



- Differential Pressure Sensor
- Constant Current/Voltage Power Supply
- -40°C - 125°C Operating Temperature
- Measures up to 500PSI (3.5MPa)
- Max Static Pressure: 2500PSI (20MPa)
- Linearity: $\pm 0.25\%$ FS
- 1ms Response Time
- Repeatability: $\pm 0.075\%$ FS
- Long-Term Stability: $\pm 0.5\%$ FS/Year

DESCRIPTION

The PPS90 is a differential pressure sensor in a media isolated package. Made with a sturdy Stainless Steel body, the PPS90 ensures safe industrial differential pressure measurement. With quality in mind, the PPS90 offers excellent stability, reliability, and replaceability in a variety of industrial applications.

Pressure that is measured is transmitted onto the die through the diaphragm and carefully measured with silicon oil, ensuring precise readings.. The PPS90 also offers a very fast response time of 1ms. Please contact Phoenix Sensors for any inquiries.

APPLICATIONS

- Gas/Liquid Pressure Measurements
- Pressure Calibrators
- Venturi Flow Meters
- Industrial Process Control
- Many More Differential Pressure Applications

Maximum Environmental Ratings

Operating Temperature-40°C to 125°C Storage Temperature Range-40°C to 125°C

Application Information

Package

The PPS90 is housed in a Stainless Steel body allowing industrial pressure measurements.

Stability

The PPS90 offers high accuracy and stability in applications it is needed most. The long term stability is rated at $\pm 0.5\%$ FS/Year, ensuring your pressure readings will remain accurate for long periods of time.

Media

The pressure port is tolerant to most media including but not limited to air, gas, and most non-corrosive media.

Wetted parts

The wetted surfaces are Stainless Steel.

Pressure port

The PPS90 has two diaphragms on each side. When pressure is applied, it is transmitted onto the die and carefully measured with silicon oil. This allows for precise readings in a variety of applications.

Application Examples



Venturi Flow Meters



Pressure Calibrators



Industrial Process Control



Gas/Liquid Pressure Measurement

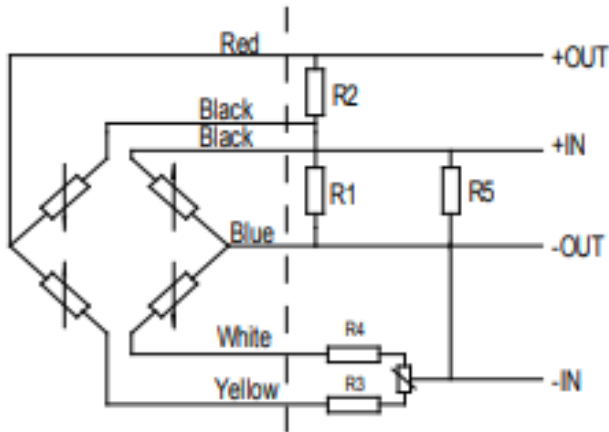
PPS90 Operational Characteristics

$V_+ = 5V$, $V_- = 0V$, Temperature = 25°C

PARAMETER	SYMBOL	Min	Typ	Max	UNITS
Operating Temperature	T_s	-40		125	°C
Supply Current (Note 1)	I_{DD}	1.49	1.5	1.51	mADC
Accuracy					
Linearity		-0.25		0.25	%Full Scale
Update Rate	ms		1		ms
Long Term Stability		-0.5		0.5	% FS per year
Repeatability		-0.075	+/-0.05	0.075	%Full Scale

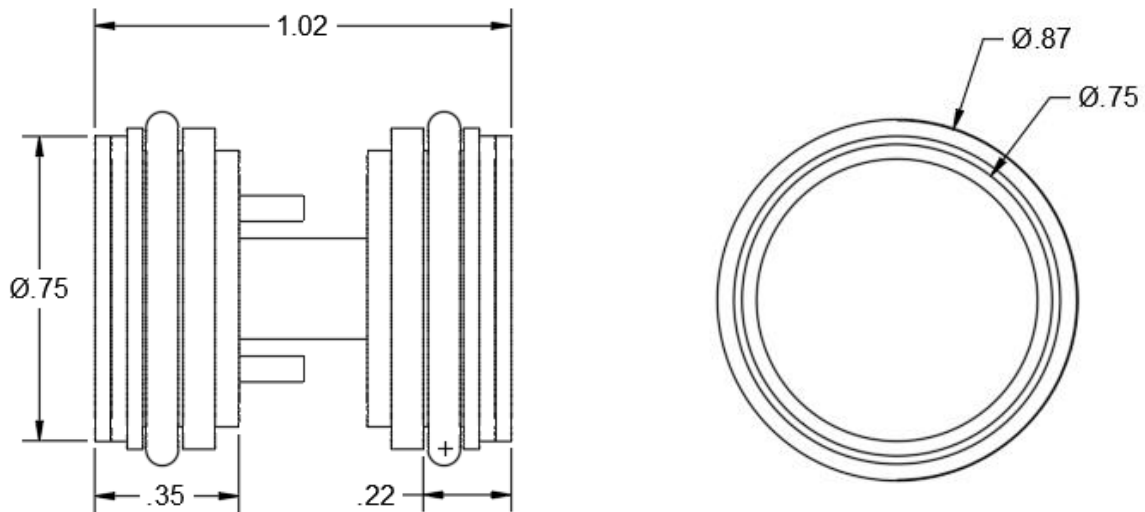
Electrical Pin Configuration

Compensated Board

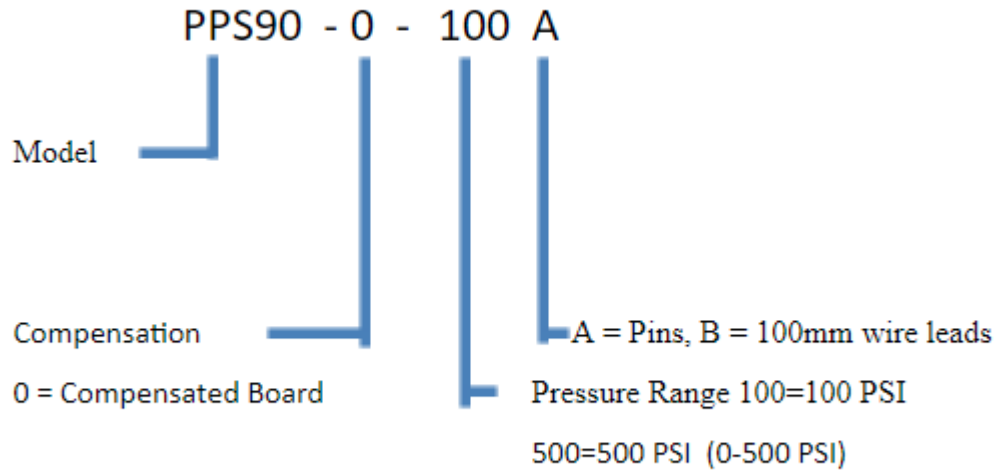


Wire color	Definition
Black	+IN
Yellow	-IN
Red	+OUT
Blue	-OUT

Mechanical Dimensions Inches [mm]



Part Number Configurator



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