Process Analytics

Conductivity Sensors

DIGITAL





SE670 Toroidal Conductivity Sensor

Digital toroidal conductivity sensor for measuring low to high conductivity.

The SE670 is a universal conductivity sensor with a compact size. The combination of a large sensor opening and dirt-repellent material prevents blockages and deposits in media with a high pollution degree. The inductive measuring principle enables the full galvanic isolation of the measurement from the medium.

An all-rounder, the sensor with a sixdecade range is suitable for a multitude of applications.

Applications

Fresh water and wastewater technology; electroplating; photographic processes; air conditioning systems; cooling tower monitoring; company water treatment plants; salt, brine and general concentration monitoring; tanneries; mordant preparation; washing facilities; vehicle technology; flushing processes

Facts and Features

- Process-wetted material: PP
- Compact size
- Resistant to pollution and deposit formation
- Range of six decades
- Inductive measuring principle, full galvanic isolation of sensor coils from the process medium
- Digital data transmission
- Cable lengths up to 100 m

Specifications

Cell factor*)
Measuring range
Resolution
Measurement deviation

Temperature detector Temperature response time

Process temperature

Operation

Short-term (max. 15 min)

Process pressure

At 20 °C (68 °F) At 60 °C (140 °F)

Material

Body

Temperature detector

Seal

Process connection

Measuring device terminal

Protection class

 $\ensuremath{^{*)}}$ Observe the user manual (field conditions).

Approx. 6.4/cm 0...2,000 mS/cm 0.020 mS/cm ≤ 1 %

≥ 1 70 Pt1000 ≤ 45 s

0...60 °C (32...140 °F) 0...100 °C (32...212 °F)

Max. 10 bar (145 psi) Max. 6 bar (87 psi)

PP (polypropylene) Stainless steel 1.4571

FKM

U1: PP coupling nut G 1½" C1: Dairy pipe screw joint DN 50

M12 plug, 4-pin

IP68



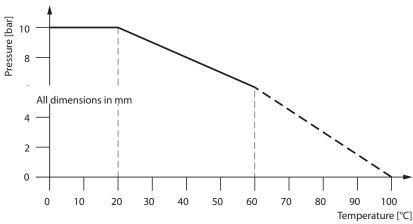
SE670 Toroidal Conductivity Sensor

Product Line

SE670 conductivity sensor	Coupling nut G 1½" Dairy pipe screw joint DN 50		SE670/U1 SE670/C1
Accessories			Order no.
Digital cable with M12 socket		5 m	CA/M12-005NA
		10 m	CA/M12-010NA
		20 m*)	CA/M12-020NA
Conductivity standard	KCI 0.1 mol/l 12.88 mS/cm ± 1.5 %	250 ml	ZU0348
Calibration certificate			ZU0320

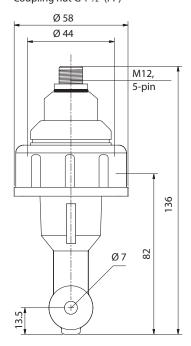
[&]quot;) Longer lengths upon request (max. 100 m)

Pressure/Temperature Diagram



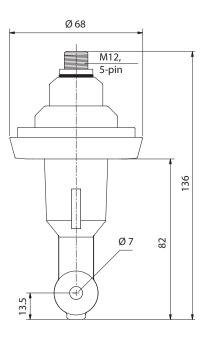
Dimension Drawing

SE670/U1 Coupling nut G 1 ½" (PP)



SE670/C1

Dairy pipe screw joint DN 50



All dimensions in mm