

XYR 6000 Wireless Transmitter Series 900 Flange Mounted Liquid Level Models Specifications 34-XY-03-27 August 2012



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 XYR 6000 series transmitters are part of the Honeywell OneWireless system and are ISA100.11a 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 in an intrinsically safe module with an expected lifetime of up to ten years or by an external 24 Vdc power supply. Transmitter range with the integral antenna is 1000' (305 m) under ideal conditions.

| Models | | | | | |
|---------|-----------------------------|-----------------|--|--|--|
| STFW924 | 0 to 400 inH ₂ O | 0 to 1,000 mbar | | | |
| STFW932 | 0 to 100 psi | 0 to 7 bar | | | |
| STFW92F | 0 to 400 inH ₂ O | 0 to 1,000 mbar | | | |
| STFW93F | 0 to 100 psi | 0 to 7 bar | | | |



Figure 1

Honeywell flange-mount transmitters may be installed directly onto a tank flange and are offered with a variety of tank connections to include ANSI flange connections.

Typical applications are high accuracy level measurement in pressurized and un-pressurized vessels in the chemical and hydrocarbon industries. Honeywell flange mount transmitters demonstrate proven reliability in hundreds on installations in a wide variety of industries and applications.

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.

Operating Conditions - All Models

| Parameter | Reference Condition (at zero static) | | Rated Condition | | Operative Limits | | Transportation and Storage | |
|--|--|------|-------------------------|-------------------------|-------------------------|---------------------------------------|-------------------------------|-------------------------|
| | °C | °F | °C | °F | °C | °F | °C | °F |
| Ambient Temperature | 25±1 | 77±2 | -40 to 85 ⁶ | -40 to 158 ⁶ | -40 to 85 ⁶ | -40 to 185 ⁶ | -40 to 85 ⁶ | -40 to 185 ⁶ |
| Ambient Temperature LCD Display Visible | 25±1 | 77±2 | -40 to 85 ⁶ | -40 to 158 ⁶ | -40 to 85 ⁶ | -40 to 185 ⁶ | -40 to 85 ⁶ | -40 to 185 ⁶ |
| Meter Body Temperature | 25±1 | 77±2 | -40 to 110 ¹ | -40 to 230 ¹ | -40 to 125 | -40 to 257 | -40 to 85 ⁶ | -40 to 185 ⁶ |
| Process Interface Temperature | | | | | | | | |
| STFW924, STFW932 only | 25±1 | 77±2 | -40 to 110 ² | -40 to 230 ² | -40 to 175 ³ | -40 to 350 | -40 to 85 ⁶ | -40 to 185 ⁶ |
| Humidity %RH | 10 to 55 | | 0 to 100 | | 0 to 100 | | 0 to 100 | |
| Minimum Pressure mmHg absolute inH ₂ O absolute | Atmospheric Atmospheric | | - | 25 13 | | term) ⁴ term) ⁴ | | |
| | Battery powered 3.6V Lithium thionyl chloride (LiSOCl2) batteries non rechargeable, si There is an option to have the battery fitted or not fitted for shipping. 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. | | ble, size D. | | | | | |
| | | | | | | | | |
| Power | | | • | | | | | |
| | | | ent 100mA. | | | | | |

¹ For model STFW932 with CTFE fill fluid, the rating is –15 to 110°C (5 to 230°F); for models STFW92F and STFW93F with CTFE fill fluid, the rating is –15 to 70°C (5 to 158°F).

Maximum Allowable Working Pressure (MAWP)^{3,4}

(XYR 6000 products are rated to Maximum Allowable Working Pressure. MAWP depends on Approval Agency and transmitter materials of construction.)

| STFW924, STFW932 | Flange Material | Ambient Temperature -29 to 38°C [-20 to 100°F] | Maximum Meterbody Temperature 125°C [257°F] | Process Interface Temperature 175°C [350°F] |
|---|--------------------------------------|---|--|--|
| ANSI Class 150 | Carbon Steel | 285 [19.6] | 245 [16.9] | 215 [14.8] |
| psi [bar] | 304 S.S. | 275 [19.0] | 218 [15.0] | 198 [13.7] |
| | 316 S.S. | 275 [19.0] | 225 [15.5] | 205 [14.1] |
| ANSI Class 300 psi [bar] | Carbon Steel 304 S.S. 316 S.S. | 740 [51.0] 720 [49.6] 720 [49.6] | 668 [46.0] 570 [39.3] 590 [40.7] | 645 [44.5] 518 [35.7] 538 [37.1] |
| DN PN40 psi [bar] | Carbon Steel 304 S.S. 316 S.S. | 580 [40.0] ¹ 534 [36.8] ¹ 534 [36.8] ¹ | 574 [39.6] 419 [28.9] 434 [29.9] | 559 [38.5] 385 [26.5] 399 [27.5] |
| STFW92F, STFW93F ANSI Class 150 psi [bar] | 316L Stainless Steel | 230 [15.9] | 185 [12.8] | No rating at this temp |

 $^{^{\}rm 1}$ Ambient Temperature for DN PN40 is –10 to 50 C [14 to 122 F]

 $^{^2}$ For model STFW932 with CTFE fill fluid, the rating is –15 to 110 $^{\circ}$ C (5 to 230 $^{\circ}$ F).

 $^{^3}$ For CTFE fill fluid, the maximum temperature rating is 150 °C (300 °F).

Short term equals 2 hours at 70°C (158°F)

⁵ 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.

⁶ 24V power option rated 80°C (176°F)

 $^{^3\,}$ MAWP applies for temperature range -40 to 125°C.

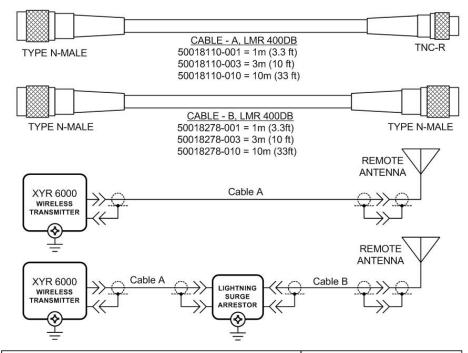
⁴ Consult factory for MAWP of XYR 6000 transmitters with CSA approval.

Wireless Specifications

| Parameter | Description |
|--|---|
| Wireless | 2,400 to 2,483.5 MHz (2.4 GHz) Industrial, Scientific and Medical (ISM) band |
| Communication | DSSS Selection – Direct Sequential Spread Spectrum per FCC 15.247 / IEEE 802.15.4–2006. ISA100.11a Compliant (2.4 GHz Direct Sequence Spread Spectrum 802.15.4 DSSS-FH) |
| | Every data packet transmitted in either direction is verified (CRC check) and acknowledged by the receiving device. |
| | USA – FCC Certified Canada – IC Certified European Union – RTTE/ETSI Conformity Japan – Ministry of Internal Affairs and Communications Certified (DSSS Selection only) |
| ISA100.11a RF Transmitter Power (Optional) | 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. |
| | EU Selection – 10 mW (10.0 dBm) maximum EIRP including antenna per RTTE/ETSI for EU locations. |
| DSSS RF Transmitter Power (Optional) | 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. |
| | EU Selection – 10 mW (10.0 dBm) maximum EIRP including antenna per RTTE/ETSI for EU locations. |
| | JP Selection – 12.14 dBm/MHz [32mW (15.14 dbm)] maximum EIRP including antenna for Japanese locations. |
| Data | PV Publish Cycle Time: Configurable as 1, 5, 10, 30 or 60 seconds Rate: 250 Kbps |
| Antennas | Integral – 2 dBi omnidirectional monopole |
| | Integral – 4 dBi omnidirectional monopole |
| | Remote – 8 dBi omnidirectional monopole with up to 20 m cable and lightning surge arrester |
| | Remote – 14 dBi directional parabolic with up to 20 m cable and lightning surge arrester. |
| Signal Range | 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.* |
| | 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.) |
| Routing vs Non- Routing | Unit can be set as a Field Routing or non-Field Routing device; the number of routing devices is set by the system manager. |
| | 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. |

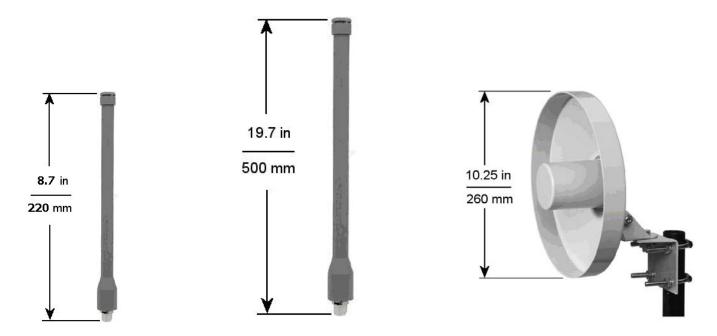
^{*}Actual range will vary depending on antennas, cables and site topography.

