

Model OPS71 pH Model OPS72 ORP Electrodes



All purpose pH / ORP electrode with double chamber gel filled reference system and integrated temperature sensor

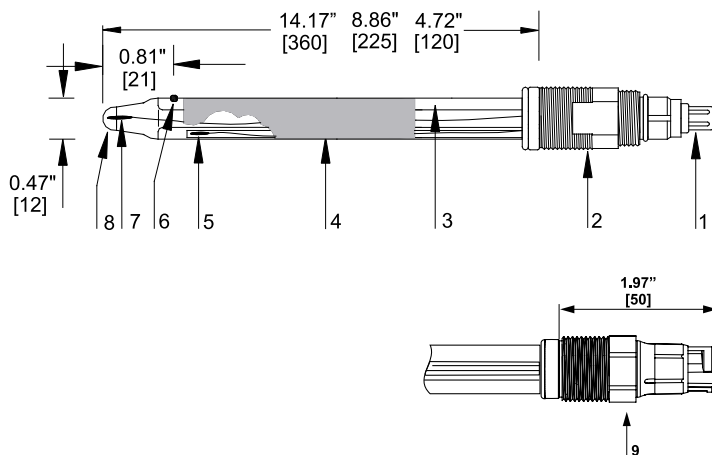
- Memosens technology with intelligent data storage and contactless cable connection as option
- FDA approved, polyacrylamide free gel delivers high performance and low maintenance
- Advanced reference configuration featuring triple ceramic diaphragms resists fouling in harsh industrial conditions
- Durable 0-14 pH sensitive glass can withstand SIP and CIP treatment and operating temperatures up to 135 °C (275 °F)
- HF version is resistant to concentrations up to 1 ppm HF
- Pressurized reference system for fermenter applications
- Upside-down option
- Pt 100 or Pt 1000 RTD in Model OPS71 pH electrode increases measurement accuracy at extreme temperatures
- Model OPS72 and OPS72D ORP sensor has platinum ring electrode as standard
- 12 mm diameter design allows for modular installation in fixed or retractable housings
- Each electrode is serialized and performance tested at the factory



For use in industrial measurement applications including acid-base neutralization, chemical stream monitoring, boiler feed water monitoring, pigment and dye manufacturing

Specifications

Measurement range	pH: 0 - 14 pH ORP: -1500 to + 1500 mV
Maximum measurement error	± 0.05 pH (OPS71 and OPS71D) ± 3 mV (OPS72 and OPS72D)
Pressure range	up to 13 bar (190 psig)
Temperature range	- 15 to 135 °C (5 to 275 °F)
Minimum conductivity	10 µS/cm
Electrolyte	3 mol KCl Gel, AgCl-free
Response time (@ 25 °C / 77 °F)	98 % of reading in 30 seconds



1. NEMA 6 waterproof connector
2. PG13.5 mounting threads
3. Gel electrolyte
4. Reference protector
5. Ag/AgCl reference element
6. Ceramic diaphragms
7. Ag/AgCl measuring element
8. pH membrane glass
9. Memosens connector

Dimensions

OPS71				ESA	(select from below for complete order code)
		Electrode Type			
	2	pH combination electrode with Pt 100 temperature element			
	3	pH combination electrode with Pt 1000 temperature element			
		Measuring Element			
	BC	pH 0-14, 0 to 130 °C, 13 bar, triple ceramic diaphragm			
	FB	pH 0-14, 0 to 70 °C, 13 bar, max. 1 ppm HF, single ceramic diaphragm			
	BP	pH 0-12, 0 to 135 °C, 6 bar, single ceramic diaphragm, prepressurized reference			
	BU	pH 0-14, 0 to 135 °C, 10 bar, single ceramic diaphragm, upside-down mounting			
		Electrode Length			
	2	120 mm			
	4	225 mm			
	5	360 mm			

Order Code

Intelligent sensor with Memosens technology

OPS71D			1	(select from below for complete order code)
7	Electrode Type			
	Memosens technology with built-in temperature element			
	Measuring Element			
	BC	pH 0-14, 0 to 130 °C, 13 bar, triple ceramic diaphragm		
	FB	pH 0-14, 0 to 70 °C, 13 bar, max. 1 ppm HF, single ceramic diaphragm		
	BP	pH 0-12, 0 to 135 °C, 6 bar, single ceramic diaphragm, prepressurized reference		
	BU	pH 0-14, 0 to 135 °C, 10 bar, single ceramic diaphragm, upside-down mounting		
	Electrode Length			
	2	120 mm		
	4	225 mm		
	5	360 mm		

OPS72	0	PB	ESA	(select from below for complete order code)
Electrode Length				
2	120 mm			
4	225 mm			
5	360 mm			

Intelligent sensor with Memosens technology

OPS72D	7	PB	1	(select from below for complete order code)
Electrode Length				
2	120 mm			
4	225 mm			

Cables	
Shielded pH cable with NEMA 6 waterproof connector, stripped and tinned ends	
OPK9-NPA1A	1.5 meter
OPK9-NQA1A	3 meter
OPK9-NAA1A	5 meter
OPK9-NBA1A	10 meter
OPK9-NCA1A	15 meter
OPK9-NDA1A	20 meter
Shielded pH cable with NEMA 6 waterproof connector, BNC and tinned ends	
OPK9B-NPA1A	1.5 meter
OPK9B-NQA1A	3 meter
OPK9B-NAA1A	5 meter
OPK9B-NBA1A	10 meter
OPK9B-NCA1A	15 meter
OPK9B-NDA1A	20 meter
Shielded pH cable with Memosens connector, stripped and tinned ends	
OYK10-A031	3 meter
OYK10-A051	5 meter
OYK10-A101	10 meter
OYK10-A201	20 meter
Calibration solutions	
OPY21	NIST traceable pH calibration solution, 4.00 pH, 1000 ml
OPY23	NIST traceable pH calibration solution, 7.00 pH, 1000 ml
OPY30	NIST traceable ORP calibration solution, value: +220 mV @ pH 7.00, 1000ml
OPY31	NIST traceable ORP calibration solution, value: +468 mV @ pH 7.00, 1000 ml
Installation housings	
OPA442, 640	Fixed housing
B60x	In-line hygienic
OPA475	Hygienic retractable
OPA450, 471, 472, 473	Industrial retractable
OPA111	Industrial submersible