

# Sensors for Conductivity Measurement

Pharm

Food



## SE 620 Conductivity Sensor

Pharma-compliant 2-electrode sensor in hygienic design

Conductivity sensor in pharmaceutical design with coaxial electrodes and integrated temperature detector. Low surface roughness of  $< 0.8 \mu\text{m}$ . The materials are physiologically harmless and meet FDA requirements. Steam-sterilizable. Reliable and easy checking of the measurement according to USP <645> using PortaSim simulator.

### 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

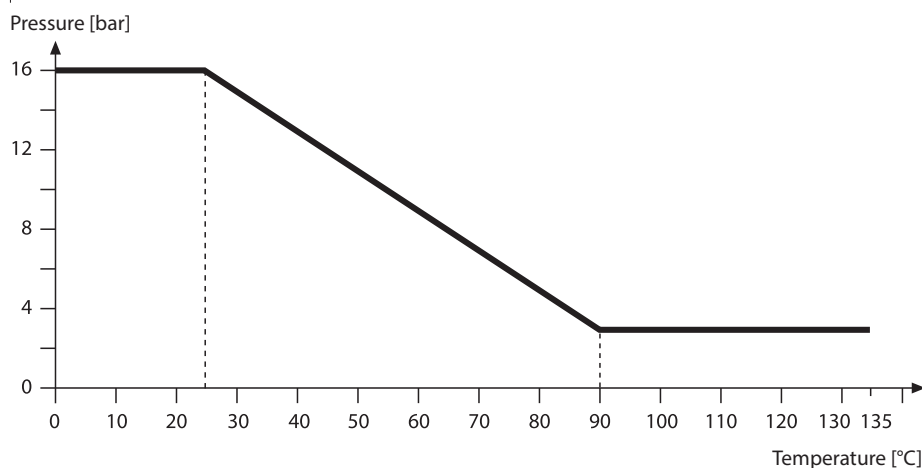
### Applications

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

### 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:	$< 0.8 \mu\text{m}$
Temperature detector:	Pt 1000
Temperature:	0 ... 135 °C (steam-sterilizable)
Pressure:	16 bar at 25 °C, 9 bar at 60 °C
Process connection:	Clamp DN 25
Sensor cap:	VP (VarioPin)

### Pressure/Temperature Diagram



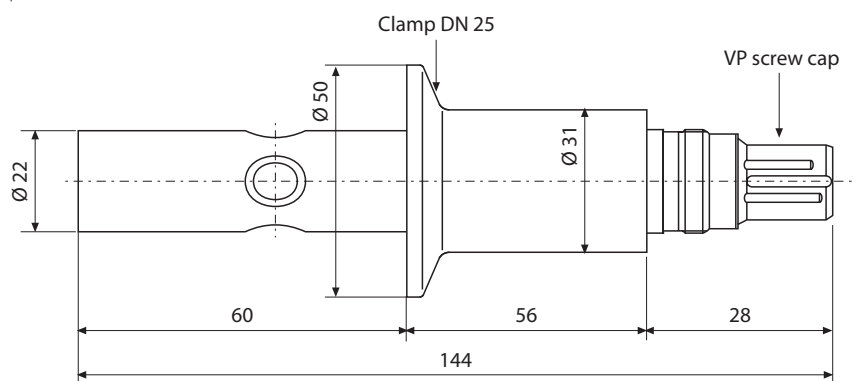
For up-to-date information, please visit [www.knick.de](http://www.knick.de)

# Knick

Product Range		Order No.
SE 620 conductivity sensor	Clamp DN 25	<b>SE 620</b>
Accessories		Order No.
VP6-ST cable	3 m	<b>ZU 0313</b>
	5 m	<b>ZU 0314</b>
	10 m	<b>ZU 0315</b>
	15 m	<b>ZU 0584</b>
	20 m	<b>ZU 0589</b>
Conductivity standard	KCl 300 ml 15 $\mu\text{S}/\text{cm} \pm 1\%$	<b>ZU 0350</b>
	KCl 500 ml 147 $\mu\text{S}/\text{cm} \pm 1\%$	<b>ZU 0702</b>
Calibration Certificate		<b>ZU 0320</b>
Conductivity simulator (cell constant 0.01/cm (Details from page 98))	PortaSim Cond C <sup>*)</sup> 1.3 $\mu\text{S}/\text{cm}$ 25 °C	<b>ZU 0308</b>

<sup>\*)</sup> 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 simply replacing the sensor by the simulator

## Dimension Drawing



All dimensions in mm