

# Level measurement

## Continuous level measurement – Guided wave radar transmitters

### SITRANS LG series

#### Overview



The Siemens SITRANS LG series are guided wave radar transmitters for level, level/interface, and volume measurement of liquids and solids. The Sitrans LG product line can handle changes in process conditions, high temperatures and pressures, and steam.

#### Benefits

- High accuracy to +/- 2 mm
- Advanced Diagnostics available for high degree of safety
- Simple menu driven display offers ease of setup
- Large range of options offers reliability in most continuous measurement applications
- Ease of maintenance through modular design and field replaceable and adjustable probe options
- Perfect solution for wide range of applications from storage to interface with options for extreme pressure and temperature conditions
- Universally applicable in liquids, interface, slurries and solids
- Highly immune to buildup
- Wide range of Hygienic options

#### Application

The SITRANS LG series comes in four different models, depending on the applications, level of performance, and functionality required:

- SITRANS LG240 offers configuration options for your hygienic and corrosive application requirements
- SITRANS LG250 Highly flexible solution for liquid level and interface applications. Extremely versatile offering solutions for storage, separation of materials or difficult ammonia applications
- SITRANS LG260 Ideal for measuring level in medium range solids applications including; grains, plastics, and cement
- SITRANS LG270 offers configuration options for extreme conditions including high temperature and high pressure applications such as: harsh applications found in chemical, HPI and energy industries for example, LPG gas tanks, steam boilers and distillation columns

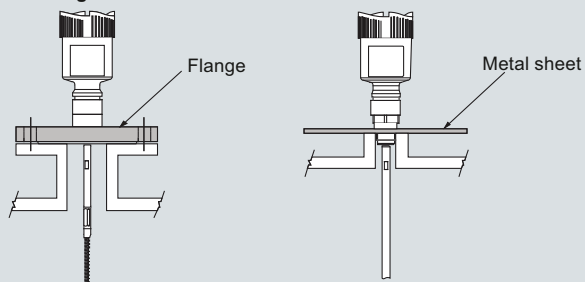
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### Configuration

#### Mounting on nozzle

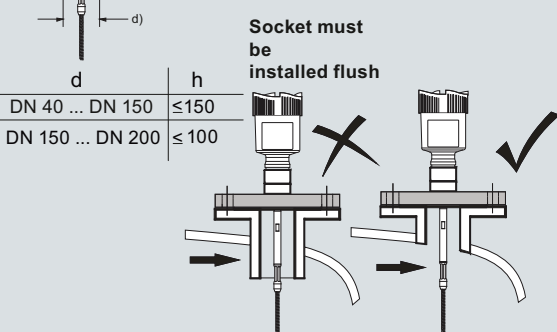


#### Installation in non-metal vessel

The guided microwave principle requires a metal surface on the process fitting. Therefore, use in plastic vessels etc. an instrument version with flange (from DN 50) or place a metal sheet,  $\text{Ø} > 200 \text{ mm}$  (8 inch), beneath the process fitting when screwing it in. Make sure that the plate has direct contact with the process fitting

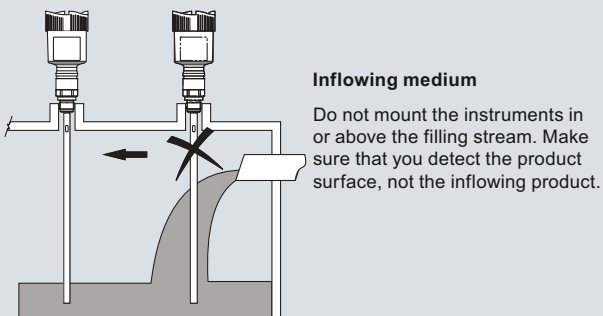
#### Mounting socket

If possible, avoid sockets, mount the sensor flush with the vessel top. If this is not possible, use short sockets with small diameter. Higher sockets or sockets with a bigger diameter can generally be used. They simply increase the upper blocking distance. Check if this is relevant for your measurement. In such cases, always carry out a false signal suppression after installation.



When welding the socket, make sure that the socket is flush to the vessel top.

Before beginning the welding work, remove the electronics module from the sensor. By doing this, you avoid damage to the electronics through inductive coupling.



