



Liquid Mist Monitor

Model LM 70DGX



Applications & Benefits

- Gas Processing
- Protect Compressors
- Detect Condensate
- Mist Eliminators
- Monitor Carryover
- Minimize Emissions



Made in USA

Overview

FilterSense liquid mist monitors are for detection and continuous monitoring of flowing, fine liquid droplets in pipes, ducts, stacks and small tubing. Applications include carryover detection with mist eliminators, process control for gas processing, emissions monitoring for scrubbers and other process liquid mist monitoring and detection.

Standard remote electronics provide easy access, while a passive sensor free of electronics ensures reliability and enables a wide range of sensor styles, mounting, process temperatures and pressures.

A high accuracy signal amplifier enables measuring very low levels of mist as well as fine micron droplets. Available outputs include relays, 4-20mA, Modbus and Ethernet. Automatic zero and span version is optional.

Principle of Operation

The LM 70 employs a field-proven combination of charge induction and protected-probe technologies invented by FilterSense. As liquid droplets flow near and around the probe, a minute current is induced. A DSP processes the signal into an absolute output relative to the amount of flowing mist. A protective layer over the probe works in combination with induction-sensing to ensure reliable operation. Maintenance is minimal. For durability, the sensors are passive and free of electronics. For safe, easy access and to facilitate instrument checks, the control unit and electronics are remote.

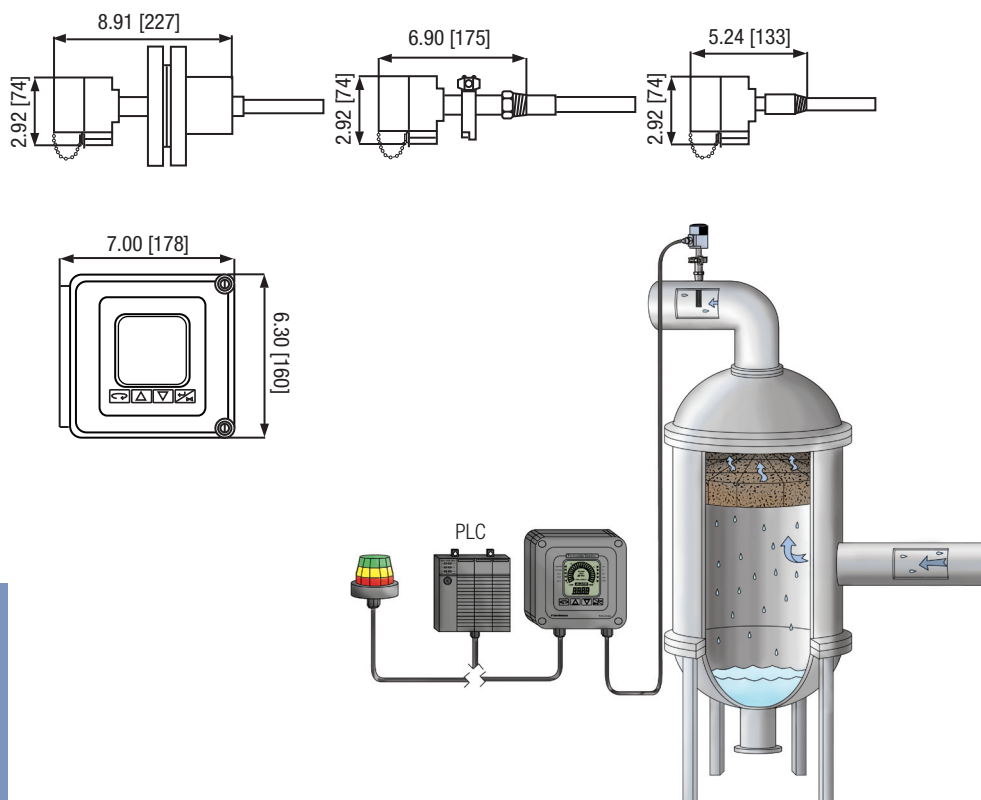
Specifications

Control Unit

Power supply:	115/230VAC 50/60Hz Std (6 Watts max) 24VDC Opt
Resolution (Range):	0.5pA (0 to 5000pA) Std 0.1pA (0 to 5000pA) Opt
Outputs:	(2) Relay (SPST, 5A@240VAC) Std (1) 4-20mA Isolated Std
Inputs:	(1) Relay Opt
Communications:	(1) Modbus RTU Opt or Ethernet IP Opt
Enclosure:	NEMA 4X Aluminum Std Other Opt
Temperature:	-13F (-25C) to 160F (70C)
User Interface:	LCD with digital, analog & text display, 4 button membrane keypad
Area Classification:	Ordinary locations (CE Approved) Std Ordinary locations (CSA Approved for use with Class I, II, III sensor) Opt

Sensor

Housing:	NEMA 4X Aluminum Std
Probe Lengths:	3, 5, 10, 15, 20, 30, 36, 48, 60, 72" Mini probes down to 1/16" and non intrusive rings for small tubing
Mounting:	NPT, Tri-Clamp or Flange
Wetted Materials:	316SS and Teflon or Ceramic Hastelloy Opt
Process Temperature:	-40F (40C) to 250F (120C) Std 450F (232C) Opt 800-1200F Opt
Process Pressure:	10PSI (.69bar) Std, 100PSI (6.9bar) Opt, 1000PSI (69bar) Opt
Sensor Cable:	300' (100m) Max
Area Classification:	Ordinary locations (CE Approved) Std Class I, II, III, Div I, II, All Groups (Intrinsically Safe, CSA Approved) Opt
General:	No special alignment, not affected by normal process vibration



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Specifications Subject to Change