**GENERAL**

The ISC40J sensors are designed for use with the FLXA™202/FLXA™21 2-wire Analyzer, FLXA™402 4-wire Converter and the ISC450G 4-wire Converter. This combination exceeds all expectations for conductivity measurement in terms of reliability, accuracy, rangeability and price performance.

This innovative inductive conductivity sensor provides highly accurate measurements over a wide measuring range (1 µS/cm to 1999 mS/cm) and process temperature range (-10 to 130°C, -10 to 105°C for ISC40SJ-TT) without changing the cell constant and conducting recalibration.

The erosion/abrasion resistant PEEK (Poly Ether Ether Ketone), which also features excellent chemical resistance in all solutions except Fluoric Acid or Oxidizing Concentrated Acids.

The PEEK sensor is provided with a rugged Stainless Steel mounting thread/nut/ gasket combination for ultimate flexibility in installation using bulk head installation technique. There is also a wide range of holders and options available for reliable in-line or off-line installation with double O-ring seals for long service life of the sensor.

The ISC40J have a large bore for optimal resistance to fouling processes and when properly installed, the flow will keep the sensor clean, to help avoid measuring errors.

**FEATURES**

- Inductive Conductivity technique for elimination of fouling and polarization errors.
- Wide bore sensors for long term stability.
- Installation flexibility due to wide range of holders and due to the use of universal bulkhead construction.
- A single sensor can maintain the high resolution and accuracy, and measure the conductivity in an extremely broad range.

Minimum span: 100 µS/cm  
Maximum span: 1999 mS/cm

**APPLICATIONS**

- All applications where severe electrode fouling prevents the use of contacting electrodes.
- All ranges except (ultra) pure water applications.
- All slurry applications where conventional systems suffer from plugging or erosion.
- All applications where the 6 decade rangeability is necessary for accurate process control.

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SYSTEM CONFIGURATION

Refer to GS 12A01A03-01EN for the FLXA202, GS 12A01A02-01E for the FLXA21, GS 12A01F01-01EN for the FLXA402, and GS 12D06D05-01E for the ISC450G.

Non-explosionproof System

![Diagram of non-explosionproof system components]

Explosionproof System

![Diagram of explosionproof system components]

(Note) The temperature of the sample solution in contact with sensor should be the range of -10 to 105°C.
# GENERAL SPECIFICATION

## 1. ISC40GJ Inductive Conductivity Sensor

### Compatibility:
- ISC40GJ is compatible with FLXA202/FLXA21 2-wire Analyzer, FLXA402 4-wire Converter, ISC202G Inductive Conductivity Transmitter and ISC450G Converter.
- ISC40SJ-TT is compatible with ISC202SJ Inductive Conductivity Transmitter.

### Measuring range:
- 1 μS/cm to 1999 mS/cm

### Output span:
- Minimum 100 μS/cm
- Maximum 1999 mS/cm

### Process temperature:
- -10 to 130°C for continuous exposure.
- -10 to 105°C for ISC40SJ-TT. Suitable for steam-sterilisable applications.

### Process pressure:
- Dependent on installation; but <2 MPa (300 psi).

### Process flow:
- Maximum 5 m/s.

### Wetted materials:
- Sensor: PEEK (Poly Ether Ether Ketone).
- O-ring: Fluoro-rubber (FKM) or ethylene propylene copolymer rubber.
- Adapter (optional): Stainless steel (316 SS) or PVC or PVDF.

### Non-wetted materials:
- Sensor thread: Stainless steel (304 SS).
- Retaining nut: Stainless steel (304 SS).
- Cable: Weatherproof vinyl.

### Process connection:
- With retaining nut on G3/4 thread of sensor top (refer to section Drawings and Dimensions) for bulkhead mounting; optional process adapters or process fittings.

### Process adapters:
- JIS 10K 50 RF flange adapter
  - (Material: Stainless steel (316 SS))
- JIS 10K 50 FF flange adapter
  - (Material: PVC or PVDF)
- DIN PN16 DN50 flange adapter
- ANSI Class 150 2 flange adapter
- R2 screw-in adapter

### Cable length:
- 5 m, 10 m, 15 m, 20 m

### Extension cable:
- The length into extension cable is inside of 50 m.
- Extension cable cannot be used with ISC40SJ-TT.

