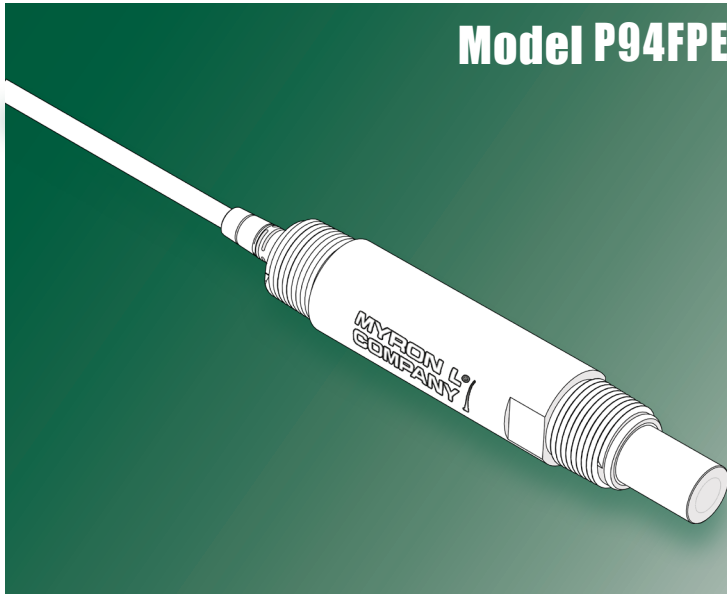


# pH SENSOR: P94FPE

Heavy-Duty, Preamplified pH Sensors for 900 Series Multi-Parameter Monitor / Controllers



## Model P94FPE

- **Heavy duty, flat-tip sensor design resists fouling and abrasion.**
- **Built-in isolated preamp guarantees accurate, trouble free operation.**
- **Integrated PT1000 RTD for superior Temperature Compensation<sup>2</sup>.**
- **Sensor body made from Ryton<sup>®</sup> for excellent temperature and chemical durability.**

## BENEFITS

- **Superb Response Time.**
- **Double-Junction Reference Design.**
- **0-14 pH Range.**
- **Sensor area is completely sealed to eliminate leaks<sup>1</sup>.**
- **Double-ended NPT for simple in-line installations, independent of mounting orientation.**

## DESCRIPTION

The Myron L<sup>®</sup> Company P94FPE pH sensors are designed to operate exclusively with Myron L<sup>®</sup> Company's 900 Series Multi-Parameter Monitor / Controller.

Each sensor has a built-in preamplifier that guarantees accurate measurements by eliminating ground-loop problems and reducing the effects of cable capacitance and impedance.

They also include an integral PT1000 RTD to facilitate fast,

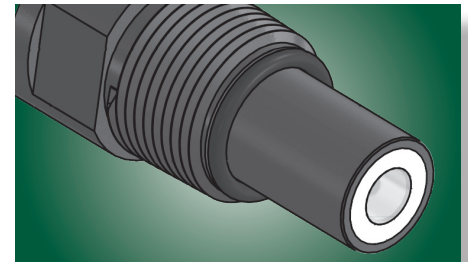
accurate Temperature Compensation (TC)<sup>2</sup>.

The P94FPE sensor body is made from durable Ryton<sup>®</sup> PPS (polyphenylene sulfide). Ryton combines excellent temperature tolerance with superb resistance to solvents and corrosive chemicals and has an inherent UL94 V-0 flammability rating without flame retardant additives. A double-ended, 3/4" NPT fitting makes this sensor easy to install in-line.

Double-Junction Reference design means this sensor is perfect for more demanding applications. Because the external junction is made from polyethylene the P94FPE is perfect for harsher industrial environments where contamination of the junction is a concern. It works exceptionally well when measuring solutions with low ionic strength.

The P94FPE sensor uses a flat tip design that stays cleaner and resists damage better than the classic bulb design when exposed to abrasive

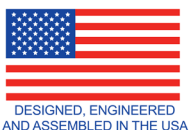
and/or oily solutions. It is an excellent choice for more demanding applications, such as wastewater management, or when measuring the pH of non-aqueous solutions.



**P94FPE Sensor Tip Detail**

Standard cable length is 10ft. (3.05m) terminated with 6, tinned leads (5 signal; 1 shield). A separate 5-pin terminal block included<sup>3</sup>.

**For more information please visit our website at [www.myronl.com](http://www.myronl.com)**



<sup>1</sup> Back seal of sensor body at cable exit is not water tight. DO NOT completely submerge sensor.

<sup>2</sup> Temperature compensation can be deactivated to meet USP (United States Pharmacopeia) requirements.

