

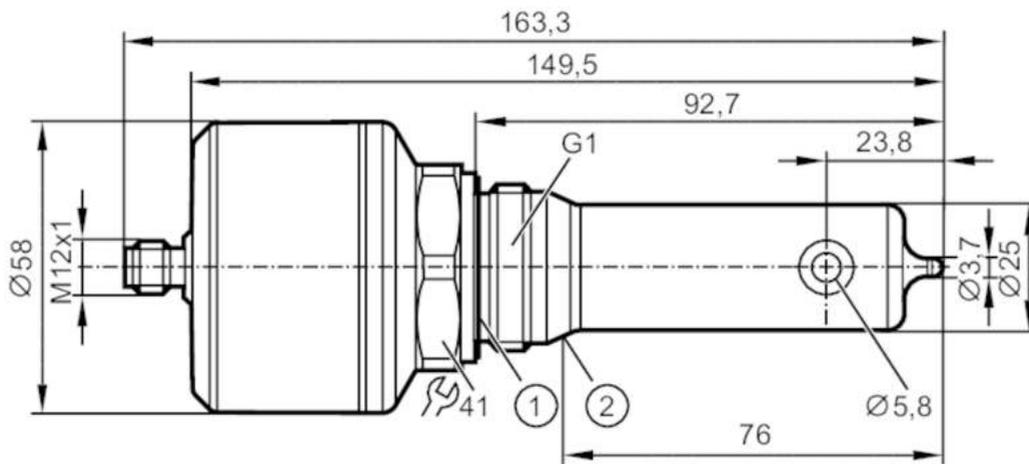
LDL201



Inductive conductivity sensor

IND CONDUCTIVITY HYG ASF-V 077

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
- 2 sealing edge



EC 1935/2004 EHEDG Certified

FCM



IO-Link



Product characteristics

Number of inputs and outputs	Number of analogue outputs: 1
Process connection	G 1 external thread Aseptoflex Vario

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]	< 50
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	2
Measuring principle	induktiv

Inputs / outputs

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

Total number of outputs	1
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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 [$\mu\text{S}/\text{cm}$]	100...1000000
Temperature measurement	
Measuring range [$^{\circ}\text{C}$]	-25...150

Accuracy / deviations

Conductivity measurement	
Accuracy (in the measuring range)	2 % MW \pm 25 $\mu\text{S}/\text{cm}$
Resolution [$\mu\text{S}/\text{cm}$]	1 (0...10000)
	10 (10000...100000)
	100 (100000...1000000)
Drift [%/K]	0,1 %/K MW \pm 25 $\mu\text{S}/\text{cm}$
Repeatability	1 % MW \pm 25 $\mu\text{S}/\text{cm}$
Long-term stability	0,5 % MW \pm 25 $\mu\text{S}/\text{cm}$
Temperature measurement	
Accuracy [K]	20...50 $^{\circ}\text{C}$: $< \pm 0,2$ K; -25...150 $^{\circ}\text{C}$: $< \pm 1,5$ 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

Operating conditions

Ambient temperature [$^{\circ}\text{C}$]	-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	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)
MTTF [years]		129
UL approval	File number UL	E364788

Mechanical data

Weight [g]	749.7
Materials	stainless steel (1.4404 / 316L); PEEK; PEI; FKM
Materials (wetted parts)	PEEK
Process connection	G 1 external thread Aseptoflex Vario

Remarks

Remarks	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



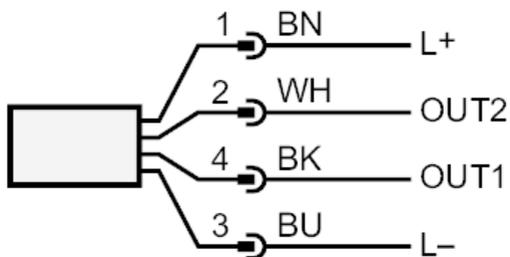
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Connection



OUT1
OUT2

IO-Link
analogue output
colours to DIN EN 60947-5-2
Core colours :

BK = black
BN = brown
BU = blue
WH = white