



WPR2

Wet to Wet Transmitter

The ACI WPR2 Series Remote Wet to Wet Differential Pressure Transmitter is designed to reduce installation time and provide mounting flexibility, often eliminating the need for additional plumbing. They accurately measure wet media pressures in a variety of applications. Commonly used for monitoring pumps, these devices are also ideal for measuring pressure across filters, heat exchangers and compressors. The dual remote sensors are based on a ceramic capacitive sensing element with 1/4"-18 NPT male (304 stainless steel) fittings. The WPR2's enclosure opens conveniently to allow it to be reconfigured between three additional ranges (see order grid) and outputs of 4 to 20 mA, 0 to 5 VDC, or 0 to 10 VDC (default). The different configurations in this series can measure both uni or bi-directional pressure ranges as low as 3 psi and as high as 300 psi, depending on the unit. The WPR2 also features a push button auto zero function for remote calibration. The LCD option will display pressure values for both the High and Low side pressures, a differential pressure value, "OVR" for values over the

specified range, "ERROR" for differential pressures out of range, and "ZERO" when the auto-zero is in process.

Applications: Monitoring Pumps, Compressors, Filters, Heat Exchangers, Flow

The WPR2 Series is covered by ACI's Five (5) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's website, www.workaci.com.

PRODUCT SPECIFICATIONS

| | |
|---|--|
| Supply Voltage: | 4-20 mA Output: 18-36 VDC (250 Ohm Load max.) / 20-36 VDC (500 Ohm Load max.) / 24 VAC (+/-10%) 50/60 Hz 0-5 VDC / 0-10 VDC Output: 16-36 VDC / 24 VAC (+/- 10%) 50/60 Hz |
| Supply Current: | 4-20 mA Output: 24 mA minimum; 0-5 VDC 0-10 VDC Outputs: 6 mA maximum |
| Output Signals: | 2-wire: Linear 4-20 mA DC Current (Field Selectable) 3-wire: 0-5 VDC; 0-10 VDC (Default) |
| Response Time (0-100% FSO): | 8 seconds |
| Output Update Rate: | 1 second |
| Output Load Resistance: | 4 to 20 mA: 500 ohms maximum 0-5 VDC/0-10 VDC: 5K ohms minimum |
| Field Selectable Ranges: | See "Ordering Grid" on back of product data sheet |
| Warm Up Time: | 15 minutes (wait 15 minutes before zeroing) |
| Accuracy ¹ (Three Highest Ranges): | ±1.0% FSO |
| Accuracy ¹ (Lowest Range ²): | ±1.5% FSO |
| Thermal Effects ³: | ±2.0% FSO from 32-140°F (0-60°C) |
| Operating Temperature: | Transducer: -40 to 257°F (-40 to 125°C) Electronics/Housing/Cables: 32-167°F (0-75°C) |
| Compensated Temperature Range: | 32 to 140°F (0 to 60°C) |
| Storage Temperature: | -13 to 176°F (-25 to 80°C) |
| Operating Humidity: | 10 to 90% RH non-condensing |
| Proof Pressure: | A/WPR2-30 Series and A/WPR2-100 Series: 3X FS A/WPR2-300 Series: 2X FS |
| Burst Pressure: | 1500 psi |
| Media Types: | Any liquids or gases compatible with Neoprene seal |
| Process Fitting Material: | 304 SS |
| Process Fitting Size: | 1/4"-18 NPT Male; Pressure Snubber included for light oils/water (WPR2-30/WPR2-100 Models) |
| Recommend Torque Specification: | 150 lbs-in (16.95 Nm) |
| Transducer Cable Rating Connector Type: | Type CMP – Plenum Rated (UL Standard 444), NEC Article 800 Packard Connector |
| Enclosure Material Flammability Rating: | Flame Retardant PC PBT Alloy UL94V-0 |
| Enclosure Rating: | NEMA 4X/IP66 |
| Approvals: | CE, RoHS2, WEEE, Reach |
| Product Dimensions (L x W x D): | 5.30" x 5.07" x 3.00" (13.46 cm x 12.88 cm x 7.62 cm) |
| Product Weights: | A/WPR2(0-xxx psid)-10¹: 2.1 lbs (0.953 kg) A/WPR2(0-xxx psid)-10¹-LCD: 2.2 lbs (0.998 kg) |

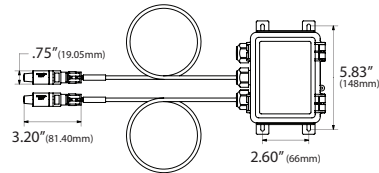
Note ¹: Accuracy includes Linearity, Hysteresis, and Repeatability @ 71°F (21.5°C) | **Note ²:** See the ordering grid on the back of the data sheet for selectable ranges

Note ³: Shift Relative to 71°F (21.5°C)

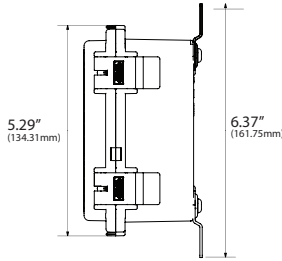




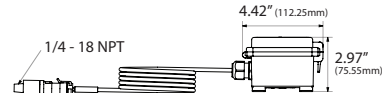
DIMENSIONAL DRAWING



Front View



Right View



Top View

STANDARD ORDERING

Model # Example: A/WPR2-30-10-LCD -OR- 139367

| Model # | Item # | Ranges* | Outputs* (Default in Bold) | 10' Harness | 20' Harness | No LCD | With LCD |
|-------------------|--------|--|-----------------------------------|-------------|-------------|--------|----------|
| A/WPR2-30-10 | 139365 | Uni-Directional: 0-30, 0-15, 0-7.5 and 0-3 psid Bi-Directional: +/-30, +/-15, +/-7.5 and +/-3 | 4-20 mA, 0-5 VDC, 0-10 VDC | • | | • | |
| A/WPR2-30-10-LCD | 139367 | | | • | | | • |
| A/WPR2-30-20 | 139366 | | | | • | • | |
| A/WPR2-30-20-LCD | 139368 | | | | • | | • |
| A/WPR2-100-10 | 138180 | Uni-Directional: 0-100, 0-50, 0-25 and 0-10 psid Bi-Directional: +/-100, +/-50, +/-25 and +/-10 | 4-20 mA, 0-5 VDC, 0-10 VDC | • | | • | |
| A/WPR2-100-10-LCD | 138014 | | | • | | | • |
| A/WPR2-100-20 | 138189 | | | | • | • | |
| A/WPR2-100-20-LCD | 138105 | | | | • | | • |
| A/WPR2-300-10 | 138190 | Uni-Directional: 0-300, 0-150, 0-75 and 0-30 psid Bi-Directional: +/-300, +/-150, +/-75 and +/-30 | 4-20 mA, 0-5 VDC, 0-10 VDC | • | | • | |
| A/WPR2-300-10-LCD | 138041 | | | • | | | • |
| A/WPR2-300-20 | 138191 | | | | • | • | |
| A/WPR2-300-20-LCD | 138106 | | | | • | | • |

Note*: WPR2 model selection is based on the maximum line pressure. EX: If your maximum line pressure is below 100 PSI, and above 30PSI, then order the WPR2-100