# Dwyer PARTICULATE TRANSMITTER Digital Damping, Non-Stick Probe, For Broken Bag Detection

ROCESS CONTROL

			2X 1/2" NPT OR M20 ELECTRICAL ENTRY
Probe			3/4" NPT or 3/4" BSPT
2" 5" 10"	in [mm] 3 [76.20] 5 [127.00] 10 [254.00]		AlLOW 1-1/4" [32] 
15″ 20″ 30″	15 [381.00] 20 [508.00] 30 [762.00]	[]	
36″	36 [914.40]		3/4" male NPT or 3/4" male BSPT mount   2X 1/2" NPT OR M20 ELECTRICAL ENTRY
	-CLAMP MOUNT	В	
Length	in [mm]	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]	"B"
15″	15-1/2 [393.70]	13-25/32 [350.04]	" <u>А</u> "5-13/16
20″	20-1/2 [520.70]	18-25/32 [477.04]	[147.64]
30″	30-1/2 [744.70]	28-25/32 [731.04]	1.5" Tri-clamp option mount
36″	36-1/2 [927.10]	34-25/32 [883.44]	

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 4-20 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

## FEATURES/BENEFITS

used to dampen the signal if desired.

- · 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

Particulate (Dust or Broken Bag)

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

# MODEL CHART

MODEL OTAKI									
Example	PMT2	-05	-A	-U2		PMT2-05-A-U2			
Series	PMT2					Particulate transmitter			
Probe		03				3" probe length			
Length		05				5" probe length			
		10				10" probe length			
		15				15" probe length			
		20				20" probe length			
		30				30" probe length			
		36				36" probe length			
Process			Α			3/4" male NPT			
Connection			В			1.5" tri-clamp kit with 1" male NPT			
			С			3/4" male BSPT			
Enclosure				A2		ATEX and IECEx (IS)			
Rating				U2		UL (IS)*			
Options					ST	Stainless steel tag			
					M2	Female M20 electrical entries			
						(female 1/2" NPT standard)			
*Options that do not have ATEX or IECEx.									
Attention: Units without the A2 suffix are not Directive 2014/34/EC (ATEX)									
compliant. These I lnits are not intended for use in potentially hazardous									

compliant. These Units are not intended for use in potentially hazardous atmospheres in the EU. These unites may be CE marked for other Directives of the

### SPECIFICATIONS

Service: Air and compatible gases, any type of particulate conductive or nonconductive. Wetted Materials: 316L SS, silicone, and PTFE. Enclosure: Powder coated aluminum. Accuracy: ±5% of reading. Particulate Size: 0.3 microns and higher. Detection Range: 5 to 5000 pA (6 selectable range options). Temperature Limits: Ambient: -40 to 145°F (-40 to 63°C); Process: -40 to 248°F (-40 to 120°C). Pressure Limit: 30 psi (2 bar). Output Signal: 4-20 mA. Power Requirements: 12-28 VDC (----). Electrical Connection: Two 1/2" female NPT electrical entries or two M20 electrical entries (A2 suffix only). Terminal Block: Removable (16 to 20 AWG wire). Process Connection: See model chart. BSPT process connections are not UL listed. Probe Lengths: See model chart. Enclosure Rating: UL Type 4 (IP66) ATEX/IECEx IP65. Mounting Orientation: Any. Averaging Time: 1 to 360 s (10 selectable options). Weight: Varies with length of probe and type of mount. Agency Approvals: CE, cULus; ATEX Compliant: CE 0518 (Ex) II 1 G Ex ia IIB T4 GA (-40°C ≤ Tamb ≤ 63°C) (-40°C ≤ T Process ≤ 120°C) / II 1 D Ex ia IIIC T120°C Da (-40°C ≤ Tamb ≤ 63°C) (-40°C ≤ T Process ≤ 120°C). Type Certificate No.: DEMKO 16ATEX1768 X. ATEX Standards: EN 60079-0:2012/A11:2013; EN 60079-11:2012. IECEx Certified: Ex ia IIB T4 Ga (-40°C ≤ Tamb ≤ 63°C) (-40°C ≤ T Process ≤ 120°C) / Ex ia IIIC T120°C Da (-40°C ≤ Tamb ≤ 63°C) (-40°C ≤ T Process ≤ 120°C). Certificate of Conformity: IECEx UL 16.013X. IECEx Standards: IEC 60079-0: 2011; IEC 60079-11: 2011. 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.

#### ACCESSORIES

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