

# General Specifications

## Hamilton Conductivity Sensors for biotech and pharmaceutical industry

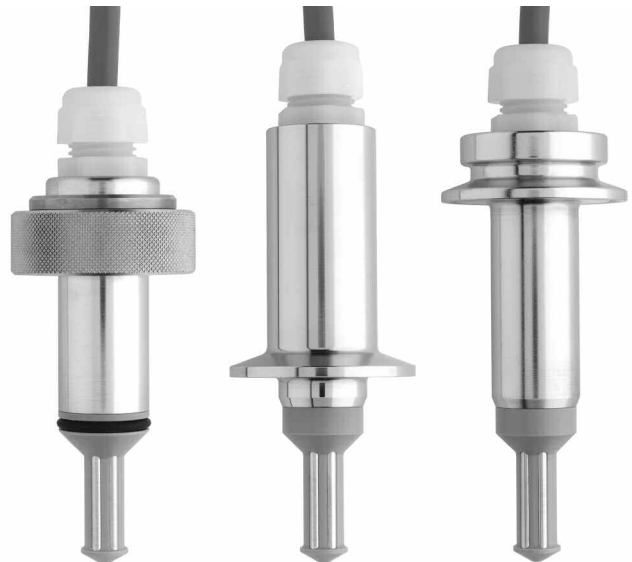
Yokogawa's SC450G and SC202G(S) have proven to work very well over a wide range of conductivity values with suitable 4-electrode sensors. The Hamilton CONDUCELL 4US sensors for Triclover and INGOLD process connections has often been successfully used where the access port is too narrow for the Inductive Sensors. Now Hamilton has released the CONDUCELL 4USF-PG-120 sensor, which is made of PEEK and fits in a simple PG13,5 process connection. The electrical connection is a VARIOPIN and it is a welcome addition to the program.

These sensors have been designed to measure accurately over an extremely wide conductivity range. They are ideal for the pharmaceutical, food and beverage industries where it is necessary to monitor product and cleaning chemicals within the same process stream.

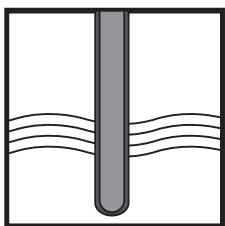
Because of the sanitary requirements in these industries these sensors are suitable for steam sterilisation and CIP cleaning. In addition to that all wetted parts are electro-polished and the materials used are approved by the FDA

### FEATURES

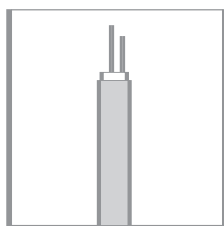
- Range 0 to 1 S/cm
- Open easy to clean cell geometry
- Surface roughness <N5 (0.4micron)
- Suitable for steam sterilisation & CIP
- Maximum pressure 6 bar G
- Temperature range -20 to 135°C
- Integrated PT1000
- Wetted parts to FDA DIN 1.4435 SS PEEK & EPDM
- VP connector in 4USF model



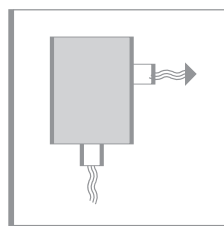
### System Configuration



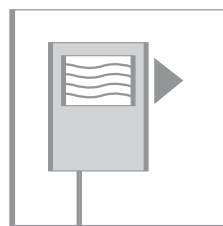
Sensors



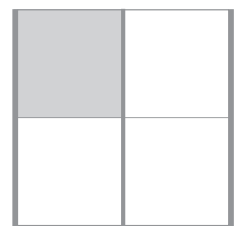
Cables



Fittings



Transmitters



Accessories

## Conducell 4US

These 4-pole conductivity sensors are especially suited for applications with large variations in conductivity. These sensors have been tested extensively and they have a very good linearity over a wide range.

The Conducell 4US is available with a tri-clover and a 25mm port-size process connection. It can be installed without any further need for a fitting.

The Conducell 4USF has a diameter of only 12 mm so it can be inserted in many standard armatures.

### Features

- Suitable for steam sterilization, autoclaving and CIP
- Sanitary: surface quality is N5 (0.4mm) and electro-polished
- All wetted parts are FDA compliant

### General Specifications 4US

#### Wetted Parts

Body and electrodes	DIN 1.4435 SS
Insulators	PEEK
O-ring	EPDM

#### Operating Specifications

Measuring systems	4 electrode
Measuring range	0.1 micro S/cm to 1 S/cm
Temperature range	-20 to 135°C
Maximum pressure	6 bar @ 135°C

#### Physical Specifications

Surface finish	Electro polished N5 (0.4micron)
Cable length	5m

Part No.	Description
10/237600	CONDUCELL 2UP-PG-120
10/237700	CONDUCELL 4US-G125-62/25
10/237750	CONDUCELL 4US-T150-50
10/237760	CONDUCELL 4US-T150-100
10/237620	CONDUCELL 4USF-PG-120 (4 stainless steel electrodes)
10/237627	CONDUCELL 4UHF-PG-120 (4 Hastelloy C electrodes)

### General Specifications 4USF

#### Wetted Parts

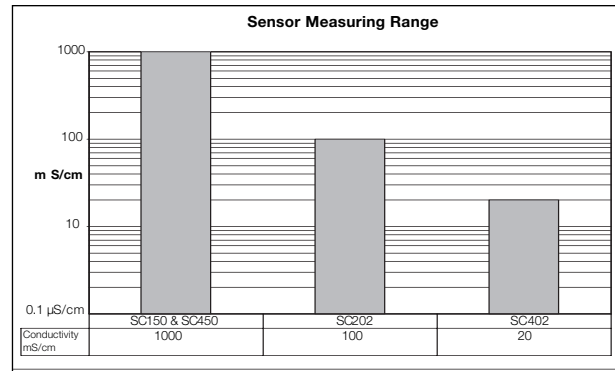
Body and electrodes	DIN 1.4435 SS
Insulators	PEEK
O-ring	EPDM

#### Operating Specifications

Measuring systems	4 electrode
Measuring range	0.1 micro S/cm to 1 S/cm
Temperature range	-20 to 150°C
Maximum pressure	10 bar @ 150°C / 20 bar @ 135°C

#### Physical Specifications

Surface finish	Electro polished N5 (0.4micron)
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