

# Wireless Transmitter Series XYR 6000 Series 100 Gauge Pressure Models Specifications

34-XY-03-46 August 2012



STGW14L	0 to 500 psi	0 to 35 bar
STGW17L	0 to 3,000 psi	0 to 210 bar
STGW18L	0 to 6,000 psi	0 to 415 bar
STGW19L	0 to 10,000 psi	0 to 690 bar

## Introduction

Building upon the tremendously successful ST 3000 series transmitter line; Honeywell brings simple, safe, and secure wireless technology to its measurement portfolio in the XYR 6000 Series Wireless Transmitters.

The Series 100 XYR 6000 Wireless pressure transmitters offer improved accuracy and performance for those critical applications that require it.

The XYR 6000 Series measurements are part of the Honeywell OneWireless system and are ISA100 – Compliant.

Measurement and information without wires! The XYR 6000 wireless transmitter series enable customers to obtain data and create information from remote and hazardous measurement locations without the need to run wires, where running wire is cost prohibitive and/or the measurement is in a hazardous location. Without wires, transmitters can be installed and operational in minutes, quickly providing information back to your system.

XYR 6000 wireless transmitters send information to an ISA100.11a compliant MESH infrastructure. Wireless Data Managers (WDM) provides the path to bring that information into Experion PKS or any other control system wirelessly via OPC client or Modbus-TCP.

Transmitter power is supplied by two “D” size lithium batteries with an expected lifetime of up to ten years. Transmitter range with the integral antenna is 1,000’ (305 m) under ideal conditions.

Pressure transmitters continue to bring a proven technology to a wide spectrum of pressure measurement applications, from furnace combustion airflow rate to hydrostatic tank gauging.



Figure 1 - XYR6000 Gauge Pressure Transmitter

Implement the value of wireless technology today:

- Measure remote access points simply, safe and securely
- Obtain and utilize previously inaccessible information due to high wiring cost or hazardous locations.
- Easily meet Regulatory Requirements
- Improve process efficiency
- Enhance Flexibility to monitor applications:
  - that have no access to power
  - that are remote or difficult to reach
  - that may require frequent reconfiguration
  - where manual readings have been required previously.

## Specifications

### Operating Conditions – All Models

Parameter	Reference Condition		Rated Condition		Operative Limits		Transportation and Storage	
	°C	°F	°C	°F	°C	°F	°C	°F
<b>Ambient Temperature</b> <sup>4</sup>	25 ±1	77 ±2	-40 to 70	-40 to 158	-40 to 85 <sup>3</sup>	-40 to 185	-40 to 85	-40 to 185
<b>Ambient Temperature LCD Display visible range</b>	25 ±1	77 ±2	-40 to 85	-40 to 185				
<b>Meter Body Temperature</b>	25 ±1	77 ±2	-40 to 110 <sup>1</sup>	-40 to 230 <sup>1</sup>	-40 to 110 <sup>1</sup>	-40 to 230 <sup>1</sup>		
<b>Humidity %RH</b>	10 to 55		0 to 100		0 to 100		0 to 100	
<b>Vacuum Region - Minimum Pressure</b> mmHg absolute inH2O absolute	atmospheric atmospheric		25 13		2 (short term <sup>2</sup> ) 1 (short term <sup>2</sup> )			
<b>Maximum Allowable Working Pressure (MAWP)</b> <sup>5</sup> (XYR6000 products are rated to Maximum Allowable Working Pressure. MAWP depends on Approval Agency and transmitter materials of construction.)	STGW14L = 500 psi, 35 bar STGW17L = 3,000 psi, 210 bar STGW18L = 6,000 psi, 415 bar STGW19L = 10,000 psi, 690 bar							
<b>Vibration</b>	Maximum of 4g over 15 to 200Hz.							
<b>Shock</b>	Maximum of 40g.							
<b>Power</b>	Battery powered 3.6V Lithium thionyl chloride (LiSOCl <sub>2</sub> ) batteries non rechargeable, size D 24 Vdc Wired Power (option) - For I.S. Application: 21 V to 25 Vdc Operated with MTL7728P+ barrier (252 Ohms Max. end to end resistance), Max input current 26mA. For Non I.S. application: 11 V to 30 Vdc Input range, Max input current 100mA.							

<sup>1</sup> For CTFE fill fluid, the rating is -15 to 110°C (5 to 230°F).

<sup>2</sup> Short term equals 2 hours at 70°C (158 °F)

<sup>3</sup> 24V power option rated 80C (176F)

<sup>4</sup> The Ambient Limits shown are for Ordinary Non-Hazardous locations only. Refer to the appropriate Control Drawing, FM/CSA, ATEX, or IECEx for the Ambient Limits when installed in Hazardous Locations.

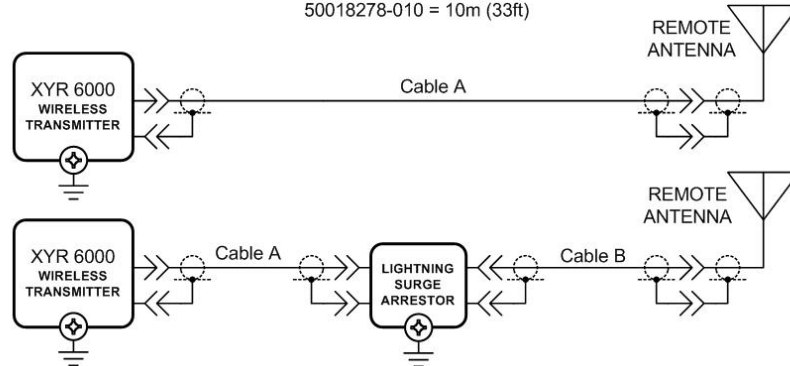
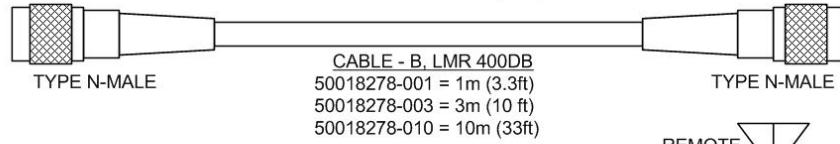
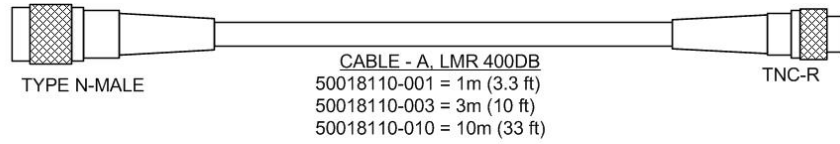
<sup>5</sup> Consult factory for MAWP of XYR6000 transmitters with CSA approval.

