

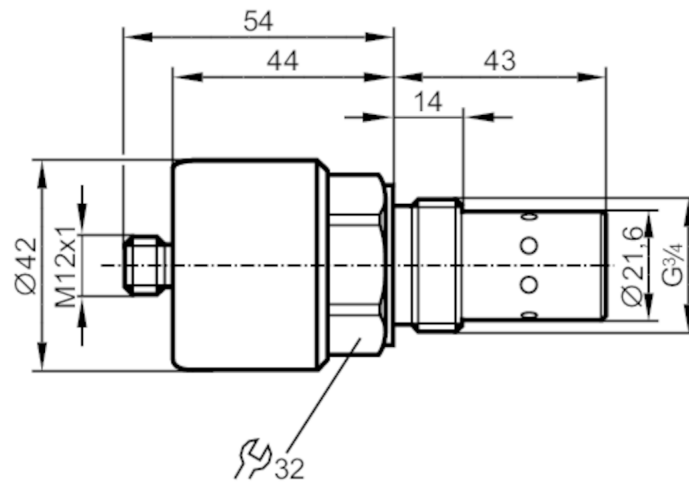
# LDH100



## 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
------------------------------	-------------------------------

### 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

# LDH100

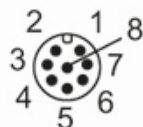


## Oil humidity sensor

OIL HUMIDITY SENSOR

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	[years] 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



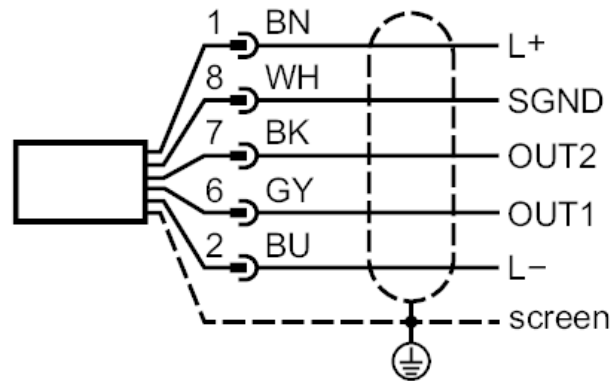
# LDH100



## Oil humidity sensor

OIL HUMIDITY SENSOR

### Connection



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