SITRANS LG series installation, dimensions in mm (inch)

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#### Technical specifications

<b>Mode of operation</b>		<b>Design</b>	
Measuring principle	Guided wave radar measurement	Instrument weight (dependent on process fitting) see manual for further details	Approx. 0.8 ... 8 kg (0.176 ... 17.64 lb)
Measuring range	300 ... 75 000 mm (11.81 ... 2 952.75 inch)	Materials	<ul style="list-style-type: none"> <li>Plastic housing plastic PBT (Polyester)</li> <li>Aluminum die-casting housing, aluminum die-casting AlSi10 mg, powder-coated-basis: polyester</li> <li>Stainless steel housing, precision casting 316L</li> <li>Stainless steel housing, electro-polished 316L</li> </ul>
<b>Output</b>		• Enclosure	
mA analog output with HART digital signal (SIL optional)	4 ... 20 mA/HART	• Degree of protection	<ul style="list-style-type: none"> <li>Type 4/NEMA 4, IP65</li> <li>Plastic housing IP66/IP67</li> <li>Aluminum and stainless steel housings are IP 66/68</li> </ul>
• Output range		• Cable inlet	2x M20x1.5 or 2 x 1/2" NPT
- Analog	Current: minimum 3.8 mA, maximum 20.5 mA	Process connections	
- Start-up current	≤ 10 mA for 5 ms after switching on, ≤ 3.6 mA	• Pipe thread, cylindrical (ISO 228 T1)	G3/4" A, G1" A, G1 1/2" A according to DIN 3852-A
• Diagnostic alarm	Failure signal current output (adjustable): last valid measured value, ≥ 21 mA, ≤ 3.6 mA	• American pipe thread, conical (ASME B1.20.1)	3/4" NPT, 1" NPT, 1 1/2" NPT
• Digital communication	HART Version 7 x and multidrop compatible	• Flanged	DIN from DN 25, ANSI from 1" hygienic fittings
Modbus	Modbus RTU, Modbus ACII, Levelmaster	• Hygienic	
Profibus PA		<b>Programming</b>	
<b>Performance</b>		Local	Four button, menu-driven data entry
Process reference conditions according to DIN EN 61298-1	Process reference conditions according to DIN EN 61298-1	Handheld communicator	HART communicator
Non-linearity		PC	SIMATIC PDM, AMS, PACTware
• Coaxial	See manual for more details	<b>Power</b>	
• Single rod probes		2 wire Hart version	9.6 ... 35 V DC
• Interface models		4 wire versions	9.6 ... 48 V DC, 20 ... 42 V AC, 50/60 Hz and 90 ... 253 V AC, 50/60 Hz
Resolution and repeatability	Accuracy +/- 2 mm (0.08 inch)	Modbus	8 ... 30 V DC
Accuracy		Profibus PA	9 ... 32 V DC
• Coaxial/rod/cable probes	+/- 2 mm (0.08 inch)	Note: See manual for specific power based on ordered options	
• Interface models	± 5 mm (0.197 inch)	<b>Certificates and approvals</b>	
	(Note: Typical deviation, Interface measurement)	Hazardous approvals:	ATEX, FM, CSA, IECex
	See manual for more details	Hygienic approvals:	EHEDG
Electromagnetic compatibility (check if needed)		Overfill protection	WHG
• Measuring cycle time	< 500 ms	Ship approval	ABS, CCS, GL
• Step response time	≤ 3 s		
• Temperature Effects	The measurement error from the process conditions is in the specified pressure and temper- ature range of below 1 %		
<b>Rated operating conditions</b>			
• Ambient temperature for enclosure	-40 ... +80 °C (-40 ... +176 °F)		
• LCD readable temperature range	-40 ... +80 °C (-40 ... +176 °F) with display heated option		
• Location	Indoor/outdoor		
• Installation category	II		
• Pollution degree	2		
• Relative Humidity	20 ... 85 %		
<b>Medium conditions</b>			
Dielectric constant	dK ≥ 1.4 (configuration dependent) Note: for measurement below 1.4 use probe tracking.		
Process temperature range	-196 ... +450 °C (-321 ... +842 °F)		
Vessel pressure	-1 ... +400 bar (-100 ... +40 000 kPa)		

