### **Process Analytics**



# **Conductivity Sensors**

### SE 604 Conductivity Sensor

Robust 2-electrode sensor for precise and reliable measurement of low and very low conductivities, particularly in ultrapure water

Robust, coaxially arranged electrodes made of stainless steel. Large measuring range from ultrapure water to 1000 µS/cm with only one sensor model (cell constant). Integrated temperature detector for

exact temperature compensation. Easy to clean thanks to replaceable outer electrode.

Reliable and easy checking of the point of measurement using PortaSim simulators.

#### Applications

Boiler feed water, feed water, boiler water, cooling water, water vapor cycle, pure water, condenser monitoring.

#### Facts

- large measuring range from 1 nS/cm to 1000  $\mu$ S/cm
- coaxially arranged electrodes
- independent of installation conditions
- integrated temperature detector
- high level of process safety due to durable materials and robust design
- easy to clean thanks to detachable outer electrode
- particularly suitable for monitoring ultrapure water in power plants
- Calibration Certificate
- suitable PortaSim simulators

#### **Specifications**

Cell constant:	0.029/cm
Range:	0.001 1000 µS/cm
Material:	Cell and electrodes: stainless steel 1.4571 Insulator: PVDF Gaskets: FKM (Viton)
Temperature detector:	Pt 1000 Class A, T <sub>90</sub> < 2 min
Temperature:	Process: −30 +120 °C Environment: −25 +80 °C
Pressure:	max. 25 bar (–30 +70 °C) max. 10 bar (120 °C)
Process adaptation:	G 1" thread
Sensor cap:	7-pole



# SE 604 Conductivity Sensor

#### **Product Line**

Sensor				Order No.
SE 604 Conductivity Sensor	G 1"			SE 604
Accessories				Order No.
Measuring cable with plug	Sensor connection: 7-pole socket 1,5		1,5 m	ZU 0743
	Device connection: wire end ferrules		3 m	ZU 0645
	Temperature:	−20 +80 °C	5 m	ZU 0569
			10 m	ZU 0570
			15 m	ZU 0589
			20 m	ZU 0590
			30 m	ZU 0660
6-hole flange				ZU 0278
Conductivity standard	KCI	15 μS/cm ± 1 %	300 ml	ZU 0350
	KCI	147 µS/cm ± 1 %	500 ml	ZU 0702
Calibration Certificate				ZU 0320

#### Pressure/Temperature Diagram



## **Process Analytics**

# **Conductivity Sensors**

**Dimension Drawing** 







All dimensions in mm !

# Knick >

### SE 604 Conductivity Sensors

#### Accessories/Specifications

Flange (6-hole) ZU 0278



Material:	1.4571 stainless steel
Accessories:	6 screws, washers, nuts, M 12, 1.4571 stainless steel
Pressure:	Max. 10 bar
Temperature:	Max. 120 °C
Sensor locations:	1 x G 1"
Sensors:	SE 604

Dimension drawingSE 604 with ZU 0278 flange



All dimensions in mm !

Measuring cable for SE 604 with plug ZU 0645

Cable lengths:1,5 m, 3 m, 5 m, 10 m, 15 m, 20 m, 30 mConnection sensor: Plug 7poleConnection device: Wire end ferrulesTemperature: $-20 \dots +80 \ ^{\circ}C$ 

