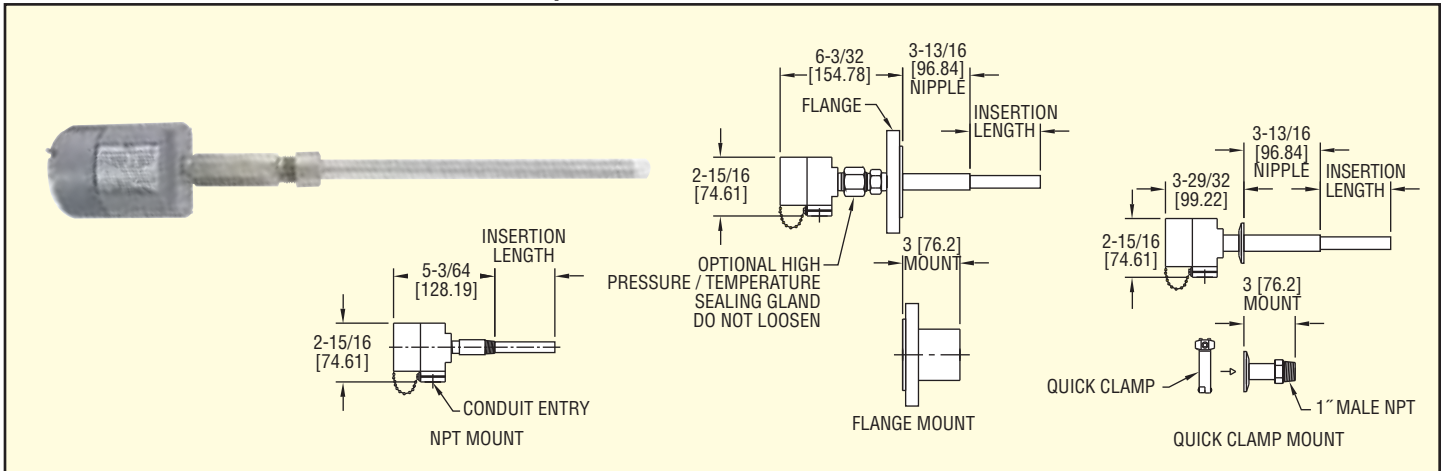




Series  
PMT

# Particulate Transmitter

## 2-Wire Loop Powered



The Series PMT Particulate Transmitter is a reliable dust collector emissions monitor and leak detector. The loop powered design is ideal for direct connection to existing PLCs or other baghouse diagnostic control systems. Adjustable linear or logarithmic output scaling enables trending both the baseline emissions and the high peak emissions that are caused by filter cleaning cycles and developing leaks. Observation of both baseline and peaks is essential to setting proper alarms.

The PMT Particulate Transmitter employs a field-proven combination of induction and protected-probe technologies. As particles flow near and around the probe, minute currents are dynamically induced into the probe. The signal is processed into an absolute output relative to the amount of particulate and thus leakage. Protective-layers over the probe work in combination with induction-sensing to ensure reliable operation with all types of particulate including moist powders and highly conductive dusts. Maintenance is minimal and there is no need for an air purge.

**The Series PMT Particulate Transmitter:**

- For baghouses, cartridge filters, bin vents, and cyclones
- Simple, low cost 2-wire installation for PLCs
- Prevent false readings from:
  - Moist and conductive dusts
  - Corrosive gases and condensate
  - Dust buildup
- Protect downstream blowers, oxidizers, HEPAs, etc.
- Repeatable in all applications (conductive and moist ducts)

**SPECIFICATIONS**

- Service:** Air and compatible gases, any type particulate conductive or non-conductive.
- Wetted Materials:** 316 SS and PFA.
- Air Velocity Range:** 300 ft/min and higher.
- Minimum Detection:** Standard: 10.0 pA; Optional: 5.0 pA and 0.5 pA.
- Temperature Limits:**
  - Ambient: -15 to 160°F (-25 to 70°C);
  - Process: Standard: -40 to 250°F (-40 to 120°C);
  - Optional: -40 to 450°F (-40 to 232°C).
- Pressure Limit:** 10 psi (0.69 bar).
- Power Requirement:** 18-28 VDC (24V nominal).
- Output Signal:** 4-20 mA.
- Loop Resistance:** 300 ohms maximum.
- Current Consumption:** Powered from 4-20 mA loop.
- Electrical Connection:** Terminal block.
- Process Connection:** See model chart.
- Enclosure Rating:** Weatherproof, NEMA 4X (IP 66).
- Mounting Orientation:** Any.
- Weight:** Varies with length of probe and type of mount.
- Agency Approvals:** CE, CSA.

<b>Example</b>	PMT	A1	1	T1	P1	1	L1.5	PMT-A11T1P11-L1.5: PMT Particulate Transmitter, Weatherproof/NEMA 4X, 1/2" NPT Connection, 250°F Max Temp., 10.0 psi Max Pressure, 10.0 pA-1.5" Probe.
<b>Series Designator</b>	PMT							PMT Particulate Transmitter (1-piece configuration, Sensor included in price)
<b>Enclosure Rating</b>		A1 AHZ2						Ordinary/General Purpose Locations, CE Approval, NEMA 4X, CSA Hazardous Location, CSA Approval, Class I, Division II, Groups A-D. Class II, Groups F, G
<b>Process Connection</b>			1 2 3 4					1/2" NPT 1" NPT with 1.5" Quick Clamp Connection 2" 150# ANSI Flange 2" 150# ANSI Flange with Process Mating Flange and Installation Kit
<b>Maximum Process Temperature</b>				T1 T2				250°F (120°C) 450°F (232°C)
<b>Maximum Process Pressure</b>					P1			10 psi
<b>Range</b>						1 2 3		10.0 pA - 5000 pA 5.0 pA - 5000 pA 0.5 pA - 5000 pA (required for low levels or EPA leak detection)
<b>Insertion Length (Recommended at Least 1/2 Duct Diameter)</b>							L1.5 L03 L05 L10 L15 L20 L30 L36	1.5" Probe 3" Probe 5" Probe 10" Probe 15" Probe 20" Probe 30" Probe 36" Probe