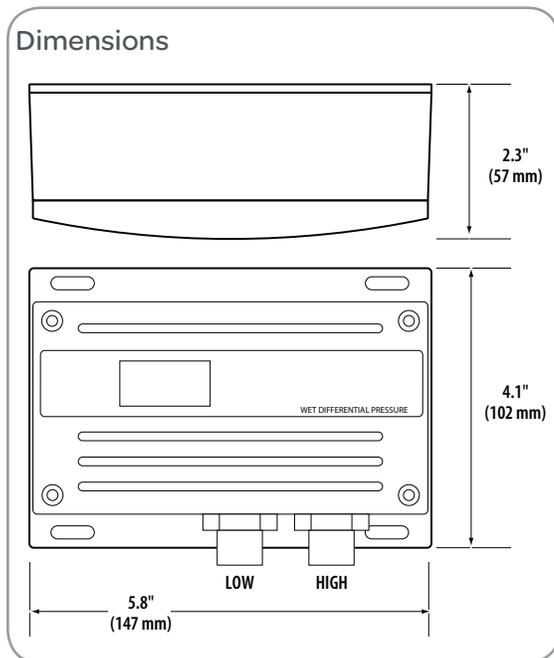


EPW Series



Quick Install

1. Affix the backplate to a mounting surface (wall, duct, sheet metal, etc.).
2. Plumb the ports to "HI" and "LO" sides of the pressure differential. Wrap the fitting with 2-3 turns of Teflon tape, hand tighten, then use a wrench to make two more turns.
3. Wire the sensor. See the Wiring section on page 2 for details.
4. Configure the jumpers as desired. See the Configuration section on page 3 for details.



Differential Pressure Transducer Wet Media

Installer's Specifications

Media Compatibility 17-4 PH stainless steel

Power Consumption

EPW2: 20mA max.

Input Power

EPW: 12 to 30VDC, 24VAC nom.

EPW2: 12-24VDC

Output

EPW: 3-wire transmitter; user selectable 4-20mA/0-5V/0-10V*

EPW2: 2-wire transmitter; 4-20mA; polarity insensitive (clipped and capped)*

Pressure Ranges (switch selectable)

103. 0-50psig (5/10/25/50psid) / 0-3.45 bar (0.34/0.69/1.72bar)

104. 0-100psig (10/20/50/100psid) / 0-6.89bar (0.69/1.38/3.45bar)

105. 0-250psig (25/50/125/250psid) / 0-17.24bar (1.72/3.45/8.62bar)

Status Indication

EPW: Dual color LED: solid green=normal, blinking green=low>high, solid red=over range, blinking red=over pressure

Proof Pressure. 2x max.; F.S. range

Burst Pressure. 5x max.; F.S. range

Accuracy @ 25°C . ±1% F.S.** combined linearity, hysteresis, and repeatability;

EPW: Range D accuracy = ±2% F.S.**

Surge Dampening Electronic, selectable (1-second or 5-second averaging)

Temperature Compensated Range 0° to 50°C (32° to 122°F);

TC Zero<±1.5% of product F.S. per sensor;

TS Span<±1.5% of product F.S. per sensor

Sensor Operating Range-20° to 85°C (-4° to 185°F)

Long Term Stability . ±0.25% per year (all models)

Zero Adjust Pushbutton autozero;

. digital input (2-position terminal block)

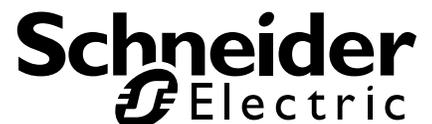
Operating Environment -10° to 55°C (14° to 131°F); 10 to 90% RH non-condensing