### Dimensions:
- Refer to section Drawings and Dimensions.

### Weight:
- Sensor: approximately 0.6 kg.

(Notes) Do not submerge the sensor itself in process water, as the seems between the mold and the metal of the sensor are not waterproof. Since a temperature sensor is imbedded in the PEEK molded sensor, its response speed is not fast. Install another temperature sensor if necessary.

---

## ISC40SJ-TT Intrinsically safe type sensor

TIIS certification sensor should be used with ISC202SJ Protection Concept and Adapter Group:
- Ex ia IIC T4 Intrinsic safe rating:
  - Ui=14.4 V, li=20 mA, Pi=190 mW, Li=28.6 mH,
  - Ci=0.2 μF

### Environment and operational conditions.
- The temperature of the sample solution in contact with sensor should be the range of -10 to 105°C.

---

## 2. ISC40FDJ Immersion Holder

### Process temperature:
- Maximum 80°C.

### Process pressure:
- Maximum 0.2 MPa at 20°C.
- Maximum 0.1 MPa at 80°C.

### Wetted materials:
- Holder: C-PVC or Stainless steel (316 SS)
- O-ring: Fluoro-rubber (FKM) or ethylene propylene copolymer rubber.
- Flange (Optional):
  - Gasket: Chloroprene or ethylene propylene copolymer rubber.

### Process connection:
- Fixed flange (Optional):
  - DIN PN10 DN50 (ANSI 2 inch 150 lbs. with bolt holes):
    - Material PP
  - JIS 10K 50 RF:
    - Material Stainless steel (316 SS)
  - 2-inch pipe:
    - Material Stainless steel (316 SS)

### Mounting set (Optional):
- Zinc-plated steel.

---

## 3. ISC40FFJ Flow Holder

### Process temperature:
- ISC40FFJ-SA, -SJ: Maximum 150°C.
- ISC40FFJ-PA, -PJ: Maximum 100°C.
- ISC40FFJ-FA, -FJ: Maximum 130°C.

### Process pressure:
- ISC40FFJ-SA, -SJ: Maximum 1.0 MPa at 150°C.
- ISC40FFJ-PA, -PJ: Maximum 0.6 MPa at 20°C.
- Maximum 0.1 MPa at 100°C.
- ISC40FFJ-FA, -FJ: Maximum 1.0 MPa at 20°C.
- Maximum 0.1 MPa at 130°C.

### Wetted materials:
- ISC40FFJ-S: Stainless steel (316 SS)
- ISC40FFJ-P: Polypropylene
- ISC40FFJ-F: PVDF
- O-ring: Fluoro-rubber (FKM) or ethylene propylene copolymer rubber.

### Non-wetted materials:
- Nut: Stainless steel (304 SS)
- Mounting set (Optional): Stainless steel (304 SS)
- Flange adapters (Optional): Stainless steel (304 SS)

### Process connection:
- 1/2NPT or Rc1/2
- DIN PN10 DN25 flange adapters (Optional)
- JIS 10K 25 RF flange adapters (Optional)
4. ISC40FSJ Direct Insertion Subassembly

Process temperature:
- ISC40FSJ-STWJ: Maximum 110°C.
- ISC40FSJ-SCWJ, -SCSJ: Maximum 150°C.
- ISC40FSJ-PCSJ: Maximum 100°C.
- ISC40FSJ-FCSJ: Maximum 130°C.

Process pressure:
- ISC40FSJ-STWJ: Maximum 1.0 MPa at 110°C.
- ISC40FSJ-SCWJ, -SCSJ: Maximum 1.0 MPa at 150°C.
- ISC40FSJ-PCSJ: Maximum 0.6 MPa at 20°C, Maximum 0.1 MPa at 100°C.
- ISC40FSJ-FCSJ: Maximum 1.0 MPa at 20°C, Maximum 0.1 MPa at 130°C.

Materials:
- Wetted materials:
  - ISC40FSJ-STWJ: Stainless steel (316L SS), silicon rubber.
  - ISC40FSJ-SCWJ, -SCSJ: Stainless steel (316 SS), Fluoro-rubber or ethylene propylene copolymer rubber.
  - ISC40FSJ-PCSJ: Polypropylene, Fluoro-rubber or ethylene propylene copolymer rubber.
  - ISC40FSJ-FCSJ: PVDF, Fluoro-rubber or ethylene propylene copolymer rubber.
- Non wetted materials:
  - ISC40FSJ-STWJ: IDF clamp; SCS13.
  - ISC40FSJ-SCWJ, -SCSJ, -PCSJ, -FCSJ: Nut; Stainless steel (304 SS).

