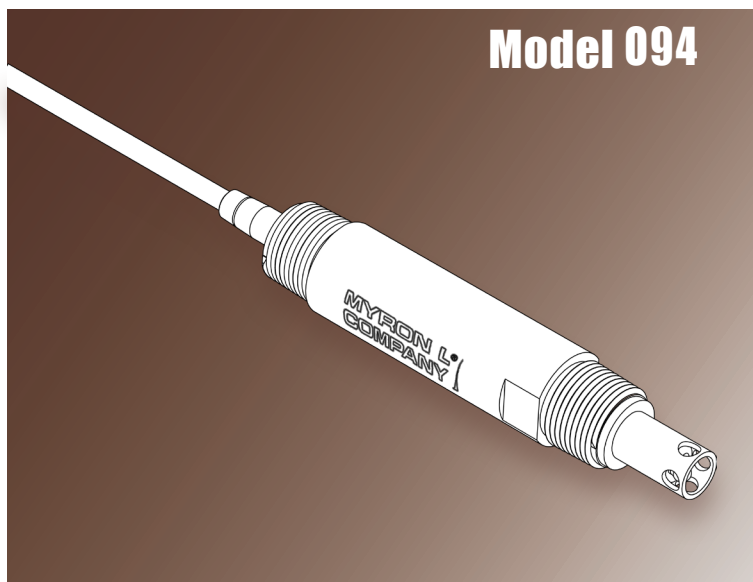# ORP SENSORS: O94 & O94PE

3/4 in. Preamplified ORP Sensors for 900 Series Multi-Parameter Monitor / Controllers

OVER **60** YEARS

Model O94

- **Built-in isolated preamp guarantees accurate, trouble-free operation.**

- **Sensor bodies made from Ryton® for excellent temperature and chemical durability.**

- **Sensor area is completely sealed to eliminate leaks[1].**

- **Platinum ORP electrode.**

BENEFITS

- **Superb Response Time.**

- **Double-Junction Reference Design.**

- **± 2000 mV Range.**

- **Double-ended NPT for simple in-line or submersion installations, independent of mounting orientation.**

DESCRIPTION

The Myron L® Company O94 and O94PE ORP sensors are designed to operate exclusively with the Myron L® Company 900 Series Multi-Parameter Monitor / Controller.
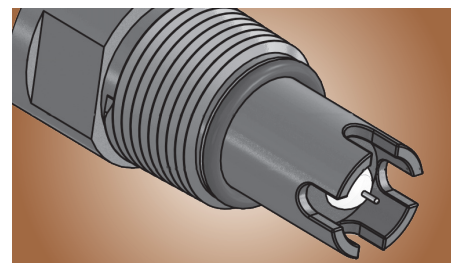
Each sensor has a built-in preamplifier that guarantees accurate measurements by eliminating ground-loop problems and reducing the effects of cable capacitance and impedance.

Sensor bodies are made from durable Ryton® 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 these sensors easy to install in-line.

Double-Junction Reference design means these sensors can withstand poisoning in more demanding applications. The external junction can be either Pellon® (O94) for applications req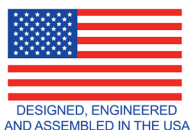uiring faster response time, or polyethylene (O94PE), for harsher industrial environments where contamination of the junction is a concern.

O94PE 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 is included[2].

For more information please visit our website at www.myronl.com

MYRON L® COMPANY
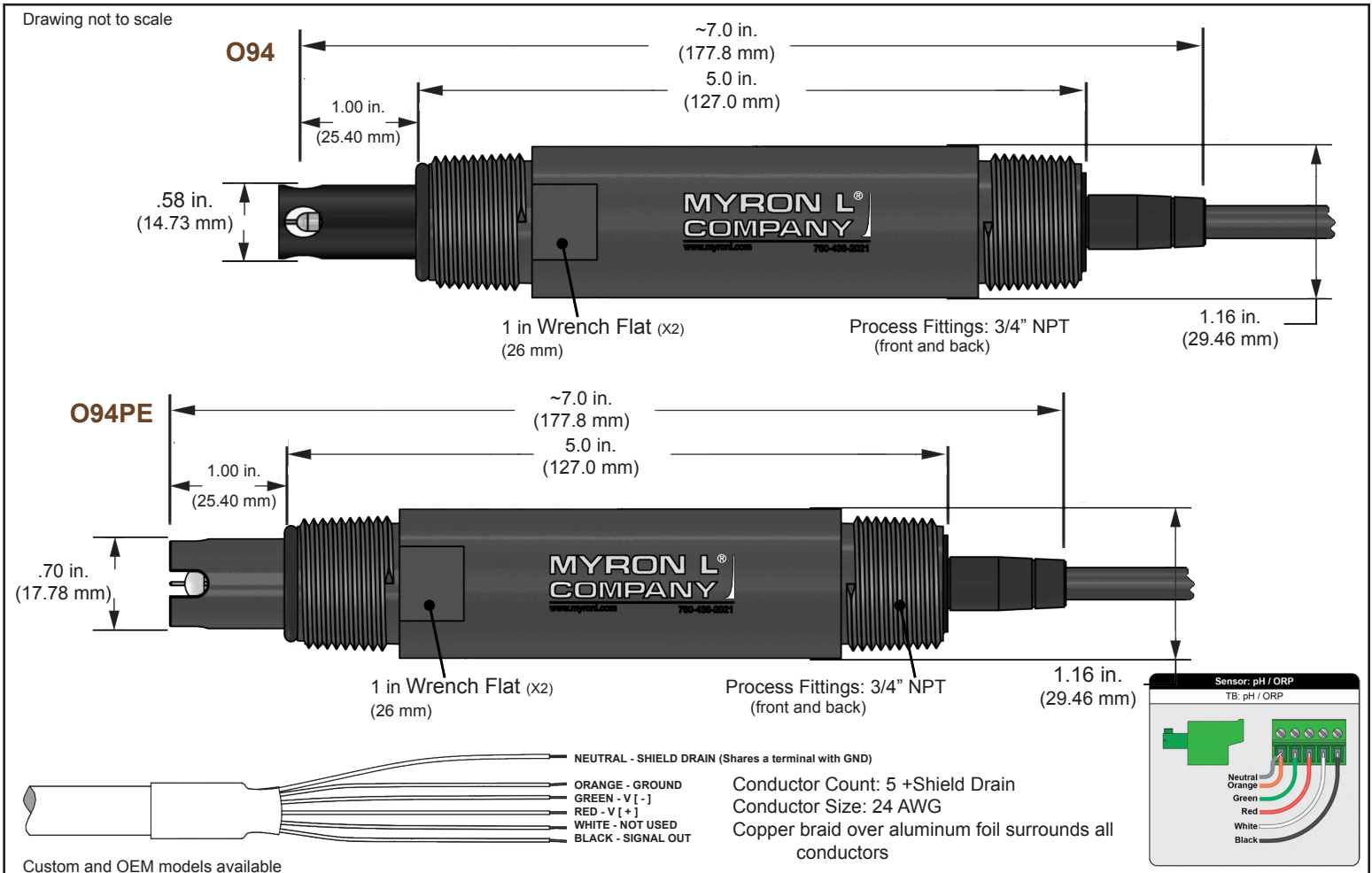Water Quality Instrumentation
Accuracy • Reliability • Simplicity

