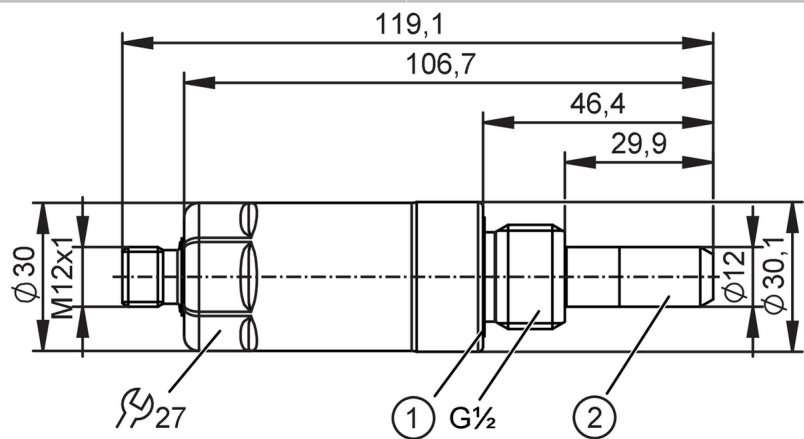


LDH313



Dew point sensor

AIR HUM DEWPOINT COOL IOL



- 1 Sealing
2 filter cap



Product characteristics

Number of inputs and outputs	Number of analogue outputs: 1
Process connection	threaded connection G 1/2 external thread

Application

Special feature	Gold-plated contacts
Media	compressed air and non-corrosive gases
Cannot be used for	See operating instructions, chapter "Intended use".
Medium temperature [°C]	-20...60
Pressure rating	50 bar 5 MPa
Vacuum resistance	-1000 mbar -0.1 MPa

Electrical data

Operating voltage [V]	18...30 DC
Current consumption [mA]	< 60
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	2
Measuring principle	capacitive

Inputs / outputs

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

Total number of outputs	1
Output signal	IO-Link; analogue signal
Output function	selectable pressure dew point / temperature
Number of analogue outputs	1
Analogue current output [mA]	4...20; (scalable)
Max. load [Ω]	500

Measuring/setting range

Measuring range [°C·td]	-20...20
Display range [°C·td]	-20...60

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Dew point sensor

AIR HUM DEWPOINT COOL IOL

Temperature measurement		
Measuring range	[°C]	-20...60
Accuracy / deviations		
Accuracy (in the measuring range)	[°C·td]	±2
Repeatability	[°C·td]	±1
Resolution	[°C·td]	0,01
Temperature measurement		
Accuracy	[K]	± 1
Repeatability	[K]	± 0,1
Resolution	[K]	0.1
Response times		
Response time	[s]	T90 < 120 humid to dry (15°Ctd to 0°Ctd); T90 <20 dry to humid (0°Ctd to 15°Ctd)
Temperature measurement		
Response time	[s]	T90 < 10
Interfaces		
Communication interface	IO-Link	
IO-Link revision	1.1	
SDCI standard	IEC 61131-9	
SIO mode	no	
Required master port type	A	
Supported DeviceIDs	Type of operation	DeviceID
	default	1694
Operating conditions		
Ambient temperature	[°C]	-25...60
Storage temperature	[°C]	-40...85
Note on storage temperature	0...100	
	non condensing	
Protection	IP 68; IP 69; (7 days / 3 m water depth / 0.3 bar: IP 68; DIN EN 60529)	
Tests / approvals		
EMC	DIN EN 61326-1	group 1: class B
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]	242
Mechanical data		
Weight	[g]	327.4
Housing	cylindrical	
Dimensions	[mm]	Ø 30.1 / L = 119.1
Materials	housing: stainless steel (316L/1.4404); plug: PEI; Sealing: FKM	
Materials (wetted parts)	process connection / filter: stainless steel (316L/1.4404); sensor element: ceramics; gold; polymer; CuP; Pt/Ni; Sn; Sealing: FKM	
Process connection	threaded connection G 1/2 external thread	
Remarks		
Pack quantity	1 pcs.	

LDH313



Dew point sensor

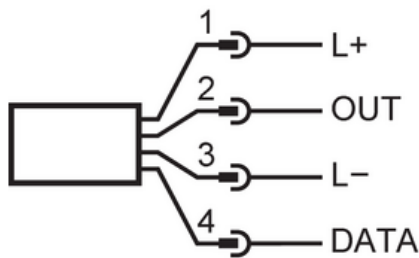
AIR HUM DEWPOINT COOL IOL

Electrical connection

Connector: 1 x M12 (EN 61067-2-101); coding: A; Contacts: 4, gold-plated



Connection

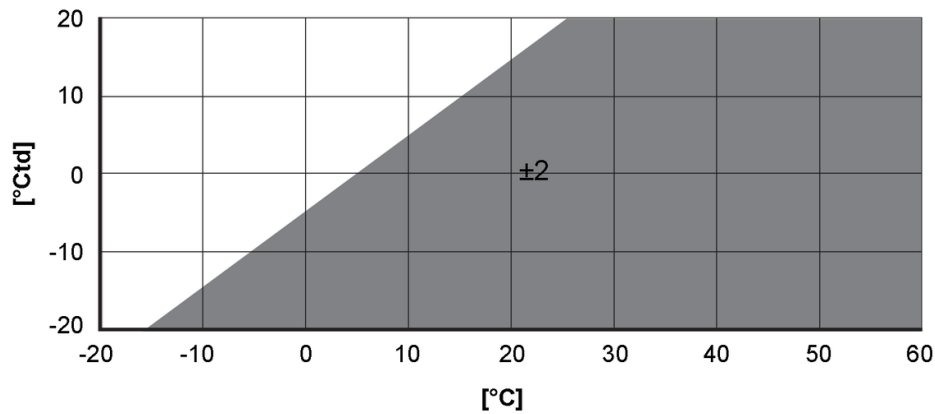


1	L+	
2	OUT	AO
3	L-	
4	DATA	IO-Link

AO: analogue output

Diagrams and graphs

validity of accuracy



°C Medium temperature
°Ctd pressure dew point