

OPCom AS

Particle Monitor for aerated lubricating fluids

- Eliminates Air Bubbles
- Compact Assembly
- Continuous monitoring



Monitoring of Hydraulic Fluids or Lubricants such as Gear Oil that suffers from aeration.



Design Description:

The OPCom AS system consists of a pump, an OPCom particle monitor and a pressure relief valve. The pump delivers the oil to the OPCom particle monitor and the pressure relief valve which is set to a high pressure. Any air bubbles are compressed so that they either are solved by the oil or so small that they are not detected by the particle counter. A typical application is particle monitoring in aerated gear oil.



Function Principle:

Particle size and concentration is determined using the ISO recommended light extinction principle. The oil flows through the sensor at between 50 and 500 mL/min. A laser beam shines through the oil and is detected by a photo diode. A particle in the beam will decrease the detected intensity. The rate of decrease corresponds to the particle size. This optical principle detects everything which differs optically from the surrounding medium, such as air bubbles. Until now, it has been impossible to monitor gear oil using a particle counter for this very reason. The OPCom AS now allows Continuous Particle Monitoring for applications in this important field.

Subject to change: 11.06 1/2

Technical Data

Power Supply	400 VAC
Power	0,09 KW
Flow Rate	ca. 0,3 L/min
Viscosity Range	52000 mm²/s
Weight	ca. 12,5 kg
Dimensions	320 x 383 x 135
Connections	inlet: G 1/8 outlet: G 3/8
Max. Inlet Pressure	0,5 Bar
Media	Mineral Oil and Biodegradable Hydraulic Liquids (HETG, HEES)
Size Channels	4, 6, 14, 21µm(c)
Display	Cleanliness Classes acc.ISO 4406:1999
Temperature Range	-20° C + 70° C
Interface	RS 232
Data Memory	> 500 measurements