[1] Back seal of sensor body at cable exit is not water tight. DO NOT completely submerge sensor.
[2] Shield drain and sensor ground share a terminal.

SPECIFICATIONS: O94 & O94PE

Model:	O94	O94PE
Measurement Range:	± 2000 mV	± 2000 mV
Ambient Temperature - Pressure:	0 – 80 °C (32 – 176 °F)[1]; 0 – 100 PSIG (0 – 6.9 bar)[1] 80 °C (176 °F) @ 50 PSIG (3.5 bar)[2] 25 °C (77 °F) @ 100 PSIG (6.9 bar)[2]	0 – 80 °C (32 – 176 °F)[1]; 0 – 100 PSIG (0 – 6.9 bar)[1] 80 °C (176 °F) @ 50 PSIG (3.5 bar)[2] 25 °C (77 °F) @ 100 PSIG (6.9 bar)[2]
Signal Conditioning:	Built-in preamplifier	Built-in preamplifier
Sensor Material:	Platinum	Platinum
Sensor Geometry:	Extended Tip	Extended Tip
Reference Junction:	Double Junction: **Internal**: Pellon® **External**: Pellon®	Double Junction: **Internal**: Pellon® **External**: Polyethylene
Temperature Sensor:	NONE	NONE
Sensor Body Material:	Ryton®	Ryton®
Physical Connection & Mounting:	3/4" NPT: **In-line**: May be installed in any orientation **Immersion**: Requires a standpipe & coupler	3/4" NPT: **In-line**: May be installed in any orientation **Immersion**: Requires a standpipe & coupler
Electrical Connection (Standard):	10 ft. (3.05 m) long Shielded Cable: 24 AWG, 5 leads + Shield Drain Wire. *5-pin Terminal Block Included.*	10 ft. (3.05 m) long Shielded Cable: 24 AWG, 5 leads + Shield Drain Wire. *5-pin Terminal Block Included.*

[1] Temperature and pressure range for ambient environment and immersion installations. Derated limits apply.
[2] Maximum temperature and pressure for wetted sensor.

Drawing not to scale

O94

~7.0 in.
(177.8 mm)

5.0 in.
(127.0 mm)

1.00 in.
(25.40 mm)

.58 in.
(14.73 mm)

MYRON L® COMPANY
www.myronl.com 760-438-2021

1 in Wrench Flat (X2)
(26 mm)

Process Fittings: 3/4" NPT
(front and back)

1.16 in.
(29.46 mm)

O94PE

~7.0 in.
(177.8 mm)

5.0 in.
(127.0 mm)

1.00 in.
(25.40 mm)

.70 in.
(17.78 mm)

MYRON L® COMPANY
www.myronl.com 760-438-2021

1 in Wrench Flat (X2)
(26 mm)

Process Fittings: 3/4" NPT
(front and back)

1.16 in.
(29.46 mm)

NEUTRAL - SHIELD DRAIN (Shares a terminal with GND)
ORANGE - GROUND
GREEN - V [-]
RED - V [+]
WHITE - NOT USED
BLACK - SIGNAL OUT

Conductor Count: 5 +Shield Drain
Conductor Size: 24 AWG
Copper braid over aluminum foil surrounds all conductors

Sensor: pH / ORP
TB: pH / ORP

Neutral
Orange
Green
Red
White
Black

Custom and OEM models available

LIMITED WARRANTY

All Myron L® Company ORP 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.

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.