## Wireless Specifications

Parameter	Description
<b>Wireless Communication</b>	<p>2,400 to 2,483.5 MHz (2.4 GHz) Industrial, Scientific and Medical (ISM) band</p> <p>DSSS Selection – Discrete Sequential Spread Spectrum per FCC 15.247 / IEEE 802.15.4–2006</p> <p>ISA100.11a Compliant (2.4 GHz Direct Sequence Spread Spectrum 802.15.4 DSSS-FH)</p> <p>Every data packet transmitted in either direction is verified (CRC check) and acknowledged by the receiving device.</p> <p>USA – FCC Certified</p> <p>Canada – IC Certified</p> <p>European Union – RTTE/ETSI Conformity</p> <p>Japan – Ministry of Internal Affairs and Communications Certified</p>
<b>ISA100.11a RF Transmitter Power (Optional)</b>	<p>NA Selection – 125 mW (20.9 dBm) maximum transmit power not including antenna per FCC/IC, or 400 mW (26.0 dBm) maximum EIRP including antenna for USA and Canadian locations.</p> <p>EU Selection – 10 mW (10.0 dBm) maximum EIRP including antenna per RTTE/ETSI for EU locations.</p>
<b>DSSS RF Transmitter Power (Optional)</b>	<p>NA Selection – 125 mW (20.9 dBm) maximum transmit power not including antenna per FCC/IC, or 400 mW (26.0 dBm) maximum EIRP including antenna for USA and Canadian locations.</p> <p>EU Selection – 10 mW (10.0 dBm) maximum EIRP including antenna per RTTE/ETSI for EU locations.</p> <p>JP Selection – 12.14 dBm/MHz [32mW (15.14 dbm)] maximum EIRP including antenna for Japanese locations.</p>
<b>Data</b>	<p>PV Publish Cycle Time: Configurable as 1, 5, 10, 30 or 60 seconds</p> <p>Rate: 250 Kbps</p>
<b>Antennas</b>	<p>Integral – 2 dBi omnidirectional monopole</p> <p>Integral – 4 dBi omnidirectional monopole</p> <p>Remote – 8 dBi omnidirectional monopole with up to 20 m cable and lightning surge arrester.</p> <p>Remote – 14 dBi directional parabolic with up to 20 m cable and lightning surge arrester.</p>
<b>Signal Range</b>	<p>Nominal 305 m (1,000 feet) between Field Transmitter and Infrastructure Unit (Multinode) or Gateway Unit when using 2 dBi Integral antenna with a clear line of sight.*</p> <p>Two XYR 6000 transmitters both having TX Power set to 16 dBm with a clear line of site nominal signal range is 150 m (490ft.)</p>
<b>Routing vs Non-Routing</b>	<p>Unit can be set as a Field Routing or non-Field Routing device; the number of routing devices is set by the system manager.</p> <p>Using the device as a routing device will impact battery life, the more messages routed through a device, the greater the impact on battery life.</p>

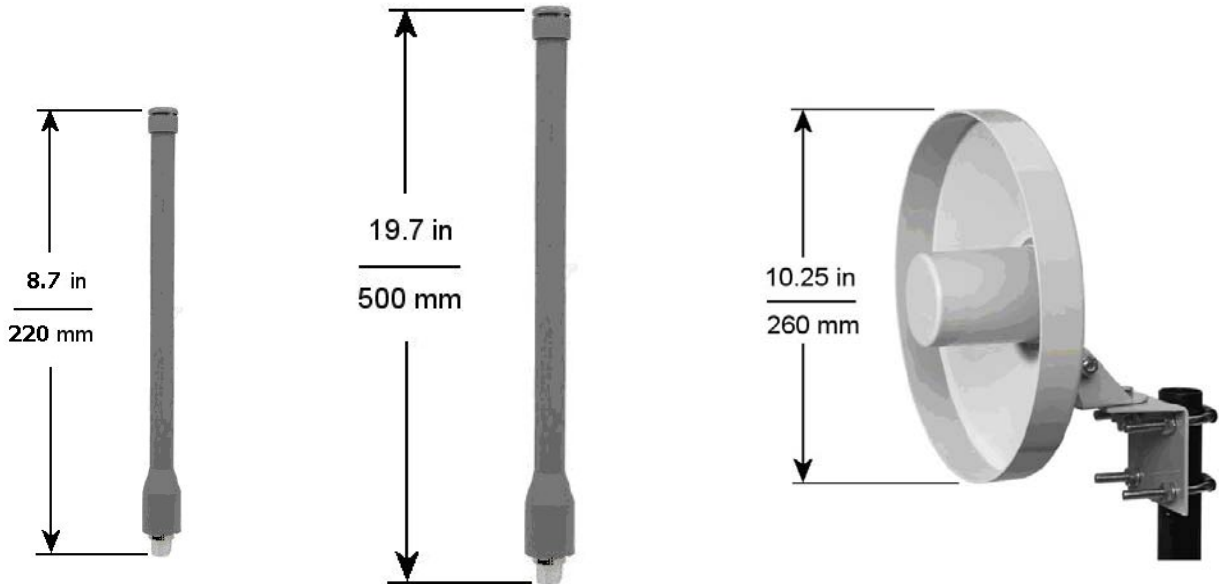
\* Actual range will vary depending on antennas, cables and site topography.

**Remote Antenna Cables**



CABLE PARAMETERS			LIGHTNING SURGE ARRESTOR PARAMETERS
CABLE A, B LENGTH	CAPACITANCE	INDUCTANCE	
1 m	78.4 pF	0.2 μH	CAPACITANCE = 1 pF INDUCTANCE = 10 nH
3 m	235.2 pF	0.6 μH	
10 m	784 pF	2.0 μH	

