

# CANADA SENSORS TECHNOLOGY INC.



Manufacturer of Advanced Technology Pressure & Liquid Level Transmitters

## PRESSURE TRANSMITTER – PROCESS 4-HYD Intrinsically Safe Model for Hydrogen Service

Canada Sensors Technology Inc. offers an affordable solution with the Process 4-HYD Pressure Transmitter without sacrificing quality or longevity of use.

### FEATURES

- ✓ Intrinsically Safe for Class I, Div. 2, Zone 2 Hazardous Locations and Hydrogen Service
- ✓ 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 from -30”Hg Vacuum to 10,000 PSI
- ✓ Heavy Duty 316SS Powder Coated Canister
- ✓ Temperature Compensated 0C to +50C
- ✓ Maximum Operating Temperature -40C to +85C
- ✓ Ingress Protection IP65
- ✓ Multiple Electrical Connectors & Housings Available
- ✓ Multiple Process Connection Gold Coated 316SS Threads Available
- ✓ 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:	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
Intrinsically Safe for Zone 2 Division 2 Hazardous Locations	

**NOTE: Intrinsically safe pressure sensors may only be used in hazardous areas if they are installed in conjunction with an Ex barrier**

**Environmental Data**

<b>Temperature</b>	
Operating:	-40C to +85C
Storage:	-55C to +125C
<b>Thermal Limits</b>	
Compensated Range:	0 to +50C
Temp Comp Zero:	1% Full Scale Output @ +50C
Temp Comp Span:	1% Full Scale Output @ +50C

**Physical Data**

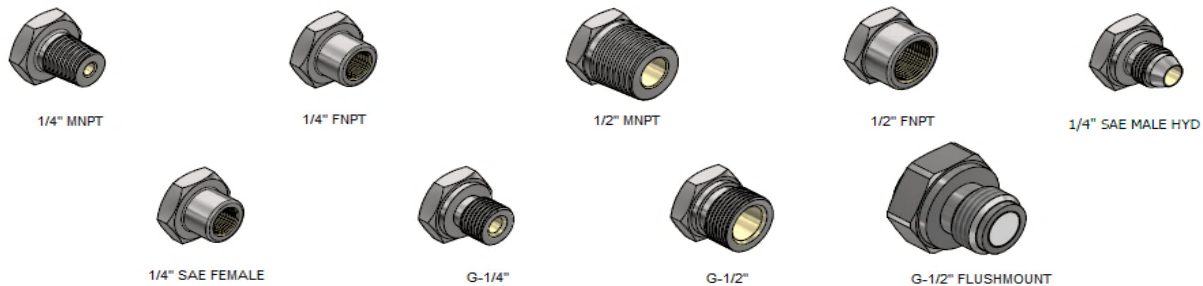
Sensor:	Gold Coated ASTM F519 Treatment is standard on all Monolithic Block - 316SS
Vibration:	25gRMS from 20Hz to 2000Hz
Shock:	100g , half sine, 11mSec.
Sensor:	Gold Coated ASTM F519 Treatment is standard on all Silicone Oil Filled - 316SS
Vibration:	25gRMS from 20Hz to 2000Hz
Shock:	100g , half sine, 11mSec.
<b>NOTE: Silicone Oil Filled Sensors are a factory option for low pressure</b>	
Process Connection:	1/4" MNPT; 1/4" FNPT; 1/2" MNPT; 1/2" FNPT; 1/4" SAE-Male; 1/4" SAE-Female; G-1/4"; G-1/2"; G-1/2" Flushmount 316SS
<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 or w/LED Display; Bendix Twist 6 Pin;

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

**Product Weights:**

	<u>OZ</u>	<u>LBS</u>	<u>KG</u>
Process 4-HYD w/ 316SS Thread-on 1/2" MNPT Solid Conduit Fitting (2 ft Flying Lead)	20.5	1.3	0.58
Process 4-HYD w/ Big-DIN (DIN 43650 90 Degree Hirschmann) or Bendix Twist 6 Pin	11.5	0.7	0.33
Process 4-HYD w/ Aluminum XP Head (1/2" FNPT x 3) - 316SS Thread-on 1/2" MNPT Solid Conduit Fitting (2ft Flying Lead) Blank - No Window	55.5	3.5	1.57
Process 4-HYD w/ Aluminum XP Head (1/2" FNPT x 3) - 316SS Thread-on 1/2" MNPT Solid Conduit Fitting (2ft Flying Lead) w/ 3 1/2 + Digits LCD Loop Powered Display	68.5	4.3	1.94
Process 4-HYD w/ 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	108.5	6.8	3.08
Process 4-HYD w/ Big-DIN (DIN 43650 90 Degree Hirschmann) w/ LED Display	19.5	1.2	0.55

