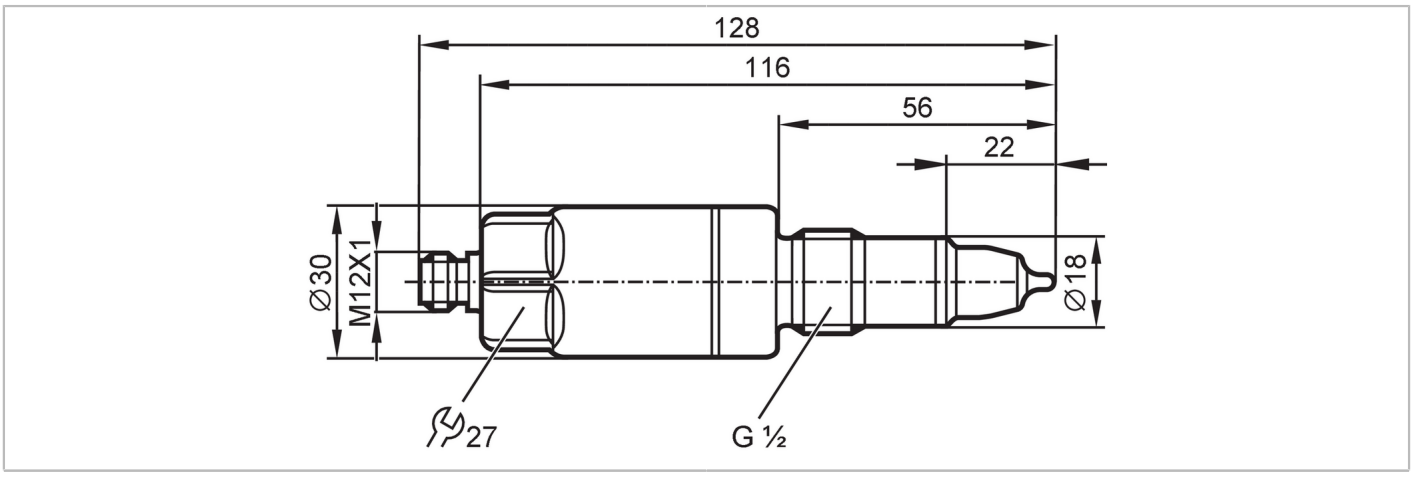
LDL100

Conductive conductivity sensor

COND CONDUCTIVITY HYG G1/2

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.



Product characteristics			
Number of inputs and outputs		Number of analogue 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	[mbar]	-1000	
MAWP for applications according to CRN		16 bar	1.6 MPa
Electrical data			
Operating voltage	[V]	18...30 DC	
Current consumption	[mA]	< 60	
Protection class		III	
Reverse polarity protection		yes	
Power-on delay time	[s]	2	
Measuring principle		konduktiv	
Inputs / outputs			
Number of inputs and outputs		Number of analogue outputs: 1	
Outputs			
Total number of outputs		1	
Output signal		analogue signal; IO-Link	
Output function		analogue output scalable; selectable conductivity / temperature	

LDL100

Conductive conductivity sensor

COND CONDUCTIVITY HYG G1/2

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...15000
Resolution	[µS/cm]		1
Temperature measurement			
Measuring range	[°C]		-25...150
Accuracy / deviations			
Conductivity measurement			
Accuracy (in the measuring range)			10 % MW ± 25 µS/cm
Drift	[%/K]		0,2 %/K MW
Repeatability			5 % MW ± 25 µS/cm
Long-term stability			1 % MW ± 25 µS/cm
Temperature measurement			
Accuracy	[K]		20...50 °C: < ± 0,5 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]		< 9; (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 type			A
Process data analogue			1
Min. process cycle time	[ms]		6.4
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	921
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)

LDL100

Conductive conductivity sensor

COND CONDUCTIVITY HYG G1/2

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]	172	
UL approval		File number UL	E364788

Mechanical data		
Weight	[g]	270.5
Materials		stainless steel (316L/1.4404); PEEK; PEI; FKM
Materials (wetted parts)		PEEK; stainless steel (316L/1.4404)
Process connection		threaded connection G 1/2 external thread sealing cone
Surface characteristics Ra/Rz of the wetted parts		Ra ≤ 0.8 µm

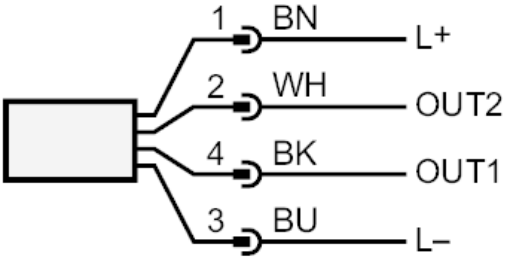
Remarks	
Remarks	MW = measured value
Notes	Digital meets analogue: integrating modern IO-Link sensors the analogue way. The EIO104 allows you to realise two analogue signals from intelligent IO-Link sensors with several process values.
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12 (EN 61067-2-101); coding: A; Contacts: 4, gold-plated



Connection



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