

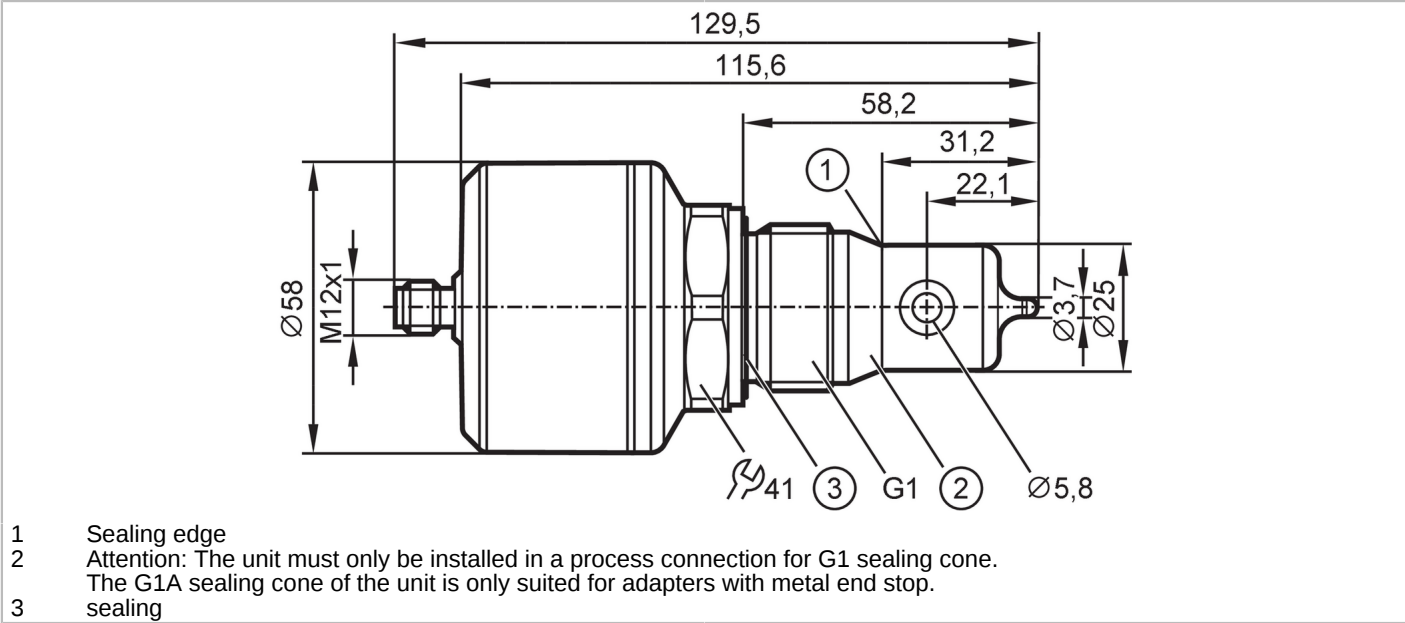
LDL210



Inductive conductivity sensor

IND CONDUCTIVITY HYG G1 SC

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



Product characteristics

Number of inputs and outputs	Number of analog outputs: 1
Process connection	threaded connection G 1 external thread sealing cone - 27 mm

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	16 bar 1.6 MPa
Vacuum resistance	-1000 mbar -0.1 MPa
MAWP (for applications according to CRN)	12 bar 1.2 MPa

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 analog outputs: 1
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Outputs			
Total number of outputs		1	
Output signal		analog signal; IO-Link	
Output function		analog output scalable; selectable conductivity / temperature	
Number of analog outputs		1	
Analog 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	
Reaction times			
Conductivity measurement			
Response time	[s]	< 2; (T09; Damping = 0)	
Temperature measurement			
Response time	[s]	< 25; (T09)	
Interfaces			
Communication interface		IO-Link	
Transmission type		COM2 (38,4 kBaud)	
IO-Link revision		1.1	
SDCI standard		IEC 61131-9	
Profiles	Smart Sensor - SSP 3.1	Measuring Sensor	
	Common - I&D	Identification and Diagnosis	
SIO mode		no	
Required master port class		A	
Process data analog		1	
Min. process cycle time	[ms]	6.4	

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Supported DeviceIDs	Type of operation	DeviceID
	default	922

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
Material	stainless steel (1.4404 / 316L); PEEK; PEI; FKM	
Materials (wetted parts)	PEEK	
Process connection	threaded connection G 1 external thread sealing cone - 27 mm	
Surface characteristics Ra/Rz of the wetted parts	$Ra \leq 0.8 \mu m$	

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 analog: integrating modern IO-Link sensors the analog way. The EIO104 allows you to realize two analog 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: 4, gold-plated



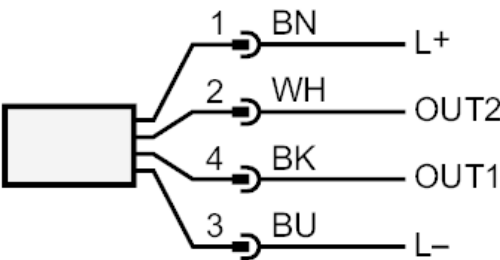
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Connection



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