**Process Connections:**



**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/ 3 1/2 + Digits LCD Loop Powered Display

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 4-HYD**

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

04-HYD-01-03-01-025-02-02-12-03-02:

Process 4-HYD Transmitter, 4-20 mA, Zero and Span, Gauge (PSIG), 0 - 1500 PSI, 1/4" FNPT, 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>	04-HYD	-	Process 4-HYD							
<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>	001	-	-30"Hg Vac – 0 PSI							
	002	-	-30"Hg Vac x 15 PSI							
	003	-	-30"Hg Vac x 30 PSI							
	004	-	-30"Hg Vac x 60 PSI							
	005	-	-30"Hg Vac x 100 PSI							
	006	-	-30"Hg Vac x 150 PSI							
	007	-	-30"Hg Vac x 200 PSI							
	008	-	-30"Hg Vac x 300 PSI							
	009	-	-30"Hg Vac x 600 PSI							
	010	-	0 – 2 PSI							
	011	-	0 – 5 PSI							
	012	-	0 – 10 PSI							
	013	-	0 – 15 PSI							
	014	-	0 – 30 PSI							
	015	-	0 – 60 PSI							
	016	-	0 – 100 PSI							
	017	-	0 – 150 PSI							
	018	-	0 – 200 PSI							
	019	-	0 – 300 PSI							
	020	-	0 – 400 PSI							
	021	-	0 – 500 PSI							
	022	-	0 – 600 PSI							
	023	-	0 – 750 PSI							
	024	-	0 – 1000 PSI							
	025	-	0 – 1500 PSI							
	026	-	0 – 2000 PSI							
	027	-	0 – 3000 PSI							
	028	-	0 – 4000 PSI							
	029	-	0 – 5000 PSI							
	030	-	0 – 6000 PSI							
	031	-	0 – 7500 PSI							
	032	-	0 – 10000 PSI							
<b>Process Connection</b>	01	-	1/4" MNPT (Maximum Pressure 10,000 PSI)							
	02	-	1/4" FNPT (Maximum Pressure 10,000 PSI)							
	03	-	1/2" MNPT (Maximum Pressure 10,000 PSI)							
	04	-	1/2" FNPT (Maximum Pressure 10,000 PSI)							
	05	-	1/4" SAE-Male (Maximum Pressure 10,000 PSI)							
	06	-	1/4" SAE-Female (Maximum Pressure 10,000 PSI)							
	07	-	G-1/4" (Maximum Pressure 5,000 PSI)							
	08	-	G-1/2" (Maximum Pressure 5,000 PSI)							
	10	-	G-1/2" Flushmount 316SS (Maximum Pressure 5,000 PSI)							
<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							
	39	-	Aluminum XP Head (1/2" FNPT x 3) - 316SS Thread-on 1/2" MNPT Solid Conduit Fitting (2ft Flying Lead) w/ 3 1/2 + Digits LCD Loop Powered Display							
	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	001 - kPa	-	-100 x 0 kPa
kPa	002 - kPa	-	-100 x 100 kPa
kPa	003 - Kpa	-	-100 x 200 kPa
kPa	004 - Kpa	-	-100 x 400 kPa
kPa	005 - kPa	-	-100 x 700 kPa
kPa	006 - kPa	-	-100 x 1000 kPa
kPa	007 - kPa	-	-100 x 1400 kPa
kPa	008 - kPa	-	-100 x 2000 kPa
kPa	009 - kPa	-	-100 x 4000 kPa
kPa	010 - kPa	-	0 – 15 kPa
kPa	011 - kPa	-	0 – 35 kPa
kPa	012 - kPa	-	0 – 70 kPa
kPa	013 - kPa	-	0 – 100 kPa
kPa	014 - kPa	-	0 – 200 kPa
kPa	015 - kPa	-	0 – 400 kPa
kPa	016 - kPa	-	0 – 700 kPa
kPa	017 - kPa	-	0 – 1000 kPa
kPa	018 - kPa	-	0 – 1400 kPa
kPa	019 - kPa	-	0 – 2000 kPa
kPa	020 - kPa	-	0 – 2800 kPa
kPa	021 - kPa	-	0 – 3500 kPa
kPa	022 - kPa	-	0 – 4000 kPa
kPa	023 - kPa	-	0 – 5000 kPa
kPa	024 - kPa	-	0 – 7000 kPa
kPa	025 - kPa	-	0 – 10000 kPa
kPa	026 - kPa	-	0 – 14000 kPa
kPa	027 - kPa	-	0 – 20000 kPa
kPa	028 - kPa	-	0 – 28000 kPa
kPa	029 - kPa	-	0 – 35000 kPa
kPa	030 - kPa	-	0 – 40000 kPa
kPa	031 - kPa	-	0 – 50000 kPa
kPa	032 - kPa	-	0 – 70000 kPa