Remote antenna cables



| CAB | LIGHTNING SURGE ARRESTOR | | |
|-------------------|--------------------------|------------|--------------------|
| CABLE A, B LENGTH | CAPACITANCE | INDUCTANCE | PARAMETERS |
| 1 m | 78.4 pF | 0.2 µH | CAPACITANCE = 1 pF |
| 3 m | 235.2 pF | 0.6 µH | INDUCTANCE = 10 nH |
| 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 STFW924 (0 to 400 inH2O/1,000 mbar)

| Parameter | Description | | |
|---|--|--|--|
| Upper Range Limit inH ₂ O mbar | 400 (39.2°F/4°C is standard reference temperature for inH2O range.) 1,000 | | |
| Minimum Span inH ₂ O mbar | 10 25 | | |
| Zero Elevation and Suppression | No limit except minimum span within ±100% URL. Specifications valid from –100% to + 100% URL. | | |
| Accuracy (Reference – Includes combined effects of linearity, hysteresis, and repeatability) | ±0.075% of calibrated span or upper range value (URV), whichever is greater, terminal based. For URV below reference point (25 inH ₂ O), accuracy equals: | | |
| Accuracy includes residual error after averaging successive readings. | $\pm \left[0.025 + 0.05 \left(\frac{25 \text{ inH}_2\text{O}}{\text{span inH}_2\text{O}}\right)\right] \text{ or } \pm \left[0.025 + 0.05 \left(\frac{62.5 \text{ mbar}}{\text{span mbar}}\right)\right] \text{ in \% of span}$ | | |
| Zero Temperature Effect per 28°C (50°F) | $\pm 0.30\%$ of span. For span below reference point (50 inH ₂ O), effect equals: $\pm 0.30 \left(\frac{50 \text{ inH}_2\text{O}}{\text{span inH}_2\text{O}}\right)$ or $\pm 0.30 \left(\frac{125 \text{ mbar}}{\text{span mbar}}\right)$ in % of span | | |
| Combined Zero and Span Temperature Effect per 28°C (50°F) | | | |
| Zero Static Pressure Effect per 300 psi (20 bar) | $ \begin{array}{l} \pm 0.2125\% \text{ of span.} \\ \text{For URV below reference point (50 inH}_2\text{O}), \text{ effect equals:} \\ \pm \left[0.0125 + 0.20 \left(\frac{50 \text{ inH}}_2\text{O}}{\text{span inH}_2\text{O}}\right)\right] \text{ or } \pm \left[0.0125 + 0.20 \left(\frac{125 \text{ mbar}}{\text{span mbar}}\right)\right] \text{ in } \% \text{ of span} \\ \end{array} $ | | |
| Combined Zero and Span Static Pressure Effect per 300 psi (20 bar) | $ \begin{array}{l} \pm 0.40\% \text{ of span.} \\ \text{For URV below reference point (50 inH}_2\text{O}), \text{ effect equals:} \\ \pm \left[0.20 + 0.20 \left(\frac{50 \text{ inH}_2\text{O}}{\text{span inH}_2\text{O}}\right)\right] \text{ or } \pm \left[0.20 + 0.20 \left(\frac{125 \text{ mbar}}{\text{span mbar}}\right)\right] \text{ in } \% \text{ of span} \\ \end{array} $ | | |

^{*} Performance specifications are based on reference conditions of 25°C (77°F), zero (0) static pressure, 10 to 55% RH, and 316L Stainless Steel barrier diaphragm.

Performance Under Rated Conditions* - Model STFW932 (0 to 100 psi/7 bar)

| Parameter | Description | |
|--|--|--|
| Upper Range Limit psi bar | 100 7 | |
| Minimum Span psi bar | 5 0.34 | |
| Zero Elevation and Suppression | No limit except minimum span within ±100% URL. Specifications valid from –100% to + 100% URL. | |
| Accuracy (Reference – Includes combined effects of linearity, hysteresis, and repeatability) | ±0.075% of calibrated span or upper range value (URV), whichever is greater, terminal based. For URV below reference point (20 psi), accuracy equals: | |
| Accuracy includes residual error after averaging successive readings. • | $\pm \left[0.025 + 0.05 \left(\frac{20 \text{ psi}}{\text{span psi}}\right)\right] \text{ or } \pm \left[0.025 + 0.05 \left(\frac{1.4 \text{ mbar}}{\text{span mbar}}\right)\right] \text{ in \% of span}$ | |
| Zero Temperature Effect per 28°C (50°F) | $\pm 0.30\%$ of span. For URV below reference point (30 psi), effect equals: $\pm 0.30 \left(\frac{30 \text{ psi}}{\text{span psi}} \right)$ or $\pm 0.30 \left(\frac{2 \text{ bar}}{\text{span bar}} \right)$ in % of span | |
| Combined Zero and Span Temperature Effect per 28°C (50°F) | $\pm 0.475\%$ of span. For URV below reference point (30 psi), effect equals: $\pm \left[0.225 + 0.25 \left(\frac{30 \text{ psi}}{\text{span psi}}\right)\right] \text{ or } \pm \left[0.225 + 0.25 \left(\frac{2 \text{ bar}}{\text{span bar}}\right)\right] \text{ in } \% \text{ of span}$ | |
| Zero Static Pressure Effect per 300 psi (20 bar) | $ \begin{array}{l} \pm 0.2125\% \text{ of span.} \\ \text{For URV below reference point (30 psi), effect equals:} \\ \pm \left[0.0125 + 0.20 \left(\frac{30 \text{ psi}}{\text{span psi}} \right) \right] \text{ or } \pm \left[0.0125 + 0.20 \left(\frac{2 \text{ bar}}{\text{span bar}} \right) \right] \text{ in \% of span} \\ \end{array} $ | |
| Span Static Pressure Effect per 300 psi (20 bar) | $ \begin{array}{ll} \pm 0.40\% \text{ of span.} \\ \text{For URV below reference point (30 psi), effect equals:} \\ \pm \left[0.20 + 0.20 \left(\frac{30 \text{ psi}}{\text{span psi}} \right) \right] \text{ or } \pm \left[0.20 + 0.20 \left(\frac{2 \text{ bar}}{\text{span bar}} \right) \right] \text{ in } \% \text{ of span} \\ \end{array} $ | |

^{*} Performance specifications are based on reference conditions of 25°C (77°F), zero (0) static pressure, 10 to 55% RH, and 316L Stainless Steel barrier diaphragm.

