

# CANADA SENSORS TECHNOLOGY INC.



Manufacturer of Advanced Technology Pressure & Level Transmitters

CRN Approval, ISO 9001:2015 Certified



## PRESSURE TRANSMITTER – PROCESS 6

### Non-Incendive Model, General Purpose for High Pressure

Canada Sensors Technology Inc. offers an affordable solution with the Process 6 Pressure Transmitter without sacrificing quality or longevity of use.

#### FEATURES

- ✓ Non-incendive for Class I, Div. 2, Zone 2 Hazardous Locations for High Pressure
- ✓ 4 – 20 mA Two Wire, Voltage, MODbus, CANbus, J1939
- ✓ 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 +95C
- ✓ Ingress Protection IP67
- ✓ Multiple Electrical Connectors & Housings Available
- ✓ Autoclave ¼" F250C Process Connection (17-4phSs or 316SS)
- ✓ Laser Engraved Product Information
- ✓ RoHS2 Compliant
- ✓ 2 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 - Process 6**

**Performance**

Accuracy:	0.25% Full Scale Output
Stability:	< 0.1% Full Scale Output/Year
Temperature Range:	-40C to +95C
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:	10 - 28 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
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
Non-incendive for Zone 2 Division 2 Hazardous Locations	

**NOTE: An Ex Barrier is required for any connections that cross the boundary from an Ordinary Location (Non-Classified/Non-Hazardous) to a Classified (Hazardous) location**

**Environmental Data**

**Temperature**

Operating:	-40C to +95C (product accessories may alter temperature ratings)
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**

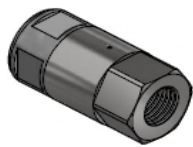
Sensor:	Monolithic Block: 17-4phSS or 316SS
Vibration:	25gRMS from 20Hz to 2000Hz
Shock:	100g , half sine, 11mSec.
Sensor:	<b>Silicone Oil Filled NOT Available on this model</b>
Vibration:	25gRMS from 20Hz to 2000Hz
Shock:	100g , half sine, 11mSec.
<b>NOTE: Silicone Oil Filled Sensors are a factory option 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; Bendix Twist 6 Pin (PTIH-10-6P); M12

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

**Product Weights:**

	<u>OZ</u>	<u>LBS</u>	<u>KG</u>
Process 6 w/ F250C Autoclave & 316SS Thread-on 1/2" MNPT Solid Conduit Fitting (2 ft Flying Lead)	24.0	1.5	0.68
Process 6 w/ F250C Autoclave & Bendix Twist 6 Pin (PTIH-10-6P); M12	15.0	0.9	0.43
Process 6 w/ F250C Autoclave & Aluminum XP Head (1/2" FNPT x 3) - 316SS Thread-on 1/2" MNPT Solid Conduit Fitting - Blank - No Window	59.0	3.7	1.67
Process 6 w/ F250C Autoclave & Aluminum XP Head (1/2" FNPT x 3) - 316SS Thread-on 1/2" MNPT Solid Conduit Fitting w/ Digits LCD Loop Powered Display	112.0	7.0	3.18

**Process Connections:**



1/4" F250C

**Electrical Connections:**



THREAD ON 1/2" MNPT



BENDIX TWIST CONNECTOR  
6 PIN



M12

**Product Accessories**

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

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



**Product Nomenclature**

**MODEL: Pressure Transmitter - Process 6**

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

06-01-03-01-034-09-02-12-02-02:

Process 6 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, No Treatment, 0.25% Accuracy

	A	B	C	D	E	F	G	H	I	J
<b>Model</b>	06	-	Process 6							
<b>Output</b>	01	-	4-20 mA							
	02	-	0-5 Volts							
	03	-	0-10 Volts							
	04	-	RS485 – Modbus							
	05	-	CANopen							
	06	-	J1939							
<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>	01	-	17-4phSS							
	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)							
	31	-	Bendix Twist Connector 6 Pin (PTIH-10-6P)							
	32	-	M12							
	36	-	Aluminum XP Head (1/2" FNPT x 3) - 316SS Thread-on 1/2" MNPT Solid Conduit Fitting - Blank - No Window							
	42	-	Aluminum XP Head (1/2" FNPT x 3) - 316SS Thread-on 1/2" MNPT Solid Conduit Fitting w/ 5 Digits LCD Loop Powered Display							
<b>Environmental Treatment</b>	02	-	No Treatment							
	04	-	DLC (Diamond Like 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> O	-	0 - 400000 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	034 - in H <sub>2</sub> O	-	0 - 500000 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	035 - in H <sub>2</sub> O	-	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> )