**Remote Antennas**



4 dBi Omnidirectional Antenna

8 dBi Omnidirectional Antenna

14 dBi Directional Antenna

**Performance under Rated Conditions\* - Model STGW14L (0 to 500 psi/35 bar)**

Parameter	Description
<b>Upper Range Limit</b>	<b>psi</b> 500 <b>bar</b> 35
<b>Minimum Span</b>	<b>psi</b> 5 <b>bar</b> 0.35
<b>Zero Elevation and Suppression</b>	No limit except minimum span from absolute 0 (zero) to +100% URL. Specifications valid over this range.
<b>Accuracy</b> (Reference – Includes combined effects of linearity, hysteresis, and repeatability)	±0.0625% of calibrated span or upper range value (URV), whichever is greater, terminal based. For URV below reference point (20 psi), accuracy equals: $\pm \left[ 0.0125 + 0.05 \left( \frac{20 \text{ psi}}{\text{span/ psi}} \right) \right] \text{ or } \pm \left[ 0.0125 + 0.05 \left( \frac{1.4 \text{ bar}}{\text{span/ bar}} \right) \right] \text{ in \% of span}$
<b>Zero Temperature Effect per 28°C (50°F)</b>	±0.05% of span. For URV below reference point (75 psi), effect equals: $\pm 0.05 \left( \frac{75 \text{ psi}}{\text{span/ psi}} \right) \text{ or } \pm 0.05 \left( \frac{5.25 \text{ bar}}{\text{span/ bar}} \right) \text{ in \% of span}$
<b>Combined Zero and Span Temperature Effect per 28°C (50°F)</b>	±0.075% of span. For URV below reference point (75 psi), effect equals: $\pm \left[ 0.025 + 0.05 \left( \frac{75 \text{ psi}}{\text{span/ psi}} \right) \right] \text{ or } \pm \left[ 0.025 + 0.05 \left( \frac{5.25 \text{ bar}}{\text{span/ bar}} \right) \right] \text{ in \% of span}$

\* Performance specifications are based on reference conditions of 25°C (77°F), 10 to 55% RH, and 316L Stainless Steel barrier diaphragm.

**Performance under Rated Conditions\* - Model STGW17L (0 to 3,000 psi/210 bar)**

Parameter	Description
<b>Upper Range Limit</b>	<b>psi</b> 3,000 <b>bar</b> 210
<b>Minimum Span</b>	<b>psi</b> 30 <b>bar</b> 2.1
<b>Zero Elevation and Suppression</b>	No limit except minimum span from absolute 0 (zero) to +100% URL. Specifications valid over this range.
<b>Accuracy</b> (Reference – Includes combined effects of linearity, hysteresis, and repeatability)	±0.0625% of calibrated span or upper range value (URV), whichever is greater, terminal based. For URV below reference point (750 psi), accuracy equals: $\pm \left[ 0.0125 + 0.05 \left( \frac{750 \text{ psi}}{\text{span/ psi}} \right) \right] \text{ or } \pm \left[ 0.0125 + 0.05 \left( \frac{52 \text{ bar}}{\text{span/ bar}} \right) \right] \text{ in \% of span}$
<b>Zero Temperature Effect per 28°C (50°F)</b>	±0.10% of span. For URV below reference point (500 psi), effect equals: $\pm 0.10 \left( \frac{500 \text{ psi}}{\text{span/ psi}} \right) \text{ or } \pm 0.10 \left( \frac{35 \text{ bar}}{\text{span/ bar}} \right) \text{ in \% of span}$
<b>Combined Zero and Span Temperature Effect per 28°C (50°F)</b>	±0.15% of span. For URV below reference point (500 psi), effect equals: $\pm \left[ 0.05 + 0.10 \left( \frac{500 \text{ psi}}{\text{span/ psi}} \right) \right] \text{ or } \pm \left[ 0.05 + 0.10 \left( \frac{35 \text{ bar}}{\text{span/ bar}} \right) \right] \text{ in \% of span}$

\* Performance specifications are based on reference conditions of 25°C (77°F), 10 to 55% RH, and 316L Stainless Steel barrier diaphragm.

**Performance under Rated Conditions\* - Model STGW18L (0 to 6,000 psi/415 bar)**

Parameter	Description
<b>Upper Range Limit</b> <b>psi</b> <b>bar</b>	6,000 415
<b>Minimum Span</b> <b>psi</b> <b>bar</b>	60 4.1
<b>Zero Elevation and Suppression</b>	No limit except minimum span from absolute 0 (zero) to +100% URL. Specifications valid over this range.
<b>Accuracy</b> (Reference – Includes combined effects of linearity, hysteresis, and repeatability) •	±0.0625% of calibrated span or upper range value (URV), whichever is greater, terminal based. For URV below reference point (1,500 psi), accuracy equals: $\pm \left[ 0.0125 + 0.05 \left( \frac{1,500 \text{ psi}}{\text{span/ psi}} \right) \right] \text{ or } \pm \left[ 0.0125 + 0.05 \left( \frac{104 \text{ bar}}{\text{span/ bar}} \right) \right] \text{ in \% of span}$
<b>Zero Temperature Effect per 28°C (50°F)</b>	±0.10% of span. For URV below reference point (1,000 psi), effect equals: $\pm 0.10 \left( \frac{1,000 \text{ psi}}{\text{span/ psi}} \right) \text{ or } \pm 0.10 \left( \frac{70 \text{ bar}}{\text{span/ bar}} \right) \text{ in \% of span}$
<b>Combined Zero and Span Temperature Effect per 28°C (50°F)</b>	±0.15% of span. For URV below reference point (1,000 psi), effect equals: $\pm \left[ 0.05 + 0.10 \left( \frac{1,000 \text{ psi}}{\text{span/ psi}} \right) \right] \text{ or } \pm \left[ 0.05 + 0.10 \left( \frac{70 \text{ bar}}{\text{span/ bar}} \right) \right] \text{ in \% of span}$

\* Performance specifications are based on reference conditions of 25°C (77°F), 10 to 55% RH, and 316L Stainless Steel barrier diaphragm.

**Performance under Rated Conditions\* - Model STGW19L (0 to 10,000 psi/690 bar)**

Parameter	Description
<b>Upper Range Limit</b> <b>psi</b> <b>bar</b>	10,000 690
<b>Minimum Span</b> <b>psi</b> <b>bar</b>	100 7
<b>Zero Elevation and Suppression</b>	No limit except minimum span from absolute 0 (zero) to +100% URL. Specifications valid over this range.
<b>Accuracy</b> (Reference – Includes combined effects of linearity, hysteresis, and repeatability) •	±0.0625% of calibrated span or upper range value (URV), whichever is greater, terminal based. For URV below reference point (2,500 psi), accuracy equals: $\pm \left[ 0.0125 + 0.05 \left( \frac{2,500 \text{ psi}}{\text{span/ psi}} \right) \right] \text{ or } \pm \left[ 0.0125 + 0.05 \left( \frac{173 \text{ bar}}{\text{span/ bar}} \right) \right] \text{ in \% of span}$
<b>Zero Temperature Effect per 28°C (50°F)</b>	±0.10% of span. For URV below reference point (1,800 psi), effect equals: $\pm 0.05 \left( \frac{1,800 \text{ psi}}{\text{span/ psi}} \right) \text{ or } \pm 0.05 \left( \frac{173 \text{ bar}}{\text{span/ bar}} \right) \text{ in \% of span}$
<b>Combined Zero and Span Temperature Effect per 28°C (50°F)</b>	±0.15% of span. For URV below reference point (1,800 psi), effect equals: $\pm \left[ 0.05 + 0.10 \left( \frac{1,800 \text{ psi}}{\text{span/ psi}} \right) \right] \text{ or } \pm \left[ 0.05 + 0.10 \left( \frac{124 \text{ bar}}{\text{span/ bar}} \right) \right] \text{ in \% of span}$

\* Performance specifications are based on reference conditions of 25°C (77°F), 10 to 55% RH, and 316L Stainless Steel barrier diaphragm.

