Model 210 Circuit Board-Mountable Pressure Transducer

Ranges: 0 to 1, 2, 5, 10, 15, 25, 50, 100 psig 0 to 15, 25, 50, 100, 150 psia



S etra's Model 210 is the ultimate in circuit board mountable pressure transducers. In addition to the convenience of quick PCB installations, the 210 offers OEM's wide media compatibility due to the stainless steel sensor construction and fully calibrated high level output. This eliminates the need for additional circuit and calibration labor costs!

Packaged in a compact plastic enclosure (1.25 in. dia. footprint), the Model 210 incorporates Setra's unique capacitance technology, known worldwide for its rock solid stability, accuracy and thermal performance. A custom ASIC circuit combined with a carefully engineered sensor

Pressure Ranges

0 psig to:	Proof Pressure (psig)	Burst Pressure (psia)	0 psia to:	Proof Pressure (psig)	Burst Pressure (psia)
1	2	250	15	30	500
2	4	250	25	50	500
5	10	500	50	100	500
10	20	500	100	200	500
15	30	500	150	300	500
25	50	500			
50	100	500			
100	200	500			

achieves unsurpassed reliability and a virtually EMI/RFI immune system. Setra can customize the Model 210 to accommodate various package and performance requirements.

Our pressure sensor products are not necessarily designed or manufactured for use as a "critical component" in a "critical device" as those terms are defined in the Medical Devices Subchapter contained in the Food and Drug Administration Rules, 21CFR800.

While we provide application assistance on all Setra products, both personally and through our literature, it is up to the customer to determine the suitability of the product in the application.

NOTE: Setra adheres to strict quality standards including ISO 9001 and ANSI-Z540-1. The calibration of this product is NIST traceable.

U.S. Patent nos. 4054833, 5442962

Applications

- Analytical Measurement and Control
- OEM

Features

- Fully signal conditioned
- High level output
- Excellent long term stability
- RFI/EMI immunity
- Easily customized package
- Optional excitations, outputs and accuracies
- Wide operating temperature range
- High signal to noise ratio

TEESING



Performance Data Accuracy RSS Non-Linearity, BFSL Hysteresis Non-Repeatability <u>Thermal Effect</u> Zero shift %FS/100年(%FS/50℃) Span Shift %FS/100年(%FS/50℃) Stability Pressure Media Gases compatible with 300, 17-4 s nylon, polyester and silicone. Electrical Data (Vol Circuit Excitation	$\pm 1.0\%$ FS $\pm 0.60\%$ FS $\pm 0.30\%$ FS $\pm 0.10\%$ FS $<\pm 2.0 (<\pm 1.8)$) $<\pm 1.5 (<\pm 1.4)$ 0.5% FS/yr. series stainless steel, Itage) 3-wire (+in, +out, common) 12 VDC (10.8 - 18.4 VDC)	Model 210 S Electrical Data Output at Full Range Pressure Full Scale Output Output Impedance Response Time Dimensional Da Case Sensor Pressure Fitting Weight (approx.) Electrical Connection	Specifications (Cont'd.) 4.5 VDC 4.0 VDC < 100 ohms 10 msec. ata Fire retardant glass filled polyester 17-7 stainless steel for range $\geq 5 \text{ psi. Other ranges, 300 series}$ stainless steel 3/16 0.D. barbed nylon pressure fitting for $1/8" \text{ I.D. tubing.}$ 0.5 ounces Solder pins, $0.030"$ round on $0.2"$ centers	Environmenta Temperature Operating Storage Humidity Operating Storage Vibration Shock Altitude No effect on accuracy in conditions of 600 to 800 Options Accuracy Excitation/Output	I Data -4 to 176 $\%$ (-20 to 80 $\%$) -40 to 185 $\%$ (-40 to 85 $\%$) 0 to 95% RH non-condensing 0 to 98% RH non-condensing 0 perating, <5g <100g operating barometric pressure mmHg. $\pm 0.5\%$ FS and $\pm 0.25\%$ FS See ordering information listed
Output at Zero Pressure	0.5 VDC				below.
$\begin{array}{c c} 1.22 \\ 3 \\ \hline \\ 0.71 \\ 2 \\ 0.31 \\ \hline \\ 0.8 \\ \hline \\ 5 \\ \end{array}$	Dia. 0.81 Dia. 2 Dia. 2 Dia. 2 Dia. 1.25 Dia. 3 IDE VIEW	Dia. <u>0.09</u> Dia. 0.2 MOUNTING HOLES GLASS FILLED VALOX ENCLOSURE 	TOP VIEW	0.47 1 0 0.47 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EXCITATION DUTPUT DUND
-		Code all bl	ocks in table.		
E	excitation, 0.5 to 4.5 v.	IPGTB35CTG for a 210 I /DC output with PC boa	ransducer, 0 to 1 psig range, b rd mountable pins and an acc	barbed fitting, 12 VDC curacy of ±1.0%.	
2 1 0 1 – Model 2101 = 210	Range 001P = 1 PSI 0 002P = 2 PSI 4 005P = 5 PSI * 010P = 10 PSI 11 015P = 15 PSI 0 025P = 25 PSI 0 050P = 50 PSI 100 100P = 100 PSI 11 150P = 150 PSI 100	PressurePressure $G = Gauge$ $1B = Barb$ $A = Absolute^*$ $4B = 90^{\circ}1$ $15, 25, 50, 100,$ $50 PSI ranges$ nly for absolute.	Fittings Exc./Output ed fitting $35 = 12 \text{ VDC}/0.5-4$ Barbed fitting 0 ptions 23 = 24 VDC/0.2-5 27 = 24 VDC/1-5 V 28 = 24 VDC/1-6 V 38 = 12 VDC/1-6 V 45 = 5 VDC/0.5-4. Please contact	C C	$\begin{array}{c c} \hline & G \\ \hline & & \\ G \\ \hline & & \\ G = \pm 1.0\% \\ \hline & \\ G = \pm 0.0\% \\ \hline & \\ G = \pm 0.05\% \\ \hline & \\ F = \pm 0.25\% \end{array}$



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