



FO 510 - Industrial oil moisture sensor

FO 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 FO 510:

0699 0100_A1_B1_C1_D1

Process connection	
A1	G 1/2"
A2	NPT 1/2"
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 a_w []
C4	Water content x [ppm]
Oil type	
D1	Standard transformer oil
D2	Customer specific oil

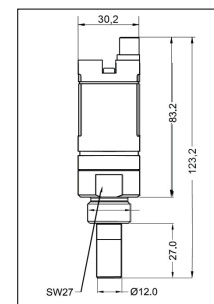
Order code Cable for FO 510:

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 FO 510

ACCESSORIES	ORDER NO.
CS Service Software FO 510 incl. interface cable to PC (USB) and power supply - for configuration / parametrisation of FO 510	0554 2010

TECHNICAL DATA FO 510	
Measuring range humidity:	0...1 a_w
Accuracy (0...0.9 a_w):	$\pm 0.02 a_w$ at +23 °C
Accuracy (0.9...1.0 a_w):	typically $\pm 0.03 a_w$ at +23 °C
Measuring range temperature:	0...125 °C
Accuracy temperature:	± 0.3 °C
Oil temperature:	-20...+125 °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