

# HIGH FLOW – HIGH PURITY REGULATOR

## Series 3830

### DESCRIPTION

The 3830 series regulators are designed for high flow applications involving high purity or corrosive gases. The series features a large main valve with a Cv of 1.0. In the high pressure version the main valve is balanced to minimize the effect of inlet pressure fluctuations on outlet pressure. The low pressure inlet line regulator version uses an unbalanced main valve for reliable shutoff.

### FEATURES

- Capable of high flows with only a small pressure drop.
- High purity metal diaphragm construction.
- All parts ultrasonically cleaned prior to assembly.
- Designed to pass an inboard leak-rate test of 2x10-8 cc/sec.

### APPLICATIONS

The 3830 series regulators are ideal for high flow systems of high purity or corrosive gas whether used as a high pressure regulator or a line regulator with inlet pressure less than 500 psig.

### SPECIFICATIONS

	3830	3830L
Max. Inlet Pressure:	3000 psig	500 psig
Operating Temp. Range:	-40°F to +165°	-40°F to +165°
Flow Coefficient(Cv):	1.0	1.0
Inlet and Outlet:	1/2" NPT	1/2" NPT



3831

### MATERIALS OF CONSTRUCTION

	3831	3831L	3832	3832L
Body:	brass	brass	316 SS	316 SS
Bonnet:	nickel plated brass	nickel plated brass	nickel plated brass	nickel plated brass
Diaphragm:	316 SS	316 SS	316 SS	316 SS
Seat:	CTFE	Teflon	CTFE	Teflon
Seal:	Teflon	Teflon	Teflon	Teflon
Main valve:	316 SS	316 SS	316 SS	316 SS
Gauges:	brass	brass	SS	SS

### HOW TO ORDER\*\*\*+

Model Number	Del. Press. Range psig	Del. Press. Gauge psig	Inlet Press. Gauge psig
3831-25	0-25	0-60	0-4000
3831-50	0-50	0-100	0-4000
3831-100	0-100	0-200	0-4000
3831-150	0-150	0-200	0-4000
3831-200	0-200	0-400	0-4000
3831L-25	0-25	0-60	none
3831L-50	0-50	0-100	none
3831L-100	0-100	0-200	none
3831L-150	0-150	0-200	none
3831L-200	0-200	0-400	none
3832-25	0-25	0-60	0-3000
3832-50	0-50	0-100	0-3000
3832-100	0-100	0-200	0-3000
3832-150	0-150	0-200	0-3000
3832-200	0-200	0-400	0-3000
3832L-25	0-25	0-60	none
3832L-50	0-50	0-100	none
3832L-100	0-100	0-200	none
3832L-150	0-150	0-200	none
3832L-200	0-200	0-400	none

\*\*\*For panel mounting bonnet add "PM" to base number (i.e., 3831LPM-50).



3831L

+ A 100 micron filter is recommended for installation on the regulator inlet. P/N 7510-100-P8MM or 7520-100-P8MM (see page 76)