



Spectre Corp

Model 1500 Pressure and Temperature Transducer

- Standard Pressure Outputs: 4-20 mADC, 0-10 VDC, 0-5 VDC, mV/V
- 0.5% & 0.2% BFSL (Standard) - 0.1% BFSL includes 16 Point Calibration with Certificate
- 1/4" NPT, SAE-4, F-250C process connections standard – contact factory for other options
- Temperature Outputs: 100 Ω RTD, J or K type thermocouple – contact factory for dual output options
- Standard ranges from 0-2.5 psi to 0-40000 psi
- Duplicate any customer's process and electrical connection for transparent replacement

The enhanced Model 1500 Pressure and Temperature

Transducer now has dual 4-20 mADC and 1-5 Vdc

temperature output capabilities.



FEATURES:

Proprietary Fused Bond Sensor

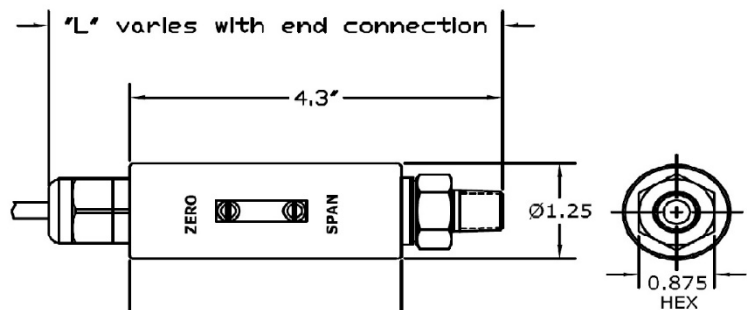
Sensor Wetted Material Machined from Stainless Steel Bar Stock (No Welds)

RFI/EMI Protection on every unit

Unparalleled long-term stability

External Zero & Span Controls available

REFERENCE DIMENSIONS:



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Model 1500 Pressure and Temperature Transducer

Ordering Guide: 1500-A-(0-300PSI)-2-D-3J-5-EC1-OP5

A	(0-300)	2	D	3J	5	EC1
PRESSURE PORT	RANGE ¹	TYPE	PRESSURE OUTPUT	TEMP OUTPUT	ACCURACY (BFSL)	CONNECTOR ²
A = 1/4" MNPT	PSI	1 = ABSOLUTE	D = 4-20 mA	3 = J OR K TC	5 = 0.5%	EC1 = 36" PIGTAIL ³
B = SAE-4 MALE	BAR	2 = GAUGE	E = 0-5 VDC	4 = 100 Ω RTD ⁴	25 = 0.25%	EC2 = LARGE DIN 43650, FORM A
C = OTHER	kPA	3 = VACUUM	F = 0-10 VDC	5 = OTHER	1 = 0.1%	EC3 = MINI DIN 4365, FORM C
D = 1/8" MNPT	INCHES WC	4 = SEALED	M = mV/V			EC4 = BENDIX PTIH-10-6P
E = F-250C	TORR	5 = COMPOUND				ECT = TURCK M12
		6 = OTHER				ECX = OTHER

¹ OTHER RANGES AVAILABLE, CONSULT FACTORY

² CUSTOM PINOUTS/WIRING AVAILABLE

³ PVC STANDARD CABLE JACKET – OTHERS AVAILABLE ON REQUEST

⁴ PLATINUM 2-WIRE

OP5
OPTIONS
OP1 = NIST CALIBRATION WITH CERTIFICATE
OP5 = ZERO & SPAN CONTROLS
OP8 = INTERNAL SHUNT CAL RESISTOR (80% FS)
OPX = OTHER (SPECIFY)

TYPICAL APPLICATIONS	
Engine Test Stand	Test Stands
Leak Detection	Rocket/Jet Engine Testing
Diesel-Internal Combustion	Emission Testing
Bake Testing	Off-road Vehicles
Laboratory/Research	Military

Performance @ 25 °C
Accuracy: $< \pm 0.5\%$ BFSL to 0.1% BFSL ⁴
Stability: (2 year): $< \pm 0.10\%$ FSO, Typical
Overpressure Protection: 2X Rated Pressure
Burst Pressure: 5X or 20000 PSI (lesser)
Pressure Cycles: > 50 Million
Temperature Range: -40°C to +85°C
Response: ≤ 5 ms to 90%

Physical Data
Sensor
Wetted Material: 316 SS
Housing: 316 SS
Connections
Pressure: 1/4" MNPT, SAE-4, F-250C

Environmental Data
Temperature
Operating: -40°C to 85°C
Storage: -50°C to 125°C
Thermal Limits
Compensated Range: 0°C to 85°C
Thermal Effect Zero: $\leq \pm 1.5\%$ FS
Thermal Effect Span: $\leq \pm 1.5\%$ FS

Electrical Data
Excitation: 9-36 VDC (4-20 mA), 13-36 VDC (0-5V, 0-10V)
Current Consumption: < 5 mADC
Zero Offset: $\leq \pm 0.25\%$ of FS
Span Tolerance: $\leq \pm 1.0\%$ of FS
Output Load: $> 10K \Omega$
Range Cal Signal: Internal Resistor 100%

⁴ Accuracy includes non-linearity, hysteresis and non-repeatability

