



**MELT PRESSURE
TRANSDUCERS & TRANSMITTERS**
300 Industrial Drive, Grand Island, NY 14072 USA
Tel. (716)775-8830 • Fax (716)775-8020 • sales@gp50.com • www.gp50.com

Product Specification Sheet

SMART SERIES FLANGE MOUNTED LOW PRESSURE TRANSMITTER

Models 430, 431 with FX/FY option

MODEL 430-FX and 430-FY

These are the rigid stem versions of GP:50's smart series flange mounted transmitters. Standard length is 3.65 inches, although they may be ordered in longer or shorter lengths to accommodate individual needs (See outline drawing & close up). The limiting minimums may be the die temperature and environment which must jointly combine to restrict the electronics and sensor from exceeding 180°F.



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

FEATURES:

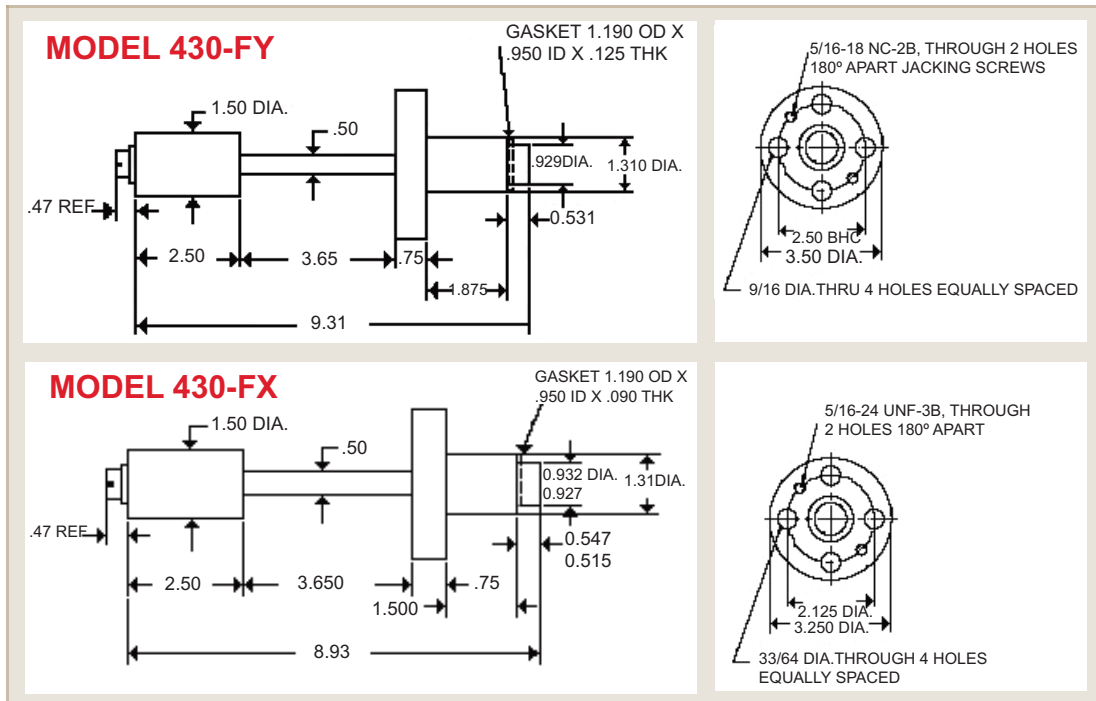
- HART® Communications
- All-welded, stainless steel construction
- Unmatched accuracy via proprietary thermal compensation method

PRESSURE RANGES:

- From 0-25 through 0-1,000 psig
(See ordering guide)

ACCURACY:

- 0.15% FSO



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.

