

ELECTROSTATIC MEASUREMENT SOLUTIONS

BENEFITS

- Real-time indication of entrained particle concentration changes
- Allows optimization of fluidizing gas flow
- User-selectable sensitivity
- No moving parts; no maintenance or spare parts required

ADVANTAGES

- Compact one-piece design standard (remote version also available)
- Custom-designed probe for easy, low-cost installation into existing ports
- Designed for harsh industrial environment
- Approved for use in hazardous areas
- Required standard part of polyolefin plant package



Correflux 5420

Carryover probe gives real-time indication of particle flow changes

The Correflux™ 5420 can be used as a particulate carryover probe monitoring conditions within gas recycle lines and gas discharge lines of various process vessels. The Correflux has the ability to measure increases in the quantity of entrained particles within these lines to give an immediate indication of process upset conditions. With real-time feedback of particle entrainment, reactor control can be improved and process parameters changed to optimize process conditions and production rates. This information is also critical in protecting expensive down-stream equipment from damage caused by excessive particle carryover.

The Correflux probe is ruggedized to be installed in the harsh conditions of reactor discharge lines. A sensing probe can be customized to be inserted into an available port or nozzle with standard flanged connections. It is designed to withstand the impact of entrained particles and to quickly alert plant operators of upset conditions. The Correflux probe is available in either an integral or remote probe and electronics configuration for cases with extreme process conditions such as high temperature.

LexMar Global
Analyze with Integrity®

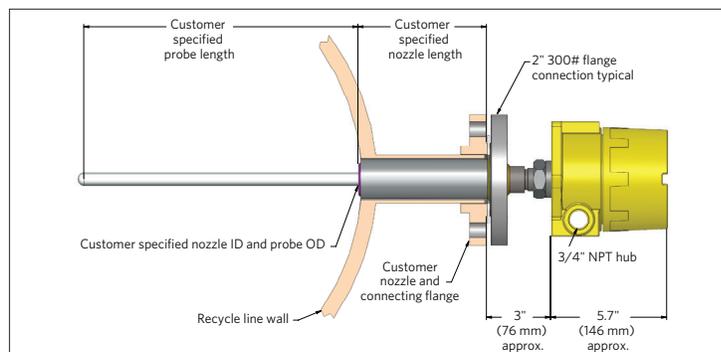
PROVEN RELIABILITY

The Correflux 5420 probe is engineered to operate continuously 24 hours per day, 7 days per week. It is designed for the harsh environment of a polymer reactor, requiring no maintenance or spare parts. The Correflux probe measures current generated by particles impinging upon the probe. This low level signal is proportional to the relative amount of particles hitting the probe.

TECHNICAL SPECIFICATIONS

MECHANICAL

- Standard port (nozzle) sizes: 1.5" and 2" (others available)
- Flange mounting (300 lb. typical)
- Cylindrical enclosure is 5.6" in diameter, 5.7" long
- Built to withstand significant impacts and reactor conditions
- Distance from flange face to tip of sensor is user specific



ENVIRONMENTAL

- IECEx Ex db ia IIC T4 Gb
- Probe: ambient to 125°C
- Electronics: ambient up to 50°C
- Consult LexMar Global for high temperature applications

ELECTRICAL

- 120/230 VAC 50/60 Hz or 10-32 VDC
- Two 3/4" NPT hubs for power and analog output signal
- Intrinsically safe probe connection
- Probe tip operates at <1 volt, eliminating the dangers of an artificially high voltage source within the reactor
- 4-20mA bipolar outputs, two user-selected parameters can be assigned as outputs
- Full scale output range selectable from ± 0.1 to ± 1000 nA of electrostatic current
- Signal damping selectable 0-100 seconds

DISPLAY

- LED Display indicates real-time bipolar signal and allows navigation through system menus
- Menu selectable output range adjustment
- Menu selectable outputs: Instantaneous DC, Instantaneous AC, Avg. DC, Avg. AC, Device Temperature
- Menu selectable signal smoothing
- All controls and indicators viewable through window in enclosure