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## Metallic Wear Debris Sensor

Real time indication of condition



ENGINEERING YOUR SUCCESS.

The Parker 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 Parker 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.

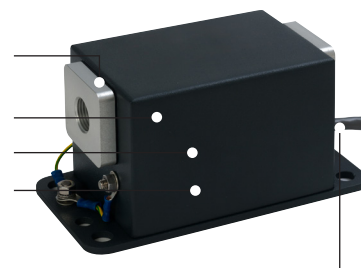
The Parker Kittiwake Metallic Wear Debris Sensor can be mounted within almost any lubrication system, on any type of machine. By using proven inductive coil technology, combined with smart algorithms to provide a particle size distribution count, the sensor measures ferrous and non-ferrous metals resulting 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.

The Parker Kittiwake Metallic Wear Debris Sensor is fully compliant with ASTM D7917-14 - Standard practice for Inductive wear debris sensors in Gearbox and drive train applications



- 1/2" BSP connections for quick and easy installation
- Sealed to IP67 suitable for industrial use
- Robust steel enclosure
- LED display providing a visual indication of sensor status
- Wide range of interface options due to variety of industry standard outputs



## Specification

Ambient Temperature:	-20 to 70°C (-4 to 158°F)
Analogue Outputs:	2 x opto isolated 4 - 20 mA, 1 x alarm contacts (0.1 A max)
Communications:	Modbus over RS485 and TCP / IP*
Connections:	1/2"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 85°C (-4 to 185°F)
Flow Rate:	0.3 - 1.9 ms <sup>-1</sup>
Sensor Bore:	Diameter 10 mm, length 120 mm
Max Fluid Pressure:	20 bar (290 psi)
Max Fluid Viscosity:	500 cSt
Power Supply:	18 - 30 V DC
Protection:	IP67
Weight:	3 kg

\*Contact Parker Kittiwake for enquiries about CAN

## Ordering Information

Product Code	Description
FGK19567PA	Metallic Wear Debris Sensor

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



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