

# LDH100 OIL HUMIDITY SENSOR

- Connector
- Process connection: G 3/4
- Measuring range
- Medium temperature (T)
- -20...120 °C
- Rel. humidity ( $\varphi$ )
- 0...100 %
- Oil humidity sensor for 24V DC supply
- Independent 4 - 20 mA output for humidity and for temperature

Article No.	Price £	Price €
LHD100	ON REQUEST	

## Application

Mineral oils, synthetic esters, biodegradable oils, air	
Medium temperature oil [°C]	
- Continuous [°C]	-20...100
- Short time [°C]	-20...120

## Electrical data

Electrical design	DC analogue
Operating voltage [V]	9...33 DC
Current consumption [mA]	< 25 ( $\leq 60$ )
Protection class	III

## Outputs

Output	2 analogue outputs 4...20 mA
Output function	4...20 mA analogue
Analogue output	2 x 4...20 mA
Max. load [ $\Omega$ ]	max. (U <sub>b</sub> -8) x 25

## Measuring / setting range

Accuracy	$\varphi$ : $\pm 3\%$ / T: $\pm 2\%$
Resolution	$\varphi$ : 1% / T: 0.1 K

## Environment

Ambient temperature [°C]	-20...85
Storage temperature [°C]	-20...85
Maximum vessel pressure [bar]	10
Max. permissible flow velocity	< 5 m/s
Protection	IP 67

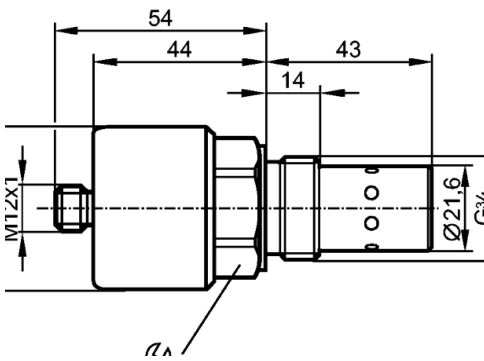
## Tests / approvals

EMC	IEC 61000-6-2 : 2005
	IEC 61000-6-4 : 2006 + AMD1: 2010
Vibration resistance	test following DIN EN 60068-2-6

## Mechanical data

Process connection	G 3/4
Materials (wetted parts)	aluminium; HNBR; polyurethane resin; epoxy resin
Weight [kg]	0.167

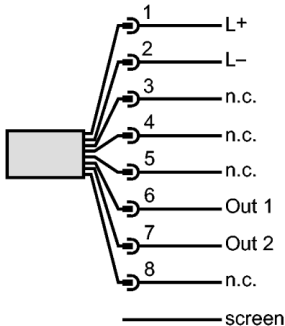
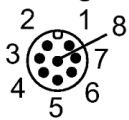
## Dimensions



## Electrical connection

Connection - M12 connector

### Wiring



n.c. = not connected  
 OUT 1: oil temperature  
 OUT 2: relative humidity

Accuracy values expressed in percent refer to the measuring span