

Model OPF19 Process pH Sensor



All purpose "severe service" industrial sensor with triple junction, nonfouling reference cell, built in temperature compensator, solution ground and 1" MNPT process connection

- Patented plunger pH measuring electrode
- Triple junction reference cell - minimize poisoning potential
- "Power Pack" Ag/AgCl cartridge for high temperature performance
- Non-fouling porous Teflon[®] liquid junctions
- Flat surface glass membrane
- "Scalloped" guard to protect flat pH membrane and promote self-cleaning effect
- Fast-responding temperature compensator
- TOP68 quick disconnect cable connector, NEMA 6
- Cast-in-place solid polymer electrolyte
- Integrated non-metallic solution ground

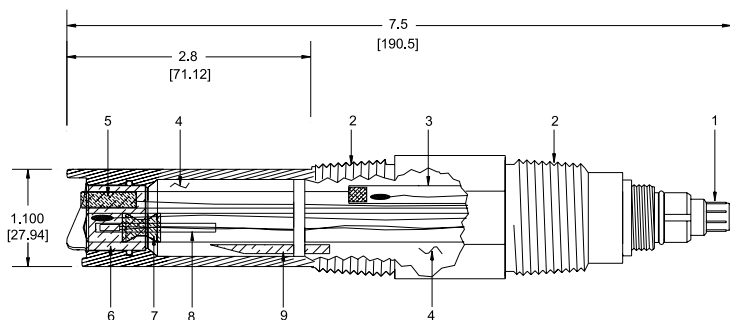


"Severe Service"

Applications:

- Chemical and petrochemical
- Boiler flue gas scrubbers
- Hot processes
- Water and wastewater treatment
- Process monitoring and control
- Strong acid / base neutralization

OPF19	Specifications
Measurement range	pH 0 - 14
O-rings	Viton [®]
Body material	Ryton [®]
Temperature range	0 to 110 °C (32 to 230 °F)
Pressure range	0 to 10.3 bar (0 to 150 psig)
Drift	< 2.0 mV/week
Response time @25°C	95 % of reading in 15 seconds
Asymmetry potential	7.0 pH ± 0.2 pH
Theoretical slope	± 59.16 mV /pH unit @ 25 °C (77 °F)
Sodium error	< 0.05 pH in 0.1 Molar Na ⁺ Ion @ 12.8 pH
pH glass bulb impedance @ 25 °C	1,000 Megohms



1. NEMA 6 waterproof connector
2. 1" NPT process connection
3. KCl-Ag/AgCl Power-Pack reference element
4. Polymerized KCl-No AgCl reference chambers
5. Nonmetallic solution ground
6. Front porous Teflon junction
7. Plunger pH electrode
8. Capillary TC
9. Middle porous Teflon junction

Dimensions Diagram

OPF19					
	Measuring Element				
	LP	0 - 14 pH, 0 - 110 °C, triple junction pH			
	PB	Platinum ORP, triple junction			
	Version				
	1	2.8" insertion, protective guard			
	Solution Ground				
	2	Solution ground added			
	Probe				
	B	ORP, no temp comp			
	C	Pt 100 temperature element (not ORP)			
	E	Pt 1000 temperature element (not ORP)			
	Plug-In Head				
	8	NEMA 6 waterproof connector (Requires NEMA 6 cable)			

Order Code

Intelligent sensor with Memosens technology

OPF19D				
	Measuring Element			
	LP	0 - 14 pH, 0 - 110 °C, triple junction pH		
	Version			
	1	2.8" insertion, protective guard		
	Solution Ground			
	1	No solution ground		

Cables	Shielded pH cable with NEMA 6 waterproof connector, stripped and tinned ends, with internal solution ground lead (for use with Model 802 field mount analyzer)
OPK9-NPA1B	1.5 meter
OPK9-NQA1B	3 meter
OPK9-NAA1B	5 meter
OPK9-NBA1B	10 meter
OPK9-NCA1B	15 meter
OPK9-NDA1B	20 meter
	Shielded pH cable with NEMA 6 waterproof connector, BNC and tinned ends, with internal solution ground lead (for use with Model 800 panel mount analyzer)
OPK9B-NPA1B	1.5 meter
OPK9B-NQA1B	3 meter
OPK9B-NAA1B	5 meter
OPK9B-NBA1B	10 meter
OPK9B-NCA1B	15 meter
OPK9B-NDA1B	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
OPY 21	NIST traceable pH calibration solution, pH 4.00, 1000 ml
OPY 23	NIST traceable pH calibration solution, pH 7.00, 1000 ml
OPY 30	NIST traceable ORP calibration solution, value: +220 mV @ pH 7.00, 1000ml
OPY 31	NIST traceable ORP calibration solution, value: +468 @ pH 7.00, 1000 ml
	Installation Housings
OPA 611	Immersion