## Physical and Approval Bodies

Parameter	Description
<b>Barrier Diaphragm Material</b>	316L SS, Hastelloy <sup>®</sup> 1 C-276
<b>Process Head Material</b>	316L SS process interface.
<b>Mounting Bracket</b>	Carbon Steel (Zinc-plated) or Stainless Steel angle bracket or Carbon Steel flat bracket available.
<b>Fill Fluid</b>	Silicone oil or CTFE (Chlorotrifluoroethylene)
<b>Electronic Housing</b> <b>Stainless Steel Housing (option)</b>	Epoxy-Polyester hybrid paint. Low Copper-Aluminum. Meets NEMA 4X (hosedown and corrosion resistant), IP 66/67 (hosedown and submersible to 1m). 316 SS Electronics Housing - with M20 Conduit Connections 316 SS Housing with 1/2" NPT Conduit Connection 316 SS or Grade CF8M, the casting equivalent of 316 SS with M20 or 1/2" NPT Conduit Connection. If ordered with the Remote Antenna options, the antenna parts are not SS or Marine type cables; the integral antenna uses SS parts.
<b>Process Connections</b>	1/2-inch F-NPT, 1/2 inch M-NPT, 9/16 High Pressure, DIN 19213
<b>Mounting</b>	Can be mounted in virtually any position using the optional mounting bracket. Mounting should result in the antenna being vertically oriented. Bracket is designed to mount on 2-inch (50 mm) vertical or horizontal pipe. See <a href="#">Figure 2</a>
<b>Dimensions</b>	See <a href="#">Figure 3</a>
<b>Net Weight</b>	7 pounds (3.2Kg) <sup>2</sup>

<sup>1</sup> Hastelloy<sup>®</sup> C-276 or UNS N10276

<sup>2</sup> Add 8.0 pounds (3.6 kg) to any model equipped with the stainless steel housing option. (Model Selection Guide Table IV selections A3 or SH)

**NOTE:** Pressure transmitters that are part of safety equipment for the protection of piping (systems) or vessel(s) from exceeding allowable pressure limits, (equipment with safety functions in accordance with Pressure Equipment Directive 97/23/EC article 1, 2.1.3), require separate examination.

## Performance under Rated Conditions – General for all Models

Parameter	Description
<b>Lightning Surge Arrester (Remote antenna only)</b>	Frequency range: 0 – 3 GHz, 50 Ohms, VSWR = 1:1.3 Max, Insertion Loss = 0.4 dB Connectors Type N Female, Max, Gas Tube Element: 90 V ± 20%, Impulse Breakdown Voltage = 1,000 V ± 20%, Maximum Withstand Current = 5 KA.
<b>CE Conformity</b>	These transmitters are in conformity with the protection requirements of European Council Directives: 89/336/EEC, the EMC Directive and 1999/5/EC, the Telecommunications Directive per EN 300 328, V1.6.1 (2004-11), EN 300 489-1, V1.6.1 (2005-09), EN 300 489-3, V1.4.1 (2002-08) and EN 61326-1997+A1+A2, Electrical Equipment for Measurement, Control and Laboratory Use – EMC Requirements.
<b>Hazardous Location Certifications</b>	See the Model Selection Guide.

## Certifications

MSG CODE	AGENCY	TYPE OF PROTECTION
2C	CSA 1903673 (USA and Canada)	<b>Intrinsically Safe:</b> Class I; Division 1; Groups A, B, C, D; Class II, Division 1, Groups E, F, G; Class III, Division 1; T4  Class I, Zone 0 Ex ia IIC T4 Class I, Zone 0 AEx ia IIC T4
		<b>Nonincendive:</b> Class I; Division 2; Groups A, B, C, D; Class II, Division 2, Groups F, G; Class III, Division 2, T4  Class I, Zone 2 Ex nA IIC, T4 Class I, Zone 2 AEx nA IIC, T4
		<b>Explosion-Proof/ Flameproof:</b> Class I, Division 1; Groups A, B, C, D; Class II, Division 1, Groups E, F, G; Class III, Division 1; T4  Class I, Zone 1 Ex d IIC T4 Class I, Zone 1 AEx d IIC, T4
		<b>Ambient Temperature</b> -40 °C to +85 °C : Battery -40 °C to +80 °C : DC Supply
		<b>Enclosure:</b> Type 4X/ IP66
1C	FM Approvals™ 3032450 (USA)	<b>Intrinsically Safe:</b> Class I; Division 1; Groups A, B, C, D; Class II, Division 1, Groups E, F, G; Class III, Division 1; T4  Class I, Zone 0 AEx ia IIC T4
		<b>Nonincendive:</b> Class I; Division 2; Groups A, B, C, D; Class II, Division 2, Groups F, G; Class III, Division 2, T4  Class I, Zone 2 AEx nA IIC, T4
		<b>Explosion-Proof/ Flameproof:</b> Class I, Division 1; Groups A, B, C, D; Class II, Division 1, Groups E, F, G; Class III, Division 1; T4  Class I, Zone 1 AEx d IIC, T4
		<b>Ambient Temperature</b> -40 °C to +85 °C : Battery -40 °C to +80 °C : DC Supply
		<b>Enclosure:</b> Type 4X/ IP66
3C	ATEX- KEMA 08ATEX0062X	<b>Intrinsically Safe:</b> II 1 G Ex ia IIB T4 II 1 D Ex tD A20 IP66 T90 °C
		<b>Flameproof:</b> II 2 G Ex d [ia] IIB T4 II 2 D Ex tD A21 IP66 T90 °C
	ATEX- DEKRA 08ATEX0074	<b>Ambient Temperature</b> -40 °C to +70 °C : Battery -40 °C to +80 °C : DC Supply
		<b>Enclosure:</b> IP66
		<b>Nonincendive:</b> II 3 G Ex nA [nL] IIC T4 II 3 D Ex tD A22 IP66 T90 °C  <b>Ambient Temperature</b> -40 °C to +84 °C : Battery -40 °C to +80 °C : DC Supply
		<b>Enclosure:</b> IP66



