GYDAD INTERNATIONAL



Description

The ContaminationSensor CS 2000 series is a stationary sensor for permanent monitoring of particle contamination in fluids.

It has been developed for applications in test rigs, lubrication systems and critical hydraulic systems for which dynamic trend measurement of the contamination is required.

The ContaminationSensor CS 2000 series benefits from the field-tested sensor technology used in the FCU 2000 series.

It has been developed for use in conjunction with pressure connections up to 40 bar (higher pressures possible with external pressure relief valve).

Applications

- Industrial hydraulic and lubrication systems
- Mobile hydraulics

Advantages

- Combined hydraulic and electronic compensation for fluctuations in pressure and viscosity
- Continuous self-diagnostics
- Analogue output (4 ... 20mA) or digital output (RS 485/RS 232/ Ethernet)
- PLC output
- Relay outputs (operation, warning, alarm)
- RS 232 interface for ISO Code indication

ContaminationSensor

CS 2000 Series

Technical specifications

Self-diagnostics	Continuous with error indication via relays and serial interface
Measuring range (calibrated)	ISO 13/11/10 23/21/18. Sensor is calibrated within this range. Displays from ISO class 12/10/09 up to ISO 25/23/21.
Operating pressure	INLET: depending on the model, max. 40 bar OUTLET: max. 10 bar, rated to 350 bar
Connections	INLET: Thread G 1/4, ISO 228 OUTLET: Thread G 1/4, ISO 228
Measurement flow rate	10 200 ml/min
Total flow rate (depending on model)	10 800 ml/min (depending on pressure)
Fluid temperature range	0 + 70 °C
Supply voltage	24 V DC, ± 25%
Power consumption	25 Watt max.
Electrical data	 Output for ContaminationSensor Display 3 relay outputs: 1 x "ready" relay 2 x "limit" relays PLC output Additional electrical output (see model code)
Ambient temperature range	0 +55 °C
Storage temperature range	-20 +85 °C
Relative humidity	max. 90%, non-condensing
Protection rating	III (safety extra-low voltage)
Protection class	IP65
Weight	4 kg

Widde	
	$\begin{array}{c} \underline{CS} & 2 & 2 & 3 & 0 & -1 & -0 & -3 & -2 & 7 \\ \hline & & & & & & & & \\ \end{array}$
Type -	ContaminationSensor
Resol	
2 =	4 particle size channels
Conta 0 = 1 = 2 =	mination codes ISO 4406 : 1987; NAS 1638 / >5 μm>15 μm >25 μm>50 μm ISO 4406 : 1991; NAS 1638 / >2 μm >5 μm >15 μm >25 μm ISO 4406 : 1999; SAE AS 4059 (D) / >4 μm _(c) >6 μm _(c) >14 μm _(c) >21 μm _(c)
Housi	ng
Fluide	
0 = 1 =	For standard mineral oils For phosphate esters
	Standard without options
1 = 0	
Suppi U =	24 VDC
Press	e "Pressure/viscosity range" graphs
Electr 0 = 1 = 2 = 5 =	ical output RS232 (DIN-66348 protocol) Analogue output (only SAE/NAS and particle counts) (4-20 mA) RS485 (DIN-66348 protocol) Ethernet (IEEE 802.3TCP / IP)
Suppl withou	ementary details t details = standard

Items supplied - CS 2000

- Programming cableOperating and maintenance instructions
- Calibration certificate

Pressure / viscosity range

40 35-1 30-Pressure [bar] 25 20-15-2 10 3 5 0 -100 150 200 250 300 350 400 450 50 500 Viscosity [mm²/s]



Viscosity [mm²/s]

Dimensions



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Accessories

FluMoS Light, Part No.: 3355176 FluMoS Professional, Part No.: 3371637

FluMoT, Part No.: 3355177

PC Software Package CoCoS Professional, Part No.: 3141522



ContaminationSensor Display CSD



	Part No.
CSD-1-U	3078272
CSD-2-U	3078273

Dimensions





а b С d е f h i. g CSD-1-U 96 48 70 44 92 45 8 ..6 90 CSD-2-U 88 89 96 336 3 ..6 61 328 329

FluMoS

FluidMonitoring Software to read, display and process data from HYDAC fluid sensors. (Part No.: 3355176)

FluMoT

FluidMonitoring Toolkit to integrate HYDAC sensors in customer-owned PC software. (Part No.: 3355177)

CoCoS

ContaminationControl Software for convenient operation, graphic and tabular display, processing and transfer of CS 2000 measuring data.

Note

The information in this brochure relates to the operating conditions and applications described.

For applications and operating conditions not described, please contact the relevant technical department. Subject to technical modifications.

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