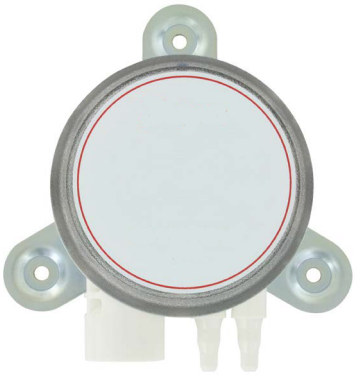

PMMS

Differential Pressure Transmitter for non-combustible Gases

Features

/ Low-Cost

/ Accuracy class 1%

/ Selectables ranges from 0. . .7 kPa

/ Analogue output for current or voltage

/ Perfect for monitoring filter pressure and air velocity

/ Optionally with field upgradeable LCD-display

/ Optionally with Pitot tube

/ Display 180° rotatable

Description:

PMMS series of differential pressure transmitter is a versatile transmitter for monitoring differential pressure and air velocity. The plus- and minus inputs of the PMMS are connected to a differential pressure of a non-combustable gas. The electronic of the unit converts this pressure either into a 0. . .10 VDC- or a 4. . .20 mA-analogue output signal. This compact package is loaded with features such as field selectable english or metric ranges, a field upgradeable LCD display, adjustable damping of the output signal (with optional display) and the ability to select a square root output for use with Pitot tubes and other similar flow sensors (e.g. orifice plates) to measure air velocities.

Application:

The patented magnetic sensing technology of the series PMMS provides an exceptional long term performance and enables the transmitter to be the single solution for a huge amount of pressure- and airflow applications. Available are four models with different operating ranges from 0. . .60 Pa up to 0. . .7 kPa. All of the units provide four different selectable full scale values. Differential pressure transmitters of the series PMMS are the perfect solution to be used in cleanroom applications, monitoring of sluices or the detection of the grade of pollution of air filters. All models can be ordered with a duct mount static pressure probe, which can be mounted directly to the duct either with a split flange or with a mounting gland. Other typical applications for the PMMS are e.g. the monitoring of ventilators and blowers, air-filters, overpressure in rows of chimneys, the measuring of low respiratory and blood pressures and the recording of air velocity in building automation processes.

Technical Specifications:

Accuracy /	± 1% FSO
Stability /	± 1% FSO / year
max. Op. pressure /	ranges 0 and 1: 3.6 psi ranges 2 and 3: 6 psi
max. Burst pressure /	all ranges 6 psi
Media temperature /	-20. . .+70°C
Process connections /	1/8", 3/16“, 1/4", 5 mm and 6 mm ID tubing
Mounting orientation /	any
Response time /	0 or 3 s (selectable)
Zero and span /	adjustable with digital push button
Accessories /	Pitot tube PMMS160 in different lengths with installation kits on request
Weight /	approx. 230 g

Electrical Specifications:

Supply voltage /	
Current output:	10. . .35 VDC
Voltage output:	17. . .36 VDC and 21.6. . .33 VAC
Output signals /	
Current output:	4. . .20 mA, 2-wire
Voltage output:	0. . .5 VDC; 0. . .10 VDC, 3-wire
Load /	
Current output:	0. . .1250 Ω max.
Voltage output:	min. 1 kΩ
max. Power consumpt. /	21 mA max.
Display /	optionally available with 4-digit LCD-display, field upgradeable
Cable entry /	1/2“-NPS-female
Electrical connection /	european style terminal block
Protection class /	IP66 (NEMA 4X)

Measuring range table :

Range	in w.c.	Pa low	Pa high	mm w.c.
0	0.1	25	60	2.5
	0.15	30	75	5
	0.25	40	100	10
	0.5*	50	125*	12.5*
1	0.1	25	100	2.5
	0.25	40	150	5
	0.5	50	160	10
	1*	60	250*	25*
2	1	250	600	25
	2	300	750	50
	3	400	1000	100
	5*	500	1250*	125*
3	10	1000	1000	250
	15	1500	4000	350
	25	2000	5000	600
	28*	2500	7000*	700*

*Indicated values are the positive full scale output values per range.
Note: Ranges indicated in the table are the high end of the set range.
All ranges have a low end pressure value of 0.

Ordering Codes:

Order number | **PMMS.** | **W.** | **2.** | **0.** | **IN.** | **2**

PMMS Differential Pressure Transmitter for non-combustible Gases

Mounting /
W = wall mount
U = universal (wall or duct) mount
N = DIN rail mount

Operating range /
0 = max. 0,5 in w.c./ 125 Pa high/ 12.5 mm w.c.
1 = max. 1 in w.c./ 250 Pa high/ 25 mm w.c.
2 = max. 5 in w.c./ 1250 Pa high/ 125 mm w.c.
3 = max. 28 in w.c./ 7000 Pa high/ 700 mm w.c.

