

CANADA SENSORS TECHNOLOGY INC.



Manufacturer of Advanced Technology Pressure & Level Transmitters

PRESSURE TRANSMITTER – PROCESS 1-HYD-IS

HART™ Enabled Intrinsically Safe or Intrinsically Safe / Explosion Proof for Hydrogen Service

Canada Sensors *intelligent* transmitters bring the latest technology to the pressure transmitter & related instrumentation market-place with self-diagnostic features which will maintain consistent accuracy throughout temperature and pressure scales.

SPECIFICATIONS & TECHNICAL DATA

- ✓ **HART™ Enabled** Two Wire 4-20 mA Output or Three Wire 1-5 vDC Output Pressure Transmitter
- ✓ **Intrinsically Safe or Intrinsically Safe / Explosion Proof** Process 1-HYD-IS Pressure Transmitters are scaled & have digitally mapped error correction throughout the pressure range
- ✓ **On-board RTD** Temperature compensation, through a mathematical formula, will occur at multiple levels throughout the range of the pressure transmitter offering highly accurate information.
- ✓ **Eliminate Output Drift**
- ✓ **Monolithic Block Sensor Head >100 million cycles** Highly accurate and repeatable 0.25% full scale accuracy, optional 0.10% full scale accuracy
- ✓ **Full Scale Accuracy 0.25% FSO, Optional 0.10% FSO** Ingress Protection is minimum IP66
- ✓ **RoHS Compliant** Operating pressure ranges from -30"Hg vacuum to 10,000 PSI, Operating temperatures from -40C to + 95C
- ✓ **1 Year Conditional Warranty** Individually characterized sensor head - 316SS silicone oil filled or 316SS machined one piece monolithic block sensor head with no internal o-rings or seals which are single seal compliant to ANSI/ISA-12.27.01.2003
- ✓ **Powder Coated Canister**
- ✓ **Engraved Product Information** Multiple Electrical Connectors & Housings Available
- ✓ **Laser Welded** Multiple Process Connection Threads Available in 316SS only for this model
- ✓ **Traceable Calibration Certificate Included**

Advanced Technology ... Improving Business
Smart THROUGH and THROUGH
This transmitter packs a powerful punch
No drift. No set-up. It just works.

Canada Sensors Technology Inc.

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



Technical Specifications - Process 1-HYD-IS & IS/EX

Performance

Accuracy:	0.25% or 0.10% Full Scale Output
Stability:	< 0.25% or 0.10% Full Scale Output
Temperature Range:	-40C to +95C Calibrated
Temperature Accuracy:	< 0.25% or 0.10% Full Scale Output
Pressure Cycles:	> 100 Million
Over Range Protection:	2 x Full Scale Output
Burst Pressure:	2.5 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:	14-33 VDC (product accessories may alter excitation values)
Comms:	HART Protocol
Current Consumption:	3.8 mA
Zero Offset:	4 mA, 1 vDC
Span Tolerance:	Range or Sensor with Turndown
Output Load:	500 OHMS
RTD Temperature:	On Board 100 ohm Platinum
Intrinsically Safe	
Intrinsically Safe / Explosion Proof	

Pollution Degree 4
Installation Category I

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:	As per Customer Specifications
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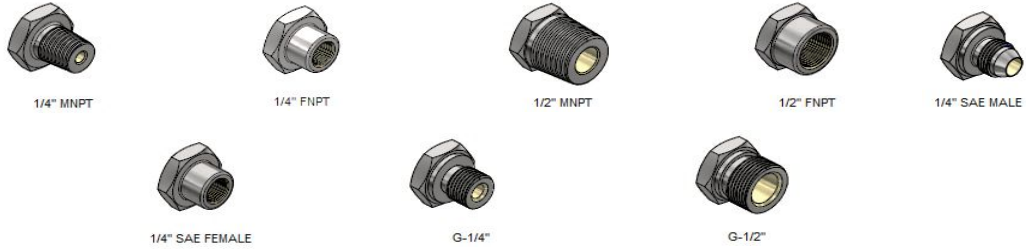
Physical Data

