LDH100

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).

CE UK CA
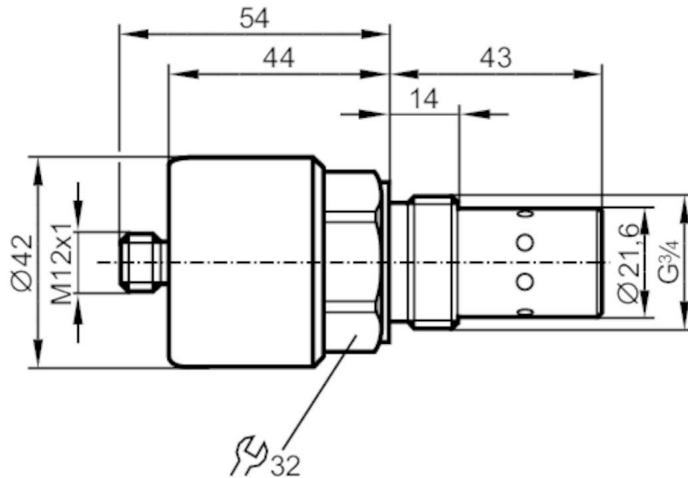
Product characteristics	
Number of inputs and outputs	Number of analog outputs: 2
Process connection	G 3/4
Application	
Media	mineral oils; synthetic esters; biodegradable oils
Tank pressure [bar]	50
Oil	
Medium temperature [°C]	-40...105
Electrical data	
Operating voltage [V]	9...33 DC
Current consumption [mA]	< 25
Protection class	III
Reverse polarity protection	no
Measuring principle	capacitive
Inputs / outputs	
Number of inputs and outputs	Number of analog outputs: 2
Outputs	
Total number of outputs	2
Number of analog outputs	2
Analog current output [mA]	4...20
Max. load [Ω]	(Ub - 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		φ: ± 3 % / T: ± 2 %	

Reaction 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]	176.5	
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
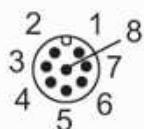
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OIL HUMIDITY SENSOR

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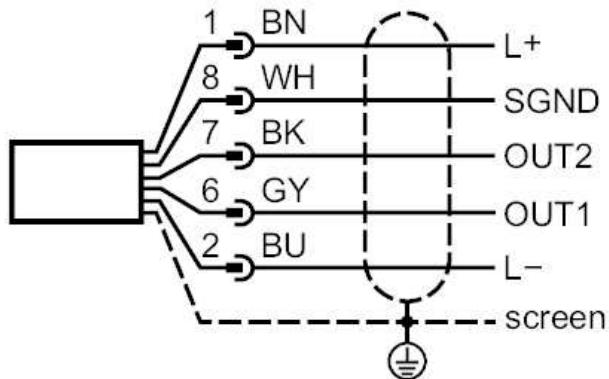
SGND:	signal ground
OUT1:	oil temperature
OUT2:	relative humidity