



Pressure, Level & Temperature Transmitters & Transducers

U.K. Distributor Interface Force Measurements

Tel.01344 776666 • Fax 01344 774765

info@interface.uk.com • www.interface.uk.com

DIFFERENTIAL PRESSURE TRANSMITTER

Models 115, 215, 315, 115X/P, 215X/P, 315X/P/Z



(Shown with "315X"
+ "HM" option)

FEATURES:

- Rugged, all welded, totally encapsulated electronics
- Leakproof. No O-ring construction
- Small size
- All SST wetted parts
- Base pressure to 10,000 psi (with option HM)
- Explosion Proof & Intrinsically Safe Approvals

PRESSURE RANGES:

- From 30 to 5000 psid
- From 2 to 300 bar
- (Bi-directional available)

Approvals



WIRING:

	115	215	315
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

Zero Balance:

- (Model 115) 0.0 mV/V $\pm 2\%$ FSO at 70°F at 10 Vdc
- (Model 215) 0.0 Vdc $\pm 2\%$ FSO at 70°F at 24 Vdc
- (Model 315) 4.0 mA $\pm 2\%$ FSO at 70°F at 24 Vdc

Temperature Compensation:

- Effect on Zero / Span $\leq \pm 2.0\%$ FSO/100°F for each

Electricals:

(Consult factory for ATEX approval)

- Excitation Voltage:

(Model 115) 3.5-15 Vdc

(Models 215/215X) 9-40 Vdc / 10.5-32 Vdc

(Models 315/315Z) 9-36 Vdc

(Model 315X) 13-36 Vdc

- Output Current:

(Model 215) 2.0 mA maximum for less than 0.1% FSO attenuation.

- Output at 70°F:

(Model 115) 3 mV/V $\pm 2\%$ FSO

(Models 215/215X) 5 Vdc $\pm 2\%$ FSO

(Models 315/315X/315Z) 4-20 mA $\pm 2\%$ FSO

- Load Impedance:

(Model 115) 50,000 ohms min. for less than 0.1% FSO attenuation

(Model 215) 750 ohms maximum at 24 Vdc & 1350 ohms at 36 Vdc

- Input Impedance:

(Model 115) 5000 ohms nominal

- Input Current:

(Model 215) 10 mA nominal

Temperature Limits:

- Compensated: +70° to +180° F
- Operating: -20° to +190° F
- Storage: -65° to +250° F

Mechanicals:

- Proof Pressure: 10 X full scale pressure range or 3000 psi, whichever is less.
- Burst Pressure: 15 X full scale pressure range or 4000 psi, whichever is less.
- Weight: 16 oz. nominal.
- Static Line Pressure: 2000 psi maximum (10,000 psi option)
- Static Line Shift (Zero Shift): $\leq \pm 1\%$ FSO/1000 PSI
- Wetted Materials: 316 SST
- Enclosure Material: 17-4 and 316 SST
- Mounting: Pressure Port

Connections:

- Pressure: 1/4" NPT (F)

- Electrical Cable:

(Model 115, 215) 36" long, 4 conductor

(Model 315) 36" long, 2 conductor

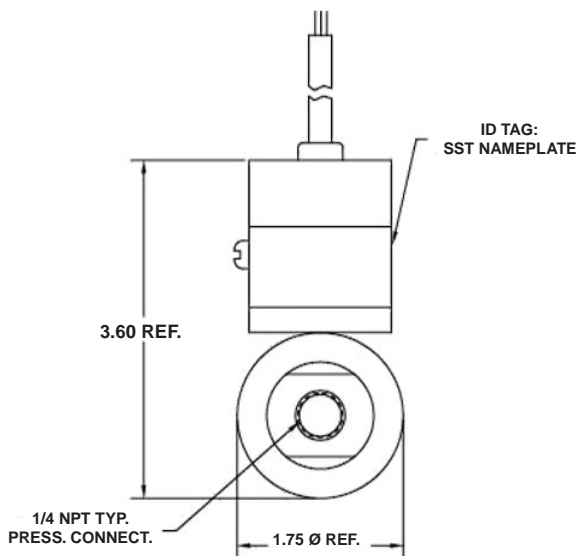
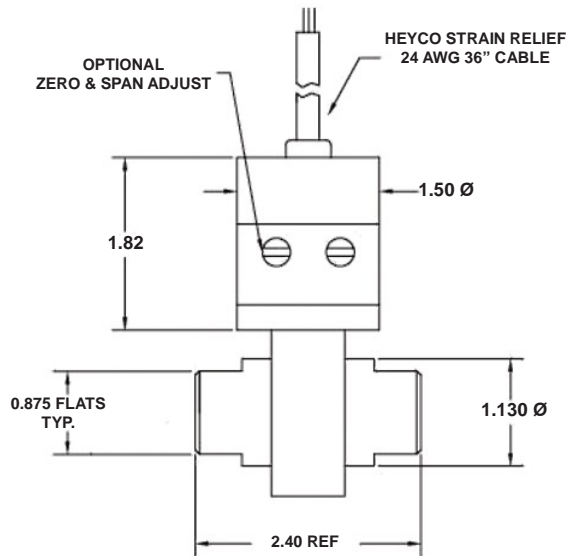
A5SL-15.00 Rev D



