## VisiTrace DO 120

## Specification Sheet (Part# 243560)



The VisiTrace DO is designed to measure dissolved oxygen in the low ppb range in brewing applications, notably during filtration and filling. Adjacent markets are also boiler feed water in power plant . The VisiTrace DO offers all the advantages of Hamilton's optical dissolved oxygen sensors: fast response time and easy maintenance. Improvements compared to conventional electrochemical (amperometric) sensors include flow independence, rapid start-up with no polarization time and implified maintenance. Monitoring in low ppb ranges is essential in many applications such as brewing processes and power plants.

## **Product Specifications**

Measurement Principle	Oxygen dependent luminescence quenching
Measuring Range	0 to 2 ppm (0 to 50 mbar)
Oxygen Consumption	None
Required Flow	None
Response Time	< 20 sec in gas; < 90 sec in water
Temperature Sensor	NTC 22 kOhm
Drift at Room Temperature	< 1 % per week @ 100 ppb
Configurable Values	DO: mbar; %-sat; %-vol; μg/l; mg/l; ppb/ppm (gas); ppb/ppm (dissolved oxygen); Temperature: °C, °F, K
Autoclavable	No
CIP	Yes
Steam Sterilizable	Yes, max. temperature 140°C
Process Temperature	-10 to 140°C; the Sensor provides no DO reading above 85°C
Pressure Range	-1 to 12 bar
O-ring Material	EPDM (FDA approved)
Surface Quality of Steel	Ra < 0.4 µm (N5)
Protection Rating	IP 68



## **Product Specifications**

Certificate	Yes, with parameter settings and materials used
Serial Number	Yes
Diameter	12 mm
Process Connection	PG13,5
Electrical Connector	M12
Analog Interface 1	4-20 mA for DO, programmable
4-20 mA Accuracy	< 0.3% current value + 0.05 mA
4-20 mA Current Range	3.5 to 22 mA
Operating Voltage	18 to 30 VDC
Electrolyte	None
Wetted parts	Stainless steel 1.4435, Silicone (FDA approved), EPDM
a-length	120 mm
Analog Interface	Two wire sink needs to be powered by external power supply
Accuracy at 25°C	± 0.5 ppb or 2% whichever is greater
Membrane / Cap	Delivered with ODO Cap L0

© 2015 Hamilton Company. All Rights Reserved.

All trademarks are owned and/or registered by Hamilton Company in the U.S. and/or other countries.

Revision: A / 2010-05-11 Printed in the U.S.A.



Web: www.hamiltoncompany.com USA: +1-800-648-5950 Europe: +41 58 610 10 10 Hamilton Americas & Pacific Rin

Hamilton Company Inc. 4970 Energy Way Reno, Nevada 89502 U.S.A. Tel: +1-800-648-5950 Fax: +1-775-856-7259 sales@hamiltoncompany.com Hamilton Europe, Asia, & Africa

Hamilton Bonaduz A.G. Via Crusch 8 CH-7402 Bonaduz, Switzerland Tel: +41 58 610 10 10 Fax: +41-58-610-00-10 contact@hamilton.ch