



Sample System Specialists for Gas Analysis

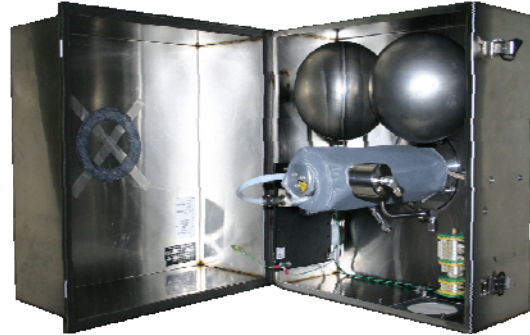
# Model 275E

## Gas Sample Probe

### General Description

The Universal Analyzers Type 275E heated sample probe is designed for continuous use in extractive gas sampling systems.

The modular design is used to filter dust and particulate from high dust loaded, high temperature, and high dew point corrosive gas streams. The sample probe is designed with the end user in mind and comes with a no-tools design for filter replacement.



A stainless steel weatherproof cover is included along with integrated temperature control at 375°F. To avoid cold spots, high wattage heating and an insulation wrap is included to keep the filter element and the tube connections hot and above the dew point. A 9" length ceramic filter (2µm) element comes standard.

For successful, continuous operation in high dust loading environments, it is important to install proper filtration and an efficient blow-back for periodic cleaning of the filter chamber, probe tube and optional probe tip filter. The type 275E extractive gas sampling probe is recommended for these applications and comes with a connection for blow back/purging and an air operated isolation valve. The isolation valve prevents over pressurizing the downstream components and assures that the total volume of blow back air entering the filter chamber is directed out the tube for efficient cleaning. To assure that the blow-back is effective, two high pressure accumulator tanks with air release valve are available.

Use of the isolation valve during a calibration sequence provides closed-loop plumbing option preventing excess use of expensive calibration gases.

Optional ANSI flanges, probe tubes and probe tip filters are available.

### Applications

- ◆ Cement Plants
- ◆ Refineries
- ◆ Incineration OPS
- ◆ Trash to Energy Plants
- ◆ Other High Dust Applications

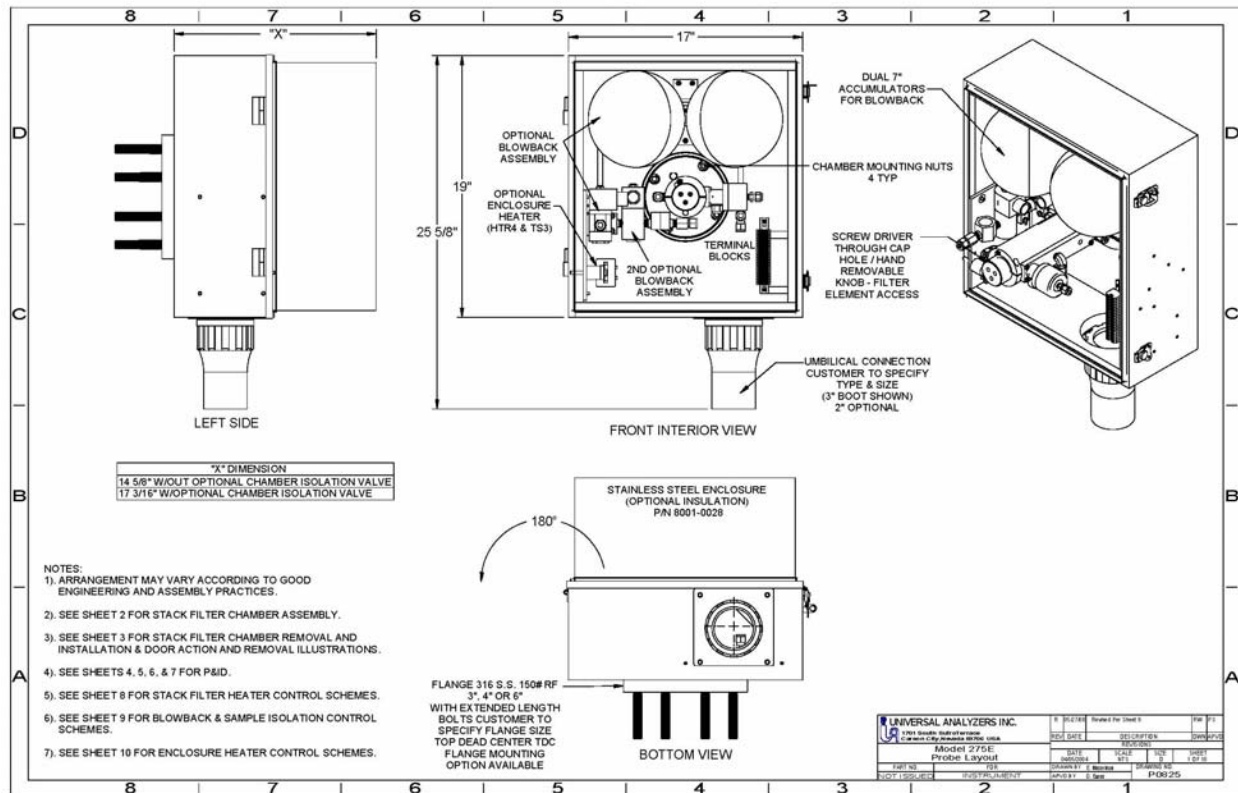
### Features

- ▶ Easy filter element replacement
- ▶ Blow Back with dual accumulator tanks
- ▶ Hazardous area options
- ▶ User-Friendly design
- ▶ Self regulating temperature control
- ▶ Prevents excessive use of cal gas
- ▶ Ammonia Oxidizer optional
- ▶ Pneumatic isolation valve
- ▶ Corrosion resistant wetted parts
- ▶ Rugged construction
- ▶ Ease of maintenance
- ▶ Corrosion resistant wetted parts
- ▶ Stainless steel weather resistant enclosure
- ▶ Sub flange for easy removal of probe tube/filter assembly

[www.UniversalAnalyzers.com](http://www.UniversalAnalyzers.com)

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### Model 275E



### Technical Specifications

Filter Element	2µm Ceramic – 9” length (optional SS, Glass Fiber, )
Sample flow rate	0-20 l/m
Operating Temperature	375°F (optional 600°F)
Process Wetted Material	316 Stainless Steel, PTFE, Viton, Ceramic
Sample Out Connection	3/8” tube
Cal Gas Connection	1/4” tube
Blow Back Connection	1/4” tube (suggested air pressure 80-100psig)
Isolation Valve Connection	1/4” tube (required control pressure 40 psig min; 120 psig max)
Heater	Rod heaters, 500 watts
Temperature Control	Self-Regulating with thermo-switch & SSR
Area Classification	General Purpose
Power Supply	115/230 50/60Hz VAC
Enclosure / Dimensions	SS ; 19 h x 17 w x 15 d
Weight	~65 LB (29 KG)
Mounting Flange	ANSI 3” or 4” or other via optional flange adapter
Sample Line Connection	Via Heat Shrink boot
Probe Tube Options	SS, Hastelloy, Mullite, Inconel or others on request