

# OIL QUALITY SENSOR (OQSx)

Product Ref: OQSx Series



## Accurate Real Time Oil Condition Monitoring.

The Oil Quality Sensor (OQSx) is your ideal solution for accurate real time oil condition monitoring. Easily and quickly installed the OQSx detects all wear and contamination elements to an exceptional high sensitivity level and provides an accurate statement of oil condition second by second - in any oil type and application.

### ➔ PRODUCT FEATURES

- **Accurate**

The OQSx accurately reports the precise condition of any oil in real time and is certified better than 15ppm sensitivity.

- **Advanced Technology**

Patented core technology delivers exceptional sensitivity to oil condition changes caused by wear and contamination.

- **Proven Performance**

Independently certified for accuracy, sensitivity and reliability. Accurate data you can trust.

- **Robust and Reliable**

Engineered for installation and long term maintenance free operation in the harshest industrial and commercial applications.

- **Easy to Install**

The OQSx is small and easy to install on any equipment and application.

- **Configurable**

OQSx is configurable for any synthetic and or mineral oil type operating in any application.

### ➔ BENEFITS



- **Optimise Service Intervals**

Optimise service intervals without risking equipment performance and reliability.



- **Lower Operating Costs**

Less downtime and less maintenance significantly reduces ongoing operating costs.



- **Improved Safety**

Ensures your equipment is in optimal condition making a safer working environment.



- **Help the Environment**

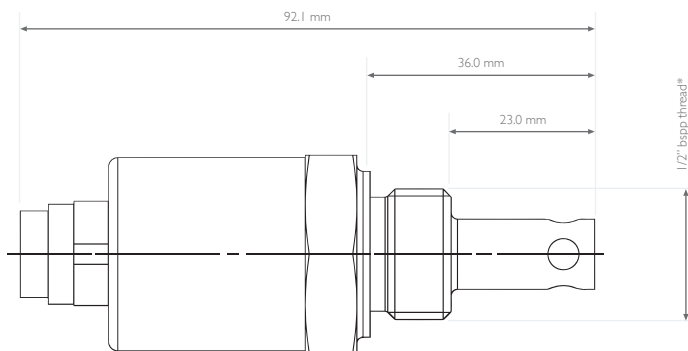
Increase equipment efficiency. Reduce oil consumption, maintenance activity and costs and conserve the environment.



# OIL QUALITY SENSOR (OQSx)

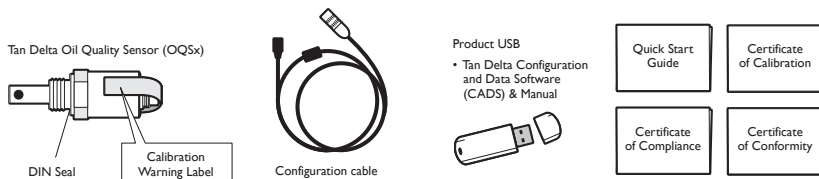
**TANDELTA**  
Oil Condition Monitoring

## DIMENSIONS



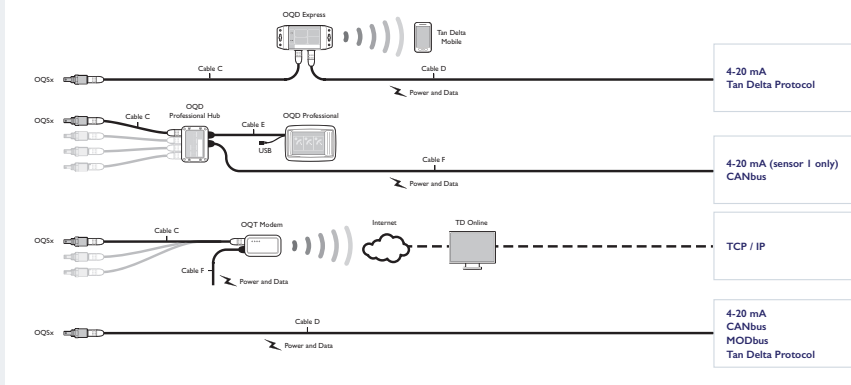
\* Standard sensor thread is BSPP thread. Other threads available upon request.

## IN THE BOX



**!** You may require additional cables to complete your installation. Please refer to the Tan Delta Systems Architecture diagram below.

## TAN DELTA SYSTEM ARCHITECTURE



## SPECIFICATIONS

### Order Information

**Product Name:** Oil Quality Sensor (OQSx)  
**Product Code:** OQSx-1-AA-02-5

### Physical

**Material:** Stainless Steel AISI304  
**Dimensions:** 90mm x 37mm (L x W)  
**Weight:** 160g  
**Thread:** 1/2" BSPP Thread / M32 Hex thread  
**Seal:** DIN 3869 Viton Seal  
(Alternative seals and threads available upon request)

### Connections

6 Pin Lumberg Male (IEC 61076-2-106)  
(Alternative connections are available upon request)

### Electrical

**Power Supply:** 9-30V DC  
**Power Consumption:** Average 0.4w continuous 30mA

### Data Output/Input

**Analogue Output:** 2x4-20mA (current syncing, passive input)  
**Digital Output:** 1xRS485: 9600 baud half duplex, Modbus protocol supported on RS485, CANbus: CANopen protocol supported on RS485

### Oil Quality Detection Parameters

**Frequency:** 15 per second  
**Sensitivity:** Certified better than 15ppm sensitivity  
**Accuracy:** +/- 1%  
**Elements:** All wear and contamination elements

### Oil Type

**Configuration:** Any synthetic or mineral oil - including fuel oils such as diesel and bio-diesel

### Environmental

**Sensor Temperature:** -20°C (-4°F) to +120°C (+248°F)  
**Fluid Temperature:** -20°C (-4°F) to +120°C (+248°F)  
**External Pressure:** 0 bar (0 psi) to 20 bar (290 psi)  
**Fluid Pressure:** up to 20 bar (290 psi)

### Standards and Certification

**Water & Dust:**  
IP67 when connected

**Shock & Vibration:**  
**BS EN 60068-2-30**  
(Test Db - Cyclic Humidity)  
**BS EN 60068-2-6**  
(Test Fc - Sine Vibration)  
**BS EN 60068-2-27**  
(Test Ea - Mechanical Shock)

**EMC:**  
**EN 61000-6-4:2007**  
(Generic Emissions Standard for Industrial Environments)  
**EN 61000-6-2:2005**  
(Generic Immunity Standard for Industrial Environments)

## About Tan Delta

Tan Delta Systems Limited is a global leader in the development and supply of advanced oil condition monitoring technologies, products and systems.

Its products are trusted by the world's leading industrial and commercial companies to monitor oil condition, helping to optimise equipment productivity, reduce operating costs, thereby remaining competitive in a global economy.

All Tan Delta products are engineered and quality manufactured for long term continuous operation in the harshest commercial and industrial environments. Each product is carefully engineered and tested to withstand the long term effects of extreme shock, vibration, heat, cold, thermal shock, electrical interference and many more factors.

Tan Delta Systems Limited is always looking to exceed customer expectations, so for this reason reserves the right to alter, without notice, the specification, design or conditions of supply of any product or service. Information provided by Tan Delta Systems is believed to be accurate and reliable. However, no responsibility is assumed by Tan Delta Systems for its use, nor any infringements of patents or other rights of third parties, which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of Tan Delta Systems ©Tan Delta Systems Ltd 2015

