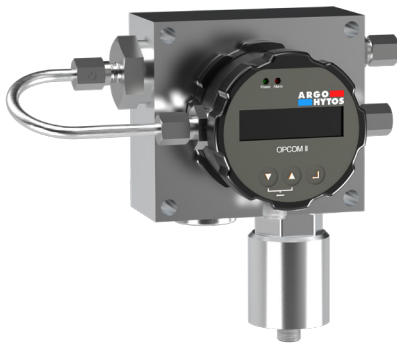


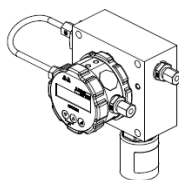
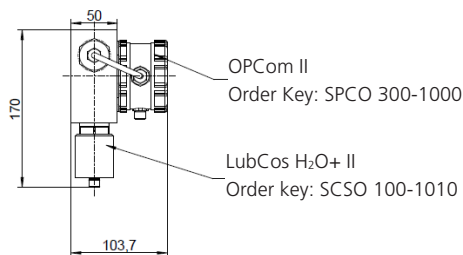
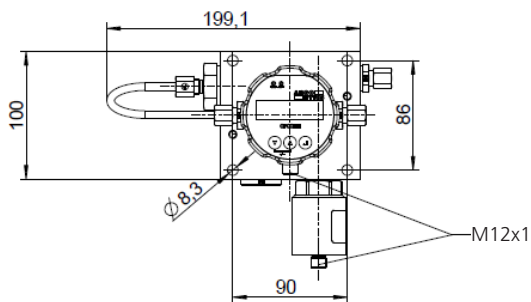
## Multi Sensor Block

### Block

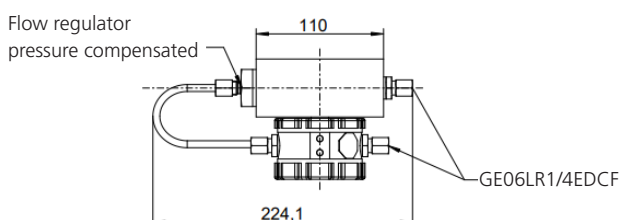
Pre-assembled block for measuring the cleanliness class and oil condition



Block SCSO 800-1000



Max pressure: 50 bar  
Recommended flow: 250 ml/min  
Temperature: -20 ... + 85 °C  
- 4 ... +185 °F



### Description

This block was designed to facilitate the implementation of OPCOM II and LubCos H<sub>2</sub>O/ H<sub>2</sub>O+ II sensors without costly modifications to the hydraulic system. For proper operation of both sensors, it is sufficient to supply the block with oil within the required pressure range (2-50 bar) and connect the appropriate port to the drain.

Communication with the block can be achieved via RS 232, CANopen / SAE J1939 protocols or analog outputs.

Samples for determining the cleanliness class can be taken at defined time intervals and displayed in accordance with the standards ISO 4406:2021, SAE AS4059, NAS 1638 and GOST 17216.

In addition, oil parameters such as relative humidity and temperature and, depending on the configuration, the ageing process, remaining service life, conductivity and permittivity are also measured.

A wide range of accessories and software, available at ARGO-HYTOS, allows the block to be freely used in many applications.

By connecting to the LubMon Connect system, you can store data in the cloud and access it from anywhere.

Connecting the device with the LubMon Visu system allows the user to create a fully functional system with printing option. The LubMon Visu system with a built-in Ethernet module allows for data transfer over the LAN.

This block offers many possibilities to create intelligent systems for monitoring the hydraulic system and oil parameters.

### Software

A 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) > Products > Sensors & Measurements > Software.

