

Dissolved Ozone



THORNTON
Leading Pure Water Analytics

pureO₃ Dissolved Ozone Sensor

Enhanced Stability and Reliability

High Accuracy

Easy to Use and Maintain

Fast Response



ISM[®]

Reliable Ozone Measurement

Easy to Use, Easy to Maintain

METTLER TOLEDO



pureO₃ Dissolved Ozone Sensor

Robust, Reliable and Easy to Use

The new pureO₃ Dissolved Ozone Sensor with Intelligent Sensor Management (ISM®) technology provides robust, reliable measurement with increased stability in pure water applications.

The pureO₃™ dissolved ozone polarographic probe combines advanced design features with a robust measurement technology to ensure accurate and reliable measurement down to zero ppb. The innovative membrane, cathode and electrolyte combination provide fast, reliable measurement data. Full temperature compensation accounts for effects of both membrane permeability and solubility of ozone in water. This state-of-the-art design yields the most accurate and reliable ozone measurement available.

The unique configuration of the membrane, pre-mounted in a membrane cartridge, allows exceptionally easy service. Routine maintenance consists of replacement of the electrolyte and membrane, requiring only a few minutes from start to finish.

Intelligent Sensor Management (ISM) simplifies sensor handling and provides diagnostic tools for predicting sensor maintenance before measurements are affected.

Features Overview

- High accuracy response at very low ppb ozone concentration
- Enhanced stability and reliability
- Fast response
- Easy to use and maintain
- Plug and Measure

Typical Applications

- Pharmaceutical water systems
- Portable water skids
- Ozone system fabricators
- Semiconductor ultrapure water
- Bottled water systems
- Beverage systems

Benefits

- Improved process control and decision making
- Increased confidence in measurement and process control
- Reduced maintenance and downtime
- Reduced operator time and cost for installation

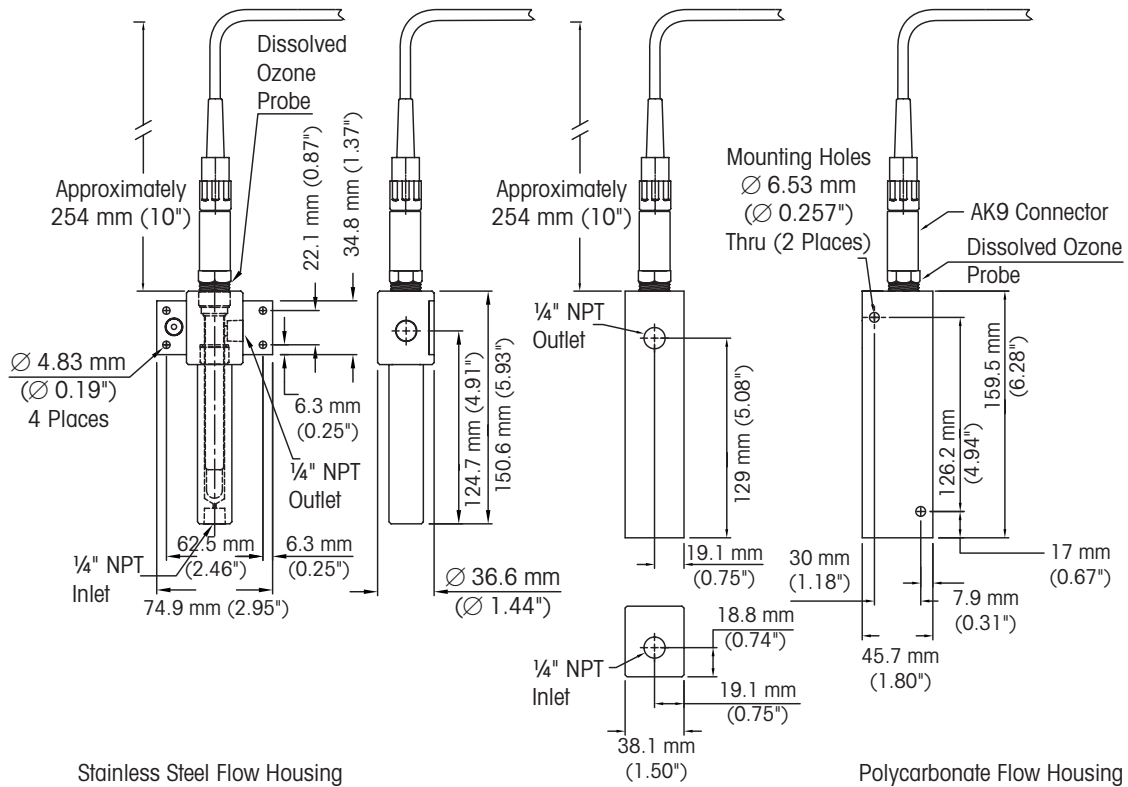


ISM®

Specifications

Operating range	0–500 ppb ($\mu\text{g/L}$) continuous; 0–5000 ppb ($\mu\text{g/L}$) short term
System accuracy	$\pm 1\%$ of reading or 0.4 ppb, whichever is greater
Response time, T90	90% response in 30 s
Sample flow rate	200 to 500 ml/min with housing
Sample temperature range	5–50 °C (41–122 °F)
Maximum pressure	3 bar (45 psig)
Sample connections	1/4" NPT(F)
Wetted materials	Polycarbonate or 316 stainless steel flow housing, 316L/1.4404 stainless steel probe, silicone rubber membrane, FKM O-rings
Cable length Probe to M800	1–80 m (3–262 ft)
Components needed	pureO ₃ probe, housing and cable
Sensor diameter	12 mm

Dimensions of pureO₃ Ozone Sensor



Notes:

1. Dimensions in mm (inches).
2. Sensor/Flow Housing assembly must be in upright position as shown.
3. Allow approximately 10 in. (254 mm) clearance to remove sensor.

pureO₃ Dissolved Ozone Sensor

Ordering Information

For new installations you need to order the sensor, the housing and a cable based on the length required by the customer.

Sensor Used with M800 Transmitter *	Order No.
pureO ₃ Dissolved Ozone Sensor	30 139 305

Required Accessories

Stainless Steel Ozone Flow Housing	58 084 020
Polycarbonate Ozone Flow Housing	58 084 012

Sensor Cable **

1 m (3.3 ft)	59 902 167
3 m (9.9 ft)	59 902 193
5 m (16.4 ft)	59 902 213
10 m (32.8 ft)	59 902 230
20 m (65.6 ft)	52 300 204
30 m (98.4 ft)	52 300 393
50 m (164.0 ft)	52 300 394
80 m (262.4 ft)	52 300 395

Spare Parts

Membrane Replacement Kit	30 235 170
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* Available for Use with the M300 ISM transmitter as of Q1/2016

** Cables are also available in 30 m, 50 m & 80 m lengths

► www.mt.com/pureO3

www.mt.com/thornton

Visit for more information

METTLER TOLEDO Group

Process Analytics Division

Local contact: www.mt.com/pro-MOs

Subject to technical changes

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