CONDUCTIVITY/RESISTIVITY SENSOR #CS41
For 750II Conductivity/Resistivity Monitor/controllers

MODEL: CS41 and CS41HT

BENEFITS

• Economic Value
• Small, Convenient Size
• Standard 100 psi at 150°C/Hi-Temp 250 psi at 205°C
• General Purpose Use
• User Replaceable

The Myron L Model CS41 sensor was designed for high pressure, high temperature Conductivity & Resistivity measurements, and is an ideal choice for boiler control applications. Blowdown control, condensate monitoring, leak detection on heat exchangers, and steam purity measurements are just a few of the many applications in which this rugged and reliable sensor can be used.

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.

Hot water is a severe environment for any elastomer, and the first O-ring bears the brunt of chemical attack, allowing the second O-ring to remain relatively unaffected. The result is the sensor life is more than double what can be expected of single sealed, or epoxy sealed units.

Probe constants of 0.05, 0.1, & 1.0 are available, which will cover the ranges in most boiler related applications.

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

CS41 Sensor

* Teflon® is a registered trademark of DuPont.
† Kel-F® is a registered trademark of 3M Company.
**SPECIFICATIONS**

**Maximum Pressure/Temperature Ratings:**
- **Standard Sensor**: 100 psi/6.9 bar at 150°C/302°F
- **Hi Temp Sensor**: 250 psi/17.2 bar at 205°C/401°F
- **Either Sensor**: 400 psi/27.6 bar at 100°C/212°F

**Wetted Materials:**
- **Insulator**: Teflon®
- **O-rings**: EPR
- **Electrodes**: 316 Stainless Steel standard, optional materials available upon request.

**Temperature Compensation**
- Resistivity: 5.49 KΩ and 100 KΩ @ 25°C/77°F
- Conductivity: 10 KΩ @ 25°C/77°F
- RT100 & RT1000 available upon request.

**Connections:**
- **Process**: 3/4” NPT compatible with BSP
- **Sensor**: 3/4” NPT
- **Electrical**: 3/4” FNPT
- 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>
</tbody>
</table>

**CONDUCTIVITY/RESISTIVITY SENSOR #CS41**

**STANDARD WIRING CONNECTIONS**

- **WHITE**: OUTER ELECTRODE
- **BLACK**: INNER ELECTRODE
- **RED**: TC ELEMENT
- **GREEN**: TC ELEMENT

**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: +1-800-869-7668 / +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.

© Myron L® Company 2017 CS41DS r09-17

Printed in U.S.A.