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Some options will affect dimensions. Consult factory if important.



MODEL:

115	3 mV/V
215	0-5 Vdc
315	4-20 mA
215X	0-5 Vdc Explosion Proof
315X	4-20 mA Explosion Proof
315Z	4-20 mA Intrinsically Safe

ACCURACY:

A - 1.0% FSO / B - 0.5% FSO / C - 0.2% FSO

PRESSURE RANGE (PSI):

** Available with option HM only

PT 30	RF 300	RS 2500
PV 50	RH 500	RT 3000**
PX 75	RJ 600	RV 5000**
PZ 100	RK 750	RW 6000**
RB 150	RM 1000	RX 7500**
RD 200	RO 1500	SZ Other
RE 250	RR 2000	

OPTIONS

AA None (standard connector)

ALTERNATE CONNECTOR OR CABLE

CA	Bendix PTIH-10-6P (Mate: PTO6E-10-6S [SR], not supplied)
CB	Bendix CF3102E-14S-6P (Mate: CF 3106E-14A-6S (not supplied))
CE	Terminal Block
CF	1/2" NPT(M) thread w/24" potted leads. (Std. on exp. proof models)
CH	NEMA-4X cable, 8' vented polyurethane jacket cable
CJ	DIN 43650 (includes mate)
CL	1/2" NPT (M) conduit, 2' vented polyurethane jacket cable
CO	Junction Box (thermocouple type) and Terminal Block
CT	Teflon jacketed cable, Tefzel used on submersible units, (Options CH, CL, DE)

ALTERNATE PRESSURE PORT

FA	MS33649-4 (1/4 AND-10050, [F])
FC	3/8" NPT (F)
FZ	Non-Standard Pressure Port

GENERAL

CW	Submersible non-vented cable (max. 500 psi external)
DE	IP-67 (NEMA-6) vented polyurethane cable, neoprene grommet
GA	Standardized Output to $\pm 0.5\%$ FSO
GB	Alternate Full Scale, Outputs that are non-standard
GE	Improved Temp. Compensation to $\pm 0.5\%$ FSO/100°F for Zero & Span
GF	Expanded process temperature range, -65 to 250°F ($\pm 2\%$ FSO/100°F)
GG	Alternate Calibration Resistor Signal
GH	Internal Calibration Resistor, set to 100% $\pm 0.5\%$ FSO
GJ	Zero & Span Controls (Approximately $\pm 20\%$ FSO) 215 & 315 only
GL	Cleaned for Oxygen Service
GS	0-10 Vdc FSO, Model 215. (Requires 16-40 Vdc excitation)
HK	NEMA-4X rating
HL	RFI Protection (for unit in proximity to radio transmitter).
HM	10,000 psi Base Pressure Flange Girdle. Proof pressure 10 x full scale range or 10,000 psi, whichever is less. Burst pressure 15 x full scale range or 10,500 psi, whichever is less.
HR	± 15 Vdc Excitation, Model 215
MD	Zero and Span Controls for Explosion-Proof Units.
MS	Bi-Directional Differential Pressure allows for both positive & Negative signal (Model 315 has a 12 mA zero)

NOTE:

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

Modifications may alter specs, consult factory for more information.