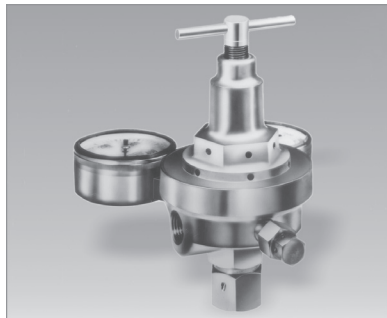




CIRCLE SEAL CONTROLS, INC.

A division of CIRCOR International, Inc.



SR800 Series

Inlet to 3,600 psig & Outlet to 250 psig

High Capacity Pressure Regulator

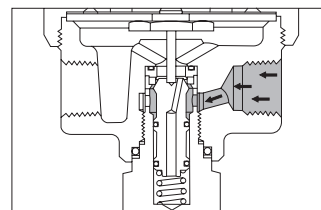
Features

- High Flow Rates of 1.65 C_v
- Diaphragm Provides Maximum Sensitivity
- Pressure Relief Valve for Safety Protection
- Panel Mounting Standard
- Wide Range of Fluid Compatibility

Applications

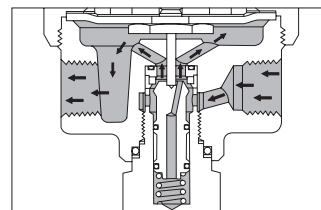
- Manifold Pressure Control
- Process Gas Control
- Blanket or Purge Gas Control
- High Flow Station or Main Line Controls

How It Works



CLOSED

Balanced poppet is spring loaded against the 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 demand ceases. At this point, increasing pressure overcomes the spring force, moving the diaphragm up and allowing poppet to close.

Technical Data

Body Construction Material:	• Brass
Seat Material:	• Nylatron GS
Seal & Diaphragm Material:	• Neoprene
Spring Material:	• Steel
Spring Housing Material:	• Brass
Port Size:	• 1/2" Female NPT
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"

NOTE: Proper filtration is recommended to prevent damage to sealing surfaces.

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SR800 Series

Inlet to 3,600 psig & Outlet to 250 psig

How to Order

R/ SR800 B 3 3 1 1 2 G

(Repair Kit) ———

BASIC MODEL NUMBER & OUTLET 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
1 – Nylatron GS (Std.)

SEAL & DIAPHRAGM MATERIAL
1 – Neoprene (Std.)

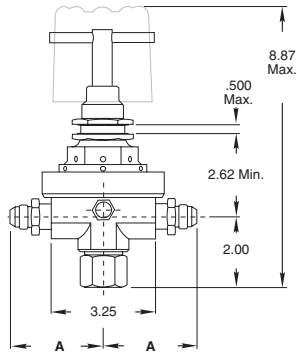
NOTES

Outlet pressure rise per 100 psi inlet pressure decay 1/4 psi Max.

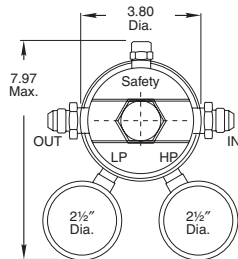
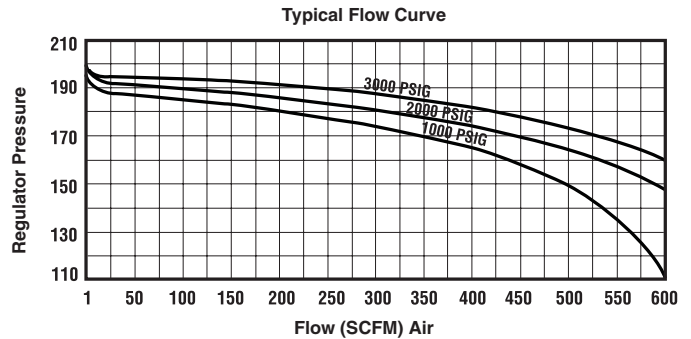
* If this regulator is to be used in oxygen service, specify "GENERAL OXYGEN SERVICE" when ordering or furnish the factory a copy of the special requirements.

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

Dimensions & Flow Curves



Connection	A
MS33656-8	2-29/32"
MS33656-12	3-5/64"
1/2" Std.	1-5/8"
Insert CGA No.	—



Pressure Range

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

For Your Safety

It is the sole responsibility of the system designer and user to select products suitable for their specific application requirements and to ensure proper installation, operation and maintenance of these products. Material compatibility product ratings and application details should be considered in the selection. Improper selection or use of products described herein can cause personal injury