Cross Purge Control Panel

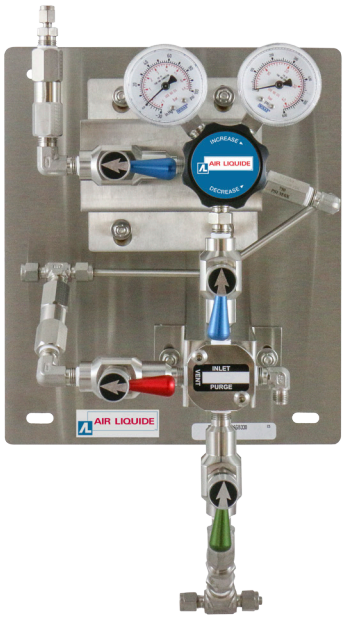
For Corrosive Liquefied Gases

Model JA-P1

Our cross purge control panel is ideal for controlling corrosive gases that are packaged as liquefied compressed gases such as H_2S, HCl, SO_2 and Cl_2. It permits manual pressure control to provide precise and safe delivery of high-purity, toxic, corrosive and flammable acid-forming gases that are corrosive in the presence of moisture.

A cross-purge assembly featuring three diaphragm-seal valves reduces risk of exposure to toxic and hazardous gases, plus helps ensure continuous operation of a contaminant-free system. An isolation valve permits isolation of the system downstream of the purge assembly, while purge and vent valves permit easy purging and venting. Thus, during initial system start-up or when changing gas cylinders, our panel provides a safe and convenient means of flushing a distribution system with a dry purge gas such as nitrogen.

As an added safety feature, our cross purge control panel comes equipped with a LifeGuard™ safety hose that is self-sealing in the event of a hose rupture, thereby minimizing the chance of releasing toxic gases that may be in use. Stainless steel components include a single-stage Model 217 tied-diaphragm regulator and diffusion-resistant diaphragm seal valves. Pressure relief and process check valves maintain a high level of purity and safety for all types of gases. Lever-activated valves that operate from "fully closed" to "fully open" in a quarter-turn, allow for quick activation and provide positive visual ID of open/closed status. Color-coded handles also serve as a visual aid in process control.



Model QJAP1-6G-B

Benefits/Features

Bar stock body, tied-diaphragm, single-stage regulator with all metal-to-metal diaphragm to body seal (without backup o-ring) design provides for low internal volume, high leak rate integrity, and high-purity control

LifeGuard safety hose protects against the potential hazardous effects of high-pressure hose rupture, pull-apart, whipping and failure

Reduced footprint allows for fitting into tight gas cabinets and CEMs shelters

Quarter-turn diaphragm seal valves never require packing adjustments and have lever-type color coded handles that serve as a visual aid in process control

Panels are designed to meet <2 x 10^{-8} scc/sec helium leak rate

All materials of construction are compatible with corrosive sulfurs and chlorinated gases

Relief valve protects regulator and system from over-pressurization

Check valves prevent back flow of gas

Components are assembled using compression or pipe thread connections to facilitate installation

Control panels are helium-leak and pressure-hold tested

Stainless steel back-plate has predrilled mounting holes

Custom designed panel configurations can be engineered to meet special installation needs

Optional Equipment

Purge gas regulator panel: provides purge gas pressure control

Cylinder scale: recommended for measuring contents of a liquefied compressed gas cylinder

Cylinder heating and insulating jackets: recommended for cylinders used in colder environments

Gas safety cabinets: provide a means to isolate hazardous gas cylinders and control panel from workplace

Fixed gas detection equipment: gas detectors, transmitters and sensors

Cylinder support stands and brackets

Longer pigtail lengths

Various inlet and outlet connections

Model 620 Electronic Scale

Note: Because pressure in a liquefied compressed gas cylinder will remain constant (at the given vapor pressure of the gas) and until the gas is entirely depleted, using a pressure gauge is ineffective. Our Model 620 electronic scale easily solves this problem by measuring the weight of the liquefied gas to accurately monitor the volume in the cylinder.

