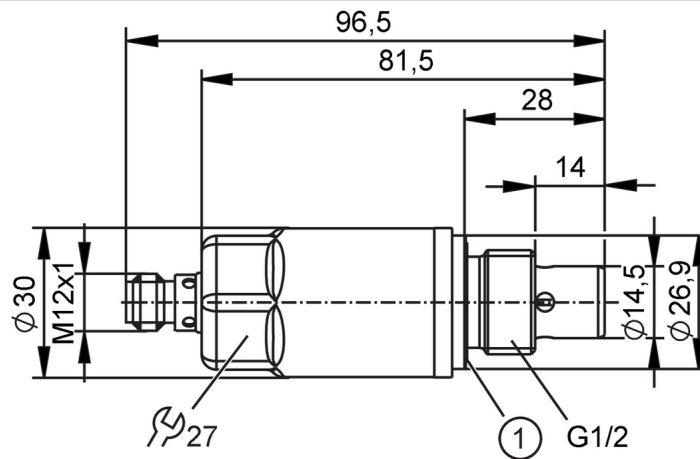


LDH112



Oil humidity sensor

OIL HUMIDITY SENSOR IO-LINK



1 sealing



Product characteristics

Number of inputs and outputs	Number of digital outputs: 1
Process connection	threaded connection G 1/2

Application

Special feature	gold-plated contacts
Media	mineral oils; synthetic esters; biodegradable oils
Cannot be used for	See operating instructions, chapter "Intended use".
Medium temperature [°C]	-40...120
Pressure rating	50 bar 5 MPa
Vacuum resistance [mbar]	-1000

Electrical data

Operating voltage [V]	18...30 DC
Current consumption [mA]	< 50
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	2
Max. current load total [A]	0.065

Inputs / outputs

Number of inputs and outputs	Number of digital outputs: 1
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Outputs

Total number of outputs	1
Output signal	IO-Link
Number of digital outputs	1

Measuring/setting range

Measuring range [% RH]	0...100
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Temperature measurement

Measuring range [°C]	-40...120
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Accuracy / deviations		
Accuracy		± 3 ; (± 5 % in the range < 10 %, > 90 %)
Repeatability		$\pm 0,5$ %
Resolution	[%]	0,1; (process value)
Temperature measurement		
Accuracy	[K]	± 1
Repeatability	[K]	$\pm 0,5$
Resolution	[K]	0.1
Reaction times		
Response time	[s]	oil: T09 < 30
Temperature measurement		
Response time	[s]	oil: T09 < 30
Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
SDCI standard		IEC 61131-9
Profiles	Common - I&D	Identification and Diagnosis
	Function	Measurement data, standard resolution
SIO mode		no
Required master port class		A
Process data analog		5
Min. process cycle time	[ms]	4.5
Supported DeviceIDs	Type of operation	DeviceID
	default	1249
Operating conditions		
Ambient temperature	[°C]	-40...85
Storage temperature	[°C]	-40...85
Max. relative air humidity	[%]	100
Protection		IP 68; IP 69K; (7 days / 3 m water depth / 0.3 bar: IP 68)
Tests / approvals		
EMC	DIN EN 61000-6-2	
	DIN EN 61000-6-4	
Shock resistance	DIN EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	284
UL approval	File number UL	E364788
Pressure equipment directive		sound engineering practice; can be used for group 2 fluids; group 1 fluids on request
Mechanical data		
Weight	[g]	119.55
Material		stainless steel (1.4404 / 316L); PEI; sealing: FKM
Materials (wetted parts)		stainless steel (1.4404 / 316L); PA6 GF50; epoxy resin; sealing: NBR
Process connection		threaded connection G 1/2

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Remarks

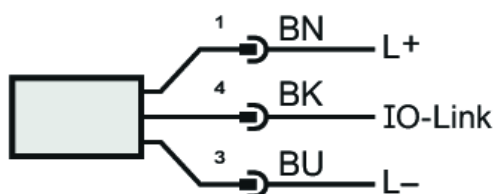
Remarks	Accuracy values expressed in percent refer to the measuring span
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12 (EN 61067-2-101); coding: A; Contacts: gold-plated



Connection



Colors to DIN EN 60947-5-2
BK= black
BN= brown
BU= blue