

General Description

The Universal Analyzers Ammonia Scrubber is designed to remove Ammonia from a gas stream to protect the analyzer from clogging due to the formation of ammonium salts. Ammonia when present in gas samples, will readily react with other components such as Sulfur Dioxide in the sample to form ammonium salts. This salt is relatively low-boiling, so it is present as a gas at the higher temperatures in the stack and in the heated line. When the sample cools, it precipitates out as a solid, clogging the chiller or analyzer. For this reason, we recommend installing an ammonia scrubber in the sample path, before the gas is cooled, to prevent downtime.

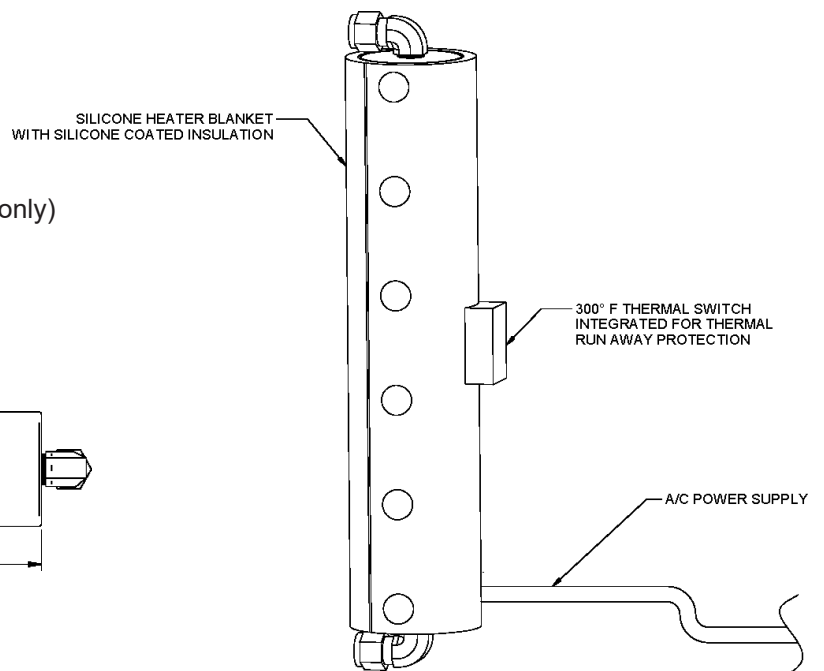
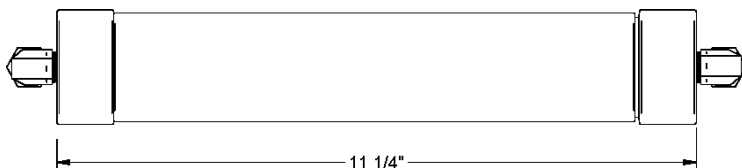


Operation

Ammonia Scrubbers consist of a Polysulfone or Stainless Steel housing filled with a phosphoric acid type media and inert ceramic burl saddles. Phosphoric acid reacts with ammonia in an acid-base neutralization reaction producing a phosphate of ammonia. This compound is a solid even at elevated temperatures and deposits immediately inside the ammonia scrubber as a visible salt residue.

Features

- Removes only Ammonia
- Eliminates ammonium salts
- Accommodates all sample compositions
- Ease of maintenance
- Self regulating temperature control (heated version only)
- Corrosion resistant wetted parts
- Hazardous area options (unheated version only)



Technical Specifications

- Maximum Sample Flow Rate: 10 LPM
- Maximum Stack Gas Temperature: 700°F STD (Stainless Steel)
265°F (Polycarbonate)
- Maximum Pressure: 300 psig (Stainless Steel)
90 psig (Polycarbonate)
- Sample Temperature (Heated): 270°F (Maintained) @ 70°F Ambient w/ 5 L/min air flow
- Dimensions (Approximate): 13 L" x 3" O.D
- Material: 316 Stainless Steel or Polycarbonate
- Weight (Approximate): 10 LB (5 KG)
- Input Power Requirement (Heated): 50 WATTS (Both Voltages)
- Input Voltage Requirement (Heated): 115 or 230 VAC at 50/60 HZ

