

# Model LABE

## High Purity, Two-Stage, Chrome-Plated Regulators

These metal diaphragm two-stage regulators are specially designed for laboratory applications requiring both high reliability and diffusion resistance. Recommended for high purity non-corrosive gases or gas mixtures, they provide constant outlet pressure regardless of changes in cylinder (inlet) pressure.



LABE Regulator

### Standard Features

- Stainless Steel Diaphragms minimize diffusion of air into regulator and eliminate “off gassing” associated with elastomeric diaphragms, thus maintaining gas purity.
- High Purity Regulator Design permits vacuum purging of regulator.
- Diaphragm Seal Outlet Valve maintains gas purity.
- Two-Stage Regulator Design ensures constant delivery pressure over varying inlet pressures.
- Chrome-Plated Surfaces provide polished appearance and ease of cleaning.
- Cartridge (Encapsulated) Seat Assemblies provide for ease of maintenance and repair.
- Filter in Each Seat Assembly traps foreign matter, extends regulator life and reduces maintenance.

### Optional Features

- Relief Valve protects regulator components from the effects of overpressurization.

### Optional Equipment

Equipment	Part No.
Relief Valves:	
for LABE-3-15 Series	RV5573-25i
for LABE-3-50 Series	RV5573-90i
for LABE-3-125 Series	RV5573-150i
for LABE-3-250 Series	RV5573-300i

### Specifications

Maximum Inlet Pressure: 3000 psig  
 Inlet Pressure Gauge (dual scale):  
 0–4000 psig / 0–275 bar  
 Delivery Pressure Range: See Table I  
 Delivery Pressure Gauge: See Table I  
 Filters: 10 micron  
 Gauge Size: 2" Dial  
 Operating Temperature Range:  
 –40°F to 140°F  
 Flow Coefficient:  
 Regulator: Cv = 0.15  
 Outlet Valve: Cv = 0.17  
 Inlet Connection: CGA 296, 320, 326, 346,  
 350, 540, 580, 590, or 660 as ordered  
 Outlet Connection:  
 ¼" NPT female (on outlet valve)  
 Optional Relief Valve Vent Connection:  
 ¼" NPT male  
 Supply Pressure Effect: 0.04 psi per 100 psi  
 Approximate Weight: 5 lbs.

### Materials of Construction

Body: Chrome-Plated Brass Forging  
 Gauges: Chrome-Plated Brass  
 Bonnets: Chrome-Plated Zinc  
 Filters: Nickel-Plated Sintered Bronze  
 Other Metal Parts Exposed to Gas:  
 Brass and Stainless Steel  
 Seat and Seals: PTFE in Regulator  
 Diaphragms: Type 304 Stainless Steel  
 Outlet Valve:  
 Body: Nickel-Plated Brass Bar Stock  
 Seat: PCTFE  
 Diaphragm: Type 316L Stainless Steel

Table I

Part No.	Delivery Pressure		
	Range (psig)	Gauge (dual scale) (psig)	(bar)
LABE-3-15-(CGA)	2–15	–30" Hg–0–30	–1–0–2
LABE-3-50-(CGA)	4–50	–30" Hg–0–100	–1–0–7
LABE-3-125-(CGA)	10–125	–30" Hg–0–200	–1–0–14
LABE-3-250-(CGA)	20–250	0–400	0–27

Where “(CGA)” is indicated above, insert appropriate Compressed Gas Association connection number to complete the part number. Example: LABE-3-15-580. Order by complete part number.