

# CANADA SENSORS TECHNOLOGY INC.



Manufacturer of Advanced Technology Pressure & Liquid Level Transmitters

## PRESSURE TRANSMITTER – PROCESS 5-HYD General Purpose Service for High Pressure Hydrogen

Canada Sensors Technology Inc. offers an affordable solution with the Process 5-HYD Pressure Transmitter without sacrificing quality or longevity of use.

### FEATURES

- ✓ 4 – 20 mA Two Wire, Voltage, MODbus, CANbus, J1939, USB, Ethernet
- ✓ 0.25% BSL Accuracy
- ✓ Monolithic Block Glass Bonded One Piece Stainless Steel Machined Sensor
- ✓ No Welded Diaphragms, No Internal O-rings, No Silicone Oil Fill
- ✓ Single seal compliant to ANSI/ISA-12.27.01.2003
- ✓ Zero & Span Function
- ✓ >100 million Cycles
- ✓ Pressure Ranges 15,000 PSI, 20,000 PSI, 30,000 PSI
- ✓ Heavy Duty 316SS Powder Coated Canister
- ✓ Temperature Compensated 0C to +50C
- ✓ Maximum Operating Temperature -40C to +85C
- ✓ Ingress Protection IP65
- ✓ Approved for General Purpose Use
- ✓ Multiple Electrical Connectors & Housings Available
- ✓ Gold Coated 316SS Autoclave ¼" F250C Process Connection
- ✓ Laser Engraved Product Information
- ✓ RoHS2 Compliant Directive 2011/65/EU
- ✓ 1 Year Conditional Warranty (Serial Number Traceability)
- ✓ Unparalleled Value



### Contact Us:

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**Manufacturer of Advanced Technology  
Level and Pressure Transmitters**

### MISSION STATEMENT

Canada Sensors Technology Inc. strives to build a mutually positive and beneficial relationship with our customers, ensuring their long-term success, through the understanding of their needs and the needs of their customers.

We will listen to our customers and constantly improve our technologies as our customers' needs change with time.

Canada Sensors Technology Inc. is committed to providing the highest level of product quality and customer service. Canada Sensors Technology Inc. is ISO 9001:2015 certified.

**Technical Specifications**

**Performance**

Accuracy:	0.25% Full Scale Output
Stability:	< 0.1% Full Scale Output/Year
Temperature Range:	-40C to +85C
Temperature Accuracy:	1% Full Scale Output @ +50C
Pressure Cycles:	> 100 Million
Over Range Protection:	2 x Full Scale Output
Burst Pressure:	5 x Full Scale Output

**NOTE: Over Range Protection and Burst Pressure shall be reduced to 1.5 x Full Scale Output for pressures exceeding 10,000 PSI due to thread limitations**

**Electrical Data**

Excitation:	9-32 VDC (product accessories may alter excitation values)
Comms:	4-20 mA, 0-5 VDC or 0-10 VDC or Ratio Metric, RS485-Modbus, CANopen, J939, USB, Ethernet
Current Consumption:	5 mA
Zero Offset:	0.5% Full Scale Output set by Customer
Span Tolerance:	0.5% Full Scale Output set by Customer
Output Load:	9 Volts typical @ 24 VDC 750 OHMS

**Environmental Data**

**Temperature**

Operating:	-40C to +85C
Storage:	-55C to +125C

**Thermal Limits**

Compensated Range:	0 to +50C
Temp Comp Zero:	1% Full Scale Output @ +50C
Temp Comp Span:	1% Full Scale Output @ +50C

**Physical Data**

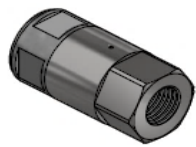
Sensor:	Gold Coated ASTM F519 Treatment is standard on all Monolithic Block - 316SS
Vibration:	25gRMS from 20Hz to 2000Hz
Shock:	100g , half sine, 11mSec.
Sensor:	<b>Silicone Oil Filled NOT Available on this model</b>
Vibration:	25gRMS from 20Hz to 2000Hz
Shock:	100g , half sine, 11mSec.
<b>NOTE: Silicone Oil Filled Sensors are a factory option for low pressure</b>	
Process Connection:	1/4" F250C
<b>NOTE: ANSI Regulations dictate that NPT Thread should not to exceed 8,000 PSI @ +125C</b>	
Electrical Connection:	316SS Thread-on 1/2" MNPT Solid Conduit Fitting or w/ Aluminum XP Heads; Big-DIN; Bendix Twist 6 Pin;

**NOTE: 316SS Wetted Parts are the minimum requirement for NACE compliance**

**Product Weights:**

	OZ	LBS	KG
Process 5-HYD w/ F250C Autoclave & 316SS Thread-on 1/2" MNPT Solid Conduit Fitting (2ft Flying Lead)	24.0	1.5	0.68
Process 5-HYD w/ F250C Autoclave & Big-DIN (DIN 43650 90 Degree Hirschmann); or Bendix Twist 6 Pin;	15.0	0.9	0.43
Process 5-HYD w/ 250C Autoclave & Aluminum XP Head (1/2" FNPT x 3) - 316SS Thread-on 1/2" MNPT Solid Conduit Fitting (2ft Flying Lead) Blank - No Window	59.0	3.7	1.67
Process 5-HYD w/ F250C Autoclave & Aluminum XP Head (1/2" FNPT x 3) - 316SS Thread-on 1/2" MNPT Solid Conduit Fitting (2ft Flying Lead) w/ 5 Digits LCD Loop Powered Display	112.0	7.0	3.18

