

MAXITROL

Balanced Valve Design Gas Appliance Regulators

R400, R500, R600 &
R400S, **R500S** &
R600S

NOTE: All Maxitrol appliance regulators should be installed and operated in accordance with Maxitrol's "Safety Warning" Bulletin.

These regulators are not suitable for dead-end lock-up service. They are capable of controlling pressure at very low flows such as standing pilots, but should not be used as a first cut regulator for appliances equipped with electronic ignition unless automatic control valve can open against line pressure.

The R & RS series is intended for use with both main burner and main burner and pilot load applications. The double diaphragm balanced valve design make it possible to build a regulator physically small in size yet having good capacity characteristics. They are able to maintain steady outlet pressure control with widely varying inlet pressures. The high quality molded balancing diaphragm eliminates the inlet pressure effect acting on the valve.

The housings are rugged aluminum die castings. All internal components are carefully selected and corrosion resistant. The diaphragms are of high quality supported synthetic rubber components, usually silicon rubber impregnated on Dacron* polyester for excellent low temperature performance. The RS models incorporate a resilient chemically bonded synthetic rubber ring on the valve member. The soft seating insures satisfactory pilot control at inlet pressures up to 5 psi.

These regulators are ideally suited for use with infra-red heaters and pilot lines on large industrial heaters and boilers. They may also be used in residential applications. Because of their high pressure drop capacities, both the R & RS models will operate satisfactorily on domestic as well as elevated pressures. Appliances may be shipped to any area having supply pressures of from 7.0" w.c. to 5 psi without changing regulators. They find wide applications on commercial and industrial equipment, especially where precise outlet pressure accuracy is required.

Any of the RS models can be furnished for zero governor applications.

*DuPont Trademark

R & RS series

MAXIMUM INLET PRESSURES:

R400, R500 & R600	1.0 psi
R400S, R500S & R600S	5.0 psi

EMERGENCY EXPOSURE LIMITS:

R400, R500 & R600	2.5 psi
R400S, R500S & R600S	12.5 psi

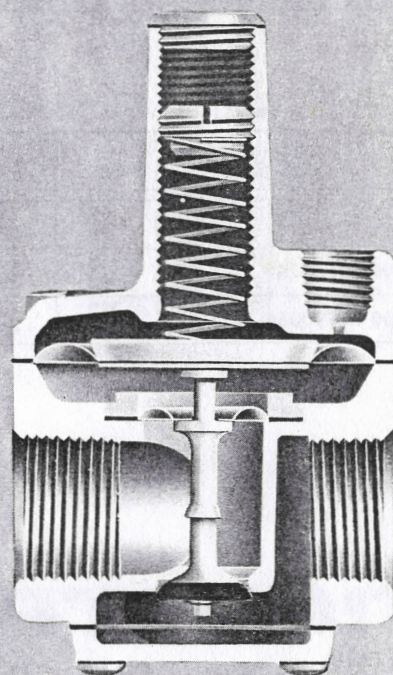
AMBIENT TEMPERATURE LIMITS:

R400, R500, R600, R400S, R500S & R600S	-40° to 205° F
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VENTING 1/8" NPT

GASES: Natural, manufactured, mixed, liquified petroleum or LP gas-air mixture.

MOUNTING: Suitable for multi-poise mounting — mount with flow direction as marked on bottom casting.



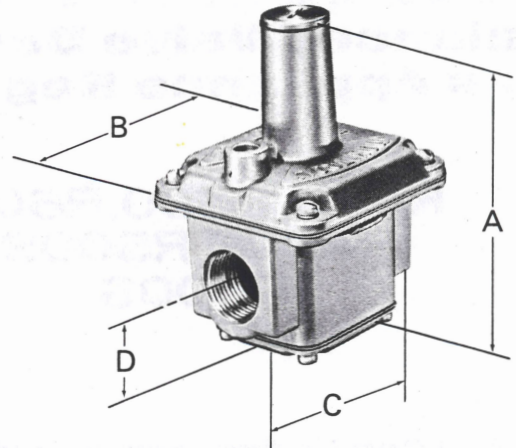
Specifications

REGULATORS FOR ZERO GOVERNOR APPLICATIONS:

R400SZ, R500SZ & R600SZ — These regulators are identical to the "S" series, except that they are equipped with a counter spring beneath the valve for zero governor use in the normal upright position. They may be used for modulating burners where the gas flow rate varies.

A maximum inlet pressure of 1 psi is recommended, and outlet pressure may be adjusted from $-1.0''$ to $+1.5''$ w.c.

At any given flow rate the regulation accuracy is $\pm 0.2''$ w.c. over varying inlet pressures up to 1 psi.



DIMENSIONS — in inches

Model Number	Swing Radius	A	B	Call-Outs	C	D
R400 & R400S	2-3/8	3-1/4	2		2	15/16
R500 & R500S	3-9/16	4-11/16	3-1/8		3	1-3/16
R600 & R600S	4-1/4	5-11/16	3-7/8		3-3/4	1-1/2

SPRING SELECTION CHART — inches w.c.

Model Number	Standard Spring	Other Springs Available							
R400 & R400S	3 to 6	1.0-3.5	2.0-5.0	3.0-8.0	—	4.0-12	5.5-12	10-22	—
R500 & R500S	3 to 6	1.0-3.5	2.0-5.0	3.0-8.0	4.0-8.0	4.0-12	5.5-12	10-22	—
R600 & R600S	3 to 6	1.0-3.5	2.0-5.0	3.0-8.0	4.0-8.0	4.0-12	5.5-12	10-22	15-30

CAPACITIES — expressed in ft³/h @ 0.64 sp gr gas

Model Number & Pipe Size		Pressure Drop										
		0.2"	0.4"	0.6"	0.8"	1.0"	1.5"	2.0"	2.5"	3.0"	3.5"	4.0"
R400 & R400S	3/8 x 3/8	77	110	134	155	174	212	245	274	—	—	—
	1/2 x 1/2	86	121	148	172	192	235	271	303	—	—	—
R500 & R500S	1/2 x 1/2	163	231	283	327	366	447	516	577	635	685	730
	3/4 x 3/4	196	277	340	392	438	537	620	693	760	820	876
R600 & R600S	3/4 x 3/4	298	421	516	595	666	816	942	1,054	1,150	1,245	1,335
	1 x 1	330	468	572	661	739	906	1,046	1,169	1,280	1,380	1,480

MAXITROL company

23555 TELEGRAPH

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