Process connection:
- ISC40FSJ-STWJ: IDF 3 inch tri-clamp.
- ISC40FSJ-SCWJ: coupling.
- ISC40FSJ-SCSJ-PCSJ-FCSJ: R2 screw-in coupling.

Dimensions: Refer to section Drawings and Dimensions.

5. BA20 Terminal Box

Use when FLXA202/FLXA21 analyzer or FLXA402/ISC450G converter is separated from ISC40J sensor and is set up.

Ambient temperature: -10 to 50°C
Construction: IP54 agreement
Case material: Article of cast metal of aluminum alloy
Cable inlet: 2 (Pg13.5)
Case color: Straight gray
Weight: Approx. 2 kg

Note: BA20 can not be used with ISC40SJ-TT.

6. WF10J Extension Cable

Number of mind Lines: 6
Finish outside diameter: 7.7 mm
Terminal processing: Special terminals
Material: Weatherproof vinyl.

Note: WF10J can not be used with ISC40SJ-TT.
2. Immersion Holder

<table>
<thead>
<tr>
<th>Model</th>
<th>Suffix code</th>
<th>Option code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISC40SJ</td>
<td>-S</td>
<td>-F</td>
<td>Immersion holder</td>
</tr>
<tr>
<td>Material</td>
<td>-P</td>
<td>-J</td>
<td>Rct1/2 Polypropylene (PP)</td>
</tr>
<tr>
<td></td>
<td>-S</td>
<td>-J</td>
<td>1/2NPT female Polypropylene (PP)</td>
</tr>
<tr>
<td>Flange</td>
<td>/S</td>
<td>/S</td>
<td>JIS 10K 25 RF Flange 316 SS</td>
</tr>
<tr>
<td></td>
<td>/J</td>
<td>/J</td>
<td>JIS 10K 25 RF Flange PVDF</td>
</tr>
<tr>
<td></td>
<td>/J</td>
<td>/P</td>
<td>JIS 10K 25 RF Flange PVC</td>
</tr>
<tr>
<td></td>
<td>/J</td>
<td>/F</td>
<td>R2 screw-in adapter PVC</td>
</tr>
<tr>
<td></td>
<td>/J</td>
<td>/S</td>
<td>R2 screw-in adapter PVDF</td>
</tr>
<tr>
<td></td>
<td>/J</td>
<td>/E</td>
<td>Ethylene propylene rubber O-ring</td>
</tr>
<tr>
<td></td>
<td>/J</td>
<td>/J</td>
<td>or gasket (*2)</td>
</tr>
</tbody>
</table>

1. Choose thermistor (-T3) only, when connecting with ISC200S.
2. For use in highly alkaline solutions, be sure to check the process conditions and contact us.

Note: “TIIS Certification” as a certified explosion approval from the Technology Institution of Industrial Safety.

3. Flow-through Holder

<table>
<thead>
<tr>
<th>Model</th>
<th>Suffix code</th>
<th>Option code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISC40FFJ</td>
<td>-F</td>
<td>-F</td>
<td>Flow-through holder</td>
</tr>
</tbody>
</table>

1. All flanges are adjustable. Each material in the above description represents the one of wetted part of the adjustable flange which itself is made of 304 SS.
2. For use in highly alkaline solutions, be sure to check the process conditions and contact us.
3. Option in case of 316 SS material.

4. Direct Insertion Adapter

<table>
<thead>
<tr>
<th>Model</th>
<th>Suffix code</th>
<th>Option code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISC40FSJ</td>
<td>-F</td>
<td>-F</td>
<td>Direct insertion adapter</td>
</tr>
</tbody>
</table>

1. For use in highly alkaline solutions, be sure to check the process conditions and contact us.

5. Terminal Box

<table>
<thead>
<tr>
<th>Model</th>
<th>Suffix code</th>
<th>Option code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA20</td>
<td>-X</td>
<td>/T</td>
<td>M4 screw terminals (*1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>/Y</td>
<td>M3 screw terminals (*2)</td>
</tr>
</tbody>
</table>

1. Use to connect with FLXA202/FLXA21.
2. Use to connect with FLX402, ISC450G, ISC202G/TB.

6. Extension Cable

<table>
<thead>
<tr>
<th>Model</th>
<th>Suffix code</th>
<th>Option code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WF10J</td>
<td>-F</td>
<td>-F</td>
<td>Extension cable</td>
</tr>
<tr>
<td></td>
<td>-X</td>
<td>-X</td>
<td>Pin terminals</td>
</tr>
<tr>
<td></td>
<td>-Y</td>
<td>-Y</td>
<td>M3 ring terminals (*2)</td>
</tr>
</tbody>
</table>

