

# IFO 510 - Industrial oil moisture sensor

## IFO 510 for moisture measurement in technical oils



### Special advantages:

- Fast response time
- Highly accurate measurement of water activity ( $a_w$ ), as well as process temperature. Measurement is independent of the respective oil type or age
- Calculation of the absolute water content (PPM), possible for transformer oil
- Two configurable analogue outputs, as well as Modbus-RTU (RS 485) interface available

### Typical application, measurement of residual moisture in:

- Transformer oil
- Engine oil
- Lubricating oil
- Hydraulic oil
- Diesel fuels

Example order code IFO 510:  
**0699 0100\_A1\_B1\_C1\_D1**

#### Process connection

A1	G 1/2"
A2	1/2" NPT

#### Scaling analogue output 1

B1	Water activity [ ] (standard)
B2	Water content x [ppm]
B3	Temperature T (°C)
B4	Temperature T (°F)

#### Scaling analogue output 2

C1	Temperature T (°C) (standard)
C2	Temperature T (°F)
C3	Water activity [ ]
C4	Water content x [ppm]

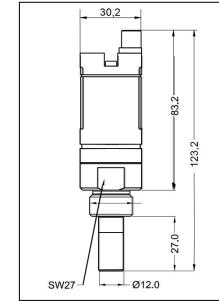
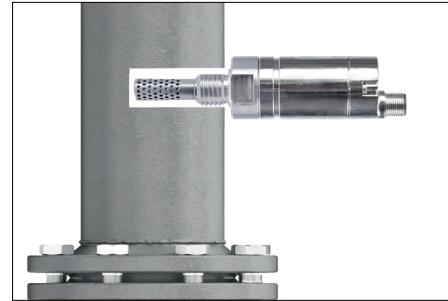
#### Oil type

D1	Standard transformer oil
D2	Customer specific oil

Order code Cable for IFO 510:  
**0553 0145\_A1**

#### Cable 8-polig

A1	5 m
A2	10 m
A3	Variable lengths on request



#### Recommendation:

Installation in a constantly flushed measuring point for best results

Dimensions IFO 510

#### ACCESSORIES

Service Software IFO 510 incl. interface cable to PC (USB) and power supply - for configuration / parametrisation of IFO 510

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#### TECHNICAL DATA FO 510

Measuring range humidity:	0...1 $a_w$
Accuracy (0...0.9 $a_w$ ):	± 0.02 $a_w$ at +23 °C
Accuracy (0.9...1.0 $a_w$ ):	typically ±0.03 $a_w$ at +23 °C
Measuring range temperature:	0...100 °C
Accuracy temperature:	±0.3 °C
Oil temperature:	-20...+100°C
Ambient temperature:	-20...+70°C
Pressure range:	up to 300 bar
Interfaces:	2 x analogue output 04...20 mA (3-wire), Modbus RTU (RS 485)
Supply voltage:	24 VDC (10...36 VDC)
Protection class:	IP 66
EMV:	acc. to DIN EN 61326-1
Material thread:	1.4404
Material perforated cap:	1.4301
Connection:	M12, 8-pin