**mBar**

mBar	001 - mBar	-	-1000 x 0 mBar
mBar	002 - mBar	-	-1000 x 1000 mBar
mBar	003 - mBar	-	-1000 x 2000 mBar
mBar	004 - mBar	-	-1000 x 4000 mBar
mBar	005 - mBar	-	-1000 x 7000 mBar
mBar	006 - mBar	-	-1000 x 10000 mBar
mBar	007 - mBar	-	-1000 x 14000 mBar
mBar	008 - mBar	-	-1000 x 20000 mBar
mBar	009 - mBar	-	-1000 x 40000 mBar
mBar	010 - mBar	-	0 – 150 mBar
mBar	011 - mBar	-	0 – 350 mBar
mBar	012 - mBar	-	0 – 700 mBar
mBar	013 - mBar	-	0 – 1000 mBar
mBar	014 - mBar	-	0 – 2000 mBar
mBar	015 - mBar	-	0 – 4000 mBar
mBar	016 - mBar	-	0 – 7000 mBar
mBar	017 - mBar	-	0 – 10000 mBar
mBar	018 - mBar	-	0 – 14000 mBar
mBar	019 - mBar	-	0 – 20000 mBar
mBar	020 - mBar	-	0 – 28000 mBar
mBar	021 - mBar	-	0 – 35000 mBar
mBar	022 - mBar	-	0 – 40000 mBar
mBar	023 - mBar	-	0 – 50000 mBar
mBar	024 - mBar	-	0 – 70000 mBar
mBar	025 - mBar	-	0 – 100000 mBar
mBar	026 - mBar	-	0 – 140000 mBar
mBar	027 - mBar	-	0 – 200000 mBar
mBar	028 - mBar	-	0 – 275000 mBar
mBar	029 - mBar	-	0 – 350000 mBar
mBar	030 - mBar	-	0 – 400000 mBar
mBar	031 - mBar	-	0 – 500000 mBar
mBar	032 - mBar	-	0 – 700000 mBar