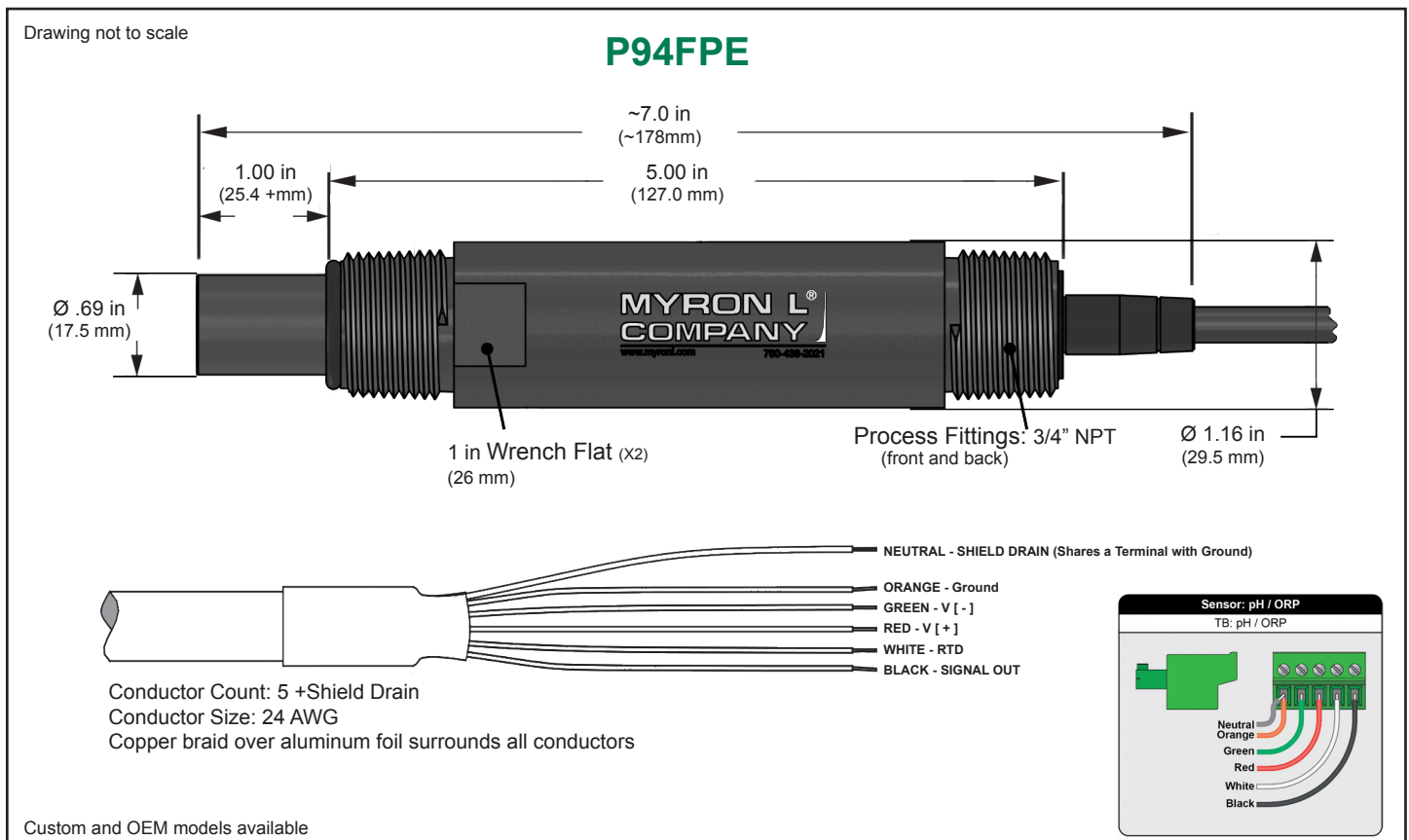
<sup>3</sup> Shield drain and sensor ground share a terminal.

## SPECIFICATIONS: P94FPE

Measurement Range:	0 – 14 pH (sodium ion error above 12.3 pH)
Offset (ZERO):	7.00 ±0.2 pH
Span:	Better than 95% of theory
Ambient Temperature - Pressure:	0 – 80 °C (32 – 176 °F) <sup>1</sup> ; 0 – 100 PSIG (0 – 6.9 bar) <sup>1</sup> 80 °C (176 °F) @ 50 PSIG (3.5 bar) <sup>2</sup> 25 °C (77 °F) @ 100 PSIG (6.9 bar) <sup>2</sup>
Signal Conditioning:	Built-in preamplifier
Sensor Geometry:	Flat Glass Tip
Reference Junction:	Double Junction: <b>Internal: Pellon®</b> <b>External: Polyethylene</b>
Temperature Sensor:	PT1000 RTD
Sensor Body Material:	Ryton®
Physical Connection & Mounting:	3/4" NPT: <b>In-line: May be installed in any orientation.</b> <b>Immersion: Requires a standpipe and coupler.</b>
Electrical Connection (Standard):	10 ft. (3.05 m) long Shielded Cable: 24 AWG, 5 leads + Shield Drain Wire <i>5-pin Terminal Block Included.</i>

<sup>1</sup> Temperature and pressure range for ambient environment and immersion installations. Derated limits apply.

<sup>2</sup> Maximum temperature and pressure for wetted sensor.



### LIMITED WARRANTY

All Myron L® Company pH Sensors have a Six (6) Month Limited Warranty. If sensor fails to function normally, return the unit to the factory prepaid. If, in the opinion of the factory, failure was due to materials or workmanship, repair or replacement will be made without charge. A reasonable service charge will be made for diagnosis or repairs due to normal wear, abuse or tampering. Warranty is limited to the repair or replacement of the sensor only. The Myron L® Company assumes no other responsibility or liability.

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### Built On Trust.

Founded in 1957, the Myron L® Company is one of the world's leading manufacturers of water quality instruments. Because of our commitment to product improvement, changes in design and specifications are possible. You have our assurance any changes will be guided by our product philosophy: accuracy, reliability, and simplicity.

