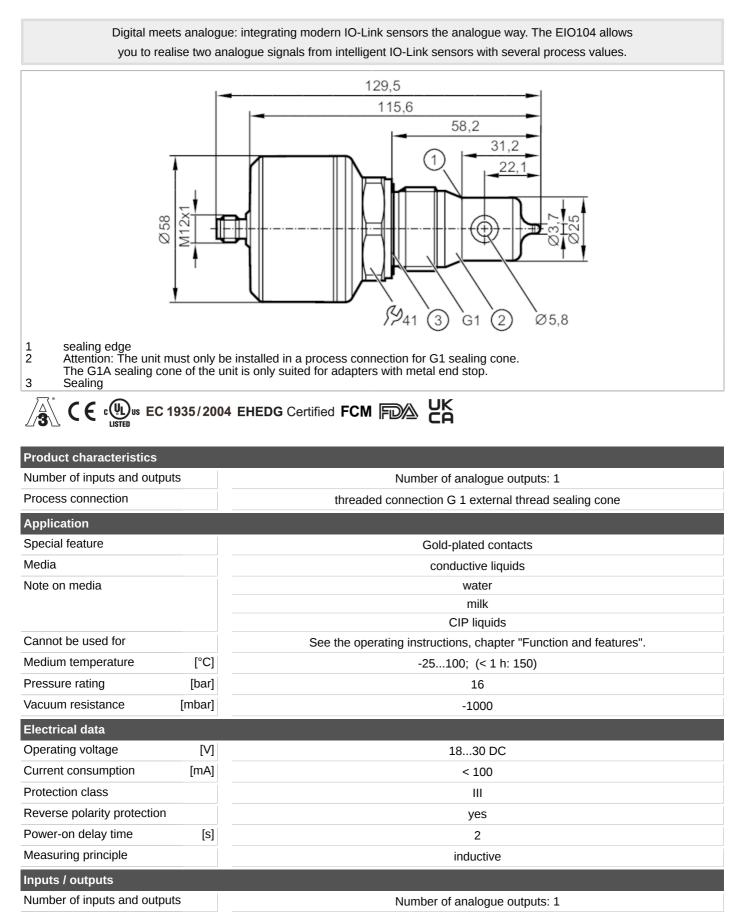
Inductive conductivity sensor



IND CONDUCTIVITY HYG G1 SC



Inductive conductivity sensor

IND CONDUCTIVITY HYG G1 SC



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 Type operationDevicelDType operationDevicelDDevicelD	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		

ifm electronic gmbh • Friedrichstraße 1 • 45128 Essen — We reserve the right to make technical alterations without prior notice. — EN-GB — LDL210-00 — 06.01.2020 — 🚊

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		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		

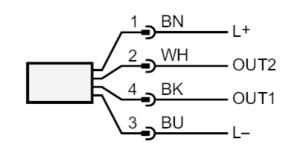


Inductive conductivity sensor

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	