Fittings. 1/8" NPT female, stainless 17-4 PH

Physical White powder-coated aluminum

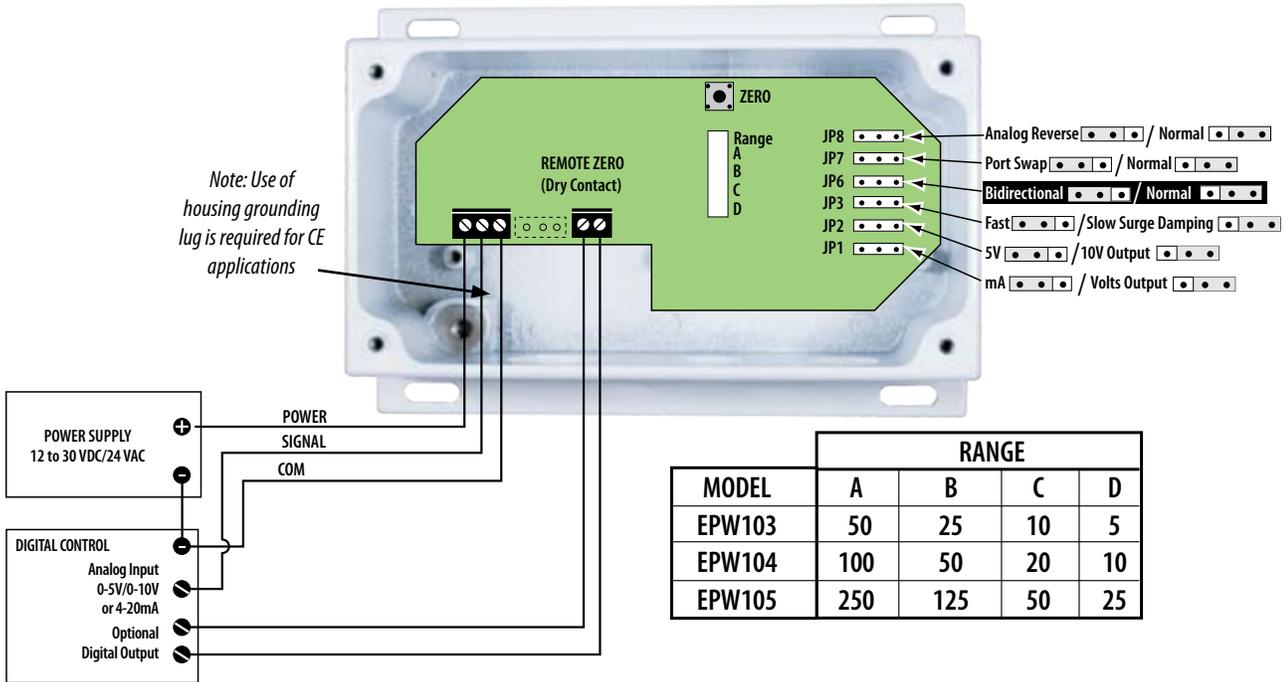
To conform to EMC standards, use shielded cabling. Minimum input voltage for 4-20mA operation: 250Ω loop (1-5V) = 12VDC; 500Ω loop (2-10V) = 15VDC.*

*** Full Scale is defined as the full span of the selected range in bidirectional*

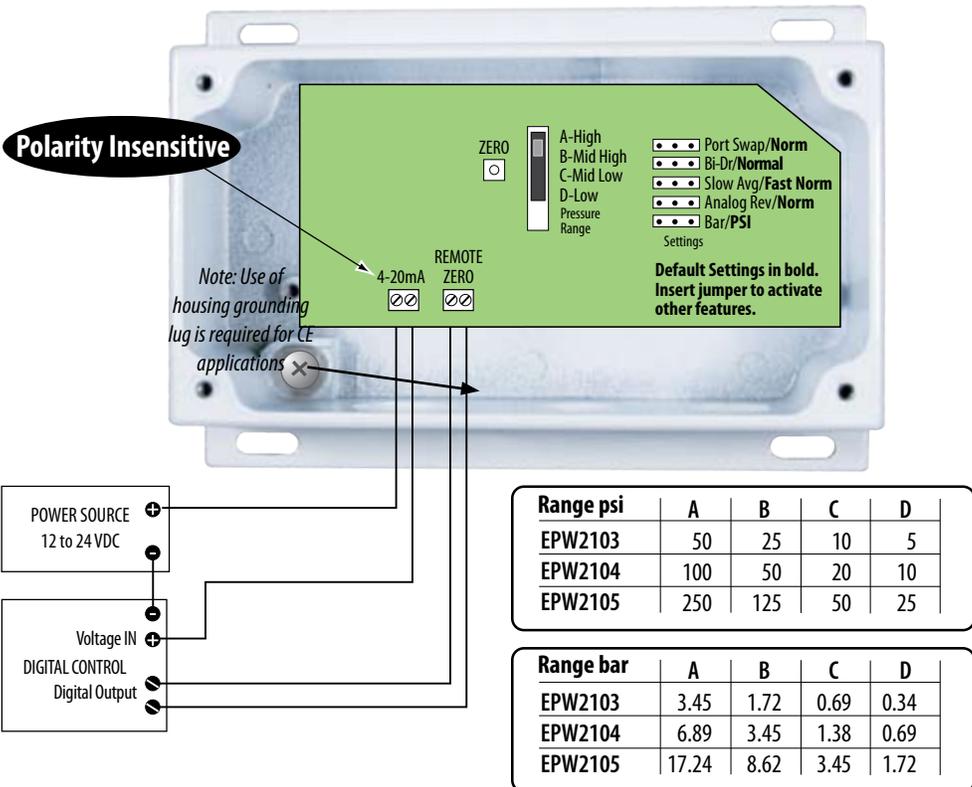


Installation/Wiring

EPW



EPW2



Configuration

EPW

JP1: Voltage (V) or current (mA) mode.

JP2: 0-10V or 0-5V output span (Voltage mode only).

JP3: Slow or fast mode. Slow mode provides 5-second averaging for surge dampening; fast mode provides 1-second averaging.

JP6: Bidirectional or Normal. Normal mode range is from zero to full scale differential pressure. Bi-directional mode changes range from minus full scale to plus full scale differential pressure. Output will be at one half when the differential pressure is zero (see table below).

