



Oil quality sensor (OQSx)

The Tan Delta OQSx oil condition monitoring sensor delivers the pinnacle in accuracy, performance and reliability for equipment operators who demand optimal reliability and productivity from their equipment. Proven around the world with leading equipment OEM's and operators, the OQSx sensor is configurable to any oil type in any application, hydraulics, engine, gear box, transformers, in real time - the OQSx will continuously monitor, detect and report any quality change.

Full spectrum holistic detection
Detects and measures all oil condition changes, no matter the cause - wear or contamination.

Sensitive
Even the smallest change is detected enabling early detection of issues before equipment damage.

Accurate
Absolute quality change detection and measurement accuracy and consistency.

Robust and reliable
Quality engineered from stainless steel. Suitable for deployment on any equipment in any environment.

Real time
Continuous inline monitoring in real time with instant detection and reporting

Easy to Install
Simple to configure and install. Long term maintenance free continuous operation.

Benefits



Lower operating costs
Less downtime and less maintenance significantly reduces ongoing operating costs.



Optimise service
Intervals optimise service intervals without risking equipment performance and reliability.



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.

Specifications

Order information

Product name: Oil Quality Sensor (OQSx)
Product code: OQSx-1-AA-02-5

Physical

Material: Stainless steel AISI304
Dimensions: 90 x 37 mm (L x W)
Weight: 160 g
Thread: 1/2" BSP 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: 9-30 V DC
Power consumption: Average 0.4 W continuous 30 mA

Data output / input

Analogue output: 2x4-20 mA (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 15 ppm 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)

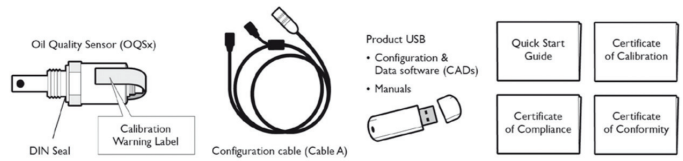
Standards and certification

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)

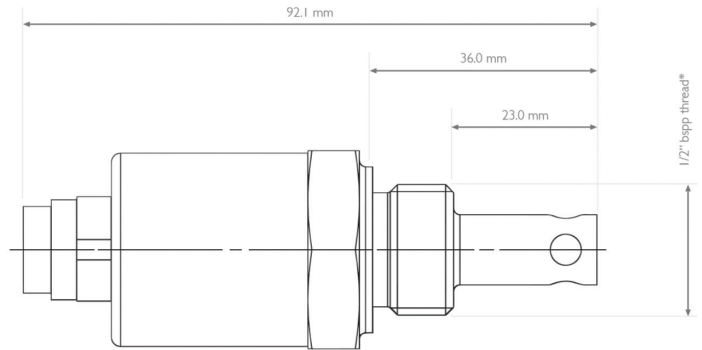
EMC:

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

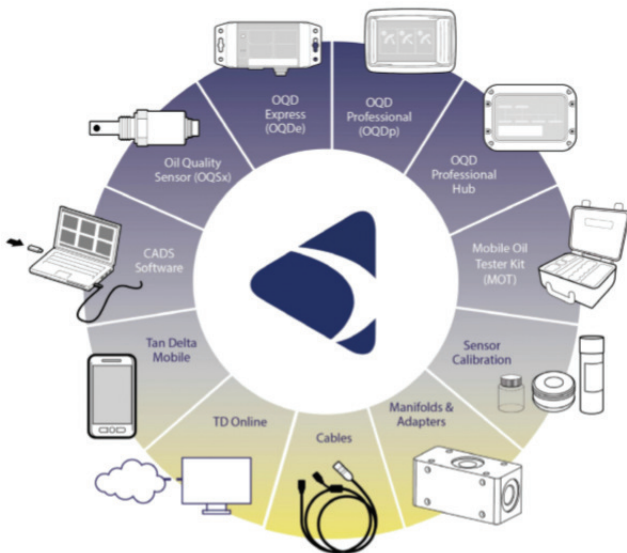
Whats in the box



Dimensions



About Tan Delta



Tan Delta Systems Limited is a global leader in the development and supply of advanced oil condition monitoring technologies, with a fully integrated product portfolio all engineered and developed from the initial core product, the oil quality sensor (OQSx).

Our 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.

The Tan Delta Customer Support team partners with customers to implement highly effective and commercial beneficial oil conditioning. Our experience and expertise enable customers to quickly and smoothly implement successful condition monitoring.

Tan Delta provide ongoing 24/7 global warranty support, technical support, advice and consultancy to ensure customers maximise the long term benefits of their investment in oil condition monitoring.

Demp A/S reserves the right to modify the technical specifications contained in this document without notice. No contractual document.

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