1. Used for connection to FLXA202/FLXA21.
2. Used for connection to FLX402, ISC450G, ISC202G/IB.

Note: The maximum extension cable length is 50 m including sensor cable length and can not be used with ISC40SJ-TT.
1. ISC40□J Inductive Conductivity Sensor

**DIMENSIONS**

#### ISC40□J Inductive Conductivity Sensor

**Ground terminals**

- ISC40SJ-GG, -TT does not need ground terminals.

**Pin terminal**

- ISC40SJ -TW has only Ring terminals.

- SC40SJ-GG, -TT has only Pin terminals.

- These accessories are not built in the instruments. Installation varies depending on type of holders.

**Cable Length L**

- 30

**Solution FlowØ48 or less**

- 4-ød holes

**Process Adapters**

- Ø40 or less

**O-ring, Gasket (2)**

**ISC40SJ-TW**

- Ground terminals

**Option Code**

<table>
<thead>
<tr>
<th>Option Code</th>
<th>A</th>
<th>B</th>
<th>d</th>
<th>t</th>
<th>Material</th>
<th>Flange Rating</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>iSFJ</td>
<td>155</td>
<td>120</td>
<td>19</td>
<td>18</td>
<td>SUS316</td>
<td>JIS 10K 50 RF</td>
<td>Approx 1.9</td>
</tr>
<tr>
<td>iPFJ</td>
<td>155</td>
<td>120</td>
<td>19</td>
<td>20</td>
<td>PVC</td>
<td>JIS 10K 50 FF</td>
<td>Approx 0.5</td>
</tr>
<tr>
<td>iFFJ5</td>
<td>155</td>
<td>120</td>
<td>19</td>
<td>20</td>
<td>PVDF</td>
<td>JIS 10K 50 FF</td>
<td>Approx 0.6</td>
</tr>
<tr>
<td>iSFJ4</td>
<td>165</td>
<td>125</td>
<td>18</td>
<td>18</td>
<td>SUS316</td>
<td>DIN PN16 DN50</td>
<td>Approx 2.7</td>
</tr>
<tr>
<td>iSFA</td>
<td>152</td>
<td>120</td>
<td>19</td>
<td>19</td>
<td>SUS316</td>
<td>ANSI Class 150 2</td>
<td>Approx 3.0</td>
</tr>
</tbody>
</table>

**Option Code**

<table>
<thead>
<tr>
<th>Option Code</th>
<th>C</th>
<th>L</th>
<th>Material</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>iSSG</td>
<td>60</td>
<td>46</td>
<td>SUS316</td>
<td>Approx 0.4</td>
</tr>
<tr>
<td>iPSG</td>
<td>70</td>
<td>48</td>
<td>PVC</td>
<td>Approx 0.15</td>
</tr>
<tr>
<td>iFSJ</td>
<td>70</td>
<td>48</td>
<td>PVDF</td>
<td>Approx 0.15</td>
</tr>
</tbody>
</table>

**Filet Screw**

- øB

- øA

**R2 Screw**

- L

**C (face to face)**

- 64
2. ISC40FDJ Immersion Holder

Unit: mm

<table>
<thead>
<tr>
<th>Model</th>
<th>L</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISC40FDJ-V-10</td>
<td>1000</td>
<td>Approx. 0.9</td>
</tr>
<tr>
<td>ISC40FDJ-V-15</td>
<td>1500</td>
<td>Approx. 1.3</td>
</tr>
<tr>
<td>ISC40FDJ-V-20</td>
<td>2000</td>
<td>Approx. 1.7</td>
</tr>
<tr>
<td>ISC40FDJ-S-10</td>
<td>1000</td>
<td>Approx. 3.6</td>
</tr>
<tr>
<td>ISC40FDJ-S-15</td>
<td>1500</td>
<td>Approx. 5.2</td>
</tr>
<tr>
<td>ISC40FDJ-S-20</td>
<td>2000</td>
<td>Approx. 6.8</td>
</tr>
</tbody>
</table>

Option Code: /FA
DIN PN10 DN50 (Note)
(ANSI Class 150 2)
Material: PP

Option Code: /FBJ
JIS 10K 50 RF (Note)
Material: Stainless steel (316 SS)