MSG CODE	AGENCY	TYPE OF PROTECTION
C1	IECEX- CSA 09.0001X	<b>Intrinsically Safe:</b> Ex ia IIB T4 Ex tD A20 IP66 T90 °C
		<b>Flameproof:</b> Ex d [ia] IIB T4 Ex tD A21 IP66 T90 °C
		<b>Nonincendive:</b> Ex nA [nL] IIC T4 Ex tD A22 IP66 T90 °C
		<b>Ambient Temperature</b> -40 °C to +70 °C (Ex ia, Ex d) -40 °C to +84 °C (Ex nA) : Battery -40 °C to +80 °C : DC Supply
		<b>Enclosure:</b> IP66
ZC	SAEx S/09-036X (South Africa)	<b>Intrinsically Safe:</b> Ex ia IIB T4 Ex tD A20 IP66 T90 °C
		<b>Flameproof:</b> Ex d [ia] IIB T4 Ex tD A21 IP66 T90 °C
		<b>Nonincendive:</b> Ex nA [nL] IIC T4 Ex tD A22 IP66 T90 °C
		<b>Ambient Temperature</b> -40 °C to +70 °C (Ex ia, Ex d) -40 °C to +84 °C (Ex nA) : Battery -40 °C to +80 °C : DC Supply
		<b>Enclosure:</b> IP66
6C	INMETRO NCC 11.0331 X (BRAZIL)	<b>Intrinsically Safe:</b> Ex ia IIB T4 Ga
		<b>Flameproof:</b> Ex d [ia] IIB T4 Ex tb IIIC T90 °C IP66
		<b>Nonincendive:</b> Ex nA [ic] IIC T4 Ex tc IIIC T90 °C IP66
		<b>Ambient Temperature</b> -40 °C to +70 °C (Ex ia, Ex d) -40 °C to +84 °C (Ex nA) : Battery -40 °C to +80 °C : DC Supply
		<b>Enclosure:</b> IP66

## Electrical Data

### Battery

Two in series connected (D size) Lithium batteries, type TL 5930/s manufactured by Tadiran, type XL-205F manufactured by Zeno Energy or type PT-2300H manufactured by Eagle Picher. Additionally for ATEX and IECEx certifications, Lithium Battery SL-2780, manufactured by Tadiran, GmbH may be used.

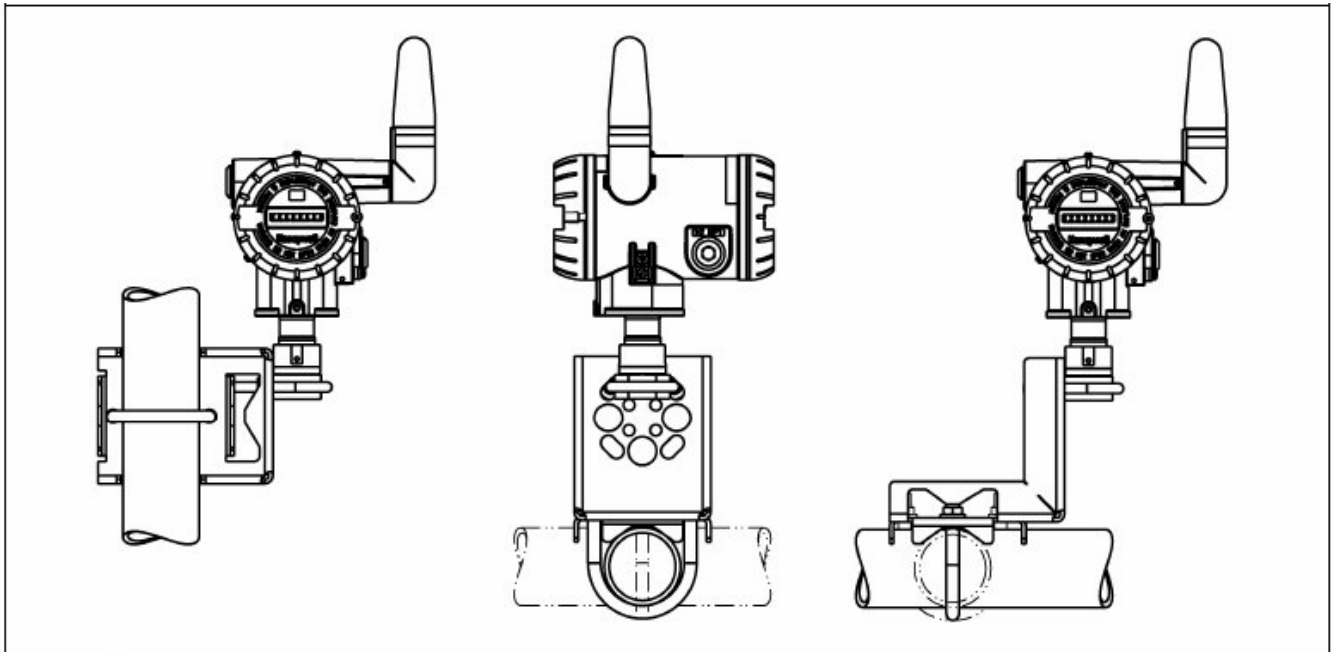
### DC Supply

For Ordinary Locations, Explosion-proof and Non Incendive:  
16.0 V min to 28.0 V max, Current = 100 mA

For Intrinsically Safe:

A Barrier, MTL 728P+ or MTL 7728P+ mounted in a suitable enclosure, or in a non-hazardous location is needed, see Agency Certification drawings in Section 6.

