

Sensors for pH Measurement

Chem

Energy

Water



SE 554 pH Sensor

Low-maintenance sensor for demanding process application in the chemical industry

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.

Facts

- Low maintenance, no refilling of electrolyte
- Integrated temperature detector
- Open junctions, no blocking
- Alpha glass, medium impedance, universal glass, fluoride resistant

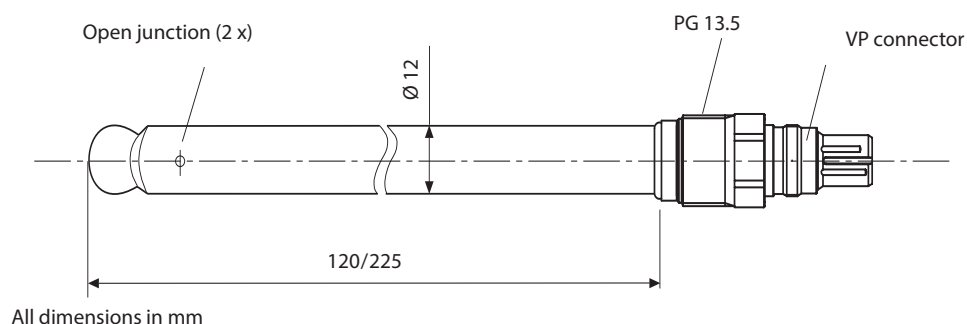
Applications

Industrial applications, dyes, precipitation reactions, polluted media

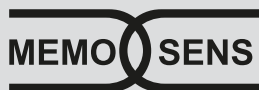
Specifications

pH:	0 ... 14
Temperature:	0 ... 130 °C
Pressure, relative:	0 ... 10 bar
Temperature detector:	Pt1000
Sensor material:	Alpha glass
Reference system:	Ag/AgCl, polymeric electrolyte
Junction:	Hole (2 x)
Length:	120 mm / 225 mm
Process adaptation:	PG 13.5
Sensor connector:	VP (VarioPin)
ATEX marking:	II 1/2 G Ex ia IIC T3/T4/T6 Ga/Gb

Dimension Drawing



Product Range		Length	Order No.
SE 554 pH sensor		120 mm	SE 554X/1-NVPN
		225 mm	SE 554X/2-NVPN
Accessories		Length	Order No.
VP6-ST cable		3 m	CA/VP6ST-003A
		5 m	CA/VP6ST-005A
		10 m	CA/VP6ST-010A
		20 m	CA/VP6ST-020A
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
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
Equipotential bonding electrode	Platinum; for monitoring the reference system of the pH sensor		ZU 0073



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

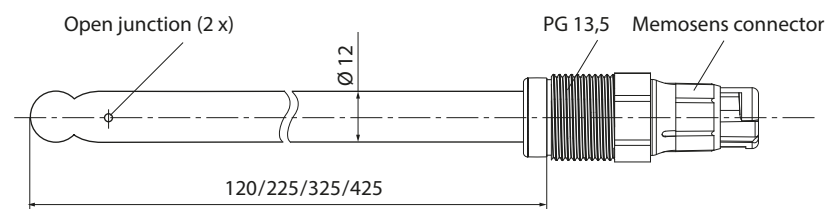
Facts

- 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 NIFW for Class I, Division 2, Groups A, B, C, D; Class I, Zone 2, IIC T6 ... T4

Dimension Drawing



All dimensions in mm

SE 554 Memosens pH Sensor

Product line

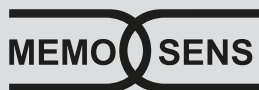
Sensor	Length	Order No.
SE 554 pH sensor	120 mm	SE 554X/1-NMSN
	225 mm	SE 554X/2-NMSN
	325 mm	SE 554X/3-NMSN
	425 mm	SE 554X/4-NMSN

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



SE 554 Memosens pH/ORP Sensor

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

The special design provides high accuracy, stability, speed, and a long life cycle. 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.

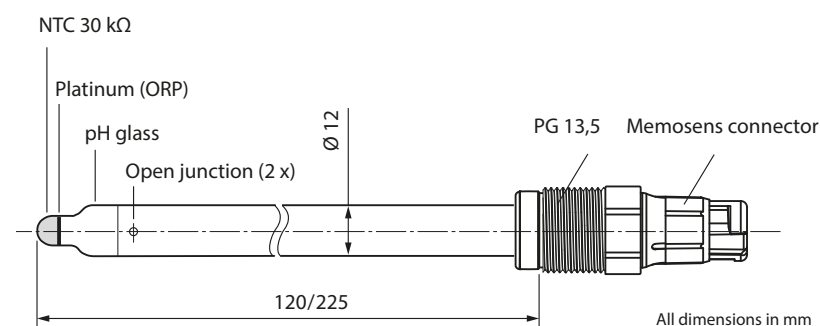
Applications

Measurement in media of extremely high ionic strength, salt brines, strongly oxidizing media, acidic and alkaline media.

Specifications

pH:	0 ... 14
ORP:	-1500 ... 1500 mV
Temperature:	0 ... 130 °C
Pressure, relative:	0 ... 10 bar
Temperature detector:	NTC 30 kΩ
pH sensor material:	Alpha glass
ORP sensor material:	Platinum
Reference system:	Ag/AgCl, polymer electrolyte
Junction:	Hole (2 x)
Length:	120 mm / 225 mm
Process adaptation:	PG 13.5
Sensor connector:	Memosens
ATEX marking	II 1 G Ex ia IIC T3 / T4 / T6 Ga
FM marking:	IS for Class I, Division 1, Groups A, B, C, D; Class I, Zone 0, AEx/Ex ia IIC T6 ... T4 NIFW for Class I, Division 2, Groups A, B, C, D; Class I, Zone 2, IIC T6 ... T4

Maßzeichnung



SE 554 Memosens pH/ORP Sensor

Product line

Sensor	Length	Order No.
SE 554 pH/ORP sensor	120 mm	SE 554X/1-AMSN
	225 mm	SE 554X/2-AMSN

Accessories

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)

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
	250 ml	CS-P0900/250
pH value 9,00 ± 0,02	1000 ml	CS-P0900/1000
	3000 ml	CS-P0900/3000
	250 ml	CS-P1200/250
pH value 12,00 ± 0,05	250 ml	CS-P1200/250
ORP buffer solution +220 mV	250 ml	ZU 0317

MemoSuite

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

*) Greater lengths on request