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Industries	SITRANS LG240 Food, Beverage and Pharmaceutical	SITRANS LG250 Chemical/HPI/Power/General	SITRANS LG260 Cement, power generation, food, processing, mineral processing, mining	SITRANS LG270 Chemical/HPI/Power/General
<b>Applications</b>	Hygienic and corrosive applications	Liquids, storage and process vessels with agitators, vaporous liquids, interface	Cement, fly ash, grain, coal, flour, plastics	Aggressive applications in Liquids, storage and process vessels with agitators, vaporous liquids, high temperatures and pressures, low dielectric media
<b>Range</b>	32 m	75 m	60 m	60 m
<b>Performance</b>	+/- 2 mm	+/- 2 mm	+/- 2 mm	+/- 2 mm
<b>Temperature</b>	-40 ... +150 °C (-40 ... +302 °F)	-40 ... +200 °C (-40 ... +392 °F)	-40 ... +200 °C (-40 ... +392 °F)	-196 ... +450 °C (-320.8 ... +842 °F)
<b>Communications</b>	<ul style="list-style-type: none"> <li>• 4 ... 20 mA/HART</li> <li>• Modbus, Modbus RTU, Modbus ASCII, Levelmaster</li> <li>• Profibus PA</li> <li>• SIMATIC PDM</li> <li>• DTM/FDT for PACTware</li> <li>• Fieldcare</li> </ul>	<ul style="list-style-type: none"> <li>• 4 ... 20 mA/HART</li> <li>• Modbus, Modbus RTU, Modbus ASCII, Levelmaster</li> <li>• Profibus PA</li> <li>• SIMATIC PDM</li> <li>• DTM/FDT for PACTware</li> <li>• Fieldcare</li> </ul>	<ul style="list-style-type: none"> <li>• 4 ... 20 mA/HART</li> <li>• Modbus, Modbus RTU, Modbus ASCII, Levelmaster</li> <li>• Profibus PA</li> <li>• SIMATIC PDM</li> <li>• DTM/FDT for PACTware</li> <li>• Fieldcare</li> </ul>	<ul style="list-style-type: none"> <li>• 4 ... 20 mA/HART</li> <li>• Modbus, Modbus RTU, Modbus ASCII, Levelmaster</li> <li>• Profibus PA</li> <li>• SIMATIC PDM</li> <li>• DTM/FDT for PACTware</li> <li>• Fieldcare</li> </ul>

