UNITED ELECTRIC

One Series Pressure & Temperature Transmitter/Switches

F.S. Ranges to 6,000 PSI, -50 to 1,000°F, Intrinsically Safe

DESCRIPTION

The One Series from UE provides explosion (flame)-proof, intrinsically safe and non-incendive models that monitor gage pressure, differential pressure or temperature. With a 4-20 mA analog output and up to two independently programmable switches and no moving parts, these versatile instruments can be used in a wide variety of control applications where mechanical switches

weren't préviously considered.

Featuring a solid-state design, UE's One Series is your best choice for tough applications with high cycle rates, severe shock and high vibration. For plant upgrades, there are a variety of power options ranging from 2-wire analog loop-powered, 2-wire discrete input powered and externally powered models that can switch up to 280 volts to the load.

With an integral digital display and 4-20 mA output, the One Series from UE can effectively do the job of three by replacing a switch, a gauge and a transmitter. Powerful yet easy to install, the One Series from UE features tamper-resistance, intuitive programming, and set-up that is fast and easy.

FEATURES

 Programmable set point and deadband provides the most versatile, accurate and repeatable alarm and shutdown switching using the integral keypad or a HART® communicator

integral keypad or a HART® communicator
• Configurable IAW™ self-diagnostics provide piece of mind that the instrument is functioning properly by communicating with the control system using a dedicated discrete output

 Plugged Port Detection allows a means to detect a clogged sensor, avoiding potentially dangerous process conditions

 Max/Min memory – samples and stores the highest and lowest extreme process variables for process diagnostics and learning

Nuisance trip filtering eliminates unwanted nuisance trips and unnecessary alarms

 Programmable trip delay – hold off the trip decision for tenths of seconds up to several minutes

 Trip counter – records trips for up to two relays for process diagnostics and learning

• 3-year warranty

ADVANCED FEATURES:

Transmitter-only and hybrid Transmitter-Switch One Series models now feature HART® 7 compatibility. Any function that can be controlled with the keypad can also be controlled with a HART® communicator. This feature makes it unnecessary to remove the enclosure cover to make programming changes or access the

MAX/MIN values, especially important in explosive environments. All programming functions can be performed remotely.

The set point and deadband settings allow for 100% adjustability, providing highly repeatable trip and reset points for many different applications. This feature allows the One Series to be used for pump and compressor cycling applications where high cycle rates may shorten the life of mechanical controls. Temperature monitoring models can provide highly repeatable thermostatic control of heaters and chillers. New software features in the One Series allow trip points to be filtered, delayed and counted. Plugged Port Detection can utilize MAX/MIN process extremes data to provide a powerful yet simple tool for detecting clogged impulse lines, rendering these application challenges manageable by the instrument, with no special programming needed at the PLC.

Mechanical switches have no self-diagnostic capabilities – they are blind instruments. All One Series models include UE's exclusive IAW™ (I Am Working) self-diagnostic system that detects faults before they become process monitoring problems.



ADVANCED FEATURES(CONT'D):

Detected faults are reported on the digital display while the set point switch will fail safe (change to the tripped state) and the 4-20 mA analog output will go to \leq 3.6 mA to provide remote fault indication per the NAMUR standard. A separate IAWTM discrete output remains normally closed and will fail-safe-open if a fault is detected or if power is lost. By monitoring this output, the intelligent and configurable IAWTM diagnostics provide immediate remote indication that the One Series remains reliable and available to react to and report process conditions worthy of an alarm and/or shutdown.

For alarm and shutdown monitoring applications, there is no better choice than the One Series family of hybrid transmitter-switches. Measuring gage pressure, differential pressure or temperature, the extremely rugged and reliable One Series takes all of the guess-work out of monitoring process variables to prevent injury, loss and downtime.

With its large backlit* digital display, fully adjustable deadband and 100% solid-state design, the One Series is the obvious choice for plant upgrades and new construction projects. A built-in microprocessor includes digital repeatability and intelligent IAWTM self-diagnostics, offering plant operators an extremely reliable and smart process and capital equipment protection device.

