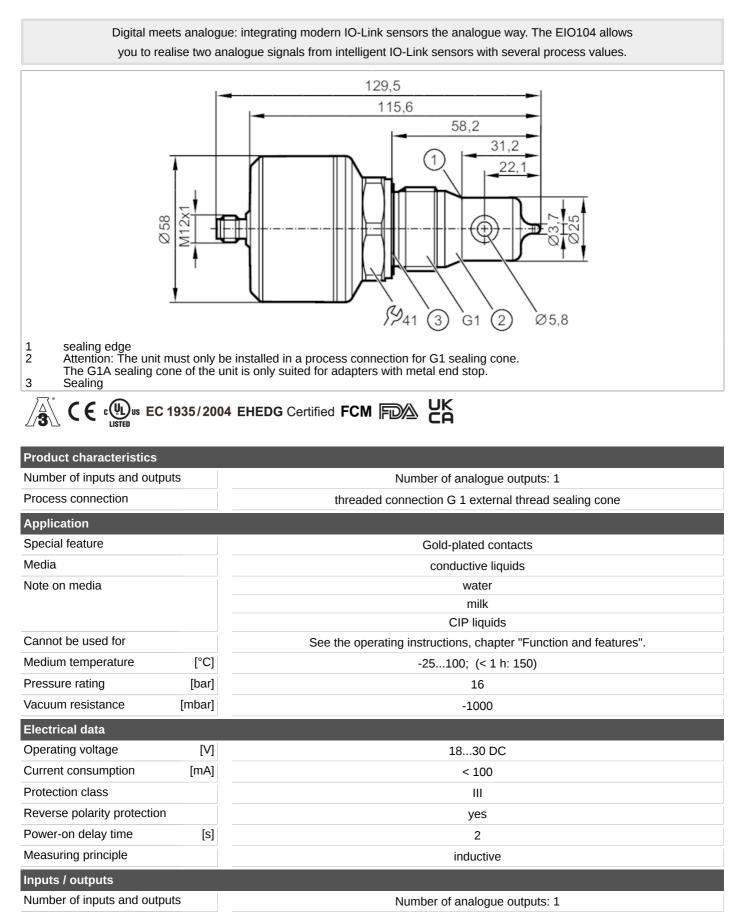
#### Inductive conductivity sensor



IND CONDUCTIVITY HYG G1 SC



### Inductive conductivity sensor

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Tetal number of outputs         I           Output signal         analogue output; scalable; sclectable conductivity / temperature           Number of analogue output; scalable; sclectable conductivity / temperature           Number of analogue output; scalable; sclectable conductivity / temperature           Number of analogue output; scalable; sclectable conductivity / temperature           Number of analogue output; scalable; sclectable conductivity / temperature           Number of analogue output; scalable; sclectable conductivity / temperature           Max. load         (0)           Measuring Scitting range         (0)           Measuring Scitting range         (0)           Measuring range         (1)           Notool	Outputs				
Output function         analogue outputs         1           Number of analogue outputs         1           Analogue current output [mA]         420           Max. load (g)         500           Max. load (g)         500           Max. load (g)         500           Mas. load (g)         500           Measuring/setting range         [µS/cm]           Conductivity measurement         100100.000           Resolution         [µS/cm]           0100.000         10           10.000100.000         100           Temperature measurement	Total number of outputs		1		
Number of analogue outputs         1           Analogue current output         [MA]           Max. load         [Q]           Max. load         [Q]           Measuring/setting range         500           Conductivity measurement         1000.1000000           Measuring range         [LS/Km]           Resolution         [LS/Km]           Measuring range         [LS/Km]           Conductivity measurement         10.000.100.000           Measuring range         [N]           Conductivity measurement         -25150           Accuracy / deviations         -25150           Conductivity measurement         -25150           Accuracy / deviations         -25150           Conductivity measurement         -25150           Accuracy (in the measurement         -25150           Accuracy (in the measurement         -25150           Accuracy (in the measurement         -25150           Repeatability         [V]         0.1.9/Km]           Conductivity measurement         -25150           Resolution         [K]         -26150           Repeatability         [K]         -26150           Resolution         [K]         0.1	Output signal		analogue signal: IO-Link		
Analogue current output     [mA]       Max. load     [O]       Measuring/setting range     [J]       Conductivity measurement     100100000       Measuring range     [J]       [J]     100100000       1000100.000     100       Temperature measurement	Output function				
Max. load         [O]         500           Measuring/setting range         [µ]S(m)         1001000000           Resolution         [µ]S(m)         1001000000           10.000100.000         10           Temperature measurement         100           Accuracy / deviations         0.10.000         10           Conductivity measurement         -25150           Accuracy / deviations         -25150           Conductivity measurement         -25150           Accuracy / deviations         -25150           Conductivity measurement         -25150           Accuracy / in the measuring range         [°C]         -25150           Drift         [%/K]         0.1.1 %K MW ± 25 µS/cm           Conductivity measurement         -2050 °C: < ± 0.2 K;	Number of analogue outpu	ıts			
Measuring/setting range         Los           Conductivity measurement         10010000000           Resolution         [µS/cm]         00.000           10.0001000.000         10           100.0001.000.000         100           Temperature measurement         -25150           Accuracy / deviations         -25150           Conductivity measurement         -25150           Accuracy / deviations         -25150           Conductivity measurement         -25150           Accuracy / in the measuring range         2 % MW ± 25 µS/cm           Prift         [%K]           Conductivity measurement         -25150           Accuracy (in the measuring range)         1 % MW ± 25 µS/cm           Drift         [%K]           Conjeterm stability         0.50 °C' < ± 0.2 K';	Analogue current output	[mA]	420		
Conductivity measurement              I.0	Max. load	[Ω]			
Measuring range         [µS/cm]         100100.000           Resolution         [µS/cm]         0100.000         10           Temperature measurement         0.000100.000         00           Conduct/vity measurement        150        150           Accuracy / deviations        150        150           Accuracy (in the measuring range)         [°C]        150           Conduct/vity measurement         2.% MW ± 25 µS/cm        150           Accuracy (in the measuring range)         [%C]         0.1.9%/K MW ± 25 µS/cm           Conduct/vity measurement        150        150	Measuring/setting range				
