GP:50

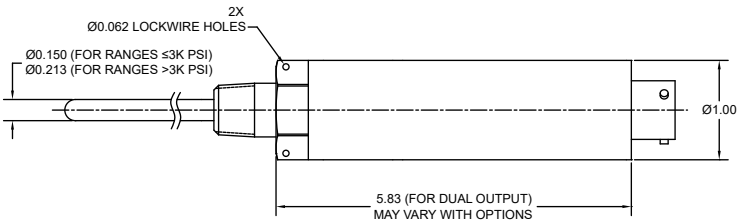
INDUSTRIAL

MODEL 243AI/AN / 343AI/AN

DUAL PRESSURE & TEMPERATURE TRANSDUCER FOR HAZARDOUS LOCATIONS

STANDARD WIRING CONFIGURATION

PIN/COND.	DESCRIPTION
A/RED	+EXC/SIG (PRESS)
B/BLK	-EXC/SIG (PRESS)
C/BRN	+EXC/SIG (TEMP)
D/BLU	-EXC/SIG (TEMP)
E/WHT	N/C
F/GRN	CASE GND



Inches (mm)

REF DIMENSIONS ONLY.
CONSULT FACTORY FOR ACTUAL DIMENSIONS.

PRODUCT OVERVIEW:

The Model 243AI/AN / 343AI/AN Series from GP:50 is an all-stainless steel, dual pressure and temperature transducer with 4-20 mA and 0-5 V output. Its compact design reduces I/O and insertion points where size and weight are considerations. Units are available in a variety of pressure and temperature ranges.

FEATURES:

- Pressure and temperature in a single device
- ATEX/IEC Intrinsically Safe (AI) and ATEX Zone 2 Non-incendive (AN) approved
- Dual 4-20mA, 0 to 5 Vdc or RTD Temperature outputs
- Maximum process temperatures from -65 °F to +250°F (-54 °C to +121 °C)
- Probe lengths from 3/4" to 7" (19mm to 178mm)
- Compact 1-inch (25.4 mm) diameter
- Rugged all-welded stainless steel design
- Standard ranges from 0-50 PSI thru 0-10K PSI (3.5 thru 690 bar)
- Calibrated Temperature ranges from -40°F to +250°F (-40°C to 121°C)

APPLICATIONS:

- Vehicle, engine and transmission oil monitoring
- Oil rig topside controls
- Automotive test stands
- Process skids
- Medical equipment
- Laboratory R&D
- Skidded process systems

OPTIONS:

- Alternate probe lengths, process ports and electrical connections
- Optional improved temperature specifications available
- Dual 0-5 Vdc or 4-20 mA outputs
- 0-5 Vdc or 4-20 mA pressure and RTD temperature output options

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GP:50 MODEL 243AI/AN / 343AI/AN

REFERENCE SPECIFICATIONS

(Standard configurations shown, consult factory for other options)

ELECTRICAL	
Output Signal:	(243AI/AN) 0-5 Vdc (343AI/AN) 4-20 mA
Excitation Voltage:	10 to 28 Vdc
Temperature Output:	100 or 1000 Ohm Platinum RTD
Output Current:	2.0 mA max. for <0.1% FSO attenuation
Insulation Resistance:	>100 MΩ at 50 Vdc and +70 °F (+21 °C)
Load Impedance:	1,350 Ω max. at 36 Vdc and 750 Ω max. Vdc

MATERIALS OF CONSTRUCTION	
Wetted Parts:	316L or 17-4 PH SST (Other options available, consult factory)
Housing:	300 Series SS

ACCURACY (BFSL): Hysteresis, Non-Linearity & Repeatability @ +70 °F	
Temperature:	±3.0 °F
Standard:	±0.5% FSO
Improved:	±0.2% FSO or ±0.1% FSO
Zero Balance:	±1% FSO

MECHANICAL	
Process Connection:	¼" NPT (M) (other ports available)
Electrical Connection:	6-pin bendix PT1H-10-6P stainless steel options available
Proof Pressure:	2X FSO or 22.5K PSI (1,551 BAR) (whichever is less)
Burst Pressure:	5X FSO or 23K PSI max. (1,586 BAR), whichever is less, Vacuum 5X FSO in gauge pressure
Probe Length:	3/4" thru 7"
Approximate Weight:	5 oz. (141.7 gms) (Optional ports and probe lengths available)

PRESSURE RANGES
0-50 thru 0-10K PSI (3.5 thru 690 BAR) gauge, sealed gauge, absolute

TEMPERATURE RANGES
Calibrated ranges from -40 °F to +250 °F (-40 °C to +121 °C) (Consult factory for other ranges - Electronics rated to 250 °F)

THERMAL SPECIFICATIONS	
Thermal Response Time:	<2 secs
Operating Process:	-40 °F to +250 °F (-40 °C to +121 °C)
Operating Ambient:	-40 °F to +185 °F (-40 °C to +85 °C)
Compensated Pressure:	+30 °F to +185 °F (-1 °C to +85 °C)
Storage:	-65 °F to +250 °F (-54 °C to +121 °C)
Effect on Zero/Span Pressure:	<±0.5% FSO/100 °F

APPROVALS
ATEX/IEC Intrinsically Safe: II 1 G Ex ia IIC T5 Ga
ATEX: CE0575 II 3 G Ex nA IIC, Ex ic IIC T5, Ta=80C
IEC: Ex na IIC, Ex ic IIC T5, Ta=80C (all Zone 2/Div 2 approvals are electrical connector dependent)

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