Performance Under Rated Conditions* - Model STFW92F (0 to 400 inH2O/25 mbar)

| Parameter | Description | | |
|---|--|--|--|
| Upper Range Limit inH ₂ O mbar | 400 (39.2°F/4°C is standard reference temperature for inH2O range.) 1000 | | |
| Minimum Span inH ₂ O mbar | 10 25 | | |
| Zero Elevation and Suppression | -5 to +100% URL | | |
| Accuracy (Reference – Includes combined effects of linearity, hysteresis, and repeatability) • Accuracy includes residual error after averaging successive readings. | $ \begin{array}{l} \pm 0.075\% \text{ of calibrated span or upper range value (URV), whichever is greater, terminal based.} \\ \text{For URV below reference point (25 inH2O), accuracy equals:} \\ \pm \left[0.025 + 0.05 \left(\frac{25 \text{ inH}_2\text{O}}{\text{span inH}_2\text{O}} \right) \right] \text{ or } \pm \left[0.025 + 0.05 \left(\frac{62.5 \text{ mbar}}{\text{span mbar}} \right) \right] \text{ in \% of span} \\ \end{array} $ | | |
| Zero Temperature Effect per 28°C (50°F) | ### ### ############################# | | |
| Combined Zero and Span Temperature Effect per 28°C (50°F) | $ \begin{array}{l} \pm 0.225\% \text{ of span.} \\ \text{For URV below reference point (50 inH2O), effect equals:} \\ \pm \left[0.075 + 0.15 \left(\frac{50 \text{ inH}_2\text{O}}{\text{span inH}_2\text{O}} \right) \right] \text{ or } \pm \left[0.075 + 0.15 \left(\frac{125 \text{ mbar}}{\text{span mbar}} \right) \right] \text{ in \% of span} \\ \end{array} $ | | |
| Zero Static Pressure Effect per 1,000 psi (70 bar) | ±0.1625% of span. For URV below reference point (50 inH ₂ O), effect equals: | | |
| | $\pm \left[0.0125 + 0.15 \left(\frac{50 \text{ inH}_2\text{O}}{\text{span inH}_2\text{O}} \right) \right] \text{ or } \pm \left[0.0125 + 0.15 \left(\frac{125 \text{ mbar}}{\text{span mbar}} \right) \right] \text{ in \% of span}$ | | |
| Combined Zero and Span Static Pressure Effect per 1,000 psi (70 bar) | $ \begin{array}{l} \pm 0.30\% \text{ of span.} \\ \text{For URV below reference point (50 inH}_2\text{O), effect equals:} \\ \pm \left[0.15 + 0.15 \left(\frac{50 \text{ inH}_2\text{O}}{\text{span inH}_2\text{O}}\right)\right] \text{ or } \pm \left[0.15 + 0.15 \left(\frac{125 \text{ mbar}}{\text{span mbar}}\right)\right] \text{ in \% of span} \\ \end{array} $ | | |

^{*} Performance specifications are based on reference conditions of 25°C (77°F), zero (0) static pressure, 10 to 55% RH, and 316 Stainless Steel barrier diaphragm.

Performance Under Rated Conditions* - Model STFW93F (0 to 100 psi/7 bar)

| Parameter | | Description | | |
|---|------------|---|--|--|
| Upper Range Limit | psi bar | 100 7 | | |
| Minimum Span | psi bar | 5 0.34 | | |
| Zero Elevation and Suppre | ession | -5 to +100% URL | | |
| Accuracy (Reference – Includes combined effects of linearity, hysteresis, and repeatability) • Accuracy includes residual error after averaging successive readings. | | $ \begin{array}{l} \pm 0.075\% \text{ of calibrated span or upper range value (URV), whichever is greater, terminal based.} \\ \text{For URV below reference point (20 psi), accuracy equals:} \\ \pm \left[0.025 + 0.05 \left(\frac{20 \text{ psi}}{\text{span psi}} \right) \right] \text{ or } \pm \left[0.025 + 0.05 \left(\frac{1.4 \text{ mbar}}{\text{span mbar}} \right) \right] \text{ in \% of span} \\ \end{array} $ | | |
| Zero Temperature Effect p 28°C (50°F) | er | $\pm 0.15\%$ of span. For URV below reference point (30 psi), effect equals: $\pm 0.15 \left(\frac{30 \text{ psi}}{\text{span psi}} \right)$ or $\pm 0.15 \left(\frac{2 \text{ bar}}{\text{span bar}} \right)$ in % of span | | |
| Combined Zero and Span Temperature Effect per 28 (50°F) | °C | $\pm 0.225\%$ of span. For URV below reference point (30 psi), effect equals: $\pm \left[0.075 + 0.15 \left(\frac{30 \text{ psi}}{\text{span psi}} \right) \right] \text{ or } \pm \left[0.075 + 0.15 \left(\frac{2 \text{ bar}}{\text{span bar}} \right) \right] \text{ in } \% \text{ of span}$ | | |
| Zero Static Pressure Effec 1,000 psi (70 bar) | t per | $\pm 0.1625\%$ of span. For URV below reference point (30 psi), effect equals: $\pm \left[0.0125 + 0.15 \left(\frac{30 \text{ psi}}{\text{span psi}}\right)\right] \text{ or } \pm \left[0.0125 + 0.15 \left(\frac{2 \text{ bar}}{\text{span bar}}\right)\right] \text{ in \% of span}$ | | |
| Combined Zero and Span Pressure Effect per 1,000 p bar) | | | | |

^{*} Performance specifications are based on reference conditions of 25°C (77°F), zero (0) static pressure, 10 to 55% RH, and 316L Stainless Steel barrier diaphragm.

Performance under Rated Conditions - General for all Models

| Parameter | Description |
|--------------------------|---|
| Lightning Surge Arrester | Frequency range: 0 – 3 GHz, 50 Ohms, VSWR = 1:1.3 Max, Insertion Loss = 0.4 dB |
| (Remote antenna only) | Connectors Type N Female, Max, Gas Tube Element: 90 V ± 20%, Impulse |
| | Breakdown Voltage = 1,000 V ± 20%, Maximum Withstand Current = 5 KA. |
| CE Conformity | 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 V1.7.1, EN301 893 V1.3.1, EN301 489-17 V1.2.1, EN301 489-1 V1.6.1 and EN61326-1 (1st Edition, 2002-02, Industrial Locations). Electrical Equipment for Measurement, Control and Laboratory Use – EMC Requirements. |
| Hazardous Location | Certifications: See the Model Selection Guide on page 19. |

Physical and Approval Bodies

| Parameter Parameter | Description | | |
|---|---|--|--|
| Barrier Diaphragms Material (Wetted) | 316L SS, Hastelloy [®] C-276 ² | | |
| Gasket Ring Material (Wetted) | 316/316L SS, Hastelloy [®] C-276* ² | | |
| Extension Tube Material (Wetted) | 316 SS | | |
| Process Head and Adapter Flange Material | 316 ⁴ SS, Carbon Steel (zinc-plated) ⁵ , Hastelloy [®] C-276* ⁶ | | |
| Process Head Gaskets | Teflon® is standard or Viton® is optional | | |
| Meter Body Bolting | Carbon Steel (zinc plated) or 316 SS (NACE) bolts. | | |
| Mounting Flange STFW924, STFW932 STFW92F, STFW93F | Flush or Extended Diaphragm: Zinc Chromate plated Carbon Steel ⁵ , 304 SS, or 316 SS (NOTE: Mounting Flange is process wetted.) | | |
| Vent/Drain Valves & Plugs 1 | 316 SS, Hastelloy [®] C-276 ² | | |
| Fill Fluid | Silicone DC® 200 oil or CTFE (Chlorotrifluoroethylene) | | |
| Electronic Housing | Epoxy-Polyester hybrid paint. Low Copper-Aluminum. Meets NEMA 4X (watertight) and NEMA 7 (explosion proof). Stainless steel optional. | | |
| Process Connections | | | |
| All Models | Process Head: 1/4-inch NPT; 1/2-inch NPT with adapter, standard option. | | |
| STFW924, STFW932 | Flange: 2, 3 or 4-inch Class 150 or 300 ANSI; DN50-PN40, DN80-PN40 or DN100-PN40 DIN flange. | | |
| STFW92F, STFW93F | Extended Diaphragm: 2, 4, or 6 inches (50, 101, 152 mm) long. 2 or 3-inch, Class 150 ANSI flange. | | |
| Mounting | See Figure 3 for typical flange mounting arrangement. | | |
| Dimensions | See Figures 4, 5, and 6. | | |
| Net Weight | Flush or Extended Model: | | |
| STFW9xF STFW9xx | 17 lbs (7.7 kg) for 2" 150# flanged head, 21 lbs (9.5 kg) for 3" 150# flanged head ⁸ 23 to 36 lbs (10.5 kg to 16.4 kg) depending on flange size ⁸ | | |

^{*} Flush design only.

