

Continuous Oil Condition Monitoring



OPCom II Particle Monitor

Application area

OPCom II is a compact particle monitor for continuous monitoring of the contamination in hydraulic fluids and lubricants.

Design characteristics

Recognizing changes in your hydraulic fluid

Particle monitors precisely display any change of contamination in your system. In that way you can react quickly when an increase in particle concentration occurs and the appropriate measures can be taken.

High pressure range

OPCom II is designed for operating with pressures of up to 420 bar. In that way it can be mounted directly to a pressure line.

Intuitive operating menu

OPCom II is equipped with an intensely illuminated graphic display and a keypad by which you may set up all required adjustments. The menu navigation is made up intuitively and logically.

Wide communication possibilities

OPCom II exports data to a serial interface or optionally to a CAN-Bus (CANopen). Parallel, the configurable 4-20 mA interface can be connected. Readings can either be run time-controlled, manual or started and stopped over digital input. The data can also be saved on the integrated memory unit.

With and without display

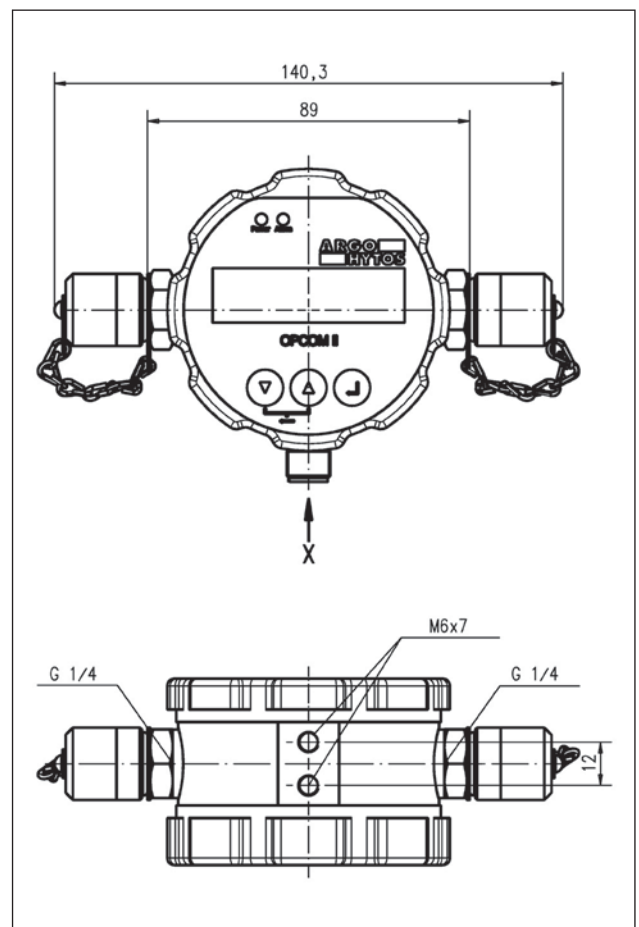
Depending on the application, OPCom II is available with and without display (e.g. if mounted in a difficult to access area).

Design characteristics

On the fluid side the OPCom II is equipped with two minimes connections respectively, to connect the sensor generally in the off-line circuit to the system. The electrical connection is installed via an 8-pole M12x1 circular plug. The integrated data memory allows data recording over a longer period. Besides all its technical functions the OPCom II scores by its compact and optical design.



OPCom II



Technical data

Measuring principle

OPCom II is an optical particle monitor which works to a so-called light extinction principle. This means that the particles are classified within a measuring cell with the help of a laser regarding their size and quantity.

Order code

OPCom II	SPCO 300-1000
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Accessories

Complete data cable set, 5 m length	SCSO 100-5030
Data cable with open ends, 5 m length	SCSO 100-5020
Contact box for connection of a data cable	SCSO 100-5010
USB adapter - RS232 serial	SCSO 100-5040
Power supply	SCSO 100-5080
Ethernet gateway for connection LubCos - LAN	SCSO 100-5100
Display and storage device LubMon Visu	SCSO 900-1000

Size channels	4, 6, 14, 21 µm (c)
Display	Cleanliness classes according to ISO 4406:99 and SAE AS 4059
Concentration limit	ISO 4 ... 25 at 10% optical coincidence
Voltage	9 ... 33 VDC
Fluid pressure	up to 420 bar dynamic
Flow rate	50 ... 500 mL/min
Temperature range	Oil: -10...+80°C Ambience: -10 ... +80°C (with display up to +60°C) Storage: -20 ... +80°C
Protection class	IP 67 (with display: IP 65)
Electrical connection	M12 x 1; 8-pole
Interface	RS-232 Analog output 4 ... 20 mA configurable, digital alarm output, Digital input to start and stop readings
Data memory	Onboard (4 MBit)
Operation	via keys, PC or digitalen I/O
Fluid compatibility	Mineral oils (e.g. HLP), ester oils (e.g. HEES) and biodegradable oils (e.g. HETG) Phosphate ester, optionally