



Sample System Specialists for Gas Analysis

Model 270F

Flare Stack Probe

General Description

The 270F Flare Stack probe is designed specifically for sulfur (total or especiated) in flare gas applications. The flare stack probe utilizes the Universal Analyzers 270SF filter chamber so it includes the heated chamber, 'no tool' filter cap, calibration gas injection port and (optional) high efficiency blowback system.

Due to the composition of the flare gas, some additional features have been included.

- For more accurate and faster response time, all sample wetted stainless steel parts have been SilcoNert™ coated.
- To protect maintenance personnel, a pneumatic chamber isolation valve is included. This valve isolates the filter chamber from the process flare gas during filter changes (an additional manual ball valve can be added for additional protection).
- For additional personnel safety, an environmental purge is included. An inspection port is provided so the operator can ensure the environment is safe before opening the enclosure.
- Specific flare stack probe models carry an FM Class 1, Div 2 certification (without a Z-purge).
- A retractable SilcoNert™ probe tube with Triple O-ring seal makes it possible to extract the probe and completely isolate it from the process by closing the process side root valve.



Applications

- ◆ Rule 1118 - Flare Stack
- ◆ 40CFR 60 Subpart Ja - Flare Stack

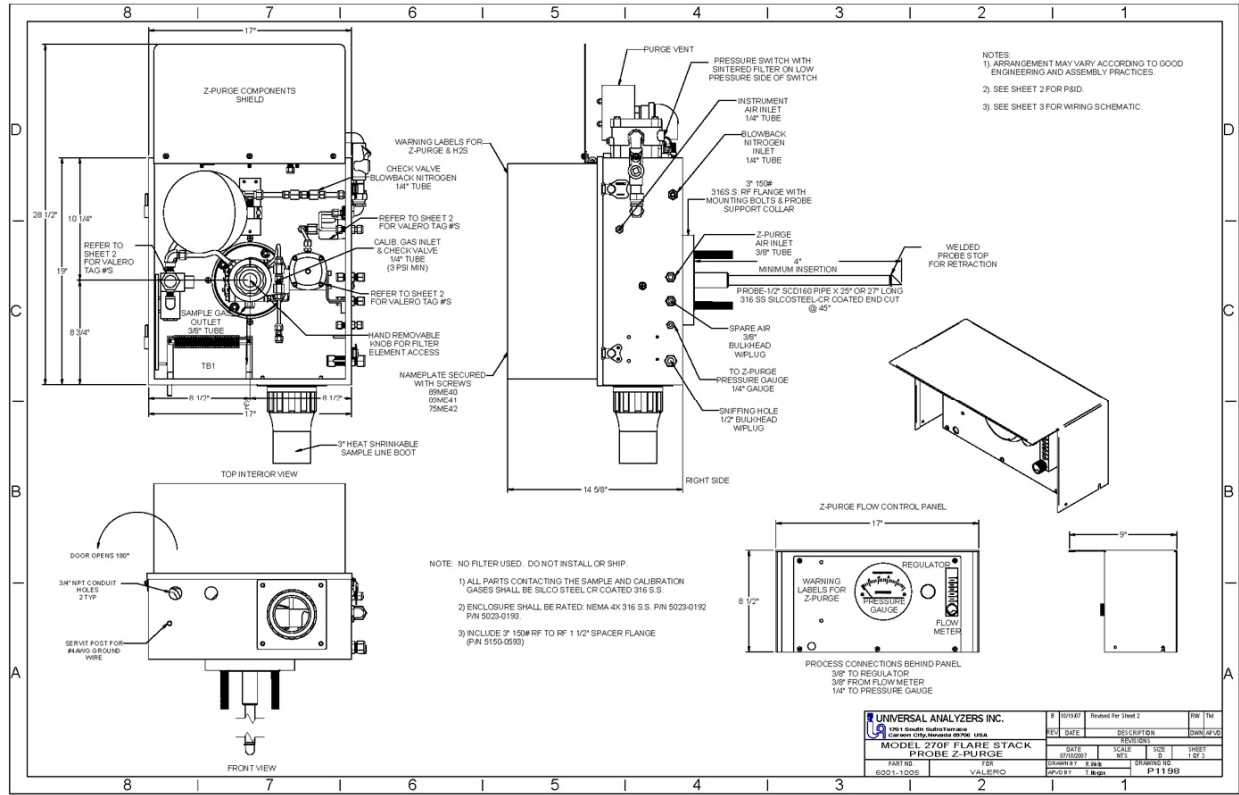
Features

- ▶ NEMA 4X Stainless Steel Enclosure
- ▶ Easy Filter Element Replacement
- ▶ Efficient Blowback
- ▶ Corrosion Resistant Wetted Parts
- ▶ Rugged Construction
- ▶ Heated Chamber Isolation Valve and Pneumatic Actuator
- ▶ Class I, Division 2, Groups A,B,C & D

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Model 270F Flare Stack Probe



Operating Specifications

- ▶ Sample Flow Rate: 0 to 20 LPM (probe)
- ▶ Calibration Gas Requirement: Sample flow rate plus 10%
- ▶ Operating Pressure Drop at 10 LPM: 12" water column
- ▶ Maximum Stack Gas Temperature: 700°F (390°C)¹
- ▶ Oven Temperature: 340°F (171°C)
- ▶ Dimensions: 28.5" x 17" x 15", HWD
- ▶ Weight: 75 LBS (plus probe)
- ▶ Input Power Requirement: 300 WATTS
- ▶ Input Voltage Requirement: 115 or 230 VAC at 50/60 HZ
- ▶ Blowback Tank Volume: 0.7 SCF when at 100 PSIG
- ▶ Blowback Duration: One half second to empty accumulator
- ▶ Blowback Isolation: Electrically or Pneumatically actuated valve
- ▶ Sample Wetted Parts: SilcoNert™ Stainless Steel, Ceramic and Kalrez

Material Specifications

- ▶ Enclosure: NEMA 4X 316SS Stainless Steel
- ▶ Sample Line Connection: 3 Inch Heat Shrink Boot
- ▶ Heater Type: Rod Heaters in Aluminum Block controlled with thermal switch
- ▶ Filter Chamber Material: 316 Stainless Steel SilcoNert™ Coated
- ▶ Filter Element Type: 2 Micron Ceramic