## Technical data

Parameter	Size	Unit
Operating pressure		
Pressure range	2- 50 (29- 725)	bar (psi)
Operating conditions		
Temperature <sup>1</sup>	-20 ... +85 (-4 ... +185)	°C (°F)
Rel. humidity <sup>1</sup>	0 ... 95	% r.H. (non-condensing)
Compatible fluids excluding water-based types	mineral oils (H, HL, HLP, HLPD, HVLP), synthetic esters (HETG, HEPG, HEES, HEPR), polyalkylenglycols (PAG), zinc and ash-free oils (ZAF), polyalphaolefins (PAO)	
Wetted materials	aluminum, stainless steel, HNBR, NBR, polyurethane resin, epoxy resin, chemical nickel/gold (ENIG), soldering tin (Sn96,5Ag3Cu0,5NiGe), aluminum oxide, glass (DuPont QQ550), gold, silver-palladium, sapphire	
Protection class <sup>2</sup>	IP67	
Power supply		
Supply voltage	9 - 33	V
Particle measurement - OPCom Particle Monitor		
ISO 4406:99	0 ... 28 (calibrated area 10...22)	ordinal number (OZ)
SAE AS 4059E	000 ... 12	ordinal number (OZ)
NAS 1638 (based)	00 ...12	ordinal number (OZ)
GOST 17216 (based)	00 ...17	ordinal number (OZ)
Size channels	4, 6, 14, 21	µm(c)
Measuring range oil parameter - LubCos H <sub>2</sub> O+ II		
*Rel. permittivity	1 ... 7	-
Rel. humidity	0 ... 100	%
*Conductivity	100 ... 800,000	pS/m
Temperature	-20 ... +85 (-4 ... +248)	°C (°F)
Measuring accuracy - OPCom Particle Monitor		
Particle measurement (within calibr. range) - ISO 4 / ISO 6	± 1	ordinal number (OZ)
Particle measurement (within calibr. range) - ISO 14 / ISO 21	± 2	ordinal number (OZ)
Measuring accuracy- LubCos H2O/ H2o+	± 0.015	-
*Rel. dielectric number <sup>3</sup>	± 3	% r.H.
Rel. humidity (10 ... 90%) <sup>4</sup>	± 5	% r.H.
Rel. humidity (<10%, >90%) <sup>4</sup>	± 200	pS/m
*Conductivity (100 ... 2000 pS/m)	Typ. < 10	%
*Conductivity (2000 ... 800,000 pS/m)	± 2	K
Temperature		
Measuring resolution LubCos H2O/ LubCos H2O+		
*Rel. dielectric number	1*10 <sup>-4</sup>	-
Rel. humidity	0.1	% r.H
*Conductivity	1	pS/m
Temperature	0.1	K
Output		
Interfaces	RS 232 / CANopen / SAE J1939 4-20 mA	
Weight	< 2 (4.4)	kg (lbs)

<sup>1</sup> The measurement accuracy applies to the medium temperature of +10 °C ... 85 °C (50 °F ... 180 °F)

<sup>2</sup> With screwed on sensor connectors

<sup>3</sup> Calibrated to n-Pentan at 25 °C (77 °F)

<sup>4</sup> Calibrated to air at room temperature

\*According to the LubCos H<sub>2</sub>O+ ||

Block with LubCos H2O + II	SCSO 800-1000
Block with LubCos H2O	SCSO 810-1000
<b>Accessories</b>	
Complete data cable set, M12x1, 8-pin, A-coded 5 m (16 ft) length	SCSO 100-5030
Data cable with open ends, M12x1, 8-pin, A-coded 5 m (16 ft) length	SCSO 100-5020
Female cable connector M12x1, 8-PIN, A-coded for connection of a data cable	SCSO 100-5010
USB adapter - RS 232 serial	SCSO 900-5040
Power supply	SCSO 100-5080
Ethernet - RS 232 gateway	SCSO 100-5100
Display and storage device LubMon Visu, standard	SCSO 900-1000
LubMon Visu, Ethernet	SCSO 900-1010
LubMon Connect	SCSO 700-1000
LubMon PClight software	free download
LubMon Config software	free download

More detailed information about sensors you can find in the datasheets:  
 OPCom Particle Monitor  
 LubCos H<sub>2</sub>O+ II  
 LubCos H<sub>2</sub>O