

	Sensor Type PSt3		Sensor Type PSt6		Sensor Type PSt9
Specifications	Gaseous & Dissolved Oxygen	Dissolved Oxygen	Gaseous & Dissolved Oxygen	Dissolved Oxygen	Gaseous Oxygen
Measurement range	0 – 100 % O <sub>2</sub> 0 – 1000 hPa	0 – 45 mg/L 0 – 1400 µmol	0 – 4.2 % O <sub>2</sub> 0 – 41.4 hPa	0 – 1.8 mg/L 0 – 56.9 µmol	0 - 200 ppm
Limit of detection	0.03 % oxygen	15 ppb	0.002 % oxygen	1 ppb	0.5 ppm
Resolution	± 0.01 % O <sub>2</sub> at 0.21 % O <sub>2</sub> ± 0.1 % O <sub>2</sub> at 20.9 % O <sub>2</sub> ± 0.1 hPa at 2 hPa ± 1 hPa at 207 hPa	± 0.14 µmol at 2.83 µmol ± 1.4 µmol at 283.1 µmol	± 0.0007 % O <sub>2</sub> at 0.002 % O <sub>2</sub> ± 0.0015 % O <sub>2</sub> at 0.2 % O <sub>2</sub> ± 0.007 hPa at 0.023 hPa ± 0.015 hPa at 2.0 hPa	± 0.010 µmol at 0.03 µmol ± 0.020 µmol at 2.8 µmol	10 ± 0.5 ppm 100 ± 0.8 ppm 200 ± 1.5 ppm
Accuracy	± 0.4 % O <sub>2</sub> at 20.9 % O <sub>2</sub> ; ± 0.05 % O <sub>2</sub> at 0.2 % O <sub>2</sub> ;		± 1 ppb or ± 3 % of the respective concentration; whichever is higher		± 2 ppm or ± 5 %; whichever is higher
Drift at 0 % oxygen	< 0.03 % O <sub>2</sub> within 30 days (sampling interval of 1 min.)		< 2 ppb within 30 days (sampling interval of 1 min.)		< 2 ppm within 30 days (sampling interval of 1 min.)
Measurement temperature range		0 – 50 °C		0 – 50 °C	0 – 40 °C
Response time (τ <sub>90</sub> )	< 6 sec.	< 40 sec.	< 6 sec.	< 40 sec.	< 3 sec.
<b>Properties</b>					
Compatibility	Aqueous solutions, ethanol, methanol				Gas phase only
No cross-sensitivity with	pH 1 – 14 CO <sub>2</sub> , H <sub>2</sub> S, SO <sub>2</sub> Ionic species				CO <sub>2</sub> , SO <sub>2</sub>
Cross-sensitivity to	Organic solvents, such as acetone, toluene, chloroform or methylene chloride Chlorine gas				Organic vapor Chlorine gas
Sterilization procedures	Steam sterilization Ethylene oxide (EtO) Gamma irradiation				-
Cleaning procedures	Cleaning in place (CIP, 5 % NaOH, 90 °C, 194 °F) 3 % H <sub>2</sub> O <sub>2</sub> Acidic agents (HCl, H <sub>2</sub> SO <sub>4</sub> ), max. 4 – 5 %				-
Calibration	Two-point calibration in oxygen-free environment (nitrogen, sodium sulfite) and air-saturated environment		Two-point calibration in oxygen-free environment (nitrogen) and a second calibration value optimally between 1 and 2 % oxygen		Two-point calibration in oxygen-free environment (nitrogen 6.0) and a second calibration value optimally between 100 and 200 ppm gaseous oxygen
Storage Stability	2 years provided the sensor material is stored in the dark (- 10 – 60 °C)				