Proven in use in literally thousands of diverse applications, One Series is designed for harsh and hazardous location process monitoring with certificates available for intrinsically safe and explosion proof areas including cULus, ATEX and IECEx among others. See the Approvals and Ratings page for complete area classification details and temperature ratings.

APPLICATIONS

- Pumps and compressors start/stop, optimizing, shutdown, staging, fast PD pump switching
- Lubricating oil monitoring seal oil pressure, sump temperature, bearing pressure, predictive maintenance
- Hydraulic oil pressure high pressure monitoring, emergency shutdown, ram cycling
- Filter monitoring automatic backwash, clog and change indication, proving flow
- Plant upgrades power and wastewater plant upgrades, drop-in replacement for mechanical switches



Pump Emergency Shutdown

SPECIFICATIONS

	Power Input/Switch Capacity									
Model	Maximum Power Ratings/Output Signal	Set Point Switch Ratings (SPST) IAW™ Switch Ratings (SPST)		Min. Load Requirements	Off State Leakage					
1XSWLL	2-wire 7.8 – 50VDC discrete input powered @ 0.75 mA	7.8 – 50 VDC @ 0.1 A MOSFET derate @ 1 mA per °C > 25°C	7.8 – 50 VDC @ 0.1 A MOSFET derate @ 1 mA per °C > 25°C	2.0 mA	0.8 mA					
1XTXSW	2-wire 20 – 40 VDC @ 21 mA / Loop powered 4-20 mA analog output with HART® version 7	SW1 & SW2: 0 – 280 VAC & VDC @ 0.3 A derate 8% per 10°C > 21°C	0 – 30 VDC @ 0.020 A MOSFET	0 mA	0.01 mA					
1XTX00	2-wire 20 – 40 VDC @ 21 mA / Loop powered 4-20 mA analog output with HART® version 7	N/A	N/A	N/A	N/A					

Accuracy: 0.5% of full range span, at room temperature

Repeatability: 0.1% of full range span

Long Term Stability: ±0.25% of range/year maximum

Temperature Drift: 0.03% of full scale per °C (0.12% for the K10 range) Switch Response Time: ≤ 100 mS for detection of full step change and change

of output state with Trip Delay and Filter turned off Display Response Time: 400 mS (updated 2.5 times per second)

SPECIFICATIONS (CONT'D)

Approved Ambient Operating Temperature Range							
Model	cULus (Division System)	cULus & ATEX (Zone System)					
1XSWLL							
1XTXSW	-40°F (-40°C) TO 185°F (85°C)	-40°F (-40°C) TO 185°F (85°C)					
1XTX00							
	Display visibility temperature range: 10°F (-12°C) to 158°F (70°C) all models						

Filter (transient filtering to prevent nuisance trips): Programmable time constants for 0.25, 0.5, 1, and 2 seconds, default OFF.

Trip Delay (switch decision delay): 0 to 999.9 seconds in 1/10th second increments

Set 4 MA (scale the 4 mA output): Programmable from -3 to 25% of the sensor's range, values are in the units of measure selected and are range dependent.

Set 20 MA (scale the 20 mA output): Programmable from 50 to 110% of the sensor's range, values are in the units of measure selected and are range dependent.

IAW™ (I Am Working) Diagnostics: Upon detecting a fault, the local display will show a fault code, the set point switch will change to the as-programmed tripped state, the normally-closed IAW™ Output switch will fail-safe-open and the NAMUR NE 43 standard 4-20 mA output will indicate ≤ 3.6 mA. See installation manual for a complete listing of detectable faults and codes.

	Switch Control modes (1XTXSW and 1XSW models only)								
Mode	Set Point Switch Action	IAW™ Output (on fault)							
Open Rise	Normally closed, opens at set point on rising media and fault	Opens							
Open Fall	Normally closed, opens at set point on falling media and fault	Opens							
Open Rise	Normally open, closes at set point on rising media and fault	Opens							
Open Fall	Normally open, closes at set point on falling media and Opens fault								
Open Out of Window	Normally closed, opens above set point high and below set point low and fault, closes below deadband high and above deadband low	Opens							
Close Out of Window	Normally open, closes above set point high and below set point low and fault, opens below deadband high and above deadband low	Opens							

Analog output (1XTX models only): 4-20 mA NAMUR NE 43 compliant and HART® version 7 compatible current output,360 ohms max. at 24 VDC, field scalable 2:1 turn down. Faults are indicated at ≤3.6mA. See installation manual for details.