<b>mm Hg</b>			
mm Hg	001 - mm Hg	-	-1500 x 0 mm Hg
mm Hg	002 - mm Hg	-	-1500 x 800 mm Hg
mm Hg	003 - mm Hg	-	-1500 x 1500 mm Hg
mm Hg	004 - mm Hg	-	-1500 x 3000 mm Hg
mm Hg	005 - mm Hg	-	-1500 x 5000 mm Hg
mm Hg	006 - mm Hg	-	-1500 x 8000 mm Hg
mm Hg	007 - mm Hg	-	-1500 x 10000 mm Hg
mm Hg	008 - mm Hg	-	-1500 x 15000 mm Hg
mm Hg	009 - mm Hg	-	-1500 x 30000 mm Hg
mm Hg	010 - mm Hg	-	0 - 100 mm Hg
mm Hg	011 - mm Hg	-	0 - 250 mm Hg
mm Hg	012 - mm Hg	-	0 - 500 mm Hg
mm Hg	013 - mm Hg	-	0 - 800 mm Hg
mm Hg	014 - mm Hg	-	0 - 1500 mm Hg
mm Hg	015 - mm Hg	-	0 - 3000 mm Hg
mm Hg	016 - mm Hg	-	0 - 5000 mm Hg
mm Hg	017 - mm Hg	-	0 - 8000 mm Hg
mm Hg	018 - mm Hg	-	0 - 10000 mm Hg
mm Hg	019 - mm Hg	-	0 - 15000 mm Hg
mm Hg	020 - mm Hg	-	0 - 20000 mm Hg
mm Hg	021 - mm Hg	-	0 - 25000 mm Hg
mm Hg	022 - mm Hg	-	0 - 30000 mm Hg
mm Hg	023 - mm Hg	-	0 - 40000 mm Hg
mm Hg	024 - mm Hg	-	0 - 50000 mm Hg
mm Hg	025 - mm Hg	-	0 - 80000 mm Hg
mm Hg	026 - mm Hg	-	0 - 100000 mm Hg
mm Hg	027 - mm Hg	-	0 - 150000 mm Hg
mm Hg	028 - mm Hg	-	0 - 200000 mm Hg
mm Hg	029 - mm Hg	-	0 - 250000 mm Hg
mm Hg	030 - mm Hg	-	0 - 300000 mm Hg
mm Hg	031 - mm Hg	-	0 - 400000 mm Hg
mm Hg	032 - mm Hg	-	0 - 500000 mm Hg

**in H<sub>2</sub>O (60° F)**

in H <sub>2</sub> O (60° F)	001 - in H <sub>2</sub> O	-	-400 x 0 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	002 - in H <sub>2</sub> O	-	-400 x 400 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	003 - in H <sub>2</sub> O	-	-400 x 800 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	004 - in H <sub>2</sub> O	-	-400 x 1500 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	005 - in H <sub>2</sub> O	-	-400 x 3000 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	006 - in H <sub>2</sub> O	-	-400 x 4000 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	007 - in H <sub>2</sub> O	-	-400 x 5000 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	008 - in H <sub>2</sub> O	-	-400 x 8000 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	009 - in H <sub>2</sub> O	-	-400 x 16500 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	010 - in H <sub>2</sub> O	-	0 - 60 H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	011 - in H <sub>2</sub> O	-	0 - 150 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	012 - in H <sub>2</sub> O	-	0 - 300 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	013 - in H <sub>2</sub> O	-	0 - 400 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	014 - in H <sub>2</sub> O	-	0 - 800 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	015 - in H <sub>2</sub> O	-	0 - 1500 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	016 - in H <sub>2</sub> O	-	0 - 3000 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	017 - in H <sub>2</sub> O	-	0 - 4000 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	018 - in H <sub>2</sub> O	-	0 - 5000 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	019 - in H <sub>2</sub> O	-	0 - 8000 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	020 - in H <sub>2</sub> O	-	0 - 10000 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	021 - in H <sub>2</sub> O	-	0 - 14000 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	022 - in H <sub>2</sub> O	-	0 - 16000 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	023 - in H <sub>2</sub> O	-	0 - 20000 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	024 - in H <sub>2</sub> O	-	0 - 30000 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	025 - in H <sub>2</sub> O	-	0 - 40000 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	026 - in H <sub>2</sub> O	-	0 - 50000 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	027 - in H <sub>2</sub> O	-	0 - 80000 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	028 - in H <sub>2</sub> O	-	0 - 100000 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	029 - in H <sub>2</sub> O	-	0 - 140000 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	030 - in H <sub>2</sub> O	-	0 - 160000 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	031 - in H <sub>2</sub> O	-	0 - 200000 in H <sub>2</sub> O (60° F)
in H <sub>2</sub> O (60° F)	032 - in H <sub>2</sub> O	-	0 - 300000 in H <sub>2</sub> O (60° F)