Resolution         [µ:S/cm]         010.000         1           10.000100.000         10           Temperature measurement         0.000           Accuracy / deviations         -25150           Accuracy (in the measuring range)         [°C]         -25150           Accuracy (in the measuring range)         2 % MW ± 25 µS/cm           Repeatability         0.1 %/K MW ± 25 µS/cm           Temperature measurement         0.5 % MW ± 25 µS/cm           Repeatability         0.5 % MW ± 25 µS/cm           Temperature measurement         0.2 % SMW ± 25 µS/cm           Repeatability         0.5 % MW ± 25 µS/cm           Conductivity measurement         0.2           Accuracy         [K]         2050 °C: < ± 0.2 K;	Conductivity measuremen	t			
10.000100.000         10           Temperature measurement         100           Measuring range         [°]         -25150           Accuracy (deviations         -25150           Accuracy (in the measurement         -2.96 MW ± 2515/cm           Accuracy (in the measuring range)         2.96 MW ± 2515/cm           Drift         [%K]         -0.19/K MW ± 2515/cm           Repeatability         1.96 MW ± 2515/cm           Long-term stability         6.0505 °C : < ± 0.2 K;	Measuring range	[µS/cm]	1001000000		
100.0001.000.000         100           Temperature measurement         -25150           Accuracy / deviations         -25150           Accuracy (in the measuring range)         2 % MW ± 25 µS/cm           Conductivity measurement         2 % MW ± 25 µS/cm           Accuracy (in the measuring range)         2 % MW ± 25 µS/cm           Drift         [%K]         0.1 %/K MW ± 25 µS/cm           Repeatability         [%K]         0.1 %/K MW ± 25 µS/cm           Conductivity measurement         0.5 % MW ± 25 µS/cm           Accuracy         [%K]         2050 °C: < ± 0.2 K;	Resolution	[µS/cm]	010.000 1		
Temperature measurement         Vertical Conductivity measurement           Accuracy (in the measuring range)         2 % MW ± 25 µS/cm           Conductivity measurement         2 % MW ± 25 µS/cm           Accuracy (in the measuring range)         2 % MW ± 25 µS/cm           Drift         1% MW ± 25 µS/cm           Long-term stability         1 % MW ± 25 µS/cm           Long-term stability         0.5 % MW ± 25 µS/cm           Converterm stability         0.5 % MW ± 25 µS/cm           Converterm stability         0.5 % MW ± 25 µS/cm           Converterm stability         0.1           Converterm stability         0.1           Repeatability         [K]           Accuracy         [K]           Source stres         0.1           Conductivity measurement         0.2           Response time         [S]           Conductivity measurement            Conductivity measurement            Response time         [S]			10.000100.000 10		
Measuring range[*C]25150Accuracy (a deviationsConductivity measurementAccuracy (in the measuring range)2 % MW ± 25 µS/cmDiff[%/K]0.1 %/K MW ± 25 µS/cmRepeatability1 % MW ± 25 µS/cmLong-term stability0.5 % MW ± 25 µS/cmComparity0.5 % MW ± 25 µS/cmTemperature measurement0.5 % MW ± 25 µS/cmAccuracy[K]2050 °C: < ± 0.2 K; -2550 °C: < ± 0.2 K; -2550 °C: < ± 1.5 K			100.0001.000.000 100		
Accuracy / deviations           Conductivity measurement           Accuracy (in the measuring range)           Drift         [%/K]           Conductivity measurement           Repeatability         1 % MW ± 25 µS/cm           Long-term stability         0.1 %/K MW ± 25 µS/cm           Conductivity measurement         0.5 % MW ± 25 µS/cm           Accuracy         [K]           Repeatability         0.5 % MW ± 25 µS/cm           Temperature measurement         0.2 %/Cm           Accuracy         [K]           Repeatability         0.2           Resolution         [K]           Resolution         [K]           Conductivity measurement         0.2           Response time         [S]           Conductivity measurement            Response time         [S]           Communication interface         IO-Link           Transmission type         IO-Link           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 <td>Temperature measuremen</td> <td>it</td> <td></td> <td></td>	Temperature measuremen	it			
Conductivity measurement           Accuracy (in the measuring range)         2 % MW ± 25 µS/cm           Drift         (%/K)         0.1 %/K MW ± 25 µS/cm           Repeatability         1 % MW ± 25 µS/cm           Long-term stability         0.5 % MW ± 25 µS/cm           Conductivity measurement         0.5 % MW ± 25 µS/cm           Accuracy         [K]         2050 °C: < ± 0.2 K;	Measuring range	[°C]	-25150		
Accuracy (in the measuring range)         2 % MW ± 25 µS/cm           Drift         [%/K]           On, 1 %/K MW ± 25 µS/cm         1 % MW ± 25 µS/cm           Repeatability         1 % MW ± 25 µS/cm           Long-term stability         0,5 % MW ± 25 µS/cm           Commer stability         0,5 % MW ± 25 µS/cm           Temperature measurement         0,5 % MW ± 25 µS/cm           Accuracy         [K]         2050 °C: < ± 0,2 K;	Accuracy / deviations				
range         2 % MW ± 25 µ3/cm           Drift         [%/K]           Drift         [%/K]           Repeatability         1 % MW ± 25 µS/cm           Long-term stability         0,5 % MW ± 25 µS/cm           Comparture measurement         0,5 % MW ± 25 µS/cm           Temperature measurement         0,5 % MW ± 25 µS/cm           Accuracy         [K]         0,5 % MW ± 25 µS/cm           Repeatability         [K]         0,5 %           Repeatability         [K]         0,2           Repeatability         [K]         0,1           Report pressurement         [K]         0,1           Response time         [S]         <40; (T09)	Conductivity measuremen	t			
