

# SENSOR | OQSEXG2 - ATEX

Product No.: OQSExG2-I-DD-02-5



## PRODUCT DESCRIPTION

The OQSExG2 is ATEX Zone 2 certified, providing operators with unmatched real-time oil condition monitoring and equipment status insight, designed for deployment on equipment operating in hazardous areas. Tan Delta's core technology enables real-time monitoring of synthetic or mineral oil, in any industrial application. Any change in quality or condition, caused by wear and/or contamination is instantly detected, accurately measured and reported. The OQSExG2 is designed for flexible integration with different head thread sizes to fit any inspection plug point, and multiple data outputs, CANBUS, MODBUS, 4-20mA for plug and play integration.

## KEY FEATURES

- **FULL SPECTRUM HOLISTIC (FSH™)**  
Detects all and any wear and contamination: water, acid, fuel, viscosity, different oil types, carbon, particles etc.
- **EXTREMELY SENSITIVE**  
Certified detection and measurement sensitivity of 0.001%. Even the smallest change is detected enabling early detection of issues before equipment damage.
- **REAL-TIME**  
Continuously analyses oil condition on operating equipment and reports oil condition every two seconds.
- **ROBUST & RELIABLE**  
Quality engineered from AISI304 stainless steel. IP67 rated, suitable for deployment on any equipment including ATEX Zone 2.
- **FULLY CERTIFIED**  
The OQSExG2 is fully certified, ATEX approval to BS EN 60079-0:2012 and BS EN 60079-11:2013 Ex ic IIA T3 Gc.

## BENEFITS

- Every equipment operator knows that machine monitoring enables effective management and thus increased reliability, efficiencies and profits. Oil condition monitoring with Tan Delta takes this to a new level through much greater insight into the real condition of your equipment, delivering significantly enhanced financial and operating benefits.
- **OPTIMISE SERVICE INTERVALS**  
Eliminate unnecessary maintenance and equipment downtime by precisely identifying oil end-of-life and reliably predicting optimal maintenance schedules.
  - **REDUCE CATASTROPHIC FAILURE**  
Ensuring optimal oil condition and reliable early detection of potential issues before wear particles are present and damage has already occurred by tracking real-time changes in oil quality.
  - **REDUCE RISK**  
Significantly reduce risks associated with inspections at heights, confined and remote assets or assets in explosive areas.

## TECHNICAL DATA

### PRODUCT INFORMATION

Name	ATEX Oil Quality Sensor
Product Number	OQSEx-G2-I-DD-02-5

### PHYSICAL

Material	Stainless Steel AISI304
Dimensions	118mm x 46mm (L x W)
Weight	160g
Connection	32mm AF Hex Collar
Torque	25N.m

### AVAILABLE THREADS

Thread	Seal
1/2" BSPP	Dowty Type
1/2" NPT	n/a
7/8" UNF	'O' Ring
M18	Dowty Type

(Alternative threads available upon request)

### CONNECTIONS

Glanded Sensor	With integral 2m Cable
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### ELECTRICAL

Supply	+9-30V DC
Consumption	0.4w Average

### DATA OUTPUT/INPUT

Digital Output	RS485, CANBus
Protocols Supported	Modbus, CANOpen and J1939

### OIL QUALITY DETECTION PARAMETERS

Frequency	Every 2 seconds
Output	Tan Delta Number (TDN) Oil Temperature (C or F)
Sensitivity / Accuracy	0.001%, +/-0.5%
Elements	All wear and contamination

### OIL TYPE

Configuration	Any mineral, semi-synthetic or synthetic oil, including fuels (diesel & bio-diesel)
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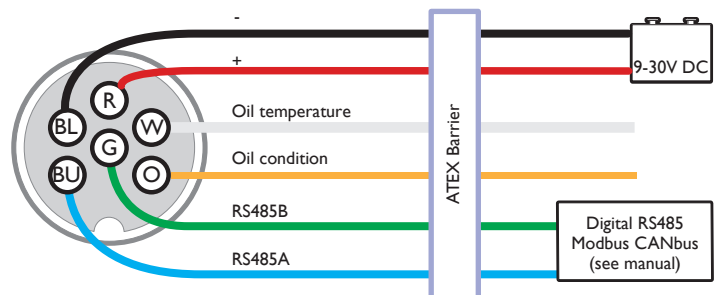
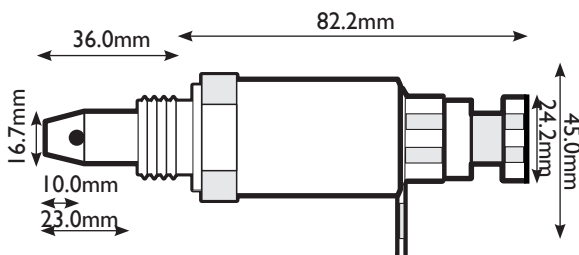
### ENVIRONMENTAL

Calibrated Temperature	-20°C (-4°F) to +120°C (+248°F)
Operating Temperature	-40°C (-40°F) to +120°C (+248°F)
Fluid Temperature	-40°C (-40°F) to +120°C (+248°F)
Fluid Pressure	up to 70 bar (1015 psi)
Storage Temperature	-55°C (-67°F) to +150°C (+302°F)

### STANDARDS & CERTIFICATION

Water & Dust	IP67 when connected
Shock & Vibration	BS EN 60068-2-30 (Test Db - Cyc.Hum.) BS EN 60068-2-6 (Test Fc - Sine Vib.) BS EN 60068-2-27 (Test Ea - Mech. Shock)
EMC	EN 61000-6-4:2007 (Generic Emissions Standard for Industrial Environments) EN 61000-6-2:2005 (Generic Immunity Standard for Industrial Environments)
ATEX	Zone II approval to BS EN 60079-0: 2012 and BS EN 60079-11:2013 Ex ic IIA T3 Gc
Conformity	CE Marked RoHS Compliant

## DIMENSIONS



## WHY TAN DELTA

Tan Delta's advanced real-time oil condition monitoring is used by equipment owners around the world to improve reliability and reduce costs. Our core FSH technology delivers exceptional real-time oil analysis and condition insight. From wind turbines and ships to mining trucks and railways, Tan Delta real-time oil condition monitoring solutions are proven to deliver substantial operational and financial benefits. Our products are easy to install and use on any equipment and are fully supported by our dedicated support team.



Tan Delta provide OEM equipment manufacturers with fully customised integrated and cost optimised solutions. Please contact us directly to discuss your oil condition requirements.