

OILPORT 20 SET

Moisture in Oil Hand-Held

To measure moisture in oil with a hand-held, user-friendly instrument requires extraordinary measurement technology. The hand-held meter OILPORT 20 meets these multiple demands and is available with a pressure-tight or short measuring probe. The robust housing of the OILPORT 20 allows usage in harsh industrial environments.

The physical quantities measured are water activity a_w and temperature T . With these quantities OILPORT 20 SET calculates the water content (ppm) in mineral transformer oils. Calculation of water content in non-mineral transformer oils and lubrication oils can be accomplished by downloading specific parameters of the oil.



OILPORT 20 SET

The carrying cases can accommodate the measuring equipment with optional calibration devices. The accuracies of the measured values are traceable to international standards, administrated by NIST, PTB, BEV...

Typical Applications

Measurement of moisture in mineral and synthetic oil

Features

measurands: T , a_w , ppm
 input of specific oil parameters
 HOLD / MIN / MAX / AVG readout
 real time clock
 SI/US units selectable
 recalibration by user

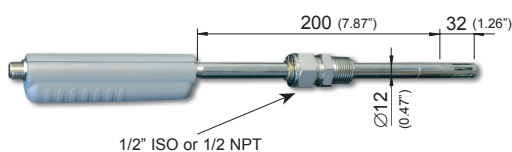
Technical Data - Display unit

General

Resolution	moisture measurement: a_w : 0.001 [] or 0.01...1ppm (depending on measuring range) temperature measurement: 0.1°C; 0.1°F		
Supply voltage	4x 1.5V AA alkali-manganese battery		
Battery lifetime	200h		
Working temperature range	display unit and grip of sensing probe: 0...50°C (32...122°F)		
CE compatibility according	EN61000-6-3	EN55011	CE
	EN61000-6-2	EN61000-4-2 EN61000-4-3	
Housing / protection class	ABS / IP40		
Dimensions (HxWxD)	145 x 85 x 37 mm (5.7 x 3.3 x 1.5")		
Weight	ca. 400g (1lbs)		
Display	LC display, 90 x 50 mm (3.5 x 2"), illuminated		

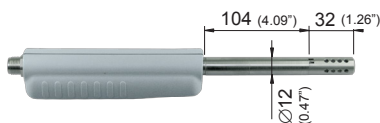
Oil Probes:

Pressure-tight Oil probe Ø12mm (0.47")



Application: measurement of moisture in mineral and synthetic oil
 Working range: 0...1 a_w / 0...20000ppm / -40...120°C (-40...248°F)
 Accuracy: $\pm 0.02a_w$ (0...0.9 a_w), $\pm 0.03a_w$ (0.9...1 a_w)
 $\pm 0.2^\circ\text{C}$ / $\pm 0.36^\circ\text{F}$ (20°C / 68°F),
 $\pm 0.5^\circ\text{C}$ / $\pm 0.9^\circ\text{F}$ (-40 resp. 120°C / -40 resp. 248°F)
 Response time τ_{90} : ≤ 10 min (in still oil)
 Pressure range: 0.01...20bar (0.15...300psi)
 Measurand: channel 1: T [°C/°F]
 channel 2: a_w [] or x [ppm] oil specific parameters are adjustable at the basic device
 Temperature dependence: a_w : $\pm 0.0003a_w / ^\circ\text{C}$ ($a_w / ^\circ\text{F}$)

Short Oil probe $\varnothing 12\text{mm}$ (0.47")



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Scope of supply

- Display unit type OMNIPORT 20 (including a set of 4 AA batteries)
- Oil probe
- Probe cable type HA010813, 2m (6,6ft)
- Calibration certificate for the sensing probe
- Calibration certificate for the display unit
- S01 protection sleeve for the sensing head
- Carry case
- Calibration kit horizontal^{*)}
- 5 ampoules humidity standard 10% RH^{*)}
- 5 ampoules humidity standard 80% RH^{*)}
- Accredited calibration certificate for the humidity standards^{*)}

^{*)} Only with version C01

Ordering Guide

MODEL	PROBES	CALIBRATION SET
(OILPORT 20 SET)	pressure-tight oil probe 1/2" ISO (1)	without calibration set (--)
	pressure-tight oil probe 1/2" NPT (2)	with calibration set (C01)
	short oil probe (3)	

Accessories

humidity standards / calibration kit
 probe cable 5m
 pressure-tight oil probe - 1/2" ISO
 pressure-tight oil probe - 1/2" NPT
 short oil probe
 ball valve set 1/2" ISO
 ball valve set 1/2" NPT

refer to data sheet "humidity calibration set"

HA010814

HA040204

HA040206

HA040210

HA050101^{*)}

HA050104^{*)}

^{*)} only suitable for pressure tight oil probe