



# PS-MRG Series

Multi-Range General Pressure Transducer



## Overview

The PS-MRG Series is a differential pressure transducer. The PS-MRG Series is the ideal product for any contractor, combining the flexibility of a multi-range with the performance of a single range transducer. The PS-MRG Series has 8 selectable ranges and 3 selectable outputs, easily adjustable on the job with a flip of a switch or jumper. The PS-MRG Series uses an IP67 rated housing and has a conduit fitting for easy wiring, making the PS-MRG Series an ideal solution for any general HVAC application.

## Applications

- Sub-Contractors- Quick Installation
- Flexible for Building Specification Changes
- Service/Retrofit Friendly
- Service Technicians- Quick & Accurate Re-configuration

## Features & Benefits

- Field Configurable Duct Probe
- 4 Digit LCD
- Field Selectable Range
- Field Selectable Output
- Simple 5-Step Setup
- Field Accessible Push-Button Zero & Span
- External Mounting Tabs & Optional DIN Rail
- Unregulated AC/DC Operation

## Model Selection

PS-MRGSA	Multi-Range General Pressure Transducer, 0.5, 1.0, 2.5, 5.0"W.C. / 100, 250, 500, 1,000 Pa / $\pm 0.5$ , $\pm 1.0$ , $\pm 2.5$ , $\pm 5.0$ "W.C. / $\pm 100$ , $\pm 250$ , $\pm 500$ , $\pm 1,000$ Pa, Standard (Base Mount) with 1/2" Conduit
PS-MRGSC	Multi-Range General Pressure Transducer, 0.5, 1.0, 2.5, 5.0"W.C. / 100, 250, 500, 1,000 Pa / $\pm 0.5$ , $\pm 1.0$ , $\pm 2.5$ , $\pm 5.0$ "W.C. / $\pm 100$ , $\pm 250$ , $\pm 500$ , $\pm 1,000$ Pa, Standard (Base Mount), 1/2" Conduit with Cal Certification <sup>2</sup>
PS-MRGUA	Multi-Range General Pressure Transducer, 0.5, 1.0, 2.5, 5.0"W.C. / 100, 250, 500, 1,000 Pa / $\pm 0.5$ , $\pm 1.0$ , $\pm 2.5$ , $\pm 5.0$ "W.C. / $\pm 100$ , $\pm 250$ , $\pm 500$ , $\pm 1,000$ Pa, Universal <sup>1</sup> with 1/2" Conduit
PS-MRGUC	Multi-Range General Pressure Transducer, 0.5, 1.0, 2.5, 5.0"W.C. / 100, 250, 500, 1,000 Pa / $\pm 0.5$ , $\pm 1.0$ , $\pm 2.5$ , $\pm 5.0$ "W.C. / $\pm 100$ , $\pm 250$ , $\pm 500$ , $\pm 1,000$ Pa, Universal <sup>1</sup> , 1/2" Conduit with Cal Certification <sup>2</sup>
PS-MRGDA	Multi-Range General Pressure Transducer, 0.5, 1.0, 2.5, 5.0"W.C. / 100, 250, 500, 1,000 Pa / $\pm 0.5$ , $\pm 1.0$ , $\pm 2.5$ , $\pm 5.0$ "W.C. / $\pm 100$ , $\pm 250$ , $\pm 500$ , $\pm 1,000$ Pa, DIN Rail with 1/2" Conduit
PS-MRGDC	Multi-Range General Pressure Transducer, 0.5, 1.0, 2.5, 5.0"W.C. / 100, 250, 500, 1,000 Pa / $\pm 0.5$ , $\pm 1.0$ , $\pm 2.5$ , $\pm 5.0$ "W.C. / $\pm 100$ , $\pm 250$ , $\pm 500$ , $\pm 1,000$ Pa, DIN Rail, 1/2" Conduit with Cal Certification <sup>2</sup>
PS-MRGPA	Multi-Range General Pressure Transducer, 0.5, 1.0, 2.5, 5.0"W.C. / 100, 250, 500, 1,000 Pa / $\pm 0.5$ , $\pm 1.0$ , $\pm 2.5$ , $\pm 5.0$ "W.C. / $\pm 100$ , $\pm 250$ , $\pm 500$ , $\pm 1,000$ Pa, Duct Probe with 1/2" Conduit
PS-MRGPC	Multi-Range General Pressure Transducer, 0.5, 1.0, 2.5, 5.0"W.C. / 100, 250, 500, 1,000 Pa / $\pm 0.5$ , $\pm 1.0$ , $\pm 2.5$ , $\pm 5.0$ "W.C. / $\pm 100$ , $\pm 250$ , $\pm 500$ , $\pm 1,000$ Pa, Duct Probe, 1/2" Conduit with Cal Certification <sup>2</sup>

Notes:

1. Code U, Universal unit includes Duct Probe and DIN Rail options.
2. Calibration is performed at highest range.

# Product Specifications

## Performance Data

Standard:

Accuracy RSS <sup>1</sup> (at constant temp)	±1.0% FS
Compensated Range °F (°C)	32 to 122°F (0 to 50°C)
Thermal Effects <sup>2</sup> %FS/°F(°C)	0.03 (0.054)
Maximum Line Pressure	10 PSI
Overpressure	Up to 10 PSI (range dependent)
Long Term Stability (max.)	2.0% FS/YR

## Position Effect

Zero Offset %FS/G	0.5%
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(Unit is factory calibrated at 0g effect in the vertical position)