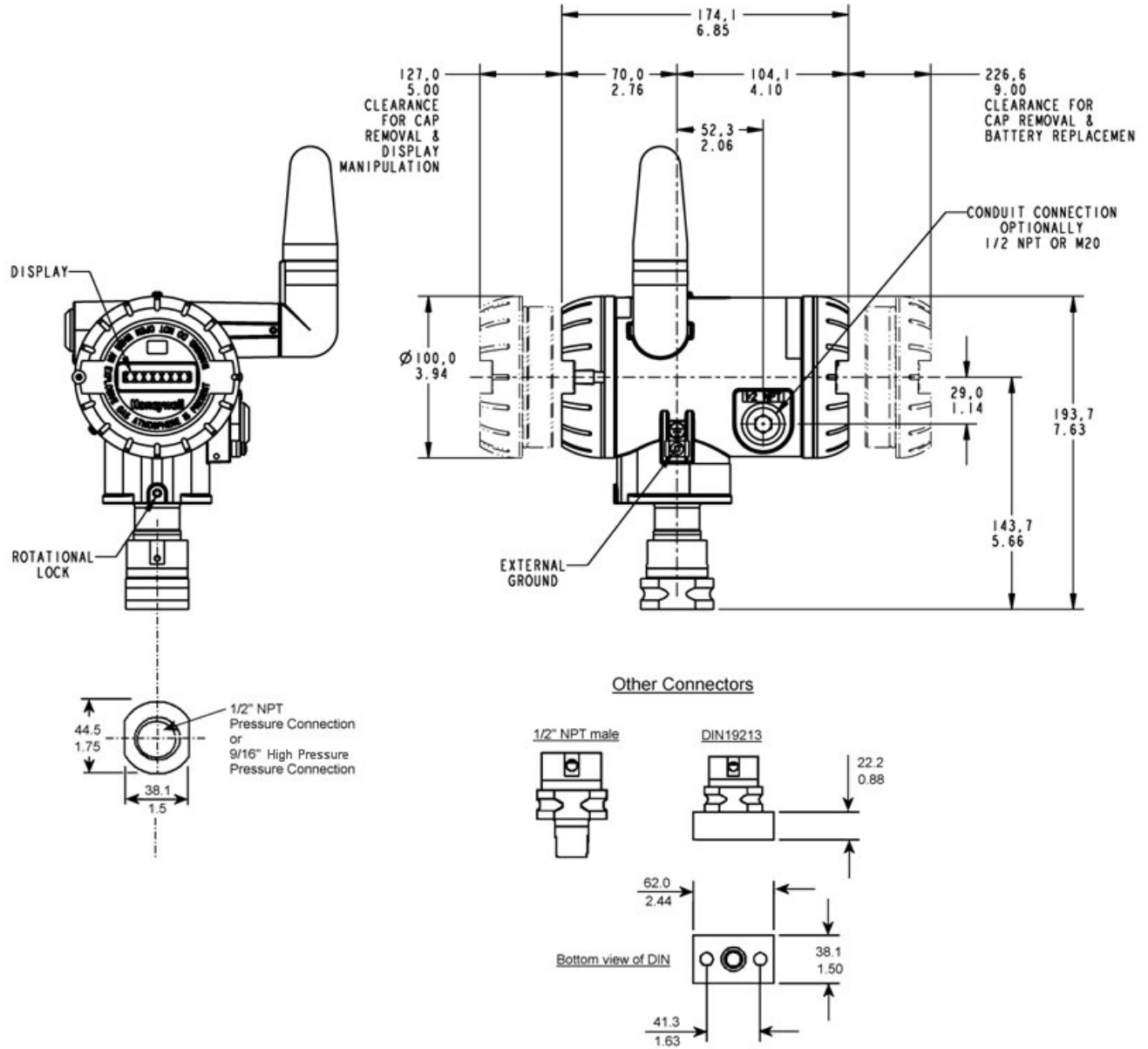
## Mounting



**Figure 2** - Examples of typical mounting positions for in-line models STGW14L, STGW17L, STGW18L and STGW19L. Note that a mounting bracket is not required for in-line models.

**Dimensions**

Reference Dimensions:  $\frac{\text{millimeters}}{\text{inches}}$



**Figure 3 - Typical mounting dimensions for in-line models STGW14L, STGW17L, STGW18L and STGW19L for reference**

## **Options**

### ***Mounting Bracket***

The angle mounting bracket is available in either zinc-plated carbon steel or stainless steel and is suitable for horizontal or vertical mounting on a two inch (50 millimeter) pipe, as well as wall mounting. An optional flat mounting bracket is also available in carbon steel for two inch (50 millimeter) pipe mounting.

### ***Transmitter Configuration***

All configurable parameters are accessible via the OneWireless network via READ/WRITE transactions.

### ***Tagging (Option TG)***

Up to 30 characters can be added on the stainless steel nameplate mounted on the transmitter's electronics housing at no extra cost. A stainless steel wired on tag with additional data of up to 4 lines of 28 characters is also available. The number of characters for tagging includes spaces.

## Sales and Service

For application assistance, current specifications, pricing, or name of the nearest Authorized Distributor, contact one of the offices below.

### ASIA PACIFIC

(TAC)

[hfs-tac-support@honeywell.com](mailto:hfs-tac-support@honeywell.com)

#### Australia

Honeywell Limited  
Phone: +(61) 7-3846 1255  
FAX: +(61) 7-3840 6481  
Toll Free 1300-36-39-36  
Toll Free Fax:  
1300-36-04-70

#### China – PRC - Shanghai

Honeywell China Inc.  
Phone: (86-21) 5257-4568  
Fax: (86-21) 6237-2826

#### Singapore

Honeywell Pte Ltd.  
Phone: +(65) 6580 3278  
Fax: +(65) 6445-3033

#### South Korea

Honeywell Korea Co Ltd  
Phone: +(822) 799 6114  
Fax: +(822) 792 9015

### EMEA

Honeywell Process Solutions,  
Phone: + 80012026455 or +44  
(0)1202645583  
FAX: +44 (0) 1344 655554

Email: (Sales)

[sc-cp-apps-salespa62@honeywell.com](mailto:sc-cp-apps-salespa62@honeywell.com)

or

(TAC)  
[hfs-tac-support@honeywell.com](mailto:hfs-tac-support@honeywell.com)

### NORTH AMERICA

Honeywell Process Solutions,  
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Model Selection Guides are subject to change and are inserted into the specifications as guidance only. Prior to specifying or ordering a model check for the latest revision Model Selection Guides which are published at: <http://hpsweb.honeywell.com/Cultures/en-US/Products/Instrumentation/ProductModelSelectionGuides/default.htm>

**Model Selection Guide (34-XY-16-22)**

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Issue 1  
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# XYR 6000 Wireless Transmitter In-Line Gage & Absolute Pressure Series 100

## Model Selection Guide



**Instructions**

- Select the desired Key Number. The arrow to the right marks the selection available.
- Make one selection from each table, I II and III, using the column below the proper arrow.
- Select as many Table IV options as desired (if no options or approvals are desired, specify 9X).
- A (•) denotes unrestricted availability. A letter denotes restricted availability.  
Restrictions follow Table VI.