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.

² Hastelloy[®] C-276 or UNS N10276

⁴ Supplied as 316 SS or as Grade CF8M, the casting equivalent of 316 SS.

⁵ Carbon Steel heads are zinc-plated and not recommended for water service due to hydrogen migration. For that service, use 316 stainless steel wetted

Process Heads.

Hastelloy® C-276 or UNS N10276. Supplied as indicated or as Grade CW12MW, the casting equivalent of Hastelloy® C-276

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)

Certifications

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

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

^{*} At time of Printing Certification was pending

Electrical Data

Battery

Two in series connected (D size) Lithium batteries, type 5930 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.

| | The XYR 6000 Wireless t Pressure Transmitters are in conformity with the essential requirements of the Pressure Equipment Directive. |
|--|--|
| European Pressure | Honeywell XYR 6000 Wireless Pressure Transmitters are designed and manufactured in accordance with the applicable portions of Annex I, Essential Safety Requirements, and sound engineering practices. These transmitters have no pressurized internal volume, or have a pressurized internal volume rated less than 200 bar (2,900 psig), and/or have a maximum volume of less than 0.1 liter (Article 3, 1.1.(a) first indent, Group 1 fluids). Therefore, these transmitters are not subject to the essential requirements of the directive 97/23/EC (PED, Annex I) and shall not have the CE mark applied. |
| Equipment Directive (PED) (97/23/EC) | For transmitters rated > 200 bar (2,900 psig) < 1,000 bar (14,500 psig) Honeywell maintains a technical file in accordance with Annex III, Module A, (internal production control) when the CE mark is required. Transmitter Attachments: Diaphragm Seals, Process Flanges and Manifolds comply with Sound Engineering Practice. |
| | 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. |
| | A formal statement from TÜV Industry Service Group of TÜV America, Inc., a division of TÜV Süddeutschland, a Notified Body regarding the Pressure Equipment Directive, can be found at www.honeywell.com. A hard copy may be obtained by contacting a Honeywell representative. |
| Dual Seal Certification | Dual Seal Certification based on ANSI/NFPA 70-202 and ANSI/ISA 12.27.01 requirements without the use of additional seal protection elements. |
| Recommended Frequency of Calibration | Honeywell recommends verifying the calibration of these devices once every four years. |

Hastelloy® C-276 is a registered trademark of Haynes International. XYR 6000® and Experion® are registered trademarks of Honeywell International Inc. Viton® is a registered trademark of DuPont Teflon® is a registered trademark of DuPont. DC® 200 is a registered trademark of Dow Corning. FM Approvals® is a service mark of FM Global

Mounting

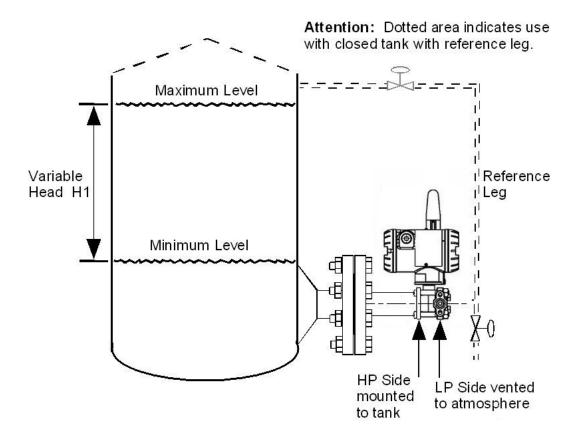


Figure 2—Typical mounting arrangement for flange mounted liquid level transmitter.

Reference Dimensions

millimeters inches

Figure 3—Approximate mounting dimensions for STFW924 and STFW932 flush diaphragm type.

Reference Dimensions

Figure 4—Approximate mounting dimensions for STFW924 and STFW932 extended diaphragm type.

Reference Dimensions

Figure 5—Approximate mounting dimensions for STFW92F and STFW93F pseudo flange type.

Options

• Tagging (Option TG)

Up to 30 characters can be added on the stainless steel nameplate mounted on the transmitter's electronics housing. Note that a separate nameplate on the meter body contains the serial number and body-related data. 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.

Transmitter Configuration (Options TC)

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

Custom Calibration and ID in Memory (Option CC)

The factory can calibrate any range within the scope of the transmitter's range.

Ordering information

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-tacsupport@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)
<u>sc-cp-apps-</u>
<u>salespa62@honeywell.com</u>

or

(TAC) hfs-tac-

support@honeywell.com

NORTH AMERICA

Honeywell Process Solutions, Phone: 1-800-423-9883 Or 1-800-343-0228

Email: (Sales)
ask-ssc@honeywell.com

or (TAC) <u>hfs-tac-</u>

support@honeywell.com

SOUTH AMERICA

Honeywell do Brasil & Cia Phone: +(55-11) 7266-1900 FAX: +(55-11) 7266-1905

Email: (Sales)

ask-ssc@honeywell.com

or (TAC) <u>hfs-tac-</u>

support@honeywell.com

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: https://www.honeywellprocess.com/en-US/explore/products/wireless/input-output-devices/xyr-6000/Pages/default.aspx

Model Selection Guide (34-XY-16-24)

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XYR 6000 Wireless Transmitter Flange Mounted Liquid Level Series 900





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

| Span | Selection | Avail. |
|---|-----------|--------------|
| 0-10 to 0-400 inH ₂ 0/0-24.9 to 0-1000 mbar Compound Characterized | STFW924 | ₩ |
| 0-5 to 0-100 psi/0-0.34 to 0-7 bar Compound Characterized | STFW932 | ↓ |
| 0-10 to 0-400 inH ₂ 0/0-24.9 to 0-1,000 mbar | STFW92F | \downarrow |
| 0-5 to 0-100 psi/0-0.34 to 0-7 bar | STFW93F | ↓ |

TABLE I - METER BODY

| | Design | Reference Head | Vent/Drain Valve on Ref. Head ² | Barrier Diaphragm (wetted) | | Diaphragm Plate (wetted) | Extension (wetted) | Sel. | | | |
|-------------------------------------|-----------------------------------|---------------------|--|--|--------------------------------------|--------------------------------|--------------------|--------|---|--------|---|
| | | Carbon | | 316L SS | | 316L SS | | Α | • | | |
| | | Steel 1 | | Hast C ³ | | 316 SS | | W | • | | |
| | · | | 316 SS | Hast C ³ | | Hast C ³ | | B | • | Ш | |
| | Flush | | | 316L SS | | 316L SS | N/A | E | • | | |
| | | 316 SS ⁵ | | Hast C ³ Hast C ³ | | 316L SS Hast C ³ | | X F | • | | |
| | | Hast C 3, 6 | Hast C 3 | Hast C ³ | | Hast C ³ | | Ј | • | | |
| Materials | | Carbon | riast o | 316L SS | | 11051 0 | | M | • | | |
| Materials | Extended | Steel 1 | 316 SS | Hast C ³ | | 316L SS | 316 SS | N | • | | |
| | | 316 SS ⁵ | | 316L SS | | | | R | • | | |
| | | 310 33 | | Hast C 3 | | | | S | • | | |
| | | Carbon | bon | 316L SS | | | | | Α | | • |
| | Pseudo | | Steel 1 | 316 SS | Hast C 3 | | N/A | N/A | B | | • |
| | Flange | 316 SS ⁵ | 01000 | 316L SS | | 1471 | 1477 | E | | • | |
| | | | Hast C 3 | | | | F | | • | | |
| Fill Fluid (Meter Body & Flange) | DC [®] 200 Silio CTFE | | | 0 Silicone TFF | | | | _1_ | • | : | |
| Dody & Flange) | Reference Head | | Flange | | | | | | | | |
| Process Connection | 1/4" NPT | | | | | gh Pressure S ow Pressure S | | A C | • | • | |
| | 1/2" NPT (with Adapter) | | | | High Pressure Side Low Pressure Side | | | H K | t | t t | |

Carbon Steel heads are zinc-plated and not recommended for water service due to hydrogen migration. For that service, use the 316 stainless steel Wetted Reference Head.