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Selection and Ordering data	Article No.
<b>SITRANS LG240</b>	<b>7ML5880-</b>
Guided Wave Radar sensor for Hygienic and corrosive continuous level and interface measurement of liquids.	
<b>Approvals</b>	
Ordinary location CE <sup>9)</sup>	<b>0A</b>
ATEX II 1G, 1/2G, 2G Ex ia IIC T6 <sup>9)</sup>	<b>0E</b>
ATEX II 1G, 1/2G 2G Ex ia IIC + ATEX II 1D, 1/2D, 1/3D, 2D, Ex t IIIC IP66 T <sup>9)11)13)15)</sup>	<b>0H</b>
ATEX II 1/2G, 2G Ex d ia IIC T6 <sup>1)12)</sup>	<b>0J</b>
ATEX II 1/2G, 2G Ex d ia IIC + ATEX II 1/2D, 2D IP6x <sup>1)11)12)13)15)</sup>	<b>0K</b>
ATEX II 1D, 1/2D, 1/3D, 2D, Ex t IIIC IP66 T <sup>1)13)15)</sup>	<b>0N</b>
IEC Ex ia IIC T6 <sup>9)</sup>	<b>0P</b>
IEC Ex ia IIC T6 + IEC IP6x T tD <sup>9)11)13)15)</sup>	<b>0Q</b>
IEC Ex d ia IIC T6 <sup>1)12)</sup>	<b>0R</b>
IEC Ex d ia IIC T6 + IEC IP6x T tD <sup>1)11)12)13)15)</sup>	<b>0S</b>
FM (NI) Class I, Div. 2, Groups A, B, C, D	<b>1A</b>
FM (IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F	<b>1B</b>
FM(XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G <sup>1)12)</sup>	<b>1C</b>
CSA (NI) Class I, Div. 2, Groups A, B, C, D (DIP) Class II, III, Div. 1, Groups E, F, G <sup>1)13)15)</sup>	<b>1E</b>
CSA (IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G	<b>1F</b>
CSA (XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G <sup>1)12)</sup>	<b>1G</b>
<b>Probe version/Material</b>	
Probe cable ø4 mm (0.16 inch) with gravity weight/PFA <sup>2)7)</sup>	<b>A</b>
Probe exchangeable rod (ø8 mm) / 1.4435 (BN2), can be autoclaved (Ra < 0.76 µm) <sup>3)7)</sup>	<b>B</b>
Probe exchangeable rod (ø8 mm) / 1.4435 (BN2), (Ra < 0.76 µm) <sup>3)7)</sup>	<b>C</b>
Probe rod ø10 mm (0.39 inch)/PFA <sup>2)7)</sup>	<b>D</b>
<b>Process fitting/Material</b>	
Clamp 2" PN 16 (ø64 mm) DIN 32676, ISO2852/1.4435 (BN2) <sup>4)</sup>	<b>00</b>
Clamp 2" PN 16 (ø64 mm) DIN 32676, ISO2852/PTFE-TFM 1600	<b>01</b>
Clamp 2 1/2" PN 10 (ø77.5 mm) DIN 32676, ISO2852/1.4435 (BN2) <sup>4)</sup>	<b>02</b>
Clamp 2 1/2" PN 10 (ø77.5 mm) DIN 32676, ISO2852/PTFE-TFM 1600	<b>03</b>
Clamp 3" PN 10 (ø91 mm) DIN 32676, ISO2852/1.4435 (BN2) <sup>4)</sup>	<b>04</b>
Clamp 3" PN 10 (ø91 mm) DIN 32676, ISO2852/PTFE-TFM 1600	<b>05</b>
Clamp 4" PN6 (ø119 mm) DIN 32676, ISO2852/1.4435(BN2) <sup>4)</sup>	<b>06</b>
Clamp 4" PN6 (ø119 mm) DIN 32676, ISO2852/PTFE-TFM 1600	<b>07</b>
Bolting DN 32, PN 40 DIN11851/1.4435(BN2) <sup>4)</sup>	<b>08</b>
Bolting DN 32, PN 40 DIN11851/PTFE-TFM 1600	<b>10</b>
Bolting DN 40, PN 40 DIN11851/1.4435 (BN2) <sup>4)</sup>	<b>11</b>
Bolting DN 40, PN 40 DIN11851/PTFE-TFM 1600	<b>12</b>
Bolting DN 50, PN 25 DIN11851/1.4435(BN2) <sup>4)</sup>	<b>13</b>
Bolting DN 50, PN 25 DIN11851/PTFE-TFM 1600	<b>14</b>
Bolting DN 65, PN 25 DIN11851/PTFE-TFM 1600	<b>15</b>
Flange DN 25, PN 40 Form C, DIN 2501/PTFE-TFM 1600	<b>20</b>
Flange DN 40, PN 40 Form C, DIN 2501/PTFE-TFM 1600	<b>21</b>