Key Number                    I                    II                    III                    IV                    V                    VI  
 [STGW\_ ] - [ ] - [00000] - [ ] - [ ] - [ ] - XXXX

KEY NUMBER		Selection Availability	
	<b>Span</b>		
Gage Pressure	0-20 to 0-500 psig/0-1.4 to 0-35 bar	STGW14L	↓
	0-300 to 0-3000 psig/0-21 to 0-210 bar	STGW17L	↓
In-Line Design	0-500 to 0-6000 psig/0-35 to 0-415 bar	STGW18L	↓
	0-500 to 0-10000 psig/0-35 to 0-690 bar	STGW19L	↓
Abs Pressure	0-20 to 0-500 psia/0-1.4 to 0-35 barA (In-Line Design)	STAW14L	↓

**TABLE I - METER BODY**

Material of Construction	Wetted Adapter Material	Barrier Diaphragms	Selection		
	316 SS	316 SS	316L SS	E _ _	•
316 SS		Hastelloy C <sup>1</sup>	F _ _	•	•
Fill Fluid	Silicone		_ 1 _	•	•
	CTFE		_ 2 _	•	•
Process Connection Configuration	9/16" - 18 High Pressure		_ _ A	•	•
	1/2" NPT (female)		_ _ G	•	•
	1/2" NPT (male)		_ _ H	•	•
	DIN 19213		_ _ D	•	•

**TABLE II**

No Selection	00000	•	•
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<sup>1</sup> Hastelloy® C-276 or UNS N10276

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TABLE III - ANTENNA OPTIONS

		Selection	↓	↓
Antennas	Integral Right-angle, vertical 2dBi	V _ _ _ _	d	d
	Integral Straight, horizontal 2dBi	S _ _ _ _	d	d
	Integral Right-angle, vertical 4dBi	R _ _ _ _	d	d
	Remote Omnidirectional, 8 dBi	M _ _ _ _	e	e
	Remote Directional, 14 dBi	D _ _ _ _	e	e
	Remote Antenna Adapter, Type N Connection	A _ _ _ _	d	d
Cable A for Remote Antenna	None	_ 0 0 _	•	•
	1.0m remote Cable A, Type N (Req'd to connect to XYR 6000)	_ 2 1 _	•	•
	3.0m remote Cable A, Type N (Req'd to connect to XYR 6000)	_ 2 3 _	•	•
	10.0m remote Cable A, Type N (Req'd to connect to XYR 6000)	_ 2 9 _	•	•
Cable B for Remote Antenna w/Accessories*	None	_ _ 0 0	•	•
	Accessory + 1.0m Cable B to Antenna, N - N	_ _ 0 1	•	•
	Accessory + 3.0m Cable B to Antenna, N - N	_ _ 0 3	•	•
	Accessory + 10.0m Cable B to Antenna, N - N	_ _ 1 0	•	•

\*See Supplemental Accessories

TABLE IV - OPTIONS

Radio Options (Must choose a Radio Option)				
2.4 GHz Direct Sequence Spread Spectrum (802.15.4 DSSS)	XD	•	•	b
ISA 100.11a Compliant (2.4 GHz Direct Sequence Spread Spectrum 802.15.4 DSSS-FH)	XS	•	•	
Power Option (Must choose Power Option)				
Battery Holder Only - No Battery Included	00	•	•	b
Battery Power	BA	•	•	
24VDC	DC	•	•	
Transmitter Housing & Electronics Options				
Custom Calibration and I.D. in Memory	CC	•	•	b
Transmitter Configuration and ID in Memory	TC	•	•	
M20 Conduit Thread (1/2" NPT is standard)	A1	f	f	b
1/2" NPT to 3/4" NPT 316 SS Conduit Adapter	A2	g	g	
316 SS <sup>1,2</sup> Electronics Housing - with M20 Conduit Connections	SH	•	•	b
316 SS <sup>1,2</sup> Housing with 1/2" NPT Conduit Connection	A3	•	•	
Stainless Steel Customer Wired-On Tag (4 lines, 28 characters per line, customer supplied information)	TG	•	•	b
Stainless Steel Customer Wired-On Tag (blank)	TB	•	•	
End Cap Warning Label in Spanish	SP	•	•	b
End Cap Warning Label in Portuguese	PG	•	•	
End Cap Warning Label in Italian	TL	•	•	
End Cap Warning Label in German	GE	•	•	
Transmitter Mounting Brackets Options				
Mounting Bracket - Carbon Steel	MB	•	•	b
Mounting Bracket - 304 SS	SB	•	•	
Flat Mounting Bracket - Carbon Steel	FB	•	•	
Services/Calibration/Conformance Options				
User's Manual Paper Copy	UM	•	•	b
Clean Transmitter for Oxygen or Chlorine Service with Certificate	0X	h	h	
Over-Pressure Leak Test with F3392 Certificate	TP	•	•	
Calibration Test Report and Certificate of Conformance (F3399)	F1	•	•	
Certificate of Conformance (F3391)	F3	•	•	
Certificate Options				
Certificate of Origin (F0195)	F5	•	•	b
NACE Certificate (F0198)	F7	•	•	
Material Traceability Certificate per EN 10204 3.1 (FC33341)	FX	•	•	
Warranty Options				
Additional Warranty - 1 year	W1	•	•	b
Additional Warranty - 2 years	W2	•	•	

<sup>1</sup> Supplied as 316 SS or as Grade CF8M, the casting equivalent of 316 SS.

<sup>2</sup> If ordered with Remote Antenna option, Table III Selection M \_ \_ \_ \_ or D \_ \_ \_ \_ , antenna parts are not SS or Marine type cables

