



MELT PRESSURE TRANSDUCERS & TRANSMITTERS

Product Specification Sheet

SMART RANGEABLE MELT PRESSURE TRANSMITTER

Models 430, 431 / 430X, 431X / 430P, 431P



FEATURES:

- Rugged, all-welded stainless steel construction
- Interchangeable with existing systems
- HART® Communication
- Many options available, including Hastelloy C-276 or Boron Hardening

PRESSURE RANGES:

- From 0-500 through 0-30,000 psig
(See ordering guide)

ACCURACY:

- (Non -Linearity, Hysteresis, Non-repeatability)
- $\pm 0.15\%$ FSO, RSS (0-5000 psi and higher)
 - $\pm 0.2\%$ FSO, RSS (0-3500 psi and lower)



Consult factory for hazardous location approval availability.

***REFER TO APPENDIX A
FOR WIRING CODES***

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

Accuracy	Static Error Band (Non-linearity, Hysteresis, Non-repeatability, includes temperature effects) ± 0.25% FSO(RSS) 500 through 3500 psi ± 0.15% FSO(RSS) 5000 through 30000 psi	
Ranging	3:1 (500 through 2500 psi) 5:1 (3000 through 30,000 psi)	
Operating Temperature Range (Compensated)		
Process	77°F to 575°F (25°C to 300°C), optional to 660°F (350°C)	
Electronics	77°F to 176°F (25°C to 80°C)	
Temperature Effects from Electronics	Less than ±0.15% FSO/100°F	
Electricals		
(Model 430/431) (Model 430X/431X)	Excitation Voltage 12-36 Vdc 12-36 Vdc	Output at 70° F 4-20 mA ± 0.1% 4-20 mA ± 0.1%
Load Impedance	250 ohms minimum (for HART® communication) @ 17Vdc 1200 ohms maximum, at 36 Vdc	
Output Current	4-20 mA ±0.1% FSO @ 70°F	
Connections		
Pressure	1/2"-20 UNF-2A thread for standard (M18 x 1.5 metric thread optional)	
Electrical (430, 431)	PTIH-10-6P standard, (PT06A-10-6S (SR), mate not included)	
Electrical (430X, 431X)	1/2" NPT(M) thread with 72" leads	
Enclosed Materials	316 stainless steel	
Mounting Torque	500 inch pounds, maximum	
Identification	Etched stainless steel nameplate welded to body.	

ORDERING GUIDE

Model: 4 3X X-XX-XX/XX/XX/XX/XX

ELECTRICAL OUTPUT	
4	4-20mA with HART® Communications

BASE MODEL	
0	Rigid Stem Only
1	Rigid Stem and Flex

HAZARDOUS APPROVAL	
Blank	No Approvals
X	FM Explosion Proof
P	FM & CSA Explosion Proof

PRESSURE RANGE			
RH	500 PSI	UV	50 BAR
RJ	600 PSI	UX	75 BAR
RK	750 PSI	UY	100 BAR
RM	1,000 PSI	UZ	150 BAR
RO	1,500 PSI	VA	200 BAR
RR	2,000 PSI	VB	300 BAR
RS	2,500 PSI	VC	350 BAR
RT	3,000 PSI	VD	500 BAR
RV	5,000 PSI	VE	700 BAR
RX	7,500 PSI	VF	750 BAR
RZ	10,000 PSI	UA	1,000 BAR
SB	15,000 PSI	UH	1,400 BAR
SD	20,000 PSI	UB	1,500 BAR
SF	30,000 PSI	UC	2,000 BAR
SZ	Custom	SZ	Custom

CONNECTOR OPTIONS	
Blank	6-Pin Bendix (PTIH-10-6P) - Standard for Non Approved Transducers
Blank	1/2" NPT (M) Thread with 72" Leads - Standard for Explosion Proof Transducers
CC	8-Pin Bendix (PCO2E-12-8P)
CF	1/2" NPT (M) Thread with 36" Leads

CAPILLARY TUBE LENGTH	
Blank	18 Inch (457.2mm) Flex
HS	9 Inch (228.6mm) Flex
HY	12 Inch (304.8mm) Flex
HV	24 Inch (609.6mm) Flex
GT	30 Inch (762mm) Flex

RIGID STEM LENGTH	
Blank	6 Inch (152.4mm) Rigid Stem
HJ	1 3/16 Inch (30.2mm) Rigid
HD	3 Inch (76.2mm) Rigid Stem
HU	4 Inch (101.6mm) Rigid Stem
GO	9 Inch (228.6mm) Rigid Stem
GN	12.5 Inch (317.5mm) Rigid Stem
HT	24 Inch (609.6mm) Rigid Stem

DIAPHRAGM OPTIONS	
Blank	15-5 PH Diaphragm
GP	Hastelloy C-276 Diaphragm & Threads
GQ	Boron Hardened Diaphragm
JW	Titanium Nitride Coated Diaphragm & Threads
QS	Diamond Coating (DLC)

FILL TYPES	
Blank	Mercury (Standard - Included)
QJ*	Nak Fill (750°F Max)
GW*	Nak Fill with Inconel Diaphragm (1000°F Max)
GV	Silicon Oil Fill (500°F Max)
GX	Mineral Oil Fill (500°F Max)

* Non Explosion Proof Transmitters Only

* Other Options Available - Consult Factory

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