

SAMPLE PUMP



AMI has developed a Class 1, Div. II Group C,D Sample Pump Module suitable for a wide range of previously impossible applications.

- Hazardous area sample pump
- Low diffusion diaphragm for trace O₂ measurement
- Approved for Class 1, Div 2, Groups C,D, Temp Code T6
- Withdraws sample from low pressure or vacuum gas lines
- Works with AMI watchdog or 2010BR analyzers

Our high quality pump uses a unique diaphragm that diffuses less than 0.5ppm of oxygen while drawing from pressures as low as 14"Hg. It pushes the sample gas through the trace oxygen analyzer allowing the sensor to operate at atmospheric pressure. Electrochemical oxygen sensors must operate at or very close to atmospheric pressure for accurate operation.

Prior sample pump technologies used various types of diaphragm materials, which either allowed too much oxygen to diffuse, or alternatively developed small leaks allowing air to be drawn into the system. In either case, the measured oxygen values would become misleadingly high. The alternative – locating the pump downstream of the analyzer so that it could draw the sample gas through the analyzer - would cause the sensor to operate at varying levels of vacuum determined by the pressure at which the pipeline or application operates, causing erroneously low readings, drift, and sensor damage.

The AMI Sample Pump Module incorporates a 12VDC long life brushless motor and pump designed to last for over 20,000 continuous hours.

It uses special electronics that prevent arcs while switching the pump on/off.

The pump is capable of handling a wide range of inlet pressures from 14"Hg. to 10PSIG while maintaining a constant 10psig output pressure.

SPECIFICATIONS

- Area Classification: Class 1, Div.2, Group C,D
- Connections: ¼" SS compression fittings
- Power: 12VDC @ 750ma.
- Pressure range: 14"Hg. to 10psig.
- Dimensions: 7.5W x 6.0"H x 4.5"D
- Weight: 4lbs.
- Mounting: Wall mount