

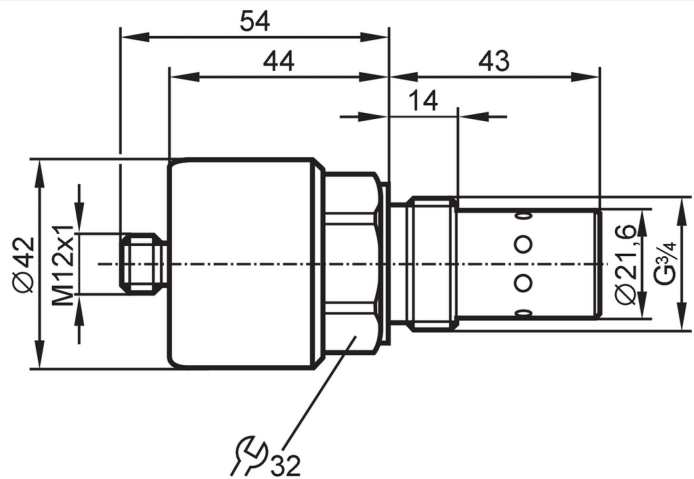
LDH100



Oil humidity sensor

OIL HUMIDITY SENSOR

For 8-wire cordsets the core colors are not standardized.
Please note the wiring of the sensor and the cordsets (see data sheet).



Product characteristics		
Number of inputs and outputs	Number of analog 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 analog outputs: 2	
Outputs		
Total number of outputs		2
Number of analog outputs		2
Analog current output	[mA]	4...20
Max. load	[Ω]	(U _b - 8) x 25
Resolution of analog output		φ: 1% / T: 0.1 K
Measuring/setting range		
Temperature monitoring		
Measuring range	[°C]	-20...120

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Accuracy / deviations

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

Response time [s]	1.3
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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

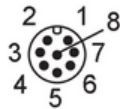
Weight [g]	169
Materials (wetted parts)	aluminum; HNBR; polyurethane resin; epoxy resin
Process connection	G 3/4

Remarks

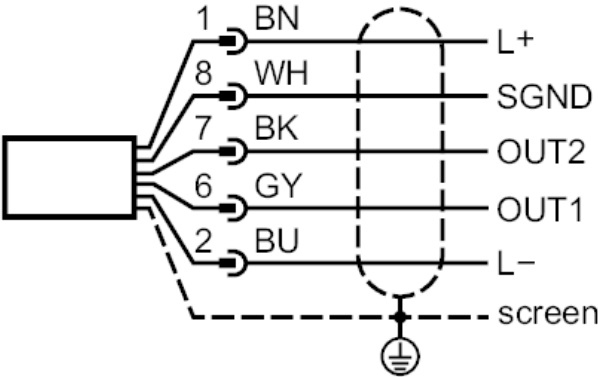
Remarks	Accuracy values expressed in percent refer to the measuring span
Pack quantity	1 pcs.

Electrical connection

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



Connection



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