Vent/Drains are sealed with Teflon® or PTFE.

³ Hastellov[®] C-276 or UNS N10276

⁵ Supplied as 316SS or as Grade CF8M, the casting equivalent of 316SS

Supplied as indicated or as Grade CW12MW, the casting equivalent of Hastellov® C-276

STFW9xx

Availability

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Flange Threaded Nut 2F 24 TABLE II - FLANGE ASSEMBLY Selection 32 3F Material **Ring Material** No Selection None None 0 • Flang 3" ANSI Class 150 • 3" ANSI Class 300 _2___ DN80-PN40 DIN _3___ 4" ANSI Class 150 Carbon Steel Carbon Steel 4" ANSI Class 300 (non-wetted) (non-wetted) DN100-PN40 DIN _6___ 2" ANSI Class 150 _7___ 2" ANSI Class 300 _8___ DN50-PN40 DIN 9 3" ANSI Class 150 _A___ • 3" ANSI Class 300 _B___ _____ DN80-PN40 DIN 4" ANSI Class 150 _D___ 304 SS 304 SS 4" ANSI Class 300 _E___ (non-wetted) (non-wetted) DN100-PN40 DIN _F___ 2" ANSI Class 150 _Q___ 2" ANSI Class 300 DN50-PN40 DIN V 3" ANSI Class 150 _H___ • 3" ANSI Class 300 DN80-PN40 DIN 4" ANSI Class 150 304 SS 316 SS 4" ANSI Class 300 (non-wetted) (non-wetted) DN100-PN40 DIN _N___ 2" ANSI Class 150 _W___ 2" ANSI Class 300 DN50-PN40 DIN Pseudo Flange on Standard DP 2" ANSI Class 150 without _S___ Vent/Drain 316L SS Not Applicable 2" ANSI Class 150 with (wetted) _T___ • Vent/Drain 3" ANSI Class 150 without _P___ 316L SS Vent/Drain Not Applicable (wetted) 3" ANSI Class 150 with _R___ • Vent/Drain No Selection 0 • 316L SS __1_ Gasket Ring (wetted) Flush Design Hastelloy® C-2763 2 Extended Design 316/316L SS 5 v No Selection 0 Flush F h Diameter Length Extension (wetted) 2 inches C_ 1.87 Inches (for 2", 3" or 4 " spud) 4 inches D_ 6 inches Ε No Selection No Selection •

³ Hastelloy[®] C-276 or UNS N10276

Δvailahility

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| Page 3 of 5 | | , | wana | DIIILY |
|---------------------|---|-----------|------|--------|
| | | STFW9xx | • | * |
| | | | 24 | 2F |
| TABLE III - ANTENNA | OPTIONS | Selection | 32 | 3F |
| Antenna's | 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 | е | e |
| | Remote Directional, 14 dBi | D | е | е |
| | Remote Antenna Adapter, Type N Connection | A | d | d |
| Cable A for | None | _00 | • | • |
| Remote Antenna | 1.0m remote Cable A, Type N (Req'd to connect to XYR 6000) | _21 | • | • |
| | 3.0m remote Cable A, Type N (Req'd to connect to XYR 6000) | _23 | • | • |
| | 10.0m remote Cable A, Type N (Req'd to connect to XYR 6000) | _29 | • | • |
| Cable B | None | 00 | • | • |
| for Remote Antenna | Accessory + 1.0m Cable B to Antenna, N - N | 01 | • | • |
| w/Accessories* | Accessory + 3.0m Cable B to Antenna, N - N | 03 | • | • |
| | Accessory + 10.0m Cable B to Antenna, N - N | 10 | • | • |

