

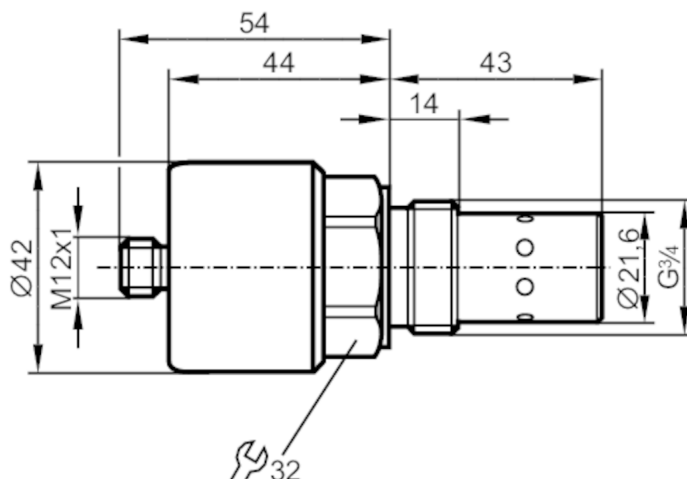
# LDH100

## 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 [bar]	50

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 <sub>b</sub> - 8) x 25
Resolution of analogue output	φ: 1% / T: 0.1 K

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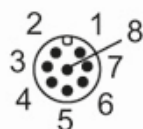


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Measuring/setting range		
Temperature monitoring		
Measuring range	[°C]	-20...120
Accuracy / deviations		
Accuracy		$\varphi$ : $\pm 3\%$ / T: $\pm 2\%$
Response times		
Response time	[s]	1.3
Operating conditions		
Ambient temperature	[°C]	-40...85
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	[ANN]	90
Mechanical data		
Weight	[g]	176.5
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



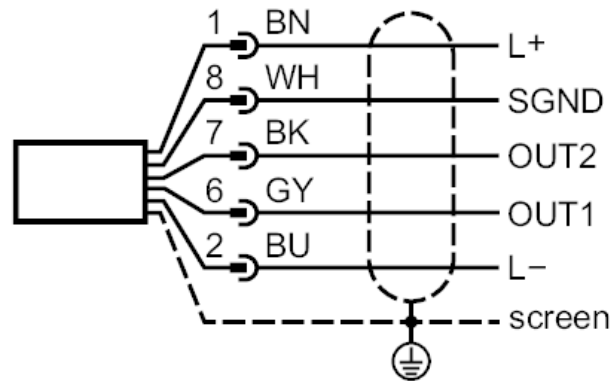
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### Connection



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