



SR800 SERIES

Inlet to 3,600 PSIG & Outlet to 250 PSIG

HIGH CAPACITY PRESSURE REGULATOR

Fred C. Gilbert Co.
106 Norris Road
Bakersfield, Ca. 93308
661-399-9569
fax 661-393-9654

Features

- High Flow Rates of 1.65 Cv
- Diaphragm Provides Maximum Sensitivity
- Pressure Relief Valve for Safety Protection
- Panel Mounting Standard
- Compatible with Corrosive and Non-corrosive Liquids & Gases

Applications

- Manifold Pressure Control
- Process Gas Control
- Blanket or Purge Gas Control
- High Flow Station or Main Line Controls

Technical Data

Materials of Construction

Body	– Brass
Seat	– Kel F, Kynar, Polyurethane or Polyimide/Vespel SP-21
Seal & Diaphragm	– Buna N, Neoprene, Teflon® or Viton®
Springs	– Steel
Spring Housing	– Brass

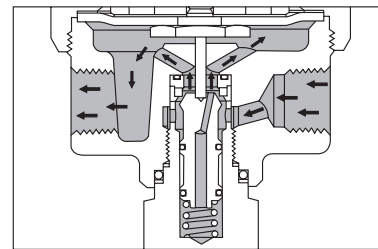
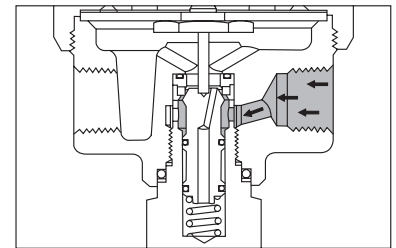
Port Size & Connections

1/2" Female NPT

How It Works

CLOSED

Balanced poppet is spring loaded against seat. When full upstream pressure is applied, a slightly unbalanced force is developed which enhances sealing.



REGULATING

As the downstream process demands flow, the pressure acting on the bottom of the diaphragm decays, allowing

the adjusting spring force to push the poppet down. This in turn unseats the poppet, allowing flow to begin and pressure under the diaphragm to increase until balance is achieved between adjusting spring force and downstream pressure. This condition continues until process ceases. At this point, increasing pressure overcomes spring force, moving diaphragm up and allowing piston to close.

Pressure Ratings

Inlet	– 3,600 PSIG (248 BAR)
Outlet	– SR800: 250 Max. SR830: 125 Max.

Temperature Range

–60°F to +160°F;
–51°C to +71°C

Flow Capacity

$C_V = 1.65$ Max.
ESEOD = 0.30"

Weight

6 lbs.



CIRCLE SEAL CONTROLS, INC.

A division of CIRCOR International, Inc.

Certified to ISO 9001

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How To Order

SR800 B 3 3 1 1 2 G

BASIC MODEL NUMBER & PRESSURE RANGE

- SR800 - 0 to 250 PSIG (0-17 BAR)
- SR830 - 0 to 125 PSIG (0-9 BAR)

BODY MATERIAL

- B - Brass

INLET CONNECTION

- 1 - MS33656-8
- 2 - MS33656-12
- 3 - 1/2" Pipe
- XXX - Insert CGA No. (example: 580)

OUTLET CONNECTION

- 1 - MS33656-8
- 2 - MS33656-12
- 3 - 1/2" Pipe

OPTIONS

- G - Pressure Gauges, Brass
- B - Bell Handle
- L - Hex Head Adjustable Screw with Locknut

CLEANING LEVELS*

- 1 - For general oxygen service
- 2 - For general pneumatic service
- 3 - Specify (Define on sales order)
- 4 - For precision pneumatic service

SEAT MATERIAL & TEMPERATURE

- 1 - Nylatron GS (Std.) -60°F to +160°F
- 2 - Kel F -20°F to +250°F
- 4 - Kynar
- 5 - Polyimide/Vespel SP-21 -20°F to +250°F
- 6 - Polyurethane

SEAL & DIAPHRAGM MATERIAL

- 1 - Neoprene (Std.)
- 3 - Viton®
- 4 - Buna N
- 5 - Teflon® Seals, Teflon® Coated Neoprene Diaphragm

Note:

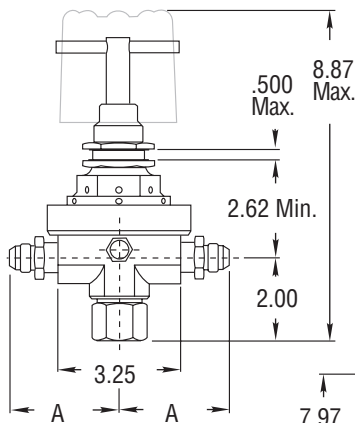
Outlet pressure rise per 100 PSI inlet pressure decay 1/4 PSI max.

*If this regulator is to be used in oxygen service, specify "GENERAL OXYGEN SERVICE" when ordering or furnish the factory a copy of the special requirements.

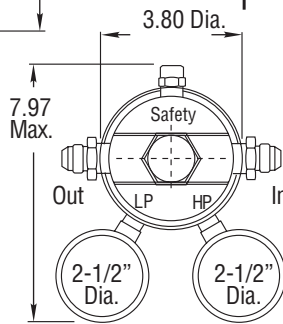
Please consult your Circle Seal Controls Distributor, Representative or the factory for information on special connections, operating pressures and temperature ranges.

Teflon® is a registered trademark of DuPont and Viton® is a registered trademark of DuPont Dow Elastomers.

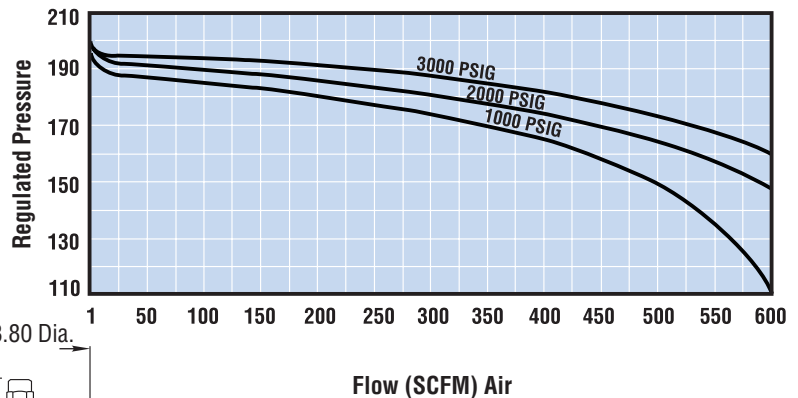
Dimensions & Flow Curves



Connection	A
MS33656-8	2-29/32"
MS33656-12	3-5/64"
1/2" Std.	1-5/8"
Insert CGA	—



TYPICAL FLOW CURVE



PRESSURE RANGES

Gauge Ranges Inlet	Gauge Ranges Outlet	Safety Valve Set Pressure
0-5000 PSIG	0-600 PSIG	400 PSIG
0-5000 PSIG	0-200 PSIG	200 PSIG

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