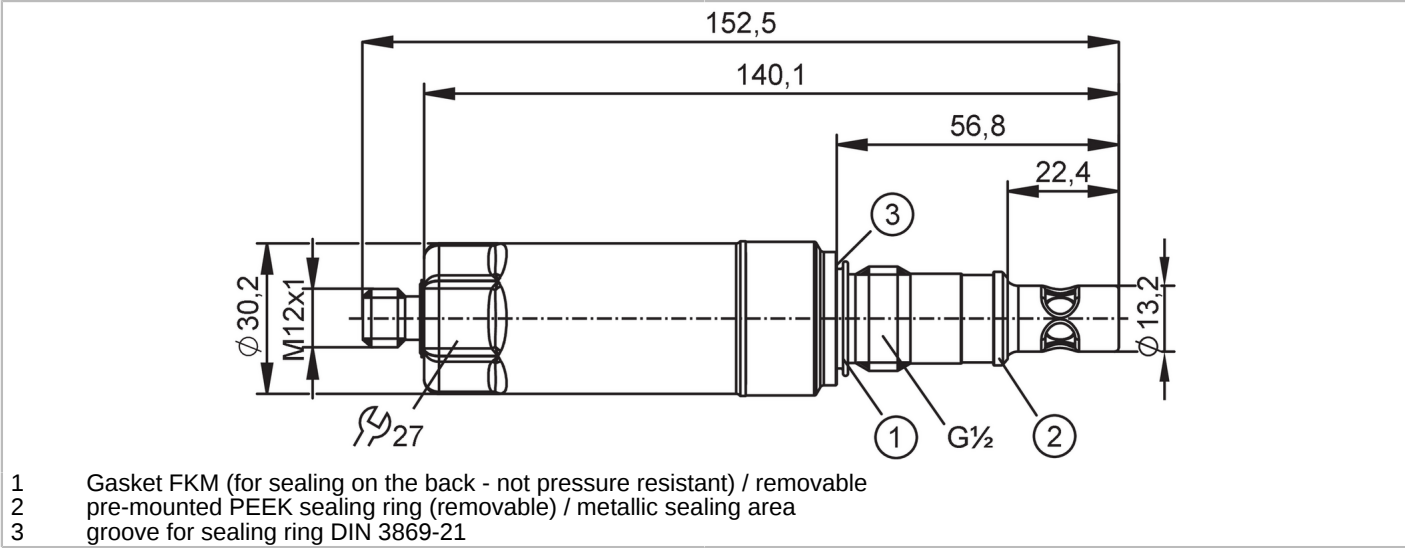




Conductive conductivity sensor

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.



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

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...100; (< 1 h: 150)
Pressure rating	35 bar 3.5 MPa
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 analog outputs: 1
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Outputs

Total number of outputs	1
Output signal	analog signal; IO-Link
Output function	analog output scalable; selectable conductivity / temperature
Number of analog outputs	1



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Analog current output	[mA]	4...20	
Max. load	[Ω]	500	
Measuring/setting range			
Conductivity measurement			
Measuring range	[μS/cm]	0.04...1000	
Resolution	[μS/cm]	0...9,999	0.001
		10...99,99	0.01
		100...1000	0.1
Temperature measurement			
Measuring range	[°C]	-25...150	
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]	20...50 °C: < ± 0,5 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]	< 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 class		A	
Process data analog		1	
Min. process cycle time	[ms]	6.4	
Supported DeviceIDs	Type of operation	DeviceID	
	default	1455	
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)	

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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]	173
UL approval	File number UL	E364788

Mechanical data		
Weight	[g]	346.8
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	
Surface characteristics Ra/Rz of the wetted parts	$Ra \leq 0.8 \mu m$	

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 61067-2-101); coding: A; Contacts: 4, gold-plated		

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