Sensors for Conductivity Measurement

Chem

SE 603 Conductivity Sensor

4-electrode sensor with large measuring range providing maximum corrosion resistance, sensor materials: PTFE and platinum

For special chemistry applications, universal measuring range from pure water to 600 mS/cm. With fixed cable and integrated temperature detector. Process-wetted materials: PTFE and platinum. Ultracompact design.

Applications
Measurement of pure water up to high conductivities. Highly corrosive chemical processes, bleaching liquors, oxidizing as well as heavily polluted (e.g. fibrous) materials, condenser leakage monitoring.

Facts
– High level of chemical resistance due to corrosion-proof materials
– Large measuring range due to 4-electrode technology
– Measurement at high temperatures and pressures
– Slim, ultracompact design

Specifications

Cell constant*):	0.14 cm … 0.38 cm (exact value printed on rating plate)
Measuring range:	Approx. 0.5 µS/cm … 600 mS/cm
Material:	Body: PTFE Electrodes: Platinum
Temperature detector:	Pt 1000 (IEC Class A)
Temperature:	Max. 120 °C
Pressure:	Max. 12 bar
Process adaptation:	Special flange (see Accessories)
Cable:	Fixed cable, 5 m

*) Observe instructions for use (field conditions)

Pressure/Temperature Diagram

Pressure [bar]

12

9

6

3

0

0   10   20   30   40   50   60   70   80   90   100   110   120   130

Temperature [°C]
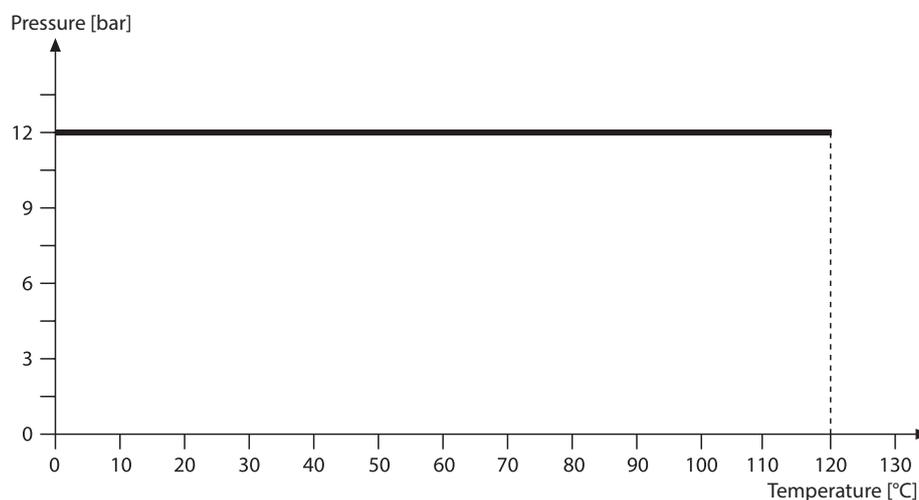
Product Range

	Order No.
SE 603 conductivity sensor	**SE 603**

Accessories

		Order No.
Sealing washer		**ZU 0218**
Flange		**ZU 0219**
Conductivity standard	KCl 0.1 mol/l 12.88 mS/cm ± 1.5 % 250 ml	**ZU 0348**
Calibration Certificate		**ZU 0320**