## Physical Description

Case	Fire-Retardant Polycarbonate (UL 94 V-0 Approved), Hinged Lid
Mounting	Two Screw Holes Vertical Position
Electrical Connection Block	Removable Screw Terminal
Pressure Fitting	3/16" O.D. Barbed Brass
Zero	Push Button
Span	Push Button
Weight (approx.)	8 Ounces

## Environmental Data

Operating Temperature <sup>3</sup>	32 to 122°F (0 to 50°C)
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## Electrical Data

Excitation Range	13 to 30 VDC/18 to 24 VAC (Voltage Output)
	13 to 30 VDC (4 to 20mA output at terminals)
Current Consumption	30mA (max)
Mis-Wiring	Reverse Excitation Protection
Field Selectable Output <sup>4</sup>	0 to 5 V, 0 to 10V (3-wire), 4 to 20mA (2-wire)
Output Resistance (Voltage Output)	10 Ohms (max)
Load Resistance (Voltage Output)	10 K-Ohms (min)
Loop Resistance (4-20mA)	0 to 800 Ohms
Approval	CE & RoHS Compliant

## Pressure Media

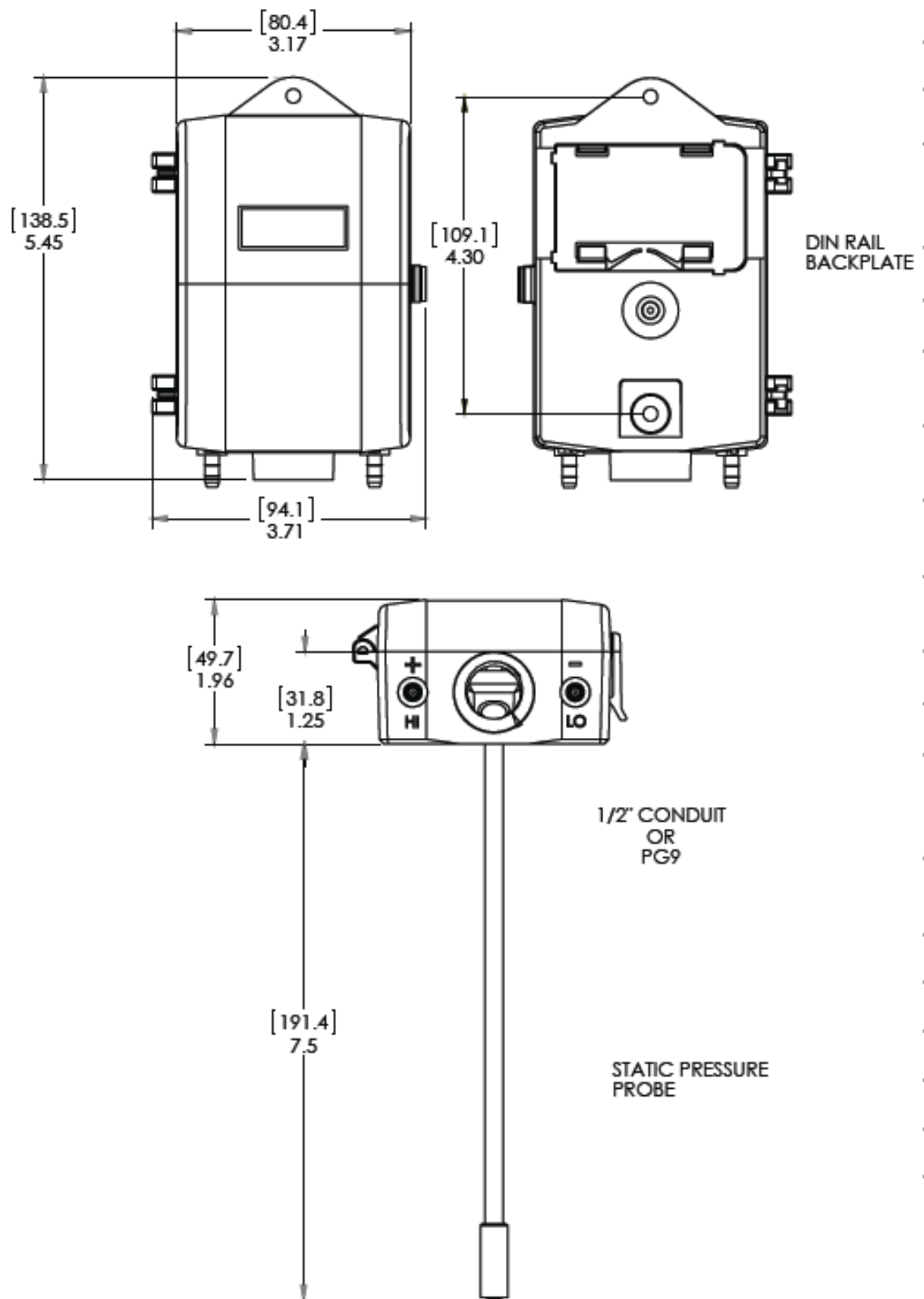
Typically air or similar non-conducting gases.

Notes:

1. RSS of Non-Linearity, Hysteresis, and Non-Repeatability.
2. Units calibrated at nominal 70°F. Maximum thermal error computed from this datum.
3. Operating temperature limits of the electronics only. Pressure media temperatures may be considerably higher.
4. Calibrated into a 50K ohm load, operable into a 10K ohm load or greater.
5. Span (Full Scale) output factory set to within 1%.
6. Calibrated at factory with a 24 VDC loop supply voltage and a 250 ohm load.
7. Span (Full Scale) output factory set to within ±0.16mA.

Specifications subject to change without notice.

## Dimensions



Specifications subject to change without notice.  
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