



Metallic Wear Debris Sensor

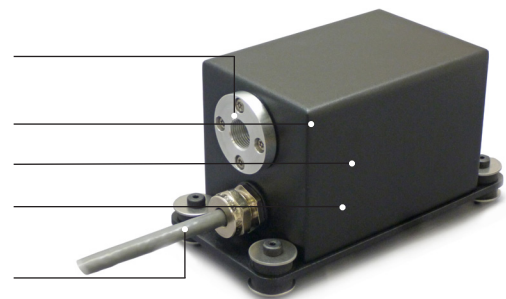
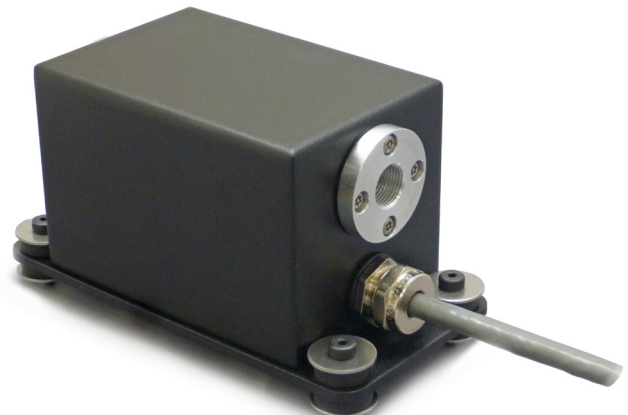
- ✔ Instant indication of condition
- ✔ Simple retrofit to oil system
- ✔ Plan maintenance and have the spares available on time

The Kittiwake Metallic Wear Debris Sensor goes beyond the scope of normal wear debris sensors to offer even smaller size resolution. With an unbeatable detection range, the sensor provides a debris count for both ferrous and non-ferrous metals.

It's no secret that particles result from wear. It is imperative to know, not just the number of particles which pass through your system, but also the size and metallic composition. The Kittiwake Metallic Wear Debris Sensor goes beyond normal protection systems, allowing you to monitor in real time and take immediate action on the first indication of change, thereby preventing all types of failure.

The Kittiwake Metallic Wear Debris Sensor can be mounted within almost any lubrication system, on any type of machine. By using proven inductive coil technology, combined with smart algorithms to provide a particle size distribution count, the sensor measures ferrous and non-ferrous metals resulting from the wear debris within the lubricant. This puts the user in control. The severity of the problem increases with an escalation in the production of larger wear debris particles.

With both digital and analogue outputs, the sensor can be easily integrated into existing condition monitoring and operating control systems, putting the user in control. Whether it's checking the health of the machine or alerting to changing wear patterns, the sensor provides instant information, complementing existing laboratory oil analysis programmes and helping the user make informed maintenance planning decisions.



3/8" BSP connections for quick and easy installation

Sealed to IP65 suitable for industrial use

Robust steel enclosure providing strength and magnetic shielding

LED display providing a visual indication of sensor status

Wide range of interface options due to variety of industry standard outputs

Technical Specification	
Ambient Temperature:	-20 to 65°C (-4 to 149°F)
Analogue Outputs:	2 x opto isolated 4 - 20 mA, 1 x alarm contacts (0.1 A max)
Communications:	CAN, RS232, RS485 (modbus option available)
Connections:	3/8" BSPP female
Detection:	> 40 micron (0.04 mm) [0.00157 inch] ferrous metal > 135 micron (0.135 mm) [0.0531 inch] non-ferrous metal
Output:	Simultaneous quantification of metallurgical composition and size category of particles in the fluid
Fluid Compatibility:	Petroleum, synthetic oils and water / oil emulsions
Fluid Temperature:	-20 to 65°C (-4 to 149°F)
Flow Rate:	0.3 - 4.5 ms ⁻¹
Sensor Bore:	Diameter 10 mm, length 120 mm
Max Fluid Pressure:	10 bar (145 psi)
Max Fluid Viscosity:	500 cSt
Power Supply:	18 - 30 V DC
Protection:	IP65
Weight:	2.2 kg

Ordering Information

Product Code	Description
FG-K19093-KW	Metallic Wear Debris Sensor
FG-K19157-KW	Metallic Wear Debris Sensor Evaluation Pack - includes case, power supply and display

All sensors come complete with software for data downloading and trending. Contact Kittiwake for information about the wide range of installation accessories and alternative options that are available to suit your specific application.

Typical Applications

- Wind Turbines
- Mud Pumps
- Large Gearboxes / Bearings



Kittiwake Proactive Technologies Pvt Ltd
 405 Ansals Majestic Tower 17
 Block G-1 Vikas Puri Community Centre
 New Delhi - 110 018 India
 Tel: +91 11 4158 6692
 Email: deepaks@kittiwake.com
 Web: www.kittiwake.com

Kittiwake Asia Pacific
 E-8-6 Block E Megan Avenue 1
 189 Jalan Tun Razak Kuala Lumpur
 50400 Malaysia
 Tel: +60 3 2333 8906
 Email: zainudiny@kittiwake.com
 Web: www.kittiwake.com

Kittiwake Developments
 3-6 Thorgate Road Littlehampton
 West Sussex BN17 7LU
 United Kingdom
 Tel: +44 1903 731 470
 Email: sales@kittiwake.com
 Web: www.kittiwake.com



Kittiwake Americas
 5177 Richmond Avenue
 Suite 1145 Houston Tx 77056
 Tel: +1 713 255 7255
 Email: keithm@kittiwake.com
 Web: www.kittiwake-americas.com

Kittiwake GmbH
 Marie -Curie-Str. 5
 25337 Elmshorn Germany
 Tel: +49 4121 700 890
 Email: info@kittiwake.de
 Web: www.kittiwake.de

MA-K19080-KW Iss 2