<b>mm H<sub>2</sub>O (4° C)</b>		
mm H <sub>2</sub> O (4° C)	001 - mm H <sub>2</sub> O	- -10000 x 0 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	002 - mm H <sub>2</sub> O	- -10000 x 10000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	003 - mm H <sub>2</sub> O	- -10000 x 20000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	004 - mm H <sub>2</sub> O	- -10000 x 40000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	005 - mm H <sub>2</sub> O	- -10000 x 70000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	006 - mm H <sub>2</sub> O	- -10000 x 100000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	007 - mm H <sub>2</sub> O	- -10000 x 140000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	008 - mm H <sub>2</sub> O	- -10000 x 200000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	009 - mm H <sub>2</sub> O	- -10000 x 400000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	010 - mm H <sub>2</sub> O	- 0 - 1400 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	011 - mm H <sub>2</sub> O	- 0 - 3500 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	012 - mm H <sub>2</sub> O	- 0 - 7000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	013 - mm H <sub>2</sub> O	- 0 - 10000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	014 - mm H <sub>2</sub> O	- 0 - 20000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	015 - mm H <sub>2</sub> O	- 0 - 40000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	016 - mm H <sub>2</sub> O	- 0 - 70000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	017 - mm H <sub>2</sub> O	- 0 - 100000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	018 - mm H <sub>2</sub> O	- 0 - 140000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	019 - mm H <sub>2</sub> O	- 0 - 200000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	020 - mm H <sub>2</sub> O	- 0 - 300000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	021 - mm H <sub>2</sub> O	- 0 - 350000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	022 - mm H <sub>2</sub> O	- 0 - 400000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	023 - mm H <sub>2</sub> O	- 0 - 500000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	024 - mm H <sub>2</sub> O	- 0 - 700000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	025 - mm H <sub>2</sub> O	- 0 - 1000000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	026 - mm H <sub>2</sub> O	- 0 - 1400000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	027 - mm H <sub>2</sub> O	- 0 - 2000000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	028 - mm H <sub>2</sub> O	- 0 - 3000000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	029 - mm H <sub>2</sub> O	- 0 - 3500000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	030 - mm H <sub>2</sub> O	- 0 - 4000000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	031 - mm H <sub>2</sub> O	- 0 - 5000000 mm H <sub>2</sub> O (4° C)
mm H <sub>2</sub> O (4° C)	032 - mm H <sub>2</sub> O	- 0 - 7000000 mm H <sub>2</sub> O (4° C)

<b>in Hg (32° F)</b>		
in Hg (32° F)	001 - in Hg	- -30 x 0 in Hg (32° F)
in Hg (32° F)	002 - in Hg	- -30 x 30 in Hg (32° F)
in Hg (32° F)	003 - in Hg	- -30 x 60 in Hg (32° F)
in Hg (32° F)	004 - in Hg	- -30 x 125 in Hg (32° F)
in Hg (32° F)	005 - in Hg	- -30 x 200 in Hg (32° F)
in Hg (32° F)	006 - in Hg	- -30 x 300 in Hg (32° F)
in Hg (32° F)	007 - in Hg	- -30 x 400 in Hg (32° F)
in Hg (32° F)	008 - in Hg	- -30 x 600 in Hg (32° F)
in Hg (32° F)	009 - in Hg	- -30 x 1200 in Hg (32° F)
in Hg (32° F)	010 - in Hg	- 0 - 5 in Hg (32° F)
in Hg (32° F)	011 - in Hg	- 0 - 10 in Hg (32° F)
in Hg (32° F)	012 - in Hg	- 0 - 20 in Hg (32° F)
in Hg (32° F)	013 - in Hg	- 0 - 30 in Hg (32° F)
in Hg (32° F)	014 - in Hg	- 0 - 60 in Hg (32° F)
in Hg (32° F)	015 - in Hg	- 0 - 125 in Hg (32° F)
in Hg (32° F)	016 - in Hg	- 0 - 200 in Hg (32° F)
in Hg (32° F)	017 - in Hg	- 0 - 300 in Hg (32° F)
in Hg (32° F)	018 - in Hg	- 0 - 400 in Hg (32° F)
in Hg (32° F)	019 - in Hg	- 0 - 600 in Hg (32° F)
in Hg (32° F)	020 - in Hg	- 0 - 800 in Hg (32° F)
in Hg (32° F)	021 - in Hg	- 0 - 1000 in Hg (32° F)
in Hg (32° F)	022 - in Hg	- 0 - 1200 in Hg (32° F)
in Hg (32° F)	023 - in Hg	- 0 - 1500 in Hg (32° F)
in Hg (32° F)	024 - in Hg	- 0 - 2000 in Hg (32° F)
in Hg (32° F)	025 - in Hg	- 0 - 3000 in Hg (32° F)
in Hg (32° F)	026 - in Hg	- 0 - 4000 in Hg (32° F)
in Hg (32° F)	027 - in Hg	- 0 - 6000 in Hg (32° F)
in Hg (32° F)	028 - in Hg	- 0 - 8000 in Hg (32° F)
in Hg (32° F)	029 - in Hg	- 0 - 10000 in Hg (32° F)
in Hg (32° F)	030 - in Hg	- 0 - 12000 in Hg (32° F)
in Hg (32° F)	031 - in Hg	- 0 - 15000 in Hg (32° F)
in Hg (32° F)	032 - in Hg	- 0 - 20000 in Hg (32° F)

