

# OneFerm pH VP 70 Pt100

Specification Sheet (Part/REF # 243216)



OneFerm pH sensors offer multiple electrical connector options and sensor lengths to work with most single use bags and bioreactor installations.

## Product Specifications

<b>Sensor Family</b>	OneFerm
<b>Parameter</b>	pH
<b>a-length</b>	70 mm
<b>Electrical Connector</b>	VP6
<b>Sensor Output</b>	Traditional: mV
<b>Measurement Principle</b>	Combination electrode; pH potential measured against reference
<b>Measuring Range</b>	pH 3 to 10
<b>Sensitivity</b>	Before gamma irradiation: 57 to 60 mV/pH at 25 °C (97 % -101 %); Shift after gamma irradiation: $\pm 1.5$ mV/pH
<b>Zero Point</b>	Before gamma irradiation: $\pm 20$ mV; Shift after gamma irradiation: $\pm 10$ mV
<b>Calibration Data</b>	Yes, provided on sensor label
<b>pH Accuracy</b>	After gamma irradiation and dry storage: $\pm 0.15$ pH with provided calibration values. $\pm 0.1$ pH after product calibration at the measurement temperature and within 2 pH units from the product calibration point
<b>Drift at Room Temperature</b>	< 0.1 pH per week after wet-in time, in buffer pH 7
<b>Membrane Shape</b>	Spherical
<b>Diaphragm</b>	HP-Coatramic
<b>Temperature Sensor</b>	Pt100
<b>Diameter</b>	12 mm
<b>Process Connection</b>	PG13,5
<b>Wetted Parts</b>	Glass VMQ (Silicone elastomer)
<b>O-ring Material</b>	FDA 21 CFR 177.2600; EG 1935/2004; USP <87>; USP <88> Class VI (121 °C)
<b>Biocompatibility</b>	Yes, tested according to ISO 10993-5 and USP <87>
<b>Wet-in Time</b>	30 min after dry storage
<b>Shelf Life</b>	12 months prior gamma irradiation. 18 months after gamma irradiation
<b>Autoclavable</b>	No
<b>CIP</b>	No
<b>Steam Sterilizable</b>	No
<b>Gamma Irradiatable</b>	Yes, up to 45 kGy
<b>Operating Temperature Range</b>	4 to 50 °C
<b>Sample min Conductivity</b>	100 $\mu$ S/cm

**Pressure Range bar g**                      0 to 2 bar

<https://www.hamiltoncompany.com/sensors/243216>