

# Continuous Oil Condition Monitoring



## OPCom II Particle Monitor

### Application area

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

### Performance features

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 countermeasures can be taken. Subsequent damages are minimized and costs are reduced.

### High pressure range

The 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

The 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

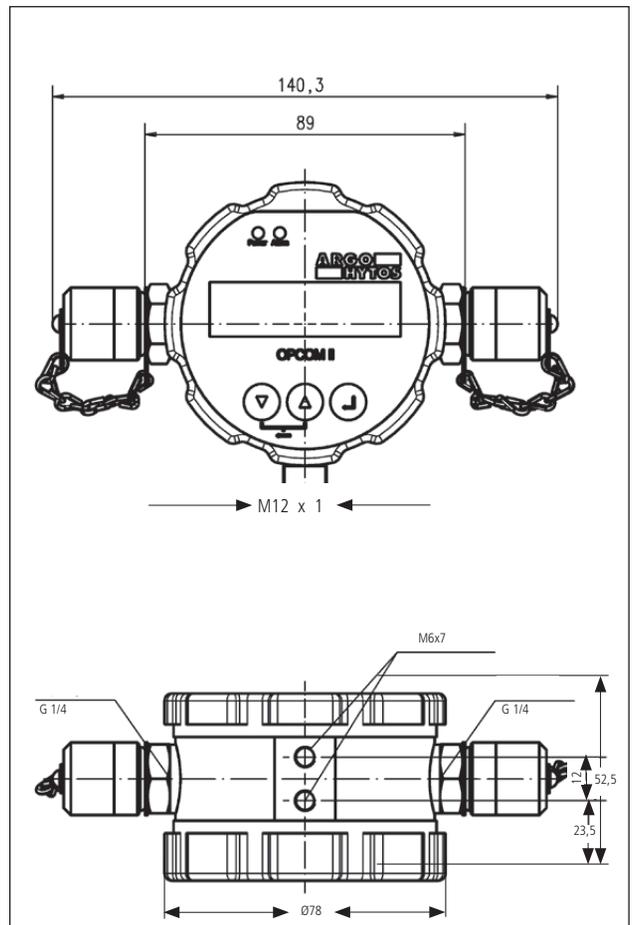
The OPCom II exports data to a serial interface or optionally to a CAN-Bus (CANopen). Parallel, the configurable 4 - 20 mA interface can be connected. Over a digital alarm output you will be warned when limits are exceeded or fallen below. Readings can run time-controlled, manually or started and stopped over a digital input. The data can also be stored on the integrated memory unit.

### Design characteristics

On the fluid side the OPCom II is equipped with two Minimes connections to connect the sensor generally in the off-line circuit to the system. The electrical connection is installed via an 8-pole M12 x 1 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



8-pole A coding (male)

# Technical data

## Measuring principle

The 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. The measured values are displayed according to ISO 4406:99 and SAE AS 4059 respectively.

## Software

A free PC-software for data recording and evaluation of the measured values can be downloaded from our website at [www.argo-hytos.com](http://www.argo-hytos.com) within our download area.

## Order code

OPCOM II	SPCO 300-1000
----------	---------------

## 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	PPCO 100-5420
Power supply	SCSO 100-5080
Ethernet - RS232 gateway	SCSO 100-5100
Display and storage device LubMon Visu	SCSO 900-1000
Minimes connection with volume flow limiting Pressure range 1: 2 ... 50 bar Pressure range 2: 50 ... 400 bar	SPCO 300-5105 SPCO 300-5140
Minimes connection with control loop	SPCO 300-5100

## Technical data

Size channels	4, 6, 14, 21 µm
Display	Cleanliness classes according to ISO 4406:99 and SAE AS 4059
Measuring range Calibrated range Measuring accuracy (calibrated range)	0 ... 24 OZ 10 ... 22 OZ ±1 OZ OZ = ordinal number
Voltage	9 ... 33 VDC
Fluid pressure	up to 420 bar (dynamic) up to 600 bar (static)
Flow rate	50 ... 400 ml/min
Temperature range	Oil: -10 ... +80 °C Ambience: -10 ... +60 °C Storage: -20 ... +80 °C Display readable up to 60 °C
Protection class	IP 67
Electrical connection	M12 x 1; 8-pole
Interface	RS-232, CANopen Analog output 4 ... 20 mA configurable, digital alarm output digital input to start and stop readings
Data memory	3000 data records
Operation	via keys, PC or digital I/O
Fluid compatibility	Mineral oils (e.g. HLP), ester oils (e.g. HEES), polyalphaolefines and biodegradable oils (e.g. HETG), phosphate ester optionally, diesel fuels