

Model MRC

Multi-Range Critical Pressure Transducer

Designed for Critical Environments, The Setra Model MRC is Setra's newest differential pressure transducer. This is the first multi-range transducer designed for stringent requirements of difficult applications. The MRC offers class leading $\pm 0.5\%$ FS accuracy in selectable ranges down to $0.1''\text{W.C.}$, which is required for critical applications. Setra's MRC comes with 3 different housing configurations; duct probe, DIN Rail mount and a universal model to cover any installation changes on the job site.

0.5% FS Accuracy

The Setra MRC is the first multi-range transducer designed for use in Critical Environments. No other multi-range transducer product offers better than 1% FS accuracy; a requirement in most critical applications. The Setra MRC is available down to $0.1''\text{W.C.}$ with 0.5% FS accuracy.

Field Selectable Universal Design

The Setra MRC has 4 selectable ranges and 3 selectable outputs, giving the flexibility to make changes on the job site. The MRC is field configurable for range, mounting (DIN Rail, wall mount and duct mount), output (mA or voltage) and engineering units (W.C. or Pascals). This flexibility means that the contractor can use the MRC for all of their critical needs.

IP67 Rated Housing

The MRC housing is a robust IP67 rated design and is sealed with a gasket to make it wash-down capable for difficult applications. The MRC also has a conduit fitting, making installation and wiring easier.

Capacitive Sensing Technology

Only Setra can claim ownership to the stainless steel capacitive design used in all of our HVAC/R sensors. Our advanced capacitive element provides excellent stability and linearity, while standing above the competitors in our ability to measure low pressure ($<0.0001''\text{W.C.}$) at high accuracy. Our technology has been used in over 8 million installations and has the highest field acceptance rate in the industry.



- Ideal For Critical Environments
- $\pm 0.5\%$ FS Accuracy
- Universal Design

Model MRC Features:

- 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
- IP67 Rated Housing

Target Uses:

- Service/Retrofit Friendly
- Sub-Contractors- Quick Installation
- Flexible for Building Specification Changes
- Service Technicians- Quick & Accurate Reconfiguration
- Hospitals
- Isolation Rooms
- Vivariums

Model MRC

Multi-Range Critical Pressure Transducer



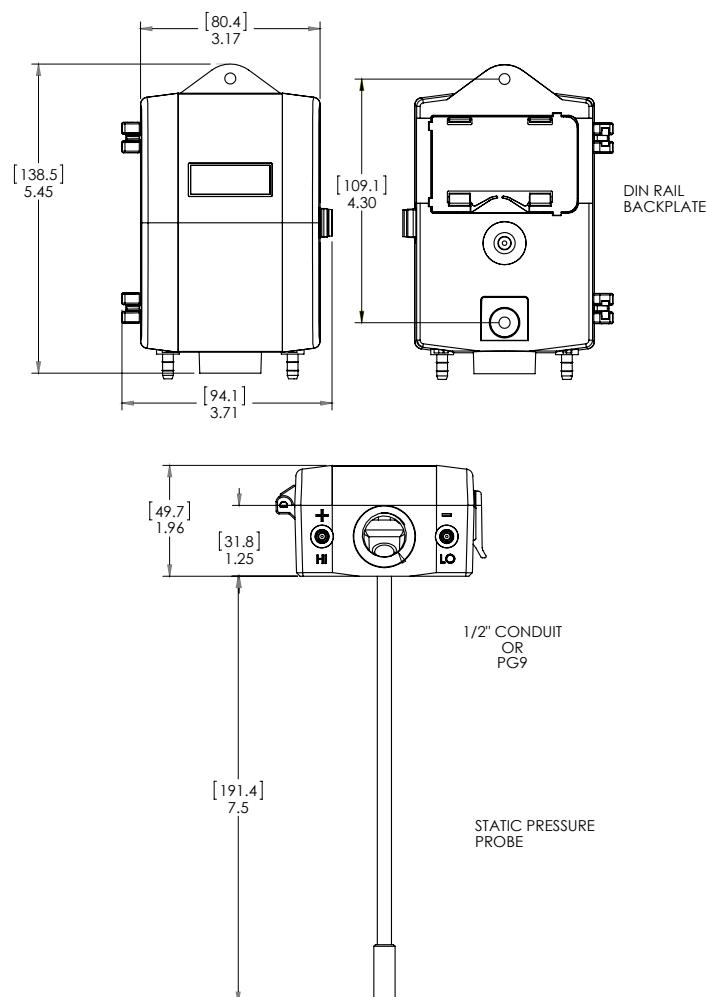
ORDERING INFORMATION

M	R	-	C	-		-	
Model	Field Selectable Ranges				Configuration	Electrical Fitting	
MRC	Unidirectional Pressure Ranges		Bidirectional Pressure Ranges		S Standard (Base Mount)	C	1/2" Conduit w/ Cal Certification ²
	0.1"W.C.	25 Pa	±0.1"W.C	±25 Pa	U Universal ¹	D	PG9 w/ Cal Certification ²
	0.25"W.C.	50 Pa	±0.25"W.C.	±50 Pa	D DIN Rail		
					P Duct Probe		

¹Universal unit includes Duct Probe and DIN Rail options.

²Calibration certificate is standard and is provided for highest range ±0.25"W.C. on ±50 Pa.

DIMENSIONS



GENERAL SPECIFICATIONS

Performance Data		Environmental Data	
	Standard	Operating Temperature ³	32 to 122°F (0 to 50°C)
Accuracy RSS ¹ (at constant temp)	±0.5% FS	Electrical Data	
Compensated Range °F (°C)	32 to 122°F (0 to 50°C)	Excitation Range	13 to 30 VDC/18 to 24 VAC (Voltage Output) 13 to 30 VDC (4 to 20mA output at terminals)
Thermal Effects ² %FS/°F(°C)	0.03 (0.054)	Current Consumption	30mA (max)
Maximum Line Pressure	10 PSI	Mis-Wiring	Reverse Excitation Protection
Overpressure	1 PSI	Field Selectable Output ⁴	0 to 5 V, 0 to 10V (3-wire), 4 to 20mA (2-wire)
Long Term Stability (max.)	1.0% FS/YR	Output Resistance (Voltage Output)	10 Ohms (max)
Position Effect		Load Resistance (Voltage Output)	10 K-Ohms (min)
Zero Offset %FS/G	0.5%	Loop Resistance (4-20mA)	0 to 800 Ohms
(Unit is factory calibrated at 0g effect in the vertical position)		Approval	CE & RoHS Compliant
Physical Description		Pressure Media	
Case	Fire-Retardant Polycarbonate (UL 94 V-0 Approved), Hinged Lid	Typically air or similar non-conducting gases.	
Mounting	Two Screw Holes Vertical Position	¹ RSS of Non-Linearity, Hysteresis, and Non-Repeatability. ² Units calibrated at nominal 70° F. Maximum thermal error computed from this datum.	
Electrical Connection Block	Removable Screw Terminal	³ Operating temperature limits of the electronics only. Pressure media temperatures may be considerably higher.	
Pressure Fitting	3/16" O.D. Barbed Brass	⁴ Calibrated into a 50K ohm load, operable into a 10K ohm load or greater.	
Zero	Push Button	⁵ Span (Full Scale) output factory set to within 1%.	
Span	Push Button	⁶ Calibrated at factory with a 24 VDC loop supply voltage and a 250 ohm load.	
Weight (approx.)	8 Ounces	⁷ Span (Full Scale) output factory set to within ±0.16mA.	
		Specifications subject to change without notice.	