

TRIDENT TM DM4600

Wear Debris Monitor

Real-time monitoring leads to improved asset health management

PRODUCT OVERVIEW

Poseidon Systems' Trident[™] DM4600 Wear Debris Monitor is a real-time, in-line fluid sensing technology for the detection of metallic wear debris and particulates in a lubrication system. By continuously monitoring wear debris generation, the device alerts users to faults in their earliest stages, allowing for lower-cost correction actions than conventional schedule based maintenance.

The DM4600 Wear Debris Monitor will detect, categorize (ferrous vs. non-ferrous), and size metals within a machinery lubrication system. The monitor will detect and measure particles with an estimated spherical diameter of 40 micron ferrous and 150 micron non-ferrous and larger. A wide range of output formats are available including particle type/size, approximate mass, and particle counts in user configurable bins.

The DM4600 integrates directly with CJC[™] Fine Filters. This easy-to-install design mounts directly between the pump and filter element of HDU 15/- and HDU 27/- systems. The unit ships with an install kit providing all required o-rings and extended mounting hardware.

BENEFITS

- Optimize machinery oil sample timing & maintenance intervals
- Improve asset health state awareness
- Advanced warning enables improved asset maintenance & logistics planning
- Reduce cost of unscheduled downtime

KEY FEATURES

• 40 micron ferrous & 150 micron non-ferrous debris detection ability

POSEIDON

- Industry standard communication interface
- Integrates directly with CJC[™] HDU 15/- & 27/- Fine Filters without additional hoses or plumbing
- Particle size/mass estimates
- Volumetric flow rate estimates
- Total particle count estimation



TECHNICAL SPECIFICATIONS

Detection Sensitivity (Debris)	40 μm Ferrous & 150 μm Non-Ferrous Metallic Particles
Communications	RS485/RS232 Modbus RTU, Pulse Output
Oil Connection	Direct Integration with CJC TM Fine Filters (HDU 15/- and HDU 27/-)
Ambient Temperature	-40 to 185°F (-40 to 85°C)
Fluid Temperature	-40 to 185°F (-40 to 85°C)
Volumetric Flow Rate	0.25 to 10 gpm (0.95 to 38 lpm)
Sensor Bore Diameter	0.472 inches (12 mm)
Ingress Protection	IP65
Power Supply	10-30 VDC, 300 mA
Weight	1.5 pounds (0.68 kg)
Working Pressure	150 psi (10.3 Bar) Max







