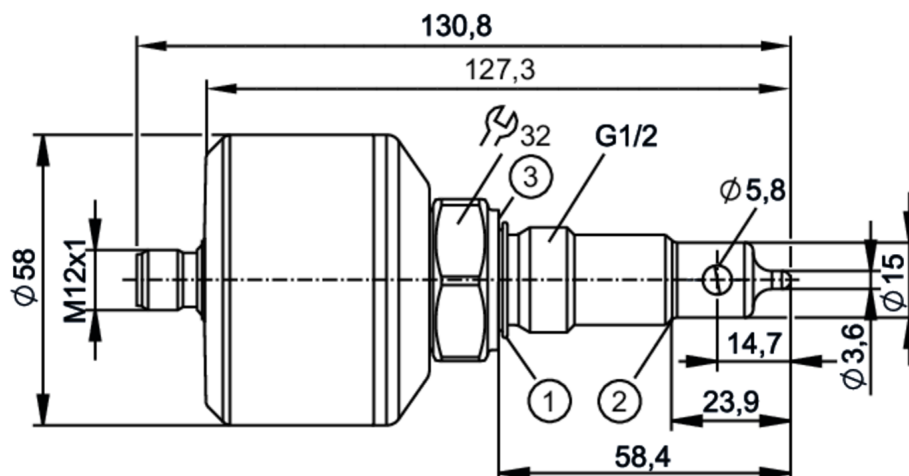




Inductive conductivity sensor

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

System	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
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Outputs

Total number of outputs	1
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LDL220



Inductive conductivity sensor

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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 [$\mu\text{S/cm}$]	100...1000000		
Resolution [$\mu\text{S/cm}$]	0...10.000	1	
	10.000...100.000	10	
	100.000...1.000.000	100	

Temperature measurement			
Measuring range [$^{\circ}\text{C}$]	-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

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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	
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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Inductive conductivity sensor

IND CONDUCTIVITY HYG G1/2 SC

Connection



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