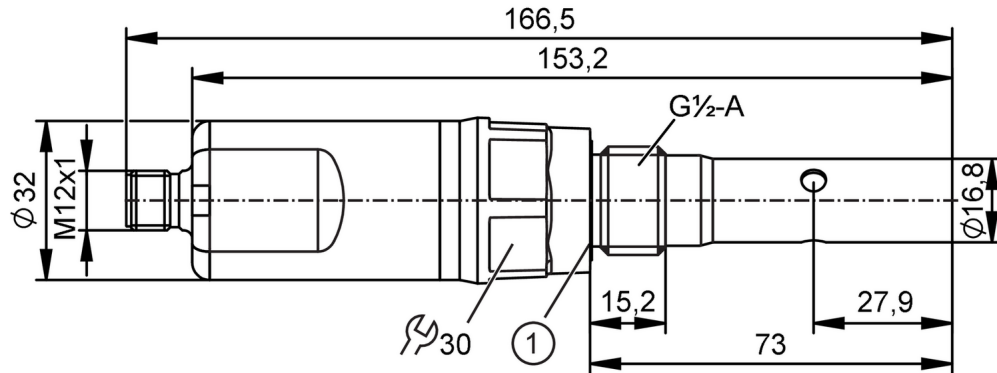




Conductive conductivity sensor

COND CONDUCTIVITY UPW 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.



1 Sealing



Product characteristics

Number of inputs and outputs	Number of analogue outputs: 1
Process connection	threaded connection G 1/2 external thread

Application

Special feature	Gold-plated contacts	
Media	conductive liquids	
Note on media	ultra-pure water	
Cannot be used for	See the operating instructions, chapter "Function and features".	
Medium temperature [°C]	-25...80; (< 1 h / day: 90)	
Pressure rating	16 bar	1.6 MPa
Note on pressure rating	at max. +80 °C	
	12 bar 1,2 MPa	
	at max. +90 °C max. 1 h / day	
Vacuum resistance	-1000 mbar	-0.1 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
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Outputs

Total number of outputs	1
Output signal	analogue signal; IO-Link
Output function	analogue output scalable; selectable conductivity / specific resistance / temperature
Number of analogue outputs	1
Analogue current output [mA]	4...20



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Max. load	[Ω]	500
Measuring/setting range		
Conductivity measurement		
Measuring range	[μS/cm]	0.04...1000
Spezifischer Widerstand		
Measuring range	[MΩ·cm]	0.001...25
Temperature measurement		
Measuring range	[°C]	-25...90
Accuracy / deviations		
Conductivity measurement		
Accuracy (in the measuring range)		3 % MW ± 0,00005 μS/cm
Drift	[%/K]	0,1 %/K; (referred to the ambient / electronics temperature)
Repeatability		1 % MW ± 0,00002 μS/cm
Long-term stability		1,5 % MW ± 0,00002 μS/cm
Spezifischer Widerstand		
Accuracy (in the measuring range)		depends on the accuracy of the conductivity measurement
Temperature measurement		
Accuracy	[K]	-25...90 °C: < ± 0,5 K / @ 25 °C: < ± 0,015 K
Repeatability	[K]	0,2
Resolution	[K]	0.1
Response times		
Conductivity measurement		
Response time	[s]	< 2; (T09; Damping = 0); conductivity <1 μS/cm : <5 s; (T09; Damping = 0)
Spezifischer Widerstand		
Response time	[s]	>1 MΩcm: <5 s (T09; Dämpfung = 0)
Temperature measurement		
Response time	[s]	< 9; (T09)
Interfaces		
Communication interface		IO-Link
IO-Link revision		1.1
SDCI standard		IEC 61131-9
SIO mode		no
Required master port type		A
Supported DeviceIDs	Type of operation	DeviceID
	default	1491
Operating conditions		
Ambient temperature	[°C]	-25...50
Storage temperature	[°C]	-25...75
Protection		IP 68; IP 69; (7 days / 3 m water depth / 0.3 bar: IP 68; DIN EN 60529)
Tests / approvals		
EMC	DIN EN 61326-1	group 1: class B

LDL311



Conductive conductivity sensor

COND CONDUCTIVITY UPW G1/2

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]	181	

Mechanical data		
Weight [g]	327.4	
Housing	cylindrical	
Dimensions [mm]	Ø 32 / L = 166.5	
Materials	housing: PP reinforced fibre; process connection: PVDF; probe: stainless steel (316L/1.4435); insulator: PEEK; Sealing: FKM	
Materials (wetted parts)	housing: PP reinforced fibre; process connection: PVDF; probe: stainless steel (316L/1.4435); insulator: PEEK; Sealing: FKM	
Tightening torque [Nm]	< 8	
Process connection	threaded connection G 1/2 external thread	

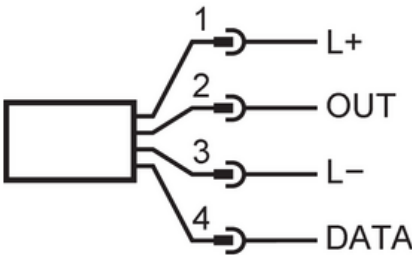
Remarks		
Remarks	MW = measured value	
Notes	Digital meets analogue: integrating modern IO-Link sensors the analogue way. The EIO104 allows you to realise two analogue signals from intelligent IO-Link sensors with several process values.	
Pack quantity	1 pcs.	

Electrical connection

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



Connection



1	L +	
2	OUT	AO
3	L -	
4	DATA	IO-Link

AO: analogue output