

# Pressure, Level & Temperature Transmitters & Transducers

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# **ULTRA HIGH PRESSURE TRANSMITTER**

Models 112, 212, 312



## **FEATURES:**

- · Rugged, all-welded, encapsulated electronics
- · Leakproof, integral pressure cavity & sensor
- Many standard easy-to-order options

#### PRESSURE RANGES:

- From 0-20,000 psi to 0-150,000 psi
- From 0-1500 bar to 0-10,000 bar

#### ACCURACY:

 Accuracies to 0.2% FSO (RSS) (Non-linearity, Hysteresis, Non-repeatability)

WIKING:	112	212	312
A/1 RED	+EXC.	+EXC.	+EXC./SIGNAL
B/2 GREEN	+SIGNAL	+SIGNAL	NC
C/3 WHITE	-SIGNAL	NC	NC
D/4 BLACK	-EXC.	-EXC./SIGNAL	-EXC./SIGNAL
E/5 BLUE	NC OPTION GH	NC OPTION GH	NC OPTION GH
F/6 BROWN	NC OPTION GH	NC OPTION GH	NC OPTION GH
SHIELD	OPEN	OPEN	OPEN

Some options will affect dimensions. Consult factory if important.

(Includes Hysteresis, Non-linearity, Non-Repeatability)

- Series B (Std): ±0.5% FSO RSS
- Series C: ±0.2% FSO RSS

# Zero Balance & FSO:

• ±1.0% FSO at 70°F for each

## **Long Term Stability:**

• <±0.25% FSO for 6 months at 70°F

## **Resolution:**

• Infinite (.02% practical minimum)

#### **Temperature Limits:**

- Compensated: 0° F to +180° F
- Operating: -20° F to +190° F
- Storage: -65° F to +250° F
- Effect on Zero & Span: Within ±2% FSO/100°F for each.

#### **Electricals:**

· Excitation Voltage:

(Model 112) 3.5-15 Vdc (Model 212) 9-40 Vdc

(Model 312) 9-40 Vdc

Output at 70° F (FSO):

(Model 112) 3.0 mV/V ±2% (Model 212) 5.0 Vdc ±2%

(Model 312) 4-20 mA ±2%

- Input Current: (Model 212) 8 mA, nominal
- · Load Impedance:

(Model 112) 50,000 ohms min. for less than 0.1% FSO attenuation (Model 312) 1350 ohms max. at 36 Vdc & 750 ohms at 24 Vdc

- Output Current: (Model 212) 2.0 mA max. for less than 0.1% FSO attenuation
- · Range Calibration Signal: Resistance value provided on calibration card for
- Insulation Resistance: Greater than 10 megohms at 50 Vdc and 70°F
- Cable: 24 AWG 36" long

# **Mechanicals:**

- Proof Pressure: 1.2 X full scale pressure or 160,000 psi, whichever is less.
- Burst Pressure: 2 X full scale pressure or 180,000 psi, whichever is less.
- Case material: Types 15-5 PH & 316 SST
- Weight: 12 oz., nominal

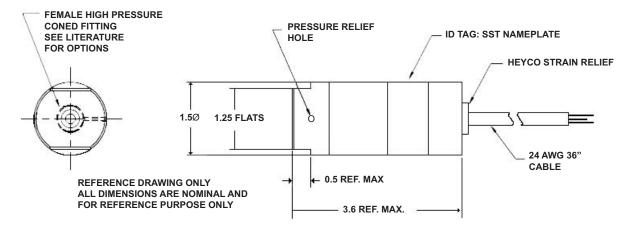
# **Connections:**

• Pressure Ranges: 20,000 to 60,000 psi - autoclave type F-250-C 75,000 to 150,000 psi - autoclave type F312-C150

A5SL-12.00 Rev B

# **Wetted Materials:**

- 0-20,000 to 60,000 psi 17-4 stainless steel
- 0-61,000 to 0-150,000 psi Vascomax 300



GP:50 reserves the right to make product improvements and amendments to the product specifications stated throughout this brochure without prior notification. Please contact the factory on all critical dimensions and specifications for verification.



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# **ULTRA HIGH PRESSURE TRANSMITTER**

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Typical configurations (consult factory for more options)

## MODEL:

112 3 mV/V 212 0-5 Vdc 312 4-20 mA

312Z 4-20 mA (Intrinsically Safe)

# **ACCURACY:**

B 0.5% FSOC 0.2% FSO

## PRESSURE RANGE:

(PSI)		(BAR)	
SD	20,000	UB	1500
SE	25,000	UC	2000
SF	30,000	UD	3000
SH	50,000	UE	5000
SI	60,000	UG	10,000
SK	75,000		
SM	100,000		
SO	150,000		
SZ	Non-std.		

Non-standard port

# PRESSURE PORT:

ЬM	F-250-C std. on 20k-60k psi Autoclave
	Engineering type.
IC	F-375-C, 3/4-16 (F) thread Autoclave
	Engineering type.
ID	F-312-C150, 5/8-18 (F) thread Autoclave
	Engineering type std. on ranges above 75k

## NOTE:

FΖ

Specifications reflect standard product, improved performance / mechanical options available.

Modifications may alter specs, consult factory for more information.

# **OPTIONS**

AA None (standard connector)

#### ALTERNATE CONNECTOR OR CABLE

CA Bendix PTIH-10-6P (Mate PT06E-10-6S [SR], not supplied)

CB Bendix CF3102E-14S-6P (Mate CF3106E-14S-6S, not supplied)

CC Bendix PCO2E-12-8P (Mate:PCO6A-12-8S-[SR] not supplied)

CD Cannon WK6-32S (Mate WK6-21C not supplied)

**CE** Terminal Block

CF 1/2" NPT Male Thread with 24" potted leads

CG MS3102A-14S-6S (mate: MS3106F-14S-6P not supplied)

CJ DIN 43650 (includes mate)

CO Junction Box (thermocouple type) and terminal block

CZ Alternate Connector/Cable/Other

# **ALTERNATE PRESSURE PORT**

C F-375-C, 3/4-16(F) thread autoclave engineering type

ID F-312-C150, 5/8-18(F) thread autoclave engineering type

FZ Non-standard port

## **GENERAL**

**GA** Standardized FSO = (Full scale reading) - (Zero reading) ±0.5% FSO

GB Alternate Electronic Output (Specify Zero and Span output

GE ImprovedTtemperature. Compensation to ±0.5% FSO/100°F for Zero & Span respectively, from 0°F to 180°F.

GF Expanded process temperature range, -65 to 250°F (±2.0% FSO/100°F)

**GG** Alternate shunt calibration signal (specify percentage FSO)

GH Internal shunt calibration resistor, set to 100% ±0.5% FSO

GJ Add Zero and Span Controls. (Approximately ±20% FSO adjustment)

GS 0-10 Vdc FSO, Model 212 only (Requires 14.5-32 Vdc excitation)

**HE** ±0.5% FSO zero balance

**HL** RFI Protection (for unit in proximity to radio transmitter)

HR ±15 Vdc Excitation, Model 212

**GZ** Customer special