

# Sensors for pH Measurement



## SE 547 Memosens pH Sensor

Break-proof ISFET sensor for hygienic and sterile applications

The SE 547 digital pH sensor is a glass-free pH sensor with a break-proof PEEK body and ISFET chip.

The sensor is CIP/SIP capable and autoclavable as well. It is particularly suitable for hygienic applications in the food and pharmaceutical sectors.

In addition, Memosens technology provides all known advantages when it comes to handling and sensor diagnostics.

### Facts

- Break-proof sensor body
- Quick response time
- Integrated temperature detector
- CIP/SIP capable, autoclavable
- Perfect galvanic isolation with Memosens technology
- No impact of moisture in the plug-in connection
- Precalibration in the laboratory
- Digital data transmission
- Integrated sensor diagnostics

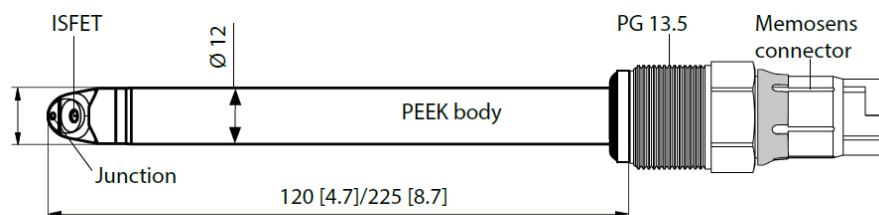
### Applications

- Food
- Pharmaceuticals
- Biotechnology

### Specifications

pH	0 ... 14
Temperature	5 ... 275 °F (-15 ... 135 °C)
Relative pressure	-2.9 ... 145 psi (212 °F) (-0.2 ... 10 bar (100 °C))
Sensor material	ISFET (ion-sensitive field-effect transistor)
Reference system	Ag/AgCl, gel electrolyte
Temperature detector	Pt1000
Junction	Ceramic (1x)
Sensing element (pH)	ISFET chip
Wetted materials	PEEK, EPDM (both FDA-compliant)
Immersion depth	120 mm / 225 mm
Process connection	Pg 13.5
Sensor connections	Memosens

### Dimensional Drawing



All dimensions in mm [inches]

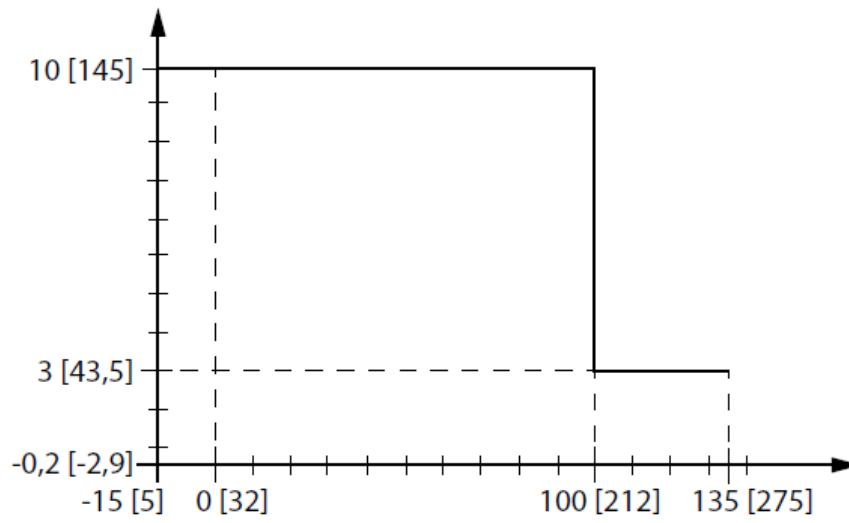
<b>Product Range</b>		<b>Order No.</b>
SE 547 pH sensor	Length 120 mm	SE 547N/1-NMSN-A2
	Length 225 mm	SE 547N/2-NMSN-A2
<b>Accessories</b>		<b>Order No.</b>
Memosens cable	3 m	CA/MS-003NAA
	5 m	CA/MS-005NAA
	10 m	CA/MS-010NAA
	20 m*)	CA/MS-020NAA
<b>Buffer Solutions (20 °C)</b>		<b>Order No.</b>
pH value 2.00 ± 0.02	250 ml	CS-P0200/250
	1000 ml	CS-P0200/1000
	3000 ml	CS-P0200/3000
pH value 4.00 ± 0.02	250 ml	CS-P0400/250
	1000 ml	CS-P0400/1000
	3000 ml	CS-P0400/1000
pH value 7.00 ± 0.02	250 ml	CS-P0700/250
	1000 ml	CS-P0700/1000
	3000 ml	CS-P0700/1000
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
<b>MemoSuite</b>		<b>Order No.</b>
Management software for Memosens sensors	Basic version (calibration)	SW-MS1400-B
	Advanced version (calibration, diagnostics, documentation)	SW-MS1400-A

\*) Greater lengths on request

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Pressure Diagram

Pressure – bar [psi]



Temperature – °C [°F]