Sensors for Conductivity Measurement

Chem

Energy





SE 604 Memosens Conductivity Sensor

Robust 2-electrode sensor, for precise and reliable measurement of low and very low conductivities, particularly in ultrapure water, digital, with Memosens technology.

Robust, coaxially arranged electrodes made of stainless steel. Large measuring range from ultrapure water to 200 μ S/cm. Integrated temperature detector for exact temperature compensation. Easy to clean thanks to replaceable outer electrode.

Applications

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

Facts

- Perfect galvanic isolation thanks to Memosens technology
- Digital data transfer
- Integrated sensor diagnostics
- Large measuring range from ultrapure water to 200 μS/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

Specifications

Cell constant: $0.029/\text{cm} \pm 1 \%$ Measuring range: $0.0 \dots 500 \, \mu\text{S/cm}$

Accuracy: 2 % meas. value up to 200 μS/cm

3 % meas. value from 200 to 500 μ S/cm

Repeatability: 0.2 % meas. value + 3 nS/cm

Response time: $T_{95} < 3 \text{ s}$

Material: Cell and electrodes: 1.4571 stainless steel; insulator: PVDF;

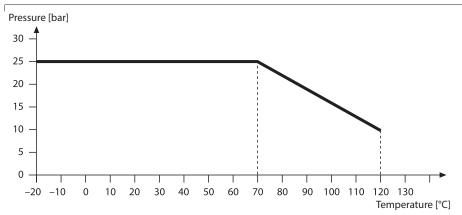
gaskets: FKM (Viton)

Temperature detector: NTC 30 kohms

Temperature: Medium: $-20 ... +120 \,^{\circ}$ C; Environment: $-25 ... +80 \,^{\circ}$ C Pressure: Max. 25 bar ($-20 ... +70 \,^{\circ}$ C); max. 10 bar ($120 \,^{\circ}$ C)

Process adaptation: G 1" thread Sensor connector: Memosens

Pressure/Temperature Diagram

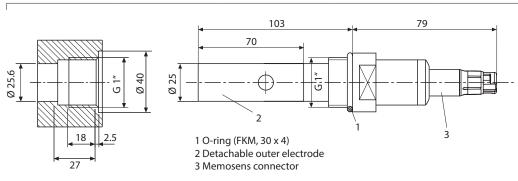




Product Range					Order No.
SE 604 conductivity sensor SE 604 X conductivity sensor	G 1" G 1"				SE 604-MS SE 604X-MS
Accessories					Order No.
Memosens cable				3 m 5 m 10 m 20 m ^{*)}	CA/MS-003NAA CA/MS-005NAA CA/MS-010NAA CA/MS-020NAA
Memosens cable, Ex				3 m 5 m 10 m 20 m")	CA/MS-003XAA CA/MS-005XAA CA/MS-010XAA CA/MS-020XAA
6-hole flange					ZU 0278
Conductivity standard	KCI KCI	300 ml 500 ml	15 μS/cm ± 1 % 147 μS/cm ± 1 %		ZU 0350 ZU 0702
Calibration Certificate					ZU 0320
MemoSuite					Order No.
Management software for Memosens sensors	Basic version (calibration) Advanced version (calibration, diagnostics, documentation)				SW-MS1400-B SW-MS1400-A

^{*)} Greater lengths on request

Dimension Drawing



Installation conditions

SE 604 Memosens Conductivity Sensor

Accessories / Specifications

Flange (6-hole)

ZU 0278

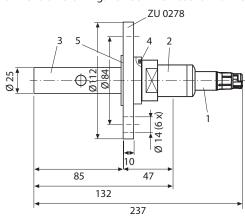


Material: Stainless steel, 1.4571

Accessories: 6 bolts, 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 drawing: SE 604 Memosens with ZU 0278 flange



- 1 Memosens connection
- 2 Sensor body
- 3 Detachable outer electrode
- 4 O-ring (FKM, 30 x 4) 5 Flat gasket