

# Model GTDJ pH / ORP Electrode



## Steam sterilizable pH / ORP electrode with double chamber gel filled reference system



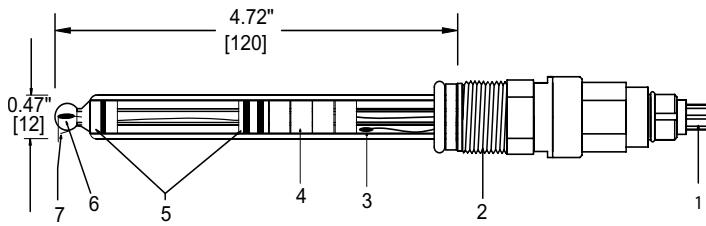
- Gel filled electrolyte delivers high performance and low maintenance
- Advanced reference configuration featuring porous Teflon® junctions prevents drift and fouling
- Internal compensators for use in processes with fluctuating pressure and temperature
- Durable 0-14 pH sensitive glass can withstand CIP treatment and SIP temperatures up to 135 °C (275 °F)
- Integrated temperature sensor option available
- 12 mm design allows for installation in fixed or retractable housings
- NEMA 6 rated detachable cable system provides the convenience of a quick connect with the reliability of a fixed cable



**For use in process applications including fermentation, cell culture, chromatography, filtration, buffer preparation, food and beverage processing**

### Specifications

Measurement range	pH: 0 - 14 ORP: -1500 to + 1500 mV
Maximum measurement error	pH ±0.05 ORP ±3 mV
Pressure range	0 to 34.4 bar (0 to 500 psig) @25 °C
Temperature range	- 5 to 135 °C (23 to 275 °F)
Minimum conductivity	10 µS/cm
Electrolyte	Saturated KCl / AgCl (rear chamber) KCl / AgCl-free (front chamber)
Response time (@ 25 °C / 77 °F)	95 % of reading in 10 seconds



1. NEMA 6 waterproof connector
2. PG13.5 mounting threads
3. Ag/AgCl reference element
4. Salt rings
5. Teflon diaphragm
6. Ag/AgCl measuring element
7. pH membrane glass

**Dimensions**

<b>GTDJ</b>				2	(select from below for complete order code)
<b>Electrode Type</b>					
0 ORP electrode					
1 pH with no temperature element					
2 pH combination electrode with Pt 100 temperature element					
3 pH combination electrode with Pt 1000 temperature element					
<b>Measuring Element</b>					
PB Platinum band electrode (ORP)					
BA 0 - 14 pH, -5 to 135 °C, sterilizable (pH)					
<b>Plug-in head</b>					
ESA Swivel nut with NEMA 6 waterproof connector (requires NEMA 6 cable)					
FSA Swivel nut with NEMA 6 waterproof connector (requires NEMA 6 cable)					

**Order Code**

**Intelligent sensor with Memosens technology**

<b>GTDJD</b>				1	(select from below for complete order code)
<b>Electrode Type</b>					
7 Memosens technology with built-in temperature element					
<b>Measuring Element</b>					
BA 0 - 14 pH, -5 to 135 °C, sterilizable (pH)					
<b>Electrode Length</b>					
2 120 mm					

<b>Cables</b>	
<b>Shielded pH cable with NEMA 6 waterproof connector, stripped and tinned ends</b>	
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
<b>Shielded pH cable with NEMA 6 waterproof connector, BNC and tinned ends</b>	
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
<b>Shielded pH cable with Memosens connector, stripped and tinned ends</b>	
OYK10-A031	3 meter
OYK10-A051	5 meter
OYK10-A101	10 meter
OYK10-A201	20 meter
<b>Calibration Solutions</b>	
OPY21	NIST traceable pH calibration solution, pH 4.00, 1000 ml
OPY23	NIST traceable pH calibration solution, pH 7.00, 1000 ml
OPY30	NIST traceable ORP calibration solution, value: +220 mV @ pH 7.00, 1000 ml
OPY31	NIST traceable ORP calibration solution, value: +468 @ pH 7.00, 1000 ml
<b>Installation Housings</b>	
OPA442, 640	Fixed housing
B60x	In-line hygienic
OPA475	Hygienic retractable
OPA450, 471, 472, 473	Industrial retractable
OPA111	Industrial submersible



OPA442



OPA475



B606