| TABLE IV - OPTIONS Radio Options (Must Choose a Radio Option) 2.4 GHz Direct Sequence Spread Spectrum (802.15.4 DSSS-FH) 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 Battery Power 24VDC Transmitter Housing & Electronics Options Custom Calibration and I.D. in Memory Transmitter Configuration and I.D. in Memory TCM M20 Conduit Thread (1/2" NPT is standard) 1/2" NPT to 3/4" NPT 316 SS Conduit Adapter 316 SS ^{5,9} Flectronics Housing - with M20 Conduit Connections Stainless Steel Customer Wired-On Tag (blank) End Cap Warning Label in Spanish End Cap Warning Label in Spanish End Cap Warning Label in Portuguese End Cap Warning Label in Italian End Cap Warning Label in German Meter Body Options (Carbon Steel standard) NACE A286 SS Bolts B7M Bolts B7 316 SS ⁵ Adapter Flange - 1/2" NPT with A36 SS Bolts 316 SS ⁵ Adapter Flange - 1/2" NPT with NACE A286 SS Bolts 316 SS ⁵ Adapter Flange - 1/2" NPT with B7M Bolts Hastelloy® C-276 ^{3,6} Adapter Flange - 1/2" NPT with CS Bolts | n 32 | | b b b b b |
|---|---|---------------------------------------|---------------------------------------|
| 2.4 GHz Direct Sequence Spread Spectrum (802.15.4 DSSS-FH) ISA 100.11a Compliant (2.4 GHz Direct Sequence Spread Spectrum 802.15.4 DSSS-FH) Battery Holder Only - No Battery Included Battery Power 24VDC Custom Calibration and I.D. in Memory Custom Calibration and I.D. in Memory Transmitter Housing & Electronics Options Custom Calibration and I.D. in Memory TC M20 Conduit Thread (1/2" NPT is standard) 1/2" NPT to 3/4" NPT 316 SS Conduit Adapter 316 SS ^{5,9} Housing with 1/2" NPT Conduit Connection 316 SS ^{5,9} Electronics Housing - with M20 Conduit Connections Stainless Steel Customer Wired-On Tag (4 lines, 28 characters per line, customer supplied information) Stainless Steel Customer Wired-On Tag (blank) End Cap Warning Label in Spanish End Cap Warning Label in Portuguese End Cap Warning Label in Fortuguese End Cap Warning Label in German Meter Body Options (Carbon Steel standard) NACE A286 SS Bolts 316 SS ⁵ Adapter Flange - 1/2" NPT with CS Bolts 316 SS ⁵ Adapter Flange - 1/2" NPT with NACE A286 SS Bolts 316 SS ⁵ Adapter Flange - 1/2" NPT with NACE A286 SS Bolts 316 SS ⁵ Adapter Flange - 1/2" NPT with NACE A286 SS Bolts 316 SS ⁵ Adapter Flange - 1/2" NPT with B7M Bolts SD CC (Must Choose Power Option (A Usst Choose Power Option AD A24 DSS - 4 DSSS | • • • • • • • • • • • • • • • • • • • | | b b b b |
| Power Option Battery Holder Only - No Battery Included 00 Battery Power BA 24VDC DC DC | • • • • • • • • • • • • • • • • • • • | • • • • • • • • • • • • • • • • • • • | b b b b b |
| Battery Holder Only - No Battery Included Battery Power 24VDC DC Transmitter Housing & Electronics Options Custom Calibration and I.D. in Memory Transmitter Configuration and I.D. in Memory M20 Conduit Thread (1/2" NPT is standard) 1/2" NPT to 3/4" NPT 316 SS Conduit Adapter 316 SS ^{5,9} Housina with 1/2" NPT Conduit Connection 316 SS ^{5,9} Housina with 1/2" NPT Conduit Connection 316 SS ^{5,9} Electronics Housina - with M20 Conduit Connections SH Stainless Steel Customer Wired-On Tag (4 lines, 28 characters per line, customer supplied information) Stainless Steel Customer Wired-On Tag (blank) TB End Cap Warning Label in Spanish End Cap Warning Label in Portuguese End Cap Warning Label in Italian TL End Cap Warning Label in German Meter Body Options (Carbon Steel standard) NACE A286 SS Bolts 316 SS Bolts B7M Bolts 316 SS Adapter Flange - 1/2" NPT with CS Bolts 316 SS 5 Adapter Flange - 1/2" NPT with NACE A286 SS Bolts 316 SS 5 Adapter Flange - 1/2" NPT with NACE A286 SS Bolts 316 SS 5 Adapter Flange - 1/2" NPT with NACE A286 SS Bolts 316 SS 5 Adapter Flange - 1/2" NPT with B7M Bolts | f i | | b b b b |
| Battery Power | f i | | b b b b |
| 24VDĆ DC Transmitter Housing & Electronics Options | • • • • • • • • • • • • • • • • • • • | | b b b b |
| Transmitter Housing & Electronics Options Custom Calibration and I.D. in Memory CC Transmitter Configuration and I.D. in Memory A1 M20 Conduit Thread (1/2" NPT is standard) A1 1/2" NPT to 3/4" NPT 316 SS Conduit Adapter A2 316 SS ^{5,9} Housing with 1/2" NPT Conduit Connection A3 316 SS ^{5,9} Electronics Housing - with M20 Conduit Connections SH Stainless Steel Customer Wired-On Tag TG (4 lines, 28 characters per line, customer supplied information) TB Stainless Steel Customer Wired-On Tag (blank) TB End Cap Warning Label in Spanish SP End Cap Warning Label in Portuguese PG End Cap Warning Label in Italian TL End Cap Warning Label in German GE Meter Body Options (Carbon Steel standard) NACE A286 SS Bolts SS 316 SS 5 Adapter Flange - 1/2" NPT with CS Bolts SS 316 SS 5 Adapter Flange - 1/2" NPT with NACE A286 SS Bolts S3 316 SS 5 Adapter Flange - 1/2" NPT with NACE A286 SS Bolts S4 316 SS 5 Adapter Flange - 1/2" NPT with B7M Bolts S5 | • f i • • • • • • • • • • • • • • • • • | • • • • • • • • • • • • • • • • • • • | b b b b b b b b b b b b b b b b b b b |
| Custom Calibration and I.D. in Memory CC Transmitter Configuration and I.D. in Memory TC M20 Conduit Thread (1/2" NPT is standard) A1 1/2" NPT to 3/4" NPT 316 SS Conduit Adapter A2 316 SS ^{5,9} Housing with 1/2" NPT Conduit Connection A3 316 SS ^{5,9} Housing with 1/2" NPT Conduit Connections SH Stainless Steel Customer Wired-On Tag TG (4 lines, 28 characters per line, customer supplied information) TB Stainless Steel Customer Wired-On Tag (blank) TB End Cap Warning Label in Spanish SP End Cap Warning Label in Portuguese PG End Cap Warning Label in Italian TL End Cap Warning Label in German GE Meter Body Options (Carbon Steel standard) NACE A286 SS Bolts SS 316 SS Bolts SS B7M Bolts SS 316 SS ⁵ Adapter Flange - 1/2" NPT with CS Bolts S3 316 SS ⁵ Adapter Flange - 1/2" NPT with NACE A286 SS Bolts S4 316 SS ⁵ Adapter Flange - 1/2" NPT with NACE A286 SS Bolts S4 316 SS ⁵ Adapter Flange - 1/2" NPT with B7M Bolts S5 | • f i • • • • • • • • • • • • • • • • • | f i | b b b b b b b b b b b b b b b b b b b |
| M20 Conduit Thread (1/2" NPT is standard) A1 1/2" NPT to 3/4" NPT 316 SS Conduit Adapter A2 316 SS 5.9 Housina with 1/2" NPT Conduit Connection A3 316 SS 5.9 Electronics Housina - with M20 Conduit Connections SH Stainless Steel Customer Wired-On Tag TG (4 lines, 28 characters per line, customer supplied information) TB End Cap Warning Label in Spanish SP End Cap Warning Label in Portuguese PG End Cap Warning Label in Italian TL End Cap Warning Label in German GE Meter Body Options (Carbon Steel standard) NACE A286 SS Bolts SS 316 SS Bolts SS B7M Bolts SS 316 SS Adapter Flange - 1/2" NPT with CS Bolts S2 316 SS Adapter Flange - 1/2" NPT with NACE A286 SS Bolts S4 316 SS Adapter Flange - 1/2" NPT with NACE A286 SS Bolts S4 316 SS Adapter Flange - 1/2" NPT with B7M Bolts S5 | f i | | b b b b b b b b b b b b b b b b b b b |
