

SANITARY FLUSH DIAPHRAGM PRESSURE TRANSDUCER/TRANSMITTER

Models 181, 281, 381

FEATURES:

- All welded, stainless steel rated NEMA 4X
- No fluid fill
- Compatible with all systems

PRESSURE RANGES:

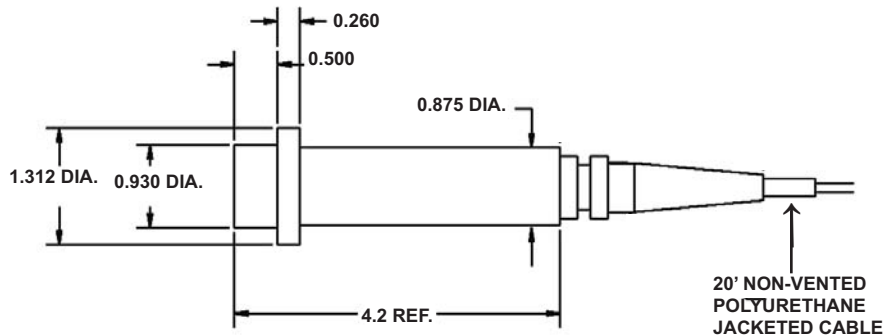
- From 0-100 psig to 0-20,000 psig
(See ordering guide)

APPLICATIONS:

- Homogenizer Pressure
- Slurries
- Viscous Materials



FLUSH DIAPHRAGM



Some options will affect dimensions. Consult factory if important.

WIRING CODE

	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

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.



Pressure, Level & Temperature Transmitters & Transducers

Specifications reflect standard product, improved performance/mechanical options available. Modifications may alter specs, consult factory for more information.

Accuracy	(Static error band includes non-linearity, hysteresis, RSS non-repeatability) ±0.5% FSO RSS		
Wetted Parts *	Inconel X750		
Temperature Limits	Compensated 0° F to +180° F Operating -20° F to +200° F		
Temperature Compensation	Zero Less than ±2.0% FSO/100° F Span Less than ±2.0% FSO/100° F		
Electricals	(Model 181)	(Model 281)	(Model 381)
Excitation Voltage	3.5 - 15 Vdc	9 - 40 Vdc	9 - 36 Vdc
Output at 70° F	3 mV/V ± 2% FSO	0 ± 5 Vdc ± 2% FSO	4 - 20 mA ± 2% FSO
Input Impedance	5000 ohm, nominal		
Load Impedance	50,000 ohm minimum, for less than 0.1% FSO attenuation		
Input Current	10mA, nominal		
Output Current	2.0 mA maximum for less than 0.1% FSO attenuation		
Load Impedance	1350 ohms maximum at 36 Vdc & 750 ohms max. at 24 Vdc		
Zero Balance	0.0 mV/V ±5% FSO at 70°F at 10 Vdc	0.0 Vdc ±5% FSO at 70°F at 24 Vdc	4.0 mA ±5% FSO at 70°F at 24 Vdc
Range Cal. Signal	Resistance value provided on calibration card for 100% FSO.	NC. See option GH	NC. See option GH
Insulation Resistance (Greater than 10 megaohms at 50 vdc and 70°F)			
Resolution	Infinite (practical minimum of 0.02% on 181, 281 and 0.06% on 381)		
Mechanicals	Proof Pressure 2 times full scale pressure or 22,500 psi, whichever is less Burst Pressure 5 times full scale pressure or 23,000 psi, whichever is less Weight 6 oz. nominal Fatigue Life Infinite when operated at less than maximum pressure range		
Connections	Pressure Flush diaphragm with gasket (included) Electrical Cable 20' Non-vented polyurethane jacketed, 6 conductor		
Enclosure	All-welded type 316 stainless steel. Rated NEMA-4X. Approved 3A		
Identification	Etched stainless steel nameplate welded to body		

* See modifications on ordering guide.

ORDERING GUIDE:

Use the following codes to identify desired item.

MODEL	RANGE	OPTIONS
●	—	●/●/●

Example: 381-RV-CA

MODEL

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

PRESSURE RANGE

PSIG	
PZ 100	RR 2,000
RB 150	RT 3,000
RD 200	RV 5,000
RF 300	RX 7,500
RH 500	RZ 10,000
RK 750	SB 15,000
RM 1,000	SD 20,000
RO 1,500	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 ±0.5% FSO
GB Alternate full scale output (FSO)
GE Improved Temperature Compensation to ±0.5% FSO/100°F for Zero & Span Respectively
GF Expanded process temperature range, -65 to 250°F (±2% FSO/100°F)
GH Internal Calibration Resistor, set to 100% ±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

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