Dimension Drawing
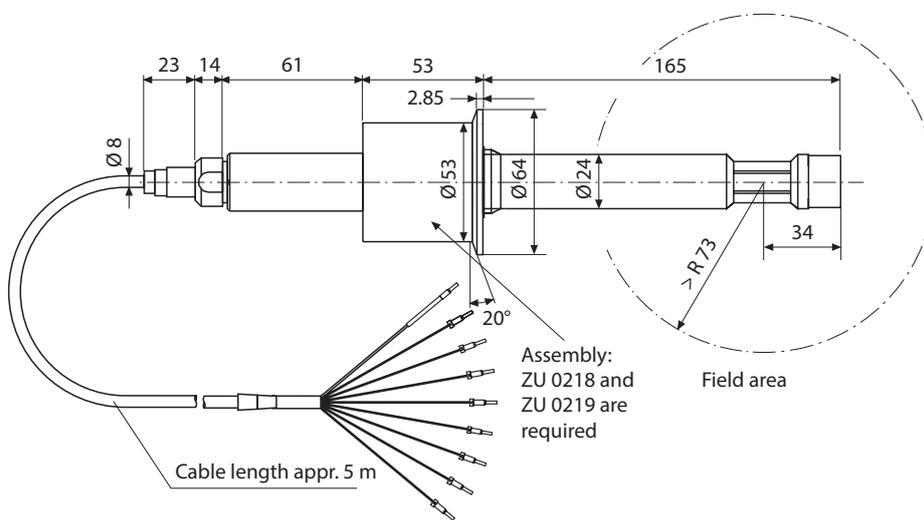
All dimensions in mm

SE 603 Conductivity Sensor

Accessories / Specifications

ZU 0218 sealing washer

Material:	PTFE/AISI 316 L
Pressure:	10 bar
Temperature:	120 °C

For installation with ZU 0219.

Dimension drawing:

Ø 88 — 9
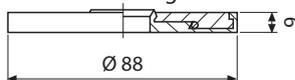
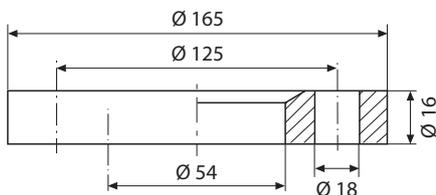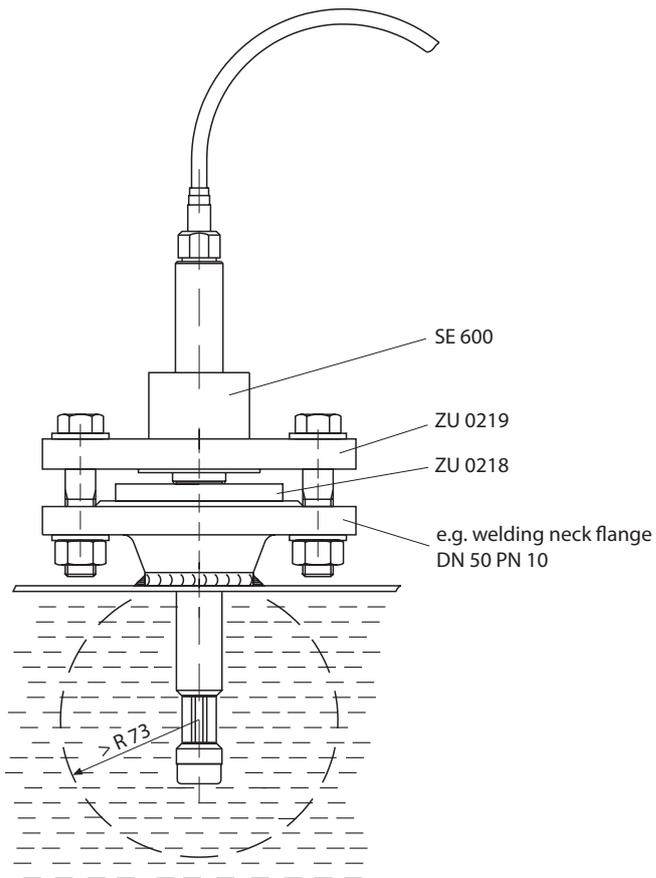**ZU 0219 flange**

Material:	AISI 316 L
Process connection:	DN 50, PN 10; Ø 165 mm
Pressure:	10 bar
Temperature:	120 °C

For installation with ZU 0218.

Dimension drawing:

Ø 165
Ø 125
Ø 16
Ø 54
Ø 18

All dimensions in mm

Typical Assembly

SE 600

ZU 0219

ZU 0218

e.g. welding neck flange
DN 50 PN 10

> R 73

All dimensions in mm