Enclosure and cover: Type 4X/IP66 certified epoxy-coated aluminum alloy 360 with tempered glass window. See Dimensional Drawings for more detail.

Conduit: 3/4" NPT female aluminum casting; 2 openings

Display: 4 digit x 0.5" (12.7 mm) backlit* LCD provides the following information

Process variable	MAX/MIN process values		
IAW™ (I Am Working) status	Units of measure		
Switch status	Latch status		
Set point values	Deadband values		
Trip counts	Fault codes		
Offset indication	* backlit on 1XTX models only		

SPECIFICATIONS (CONT'D)

Set point & deadband: Programmable over the sensor's entire range Memory: Programming and data protected by non-volatile FRAM

Effective Transmission Distance: 2,000 feet (610 meters) at rated voltage for 1XSW models

Sensors:

Gage Pressure – 316L stainless steel wetted parts, welded diaphragm, 1/2" NPT (female) process connection, micro-machined piezo-resistive strain gage silicon element, 0.25 ml silicone oil fill, maximum diaphragm displacement: 0.00053 inches.

Maximum media temperature: -40 to 257°F (-40 to 125°C)

Vacuum: All gage pressure sensors withstand deep vacuum with no calibration effects. For compound vacuum ranges, see Gage Pressure Sensor table below.

Differential Pressure - 316L stainless steel, welded diaphragms, 1/4" NPT (male) process connections, piezoresistive strain gage silicon element, silicone oil fill.

Maximum media temperature: -40 to 257°F (-40 to 125°C) **Temperature** – 316 stainless steel 0.25" OD sheath containing a 100 ohm 4-wire platinum RTD element available with epoxy fill (local low temp) or powder fill (remote high temp). Media temperature limits:

-328 to 1000°F, intermittent to 1100°F (-200 to 538°C, int. to 593°C) for TH and TT ranges

-40 to 500°F (-40 to 260°C) for TR and TL ranges

EMI/RFI: Compliance to CE EMC requirements: EN 61000-6-2, EN 61000-6-4

Emission: EN 61000-6-4 Class A

Immunity:

EN 61000-4-2 Immunity to Electrostatic Discharge

EN 61000-4-3 Immunity to Continuous Radiated Disturbances

EN 61000-4-4 Immunity to Electrical Fast Transients EN 61000-4-5 Immunity to Surges

EN 61000-4-6 Immunity to Continuous Conducted Disturbances

EN 61000-4-11 Immunity to Voltage Dips and Interruptions

Weight: 4.5 - 6.0 lbs (2.0 - 2.7 kg) depending on sensor. Add 1.9 lbs. (0.9 kg) for option M041

Shock: Per MIL-STD-810G method 516.6 – when device is subjected to 15 g (10 mSec) and 40 g (6 mSec); 3 drops/axis

Vibration: per IEC 61298-3 (field and pipeline applications with high vibration level, 10-1000 Hz range, 0.014" displacement peak amplitude, 5 g acceleration amplitude)