Sensor:	Hardened 316SS is standard on all Monolithic Block
Vibration:	25gRMS from 20Hz to 2000Hz
Shock:	100g , half sine, 11mSec.
Sensor:	316SS is standard on all Silicone Oil Filled
Vibration:	25gRMS from 20Hz to 2000Hz
Shock:	100g , half sine, 11mSec.
NOTE: Silicone Oil Filled Sensors are a factory option for low pressure	
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"
NOTE: ANSI Regulations dictate that NPT Thread should not to exceed 8,000 PSI @ +125C	
Electrical Connection:	Intrinsically Safe: 316SS Weld-on: 1/2" MNPT Solid Conduit or w/ Aluminum XP Heads; Bendix Twist Connector 6 Pin (PTIH-10-6P), M12 Twist Connector 4 Pin Intrinsically Safe / Explosion Proof: 316SS Weld-on: 1/2" MNPT Solid Conduit or w/ Aluminum XP Heads

Product Weights:

	OZ	LBS	KG
Process 1-HYD w/ 316SS Weld-on 1/2" MNPT Solid Conduit Fitting (2 ft Flying Lead); Bendix Twist Connector 6 Pin (PTIH-10-6P); M12 Twist Connector 4-Pin	23.5	1.5	0.67
Process 1- HYD w/ Aluminum XP Head (1/2" FNPT x 3) - 316SS Weld-on 1/2" MNPT Solid Conduit Fitting - Blank - No Window	58.5	3.7	1.66
Process 1-HYD w/ Aluminum XP Head (1/2" FNPT x 3) - 316SS Weld-on 1/2" MNPT Solid Conduit Fitting w/ 3 1/2 + Digits LCD Loop Powered Display	71.5	4.5	2.03
Process 1-HYD w/ Aluminum XP Head (1/2" FNPT x 3) - 316SS Weld-on 1/2" MNPT Solid Conduit Fitting w/ 5 Digits LCD Loop Powered Display	111.5	7.0	3.16

Process Connections:

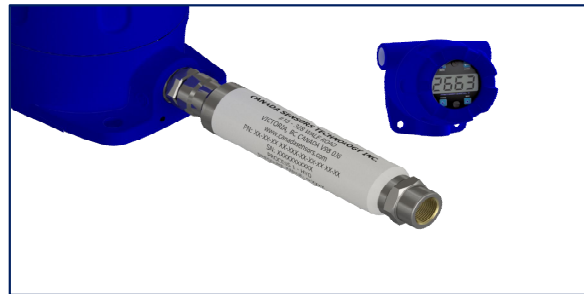
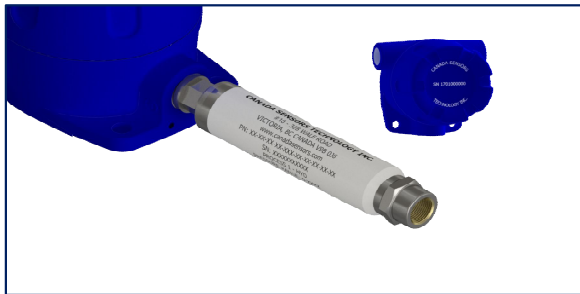


Electrical Connections:



Product Accessories:

- Aluminum XP Head (1/2" FNPT x 3) - 316SS Weld-on 1/2" MNPT Solid Conduit Fitting - Blank - No Window
- Aluminum XP Head (1/2" FNPT x 3) - 316SS Weld-on 1/2" MNPT Solid Conduit Fitting w/ 3 1/2 + Digits LCD Loop Powered Display
- Aluminum XP Head (1/2" FNPT x 3) - 316SS Weld-on 1/2" MNPT Solid Conduit Fitting w/ 5 Digits LCD Loop Powered Display



Product Nomenclature

MODEL: Pressure Transmitter - Process 1-HYD - Intrinsically Safe

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

01-HYD-IS-01-01-01-025-02-02-08-02-04:

Process 1-HYD IS Transmitter, 4-20 mA, HART Enabled, Gauge (PSIG), 0 - 1500 PSI, 1/4" FNPT, 316SS Wetted Parts, 316SS Weld-on 1/2" MNPT Solid Conduit Fitting with 4 ft Leadension Wire, No Treatment, 0.10 % Accuracy

	A	B	C	D	E	F	G	H	I	J
Model	01-HYD-IS - Process 1-HYD - Intrinsically Safe									
Output	01 - 4-20 mA 09 - 1-5 VDC									
Calibration Adjustment	01 - HART Enabled									
Pressure Reference	01 - Gauge (PSIG)									
Pressure Range	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									
Process Connection	01 - 1/4" MNPT 02 - 1/4" FNPT 03 - 1/4" MNPT 04 - 1/2" FNPT 05 - 1/2" SAE-Male 06 - 1/2" SAE-Female 07 - G-1/2" 08 - G-1/2"									
Wetted Parts	02 - 316SS									
Electrical Connection	07 - 316SS Weld-on 1/2" MNPT Solid Conduit Fitting (2 ft Lead Extension Wire) 08 - 316SS Weld-on 1/2" MNPT Solid Conduit Fitting (4 ft Lead Extension Wire) 09 - 316SS Weld-on 1/2" MNPT Solid Conduit Fitting (6 ft Lead Extension Wire) 10 - 316SS Weld-on 1/2" MNPT Solid Conduit Fitting (10 ft Lead Extension Wire) 31 - Weld-on Bendix 6-Pin (PTIH-10-6P) - Aluminum 32 - Weld-on M12 4-Pin 33 - Weld-on Bendix 6-Pin (PTIH-10-6P) - 316SS 35 - Aluminum XP Head (1/2" FNPT x 3) - 316SS Weld-on 1/2" MNPT Solid Conduit Fitting - Blank - No Window 38 - Aluminum XP Head (1/2" FNPT x 3) - 316SS Weld-on 1/2" MNPT Solid Conduit Fitting w/ 3 1/2 + Digits LCD Loop Powered Display 41 - Aluminum XP Head (1/2" FNPT x 3) - 316SS Weld-on 1/2" MNPT Solid Conduit Fitting w/ 5 Digits LCD Loop Powered Display									
Environmental Treatment	02 - No Treatment									
Accuracy	02 - 0.25 % 04 - 0.10 %									

MODEL: Pressure Transmitter - Process 1-HYD - Intrinsically Safe / Explosion Proof

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

01-HYD-IS/EX-01-01-01-025-02-09-02-04:

Process 1-HYD IS/EX Transmitter, 4-20 mA, HART Enabled, Gauge (PSIG), 0 - 1500 PSI, 1/4" FNPT, 316SS Wetted Parts, 316SS Weld-on 1/2" MNPT Solid Conduit Fitting with 6 ft Lead Extension Wire, No Treatment, 0.10 % Accuracy

	A	B	C	D	E	F	G	H	I	J
Model										
01-HYD-IS/EX	-	Process 1-HYD - Intrinsically Safe / Explosion Proof								
Output										
01	-	4-20 mA								
09	-	1-5 VDC								
Calibration Adjustment										
01	-	HART Enabled								
Pressure Reference										
01	-	Gauge (PSIG)								
Pressure Range										
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								
Process Connection										
01	-	1/4" MNPT								
02	-	1/4" FNPT								
03	-	1/2" MNPT								
04	-	1/2" FNPT								
05	-	1/4" SAE-Male								
06	-	1/4" SAE-Female								
07	-	G-1/4"								
08	-	G-1/2"								
Wetted Parts										
02	-	316SS								
Electrical Connection										
09	-	316SS Weld-on 1/2" MNPT Ex d Solid Conduit Fitting (6 ft lead extension wire)								
35	-	Aluminum XP Head (1/2" FNPT x 3) - 316SS Weld-on 1/2" Ex d MNPT Solid Conduit Fitting - Blank - No Window								
38	-	Aluminum XP Head (1/2" FNPT x 3) - 316SS Weld-on 1/2" Ex d MNPT Solid Conduit Fitting w/ 3 1/2 + Digits LCD Loop Powered Display								
41	-	Aluminum XP Head (1/2" FNPT x 3) - 316SS Weld-on 1/2" Ex d MNPT Solid Conduit Fitting w/ 5 Digits LCD Loop Powered Display								
Environmental Treatment										
02	-	No Treatment								
Accuracy										
02	-	0.25 %								
04	-	0.10 %								