Repeatability         1 % MW ± 25 µS/cm           Long-term stability         0,5 % MW ± 25 µS/cm           Temperature measurement         2050 °C: <± 0,2 K;		g	2 % MW ± 25 µS/cm		
Long-term stability         0,5 % MW ± 25 µS/cm           Temperature measurement         0,5 % MW ± 25 µS/cm           Accuracy         [K]         2050 °C: <± 0,2 K; .25150 °C: <± 1,5 K	Drift	[%/K]	0,1 %/K MW ± 25 μS/cm		
Temperature measurement           Accuracy         [K]         2050 °C: <± 0.2 K; .25150 °C: <± 1.5 K	Repeatability				
Accuracy         [K]         2050 °C: <± 0.2 K; -25150 °C: <± 1,5 K           Repeatability         [K]         0,2           Resolution         [K]         0,1           Response times         0.1            Conductivity measurement         [S]         <2; (T09; Damping = 0)	Long-term stability				
-25150 °C: < ± 1,5 KRepeatability[K]Resolution[K]Resolution[K]Conductivity measurementResponse time[S]Temperature measurementResponse time[S]Communication interface[S]Communication interfaceTransmission type[S]OCIDL ink revision[S]SDCI standard[S]ProfilesMeasuring Sensor, Identification and DiagnosisSIO modenoRequired master port type[S]Process data analogue[S]Min. process cycle time[m]Supported DevicelDs <b>Type operationDevicelDType operationDevicelDDevicelD</b>	Temperature measuremen	ıt			
Resolution[K]0.1Response times0.1Conductivity measurementConductivity measurementResponse time[S]<2; (T09; Damping = 0)	Accuracy	[K]			
Response times       Conductivity measurement       Response time     [s]       Communication interface       Communication interface       Transmission type       IO-Link       Toomunication       IO-Link revision       SDCI standard       Profiles       SIO mode       Required master port type       Required master port type       Min. process cycle time [ms]       Supported DeviceIDs	Repeatability	[K]			
Conductivity measurementResponse time[s]< 2; (T09; Damping = 0)	Resolution	[K]			
Response time[s]< 2; (T09; Damping = 0)Temperature measurementResponse time[s]< 40; (T09)InterfacesCommunication interfaceIO-LinkTransmission typeIO-LinkIO-Link revisionIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Response times				
Temperature measurementResponse time[s]< 40; (T09)InterfacesCommunication interfaceIO-LinkTransmission typeOCM2 (38,4 kBaud)IO-Link revision1.1SDCI standardIEC 61131-9ProfilesMeasuring Sensor, Identification and DiagnosisSIO modenoRequired master port typeAProcess data analogue1Min. process cycle time[ms]Supported DeviceIDsType of operation	Conductivity measuremen	t			
Response time[S]< 40; (T09)InterfacesCommunication interfaceIO-LinkTransmission typeIO-LinkIO-Link revisionIO-Link comparing (38,4 kBaud)IO-Link revisionIEC 61131-9SDCI standardIEC 61131-9ProfilesMeasuring Sensor, Id=Tification and DiagnosisSIO modeIRequired master port typeIProcess data analogue1Min. process cycle timeType of operationSupported DeviceIDsType of operation	Response time	[s]	< 2; (T09; Damping = 0)		
InterfacesCommunication interfaceIO-LinkTransmission typeCOM2 (38,4 kBaud)IO-Link revision1.1SDCI standardIEC 61131-9ProfilesMeasuring Sensor, Identification and DiagnosisSIO modenoRequired master port typeAProcess data analogue1Min. process cycle time [ms]Type of operationDeviceIDsType of operation	Temperature measuremen	it			
Communication interfaceIO-LinkTransmission typeCOM2 (38,4 kBaud)IO-Link revision1.1SDCI standardIEC 61131-9ProfilesMeasuring Sensor, Identification and DiagnosisSIO modenoRequired master port typeAProcess data analogue1Min. process cycle time [ms]Type of operationSupported DeviceIDsType of operation	Response time	[s]	< 40; (T09)		
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	Interfaces				
IO-Link revision1.1SDCI standardIEC 61131-9ProfilesMeasuring Sensor, Identification and DiagnosisSIO modenoRequired master port typeAProcess data analogue1Min. process cycle time [ms]5.6Supported DeviceIDsType of operation	Communication interface		IO-Link		
IO-Link revision1.1SDCI standardIEC 61131-9ProfilesMeasuring Sensor, Identification and DiagnosisSIO modeNoRequired master port typeAProcess data analogue1Min. process cycle time [ms]5.6Supported DeviceIDsType of operation	Transmission type				
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	IO-Link revision				
ProfilesMeasuring Sensor, Identification and DiagnosisSIO modenoRequired master port typeAProcess data analogue1Min. process cycle time [ms]5.6Supported DeviceIDsType of operation					
SIO modenoRequired master port typeAProcess data analogue1Min. process cycle time [ms]5.6Supported DeviceIDsType of operationDeviceIDDeviceID	Profiles				
Required master port type     A       Process data analogue     1       Min. process cycle time     [ms]       Supported DeviceIDs     Type of operation   DeviceID	SIO mode				
Process data analogue     1       Min. process cycle time     [ms]       Supported DeviceIDs     Type of operation   DeviceID	Required master port type				
Min. process cycle time     [ms]     5.6       Supported DeviceIDs     Type of operation     DeviceID					
Supported DeviceIDs     Type of operation     DeviceID	_	[ms]			
			default 922		

