

Low-concentration type

Sanitary Conductivity Meter (2ch)

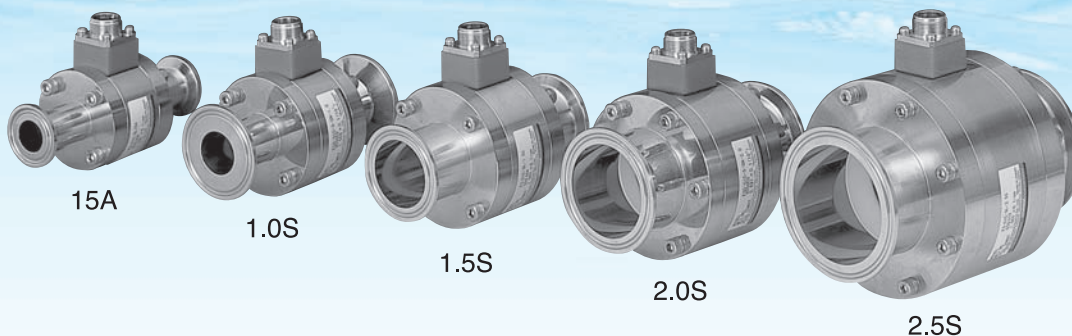
Flow-through Sensor

HE-960CW

This model is ideal for conductivity management of purified and sterilized water and Water-for-Injection(WFI) for use in the manufacture of pharmaceuticals.



Parts contacting fluids are straight and without projections.



- Simultaneous measurement and output in two channels.

- USP<645> water quality determination function.

- Inline, straight structure.

- Tough structure withstands sterilization in place (SIP) at up to 140°C

- Electropolished inner surfaces

- Communication device ability(RS-485)

Cannot be used with fluids (hydrochloric acid, diluted sulfuric acid, seawater, etc) that chemically react with electrode (SUS316L).

The HE-960CW is also an environmentally-friendly product that uses lead-free solder for mounting chips on the PCB.

Model	HE-960CW						
Measurement method	2-electrode method						
Sensor input	2-channel (for concurrent measurement with sensors isolated each other)						
Temperature sensor specifications	Platinum resistance 1000Ω/0°C						
Measuring range	<table border="1"> <tr> <td>Cell constant</td><td>0.1/cm</td></tr> <tr> <td>Conductivity</td><td>2.000/20.00/200.0/2000μS/cm 0.2000/2.000/20.00/200.0mS/m</td></tr> <tr> <td>TDS conversion</td><td>20.0/200mg/L</td></tr> </table> <p>Temperature : 0°C to 100°C (Select your desired decimal point from 0, 1, and 2 digits) Desalination rate : 0.0% to 100% Conductivity difference: Depends on measurement range of sensor 2 (CH2)</p>	Cell constant	0.1/cm	Conductivity	2.000/20.00/200.0/2000μS/cm 0.2000/2.000/20.00/200.0mS/m	TDS conversion	20.0/200mg/L
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Conductivity	2.000/20.00/200.0/2000μS/cm 0.2000/2.000/20.00/200.0mS/m						
TDS conversion	20.0/200mg/L						
Repeatability	<p>Conductivity display : Within ±0.5% of the full scale TDS display : Within ±1.5% of the full scale 2000μS/cm and 200.0mS/m ranges: Within ±2% of the full scale</p>						
Linearity	<p>Conductivity display : Within ±0.5% of the full scale TDS display : Within ±1.5% of the full scale 2000μS/cm and 200.0mS/m ranges: Within ±2% of the full scale</p>						
Transmission output	<p>Number of outputs : 4 4mA to 20mA DC/0mA to 20mA DC : input/output isolated type Maximum load resistance : 900Ω Transmission output range : Freely selectable within the measurement range However, repeatability and linearity will remain accurate to the separately set measuring range. (Negative terminals of each transmission output channel are connected inside and thus have the same electric potential.)</p>						
Contact output	<p>Number of output : 4 points Alarm contact output (R1,R2,R3,R4) Contact type : relay contact, R1, R2, R3 : SPST R4 : SPDT Contact rating : 240V AC 3A and 30V DC, 3A (resistance load) Contact function : selectable from upper/lower limit action (ON/OFF control), delay, and hysteresis Output contents : selectable from the selected measurement, USP assessment, anomaly alarm, and maintenance. (However, R1 and R2, R3 and R4 share the COMMON contacts respectively.)</p>						
Communication output	RS-485 input/output						
Calibration function	<p>Conductivity : Based on the specified compensation coefficient for the cell constant (parameter input) Temperature : Calibrated by comparing with the reference thermometer TDS: Conversion using a user-defined coefficient value (0.30 to 1.00)</p>						
Transmission output hold feature	Selectable from the Previous value hold and the Optional value hold. (However, only the previous value hold is available in the maintenance mode.)						
Self-diagnosis function	<p>· Sensor diagnosis (Short-circuit and disconnection of the temperature sensor) · Out of the measurement range ·A/D converter scale over ·Converter error</p>						
Temperature compensation	<p>· Temperature characteristic of NaCl (reference temperature : 5°C to 95°C) · Arbitrary temperature coefficient entry (reference temperature : 5°C to 95°C, temperature coefficient : ±5%/°C) (In the deionized water area, however, the temperature compensation for deionized Water is automatically performed in both NaCl and arbitrary temperature coefficient Compensation settings.)</p>						
Temperature compensation range	0°C to 100°C						
Ambient environment	Temperature: -5°C to 55°C, Relative humidity: 20% to 85% (without dew condensation)						
Power supply	100V to 240V AC ±10%, 50/60Hz, 25VA (max)						
Protective structure	Panel: IP65, Rear case: IP20, Terminal: IP00 (Indoor-use panel installation type)						
Mass	Approx. 550g						
Conforming standards	CE Marking, FCC Part15						

Model	FS-01F-C -SL-15A	FS-01F-C -SL-1S	FS-01F-C -SL-1.5S	FS-01F-C -SL-2S	FS-01F-C -SL-2.5S
Measurement principle	2-electrode method				
Cell constant	Approx. 0.1/cm				
Sample condition	Temperature: 0 to 100°C, Pressure: 0 to 1MPa				
Sterilization conditions	140°C/0.6MPa, within 60 minutes				
Ambient environment					
Protective structure	IP67 equivalent				
Liquid end materials	Electrode: SUS316L, Insulating part: PEEK, Seal: FKM (Compliant with MHLW Bulletin No.20 and 85)				
Connection aperture	15A ferrule	IDF/ISO 1S ferrule	IDF/ISO 1.5S ferrule	IDF/ISO 2S ferrule	IDF/ISO 2.5S ferrule
Mass	Approx. 1.0Kg	Approx. 1.0Kg	Approx. 1.3Kg	Approx. 1.6Kg	Approx. 3.4Kg
Cable	10m(CK-Y10M), 20m(CK-Y20M), 30m(CK-Y30M), Y terminal(Standard)				
Compatible converter	HE-960CW				

*Cannot be used with fluids (hydrochloric acid, diluted sulfuric acid, seawater, etc) that chemically react with electrode (SUS316L).



Please read the operation manual before using this product to assure safe and proper handling of the product.

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■ Converter HE-960CW

Panel Cut Size

■ Flow-through sensor FS-01F-C-SL Series

AC 2-electrode type
sanitary conductivity sensor dimensions

Aperture	15A	1.0S	1.5S	2.0S	2.5S
A	(120)	(120)	(120)	(120)	(140)
B	53.5	59	64.5	70	82.5
C	(97.5)	(103)	(108.5)	(114)	(126.5)
ΦD	55	65	75	85	110

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