<b>Bar</b>			
Bar	001 - Bar	-	-1 x 0 Bar
Bar	002 - Bar	-	-1 x 1 Bar
Bar	003 - Bar	-	-1 x 2 Bar
Bar	004 - Bar	-	-1 x 4 Bar
Bar	005 - Bar	-	-1 x 7 Bar
Bar	006 - Bar	-	-1 x 10 Bar
Bar	007 - Bar	-	-1 x 14 Bar
Bar	008 - Bar	-	-1 x 20 Bar
Bar	009 - Bar	-	-1 x 40 Bar
Bar	010 - Bar	-	0 - 0.15 Bar
Bar	011 - Bar	-	0 - 0.35 Bar
Bar	012 - Bar	-	0 - 0.7 Bar
Bar	013 - Bar	-	0 - 1 Bar
Bar	014 - Bar	-	0 - 2 Bar
Bar	015 - Bar	-	0 - 4 Bar
Bar	016 - Bar	-	0 - 7 Bar
Bar	017 - Bar	-	0 - 10 Bar
Bar	018 - Bar	-	0 - 14 Bar
Bar	019 - Bar	-	0 - 20 Bar
Bar	020 - Bar	-	0 - 28 Bar
Bar	021 - Bar	-	0 - 35 Bar
Bar	022 - Bar	-	0 - 40 Bar
Bar	023 - Bar	-	0 - 50 Bar
Bar	024 - Bar	-	0 - 70 Bar
Bar	025 - Bar	-	0 - 100 Bar
Bar	026 - Bar	-	0 - 140 Bar
Bar	027 - Bar	-	0 - 200 Bar
Bar	028 - Bar	-	0 - 275 Bar
Bar	029 - Bar	-	0 - 350 Bar
Bar	030 - Bar	-	0 - 400 Bar
Bar	031 - Bar	-	0 - 500 Bar
Bar	032 - Bar	-	0 - 700 Bar

<b>ata (kg/cm<sup>2</sup>)</b>			
ata (kg/cm <sup>2</sup> )	001 - ata	-	-1 x 0 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	002 - ata	-	-1 x 1.0 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	003 - ata	-	-1 x 2.1 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	004 - ata	-	-1 x 4 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	005 - ata	-	-1 x 7 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	006 - ata	-	-1 x 10 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	007 - ata	-	-1 x 14 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	008 - ata	-	-1 x 21 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	009 - ata	-	-1 x 40 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	010 - ata	-	0 - 0.14 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	011 - ata	-	0 - 0.35 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	012 - ata	-	0 - 0.7 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	013 - ata	-	0 - 1 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	014 - ata	-	0 - 2.1 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	015 - ata	-	0 - 4 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	016 - ata	-	0 - 7 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	017 - ata	-	0 - 10 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	018 - ata	-	0 - 14 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	019 - ata	-	0 - 21 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	020 - ata	-	0 - 30 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	021 - ata	-	0 - 35 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	022 - ata	-	0 - 40 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	023 - ata	-	0 - 50 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	024 - ata	-	0 - 70 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	025 - ata	-	0 - 100 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	026 - ata	-	0 - 140 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	027 - ata	-	0 - 210 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	028 - ata	-	0 - 300 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	029 - ata	-	0 - 350 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	030 - ata	-	0 - 400 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	031 - ata	-	0 - 500 ata (kg/cm <sup>2</sup> )
ata (kg/cm <sup>2</sup> )	032 - ata	-	0 - 700 ata (kg/cm <sup>2</sup> )