



## WEPS25 Series



- Beacon Mode Available
- 10Xs Faster (200Hz Update)
- Connect up to 10 sensors simultaneously
- -40-105°C Wide Operating Temperature
- Total Error Band 1%
- BLE 5.0 Wireless Communication (Android)
- 1-15,000 psi pressure ranges
- Absolute, Gauge, Vacuum
- Media – Liquid, Air, & Gas
- Stores up to 100,000 points for analysis
- IP65 (& IP67)
- Long battery life (Up to 2.5 years)

### DESCRIPTION

The WEPS25 is a Bluetooth-enabled wireless pressure sensor designed for easy measurement across a wide range of applications. This silicon pressure sensor offers a cost-effective solution for industrial, consumer, and commercial use.

Simply download the Phoenix Sensors application from our website and connect it to the device. The sensor boasts the industry's fastest update rate of 200Hz, allowing you to read and store synchronized data from up to four sensors simultaneously. The battery-powered version can last up to 2.5 years with continuous use (1 measurement every 60 seconds). For custom design options, please contact us.

Our mobile software enables users to store up to 100,000 data points for later analysis.

### APPLICATIONS

- Consumer products
- Industrial Automation
- HVAC
- Pool Pumps
- Compressor
- Pneumatics

## Maximum Environmental Ratings

Operating Temperature ..... -40°C to 105°C  
 Storage Temperature Range ..... -40°C to 105°C

Proof pressure ..... 2x full scale pressure  
 Burst pressure ..... 3x full scale pressure (Max 12kPSI)

### Liquid Level – Trucks, Gas/Water Tanks

The WEPS25 is a wireless pressure sensor used in a variety of liquid level applications, such as Water Trucks, Liquid Tanks, Oil tanks, and Spas. It can measure down to 1” of H2O



### HVAC – High & Low Side of A/C



The WEPS25 is a wireless pressure sensor that can measure up to pressures of 15,000PSI. It is accurate and robust enough for HVAC applications; if you need temporary remote Pressure and Temperature measurement of the system this sensor is your solution.

### Dirty Air Filter Detection

The WEPS25 is a wireless pressure sensor that can down to pressures of 3PSI, so it is ideal for most air filter applications. For troubleshooting , the WEPS25 offers temporary remote Pressure and Temperature measurement of the system. The battery powered solution can last up to 12-months of continuous (1 measurement/10 seconds) use.



### Pumps – Water, Hydraulic, etc.



The WEPS25 is a wireless pressure sensor that can measure up to pressures of 15,000PSI, so it is ideal for Hydraulic Pump applications. For monitoring , the WEPS25 offers temporary remote Pressure measurement of the system. The battery powered solution can last up to 24-months of continuous (1 measurement/60 seconds) use.

## WEPS25 Operational Characteristics

V <sub>+</sub> = 5V, V <sub>-</sub> = 0V, Temperature = 25°C					
PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS
Supply Voltage <small>(note 1)</small>	V <sub>DD</sub>	2.2	3	3.5	V
Supply Current	I <sub>DD</sub>	5	50	750	uA
Wireless Digital Output (BLE)	BLE				
Linearity <small>(Note 2)</small>		-0.25		0.25	%FS
Temperature Error (Null and Span) <small>(Note 3)</small>		-1.5		+1.5	C
Response Time	t <sub>R</sub>		5	60,000	ms
Total Error Band <small>(Note 4)</small>		-1		1	%FS
Compensated Temperature Range	C	-20		85	C
Operating Temperature Range	C	-40		105	C

## Application Information

### Package

The two-piece body design is made of SS316, which allows for easy low-cost manufacturability and corrosion resistance. Vibration proof design for use in industrial applications. Plastic option is available for custom designs.

### Stability

The silicon MEMS sensor element is fused to the backside of the stainless-steel port and sealed into the Acetal industrial plastic housing. The selection of thermally capability materials reduce the mechanical stress on the sensor resulting in greater stability over time and temperature.

Additional stability is gained from factory stabilization of all sensors.

### Pressure port

1/4" -18NPT and 1/8"-27NPT threads are standard SS fittings. Other port fittings such as 7/16-20UNF, and 1/4" BSP are available for OEM customers.

