



Pressure, Level & Temperature Transmitters & Transducers

2770 Long Road, Grand Island, NY 14072 USA

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HOMOGENIZER PRESSURE TRANSMITTER

Models 181, 281, 381



FEATURES:

- All welded, SST rated NEMA 4X
- No fluid fill
- Compatible with all systems
- Complies with 3-A Standard 74-03

APPLICATIONS:

- Homogenizer Pressure
- Slurries
- Viscous Materials

PRESSURE RANGES:

- From 0-100 psig to 0-20,000 psig



74-03
Cert no. 668

WIRING:

	181	281	381
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

Accuracy:

Static Error (Includes Hysteresis, Non-linearity, Non-Repeatability)
• ±0.5% FSO RSS

Resolution:

- Infinite (Practical min. of 0.02% on 181, 281 and 0.06% on 381)

Temperature Limits:

- Compensated: 0° F to +180° F
- Operating: -20° F to +200° F

Temperature Compensation:

- Zero & Span: Less than ±2.0% FSO/100°F for each.

Electricals:

- Excitation Voltage:
(Model 181) 3.5 -15 Vdc
(Model 281) 9-40 Vdc
(Model 381) 9-36 Vdc
- Output at 70° F:
(Model 181) 3 mV/V ±2% FSO
(Model 281) 0 ±5 Vdc ±2% FSO
(Model 381) 4-20 mA ±2% FSO
- Zero Balance:
(Model 181) 0.0 mV/V ±5% FSO at 70° F at 10 Vdc
(Model 281) 0.0 Vdc ±5% FSO at 70° F at 24 Vdc
(Model 381) 4.0 mA ±5% FSO at 70° F at 24 Vdc
- Input Impedance: (Model 181) 5,000 ohm, nominal.
- Load Impedance:
(Model 181) 50,000 ohm, min. for less than 0.1% FSO attenuation
(Model 381) 1,350 ohms, max. at 36 Vdc & 750 ohms max. at 24 Vdc
- Range Cal. Signal:
(Model 181) Resistance value provided on calibration card for 100% FSO
(Models 281 & 381) NC. see option GH
- Insulation Resistance: Greater than 10 megaohms at 50 Vdc and 70° F

Mechanicals:

- Proof Pressure: 2 X full scale pressure or 22,500 psi, whichever is less.
- Burst Pressure: 5 X full scale pressure or 23,000 psi, whichever is less.
- Weight: 6 oz. nominal
- Fatigue Life: Infinite when operated at less than max. pressure range

Connections:

- Pressure: Flush Diaphragm with gasket (included)
- Electrical Cable: 20' non-vented polyurethane jacketed, 6 conductor.

Wetted Parts:

Inconel X750

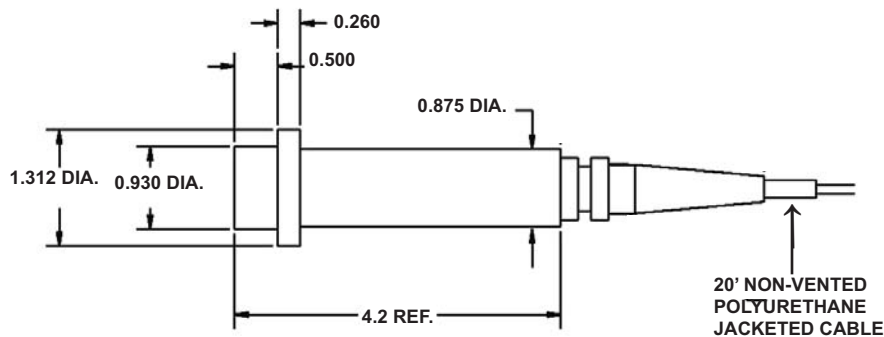
Enclosure:

All-welded type 316 SST. Rated NEMA-4X. 3A 74-03 compliant.

Identification:

Laser etching & etched SST nameplate welded to body.

Some options will affect dimensions. Consult factory if important.



A5SL-81.00 Rev B

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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Typical configurations (consult factory for more options)

MODEL

181	3 mV/V
281	0-5 Vdc
381	4-20 mA

PRESSURE RANGE

PSIG

PZ	100
RB	150
RD	200
RF	300
RH	500
RK	750
RM	1,000
RO	1,500
RR	2,000
RT	3,000
RV	5,000
RX	7,500
RZ	10,000
SB	15,000
SD	20,000
SZ	Other

OPTIONS

AA None (standard connector)

ALTERNATE CONNECTOR OR CABLE

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

CZ Alternate Connector/Cable/Other

GENERAL

GA Standardized Output to $\pm 0.5\%$ FSO

GB Alternate full scale output (FSO)

GE Improved Temperature Compensation to $\pm 0.5\%$ FSO/100°F for Zero & Span Respectively.

GF Expanded process temperature range, -65 to 250°F ($\pm 2\%$ FSO/100°F)

GH Internal Calibration Resistor, set to 100% $\pm 0.5\%$ FSO

GS 0 -10 Vdc FSO, Model 281. Requires 16 - 40 Vdc excitation.

JH Remote cable-mounted Zero and Span Controls. 3' cable on open side. Cable on closed side as required. (Model 381 only)

GZ Customer special

NOTE:

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

Modifications may alter specs, consult factory for more information.