



# OIL & GAS

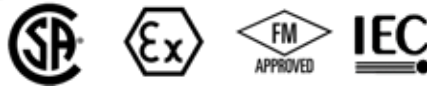
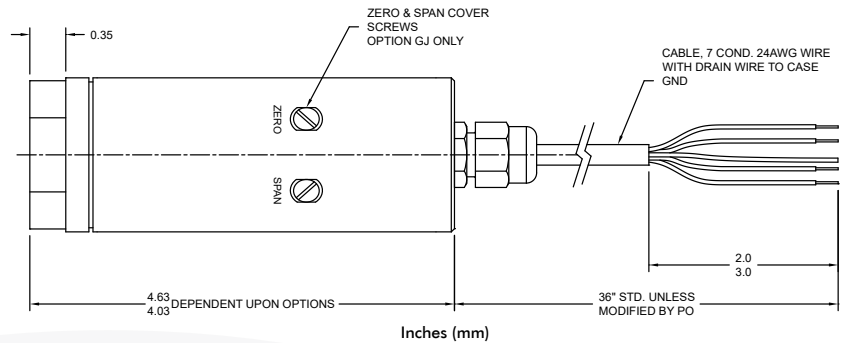
## MODEL 311 I, GI, AI

### INTRINSICALLY SAFE PRESSURE TRANSDUCER



STANDARD WIRING CONFIGURATION

PIN OR WIRE COLOR	DESCRIPTION
A/1/RED	+EXC/SIG
B/2/GRN	CASE GND
C/3/WHT	NIC
D/4/BLK	-EXC/SIG
E/5/BLU	NIC
F/6/BRN	NIC



**REF DIMENSIONS ONLY.  
CONSULT FACTORY FOR ACTUAL DIMENSIONS.**

#### PRODUCT OVERVIEW:

GP:50's Model 11 Series provides a rugged solution in hazardous approved areas. The all welded, stainless steel design provides years of reliable service in some of the harshest applications.

#### FEATURES:

- 0 to 5 PSI thru 0 to 75K PSI (75 mBAR to 1,034 BAR)
- FM, CSA, ATEX & IEC approvals
- Welded, rugged construction
- Optional high overpressure protection

#### APPLICATIONS:

- Rig safety systems
- Well head control
- Gas pipeline
- Control panels
- On-board transmission & engine monitoring

#### OPTIONS:

- FM, CSA ATEX, IEC Intrinsically Safe\*
- Zero & Span adjust
- Alternate connectors & pressure ports
- For Explosion-proof see model 311X/P\*

\*For details of available approvals go to:  
<https://www.gp50.com/certifications>



# GP:50 MODEL 311 I, GI, AI

## REFERENCE SPECIFICATIONS

(Standard configurations shown, consult factory for other options)

ELECTRICAL	
Output Signal:	4-20 mA output
Excitation Voltage:	10 to 28 Vdc excitation
Insulation Resistance:	> 10 MΩ @ 50 Vdc, +70 °F
Circuit Protection:	RFI, EMI & Reverse polarity protected
Response Time:	<5 ms 10% to 90%

MATERIALS OF CONSTRUCTION	
Wetted Parts:	316 or 17-4 PH stainless steel (Options available, consult factory)
Housing:	316 stainless steel
Internal Fill:	Fomblin oil fill (May contain Silicone Oil)

ACCURACY (BFSL): Non-Linearity @ +70 °F	
Standard:	±0.5%
Improved:	±0.2% and ±0.1%
Zero & Span Balance:	±1% FSO at +70 °F, 0.5% optional

MECHANICAL	
Process Connection:	¼" NPT (F) for ranges <20 KPSI (1.4 BAR) High pressure coned fittings for ranges 20K to 75K PSI (1,379 to 5,171 BAR)
Electrical Connection:	36" long PVC Jacketed, 24 AWG, 7 conductor cable with drain wire
Proof Pressure:	1.5X FSO ≤30K PSI, 1.2X FSO >30K PSI
Burst Pressure:	2.5X FSO ≤10K PSI 5X FSO >10K PSI and ≤30K PSI 1.5X ≤75K PSI
Approximate Weight:	10 oz. (0.3 kg) nominal (options may increase weight)

PRESSURE RANGES	
0 to 5 thru 0 to 75K PSI (0 to 0.3 thru 0 to 5,171 BAR) (PSIG, PSIS, PSIA, PSIV & Compound ranges available)	

THERMAL SPECIFICATIONS	
Operating Range:	-40 °F to +176 °F (-40 °C to +80 °C)
Compensated Range:	0 °F to +180 °F (-18 °C to +82 °C)
Storage Ambient:	-65 °F to 250 °F (-53 °C to +121 °C)
Effect on Zero/Span:	±2.0% FSO/100 °F
Improved or expanded temperature compensation available	

APPROVALS:	
FM, FM/CSA: Class I/II/III, Div 1, Grps A-G, T6 at Ta=40C	
Zone 2 / Division 2	
FM: Class I, Zone 2 AEx nC IIC T5, Class I, Div. 2, Grp. A, B, C, D Class II, Grp. E, F, G, Class III T5, Ta = 80C	
CSA: Ex nA IIC T5, Ex nL IIC T5, Class I Div. 2 Grp. A, B, C, D Class II Div. 2 Grp. E, F, G Class III T5, Ta=80C	
ATEX: CE0575 II 3 G Ex nA IIC, Ex ic IIC T5, Ta=80C	
IEC: Ex na IIC, Ex ic IIC T5, Ta=80C	

