

SilcoNert[®] 2000 Cross Purge Assembly

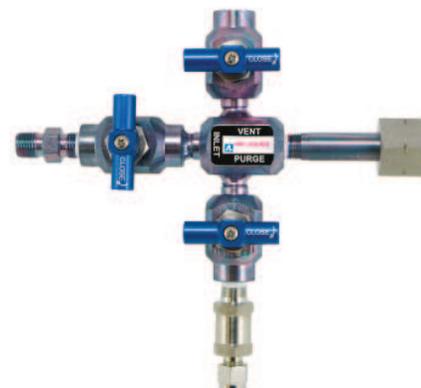
Model SN4P74

Model SN4P74 Cross Purge Assembly is ideal for use with low level reactive calibration gas mixtures. The SilcoNert 2000 treatment eliminates surface adsorption of reactive gases for unsurpassed analytical accuracy. Processes are more precisely controlled, sample cycle times reduced, and false low and inaccurate analysis values are eliminated—yielding significant savings in time, labor and materials.

Purging (meaning to cleanse) is an important procedure which is often overlooked in many gas processes. Before initial and subsequent system start-ups, 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. Many gases such as hydrogen chloride, hydrogen sulfide or sulfur dioxide will react with moisture to form highly corrosive acids. These acids will affect analytical analyses and calibration results, and will also attack most metals including stainless steel, thereby reducing the service life of pressure regulators, analytical instruments and other system components. Proper purging techniques can avoid these and other related problems.

Purging is often done by simply flowing the service gas through the system and venting until the system has been cleansed. However, when the service gas is toxic, corrosive, hazardous or expensive, purging by this method is not practical or effective. In these cases, purging is normally accomplished using an inert purge gas such as dry nitrogen.

The Model SN4P74 Cross Purge Assembly is used between the gas cylinder and pressure regulator to provide a means to introduce a purge gas into the system, isolate the regulator and flush contaminants through a vent valve. Primarily, they are designed for incorporation into SilcoNert 2000 regulators (Models SN206 and SN216). Each unit is supplied with a check valve and shutoff valve to minimize possible backflow of cylinder gas into the purge source. Other regulators or custom gas delivery systems can be fitted with these purge units—consult with your Air Liquide representative for recommendations.



Specifications

Operating Pressure:

3000 psig (207 bar) maximum

Leakage:

External: Designed to meet $<2 \times 10^{-8}$ atm cc/sec He

Inlet Connection: Specify CGA

Valves: 3/4-turn lever-type handle, diaphragm seal

Outlet: 1/4" NPT Male

Vent Connection: 1/4" NPT Female

Check Valve Connection: 1/4" Compression

Materials of Construction

Metal Parts Exposed to Gas:

316 Stainless Steel treated with SilcoNert 2000

Diaphragm Valve:

Body: 316 Stainless Steel

Seat: PCTFE

Diaphragm: 316 Stainless Steel

Check Valve:

Body: 316 Stainless Steel

Seal: Viton[®]

Model Number	Description
QSN-4P74-(*)	SilcoNert Cross Purge

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

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