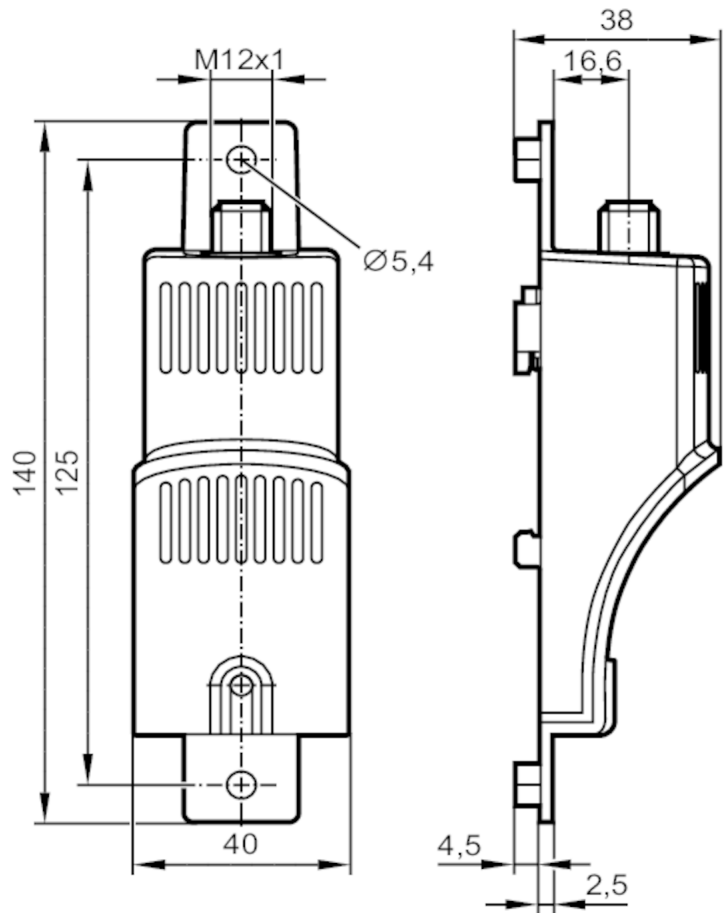


LDH290



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

LDH290



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AIR HUMIDITY SENSOR ANALOG

Max. load	[Ω]	(U _b - 12 V) / 20 mA
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 61000-6-3	
MTTF	[years]	178
UL approval	File number UL	E224228
Mechanical data		
Weight	[g]	72.3
Type of mounting		DIN rail clip for 35 mm DIN rail (EN 60715); screw mounting; (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.

LDH290



Air humidity sensor

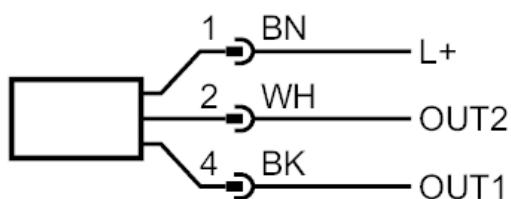
AIR HUMIDITY SENSOR ANALOG

Electrical connection

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



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