

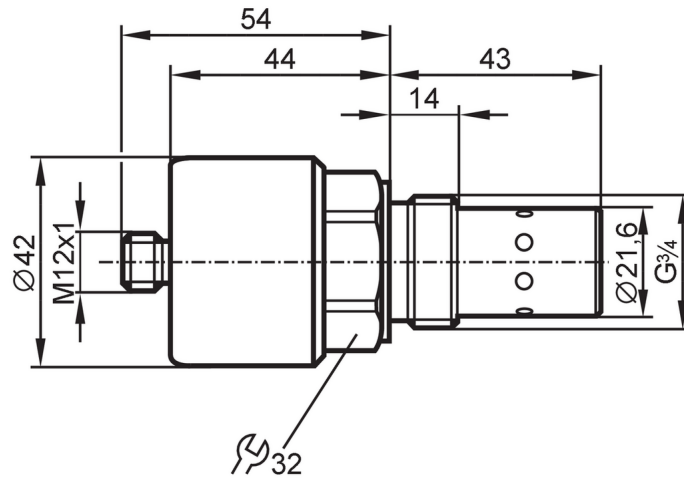
LDH100



Oil humidity sensor

OIL HUMIDITY SENSOR

For 8-pole sockets the core colours are not standardised.
Please note the wiring of the sensor and the sockets (see data sheet).



Product characteristics

Number of inputs and outputs	Number of analogue outputs: 2
Process connection	G 3/4

Application

Media	mineral oils; synthetic esters; biodegradable oils	
Tank pressure	50 bar	5 MPa
Oil		
Medium temperature [°C]	-40...105	

Electrical data

Operating voltage [V]	9...33 DC
Current consumption [mA]	< 25
Protection class	III
Reverse polarity protection	no
Measuring principle	capacitive

Inputs / outputs

Number of inputs and outputs	Number of analogue outputs: 2
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Outputs

Total number of outputs	2
Number of analogue outputs	2
Analogue current output [mA]	4...20
Max. load [Ω]	(U _b - 8) x 25
Resolution of analogue output	φ: 1% / T: 0.1 K

Measuring/setting range

Temperature monitoring	
Measuring range [°C]	-20...120

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Accuracy / deviations

Accuracy $\varphi: \pm 3 \% / T: \pm 2 \%$

Response times

Response time [s] 1.3

Operating conditions

Ambient temperature [°C] -40...85

Storage temperature [°C] -40...85

Max. relative air humidity [%] 100

Protection IP 67

Tests / approvals

EMC EN 13309
IEC 61000-6-2 : 2005
IEC 61000-6-4 : 2006 + AMD1: 2010

Vibration resistance test following DIN EN 60068-2-6

MTTF [years] 90

Mechanical data

Weight [g] 169

Materials (wetted parts) aluminium; HNBR; polyurethane resin; epoxy resin

Process connection G 3/4

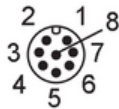
Remarks

Remarks accuracy values expressed in percent refer to the measuring span

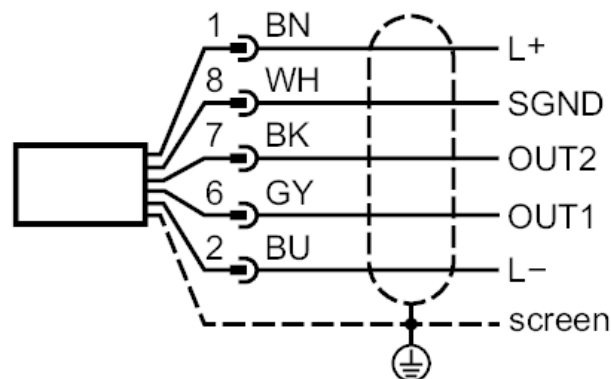
Pack quantity 1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: 8



Connection



SGND: signal ground
OUT1: oil temperature
OUT2: relative humidity