

UL300 Series Non-Incendive Pressure Transducer



- Eliminate Drift – Fused Bond sensor technology for long term stability
- Sensor wetted material machined from solid stainless steel bar stock – no welding
- No silicone oil fill, no internal o-rings, no welded diaphragms
- RFI/EMI protection on every transducer
- Outputs: 4-20mA, 1-5 Vdc and 1-6 Vdc
- Pressure ranges – 0-5 PSI to 10,000 PSI
- Standard accuracy of 0.25% BFSL
- Approved to UL1604 (CSA 213) for Class 1, Div 2, Groups A, B, C and D, Non-Incendive for use in Hazardous Areas.
- ANSI/ISA – 12.27.01.2003 Compliant “Single Seal” (No need for secondary seal)
- Optional external Zero & Span controls (specify Model UL310)



Spectre's Series UL300 and UL310 Pressure Transducers are specifically engineered with proprietary Fused Bond sensor technology to eliminate the two most common problems with pressure transducers, noise and drift. The UL300 and UL310 (with zero & span) are approved to UL 1604 (CSA 123) for use in Class 1, Div 2, Group A, B, C & D hazardous areas

Performance @ 25°C (77°F)

Accuracy: $<\pm 0.25\%$ BFSL
Stability (1 year): $<\pm 0.25\%$ FS, typical
Over pressure protection: 2X Rated Pressure
Burst Pressure: 5X or 20,000 PSI (whichever is less)
Pressure Cycles: >100 Million
Temperature range: -55 to +125°C (-65 to +250°F)
Temperature Accuracy: $\pm 1^\circ\text{C}$ ($\pm 1^\circ\text{F}$)

Environmental Data

Operating temp: -40 to + 85°C (-40 to +185°F)
Storage temp: -50 to +125°C (-60 to +250°F)
Compensated range: 0 to 55°C (-32 to +130°F)
Temp comp Zero: $<\pm 1.5\%$ FS
Temp comp Span: $<\pm 1.5\%$ FS

Electrical Data

Excitation: 10-26 Vdc
Output: 4-20mA, 1-5 Vdc, 1-6 Vdc
Current consumption: <5 mA
Zero offset: $<\pm 1\%$ of FS
Span tolerance: $<\pm 1\%$ of FS
Output load: $>100\text{K}$ Ohm
Isolation: 50 MOhm @ 250 VDC
Output Impedance: <50 Ohm (voltage outputs)

Physical data

Sensor wetted material: 17-4 PH stainless (316SS optional)
Pressure Connection: 1/4" & 1/8" MNPT, SAE-4
Electrical connection: 1/2" MNPT conduit connection with 24" wiring leads
Shock: 100G, 11msec; 1/2 sine
Vibration: 20G peak, 20 to 2400 Hz
ANSI/ISA 12.27.01.2003 compliant

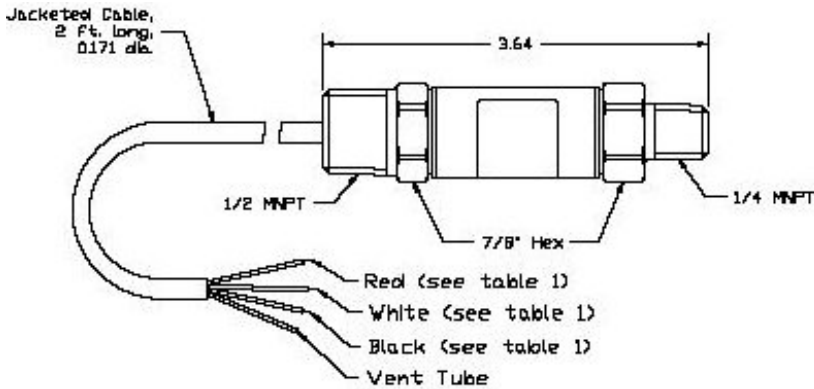
Spectre Sensors

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Ordering guide – Example: UL300-A-(0-100PSI)-2-A-EC9-174

UL300 Model	A Pressure port	0-100PSI Range	2 Units	A Output	EC9 Connector	174 Material
UL300	A=1/4" MNPT B=SAE-4 C=1/8" MNPT	Specify pressure range in: PSI (5-10,000)	2=Gauge 4=Sealed 5=Compound 6=Other	A=4-20mA B=1-5Vdc C=1-6Vdc	EC9=1/2"MNPT w/24" leads ECX=Other	174=17-4 ss 316=316 ss
UL310 (with zero And span)						

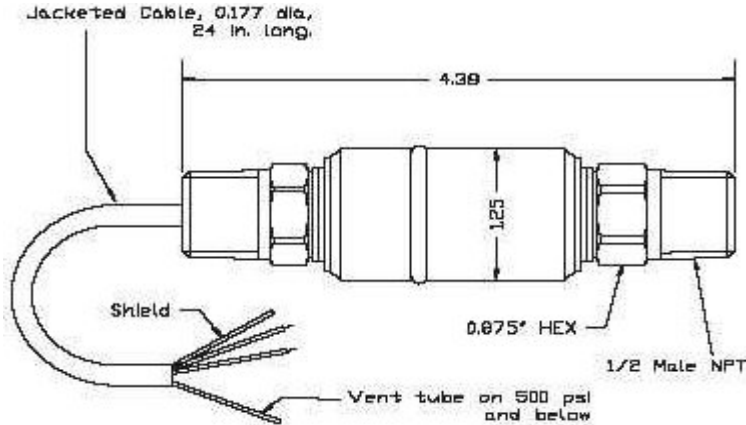
Dimensions: Model UL300



Wiring	4-20mA output, Cable
White	+ excitation
Black	- excitation/signal
Power	10-28 Vdc

Wiring	Voltage output, Cable
Red	+ excitation
White	- signal
Black	- excitation/signal
Power	10-28 Vdc

Dimensions: Model UL310



All above dimensions may vary with options.
Specifications subject to change without prior notice.