**Process Connections:**

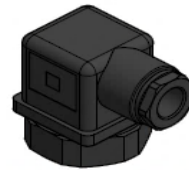


1/4" F250C

**Electrical Connections:**



THREAD ON 1/2" MNPT



43650A DIN CONNECTOR (BIG-DIN HIRSCHMANN)



BENDIX TWIST CONNECTOR 6 PIN

**Product Accessories**

Aluminum XP Head (1/2" FNPT x 3) - 316SS Thread-on 1/2" MNPT Solid Conduit Fitting (2ft Flying Lead) Blank - No Window

Aluminum XP Head (1/2" FNPT x 3) - 316SS Thread-on 1/2" MNPT Solid Conduit Fitting (2ft Flying Lead) w/ 5 Digits LCD Loop Powered Display



**Product Nomenclature**

**MODEL: Pressure Transmitter - Process 5-HYD**

PN Example: A-B-C-D-E-F-G-H-I-J

05-HYD-01-03-01-034-09-02-12-03-02:

Process 5-HYD Transmitter, 4-20 mA, Zero and Span, Gauge (PSIG), 0 - 20000 PSI, 1/4" F250C, 316SS Wetted Parts, 316SS Thread-on 1/2" MNPT Solid Conduit Fitting with 2 ft Flying Lead, Gold Coating, 0.25% Accuracy

	A	B	C	D	E	F	G	H	I	J
<b>Model</b>										
05-HYD	-	Process 5-HYD								
<b>Output</b>										
01	-	4-20 mA								
02	-	0-5 Volts								
03	-	0-10 Volts								
04	-	RS485 – Modbus								
05	-	CANopen								
06	-	J1939								
07	-	USB								
08	-	Ethernet								
<b>Calibration Adjustment</b>										
03	-	Zero and Span								
<b>Pressure Reference</b>										
01	-	Gauge (PSIG)								
02	-	Absolute (PSIA)								
03	-	Sealed Gauge								
<b>Pressure Range</b>										
033	-	0 – 15000 PSI								
034	-	0 – 20000 PSI								
035	-	0 – 30000 PSI								
<b>Process Connection</b>										
09	-	1/4" F250C								
<b>Wetted Parts</b>										
02	-	316SS								
<b>Electrical Connection</b>										
12	-	316SS Thread-on 1/2" MNPT Solid Conduit Fitting (2 ft Flying Lead)								
13	-	316SS Thread-on 1/2" MNPT Solid Conduit Fitting (4 ft Flying Lead)								
14	-	316SS Thread-on 1/2" MNPT Solid Conduit Fitting (6 ft Flying Lead)								
15	-	316SS Thread-on 1/2" MNPT Solid Conduit Fitting (10 ft Flying Lead)								
22	-	Big-DIN (DIN 43650 90 Degree Hirschmann)								
23	-	Bendix Twist Connector 6 Pin (PTIH-10-6P)								
36	-	Aluminum XP Head (1/2" FNPT x 3) - 316SS Thread-on 1/2" MNPT Solid Conduit Fitting (2ft Flying Lead) Blank - No Window								
42	-	Aluminum XP Head (1/2" FNPT x 3) - 316SS Thread-on 1/2" MNPT Solid Conduit Fitting (2ft Flying Lead) w/ 5 Digits LCD Loop Powered Display								
<b>Environmental Treatment</b>										
03	-	Gold Coating								
<b>Accuracy</b>										
02	-	0.25 %								

**E: Alternate Pressure Range Units**

**kPa**

kPa	033 - kPa	-	0 - 100000 kPa
kPa	034 - kPa	-	0 - 140000 kPa
kPa	035 - kPa	-	0 - 200000 kPa

**mBar**

mBar	033 - mBar	-	0 - 1000000 mBar
mBar	034 - mBar	-	0 - 1400000 mBar
mBar	035 - mBar	-	0 - 2000000 mBar

**mm Hg**

mm Hg	033 - mm Hg	-	0 - 800000 mm Hg
mm Hg	034 - mm Hg	-	0 - 1000000 mm Hg
mm Hg	035 - mm Hg	-	0 - 1500000 mm Hg

**in H<sub>2</sub>O (60° F)**

in H <sub>2</sub> O (60° F)	033 - in H <sub>2</sub> C	-	0 - 400000 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	034 - in H <sub>2</sub> C	-	0 - 500000 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	035 - in H <sub>2</sub> C	-	0 - 800000 in H <sub>2</sub> O (60° F)

**mm H<sub>2</sub>O (4° C)**

mm H <sub>2</sub> O (4° C)	033 - mm H <sub>2</sub> O	-	0 - 10000000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	034 - mm H <sub>2</sub> O	-	0 - 14000000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	035 - mm H <sub>2</sub> O	-	0 - 20000000 mm H <sub>2</sub> O (4° C)

**in Hg (32° F)**

in Hg (32° F)	033 - in Hg	-	0 - 30000 in Hg (32° F)
in Hg (32° F)	034 - in Hg	-	0 - 40000 in Hg (32° F)
in Hg (32° F)	035 - in Hg	-	0 - 60000 in Hg (32° F)

**Bar**

Bar	033 - Bar	-	0 - 1000 Bar
Bar	034 - Bar	-	0 - 1400 Bar
Bar	035 - Bar	-	0 - 2000 Bar

**ata (kg/cm<sup>2</sup>)**

ata (kg/cm <sup>2</sup> )	033 - ata	-	0 - 1000 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	034 - ata	-	0 - 1400 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	035 - ata	-	0 - 2100 ata (kg/cm <sup>2</sup> )