

## SERIES PMT2 | DWYER PARTICULATE TRANSMITTER

### FEATURES/BENEFITS

- Simple 2-wire installation for PLC and control panels
- Non-stick PTFE coated probe to prevent false readings from moist and conductive dusts, condensate, and dust buildup
- Remote zero calibration helps to decrease maintenance time

### APPLICATIONS

- Emissions monitoring
- Broken bag detection in dust collectors
- Filter leak or wear detection
- Bin vent monitoring

### DESCRIPTION

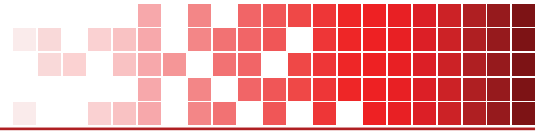
The **SERIES PMT2** Particulate Transmitter is designed to measure particulate emission levels from dust collector discharge. Using DC coupled electrostatic induction sensing technology, the transmitter monitors a pA current that is generated as particulate passes near the probe; a 4 to 20 mA signal will vary based on the particulate level. The PMT2 offers 6 sensitivity ranges allowing the user to choose the range that will best fit the application. The range and test selector switch can also be set to output a 4 mA or 20 mA signal to assist with set up or trouble shooting. Averaging time setting can be used to dampen the signal if desired.



### SPECIFICATIONS

|                              |  |
|------------------------------|--|
| <b>Service</b>               | Air and compatible gases, any type of particulate conductive or non-conductive.  |
| <b>Wetted Materials</b>      | 316L SS, silicone, and PTFE.   |
| <b>Enclosure</b>             | Powder coated aluminum.  |
| <b>Accuracy</b>              | ±5% of reading.  |
| <b>Particulate Size</b>      | 0.3 microns and higher.  |
| <b>Detection Range</b>       | 5 to 5000 pA (6 selectable range options).   |
| <b>Temperature Limits</b>    | Ambient: -40 to 145°F (-40 to 63°C); Process: -40 to 248°F (-40 to 120°C).   |
| <b>Pressure Limit</b>        | 30 psi (2 bar).  |
| <b>Minimum Air Velocity</b>  | 300 ft/min (1.52 m/s).   |
| <b>Output Signal</b>         | 4 to 20 mA.  |
| <b>Power Requirements</b>    | 12 to 28 VDC.  |
| <b>Electrical Connection</b> | Two 1/2" female NPT conduit openings.  |
| <b>Terminal Block</b>        | Removable (16 to 20 AWG wire).   |
| <b>Process Connection</b>    | See model chart.   |
| <b>Probe Lengths</b>         | See model chart.   |
| <b>Enclosure Rating</b>      | Type 4 (IP66).   |
| <b>Mounting Orientation</b>  | Any.   |
| <b>Averaging Time</b>        | 1 to 360 s (10 selectable options).  |
| <b>Weight</b>                | Varies with length of probe and type of mount.   |
| <b>Agency Approvals</b>      | CE, cULus; ATEX pending, IECEX pending. UL Listed Intrinsically Safe for Class I, Groups C and D; Class II, Groups E, F and G; Class III; Class I Zone 0 AEx ia IIB T4 Ga; Class I Zone 0 Ex ia IIB T4 Ga. |

