

## SE 554 Memosens pH Sensor

**Low-maintenance sensor for demanding process application in the chemical industry, digital, with Memosens technology**

High accuracy, stability, rapidness, and a long life cycle are achieved by the special design. Through 2 open junctions, the reference system is in direct contact with the measured medium. There is hardly any risk of contamination or blocking of the junction. The high content and special distribution of potassium chloride in the polymer reduces measurement disturbances which could be caused by liquid junction potentials.

### Applications

Industrial applications, dyes, precipitation reactions, polluted media

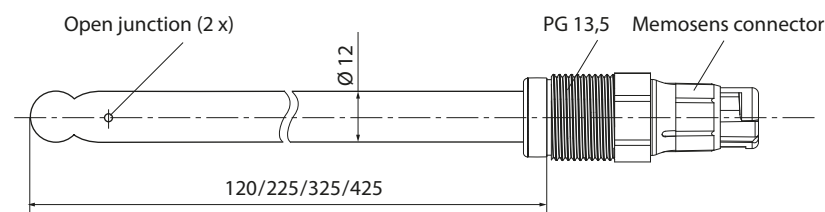
### Facts

- Perfect galvanic isolation thanks to Memosens technology
- No influence of humidity in the connector
- Precalibration in the lab
- Digital data transfer
- Integrated sensor diagnostics
- Low maintenance, no refilling of electrolyte
- Integrated temperature detector
- Open junctions, no blocking
- Alpha glass, medium impedance, universal glass, fluoride resistant

### Specifications

|                       |                                                                                                                                                                            |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| pH:                   | 0 ... 14                                                                                                                                                                   |
| Temperature:          | 0 ... 130 °C                                                                                                                                                               |
| Pressure, relative:   | 0 ... 10 bar                                                                                                                                                               |
| Temperature detector: | NTC 30 kohms                                                                                                                                                               |
| Sensor material:      | Alpha glass                                                                                                                                                                |
| Reference system:     | Ag/AgCl, polymeric electrolyte                                                                                                                                             |
| Junction:             | Hole (2 x)                                                                                                                                                                 |
| Length:               | 120 mm / 225 mm / 325 mm / 425 mm                                                                                                                                          |
| Process adaptation:   | PG 13.5                                                                                                                                                                    |
| Sensor connector:     | Memosens                                                                                                                                                                   |
| ATEX marking:         | II 1 G Ex ia IIC T3/T4/T6                                                                                                                                                  |
| FM marking:           | IS for Class I, Division 1, Groups A, B, C, D; Class I, Zone 0, AEx/Ex ia IIC T6 ... T4<br>NIFW for Class I, Division 2, Groups A, B, C, D; Class I, Zone 2, IIC T6 ... T4 |

### Dimension Drawing



All dimensions in mm

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## Product line

| Sensor           | Length | Order No.      |
|------------------|--------|----------------|
| SE 554 pH sensor | 120 mm | SE 554X/1-NMSN |
|                  | 225 mm | SE 554X/2-NMSN |
|                  | 325 mm | SE 554X/3-NMSN |
|                  | 425 mm | SE 554X/4-NMSN |

| 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  |
| pH value 4,00 ± 0,02             | 250 ml   | CS-P0400/250  |
|                                  | 1000 ml  | CS-P0400/1000 |
|                                  | 3000 ml  | CS-P0400/3000 |
|                                  | 250 ml   | CS-P0700/250  |
| pH value 7,00 ± 0,02             | 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  |

| MemoSuite                                |                                                            | Order No.   |
|------------------------------------------|------------------------------------------------------------|-------------|
| Management software for Memosens sensors | Basic version (calibration)                                | SW-MS1400-B |
|                                          | Advanced version (calibration, diagnostics, documentation) | SW-MS1400-A |

\*) Greater lengths on request