| 1/2" NPT to 3/4" NPT 316 SS Conduit Adapter A2 316 SS 5.9 Housina with 1/2" NPT Conduit Connection A3 316 SS 5.9 Electronics Housina - with M20 Conduit Connections SH Stainless Steel Customer Wired-On Tag TG (4 lines, 28 characters per line, customer supplied information) TB Stainless Steel Customer Wired-On Tag (blank) TB End Cap Warning Label in Spanish SP End Cap Warning Label in Portuguese PG End Cap Warning Label in Italian TL End Cap Warning Label in German GE Meter Body Options (Carbon Steel standard) NACE A286 SS Bolts SS 316 SS Bolts SS B7M Bolts S2 316 SS ⁵ Adapter Flange - 1/2" NPT with CS Bolts S3 316 SS ⁵ Adapter Flange - 1/2" NPT with NACE A286 SS Bolts S4 316 SS ⁵ Adapter Flange - 1/2" NPT with NACE A286 SS Bolts S4 316 SS ⁵ Adapter Flange - 1/2" NPT with B7M Bolts S5 | i | | b b b b b b b b b b b b b b b b b b b |
| 316 SS 5.9 Housina with 1/2" NPT Conduit Connection A3 316 SS 5.9 Electronics Housina - with M20 Conduit Connections SH Stainless Steel Customer Wired-On Tag TG (4 lines, 28 characters per line, customer supplied information) TB Stainless Steel Customer Wired-On Tag (blank) TB End Cap Warning Label in Spanish SP End Cap Warning Label in Portuguese PG End Cap Warning Label in Italian TL End Cap Warning Label in German GE Meter Body Options (Carbon Steel standard) NACE A286 SS Bolts SS 316 SS Bolts SS B7M Bolts SS 316 SS ⁵ Adapter Flange - 1/2" NPT with CS Bolts S3 316 SS ⁵ Adapter Flange - 1/2" NPT with NACE A286 SS Bolts S4 316 SS ⁵ Adapter Flange - 1/2" NPT with NACE A286 SS Bolts S4 316 SS ⁵ Adapter Flange - 1/2" NPT with B7M Bolts S5 | • • • • • • • • • • • • • • • • • • • | | b |
| SH Stainless Steel Customer Wired-On Tag | • • c c | • • • • • • • • • • • • • • • • • • • | |
| Stainless Steel Customer Wired-On Tag TG (4 lines, 28 characters per line, customer supplied information) TB Stainless Steel Customer Wired-On Tag (blank) TB End Cap Warning Label in Spanish SP End Cap Warning Label in Portuguese PG End Cap Warning Label in Italian TL End Cap Warning Label in German GE Meter Body Options (Carbon Steel standard) NACE A286 SS Bolts 316 SS Bolts SS B7M Bolts SS 316 SS ⁵ Adapter Flange - 1/2" NPT with CS Bolts S2 316 SS ⁵ Adapter Flange - 1/2" NPT with 316 SS Bolts S3 316 SS ⁵ Adapter Flange - 1/2" NPT with NACE A286 SS Bolts S4 316 SS ⁵ Adapter Flange - 1/2" NPT with B7M Bolts S5 | • • c c | • • • • • • • • • • • • • • • • • • • | |
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| Stainless Steel Customer Wired-On Tag (blank) TB End Cap Warning Label in Spanish SP End Cap Warning Label in Portuguese PG End Cap Warning Label in Italian TL End Cap Warning Label in German GE Meter Body Options (Carbon Steel standard) NACE A286 SS Bolts CR 316 SS Bolts SS B7M Bolts B7 316 SS ⁵ Adapter Flange - 1/2" NPT with CS Bolts S2 316 SS ⁵ Adapter Flange - 1/2" NPT with 316 SS Bolts S3 316 SS ⁵ Adapter Flange - 1/2" NPT with NACE A286 SS Bolts S4 316 SS ⁵ Adapter Flange - 1/2" NPT with B7M Bolts S5 | • • c c | • • • • • • • • • • • • • • • • • • • | |
| End Cap Warning Label in Portuguese PG End Cap Warning Label in Italian TL End Cap Warning Label in German GE Meter Body Options (Carbon Steel standard) NACE A286 SS Bolts 316 SS Bolts SS B7M Bolts B7 316 SS ⁵ Adapter Flange - 1/2" NPT with CS Bolts S2 316 SS ⁵ Adapter Flange - 1/2" NPT with 316 SS Bolts S3 316 SS ⁵ Adapter Flange - 1/2" NPT with NACE A286 SS Bolts S4 316 SS ⁵ Adapter Flange - 1/2" NPT with B7M Bolts S5 | • • c c | • • • • • • • • • • • • • • • • • • • | |
| End Cap Warning Label in Italian TL End Cap Warning Label in German GE Meter Body Options (Carbon Steel standard) CR NACE A286 SS Bolts SS 316 SS Bolts SS B7M Bolts B7 316 SS ⁵ Adapter Flange - 1/2" NPT with CS Bolts S2 316 SS ⁵ Adapter Flange - 1/2" NPT with 316 SS Bolts S3 316 SS ⁵ Adapter Flange - 1/2" NPT with NACE A286 SS Bolts S4 316 SS ⁵ Adapter Flange - 1/2" NPT with B7M Bolts S5 | • • c c | • • • • • • • • • • • • • • • • • • • | |
| End Cap Warning Label in German GE Meter Body Options (Carbon Steel standard) CR NACE A286 SS Bolts SS 316 SS Bolts SS B7M Bolts B7 316 SS ⁵ Adapter Flange - 1/2" NPT with CS Bolts S2 316 SS ⁵ Adapter Flange - 1/2" NPT with 316 SS Bolts S3 316 SS ⁵ Adapter Flange - 1/2" NPT with NACE A286 SS Bolts S4 316 SS ⁵ Adapter Flange - 1/2" NPT with B7M Bolts S5 | • • c c | • • • • • • • • • • • • • • • • • • • | H |
| Meter Body Options (Carbon Steel standard) NACE A286 SS Bolts CR 316 SS Bolts SS B7M Bolts B7 316 SS ⁵ Adapter Flange - 1/2" NPT with CS Bolts S2 316 SS ⁵ Adapter Flange - 1/2" NPT with 316 SS Bolts S3 316 SS ⁵ Adapter Flange - 1/2" NPT with NACE A286 SS Bolts S4 316 SS ⁵ Adapter Flange - 1/2" NPT with B7M Bolts S5 | • • c c | | H |
| NACE A286 \$S Bolts CR 316 \$S\$ Bolts \$S\$ B7M Bolts B7 316 \$S\$ Adapter Flange - 1/2" NPT with CS Bolts \$2 316 \$S\$ Adapter Flange - 1/2" NPT with 316 \$S\$ Bolts \$3 316 \$S\$ Adapter Flange - 1/2" NPT with NACE A286 \$S\$ Bolts \$4 316 \$S\$ Adapter Flange - 1/2" NPT with B7M Bolts \$5 | • c c | • c c | H |
| B7M Bolts B7 316 SS ⁵ Adapter Flange - 1/2" NPT with CS Bolts S2 316 SS ⁵ Adapter Flange - 1/2" NPT with 316 SS Bolts S3 316 SS ⁵ Adapter Flange - 1/2" NPT with NACE A286 SS Bolts S4 316 SS ⁵ Adapter Flange - 1/2" NPT with B7M Bolts S5 | c | c c | H |
| 316 SS ⁵ Adapter Flange - 1/2" NPT with CS Bolts S2 316 SS ⁵ Adapter Flange - 1/2" NPT with 316 SS Bolts S3 316 SS ⁵ Adapter Flange - 1/2" NPT with NACE A286 SS Bolts S4 316 SS ⁵ Adapter Flange - 1/2" NPT with B7M Bolts S5 | c | c c | |
| 316 SS ⁵ Adapter Flange - 1/2" NPT with 316 SS Bolts 316 SS ⁵ Adapter Flange - 1/2" NPT with NACE A286 SS Bolts 316 SS ⁵ Adapter Flange - 1/2" NPT with B7M Bolts S5 | С | - c | |
| 316 SS ⁵ Adapter Flange - 1/2" NPT with 316 SS Bolts 316 SS ⁵ Adapter Flange - 1/2" NPT with NACE A286 SS Bolts 316 SS ⁵ Adapter Flange - 1/2" NPT with B7M Bolts S5 | | | |
| 316 SS ⁵ Adapter Flange - 1/2" NPT with NACE A286 SS Bolts S4 316 SS ⁵ Adapter Flange - 1/2" NPT with B7M Bolts S5 | ٦ | | |
| 316 SS ⁵ Adapter Flange - 1/2" NPT with B7M Bolts | | l c | |
| | C | | |
| Hastelloy C-276 Adapter Flange - 1/2 NPT with C5 Bolts 12 | C | | 1 . |
| | | | 1 1 |
| riadioney of 270 maple. Haingo in 2 million of objection | С | | |
| 316 SS ⁵ Blind Adapter Flange with CS Bolts B3 | • | 1 - | |
| 316 SS ⁵ Blind Adapter Flange with 316 SS Bolts | • | • | |
| 316 SS ⁵ Blind Adapter Flange with NACE A286 SS Bolts | • | • | b |
| 316 SS ⁵ Blind Adapter Flange with B7M Bolts | • | • | |
| Viton® Process Head Gaskets (adapter gaskets ordered separately) | • | • | Г |
| Viton ^{® 8} Adapter Flange Gaskets VF | m | ı m | |
| Services/Certificates/Marine Type Approval Options | | | |
| User's Manual Paper Copy (Standard, HC/H6, or FF ships accordingly) UM | • | • | 7 |
| Clean Transmitter for Oxygen or Chlorine Service with Certificate 0X | j | j | |
| Over-Pressure Leak Test with F3392 Certificate TP | • | • | \vdash |
| Calibration Test Report and Certificate of Conformance (F3399) | • | • | l b |
| Certificate of Conformance (F3391) | • | • | μĭ |
| Certificate of Origin (F0195) F5 NACE Certificate (Process-Wetted & Non-Process Wetted) (FC33339) F7 | • | • | \vdash |
| NACE Certificate (Process-Wetted & Non-Process Wetted) (FC33339) NACE Certificate (Process-Wetted Only) (FC33338) FG | k | | þ |
| Material Traceability Certification per EN 10204 3.1 (FC33341) | • | | Н |
| Warranty Options | Ť | Ť | - |
| Additional Warranty - 1 year W1 | • | • | ╆ |
| Additional Warranty - 2 years W2 | | | 11. |