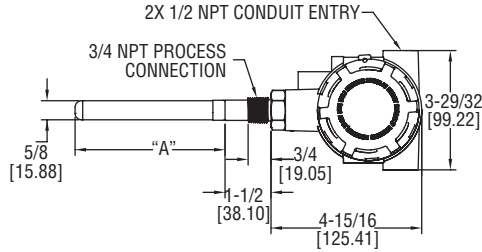




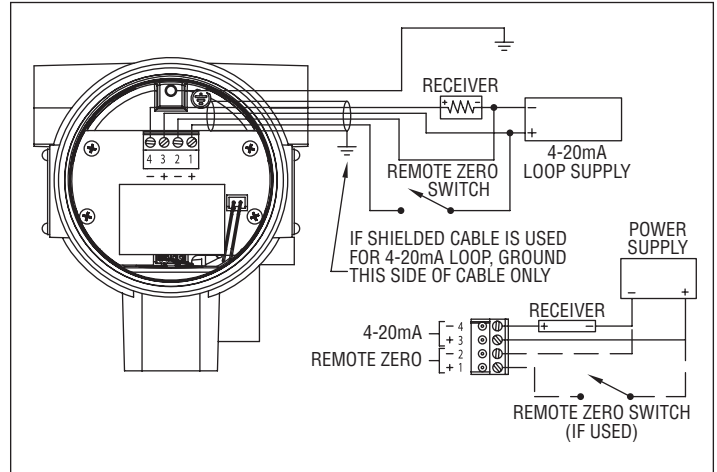
## DIMENSIONS

### 3/4" Male NPT Mount

| Probe Length | A in [mm]   |
|--------------|-------------|
| 3"           | 3 [76.20]   |
| 5"           | 5 [127.00]  |
| 10"          | 10 [254.00] |
| 15"          | 15 [381.00] |
| 20"          | 20 [508.00] |
| 30"          | 30 [762.00] |
| 36"          | 36 [914.40] |

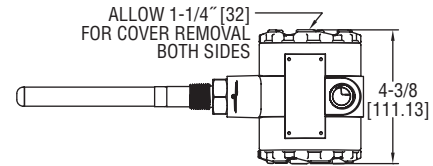
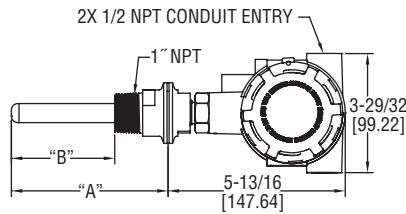


## WIRING DIAGRAM



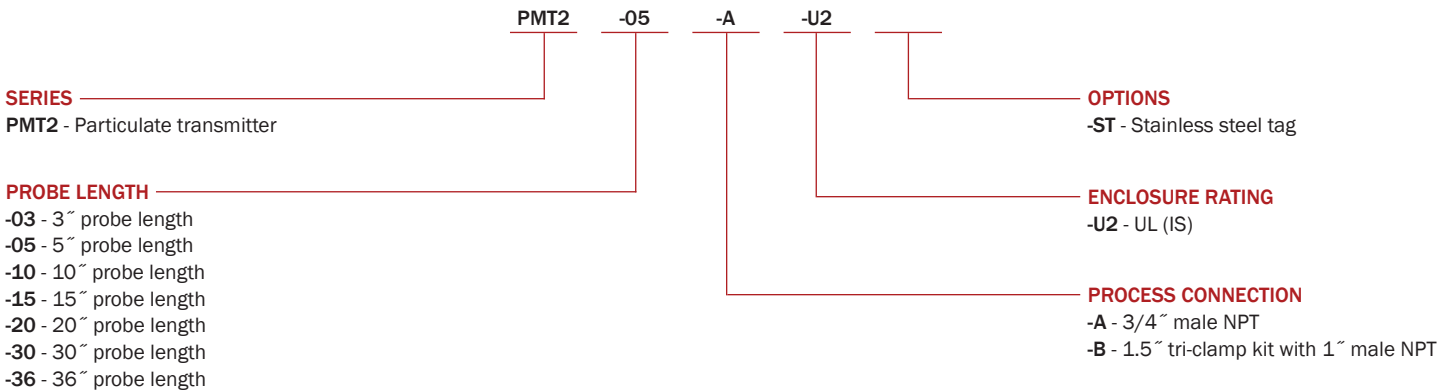
### 1.5" Tri-Clamp Option Mount

| Probe Length | A in [mm]       | B in [mm]         |
|--------------|-----------------|-------------------|
| 3"           | 3-1/2 [88.90]   | 1-25/32 [45.24]   |
| 5"           | 5-1/2 [139.70]  | 3-25/32 [96.04]   |
| 10"          | 10-1/2 [266.70] | 8-25/32 [223.04]  |
| 15"          | 15-1/2 [393.70] | 13-25/32 [350.04] |
| 20"          | 20-1/2 [520.70] | 18-25/32 [477.04] |
| 30"          | 30-1/2 [744.70] | 28-25/32 [731.04] |
| 36"          | 36-1/2 [927.10] | 34-25/32 [883.44] |



## HOW TO ORDER

Use the **bold** characters from the chart below to construct a product code.



## ACCESSORIES

| Model             | Description                                       |
|-------------------|---|
| <b>A-PMT2-M20</b> | 1/2" NPT to M20 conduit adaptor                   |
| <b>A-PMT2-FLG</b> | 2" flange with 3/4" NPT female connection, 316 SS |

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