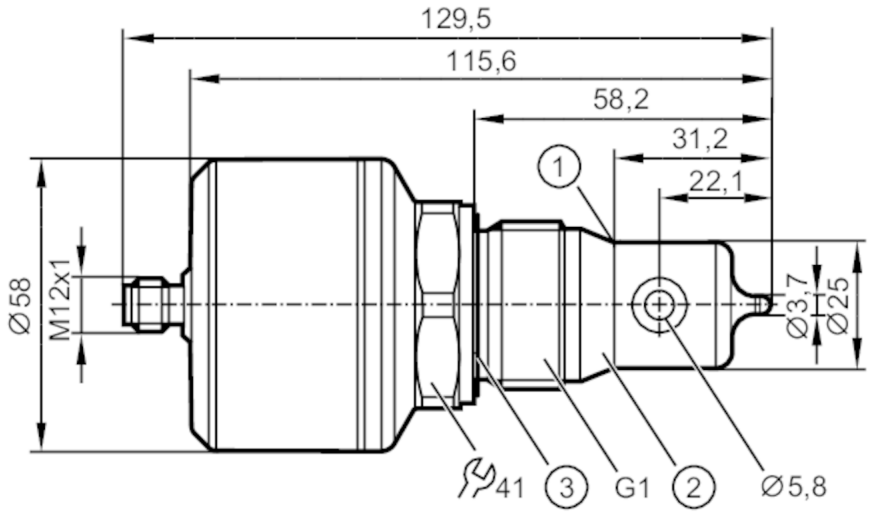
LDL210

Inductive conductivity sensor

IND CONDUCTIVITY HYG G1 SC

Digital meets analogue: integrating modern IO-Link sensors the analogue way. The EIO104 allows you to realise two analogue signals from intelligent IO-Link sensors with several process values.



1 sealing edge
2 Attention: The unit must only be installed in a process connection for G1 sealing cone. The G1A sealing cone of the unit is only suited for adapters with metal end stop.
3 Sealing

EC 1935/2004 EHEDG Certified FCM

Product characteristics		
Number of inputs and outputs		Number of analogue outputs: 1
Process connection		threaded connection G 1 external thread sealing cone
Application		
Special feature		Gold-plated contacts
Media		conductive liquids
Note on media		water
		milk
		CIP liquids
Cannot be used for		See the operating instructions, chapter "Function and features".
Medium temperature	[°C]	-25...100; (< 1 h: 150)
Pressure rating	[bar]	16
Vacuum resistance	[mbar]	-1000
Electrical data		
Operating voltage	[V]	18...30 DC
Current consumption	[mA]	< 100
Protection class		III
Reverse polarity protection		yes
Power-on delay time	[s]	2
Measuring principle		inductive
Inputs / outputs		
Number of inputs and outputs		Number of analogue outputs: 1

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Outputs			
Total number of outputs		1	
Output signal		analogue signal; IO-Link	
Output function		analogue output; scalable; selectable conductivity / temperature	
Number of analogue outputs		1	
Analogue current output	[mA]	4...20	
Max. load	[Ω]	500	
Measuring/setting range			
Conductivity measurement			
Measuring range	[µS/cm]	100...1000000	
Resolution	[µS/cm]	0...10.000	1
		10.000...100.000	10
		100.000...1.000.000	100
Temperature measurement			
Measuring range	[°C]	-25...150	
Accuracy / deviations			
Conductivity measurement			
Accuracy (in the measuring range)		2 % MW ± 25 µS/cm	
Drift	[%/K]	0,1 %/K MW ± 25 µS/cm	
Repeatability		1 % MW ± 25 µS/cm	
Long-term stability		0,5 % MW ± 25 µS/cm	
Temperature measurement			
Accuracy	[K]	20...50 °C: < ± 0,2 K; -25...150 °C: < ± 1,5 K	
Repeatability	[K]	0,2	
Resolution	[K]	0.1	
Response times			
Conductivity measurement			
Response time	[s]	< 2; (T09; Damping = 0)	
Temperature measurement			
Response time	[s]	< 40; (T09)	
Interfaces			
Communication interface		IO-Link	
Transmission type		COM2 (38,4 kBaud)	
IO-Link revision		1.1	
SDCI standard		IEC 61131-9	
Profiles		Measuring Sensor, Identification and Diagnosis	
SIO mode		no	
Required master port type		A	
Process data analogue		1	
Min. process cycle time	[ms]	5.6	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	922

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Operating conditions		
Ambient temperature	[°C]	-40...60
Storage temperature	[°C]	-40...85
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 61000-6-3	in a closed metal tank
Shock resistance	DIN EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	20 g (10...2000 Hz)
UL approval	File number UL	E364788

Mechanical data		
Weight	[g]	736.5
Materials		stainless steel (316L/1.4404); PEEK; PEI; FKM
Materials (wetted parts)		PEEK
Process connection		threaded connection G 1 external thread sealing cone

Remarks	
Remarks	Attention: The unit must only be installed in a process connection for G1 sealing cone.
	The G1A sealing cone of the unit is only suited for adapters with metal end stop.
	MW = measured value
Notes	Digital meets analogue: integrating modern IO-Link sensors the analogue way. The EIO104 allows you to realise two analogue signals from intelligent IO-Link sensors with several process values.
Pack quantity	1 pcs.

Electrical connection

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

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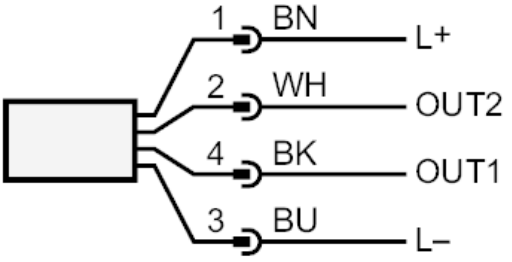
Connection



OUT1	IO-Link
OUT2	analogue output
	colours to DIN EN 60947-5-2
	Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white