

HYDAC INTERNATIONAL



AquaSensor AS 2000

Description

The AquaSensor AS 2000 is designed for online measurement and indication of the percentage of dissolved water in hydraulic fluids. It also measures the temperature. The AquaSensor measures the level of saturation in percentage (volume %) irrespective of the oil type, age and temperature. The level of saturation indicates how much water is dissolved in the oil as a percentage of the maximum possible (total saturation). In other words 0% would indicate oil which is free of water and 100% would indicate oil which is completely saturated with water.

Applications

Applications in test rigs, lubrication systems and hydraulic systems for:

- Dynamic trend measurement of the water content
- Leakage monitoring
- Maintenance planning

Advantages

- With or without integral display
- Possible to transfer the measured values to a PC via RS 485 port
- Analogue and switching outputs

Technical specifications

Measurement range (calibrated)	Level of saturation: 0 - 100 %, Temperature: -20 .. 120 °C
Accuracy	Level of saturation: +/- 2 %, Temperature: +/- 0.4 °C at 5 .. +50 °C
Operating pressure	-0.5 .. 10 bar (-0.05 .. 1MPa)
Flow velocity	max. 4.5 m/sec
Fluid temperature range	5 .. + 90 °C
Ambient temperature	-10 .. +70 °C
Supply voltage	24 VDC (10 .. 30 VDC), max. 100 mA, residual ripple <10 %
Analogue outputs	
Level of saturation	4 .. 20 mA, resolution: 0.02 mA
Temperature	4 .. 20 mA, resolution: 0.02 mA
Max. ohmic resistance	500 Ω (Ohm)
Switching outputs	2 x saturation level (OG1/UG1) 2 x temperature (OG2/UG2), Transistors via optical coupler switching to +, max. 30VDC / 100mA / 3W
Protection class	IP65
Housing	Zinc die-casting GD-ZNAI 4

Model code

Type _____
AS = AquaSensor

Measuring range _____
2 = Saturation level 0 - 100%,
Temperature -20 .. 120 °C

Version _____
0 = 4 .. 20 mA output
3 = 4 .. 20 mA output + display +
RS485 port + switching outputs

Housing _____
3 = For stationary use

Fluids _____
0 = For standard mineral oils

Length of cable (to tip of probe) _____
1 = 3000 mm

Supply voltage _____
U = 24 VDC

Model code: AS 2 3 3 0 - 1 - U

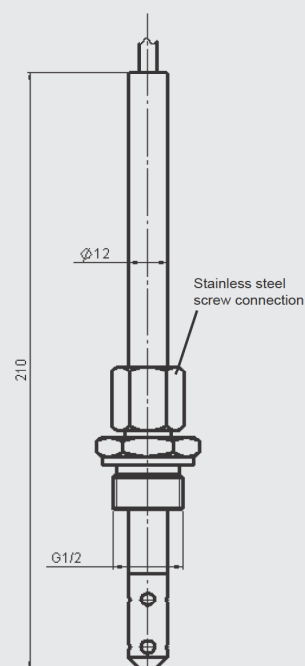
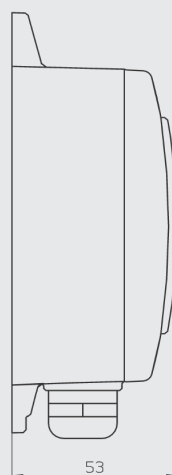
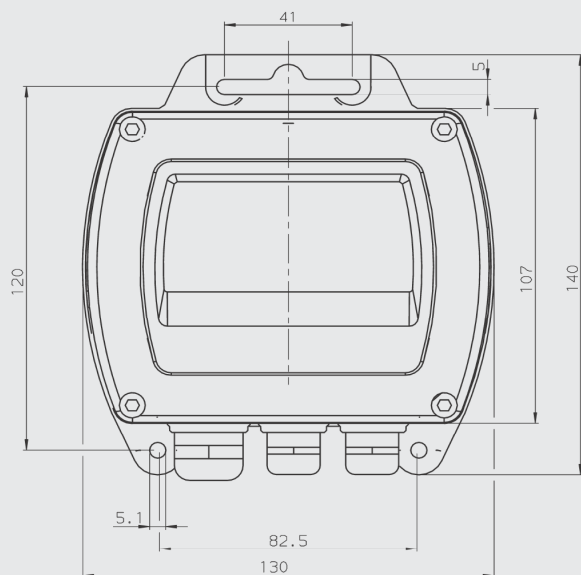
Items supplied

- AS 2000
- Stainless steel screw connection
1/2" with compression ring
- Operating manual

Accessories

- Calibration and adjustment kit
Part No.: 3122629

Dimensions



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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