

Tied-Diaphragm Regulators

High-Purity for Corrosive Service

Model 237

These single-stage tied-diaphragm regulators have been successfully used with acid-forming gases such as hydrogen chloride and boron trifluoride. Constructed of aluminum silicon bronze, they demonstrate superior corrosion-resistant properties for demanding gases. Featuring both Monel® nozzle and filter screens, along with a stainless steel diaphragm lined with Hastelloy C-22®, this construction allows for use in high-purity applications while enhancing resistance to corrosion.



Benefits/Features

High-flow capabilities for chemical process control and tube trailer unloading.

Diaphragm and poppet are mechanically linked to provide a positive shutoff.

Stainless steel diaphragm with Hastelloy C-22® trim maintains gas purity while providing enhanced resistance to corrosion.

Specifications

Inlet Pressure: See table below

Operating Temperature Range:
-40°F to 140°F (-40°C to 60°C)

Flow Coefficient:

Regulator Cv = 0.624

Outlet Valve Cv = 0.26

Supply Pressure Effect:

1 psi per 100 psi (0.1 bar per 7 bar)

Regulator Inlet Port: 1/4" NPT Female

Inlet Connections: Specify CGA

Outlet Connections: 1/4" NPT Female and all other configurations

Gauge: 2.5" (67 mm) face

Weight: 7.1 lbs. (3.2 kg)

Materials of Construction

Body: Aluminum silicon brass

Diaphragm: 316 Stainless Steel lined with Hastelloy C-22®

Seats: PCTFE

Seals: PTFE

Gauges: 316 Stainless Steel

Bonnet: Nickel chrome-plated brass

Model 237 Aluminum Silicon Bronze	Delivery Pressure Range		Delivery Pressure Gauge		Cylinder Pressure Gauge		Inlet Pressure (maximum)	
	psig	bar	psig	bar	psig	bar	psig	bar
Q1-237A4K-(*)	3 – 75	0.2 – 5	0 – 100	0 – 7	0 – 4000	0 – 276	3000	207
Q1-237B4K-(*)	10 – 150	0.7 – 10	0 – 200	0 – 14	0 – 4000	0 – 276	3000	207
Q1-237A1K-(*)	3 – 75	0.2 – 5	0 – 100	0 – 7	0 – 1000	0 – 70	800	55
Q1-237B1K-(*)	10 – 150	0.7 – 10	0 – 200	0 – 14	0 – 1000	0 – 70	800	55
Q1-237A4-(*)	3 – 75	0.2 – 5	0 – 100	0 – 7	0 – 400	0 – 28	300	21
Q1-237B4-(*)	10 – 150	0.7 – 10	0 – 200	0 – 14	0 – 400	0 – 28	300	21
Q1-237A-(*)	3 – 75	0.2 – 5	0 – 100	0 – 7	None	None	3000	207
Q1-237B-(*)	10 – 150	0.7 – 10	0 – 200	0 – 14	None	None	3000	207

* Specify CGA. Other cylinder connections are available – please contact your Air Liquide representative.