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#### Inductive conductivity sensor

IND CONDUCTIVITY HYG G1 SC



Ambient temperature	[°C]	-4060		
Storage temperature	[°C]	-4085		
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 (102000 Hz)
UL approval		File number UL		E364788
Mechanical data				
Weight	[g]	736.5		
Materials		stainless steel (316L/1.4404); PEEK; PEI; FKM		
Materials (wetted parts)		PEEK		
Process connection		threaded connection G 1 external thread sealing cone		
Remarks				
Remarks		Attention: The unit must only	be installed in	n a process connection for G1 sealing cone.
		The G1A sealing cone of	the unit is only	y suited for adapters with metal end stop.
		MW = measured value		
Notes		Digital meets analogue: integrating modern IO-Link sensors the		
				ows you to realise two analogue
<b>B</b>		signals from intellig		ensors with several process values.
Pack quantity		1 pcs.		
Electrical connection				
Connector: 1 y M12 (EN 610	167-2-101	); coding: A; Contacts: gold-plated		

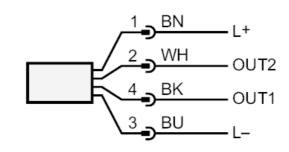


#### Inductive conductivity sensor

IND CONDUCTIVITY HYG G1 SC

#### Connection





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