Effects: less than +/- 0.40% of range

ORDERING INFORMATION

BUILD A PART NUMBER BY SELECTING THE MODEL, SENSOR AND OPTIONS FROM THE TABLES BELOW. **EXAMPLE: 1XTXSWP15-M041**

Model	Description		Zone	Division		
Model	Description	0	1	2	1	2
(Neplaces 2002D, 202D,	1XSWLL places 2W2D,2X2D, 2W4D,2X4D) • 2-wire, discrete input powered switch for 24 and 48 VDC logic solver inputs • Programmable set point switch rated at 7.8 - 50.0 VDC @ 0.1 A max. • IAW™ health status fail-safe-open switch rated at 7.8 - 50.0 VDC @ 0.1 A wired separately to the logic solver@ 0.1 A max.					•
1XTXSW (Replaces 2WLP, 2XLP, 8W2D,8X2D	 Loop-powered 24 VDC HART® enabled transmitter Two programmable set point fail-safe solid state relays rated at 0 - 280 VAC/VDC @ 0.3 A IAW™ health status fail-safe-open switch rated at 0 - 30.0 VDC @ 0.020 A 		•	•	•	•
1XTX00 (Transmitter Only)	Loop-powered 24 VDC HART® enabled transmitter		•	•	•	•
-	O - a safety barrier is required for intrinsically safe areas Zone O and Div. 1 Fx ia					

Gage Pressure Se	Gage Pressure Sensor: Gage pressure, piezo-resistive strain gage, silicone oil fill, 316L stainless wetted materials, 1/2 "NPT (female) process connection										
Sensor P/N		Pressure Opera	Max. Over Range ² (PSIG)								
P06	-14.7 TO 30 psig	931.1" wc	2068 mbar	206.8 kPa	2.109 kg/cm ²	60					
P08	-14.7 to 100 psig	2770" wc	6895 mbar	689.5 kPa	7.031 kg/cm ²	200					
P10	0-5.00 psig	138.5" wc	344.7 mbar	34.47 kPa	0.352 kg/cm ²	10					
P11	0-15.00 psig	415.5" wc	1034 mbar	103.4 kPa	1.055 kg/cm ²	30					
P12	0-30.00 psig	831.1" wc	2068 mbar	206.8 kPa	2.109 kg/cm ²	60					
P13	0-50.00 psig	1385"wc	3447 mbar	344.7 kPa	3.516 kg/cm ²	100					
P14	0-100.0 psig	2770" wc	6895 mbar	689.5 kPa	7.031 kg/cm ²	200					
P15	0-300.0 psig	N/A	20.68 bar	2068 kPa	21.09 kg/cm ²	600					
P16	0-500.0 psig	N/A	34.47 bar	3447 kPa	35.16 kg/cm ²	1000					
P17	0-1000 psig	N/A	68.95 bar	6895 kPa	70.31 kg/cm ²	2000					
P18	0-3000 psig	N/A	206.8 bar	20.68 MPa	210.9 kg/cm ²	6000					
P19	0-4500 psig	N/A	310.3 bar	31.03 MPa	316.4 kg/cm ²	9000					
P20	0-6000 psig	N/A	413.7 bar	41.37MPa	421.9 kg/cm2	12000					

Dif	Differential Pressure Sensor: Differential pressure, piezo-resistive strain gage, silicone oil fill, 316L stainless wetted materials, 1/4" NPT (male) process connection										
:	Sensor P/N		Pressure Opera	Max. Over Range ² (PSID)	Max. Working Pressure ³ (PSIG)						
	K10	0-5.000 psid	138.5 " wc	344.7 mbar	34.47 KPa	0.352 kg/cm ²	10	50			
	K11	0-50.00 psid	1385" wc	3447 mbar	344.7 KPa	3.516 kg/cm ²	100	500			
	K13	0-100.0 psid	2770" wc	6895 mbar	689.5 KPa	7.031kg/cm ²	200	1500			
	K14	0-200.0 psid	NA	13.79 bar	1379 KPa	14.10 kg/cm ²	400	1500			

¹ - The pressure range that the sensor will perform within specified tolerances.

³ - The maximum pressure that can be applied to both ports simultaneously without affecting sensor performance. Pressure on the "H" sensor port must be ≥ pressure on the "L" sensor port.

