



## Total Ferrous Debris Sensor

- ✔ Contamination analysis, monitored in real-time
- ✔ Measure ferrous density of a lubricant
- ✔ Easy integrated into existing condition monitoring programmes

# Whether it's to check on the health of a machine, or alert a user to changing wear patterns, the Kittiwake Total Ferrous Debris Sensor provides instant information. Designed to complement your existing oil analysis programme, the sensor places you in control and helps in making informed maintenance planning decisions.

Machines give telltale indicators of potential problems, either through changes in noise, vibration or metallic wear debris in the lubrication system. Any change in the wear pattern results in changes in the ferrous density in the lubricant. The Kittiwake Total Ferrous Debris Sensor goes beyond normal chip detectors and magnetic plugs, providing a Parts per Million (ppm) value. The user can monitor in real-time and take immediate action on the first indication of change.

The Kittiwake Total Ferrous Debris Sensor can be mounted within almost any lubrication system, on any type of machine. Using a combination of proven magnetometry, combined with smart algorithms to provide data directly in ppm, the sensor measures ferrous density resulting from wear debris within the lubricant. With both digital and analogue outputs, airblast and piston options, the Kittiwake Total Ferrous Sensor can be easily integrated into existing condition monitoring and operating control systems.



Technical Specification	
<b>Ambient Temperature:</b>	-20 to 65°C (-4 to 149°F)
<b>Analogue Output:</b>	Opto isolated 4 - 20 mA
<b>Communications:</b>	CAN, RS232, RS485
<b>Connections:</b>	1/8" BSP
<b>Detection:</b>	Total ferrous wear debris
<b>Fluid Compatibility:</b>	Petroleum, synthetic oils and water / oil
<b>Fluid Temperature:</b>	-20 to 65°C (4 to 149°F)
<b>Max. Fluid Pressure:</b>	10 bar (145 psi)
<b>Options:</b>	Stand alone unit, unit with automatic piston zeroing, display / alarm box
<b>Power Supply:</b>	18 - 30 VDC
<b>Protection:</b>	IP65
<b>Range:</b>	0 - 2000 ppm uncombined ferrous debris
<b>Weight:</b>	2.2 kg (4.85 lb)
<b>Fluid Viscosity:</b>	350 cst (piston version and non zeroing option)

Ordering Information	
<b>Product Code</b>	<b>Description</b>
<b>FG-K16344-KW</b>	Piston version
<b>FG-K16354-KW</b>	Evaluation kit piston version, 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	
	Heavy Plant
	Final Drives
	Scrapedown Oil

Available for use in a multitude of applications

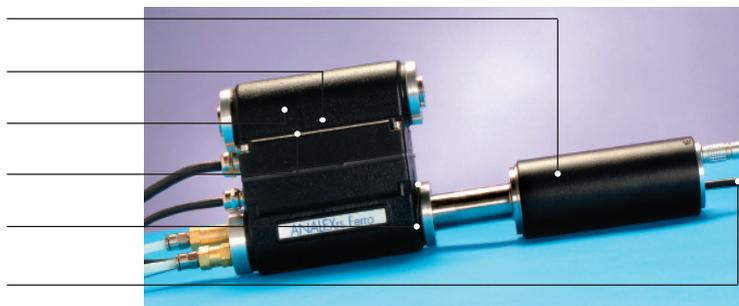
Robust cast iron enclosure providing strength and magnetic shielding

Reference coil for controlled temperature stability

Sealed to IP65 suitable for industrial use

LED display providing a visual indication of sensor status

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



**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