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

mm Hg		
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 H₂O (60° F)

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

mm H₂O (4° C)			
mm H ₂ O (4° C)	001 - mm H ₂ O	-	-10000 x 0 mm H ₂ O (4° C)
mm H ₂ O (4° C)	002 - mm H ₂ O	-	-10000 x 10000 mm H ₂ O (4° C)
mm H ₂ O (4° C)	003 - mm H ₂ O	-	-10000 x 20000 mm H ₂ O (4° C)
mm H ₂ O (4° C)	004 - mm H ₂ O	-	-10000 x 40000 mm H ₂ O (4° C)
mm H ₂ O (4° C)	005 - mm H ₂ O	-	-10000 x 70000 mm H ₂ O (4° C)
mm H ₂ O (4° C)	006 - mm H ₂ O	-	-10000 x 100000 mm H ₂ O (4° C)
mm H ₂ O (4° C)	007 - mm H ₂ O	-	-10000 x 140000 mm H ₂ O (4° C)
mm H ₂ O (4° C)	008 - mm H ₂ O	-	-10000 x 200000 mm H ₂ O (4° C)
mm H ₂ O (4° C)	009 - mm H ₂ O	-	-10000 x 400000 mm H ₂ O (4° C)
mm H ₂ O (4° C)	010 - mm H ₂ O	-	0 - 1400 mm H ₂ O (4° C)
mm H ₂ O (4° C)	011 - mm H ₂ O	-	0 - 3500 mm H ₂ O (4° C)
mm H ₂ O (4° C)	012 - mm H ₂ O	-	0 - 7000 mm H ₂ O (4° C)
mm H ₂ O (4° C)	013 - mm H ₂ O	-	0 - 10000 mm H ₂ O (4° C)
mm H ₂ O (4° C)	014 - mm H ₂ O	-	0 - 20000 mm H ₂ O (4° C)
mm H ₂ O (4° C)	015 - mm H ₂ O	-	0 - 40000 mm H ₂ O (4° C)
mm H ₂ O (4° C)	016 - mm H ₂ O	-	0 - 70000 mm H ₂ O (4° C)
mm H ₂ O (4° C)	017 - mm H ₂ O	-	0 - 100000 mm H ₂ O (4° C)
mm H ₂ O (4° C)	018 - mm H ₂ O	-	0 - 140000 mm H ₂ O (4° C)
mm H ₂ O (4° C)	019 - mm H ₂ O	-	0 - 200000 mm H ₂ O (4° C)
mm H ₂ O (4° C)	020 - mm H ₂ O	-	0 - 300000 mm H ₂ O (4° C)
mm H ₂ O (4° C)	021 - mm H ₂ O	-	0 - 350000 mm H ₂ O (4° C)
mm H ₂ O (4° C)	022 - mm H ₂ O	-	0 - 400000 mm H ₂ O (4° C)
mm H ₂ O (4° C)	023 - mm H ₂ O	-	0 - 500000 mm H ₂ O (4° C)
mm H ₂ O (4° C)	024 - mm H ₂ O	-	0 - 700000 mm H ₂ O (4° C)
mm H ₂ O (4° C)	025 - mm H ₂ O	-	0 - 1000000 mm H ₂ O (4° C)
mm H ₂ O (4° C)	026 - mm H ₂ O	-	0 - 1400000 mm H ₂ O (4° C)
mm H ₂ O (4° C)	027 - mm H ₂ O	-	0 - 2000000 mm H ₂ O (4° C)
mm H ₂ O (4° C)	028 - mm H ₂ O	-	0 - 3000000 mm H ₂ O (4° C)
mm H ₂ O (4° C)	029 - mm H ₂ O	-	0 - 3500000 mm H ₂ O (4° C)
mm H ₂ O (4° C)	030 - mm H ₂ O	-	0 - 4000000 mm H ₂ O (4° C)
mm H ₂ O (4° C)	031 - mm H ₂ O	-	0 - 5000000 mm H ₂ O (4° C)
mm H ₂ O (4° C)	032 - mm H ₂ O	-	0 - 7000000 mm H ₂ O (4° C)
in Hg (32° F)			
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)

