

# **Oil Condition Sensor**



Preventative maintenance and servicing is playing an increasingly relevant role today to guarantee the trouble-free operation of plant and machinery.

With hydraulic and lubricating oil systems, the main focus is on preventative monitoring of their condition and analysis of the fluids used. Apart from the purity of the oils, which can be determined using mobile or stationary STAUFF LasPac-II and LPM-II Laser Particle Counters, oil ageing is a second important criterion for the decisive and comprehensive determination of the condition of a system.

Lubricants and operating media age with progressive use. Old or used oils can sometimes no longer guarantee the necessary protection of system components from wear, a factor that can decisively impair the operation of sensitive components in particular. Quite often this means repairing or  $% \left\{ 1\right\} =\left\{ 1$ replacing the affected components, which usually results in expensive downtimes and unplanned oil changes.

The STAUFF OCS Oil Condition Sensor continuously monitors the condition of hydraulic and lubricating oils and displays this in real time on the OCD Oil Condition Display, optionally available as an accessory.

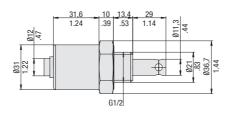
The OCD displays the values recorded by the OCS sensor on a multi-segment display, which enables the oil condition and temperature to be recorded at a glance without the need to  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left$ connect to a PC.

The data can, of course, also be transmitted directly into the machine control or to a PC, if required. More important, a multi-coloured LED provides the ACTUAL condition in relation to the TARGET condition, which enables demand-led maintenance and oil change intervals to be planned.



# Oil Condition Sensor • Type OCS-I-M-B08-M16







#### **Product Description**

The Oil Condition Sensor OCS is designed for continuous monitoring of hydraulic systems. Permanently installed in the system the OCS sensor monitors the condition of hydraulic fluids and lubricating oils in real time, whereby water ingress and oxidation can be detected in time. The OCS sensor is 60 times more sensitive than dielectric sensors on increasing contamination and protects the system from cost-intensive downtimes and reduces machine downtimes.

#### **Features**

- Robust construction
- Usage under extreme conditions with temperatures from -20 °C to +120 °C / -4 °F to +248 °F
- Suitable for use at operating pressures up to 20 bar / 290 PSI

#### **Order Code**



1 Series

Oil Condition Sensor (only)

OCS-I-M-B08-M16

# **Technical Data**

#### Materials

Stainless Steel (corrosion-resistant Steel) AISI304, 1.4301

#### **Dimensions**

• 90 x 37 mm / 3.54 x 1.46 in

#### Weight

■ 160 g / .35 lbs

#### **Sealing Material**

■ FKM (Viton®)

#### **Max. Burst Pressure**

20 bar / 290 PSI

#### **Media Temperature**

■ -20 °C ... +120 °C / -4 °F ... +248 °F

#### **Media Compatibility**

 Mineral and Synthetic Oil (Please contact STAUFF for other fluids)

# **Process Connection**

■ G1/2

#### **Electrical Connection**

6-pin connection plug

#### **Power Supply**

■ 9 ... 30 V DC

#### **Analog Output**

■ 4 ... 20 mA

# **Computer Interface**

RS485

# **Protection Rating**

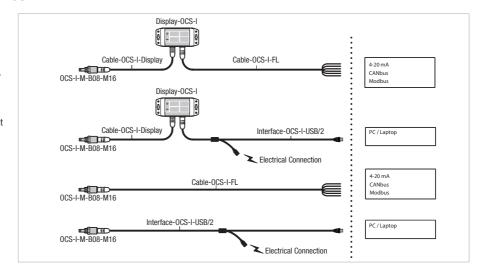
■ IP67

# **USB Interface • Type Interface-OCS-I-USB**

#### **Product Description**

The OCS sensor respectively the Display-OCS-I can be connected to a PC or laptop using the Interface-OCS-I-USB. It allows you to download the measured data and to carry out programming using the supplied software.

The Interface-OCS-I-USB was not designed for a permanent operating and should be used for programming the OCS sensor respectively download the measured data from the Display-OCS-I only.



#### **Order Code**



1) Series **Connection Cable** Cable-OCS-I-Display

#### **Order Code**

Interface-OCS-I-USB/2

1) Series

**Order Code** 

**Connection Cable** Cable-OCS-I-FL

Cable-OCS-I-FL

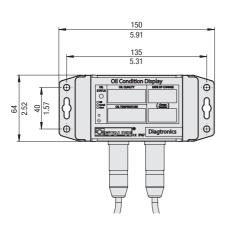
1) Series

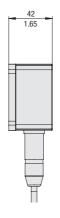
**Connection Cable** 

Interface-OCS-I-USB/2



# Oil Condition Display • Type Display-OCS-I







#### **Order Code**



(1) Series

Oil Condition Display OCS

Display-OCS-I

#### **Product Description**

The optional Oil Condition Display OCS unit shows the values measured by the sensor using a multi-segment LED indicator, which makes the oil condition apparent at a glance and without any connection to a PC.

The display unit also has integrated measurement value memory, from which the data can be subsequently transferred for assessment via USB.

#### **Technical Data**

#### Materials

Polycarbonate

#### **Dimensions**

150 x 64 x 42 mm / 5.91 x 2.52 x 1.65 in

#### Weight

■ 250 g / .35 lbs

# **Power Supply**

■ 9 ... 30 V DC

#### **Analog Output**

■ 4 ... 20 mA

# **Computer Interface**

RS485, 9600 Baud (half duplex)

#### Mounting

Mounting flange on back side 150 x 64 mm / 5.91 x 2.52 in

#### **Protection Rating**

■ IP67

#### Display

 Multi-segment LED indicator (20 segments: 13 green LED, 4 amber LED, 3 red LED, 1 red LED (Unit 0N))

# Order Code

# Starterkit-OCS-I

① Series
Starterkit Starterkit-OCS-I

#### Includes

■ 1x Oil Condition Sensor - Type OCS-I-M-B08-M16

■ 1x Oil Condition Display - Type Display-OCS-I

■ 1x Connection Cable - Type Cable-OCS-I-Display

■ 1x Connection Cable - Type Interface-OCS-I-USB/2

■ 1x Connection Cable - Type Cable-OCS-I-FL

# Starterkit • Type Starterkit-OCS-I

