Honeywell Solutions-Model 5000TC & APT 4000

Honeywell’s Answer to Successful Clean-In-Place Results

Model 5000TC Non-Contacting Conductivity Sensor
Model APT4000 Conductivity Analyzer

The Honeywell Model 5000TC Non-Contacting Conductivity Sensor and Model APT4000 Conductivity Analyzer “A solution that insures successful CIP results using sanitary, non-contacting measurement technology”.

Application

Clean-in-place systems to sanitize process piping and vessels use cleaning solutions and rinse water to kill microorganisms left from previous products and batches.

• Do you monitor your CIP operation to insure proper cleaning solution strength and successful final rinsing?

• Are you risking product contamination in process piping and vessels by not removing all residue from previous products and batches?

• Is your current monitoring solution adding to the contamination?

The Problem

Proper cleaning solution strength must be maintained to kill all microorganisms. Rinse water conductivity must be measured to insure all residue has been removed. Accurate rinse water conductivity and a direct concentration reading of cleaning solution strength are needed for successful CIP results.

Contributing factors are:

• Cleaning solutions often use harsh chemicals resulting in difficult conductivity measurement

• Many times, cleaning solutions are reused and solution strength becomes diluted

• Rinse water conductivity indicates the presence of contaminants and residue. High accuracy is needed

• Non-sanitary conductivity measuring sensors with process connections that can trap residue/organisms, may be adding contamination to the process

Honeywell eliminates these problems with a sanitary non-contacting (torodial) solution that measures water conductivity and a direct concentration reading of nitric acid, sodium hydroxide or other cleaning liquids.

Industrial Measurement and Control
The Honeywell Solution

*Honeywell’s 5000TC Conductivity Sensor and APT4000 Analyzer Solution* gives you the measurement you want ...

- Cleaning solution direct concentration
- Rinse water conductivity
- 3A approved process compatible materials
- Sanitary process fittings
- Connections to fit most vessels and piping
- Toroidal sensor technology seldom requires cleaning

... and the Time-Proven accuracy and performance you need.

- High accuracy
- Rapid response sensor indentifies stage of cleaning
- Temperature compensation of conductivity measurement
- Conductivity, Concentration and Temperature indication
- Easy to configure, menu driven configuration
- Process and Diagnostic Alarms

**Specifications: Model 5000TC Conductivity Sensor & APT4000 Analyzer Solution**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Measuring Range</td>
<td>0.2 to 2000 milliSiemens/cm</td>
</tr>
<tr>
<td>Wetted Materials</td>
<td>PFA Teflon, Polypropylene, PVFD or PEEK</td>
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<tr>
<td>Process Connection</td>
<td>2 in. Sanitary Fitting</td>
</tr>
<tr>
<td>Sensor Certification</td>
<td>3A Sanitary Materials</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>10 °C to 125 °C (14 °F to 257 °F)</td>
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</tbody>
</table>
| Max Pressure/Temperature Limits | 200 PSI @ 302°F (PEEK, PFA Teflon)  
                            | 100 PSI @ 212°C (Polypropylene)                    
                            | 100 PSI @ 248°C (PVDF)                             |
| Temperature Compensator       | 100 OHM Platinum RTD                              |
| Accuracy                      | +/-1% of reading +/-0.02 mS/cm +/-1 of least significant digit |
| Output                        | 4-20 mA DC, 0-20 mA DC                            |
| Alarm/Relays                  | Max, Min, Wash, Diagnostic (all SPDT)              |

Honeywell Industrial Measurement and Control offers a complete portfolio of products and solutions for process and machine control applications, including controllers, recorders, transmitters, actuators, smart sensors, and analytical instruments. To learn more about these offerings and how they can help your organization achieve breakthrough results, contact your local Honeywell representative, or contact us at the following phone numbers:

**U.S.:** 1-800-784-3011  
**Canada:** 1-800-461-0013  
**UK:** 44 1698 481730  
**Germany:** 49 69 8064-336  
**Asia/Pacific:** 65 6355 2828  
**France:** 33 1 60 19 80 75  
**Italy:** 39 02 9214 6503  
**Spain:** 34 91313.61.00  
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**Warranty/Remedy**

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