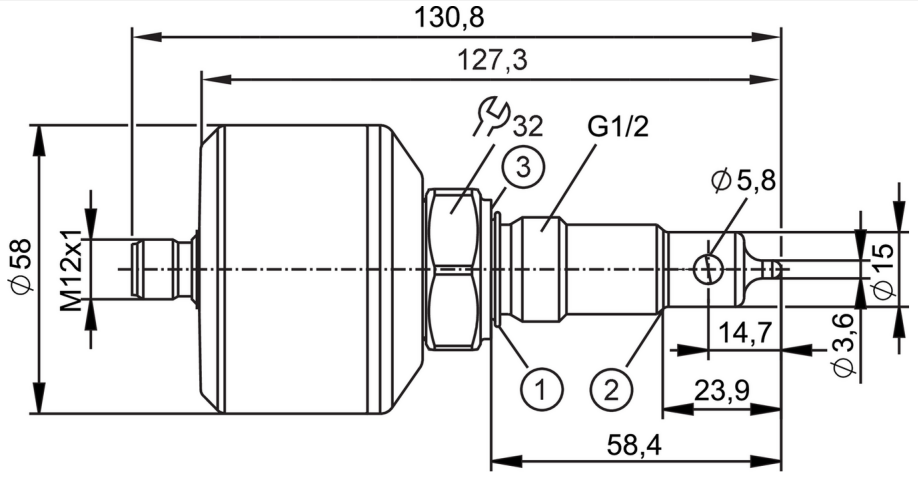
LDL220

Inductive conductivity sensor

IND CONDUCTIVITY HYG G1/2 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.



1 Gasket FKM (for sealing on the back - not pressure resistant) / removable
2 Sealing edge Note: The unit must only be installed in a process connection for G1/2 sealing cone.
3 groove for sealing ring DIN 3869-21

EC 1935/2004 EHEDG Certified FCM IO-Link

Product characteristics			
Number of inputs and outputs		Number of analog outputs: 1	
Process connection		threaded connection G 1/2 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		16 bar	1.6 MPa
Vacuum resistance		-1000 mbar	-0.1 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	
Outputs			
Total number of outputs		1	
Output signal		analog signal; IO-Link	

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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]	0,05 %/K MW	
Repeatability		1 % MW ± 25 µS/cm	
Long-term stability		1 % 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	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	922
Operating conditions			
Ambient temperature	[°C]	-40...60	

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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	
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]	131	
UL approval		File number UL	E364788
Mechanical data			
Weight	[g]	606.2	
Material		stainless steel (1.4404 / 316L); PEEK; PEI; FKM	
Materials (wetted parts)		PEEK	
Process connection		threaded connection G 1/2 external thread sealing cone	
Surface characteristics Ra/Rz of the wetted parts		Ra ≤ 0.8 µm	
Remarks			
Remarks		Note: The unit must only be installed in a process connection for G1/2 sealing cone.	
		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: gold-plated

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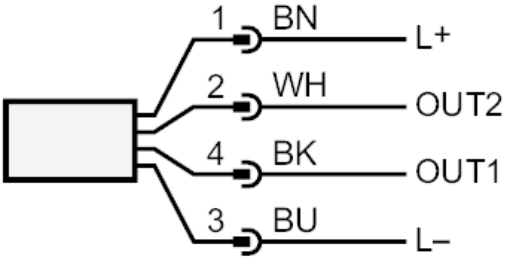
Connection



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