Overview

Description

OQSx-G2 is an advanced real-time oil condition sensor delivering unique insight into the status of your equipment, enabling significant operating cost reductions through maintenance optimization, advanced fault detection and reduced waste.
OQSx-G2 is powered by proprietary FSHâ„¢ core technology which combines real time oil condition analysis with data analytics. The electro-chemical properties of oil are continuously analyzed to an accuracy of 0.001% generating high quality raw data, which is then processed using our advanced analytics. This enables OQSx-G2 to accurately detect and measure all wear, contamination and failure modes and reliably inform you when equipment requires maintenance.
OQSx-G2 can be easily installed on any equipment, operating in any environment, with any oil type.

Features

- **FULL SPECTRUM HOLISTIC (FSHâ„¢)** Unique capability to detect and measure all and any wear and contamination - water, acid, fuel, viscosity, different oil types, carbon, particles etc.
- **ANALYSIS ACCURACY** FSH technology analysis, detects and measures changes in the electro-chemical properties of live oil in real time down to 0.001% (10ppm) change sensitivity. Unmatched raw data quality.
- **REAL-TIME** Continuously analyzes and reports oil condition on operating equipment and reports oil condition every seconds.
- **ROBUST and RELIABLE** Proven around the world for use in even the most extreme industrial and commercial applications.
- **EASY TO INSTALL** Quick and easy to install on any equipment with plug and play integration with any existing data reporting and display systems.

Benefits

Tan Delta advanced oil condition monitoring provides a new level of equipment condition insight resulting in reduced operating and ownership costs through a combination of optimized maintenance scheduling, advanced fault detection, longer equipment life, and reduced waste.

- **MAINTENANCE OPTIMIZATION** Eliminate unnecessary time based maintenance, through optimized maintenance scheduling according to actual equipment need and maintenance condition.
- **ADVANCED FAULT DETECTION** Detect early signs of issues before equipment damage to enable pre-emptive maintenance and reduce breakdowns.
- **ENVIRONMENTAL (ESG)** Reduce waste, extend equipment life, increase equipment productivity and efficiency. Reduce carbon footprint.

Ratings

Product Information

Name	Gen 2 oil quality sensor
Nomenclature	OQSxG2-1-CC-10-5 **- Note:** #10 ORB SAE J1926-3 (7/8-14 UNF) OQSxG2-1-EE-06-5 **- Note:** 1/2 in NPT OQSxG2-1-DD-02-5 **- Note:** 1/2 in BSPP

Physical

Material	Stainless steel AISI304
Dimensions	102 x 36 mm (4 x 1.42 in)
Weight	180 g (0.4 lb)
Connection	32 mm AF hex collar
Installation torque	25 N-m (18.4 ft-lb)

Available Threads

Thread	SAE #10 ORB (7/8-14 UNF) **- Note:** Seal: O-ring (VITON) 1/2 in BSP **- Note:** Seal: Dowty type (VITON) 1/2 in NPT

Connection

Connector type	6 pin Bulgin 4000 series

Electrical

Supply voltage	+9 to 30 Vdc
Power	0.4 W average

Data Input/Output

Digital Output	RS-485 CANbus
Supported protocols	Modbus CANOpen SAE J1939

Analog Output

Oil temperature	4 to 20 mA
Oil condition	4 to 20 mA

Oil Quality Detection Parameters

Measurement frequency	2 sec
Output	Tan Delta number (TDN) Oil temperature (°C or °F)
Sensitivity	0.001%
Accuracy	±0.5%
Elements	All wear and contamination

Oil Type

Configuration	Any mineral, semi-synthetic or synthetic oil, including fuels (diesel and bio-diesel)

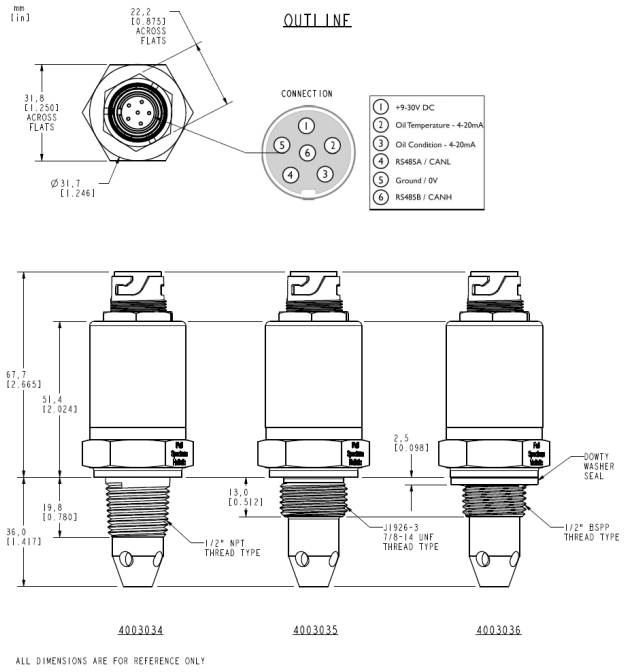
Envitonmental

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

Standards and Certification

Ingress protection	IP68 (when connected)
Shock and 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)
Conformity	CE Marked RoHS Compliant

Dimensions and Pinout



To Order

1/2 in NPT: Part No. 4003034
SAE #10 ORB (7/8-14 UNF): Part No. 4003035
1/2 in BSPP: Part No. 4003036
Configuration software and cable kit: Part No. 4214450