JP7: Port Swap or Normal. This setting is used to remedy situations when the "HI" & "LO" ports to the pressure transducer are incorrectly plumbed. Use jumper JP7 to reverse polarity of pressure ports. This jumper makes the "HI" port "LO" and the "LO" port "HI".

JP8: Analog Reverse or Normal. Normal mode output increases as pressure increases. Reverse mode output is maximum when pressure differential is zero and decreases as pressure increases.

RANGE: Use range switch to select full-scale differential pressure.

EPW2

Fast or Slow: Slow mode provides 5-second averaging for surge dampening; fast mode provides 1-second averaging.

Bidirectional or Normal: Normal mode range is from zero to full scale differential pressure. Bi-directional mode changes range from minus full scale to plus full scale differential pressure. Output will be at one half when the differential pressure is zero (see table below).

Port Swap: This setting is used to remedy situations when the "HI" & "LO" ports to the pressure transducer are incorrectly plumbed. Use jumper "Port Swap" to reverse polarity of pressure ports. This jumper makes the "HI" port "LO" and the "LO" port "HI".

Analog Reverse or Normal: Normal mode output increases as pressure increases. Reverse mode output is maximum when pressure differential is zero and decreases as pressure increases.

Range: Use range switch to select full-scale differential pressure. Select psi or bar by positioning jumper.

Bi-directional Operation

| Input Conditions (psi) | | Result | Outputs Read |
|------------------------|---------|--------|--------------|
| Hi Port | Lo Port | DP | 4-20mA |
| 100 | 0 | +100 | 20 |
| 100 | 50 | +50 | 16 |
| 50 | 50 | 0 | 12 |
| 50 | 100 | -50 | 8 |
| 0 | 100 | -100 | 4 |

Operation

LED INDICATOR (EPW Only)

GREEN ON (solid): Normal

GREEN (blinking): Low > High - Use port swap jumper or bidirectional mode.

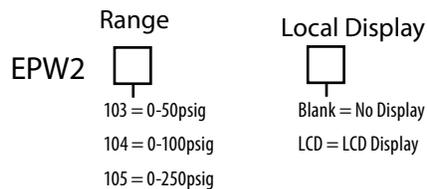
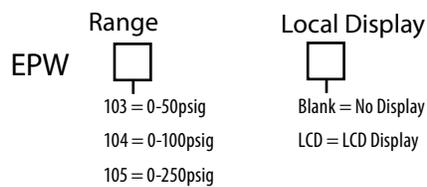
RED ON (solid): Differential Pressure is too high. Select a higher range on device.

RED (blinking): Gauge pressure has exceeded sensor; F.S. Reduce line pressure or replace with a higher range device.

ZERO

Press and hold the "ZERO" push-button for 2 seconds or provide contact closure on auxiliary "REMOTE ZERO" terminal to automatically reset output to ZERO pressure. To protect the unit from accidental ZERO, this feature is enabled only when detected pressure is within 5% of factory calibration.

Product Identification



Select operational range according to the max. gauge pressure, NOT differential pressure. Example: For hi-gauge pressure = 90psig, select the 100psig model.

Note: The EPW Series is 3-wire. The EPW2 Series is 2-wire, loop-powered.

Available Products

| Part Number | Product Description |
|-------------|---|
| EPW103 | Differential Pressure Transducer - Wet Media 0-50 psig 0-5VDC/0-10VDC/4-20mA |
| EPW103-LCD | Differential Pressure Transducer - Wet Media 0-50 psig 0-5VDC/0-10VDC/4-20mA w/LCD |
| EPW104 | Differential Pressure Transducer - Wet Media 0-100 psig 0-5VDC/0-10VDC/4-20mA |
| EPW104-LCD | Differential Pressure Transducer - Wet Media 0-100 psig 0-5VDC/0-10VDC/4-20mA w/LCD |
| EPW105 | Differential Pressure Transducer - Wet Media 0-250 psig 0-5VDC/0-10VDC/4-20mA |
| EPW105-LCD | Differential Pressure Transducer - Wet Media 0-250 psig 0-5VDC/0-10VDC/4-20mA w/LCD |
| EPW2103 | Differential Pressure Transducer - Wet Media 0-50 psig 4-20mA |
| EPW2103-LCD | Differential Pressure Transducer - Wet Media 0-50 psig 4-20mA w/LCD |
| EPW2104 | Differential Pressure Transducer - Wet Media 0-100 psig 4-20mA |
| EPW2104-LCD | Differential Pressure Transducer - Wet Media 0-100 psig 4-20mA w/LCD |
| EPW2105 | Differential Pressure Transducer - Wet Media 0-250 psig 4-20mA |
| EPW2105-LCD | Differential Pressure Transducer - Wet Media 0-250 psig 4-20mA w/LCD |

Notice:

- This product is not intended for life or safety applications.
- Do not install this product in hazardous or classified locations.
- Read and understand the instructions before installing this product.
- Turn off all power supplying equipment before working on it.
- The installer is responsible for conformance to all applicable codes.