LCD-Display /
0 = none
1 = with LCD-Display

Units /
IN = inches water column
Pa = pascal
MM = millimeters water column

Option /
1 = installer kit, includes 2 plastic static pressure tips and 7 ft (2.1m) of PVC tubing
2 = factory calibration certificate
3 = filtered pickup with barb
4 = liquid tight cable gland fitting
5 = NIST traceable calibration certificate
6 = two (2) plastic static pressure tips
7 = toolless terminal block
8 = LCD cover without LCD display

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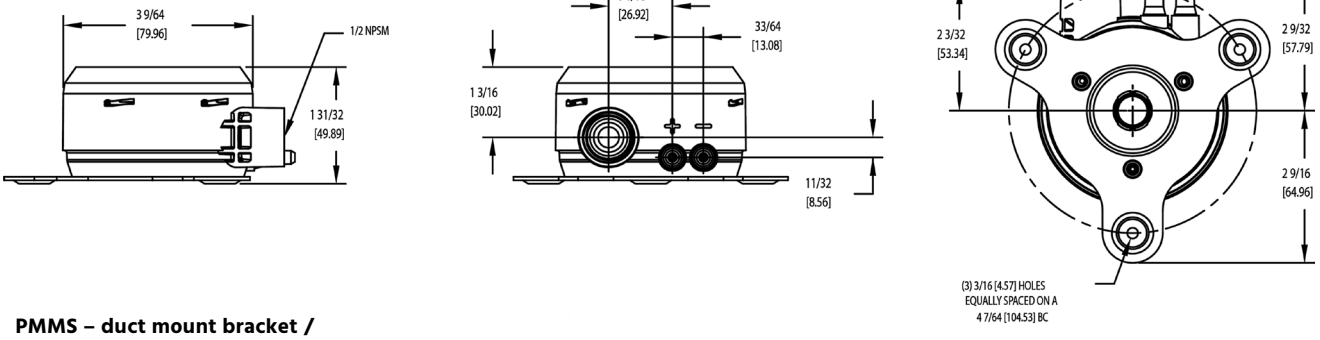
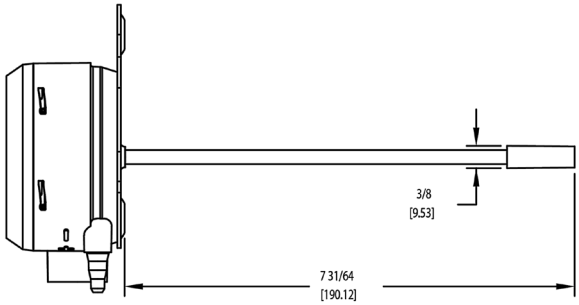
fax +49 (0)471 98 24 152 | **mail** info@profimess.de | **web** profimess.com

Dimensions in Inch (mm):

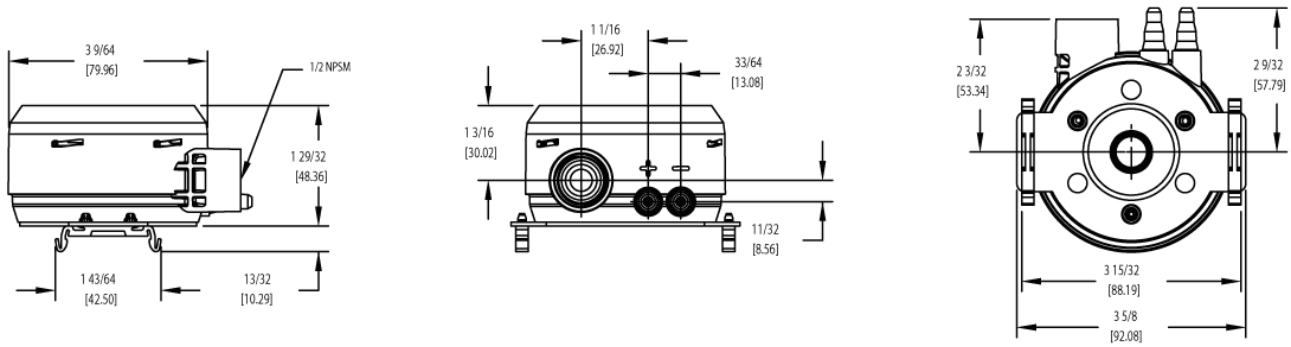
PMMS - Wall mount bracket /



PMMS – duct mount bracket /



PMMS – DIN mount bracket /



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