Sensor P/N	Temperature Range	Description (See drawings)			
TL1		Local (stem) mounted rigid to enclosure, 4" sheath length			
TL2		Local (stem) mounted rigid to enclosure, 6" sheath length			
TL3	1 1	Local (stem) mounted rigid to enclosure, 10" sheath length			
TR		Remote mounted, 2.5" sheath, 6' MI fixed extension length			
TRC		Remote mounted, 2.5" sheath, 1' to 30' MI extension length MUST BE SPECIFIED. USE OPTION W074 ONLY			
TH1	-40 to 1000°F/-40 to 538°C	Remote mounted, 2.5" sheath, 6' MI fixed extension length			
THC	-40 to 1000 F/-40 to 538 C	Remote mounted, 2.5" sheath, 1' to 30' MI extension length MUST BE SPECIFIED. USE OPTION W074 ONLY.			
TC1*	200 +- 20005/ 104 +- 0206	Remote mounted, 2.5" sheath, 6' MI fixed extension length			
TCC*	-300 to 200°F/-184 to 93°C	Remote mounted, 2.5" sheath, 1' to 30' MI extension length MUST BE SPECIFIED. USE OPTION W074 ONLY			
TLC	-40 to 900°F/-40 to 482°C	Local (stem) spring-loaded mount, NUN connection lengths: 4" – 10" in 1" increments, variable sheath (L) length up to 60", BOTH MUST BE SPECIFIED. Refer to drawing on page 13. Thermowell required, see page 11. (Example: TTC–NUN6–L 10.5)			

^{*}Calibration certification is not available on the TC1 and TCC

OPTION CODES

M041: Dual Seal- Provides secondary process seal for all pressure models

M201: Factory programmable set point, deadband and switch mode for one switch (Model 1XTXSW Only) (see M202 forinformation required)

M202: Factory programmabled set point, deadband and switch mode for two relays (Model 1XTXSW Only)

All 6 settings are required when ordering - see example below								
Relay	Set Point ¹	Deadband ¹	Relay Mode					
SW1	040.3	001.5	OPEN ON FALL					
SW2	050.0	005.0	CLOSE ON RISE					

For WI	For WINDOW modes, all 10 settings are required when ordering - see example below										
Relay	Set Point High ¹	Deadband High ¹	Set Point Low ¹	Deadband Low ¹	Relay Mode						
SW1	60.00	12.00	18.50	10.25	OPEN WINDOW						
SW2	30.50	06.25	09.00	04.75	CLOSE WINDOW						

¹Note: Four digits must be entered for each set point and deadband. Please refer to above sensor tables for the display resolution for the correct number of decimal places allowed for the sensor range and units of measure selected.

M270: Display units, degrees C for temperature models

M275: Display units, inches of water column

M276: Display units, bar or mbar

M277: Display units, kPa or MPa

M278: Display units, kg/cm²

M395: Flameproof compliance Ex d per Korea Occupational Safety and Health Agency (KOSHA)*

M406: Compliance per Russian Gosgortechnadzor*

M444: Paper tag

M446: Stainless steel tag

M449: Mounting bracket for pipe or wall. Use part number 6361-704 if ordered separately. See page 12 for additional information.

² - The maximum pressure that can be applied without affecting sensor performance.

M550: Oxygen service: Cleaned in accordance with ASTM G93

W073: 1/2" NPT male compression fitting for use with all TL and TR sensors, see page 8 for additional information

W074: 1/2" NPT male union connector for use with all TR, TH and TC sensors

W081: Thermowell adapter - Adapts 3/8" Thermowell to 1/4" sensor sheath

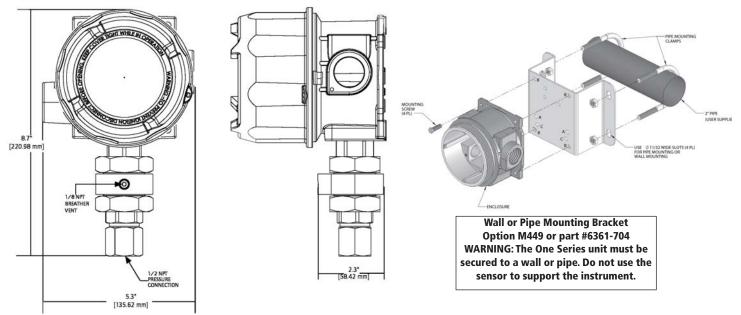
W930: 1/2" NPT male to G1/2 male adapter for use with gage pressure sensors P06-P20. Use part number 6361-762 if ordered separately.