### Media

The pressure port is tolerant to most media including but not limited to oil, air, gas, and other non-corrosive media compatible to 316SS or 17-4PH.

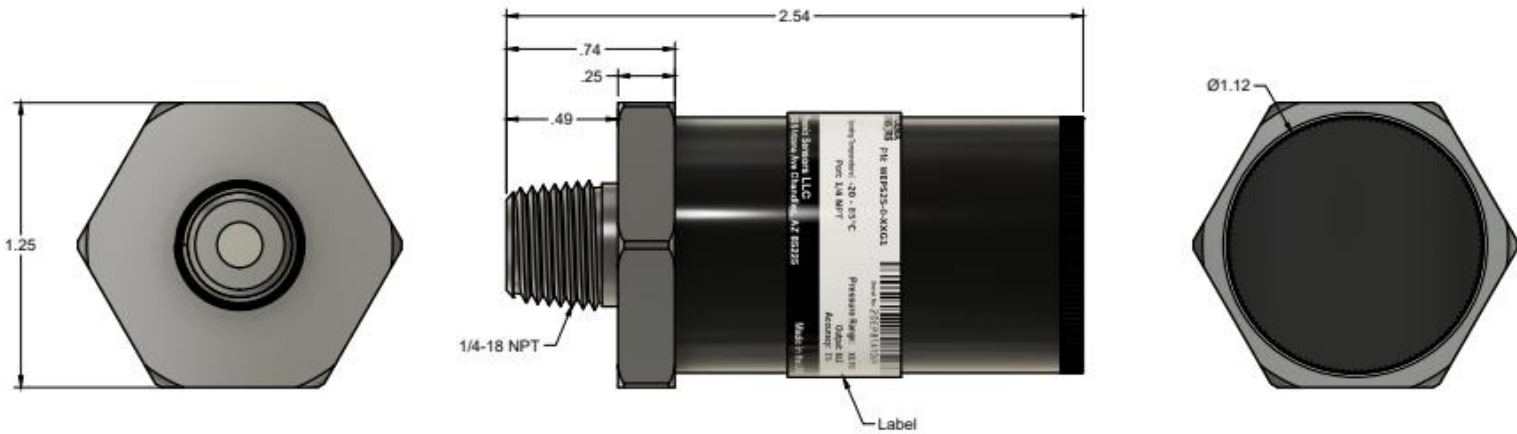
### Wetted parts

When checking media capability, the wetted surface is composed of 316SS (or 17-4PH).

### Pressure ranges

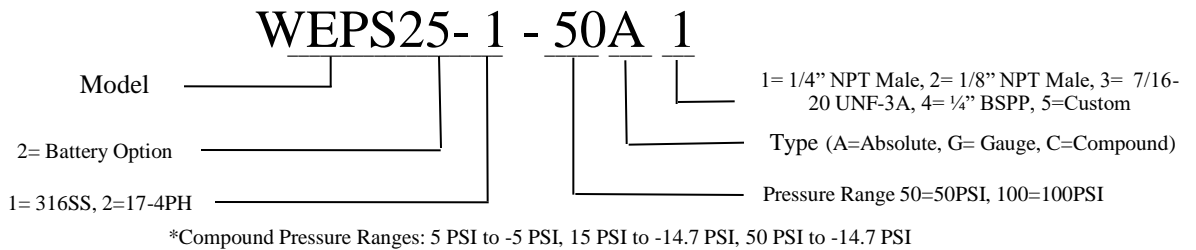
Standard pressure ranges are 1,3, 5, 15, 30, 50, 100, 150, 200, 300, 1k, 3k, 5k, and 10k psi in absolute and gage. Custom pressure ranges are available for OEM customers.

## Mechanical Dimensions (inches)



**Pic. 1 - Battery Option**

## Part Number Configuration



## Standard Part Numbers

Model	Pressure Range PSI	Type	Max Over Pressure
WEPS25-0-50A1	50	Absolute	150
WEPS25-0-100A1	100	Absolute	200
WEPS25-0-300A1	300	Absolute	450

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