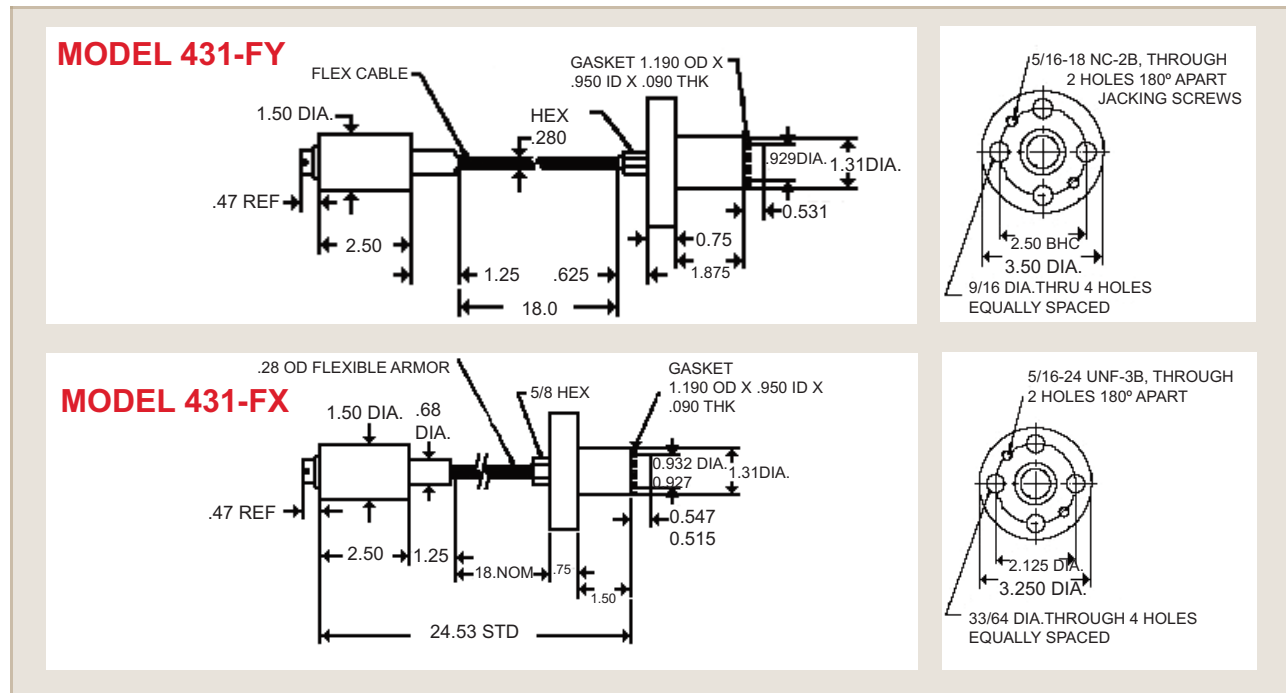


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MODEL 431-FX and 431-FY

The flexible tube versions of GP:50's smart series flange mounted transmitters. These transmitters provide the ultimate thermal isolation for those demanding applications reaching 600°F (660°F optional). Model 431-FX and 431-FY come with a standard 18 inch length of flexible capillary tubing protected with a stainless steel armored jacket. This length can be customized (consult option codes).



ORDERING GUIDE

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

ELECTRICAL OUTPUT	
4	4.20mA with HART® Communications

BASE MODEL	
0	Rigid Stem Only
1	Rigid Stem and Flex

PRESSURE RANGE			
PO	25 PSI	UL	2 BAR
PT	30 PSI	UM	3 BAR
PV	50 PSI	UN	5 BAR
PX	75 PSI	UP	7.5 BAR
PZ	100 PSI	UQ	10 BAR
RB	150 PSI	UR	15 BAR
RD	200 PSI	US	20 BAR
RE	250 PSI	UT	30 BAR
RF	300 PSI	UV	50 BAR
RH	500 PSI	UX	75 BAR
RJ	600 PSI	SZ	Custom
RK	750 PSI		
RM	1,000 PSI		

FLANGE TYPE	
X	3.25 Diameter Flange
Y	3.50 Diameter Flange

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

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)

CONNECTOR OPTIONS	
Blank	6-Pin Bendix (PTIH-10-6P)
CC	8-Pin Bendix (PCO2E-12-8P)
CF	1/2" NPT (M) Thread with 36° Leads

* Other Options Available - Consult Factory



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

Full Scale Pressure Ranges	See ordering guide	
Accuracy	Static Error Band (Non-linearity, Hysteresis, Non-repeatability also includes temperature effects) ± 0.2% FSO(RSS) 500 through 3500 psi ± 0.15% FSO(RSS) 5000 through 30000 psi	
Material in Contact with Pressure Media	316 stainless steel / 15-5PH diaphragm, Armoloy coated (hard chrome) Diamond, Boron, or Titanium Nitride coatings optional	
Ranging	3:1 25 through 2500 psi 5:1 3000 through 30000 psi	
Proof Pressure	2 times full scale pressure range	
Temperature Limits	Diaphragm 600°F (315°C) Standard Strain Gauge Housing 176°F (80°C)	
Temperature Effects	From Fill Zero 1 psi/100°F at diaphragm From Strain Gauge Housing Zero Less than ± 1.0% FSO/100°F (± 2.0% FSO/100°C) Span Less than ± 1.0% FSO/100°F (± 2.0% FSO/100°C) From Fill and Housing Included in accuracy	
Electricals	Excitation Voltage	Output at 70° F
(Models 430 and 431)	12-36 Vdc	4-20 mA ± 2% FSO
Zero Balance (Models 430 and 431)	4.0 mA ±0.2% FSO at 70°F, vertical tip down	
Input Impedance (Models 430 and 431)	1200 ohms maximum at 36 Vdc & 750 ohms at 24 Vdc	
Connections	Pressure 3.25" OD Flange (FX option) 3.50" OD Flange (FY option) Electrical PTIH-10-6P, standard PT06A-10-6S (SR), standard mate (not included) See options.	
Enclosed Materials	316 stainless steel	
Mounting Torque	110 inch pounds, maximum	
Identification	Etched stainless steel nameplate welded to body.	