



**Aerospace**  
**Sensing & Controls**

Electromesh®



Eaton Aerospace's Sensing & Controls has been an innovator and pioneering leader in the development of mechanical and electronic technologies for the aerospace industry for more than 50 years. Specializing in the manufacture of lube system early failure detection devices, such as magnetic chip collectors, electric chip detectors, pulsed electric chip detectors (Zapper®) and quantitative debris monitors that capture and indicate the presence of ferrous wear particles, they have also responded to an industry need for the detection of wear particles other than ferro-magnetic.

The Tedeco® brand Electromesh® lube system debris monitor is configured to capture and indicate the presence of conductive, non-ferrous debris particles such as aluminum, magnesium, phosphor bronze and Babbitt material. The heart of the system is a uniquely woven screen that traps the debris and closes an electrical circuit to indicate its presence.

The assembly is shaped as a strainer with the stainless steel wires providing an indication of the presence of metallic particles that short across them.

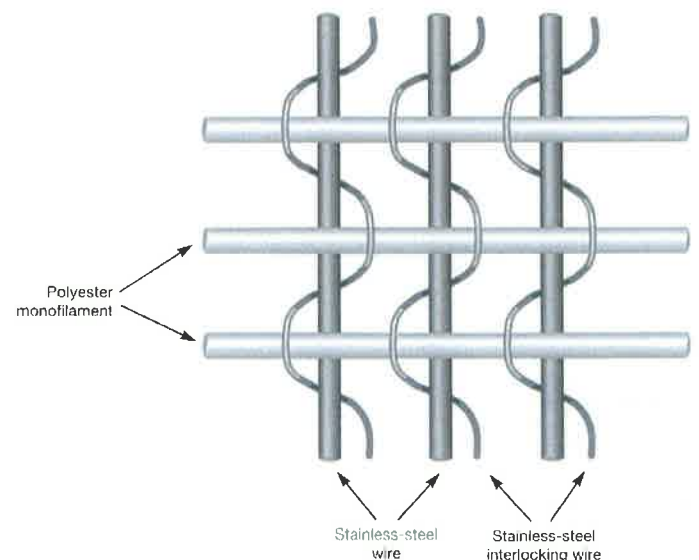
Located in the oil scavenge line, the screen passes the full oil flow. A chip detector can be incorporated in the base to provide the additional feature of capturing and indicating ferrous particles.

**Features**

- Indicates presence of conducting, non-ferrous debris particles
- Low pressure drop through screen
- Acts as a full-flow debris monitor
- Can incorporate a ferrous debris monitor such as a chip collector, chip detector or pulsed electric chip detector

**The Indicating Screen**

The Electromesh sensor consists of a screen formed by weaving vertical strands of stainless steel wires with horizontal strands of polyester monofilament into a mesh with the strands held in place by a fine stainless steel wire shown below.



**AS 9100**

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