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Selection ↓ ↓

Approval Body	Approval Type	Location or Classification			
No hazardous location approvals			9X	•	•
FM	Intrinsically Safe	Class I, II, III, Div. 1, Groups A,B,C,D,E,F,G; T4, Ta ≤ 85°C; Type 4X Class I, AEx ia IIC; T4, Ta ≤ 85°C, Zone 0; IP66	1C	•	•
	Explosion-proof	Class I, Div. 1, Groups A,B,C,D; Cl II, Div. 1, Groups E, F & G; Cl III, Div. 1, T4, Ta ≤ 85°C; Type 4X Class I, AEx d IIC; T4, Ta ≤ 85°C, Zone 1; IP66			
	Nonincendive	Class I, Div. 2, Groups A,B,C,D; T4, Ta ≤ 85°C; Type 4X			
	Non-Sparking	Class I, AEx nA IIC; T4, Ta ≤ 85°C, Zone 2; IP66			
CSA cus	Nonincendive	Nonincendive, Cl I, Div 2, Groups A,B,C & D, Cl II & III, Div 2, Groups F & G, T4 Ta = 85°C	2N	•	•
	Non-Sparking	Class I, ExAEx nA IIC; T4, Ta ≤ 85°C, Zone 2; IP66			
	Intrinsically Safe	Class I, Div. 1, Gp A,B,C,D; Class II, Div 1, Gp E,F,G; Class III, Div 1; T4, Ta ≤ 85°C; Type 4X Class I, ExAEx ia IIC; T4, Ta ≤ 85°C, Zone 0; IP66	2C	•	•
	Explosion-proof	Class I, Div. 1, Groups A,B,C,D; Class II, Div. 1, Groups E, F & G; Class III, Div. 1, T4, Ta ≤ 85°C; Type 4X Class I, ExAEx d IIC; T4, Ta ≤ 85°C, Zone 1; IP66			
	Nonincendive	Class I, Div. 2, Groups A,B,C,D; T4, Ta ≤ 85°C; Type 4X			
	Non-Sparking	Class I, ExAEx nA IIC; T4, Ta ≤ 85°C, Zone 2; IP66			
ATEX	Intrinsically Safe	Ex II 1 GD; Ex ia IIB; T4, Ta ≤ 70°C, Zone 0; IP66 ExtD A20 IP66 T90°C	3U	•	•
	Flameproof	Ex II 2 GD; Ex d [ia] IIB; T4, Ta ≤ 70°C, Zone 1; IP66 ExtD A21 IP66 T90°C	3B	•	•
	Non-Sparking	Ex II 3 GD; Ex nA [nL] IIC; T4, Ta ≤ 84°C, Zone 2 ExtD A22 IP66 T90°C	3Y	•	•
	Intrinsically Safe	Ex II 1 GD; Ex ia IIB; T4, Ta ≤ 70°C, Zone 0; IP66 ExtD A20 IP66 T90°C	3C*	•	•
	Flameproof	Ex II 2 GD; Ex d [ia] IIB; T4, Ta ≤ 70°C, Zone 1; IP66 ExtD A21 IP66 T90°C			
	Non-Sparking	Ex II 3 GD; Ex nA [nL] IIC; T4, Ta ≤ 84°C, Zone 2 ExtD A22 IP66 T90°C			
IECEX Australia & New Zealand	Intrinsically Safe	Ex ia IIB; T4, Ta ≤ 70°C, Zone 0; IP66 ExtD A20 IP66 T90°C	CU	•	•
	Flameproof	Ex d [ia] IIB; T4, Ta ≤ 70°C, Zone 1; IP66 ExtD A21 IP66 T90°C	CB	•	•
	Non-Sparking	Ex nA IIC; T4, Ta ≤ 84°C, Zone 2; IP66 ExtD A22 IP66 T90°C	CY	•	•
	Intrinsically Safe	Ex ia IIB; T4, Ta ≤ 70°C, Zone 0; IP66 ExtD A20 IP66 T90°C	C1*	•	•
	Flameproof	Ex d [ia] IIB; T4, Ta ≤ 70°C, Zone 1; IP66 ExtD A21 IP66 T90°C			
	Non-Sparking	Ex nA [nL] IIC; T4, Ta ≤ 84°C, Zone 2; IP66 ExtD A22 IP66 T90°C			
SAEx South Africa	Intrinsically Safe	Ex ia IIB; T4, Ta ≤ 70°C, Zone 0; IP66 ExtD A20 IP66 T90°C	ZU	•	
	Flameproof	Ex d [ia] IIB; T4, Ta ≤ 70°C, Zone 1; IP66 ExtD A21 IP66 T90°C	ZB	•	
	Non-Sparking	Ex nA [nL] IIC; T4, Ta ≤ 84°C, Zone 2; IP66 ExtD A22 IP66 T90°C	ZY	•	
	Intrinsically Safe	Ex ia IIB; T4, Ta ≤ 70°C, Zone 0; IP66 ExtD A20 IP66 T90°C	ZC*	•	
	Flameproof	Ex d [ia] IIB; T4, Ta ≤ 70°C, Zone 1; IP66 ExtD A21 IP66 T90°C			
	Non-Sparking	Ex nA [nL] IIC; T4, Ta ≤ 84°C, Zone 2; IP66 ExtD A22 IP66 T90°C			
INMETRO Brazil	Intrinsically Safe	Ex ia IIC; T4, Ta ≤ 85°C, Zone 0; IP 66	6C*		
	Flameproof	Ex d IIC; T4, Ta ≤ 85°C, Zone 1; IP 66			
	Non-Sparking	Ex nA IIC; T4, Ta ≤ 85°C, Zone 2; IP 66			

\* The user must determine the type of protection required for installation of the equipment. The user shall then check the box [✓] adjacent to the type of protection used on the equipment certification nameplate. Once a type of protection has been checked on the nameplate, subsequently the equipment shall not be reinstalled using any of the other certification types.

**WARNING** – Division 2 / Zone 2 apparatus may only be connected to processes classified as non-hazardous or Division 2 / Zone 2. Connection to hazardous (flammable or ignition capable) Division 1 / Zone 0, or 1 process is not permitted.



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TABLE V

Country	(Must Choose a Country Code)	Country Code	STGW19L	STGW14L, 17L, 18L, STAW14L
North America, Canada		NA00	•	•
European Union		EU00	•	•
Japan		JP00	m	m
Brazil		BZ00	•	•

TABLE VI

Factory Identification	Selection
XXXX	• •

RESTRICTIONS

Restriction	Available Only With		Not Available With	
	Table	Selection	Table	Selection
b	Select only one option from this group			
d	III	_ 00 _ _ , _ _ _ 00		
e			III	_ 00 _ _
f			IV	SH, A3
g			IV	BA, SH, A1
h	I	_ 2 _		
m	IV	9X		

## Supplemental Accessories & Kits

Description	Part Number
1/2 NPT Socket Plug (ZN Plated CS)	50021832-001
1/2 NPT Certified Conduit Plug (SS)	50021832-002
M20 Certified Conduit Plug (SS)	50000547-001
M20 Conduit Plug (ZN Plated CS)	50000547-002
Surge Diverter*	50018279-090
Lithium Thionyl Chloride Batteries (Qty 2)	50026010-501
Lithium Thionyl Chloride Batteries (Qty 4)	50026010-502
Lithium Thionyl Chloride Batteries (Qty 10)	50026010-503

\* Surge Diverter Accessory supplied with Table III, Selections XXX01, XXX03, XXX10

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*Specifications are subject to change without notice.*

**For More Information**

Learn more about how Honeywell's Wireless Transmitter Gauge Pressure Models can offer reliability and stability, visit our website [www.honeywellprocess.com](http://www.honeywellprocess.com) or contact your Honeywell account manager.

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