W932: 1/4" NPT female to G1/2 male adapter for use with differential pressure sensors K10-K13. Use part number 6361-763 if ordered separately (2 required)

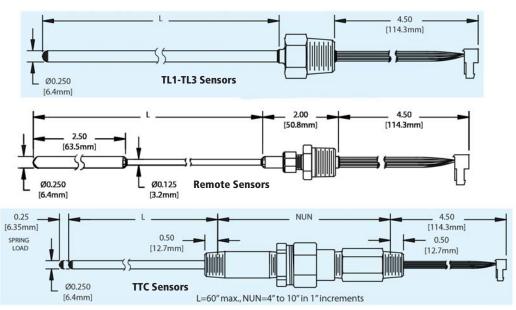
6361-752: Replacement cover assembly

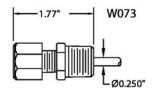
DIMENSIONS INCHES (MM)

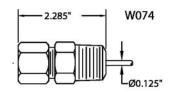
Enclosure shown with Dual Seal option M041 and gage pressure sensor



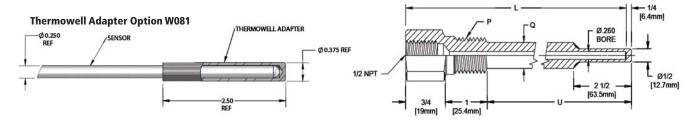
Temperature Sensors



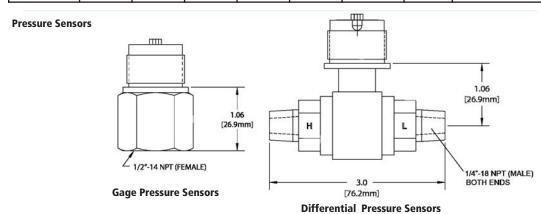




ĺ		W073	W074		
		1/2" NPT compression fitting with ferrule to fit 0.25" sensor sheath			
١		Terrule to 11t 0.25 Sensor Sheath	0.125 Sensor extension cable		
I	1XSW, 1XTX	TLx	TRx, THx, TCx		



Fittings for Thermowells					Local Temperature Sensors w/0.25" Sensor Sheath			Remote Temperature Sensors w/Teflon® Cable	Remote Temperature Sensors w/0.125" Diameter MI Cable
Thermowell P/N	Length (L) (Inches)	P (NPT)	0	U	TL1 (4")	TL2 (6")	TL3 (10")	TR	TR, TH, TC
1S260 L2.5-316	2.5	1/2	5/8	1	W073	W073	W073	W073	W074
1S260 L4-316	4	1/2	5/8	2.5	NA	W073	W073	W073	W074
1S260 L4.5-316	4.5	1/2	5/8	3	NA	W073	W073	W073	W074
1S260 L5.5-316	5.5	1/2	5/8	4	NA	NA	W073	W074	W074
1S260 L6-316	6	1/2	5/8	4.5	NA	NA	W073	W074	W074
1S260 L6.5-316	6.5	1/2	5/8	5	NA	NA	W073	W074	W074
1S260 L9-316	9	1/2	5/8	7.5	NA	NA	NA	W074	W074
1S260 L9.5-316	9.5	1/2	5/8	8	NA	NA	NA	W074	W074
1S260 L12-316	12	1/2	5/8	10.5	NA	NA	NA	W074	W074
1S260 L15-316	15	1/2	5/8	13.5	NA	NA	NA	W074	W074
1S260 L18-316	18	1/2	5/8	16.5	NA	NA	NA	W074	W074
1S260 L24-316	24	1/2	5/8	22.5	NA	NA	NA	W074	W074
25260 L2.5-316	2.5	3/4	3/4	1	W073	W073	W073	W073	W074
25260 L4-316	4	3/4	3/4	2.5	NA	W073	W073	W073	W074
25260 L6-316	6	3/4	3/4	4.5	NA	NA	W073	W074	W074
25260 L9-316	9	3/4	3/4	7.5	NA	NA	NA	W074	W074
25260 L12-316	12	3/4	3/4	10.5	NA	NA	NA	W074	W074
25260 L15-316	15	3/4	3/4	13.5	NA	NA	NA	W074	W074
25260 L18-316	18	3/4	3/4	16.5	NA	NA	NA	W074	W074
25260 L24-316	24	3/4	3/4	22.5	NA	NA	NA	W074	W074



