

Purge Assemblies

A purge assembly is recommended for use with toxic, corrosive, or flammable gases. The cross purge and tee purge assemblies help to ensure safety when working with hazardous gases. The cross purge also protects the system from atmospheric contamination. The tee purge is used for general purpose corrosive or hazardous applications; the cross purge is intended for use with high purity applications where preventing contamination is critical.

Safety

Toxic levels of arsine, phosphine, and other gases may be contained in the high pressure side of regulators. When the regulator is removed from a cylinder of these hazardous gases, some gas is released into the work atmosphere. Spontaneously flammable materials like silane will ignite when exposed to air. A cross purge or tee purge assembly is used with an inert gas to flush all hazardous gases from the regulator, eliminating their release when the regulator is removed from the cylinder.

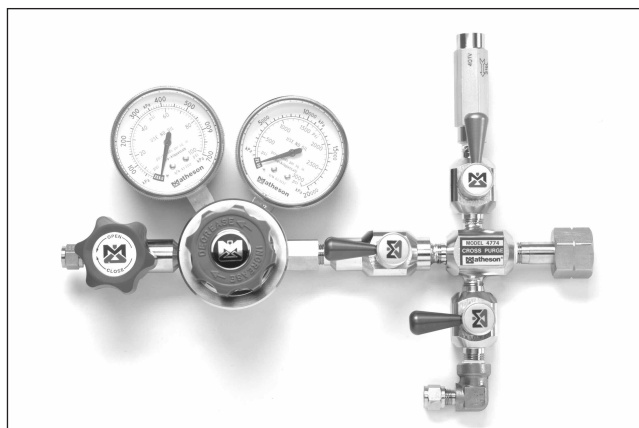
Corrosive gases like hydrogen chloride present severe corrosion problems when exposed to moisture. The cross purge's valving configuration allows the regulator to be closed off completely from the atmosphere before removing it from the cylinder. Closing the valves prevents atmospheric moisture from contacting the gas, minimizing corrosion.

Purity

Atmospheric contaminants like moisture and oxygen cannot be tolerated in a high purity system. When a regulator is removed from a cylinder, atmospheric oxygen and moisture enter the regulator. When the regulator is put back into service, these contaminants enter the system. The cross purge's valving configuration allows the regulator to be completely isolated from the atmosphere, preventing contaminants from entering the system.

Note: Regulator is not included with the cross purge assembly; it must be ordered separately. When ordering a regulator for use with a cross purge assembly, please specify the regulator model number with a "no inlet" designation, using an 'N/I' suffix instead of a CGA number (e.g., 3122-N/I for a model 3122 with no inlet CGA connection). This designation will provide a regulator with an FPT inlet instead of a CGA connection, into which the cross purge assembly can be installed.

Models 4774 and 4775 Cross Purge Assemblies



Model 4774 Cross Purge Assembly shown with regulator attached; please order regulator separately

Design Features

- Eliminates the escape of hazardous gases when changing cylinders
- Reduces danger of contamination from atmospheric moisture and oxygen
- Minimizes the amount of gas lost during cylinder changes
- All stainless steel or corrosion resistant construction
- Rated for 3000 psig (20,700 kPa)
- Packless valves throughout

Ordering Information

Model Number	Material
4774-CGA	All 316 Stainless Steel
4775-CGA	Aluminum-Silicon-Bronze Valves with Monel Block and Check Valve

Shipping Weight: 3 lbs

Options

Model Number	Description
MSP-0012-XX	Helium Leak Rate Certification (2×10^{-8} scc/min for 5 minutes)