

Subpart Ja Cross Purge Module

Model JA-XPURGE

Purging, meaning to cleanse, is an important procedure which is often overlooked in many gas processes. Before initial and subsequent system startups, purging should be done to remove contaminants (such as air and water vapor) from the gas delivery system. To enhance operator safety, purging should also be done before changing out cylinders to remove residual corrosive or toxic gases. Oxygen and moisture can adversely affect many applications, reducing the quality of products being produced, or affecting the results of tests being performed. In addition, many gases such as hydrogen sulfide and sulfur dioxide will react with moisture to form highly corrosive acids. These acids will attack most metals, including stainless steel, thereby reducing the service life of pressure regulators and other system components. Proper purging techniques can avoid these and other related problems.

The Subpart Ja Cross Purge Module provides a means to introduce an inert purge gas such as dry nitrogen into the system after the service gas cylinder has been connected. Pressure purging and venting with strict compliance to procedural process steps reduces the risk of exposure to the operator and contamination to the distribution system.

The Model JA-XPURGE cross purge assembly is designed to be installed between the gas cylinder and pressure regulator. It features a diaphragm seal valve that connects to a regulated purge gas source and a check valve installed in the purge inlet port to prevent backflow of gas into the purge line should the purge valve be inadvertently left open. An inlet valve allows the operator to isolate the pressure regulator and downstream system prior to a cylinder change. A vent valve connects to a suitable disposal line.

Benefits/Features

Quarter-turn valves with lever-type handles operate from "fully closed" to "fully open" in a 90° arc, allowing for easy cycling and visual indication that the valves are opened or closed

Packless diaphragm seal valves maintain gas purity at maximum levels (inboard leakage <2 x 10–8 scc/sec He) while permitting operation at pressures ranging from vacuum to 3000 psig.

Color-coded valve handles serve as a visual aid in process control

Check valve on purge inlet prevent back flow of process gas into the purge gas line

Stainless steel mounting bracket has predrilled mounting holes

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

Helium leak and pressure-hold tested



Model JA-XPURGE

Specifications

Inlet Pressure:

3000 psig (207 bar) maximum

Operating Temperature:

-15°F to 140°F (-26°C to 60°C)

Flow Coefficient (valves): Cv = 0.15

Connections:

Purge Gas and Cylinder Inlet: ¼" Compression
Regulator Isolation Outlet: ¼" NPT Male
Vent Outlet: ¼" NPT Female

Bracket Dimensions (14 gauge):

3.75" H x 1.88" W x 3.31" D
(95.3 mm x 47.8 mm x 84.1mm)

Materials of Construction

Valves: 316 Stainless Steel

Diaphragms: 316 Stainless Steel

Seats:

Valves: PCTFE
Check Valve: FKM

Bracket: Brushed 304 Stainless Steel

Optional Equipment

Model Number	Description
QJA-XPURGE	Ja Cross Purge Module

Where (CGA) is indicated, insert appropriate Compressed Gas Association (CGA) connection number to complete the model number. Example: QLGS036T-330. Please order by complete model number.

Model Number	Description	Specifications
QLGS036T-(CGA)	LifeGuard™ Flexible Safety Hose Pigtailed (Model LGS)	36" long, 1/4" tube x CGA
QLGS048T-(CGA)		48" long, 1/4" tube x CGA
QLGS060T-(CGA)		60" long, 1/4" tube x CGA
QCV5660KZ	Check Valves	316SS w/Hifluor FKM seat ¼" NPTM x ¼" NPTM
QCV5663KZ		316SS w/Hifluor FKM seat ¼" NPTF x ¼" NPTF