Table IV continued next page

Hastellov® C-276 or UNS N10276
 Supplied as 316 SS or as Grade CF8M, the casting equivalent of 316 SS.
 Supplied as indicated or as Grade CW12MW, the casting equivalent of Hastellov® C-276
 Viton® or Fluorocarbon Elastomer

⁹ 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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INMETRO

Brazil

Flameproof

Non-Sparking

Page 4 of 5 Availability **TABLE IV - OPTIONS (continued)** STFW9xx Approval Location or Classification 32 3F Body Approval Type Selection No hazardous location approvals 9X Class I, II, III, Div. 1, Groups A,B,C,D,E,F,G; Intrinsically Safe T4, Ta ≤ 85°C; Type 4X Class I, AEx ia IIC; T4, Ta ≤ 85°C, Zone 0; IP66 Class I, Div. 1, Groups A,B,C,D; CI II, Div. 1, Groups E, F & G; Explosion-proof 1C Cl III, Div. 1, T4, Ta ≤ 85°C; Type 4X Class I, AEx d IIC; T4, Ta ≤ 85°C, Zone 1; IP66 Class I, Div. 2, Groups A,B,C,D; T4, Nonincendive Ta ≤ 85°C; Type 4X Non-Sparking Class I, AEx nA IIC; T4, Ta ≤ 85°C, Zone 2; IP66 Nonincendive, CL I, Div 2, Groups A,B,C & D, Nonincendive CL II & III, Div 2, Groups F & G, T4 Ta = 85°C 2N Class I, Ex/AEx nA IIC; T4, Ta ≤ 85°C, Zone 2; IP66 Non-Sparking Class I, Div. 1, Gp A,B,C,D; Class II, Div 1, Intrinsically Safe Gp E,F,G; Class III, Div 1; T4, Ta ≤ 85°C; Type 4X Class I, Ex/AEx ia IIC; T4, Ta ≤ 85°C, Zone 0; IP66 CSA Class I, Div. 1, Groups A,B,C,D; cus Class II, Div. 1, Groups E, F & G; 2C Explosion-proof Class III, Div. 1, T4, Ta ≤ 85°C; Type 4X Class I, Ex/AEx d IIC; T4, Ta ≤ 85°C, Zone 1; IP66 Class I, Div. 2, Groups A,B,C,D; T4, Nonincendive Ta ≤ 85°C; Type 4X Class I, Ex/AEx nA IIC; T4, Ta ≤ 85°C, Zone 2; IP66 Non-Sparking (£x) II 1 GD; Ex ia IIB; T4, Ta ≤ 70°C, Zone 0; IP66 Intrinsically Safe 3U Ex tD A20 IP66 T90°C $\langle E_x \rangle$ II 2 GD; Ex d [ia] IIB; T4, Ta \leq 70°C, Zone 1; IP6 Flameproof 3B • Ex tD A21 IP66 T90°C (Ex) II 3 GD; Ex nA [nL] IIC; T4, Ta ≤ 84°C, Zone 2 Non-Sparking 3Y Ex tD A22 IP66 T90°C **ATEX** (ξ_x) II 1 GD; Ex ia IIB; T4, Ta ≤ 70°C, Zone 0; IP66 Intrinsically Safe Ex tD A20 IP66 T90°C ⟨εx⟩ II 2 GD; Ex d [ia] IIB; T4, Ta ≤ 70°C, Zone 1; IP6 3C* Flameproof Ex tD A21 IP66 T90°C (£x) II 3 GD; Ex nA [nL] IIC; T4, Ta ≤ 84°C, Zone 2 Non-Sparking Ex tD A22 IP66 T90°C Ex ia IIB; T4, Ta ≤ 70°C, Zone 0; IP66 Intrinsically Safe CU Ex tD A20 IP66 T90°C Ex d [ia] IIB; T4, Ta ≤ 70°C, Zone 1; IP66 Flameproof CB Ex tD A21 IP66 T90°C Ex nA IIC; T4, Ta ≤ 84°C, Zone 2; IP66 CY **IECEx** Non-Sparking Ex tD A22 IP66 T90°C Australia & Ex ia IIB; T4, Ta ≤ 70°C, Zone 0; IP66 New Zealand Intrinsically Safe Ex tD A20 IP66 T90°C Ex d [ia] IIB; T4, Ta ≤ 70°C, Zone 1; IP66 Flameproof C1* Ex tD A21 IP66 T90°C Ex nA [nL] IIC; T4, Ta ≤ 84°C, Zone 2; IP66 Non-Sparking Ex tD A22 IP66 T90°C Ex ia IIB; T4, Ta ≤ 70°C, Zone 0; IP66 Intrinsically Safe ZU Ex tD A20 IP66 T90°C Ex d [ia] IIB; T4, Ta ≤ 70°C, Zone 1; IP66 7B Flameproof Ex tD A21 IP66 T90°C Ex nA [nL] IIC; T4, Ta ≤ 84°C, Zone 2; IP66 Non-Sparking ZY SAEx Ex tD A22 IP66 T90°C South Africa Ex ia IIB; T4, Ta ≤ 70°C, Zone 0; IP66 Intrinsically Safe Ex tD A20 IP66 T90°C Ex d [ia] IIB; T4, Ta ≤ 70°C, Zone 1; IP66 ZC* Flameproof Ex tD A21 IP66 T90°C Ex nA [nL] IIC; T4, Ta ≤ 84°C, Zone 2; IP66 Non-Sparking Ex tD A22 IP66 T90°C Intrinsically Safe Ex ia IIC; T4, Ta ≤ 85°C, Zone 0; 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 check 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.

Ex d IIC; T4, Ta ≤ 85°C, Zone 1; IP 66

Ex nA IIC; T4, Ta ≤ 85°C, Zone 2; IP 66

6C*

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TABLE V Availability

| Country | (Must Choose a Country Code) | Country Cod | le | | _ |
|-----------------------|------------------------------|-------------|----|---|---|
| North America, Canada | | NA00 | • | • | |
| European Union | | EU00 | • | • | b |
| Japan | | JP00 | | | |
| Brazil | | BZ00 | • | • | |

 TABLE VI
 Selection

 Factory Identification
 XXXX
 •
 •

RESTRICTIONS

| Restriction | | Available Only With | | Not Available With | |
|-------------|--|--------------------------------|---------|---|--|
| Letter | Table | Selection | Table | Selection | |
| b | Select only one option from this group | | | | |
| С | I | H,K | | | |
| d | III | _ 00 , 00 | | | |
| е | | | III | _ 00 | |
| g | 1 | A, B, E, F, J, W, X | | | |
| h | | | I II | M,N,R,S 5,, 0 | |
| i | Ш | 1C or 2J | IV | BA, SH, A1 | |
| j | I | _2_ | | | |
| k | III | CR | III | S2, S3, S5, T2, T3, B3, B4, B6, V2, V3 | |
| m | III | VT | | | |
| n | | | III | 1C, 2J | |
| t | | Select S2,S3,S4,S5,T2,T3,V2,V3 | | | |
| V | ĺ | M, N, R, S | | | |

Ordering Example: STFW924-A1A-01000-R0000-XS,BA,1C-NA00+XXXX

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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

Specifications are subject to change without notice.

For More Information

Learn more about how XYR 6000 Series 900 Flange-mount Pressure Transmitters can increase performance, reduce downtime and decrease configuration costs, visit our website www.honeywellprocess.com/wireless or contact your Honeywell account manager.

Honeywell

Honeywell Process Solutions

1860 West Rose Garden Lane Phoenix, AZ 85027

Tel: 1-800-423-9883 or 1-800-343-0228

www.honeywellprocess.com/

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