maselli
PROCESS ANALYZERS

TECHNICAL DATASHEET No. 90034H5281

O_2 OPTIC ANALYZER mod. UG01

OPERATING SPECIFICATIONS	
Application:	Measurement of O_2 in beer ("Low Range") and soft drinks ("High Range") for application on board lines.
Type of measurement:	Measurement of dissolved O_2 concentration, by means of an O_2 sensor using the fluorescence "quenching" phenomenon
Measurement limits	***Low range:*** 1 ppb ***High range:*** 0.015 ppm
Accuracy:	±1 ppb or 3% of the reading-(if the 3% of the reading is less than 1 ppb the accuracy is 1 ppb if the 3% is greater than 1 ppb the accuracy is 3% of the reading). 0.05 ppm or 3% of the reading (if the 3% of the reading is less than 0.05 ppm the accuracy is 0.05 ppm, if the 3% is greater than 0.05 ppm the accuracy is 3% of the reading).
Measurement scale	L***ow Range:*** 0…2000 ppb ***High range:*** 0 -22.5 ppm (beverage). 0-45 ppm (fermentation control).
Measurement interval:	5 seconds
Response time:	40 seconds
Product temperature during measuring:	-5...40°C (23…122 °F) with automatic measurement of the temperature by means of the PT100 probe and the possibility of setting a cutoff temperature below 40°C to increase the life time of the sensor
Relative line pressure:	Max. 10 bar (145 psi) at 20 °C (68 °F)
Sanitation conditions:	Cleaning in place (CIP, 2% NaOH, + 80 °C, + 176 °F). For any other sanitation agent used please contact the Maselli Service Department for the check of compatibility.
Zero drift:	The instrument requires checking and alignment of the zero at least every 2 weeks
Life time of fluorescent spot:	From 6 to 12 months, depending on the number of sanitation and hours of operation. The instrument is provided with internal diagnostics which allows an estimate of the time remaining before replacement of the sensor. The spot can be easily replaced.
Calibration:	Zero calibration by means of 99.999% N2 (low range) 99.99%N2 (high range) cylinder; the sensor must be removed from the line
Accessories for calibration:	Calibration tool (X-liter cylinder adapter). Flow cell.

GENERAL SPECIFICATIONS	
Power supplies	***Electrical:*** DC 24V ±10% 4W
Interfaces	***Digital:*** RS485
Notes:	Connections to the appliance are made via a metal multi-pin connector. The appliance is supplied together with the BA06 or IB08 Analysis System to which it must be electrically connected.

CONSTRUCTION FEATURES	
Execution:	Enbloc housing with AISI 316L stainless steel cover, PEEK™ heat insulating flange, “N” type Varivent® connector for installation on the process line
Measurement section:	O_2 Sensor “Pt100” temperature probe
Electronic section:	“CPU" with microprocessor
Materials in contact with the product:	Food-grade silicone AISI 316 stainless steel O-ring made of Karlez.
Notes:	The optical section of the equipment is dehumidified by a special humidity extractor.
Dimensions and weight:	176 (b) x 255 (h) x 181 (d), 3.2 kg

TECHNICAL-NORMATIVE SPECIFICATIONS	
Environmental features	***Temperature limits:*** Environment: -10…+45 °C (14…113 °F) Storage: -20…+70 °C (-4…+158 °F) ***Humidity limits:*** Environment: 5%...95% (R.H. without condensate) storage: 5%...95% (R.H without condensate) ***Altitude limits:*** <2000 m a.s.l. ***Degree of Protection:*** IP67 in accordance with EN60529
Conformity to Directives:	EMC: 2014/30/EU CE marking of conformity to EU Directives