Bar			
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
ata (kg/cm²)			
ata (kg/cm ²)	001 - ata	-	-1 x 0 ata (kg/cm ²)
ata (kg/cm ²)	002 - ata	-	-1 x 1.0 ata (kg/cm ²)
ata (kg/cm ²)	003 - ata	-	-1 x 2.1 ata (kg/cm ²)
ata (kg/cm ²)	004 - ata	-	-1 x 4 ata (kg/cm ²)
ata (kg/cm ²)	005 - ata	-	-1 x 7 ata (kg/cm ²)
ata (kg/cm ²)	006 - ata	-	-1 x 10 ata (kg/cm ²)
ata (kg/cm ²)	007 - ata	-	-1 x 14 ata (kg/cm ²)
ata (kg/cm ²)	008 - ata	-	-1 x 21 ata (kg/cm ²)
ata (kg/cm ²)	009 - ata	-	-1 x 40 ata (kg/cm ²)
ata (kg/cm ²)	010 - ata	-	0 - 0.14 ata (kg/cm ²)
ata (kg/cm ²)	011 - ata	-	0 - 0.35 ata (kg/cm ²)
ata (kg/cm ²)	012 - ata	-	0 - 0.7 ata (kg/cm ²)
ata (kg/cm ²)	013 - ata	-	0 - 1 ata (kg/cm ²)
ata (kg/cm ²)	014 - ata	-	0 - 2.1 ata (kg/cm ²)
ata (kg/cm ²)	015 - ata	-	0 - 4 ata (kg/cm ²)
ata (kg/cm ²)	016 - ata	-	0 - 7 ata (kg/cm ²)
ata (kg/cm ²)	017 - ata	-	0 - 10 ata (kg/cm ²)
ata (kg/cm ²)	018 - ata	-	0 - 14 ata (kg/cm ²)
ata (kg/cm ²)	019 - ata	-	0 - 21 ata (kg/cm ²)
ata (kg/cm ²)	020 - ata	-	0 - 30 ata (kg/cm ²)
ata (kg/cm ²)	021 - ata	-	0 - 35 ata (kg/cm ²)
ata (kg/cm ²)	022 - ata	-	0 - 40 ata (kg/cm ²)
ata (kg/cm ²)	023 - ata	-	0 - 50 ata (kg/cm ²)
ata (kg/cm ²)	024 - ata	-	0 - 70 ata (kg/cm ²)
ata (kg/cm ²)	025 - ata	-	0 - 100 ata (kg/cm ²)
ata (kg/cm ²)	026 - ata	-	0 - 140 ata (kg/cm ²)
ata (kg/cm ²)	027 - ata	-	0 - 210 ata (kg/cm ²)
ata (kg/cm ²)	028 - ata	-	0 - 300 ata (kg/cm ²)
ata (kg/cm ²)	029 - ata	-	0 - 350 ata (kg/cm ²)
ata (kg/cm ²)	030 - ata	-	0 - 400 ata (kg/cm ²)
ata (kg/cm ²)	031 - ata	-	0 - 500 ata (kg/cm ²)
ata (kg/cm ²)	032 - ata	-	0 - 700 ata (kg/cm ²)