



Model D150 Differential Series

Pressure/Temperature Transducer.

- Transmitter is customized to your specific temperature and pressure conditions
- Flexible – Transmitter output can be mapped to enhance accuracy at any specific Temperature or Pressure range.
- Multiple Outputs – TC, RTD, 4-20mA, 0-5V, & 0-10V
- Suitable for high shock and vibration applications
- No Silicone oil, no internal o-rings, no welded diaphragms!
- Ranges 0-5 PSID to 10,000 PSID



DESCRIPTION

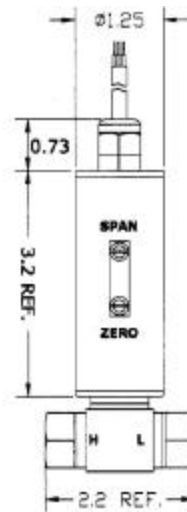
Spectre's Differential Series Pressure Transducers offer the first available sensors that are manufactured, designed and calibrated to each customer's specific operating conditions. The model D150 offers wet/wet differential pressure measurements of gases and liquids compatible with stainless steel. The compact size contains no internal O-rings or fluid filled cavities, making it ideal for water management, gas pipeline instrumentation, filtration, natural gas compressors and many other applications. In the event that either pressure port is at full line pressure and the other at zero, no damage will be done to the transducer/transmitter.



FEATURES

- Proprietary Fused Bond Sensor
- Accuracies 0.5% - 0.1% BFS
- RFI/EMI Protection
- Digital Temperature Correction at operating conditions
- Sensor Wetted Material Machined From Solid Stainless Steel Bar Stock (No Welds)
- Unparalleled Long Term Stability

DIMENSIONS



OPTIONS MAY CHANGE OVERALL DIMENSIONS,
CONSULT FACTORY



Spectre Sensors

Made in the U.S.A.

Model D150 Differential Series



Ordering Guide. Example: D150-A-(0-500)-A-1-5-EC1

Please inquire for specials or options

A	(0-500)	A	1	5	EC1
Pressure Port	Range	Pressure Output	Temperature Output	Accuracy	Connector
A=1/8"FNPT B=Other w/ adaptors	Specify Pressure Range. 0-5 psiD to 0-10,000 psiD	A=4-20mA B=0-5Vdc C=0-10Vdc D=mV E=Other	0=None 3=TC 4=RTD 5=Other	1=1.0%BFSL 5=0.5%	EC1=36" pigtail EC2=DIN 43650 with mate. Large EC3=Mini DIN ECX=Other

Performance @ 25°C (77°F)

Accuracy(1): $\pm 1.0\%$ BFSL to 0.5%BFSL
Stability (1 year): $\pm 0.25\%$FS, typical
Over range protection: 2X Rated Pressure
Burst Pressure: 2.5X Minimum
Zero Offset: $\pm 1\%$ FS
Pressure Cycles: >50 Million
Temperature Range: -55 to 125°C (-65 to 250°F)
Temperature Accuracy: $\pm 1^\circ\text{F}$ ($\pm 1^\circ\text{C}$)

Electrical Data

Excitation: 13-36 Vdc (0-10Vdc) 9-36Vdc (4-20mA,0-5V) Option C29 – Maximum 29 Vdc excitation
Current Consumption: <math>< 10\text{mA}</math>
Zero Offset: $\pm 1\%$ of FS
Span Tolerance: $\pm 1\%$ FS
Output load: > 100 K Ohm

Environmental Data

Temperature
Operating: -40 to 85°C (-40 to 185°F)
Storage: -50 to 125°C (-60 to 250°F)
Thermal Limits
Compensated Range: 0 to 55°C (-30 to 130°F)
Temp Comp Zero: $\pm 1.0\%$ FS ($\pm 1.5\%$ for 316L)
Temp Comp Span: $\pm 1.0\%$ FS ($\pm 1.5\%$ for 316L)

Physical Data

Sensor: Wetted Material 17-4 pH SS (others on request)
Pressure Connection: 1/4" MNPT (others on request)
Electrical Connection: Cable, DIN, Cannon, Bendix. Others on request

Applications

The Model D150 offers wet/wet differential pressure measurement of gases and liquids compatible with stainless steel. The compact size contains no internal O-rings or fluid filled cavities, making it ideal for water management, gas pipeline instrumentation, filtration, natural gas compressors and many other applications. In the event that either pressure port is at full line pressure and the other at zero, no damage will be done to the transducer.

The Model D150 has been designed specifically for applications with demanding price and performance requirements. Measurements are available in differential pressures covering line pressures up to 10,000 PSI.

Contact Information

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