Technical specifications

Oxygen sensors

Hamilton Medical offers oxygen sensors for use with Hamilton Medical ventilators.

Oxygen sensor for HAMILTON-G5/S1, GALILEO, RAPHAEL
1/box

single use



Product specifications

Oxygen sensor model	**PN 396008**
Measuring range	0% to 100% O2
Response time 90%	6 seconds
Accuracy full scale (2) (3)	± 1%
Accuracy over operating range (4)	± 5%
Drift % signal/month (2)	< 1%
Linearity (2)	± 1%
Temperature coefficient	Compensated
Humidity noncondensing	0% to 99% relative humidity
Expected life (1)	60 months
Storage temperature (5)	0°C to 40°C

1. In air (20.9% O2) at 25°C and 1 atm.
2. At a constant temperature, pressure and humidity < 1% volume O2 when calibrated at 100%.
3. For optimal performance at higher oxygen levels, calibrate with 100% oxygen.
4. Calculated from the signal output value where above, and after any step change of 15°C or more once the sensor has reached equilibrium (approximately 1 hour).
5. Sensors may be stored in up to 55°C on a temporary basis only (up to one week); for example, during transport.

Technical specifications

Oxygen sensor for HAMILTON-C3/C2/C1/T1/MR1
1/box

single use



Product specifications

Oxygen sensor model	**PN 396200**
Measurement range	0% to 100% O2
Accuracy and repeatability	< 1% volume O2 when calibrated at 100% oxygen
Linearity error	< 3% relative
Response time	< 12 seconds to 90% of final value
Cross-interference	Meets ISO 80601-2-55 requirements
Effect of humidity	–0.03% relative per %RH at 25°C
Effect of mechanical shock	< 1% relative after a fall from a height of 1 meter
Temperature compensation	Built-in NTC compensation
Operating humidity	0% to 99% relative humidity, noncondensing
Long term output drift	< 1% volume oxygen per month Typically < –15% relative over lifetime
Storage temperature:	–20°C to +50°C
Prolonged lifetime	Maximum lifetime when stored between +5°C and +15°C
Warm-up time	< 30 minutes after replacement of sensor
Nominal sensor lifetime	≥ 1,000,000% volume oxygen hours

All specifications apply to standard conditions: 1013 hPa; 25°C dry, ambient air.