APPROVALS & RATINGS

Model	N. America	Europe	International
1XSWLL	cULus Listed UL: 50, 50E, 913, 1203 and 61010-1. ANSI/ISA 12.12.01, ISA 12.27.01. CSA C22.2: 25, 30, 157, 213, 94.01, 94.2 and 61010-1. CSA C22.2 / UL: 60079, -0, -1, -11, -15, -31.	EN 60079-0, EN 60079-1, EN 60079-11, EN 60079-15, EN 60079-31	IEC 60079-0, IEC 60079-1, IEC 60079-11, IEC 60079-15, IEC 60079-31
1XSWLL	Class 1 , Division 1 GROUPS A, B, C & D; CLASS II, DIVISION 1, GROUPS E, F, G; CLASS III (Note: No gas group A with option M041) CLASS I, ZONE 1, AEx d IIC **T3/T5; Ex d IIC **T3/T5; CLASS I, ZONE 0, AEx ia IIC T4; Ex ia IIC T4; CLASS I, DIVISION 2, GROUPS A, B, C & D; CLASS II, DIVISION 2, GROUPS E, F, G; CLASS III (No gas group A with option M041) CLASS I, ZONE 2, GROUPS AEx nA IIC T4; Ex nA IIC T4; -40°C ≤ Tamb ≤ 85°C (-40°F ≤ Tamb ≤ 185°F) ENCLOSURE TYPE 4X, IP66 UL File: E226592	II 2 G Ex db IIC **T3/T5 Gb; II 2 D Ex tb IIIC T+90°C Db; IP66 II 1 G Ex ia IIC T4 Ga; II 1 D Ex ia IIIC T+135°C Da; -40°C ≤ Tamb ≤85°C (-40°F ≤ Tamb ≤185°F) DEMKO 09 ATEX 0813748X II 3 G Ex nA IIC T4 Gc; DEMKO 15 ATEX 1483 -40°C ≤ Tamb ≤85°C (-40°F ≤ Tamb ≤185°F)	Ex db IIC **T3/T5 Gb; Ex tb IIIC T+90°C Db; IP66 Ex ia IIC T4 Ga; Ex tb IIIC T+135°C Da; IECEX UL 08.0017X -40°C ≤ Tamb ≤85°C (-40°F ≤ Tamb ≤185°F)
1XTXSW 1XTX00	CULus Listed UL: 50, 50E, 913, 1203 and 61010-1. ANSI/ISA 12.12.01, ISA 12.27.01. CSA C22.2: 25, 30, 213, 94.01, 94.2 and 61010-1. CSA C22.2 / UL: 60079, -0, -1, -15, -31.	EN 60079-0, EN 60079-1, EN 60079-15, EN 60079-31	IEC 60079-0, IEC 60079-1,IEC 60079-15, IEC 60079-31
TXTXSW TXTX00	CLASS II, DIVISION 1, GROUPS E, F, G; CLASS III (Note: No gas group A with option M041) CLASS I, ZONE 1, AEx d IIC **T3/T5;	II 2 G Ex db IIC **T3/T5 Gb; II 2 D Ex tb IIIC T+90°C Db; IP66 -40°C ≤ Tamb ≤85°C (-40°F ≤ Tamb ≤185°F) DEMKO 09 ATEX 0813748X II 3 G Ex nA IIC T4 Gc; DEMKO 15 ATEX 1483 -40°C ≤ Tamb ≤85°C (-40°F ≤ Tamb ≤185°F)	Ex db IIC **T3/T5 Gb; Ex tb IIIC T+135°C Db; IECEx UL 08.0017X -40°C ≤ Tamb ≤85°C (-40°F ≤ Tamb ≤185°F)

 $^{^{\}star\star}\text{T3}$ for pressure sensor ranges P06, P08, and P10-P16 only. T5 for all other models.

Specifications subject to change without notice.