Cross Purge Control Panel

For Corrosive Liquefied Gases

Model JA-P1

Specifications

Inlet Pressure (maximum): See table

Operating Temperature:
-15°F to 140°F (-26°C to 60°C)

Regulator: Model 217

Flow Coefficient:
Regulator: Cv = 0.05
Diaphragm Valves: Cv = 0.15

Gauge Size: 2" face (50.8 mm)

Inlet Connections:
Models with pigtails: Specify CGA
Models without pigtails: 1/4" compression

Outlet Connection: 1/8" compression

Pigtails: LifeGuard™ flexible safety hose (Model LGS), 36" long, 1/4" nominal ID, 0.64" nominal OD, double-braided, convoluted stainless steel inner liner

Panel Dimensions (12-gauge):
Vertical: 10" W x 12" H x 0.105" D
(254 mm x 305 mm x 2.7 mm)

Materials of Construction

Regulator and Valve Bodies:
316 Stainless Steel

Diaphragms: 316 Stainless Steel

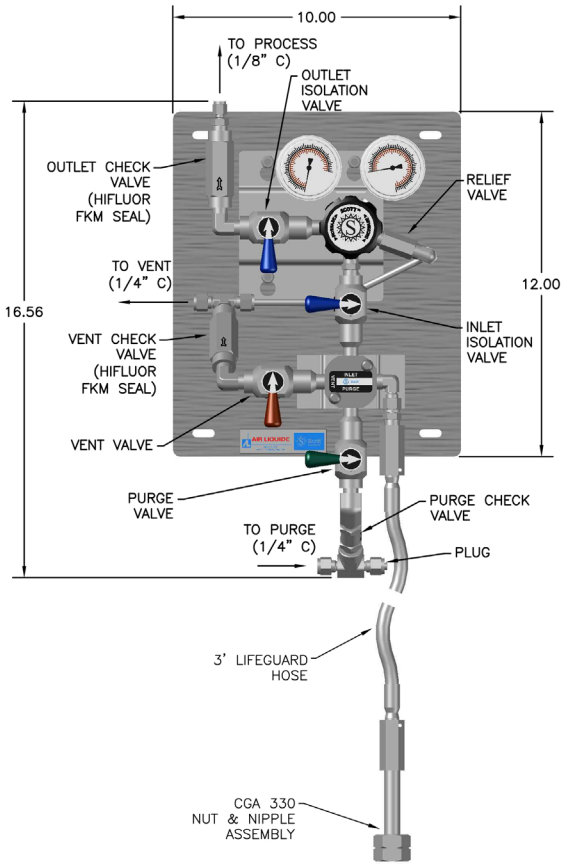
Seals: PCTFE

Seats:
Regulator and Valves: PCTFE
Relief Valve: Hifluor FKM
Check Valves:
Purge: FKM
Process and Vent: Hifluor FKM

Gauges: 316 Stainless Steel

Pigtails:
Model LGS LifeGuard™ flexible safety hose
Innercore and End Fittings:
316 Stainless Steel
Internal Safety Cable, Valve Retainer and Snap Ring: 316 Stainless Steel
Overbraid: 304 Stainless Steel

Panels and Brackets:
Brushed 304 Stainless Steel



Ordering Information

Model Number	Inlet Pressure (maximum)		Cylinder Pressure Gauge (dual scale)		Delivery Pressure Range		Delivery Pressure Gauge (dual scale)	
	psig	bar	psig	bar	psig	bar	psig	bar
QJAP1-4G-A-(CGA)	320	22	0 – 400	0 – 28	1 – 30	0.1 – 2	30" Vac – 0 – 60	-1 – 0 – 4
QJAP1-4G-B-(CGA)	320	22	0 – 400	0 – 28	2 – 75	0.1 – 5	30" Vac – 0 – 100	-1 – 0 – 7
QJAP1-4G-C-(CGA)	320	22	0 – 400	0 – 28	5 – 150	0.3 – 10	30" Vac – 0 – 200	-1 – 0 – 14
QJAP1-6G-A-(CGA)	480	33	0 – 600	0 – 42	1 – 30	0.1 – 2	30" Vac – 0 – 60	-1 – 0 – 4
QJAP1-6G-B-(CGA)	480	33	0 – 600	0 – 42	2 – 75	0.1 – 5	30" Vac – 0 – 100	-1 – 0 – 7
QJAP1-6G-C-(CGA)	480	33	0 – 600	0 – 42	5 – 150	0.3 – 10	30" Vac – 0 – 200	-1 – 0 – 14
QJAP1-1KG-A-(CGA)	800	55	0 – 1000	0 – 69	1 – 30	0.1 – 2	30" Vac – 0 – 60	-1 – 0 – 4
QJAP1-1KG-B-(CGA)	800	55	0 – 1000	0 – 69	2 – 75	0.1 – 5	30" Vac – 0 – 100	-1 – 0 – 7
QJAP1-1KG-C-(CGA)	800	55	0 – 1000	0 – 69	5 – 150	0.3 – 10	30" Vac – 0 – 200	-1 – 0 – 14

Where (CGA) is indicated, insert appropriate Compressed Gas Association (CGA) connection number to complete the model number.
Example: QJAP1-6G-B-330. Please order by complete model number.
Optional purge control panels are available - please contact your Air Liquide representative.