### **Process Analytics**

### pH Sensors





### SE555 Memosens pH/ORP Sensor

Steam-sterilizable sensor providing high reliability and precision, digital, with Memosens technology

The digital pH/ORP sensor SE555X/\*-AMSN has a special pH glass with high impedance for high-temperature applications and low alkali error as well as a platinum disk as ORP measuring element.

The sensor is CIP and SIP capable. The silver ion trap prevents contamination and blocking of the junction by silver sulfide in sulfide-containing media. The reference electrolyte is biocompatible. This makes the sensor predestined for applications in food and biotechnology, but it is also suitable for continuous and simultaneous measurement of pH and ORP in process chemistry or wastewater.

In addition, the Memosens technology offers all known advantages in terms of handling and sensor diagnostics.

#### **Applications**

Fermentation, food and beverage, aggressive media, extreme pH values, waste water

#### **Facts and Features**

- Simultaneous measurement of pH and ORP
- Gel electrolyte, pressurized and long-term stable
- Ceramic junction
- Silver ion trap
- Integrated temperature detector
- Omega glass with high impedance for high-temperature applications, very low alkali error
- CIP/SIP capable, safe sterilization with temperature monitoring
- Perfect galvanic isolation thanks to Memosens technology
- No influence of humidity in the connector
- Precalibration in the lab
- Digital data transfer
- Integrated sensor diagnostics



## SE555 pH/ORP Sensor

#### **Specifications**

pH: 0 ... 14

ORP: -1500 ... 1500 mV

Temperature:  $0 \dots 135 \, ^{\circ} C$ Temperature detector: NTC 30 k $\Omega$ Pressure, relative:  $-1 \dots 6$  bar

Reference system: Ag/AgCl with silver ion trap Electrolyte: Gel electrolyte, pressurized

Junction: Ceramic (1x)

Sensor material pH: Omega glass, high impedance, very low alkali error

Sensor material ORP: Platinum

Length: 120 mm / 225 mm

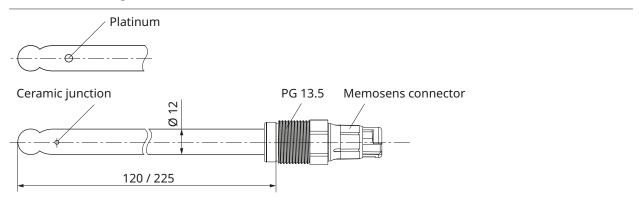
Process connection: PG 13.5
Sensor connector: Memosens

Explosion protection: See Ex certificates and EU declaration of conformity or www.knick.de

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#### **Dimension Drawing**





# SE555 pH/ORP Sensor

#### **Product Range**

| Sensor                           | Length   | Order No.     |
|----------------------------------|----------|---------------|
| SE555 pH/ORP sensor              | 120 mm   | SE555X/1-AMSN |
|                                  | 225 mm   | SE555X/2-AMSN |
| Accessories                      | Length   | Order No.     |
| Memosens cable                   | 3 m      | CA/MS-003NAA  |
|                                  | 5 m      | CA/MS-005NAA  |
|                                  | 10 m     | CA/MS-010NAA  |
|                                  | 20 m*)   | CA/MS-020NAA  |
| Memosens cable, Ex               | 3 m      | CA/MS-003XAA  |
|                                  | 5 m      | CA/MS-005XAA  |
|                                  | 10 m     | CA/MS-010XAA  |
|                                  | 20 m*)   | CA/MS-020XAA  |
| CaliMat Buffer Solutions (20 °C) | Quantity | Order No.     |
| pH value 2.00 ± 0.02             | 250 ml   | CS-P0200/250  |
|                                  | 3000 ml  | CS-P0200/3000 |
| pH value 4.00 ± 0.02             | 250 ml   | CS-P0400/250  |
|                                  | 1000 ml  | CS-P0400/1000 |
|                                  | 3000 ml  | CS-P0400/3000 |
| pH value 7.00 ± 0.02             | 250 ml   | CS-P0700/250  |
|                                  | 1000 ml  | CS-P0700/1000 |
|                                  | 3000 ml  | CS-P0700/3000 |
| pH value 9.00 ± 0.02             | 250 ml   | CS-P0900/250  |
|                                  | 1000 ml  | CS-P0900/1000 |
|                                  | 3000 ml  | CS-P0900/3000 |
| pH value 12.00 ± 0.05            | 250 ml   | CS-P1200/250  |
| OPP huffer solution + 220 mV     | 250 ml   | 7110217       |
| ORP buffer solution + 220 mV     | 250 ml   | ZU0317        |

<sup>\*)</sup> Greater lengths on request