CONDUCTIVITY/RESISTIVITY SENSOR #CS40
For 750II Conductivity/Resistivity Monitor/controllers

MODEL: CS40
CS40HT (Temporarily unavailable; contact manufacturer)

BENEFITS
- Economic Value
- Standard 100 psi at 150°C/Hi-Temp 250 psi at 205°C
- Broad Measurement Range
- Many Applications

The Myron L Model CS40 sensor has been designed for a broad measurement range in difficult process conditions. It can be installed in submersion, insertion, or wet-tap configurations, and is good for most applications from high purity water to high chemical concentrations.

DESCRIPTION
Wetted materials of construction are 316 stainless steel and Kel-F or Teflon®, depending on the range of temperature required. All possible leak paths through the sensor are double sealed with EPR O-rings for maximum on-stream reliability. The first O-ring protects the second O-ring from chemical attack, giving more than double the service life that can be expected from single sealed units.

Process connections are made via a bored through swage fitting with 3/4" NPT threads. This fitting can be screwed into a line, a tank, or the optional wet-tap valve (WTV) assembly. It can also be turned around and connected to a standpipe for use in a submersion configuration. Available sensor constants of 0.05, 0.1, 1.0 & 10.0 provide the broadest range of applications of any of our sensor models.

NOTE: Shown with optional wet-tap valve and junction box

* Teflon® is a registered trademark of DuPont.

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

Made in USA

Water Quality Instrumentation
Accuracy • Reliability • Simplicity
### Maximum Pressure/Temperature Ratings:

<table>
<thead>
<tr>
<th>Component</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Sensor</td>
<td>100 psi/6.9 bar at 120°C/248°F</td>
</tr>
<tr>
<td>Hi Temp Sensor</td>
<td>Temporarily unavailable; contact manufacturer.</td>
</tr>
<tr>
<td>Valve Assembly</td>
<td>50 psi/3.4 bar at all temps</td>
</tr>
</tbody>
</table>

### Wetted Materials:

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insulator</td>
<td>Teflon®</td>
</tr>
<tr>
<td>O-rings</td>
<td>EPR</td>
</tr>
<tr>
<td>Electrodes</td>
<td>316 Stainless Steel standard; optional materials available upon request.</td>
</tr>
<tr>
<td>Fitting</td>
<td>316 Stainless Steel</td>
</tr>
</tbody>
</table>

### Temperature Compensation

- Resistivity: 5.49 KΩ & 100 KΩ @ 25°C/77°F
- Conductivity: 10 KΩ @ 25°C/77°F
- Conductivity HT: 100 KΩ @ 25°C/77°F

### Connections:

- 3/4" NPT compatible with BSP
- Process: Sensor: 3/4" NPT
- Valve: 1" NPT
- Electrical: Plain tinned wire ends, 22-24 gauge.

### Sensor Constant:

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Range</th>
<th>Constant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resistivity</td>
<td>0-200 KΩ to 0-20 MΩ</td>
<td>0.05</td>
</tr>
<tr>
<td>Conductivity</td>
<td>0-1 to 0-5 µS/ppm</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td>0-10 to 0-20,000 µS/ppm</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>0-50,000 to 0-200,000 µS/ppm</td>
<td>10.0</td>
</tr>
</tbody>
</table>

### Conductivity/Resistivity Sensor #CS40

![Diagram of CS40 sensor](image)

- Reverse direction of swage fitting and thread onto a standpipe for submersible use. Can be swaged in place at any point on the sensor body.
- Adjustable 3-9 in. / 76-229 mm
- Optional wet-tap valve assembly with probe constants of 0.1/1.0 only
- Terminal strip in J-box accepts plain stripped leads, 14-24 awg
- Optional junction box Class I, Group D, Div. 2 explosion and weatherproof, aluminum

**Note:** Drawing Not to Scale

### Limited Warranty

All Myron L® conductivity and resistivity sensors have a Two (2) Year 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.

2450 Impala Drive
Carlsbad, CA 92010-7226 USA
Tel: +1-760-438-2021
Fax: +1-800-869-7688 / +1-760-931-9189
www.myronl.com

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.