Flange (Option)
Immersion holder mounting hardware: /MS1 or /MS2 option

Note: Only mating dimensions are according to flange standards.
3. ISC40FFJ Flow Holder

Material: Stainless steel (ISC40FFJ-SJ, -SA)

Model code

<table>
<thead>
<tr>
<th>Model code</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISC40FFJ - SJ</td>
<td>Rc1/2</td>
</tr>
<tr>
<td>ISC40FFJ - SA</td>
<td>1/2NPT female</td>
</tr>
</tbody>
</table>

Unit: mm

Weight: Approx. 1.7 kg

Mounting hardware when /MS option specified

2-inch (O.D.: ø60.5) Mounting Pipe

4 - ø10 hole (For Wall Mounting Hardware)

F06.ai

Oct.05, 2018-00
Material: Stainless steel, with Flange (ISC40FFJ-SJ/FSJ2, ISC40FFJ-SA/FS2)

Material: PP or PVDF (ISC40FFJ-PJ, -PA, -FJ, -FA)
Mounting hardware when /MP option specified

Unit: mm

Option code: /MP  Mounting Bracket  Weight: Approx. 0.5 kg

Material: PP or PVDF, with Flange (ISC40FFJ-PJ/FPJ2, ISC40FFJ-PA/FP2, ISC40FFJ-FJ/FFJ2, ISC40FFJ-FA/FF2)

<table>
<thead>
<tr>
<th>Model code</th>
<th>Flange standard</th>
<th>A</th>
<th>B</th>
<th>d</th>
<th>t</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISC40FFJ-PJ / PJ</td>
<td>JIS 10K 25 RF</td>
<td>125</td>
<td>90</td>
<td>19</td>
<td>Approx. 20</td>
<td>Approx. 3.2 kg</td>
</tr>
<tr>
<td>ISC40FFJ-FJ / FJ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Approx. 3.9 kg</td>
</tr>
<tr>
<td>ISC40FFJ-PA / PA</td>
<td>DIN PN10 DN25</td>
<td>115</td>
<td>85</td>
<td>14</td>
<td>Approx. 19</td>
<td>Approx. 3.2 kg</td>
</tr>
<tr>
<td>ISC40FFJ-FA / FA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Approx. 3.9 kg</td>
</tr>
</tbody>
</table>
4. ISC40FSJ Direct Insertion Subassembly

**IDF Clamp**

*ISC40FSJ-STWJ*

**Coupling welded**

*ISC40FSJ-SCWJ*

**Screw-in socket**

*ISC40FSJ-SCSJ, ISC40FSJ-PCSJ, ISC40FSJ-FCSJ*

**Unit:** mm

**U-Shaped Gasket**

Weight: Approx. 0.8 kg

**Gasket**

Weight: Approx. 1.2 kg

**3-inch Clamp**

Weight: Approx. 0.7 to 1.4 kg

**Liner**

**O-ring**
5. BA20 Terminal Box

Unit: mm

- Inlet for extension cable (ø21.5 hole)
  - Equivalent to DIN Pg13.5 cable gland
- Inlet for detector cable (ø21.5 hole)
  - Equivalent to DIN Pg13.5 cable gland
- Ground terminal
- M4 Screw

Wiring

- Terminal Box
- Ground
- Cable of ISC40 J Detector
- WF10J Extension Cable

6. WF10J Extension Cable

Unit: mm

- Terminal for inductive conductivity transmitter/converter
- Terminal for BA20 terminal box
- Pin terminal
- Ring terminal
- Cable length L (approx.) 5, 10, 20, 30, 40 m
# TABLE OF CORROSION-RESISTANT MATERIALS

This chemical resistance table is based on reference data provided by manufacturers and shows the chemical resistance of materials to individual chemical. If a sample contains multiple chemicals, the resistance characteristics may differ from the table specifications. Since sample conditions in an actual application are influenced by various factors, the sensor may not be applicable to some applications. The data should be used for reference only.

