The Renold SmartGearbox OCMS

Oil Quality Sensor - OQS Express

> "Giving you a 360 degree view of your oil.

The Renold Gears Oil Quality Sensor has been designed and developed to the highest standards. 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 exceptionally high sensitivity level and provides an accurate statement of oil condition second by second - in any oil type and in any application, giving you a true 360 degree view of how your oil is performing.

Key Features

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

Advanced Technology
Patented core technology delivers exceptional sensitivity to oil condition changes caused by both 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.

Key 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.

RENOLD SMARTGEARBOX

RENOLD
Superior Gear Technology

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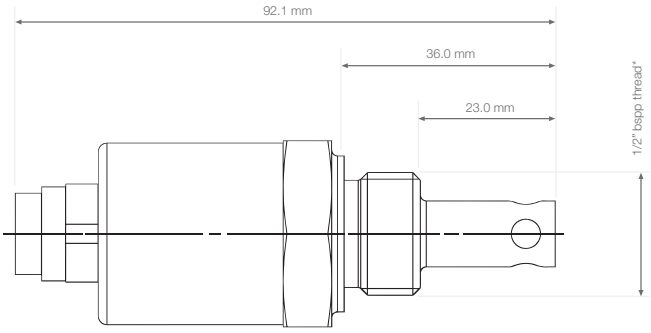
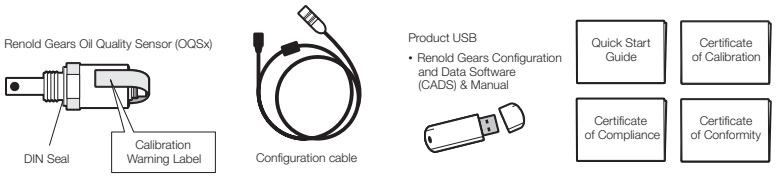
Dimensions



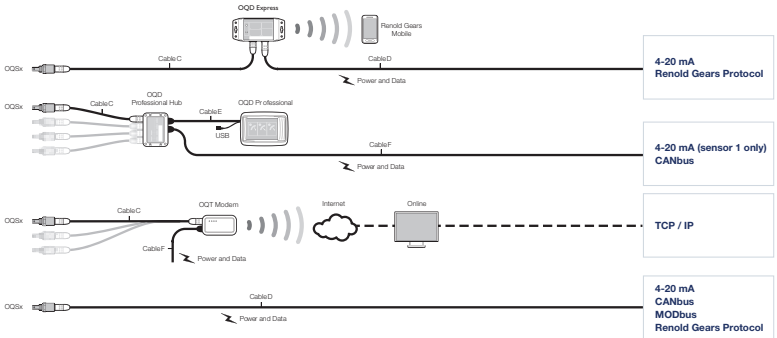
* Standard sensor thread is BSPP thread. Other threads available upon request.

In the box



You may require additional cables to complete your installation. Please refer to the Renold Systems Architecture diagram below.

System Architecture



Specifications

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

- **Physical**
  Material: Stainless Steel AISI304
  Dimensions: 90 mm x 37 mm (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: 9–30 V DC
  Power Consumption: Average 0.4w continuous 30mA

- **Data Output/Input**
  Analogue Output: 2 x 4 – 20mA (current syncing, passive input)
  Digital Output: 1 x RS485: 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: –20ºC (–4ºF) to +120ºC (+248ºF)
  Fluid Temperature: –20ºC (– 4ºF) to +120ºC (+248ºF)
  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)

Ordering information

Standard Sensor = OQS-1-AA-02-1

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RENOLD
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REN101/SMART/02.17/E