



Industrial Filters · Accumulators

Description

This low cost online particle monitor enables the machine operator to survey at any time the trend of the contamination inside a hydraulic- or lube oil system.

An increasing contamination level may indicate one of the mayor reasons for accessive wear in pumps, valves, seals and other components. Further the combination with present water has a significant impact to oil characteristics and oxidation

Therefore the control of the contamination level is an important factor for an extensive maintenance concept.

Unnecessary machine downtime can be prevented by the continuous determination of the contamination level. It also achieves a considerable reduction of the maintenance costs in the long run when using a bypass-filtration-unit if the contamination levels reaches a defined limit.

A broad range of different data interfaces between the EPE OPM 4000 and the PLC or the computer ensures an easy data collection and documentation.

The OPM 4000 is also available as an additional accessory for different EPE-bypass-filtration units. The OPM is directly mounted to the unit and displays the current oil contamination level showing the effectiveness of the filtration.

Online-particle-monitor OPM 4000



Specifications:

Connections:	7/16"-20 UNF or optional minimes
Sensor:	Principle: light extinction, laser diode Sizes: 4,6,14 und 21 μm (c) at calibration acc. ISO 11171 with ISO MTD. Accuracy: 0,1 ISO-code
Flow Rate:	50 to 500 ml/min, unit offer integrated flow rate monitoring with alarms.
Fluid:	Hydraulic and lubrication oils, mineral and synthetic; phosphate ester optional
Viscosity:	> 2 mm ² /s (cSt), selection charts available.
Output:	local display local alarm contacts modbus analogue output 0...5V RS232, RS485
Reports:	ISO 4406-codes for 4,6,14,21 μm (c) (ISO MTD), Particles/ml
Power:	9 to 36 VDC
Dimensions:	approx. 9,5 x 9 x 5 cm
Accessories: (including)	DDE Software, 6 m (20 foot) fiber optic cable, operator's manual

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Quality assured

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Versions

The EPE online particle monitor OPM 4000 is supplied in three basic versions for easy installation to a new or existing system. The figure below illustrates the fluid flow path through the three units.

The OPM 4000-1 includes a flow inhibitor downstream of the sensor. It is designed for installation in the bypass line for a pressure range between 27- 500 bar. It restricts and controls flow from variable high-pressure sources and decreases the pressure to near atmospheric value for return to the fluid reservoir.

The OPM 4000-2 is an inline flow sensor with a built in check valve to divert flow from varying pressure or flow systems. Please note the minimum pressure of 1,3 bar and the flow range of 4 to 45 l/min.

The OPM 4000-3 is a straight through sensor for constant pressure source fluid systems in a bypass line. The flow through the sensor has to be controlled externally and must be between 50 and 500 ml/min.

The OPM 4000-1 and OPM 4000-2 each have an integrated oil sampling port for laboratory analysis. The port ensures that the oil is sampled from the point where the particle count level is determined.

Ordering information

