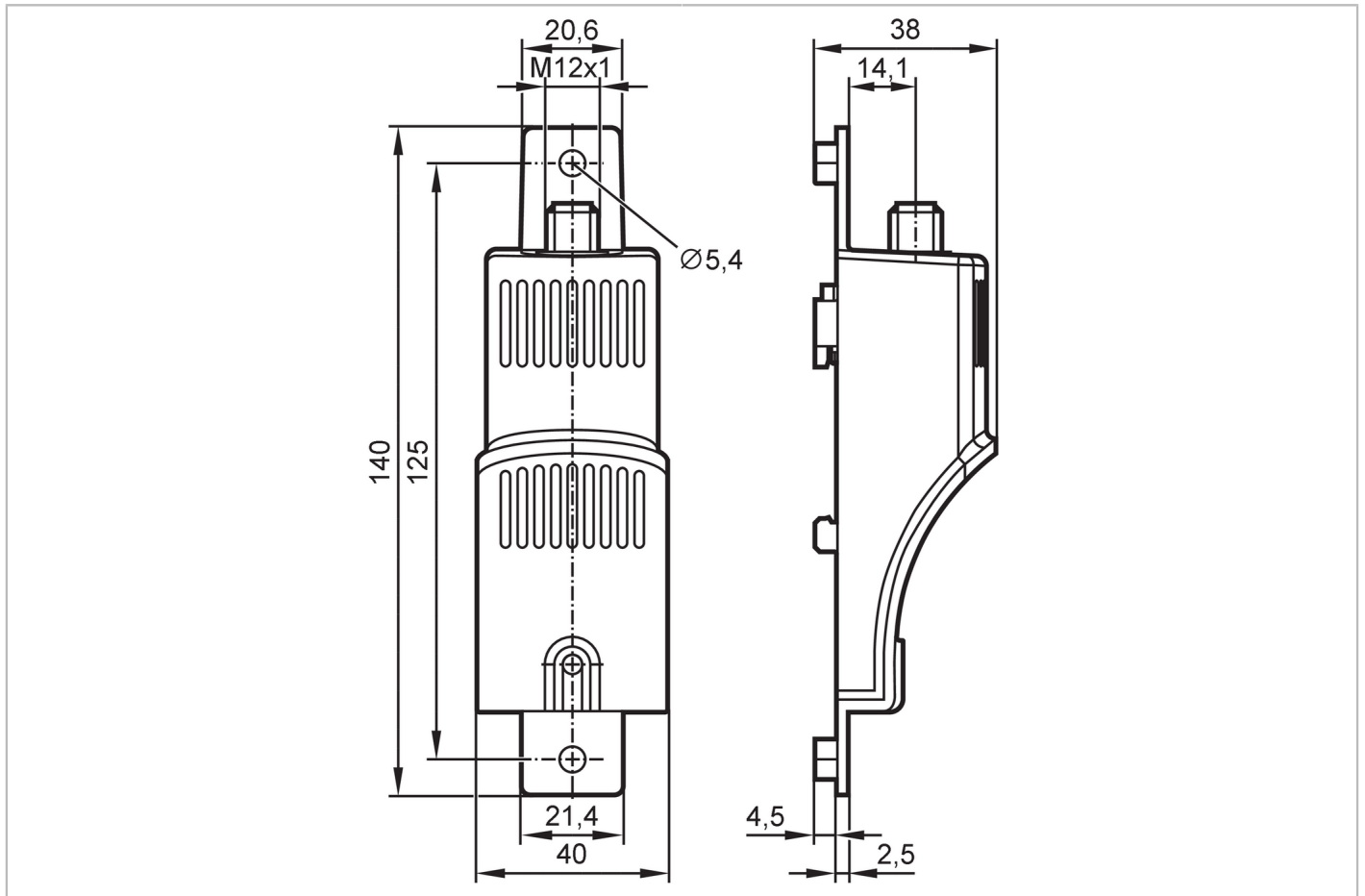


LDH290



Air humidity sensor

AIR HUMIDITY SENSOR ANALOG



Product characteristics

Number of inputs and outputs	Number of analogue outputs: 2
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Application

Special feature	Gold-plated contacts
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Electrical data

Operating voltage	[V]	12...30 DC
Protection class		III
Reverse polarity protection		yes
Power-on delay time	[s]	< 1
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
Output signal	analogue signal
Number of analogue outputs	2
Analogue current output	[mA] 4...20
Max. load	[Ω] (U _b - 12 V) / 20 mA

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Measuring/setting range	
Measuring range [% RH]	0...100
Temperature measurement	
Measuring range [°C]	-40...60
Accuracy / deviations	
Accuracy [% RH]	4; (in the range 20...80 % RH)
Resolution [% RH]	0,1
Temperature measurement	
Accuracy [K]	± 1
Resolution [K]	0.1
Response times	
Response time [s]	< 30; (T90)
Temperature measurement	
Response time [s]	< 300; (T90)
Operating conditions	
Ambient temperature [°C]	-40...70
Note on ambient temperature	application humidity: ≤ 90 % RH non condensing
Storage temperature [°C]	-40...85
Note on storage temperature	storage humidity: ≤ 90 % RH non condensing
Protection	IP 20; (only sensor: IP 57)
Tests / approvals	
EMC	DIN EN 61000-6-2 DIN EN 61000-6-4
MTTF [years]	178
UL approval	File number UL E224228
Mechanical data	
Weight [g]	72.3
Type of mounting	mounting on DIN rail and panel; (TH35 (EN 60715) / M5)
Dimensions [mm]	140 x 40 x 38
Materials	plastics UL94 V-0; light grey
Installation position	vertical; connector facing upwards
Remarks	
Pack quantity	1 pcs.
Electrical connection	
Connector: 1 x M12 (EN 61067-2-101); coding: A; Contacts: gold-plated	
	

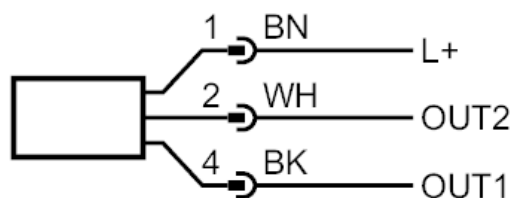
LDH290



Air humidity sensor

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Connection



OUT1: analogue output temperature

OUT2: analogue output air humidity

colours to DIN EN 60947-5-2

Core colours :

BK = black

BN = brown

WH = white