

Sensors for Conductivity Measurement



SE 620 Conductivity Sensor

Analog steam-sterilizable, CIP-capable sensor designed for pharmaceutical applications

Conductivity sensor in pharmaceutical design with coaxial electrodes and integrated temperature detector. Low surface roughness of $< 32 \mu\text{m}$. The materials meet FDA requirements and are steam-sterilizable. Reliable and easy validation of the measurement according to USP <645> using PortaSim simulator.

Applications

Pure and ultrapure water, water for injection (WFI), food, ion exchangers, reverse osmosis plants, also semiconductor

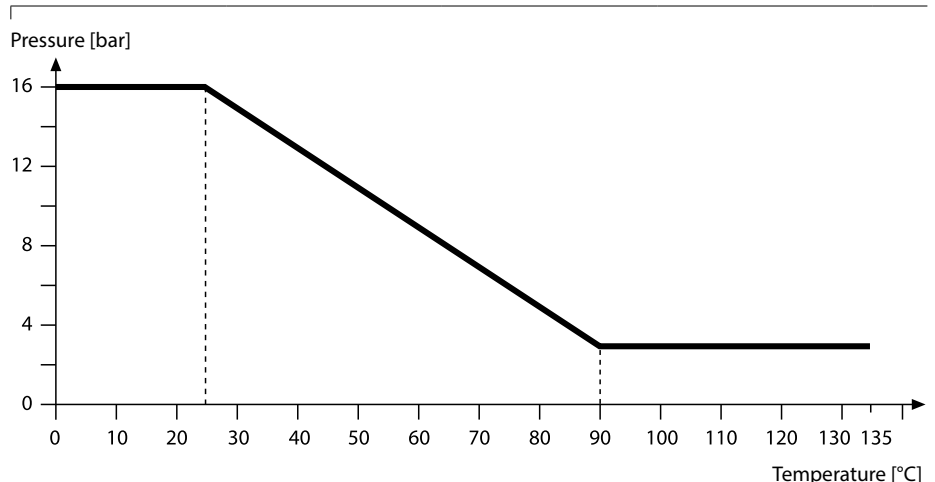
Facts

- Low surface roughness
- Steam-sterilizable
- CIP-capable
- Integrated temperature detector
- Measuring range 0.05 to 50 $\mu\text{S}/\text{cm}$
- Coaxially arranged electrodes
- Independent of installation conditions
- Insulator and sealing materials FDA-listed
- VP screw cap
- PortaSim simulator with VP plug
- Incl. Inspection Certificate 3.1

Specifications

Cell constant:	0.01/cm
Measuring range:	0.05 ... 50 $\mu\text{S}/\text{cm}$
Material:	Cell and electrodes: stainless steel 1.4435, electropolished; Insulator and O-rings (plastics), FDA-listed
Roughness:	$< 32 \mu\text{m}$
Temperature detector:	Pt 1000
Temperature:	32 ... 275 °F (0 ... 135 °C) steam-sterilizable
Pressure:	232 psi (16 bar) at 77 °F (25 °C), 130 psi (9 bar) at 144 °F (60 °C)
Process connection:	Clamp DN 25
Sensor cap:	VP (VarioPin)

Pressure/Temperature Diagram



Product Range

SE 620 conductivity sensor

Clamp DN 25

Order No.

SE 620

Accessories

VP6-ST cable

3 m

5 m

10 m

15 m

20 m

Order No.

ZU 0313

ZU 0314

ZU 0315

ZU 0584

ZU 0589

Conductivity standard

KCl 300 ml 15 μ S/cm \pm 1 %

KCl 500 ml 147 μ S/cm \pm 1 %

ZU 0350

ZU 0702

Calibration Certificate

ZU 0320

Conductivity simulator
(cell constant 0.01/cm
(Details from page 98)

PortaSim Cond C^{*)} 1.3 μ S/cm 25 °C

ZU 0308

*) Conductivity simulator; checking the meter and cable by simulating the sensor.
High-precision comparison resistors, traced to NIST standard. Used for measurement to USP <645>.
Check by replacing the sensor by the simulator

Dimensional Drawing