## Chemical Resistance Table for ISC40

<table>
<thead>
<tr>
<th>Reagent</th>
<th>Temp conc.</th>
<th>PVDF</th>
<th>316 SS</th>
<th>PP</th>
<th>PVC</th>
<th>FPM</th>
<th>EPDM</th>
<th>PEEK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>20</td>
<td>60</td>
<td>100</td>
<td>20</td>
<td>60</td>
<td>100</td>
<td>20</td>
</tr>
<tr>
<td>Sulfuric acid</td>
<td>10% 50% 98%</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td></td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Fuming sulfuric acid</td>
<td>(98%)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td></td>
<td></td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Hydrochloric acid</td>
<td>15% 38%</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Nitric acid</td>
<td>30% 50% 98%</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>Phosphoric acid</td>
<td>10% 50% 98%</td>
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<td>Hydrofluoric acid</td>
<td>40% 50%</td>
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<tr>
<td>Acetic acid</td>
<td>20% 80%</td>
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<tr>
<td>Glacial acetic acid</td>
<td>96%</td>
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<tr>
<td>Formic acid</td>
<td>90%</td>
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<tr>
<td>Citric acid</td>
<td>10%</td>
<td>☐</td>
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<td>Calcium hydroxide</td>
<td>Saturated</td>
<td>☐</td>
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<tr>
<td>Potassium hydroxide</td>
<td>25%</td>
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<tr>
<td>Sodium hydroxide</td>
<td>50%</td>
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<tr>
<td>Ammonia water</td>
<td>10%</td>
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<td>Ammonium chloride</td>
<td>Saturated</td>
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<td>Zinc chloride</td>
<td>Saturated</td>
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<td>Iron (II) chloride</td>
<td>20%</td>
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<td>Sodium carbonate</td>
<td>Saturated</td>
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<tr>
<td>Potassium chloride</td>
<td>30%</td>
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<td>Sodium sulfate</td>
<td>Saturated</td>
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<td>Calcium chloride</td>
<td>Saturated</td>
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<td>Sodium chloride</td>
<td>Saturated</td>
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<td>Sodium nitrate</td>
<td>Saturated</td>
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<td>Aluminum chloride</td>
<td>Saturated</td>
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<tr>
<td>Hydrogen peroxide</td>
<td>30%</td>
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<td>Sodium hypochlorite (*)</td>
<td>13%</td>
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<tr>
<td>Potassium dichromate</td>
<td>Saturated</td>
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<tr>
<td>Ethanol</td>
<td>100%</td>
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<tr>
<td>Cyclohexane</td>
<td>100%</td>
<td>☐</td>
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<tr>
<td>Toluene</td>
<td>100%</td>
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<tr>
<td>Water</td>
<td>100%</td>
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- Very suitable
- Suitable
- Slightly unsuitable
- Unusable

*1: Unusable with any material when this coexists with an acidic solution or oxides.

**CAUTION**

Select the material of wetted parts with careful consideration of process characteristics. Inappropriate selection may cause leakage of process fluids, which greatly affects facilities. Considerable care must be taken particularly in the case of strongly corrosive process fluid such as hydrochloric acid, sulfuric acid, hydrogen sulfide, and sodium hypochlorite. If you have any questions about the wetted part construction of the product, be sure to contact Yokogawa.
Inductive Conductivity Sensors and Holders System Inquiry Specifications

Make inquiries by filling in related boxes with checks (✓) and writing in the underlined parts.

1. General Items
   Name of your company: ___________________________
   Person in charge: ___________________________
   Belongs to: ___________________________ (Phone No. ________)
   Name of plant: ___________________________
   Measuring point: ___________________________
   Purpose of use: □ Indication □ Record □ Alarm □ Control
   Power supply to Distributor: ____________ V AC

2. Measuring conditions
   (1) Liquid temperature: _______ to _______ °C
   (2) Liquid pressure: _______ to _______ kPa (kgf/cm²G)
   (3) Flow rate: _______ to _______ L/min
   (4) Flow speed: _______ to _______ m/s
   (5) Slurry of fouling components: □ No □ Yes
   (6) Name of measured liquid: ___________________________
   (7) Components of measured liquid: ___________________________
   (8) Others: ___________________________________________

3. Installing Location
   (1) Ambient temperature: ___________________________
   (2) Installing location: □ Outdoors □ Indoors
   (3) Others: ___________________________________________

4. Specification Requirements
   (1) Measuring range: ____________
   (2) System configuration selection: □ Sensor □ Holder □ Terminal box □ Extension cable
   (3) Sensor mounting: □ Immersion □ Flow-through □ Direct insertion
   (4) Sensor cable length: □ 5 m □ 10 m □ 15 m □ 20 m
   (5) Extension cable length: □ 5 m □ 10 m □ 20 m □ 30 m □ 40 m
   (6) Others: ___________________________________________