

# SG4820 Series

## High Precision, Low Flow, Instrument Regulators

The SG4820 Series regulators are designed primarily for use in analytical instrument applications and are suitable for line or panel mounting. These high precision, direct acting, non-relieving regulators provide bubble-tight shutoff with helium at 100 psig.

### Standard Features

- High Resolution Design (0–15 Turns Over Full Delivery Pressure Range) provides precise pressure control necessary for use with analytical instruments.
- Filter Screens in Ports trap foreign matter, extend regulator life and reduce maintenance.
- Mounting Nuts permit regulator to be panel mounted.

### Optional Features

- 2 Micron, Type 316 Stainless Steel or Aluminum Alloy Inlet Filter provides additional protection from particulates for regulator and downstream system.

### Specifications

Maximum Inlet Pressure: 250 psig  
 Delivery Pressure Range: See Table I  
 Maximum Operating Temperature: 140°F  
 Maximum Flow Capacity: 1,000 sccm air  
 Inlet, Outlet and Gauge Ports:  
 1/8" NPT female  
 Supply Pressure Effect: 0.07 psi per 10 psi  
 Approximate Weight: 0.5 lb

### Materials of Construction

Body: See Table I  
 Bonnet: Aluminum  
 Valve Stem and Valve Spring:  
 Type 316 Stainless Steel  
 Seat: PTFE  
 Diaphragm and Seals:  
 SG4820: Buna-N  
 SG4821: Viton®  
 Adjusting Spring: Zinc-Plated Music Wire



SG4820 Regulator

Table I

Delivery Pressure Range (psig)	Model SG4820 (Aluminum Body)	Model SG4821 (Type 316 SS Body)
0–0.5	SG4820-1	SG4821-1
0–10	SG4820-10	SG4821-10
0–30	SG4820-30	SG4821-30
0–60	SG4820-60	SG4821-60
0–100	SG4820-100	SG4821-100
0–200	SG4820-200	SG4821-200

### Optional Equipment

Equipment	Part No.
Inlet Filter, 2 micron, for Model SG4820	FM4741
Inlet Filter, 2 micron, for Model SG4821	FM4746