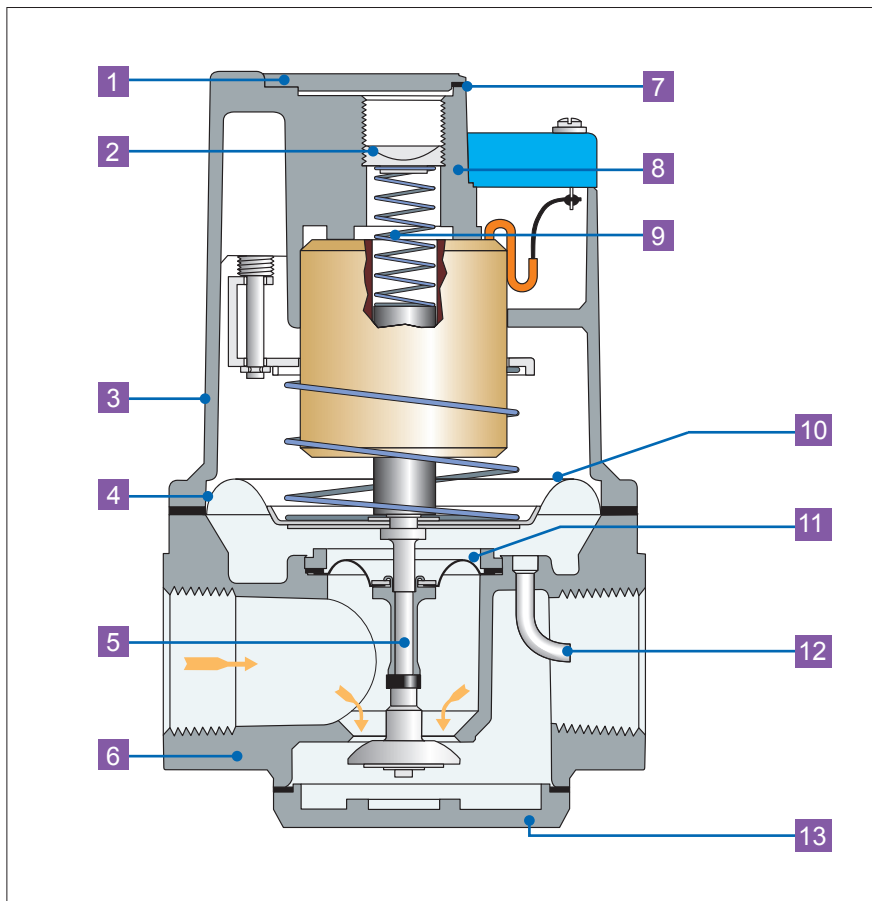
Model	Pipe Size	Vent Connection	Dimensions			
			A	B	C	D
SR400	3/8", 1/2"	1/8" NPT, 12A06 vent limiting device installed.	4" (102 mm)	2" (51 mm)	2.2" (56 mm)	1" (25 mm)
SR500	1/2", 3/4"	1/8" NPT, 12A06 vent limiting device installed.	5.3" (135 mm)	3.2" (81 mm)	3.4" (86 mm)	1.2" (30 mm)
SR600	3/4", 1"	1/8" NPT, 12A06 vent limiting device installed.	7" (178 mm)	3.9" (99 mm)	4" (102 mm)	1.5" (38 mm)

**NOTE:** Dimensions are maximums and to be used only as an aid in designing clearance for the valve. Actual production dimensions may vary somewhat from those shown.



SR400, SR500, SR600

## 2 Stage Design



- 1** Seal Cap
- 2** Adjusting Screw
- 3** Top Housing
- 4** Regulating Diaphragm
- 5** Stem & Valve
- 6** Bottom Housing
- 7** Seal Cap Gasket
- 8** Stack
- 9** Spring
- 10** Diaphragm Plates
- 11** Balancing Diaphragm
- 12** Sensing Tube
- 13** Bottom Plate

**NOTE:** Diagrams are graphical representations only and may differ from actual product.

