1 2 3

Output signal

Conductive conductivity sensor

COND CONDUCTIVITY UPW HYG G1/2



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. 152,5 140.1 56,8 22,4 3 \mathcal{P}_{27} G1/2 Gasket FKM (for sealing on the back - not pressure resistant) / removable pre-mounted PEEK sealing ring (removable) / metallic sealing area groove for sealing ring DIN 3869-21 **Product characteristics** Number of inputs and outputs Number of analog outputs: 1 Process connection threaded connection G 1/2 external thread sealing cone optional:hygienic PEEK gasket according to EHEDG Application System 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...100; (< 1 h: 150) Pressure rating [bar] 16 Vacuum resistance [mbar] -1000 **Electrical data** Operating voltage 18...30 DC [V] Current consumption [mA] < 60 Protection class Ш Reverse polarity protection yes Power-on delay time [S] 2 Measuring principle konduktiv Inputs / outputs Number of inputs and outputs Number of analog outputs: 1 Outputs Total number of outputs 1

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analog signal; IO-Link

Conductive conductivity sensor





Output function		analog output; scalable; selectable conductivity / temperature		
Number of analog outputs		1		
Analog current output	[mA]	420		
Max. load	[Ω]	500		
Measuring/setting range				
conductivity measurement				
Measuring range	[µS/cm]		0.041000	
Resolution	[µS/cm]	09,999	0.001	
		1099,99	0.01	
		1001000	0.1	
Temperature measurement				
Measuring range	[°C]	-25150		
Accuracy / deviations				
conductivity measurement				
Accuracy (in the measuring range)		3 % MW ± 0,03 µS/cm		
Drift	[%/K]	0,1 %/K MW		
Repeatability			1 % MW ± 0,010 µS/cm	
Long-term stability		1,5 % MW ± 0,015 μS/cm		
Temperature measurement				
Accuracy	[K]		2050 °C: < ± 0,5 K; -25150 °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]	< 9; (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 class		А		
Process data analog		1		
Min. process cycle time	[ms]	5.6		
Supported DeviceIDs		Type of operation	DeviceID	
		default	1455	
Operating conditions	F0 = 3			
Ambient temperature	[°C]		-4060	
Storage temperature	[°C]		-4085	

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Conductive conductivity sensor



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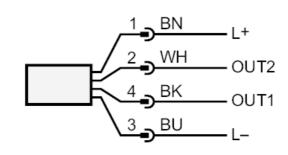
Protection		IP 68; IP 69K; (7 days / 3 m water depth / 0.3 bar: IP 68)		
Tests / approvals				
EMC		DIN EN 61000-6-2		
		DIN EN 61000-6-3		
Shock resistance		DIN EN 60068-2-27	50 g (11 ms)	
Vibration resistance		DIN EN 60068-2-6	20 g (102000 Hz)	
MTTF	[years]		173	
Mechanical data				
Weight	[g]	329.9		
Material		stainless steel (1.4404 / 316L); PEI; FKM		
Materials (wetted parts)		stainless steel (1.4435 / 316L); PEEK		
Process connection		threaded connection G 1/2 external thread sealing cone optional:hygienic PEEK gasket according to EHEDG		
Remarks				
Remarks		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 61	067-2-101); coding: A; Contacts: gold-plated		

Conductive conductivity sensor

COND CONDUCTIVITY UPW HYG G1/2

Connection





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