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<b>SITRANS LG240</b>	<b>7ML5880-</b>
Guided Wave Radar sensor for Hygienic and corrosive continuous level and interface measurement of liquids.	
Flange DN 50, PN 40 Form C, DIN 2501/PTFE-TFM 1600	<b>22</b>
Flange DN 50, PN 40 Form V13, DIN 2513/PTFE-TFM 1600	<b>23</b>
Flange DN 65, PN 40 Form C, DIN 2513/PTFE-TFM 1600	<b>24</b>
Flange DN 80, PN 40 Form C, DIN 2501/PTFE-TFM 1600	<b>25</b>
Flange DN 100, PN 16 Form C, DIN 2501/PTFE-TFM 1600	<b>26</b>
Flange DN 80, PN 40 EN1092-1 Form B1/PTFE-TFM 1600	<b>27</b>
Flange DN 100, PN 40 EN1092-1 Form B1/PTFE-TFM 1600	<b>28</b>
Flange 2" 150 lb RF, ANSI B16.5/PTFE-TFM 1600	<b>30</b>
Flange 2" 300 lb RF, ANSI B16.5/PTFE-TFM 1600	<b>31</b>
Flange 3" 150 lb RF, ANSI B16.5/PTFE-TFM 1600	<b>32</b>
Flange 4" 150 lb RF, ANSI B16.5/PTFE-TFM 1600	<b>33</b>
<b>Electronics</b>	
Two-wire 4 ... 20mA/HART	<b>0</b>
Four-wire Modbus <sup>19)20)21)22)</sup>	<b>1</b>
Two-wire 4...20mA/HART with SIL qualification <sup>17)18)</sup>	<b>2</b>
Four-wire 4...20mA/HART; 90...253V AC; 50/60 Hz <sup>1)8)10)</sup>	<b>3</b>
Four-wire 4...20mA/HART; 9.6...48V DC; 20...42 V AC <sup>1)8)10)</sup>	<b>4</b>
Profibus PA	<b>5</b>
<b>Seal/Process temperature</b>	
Without glass seal/-40 ... +150 °C	<b>A</b>
(-40 ... +302 °F) <sup>5)11)</sup>	<b>B</b>
FFKM (Kalrez 6221)/-20...150 °C (-4... +302 °F)	<b>C</b>
EPDM (Freudenberg 70 EPDM 291)/-20...130 °C (-4 ... +266 °F)	<b>C</b>
<b>Housing/Protection/Cable</b>	
Plastic IP66/IP67 M20x1.5/blind stopper	<b>A</b>
Plastic IP66/IP67 1/2" NPT/blind stopper	<b>B</b>
Aluminium/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	<b>C</b>
Aluminium/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	<b>D</b>
Aluminium double chamber/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	<b>E</b>
Aluminium double chamber/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	<b>F</b>
Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	<b>G</b>
Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	<b>H</b>
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	<b>J</b>
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	<b>K</b>
Stainless steel double chamber/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	<b>L</b>
Stainless steel double chamber/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	<b>M</b>
Aluminium/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	<b>N</b>
Aluminium double chamber/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	<b>P</b>
Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) M20x1.5/Cable gland stainless steel	<b>Q</b>

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<b>SITRANS LG240</b>	<b>7ML5880-</b>	<b>Further designs (optional)</b>	
Guided Wave Radar sensor for Hygienic and corrosive continuous level and interface measurement of liquids.		Please add <b>"-Z"</b> to Order No. and specify Order code(s).	
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	<b>R</b>	Enter the total insertion length in plain text description	<b>Y01</b>
<b>Lengths</b>		Enter the total length of rigid part (cable version only)	<b>Y02</b>
<u>Rod ø8 mm (0.31 inch)/1.4435 (Basle standard 300 ... 4 000 mm)</u>		Cleaning included certificate: oil, grease and silicone free	<b>W01</b>
300 ... 1 000 mm (11.81 ... 39.37 inch) <sup>14)</sup>	<b>0</b>	Identification Label (measurement loop) stainless steel	<b>Y17</b>
1 001 ... 2 000 mm (39.41 ... 78.74 inch) <sup>14)</sup>	<b>1</b>	Identification Label (measurement loop) Foil	<b>Y18</b>
2 001 ... 3 000 mm (78.78 ... 118.11 inch) <sup>14)</sup>	<b>2</b>	3.1 Certificate instrument <sup>16)</sup>	<b>C12</b>
3 001 ... 4 000 mm (118.15 ... 157.48 inch) <sup>14)</sup>	<b>3</b>	3.1 Certificate material (NACE0175) <sup>16)</sup>	<b>D07</b>
<u>Rod ø10 mm (0.24 inch)/PFA (300 ... 4 000 mm)</u>		3.1 Certificate instrument with test data <sup>16)</sup>	<b>C25</b>
300 mm (11.81 inch) <sup>14)</sup>	<b>9R1A</b>	2.2 Certificate material <sup>16)</sup>	<b>C15</b>
500 mm (19.69 inch) <sup>14)</sup>	<b>9R1B</b>	Quality/test plan <sup>16)</sup>	<b>C26</b>
300 ... 1 000 mm (11.81 ... 39.37 inch) <sup>14)</sup>	<b>9R1C</b>	Dye penetration test + 3.1 certificate/instrument <sup>16)</sup>	<b>C13</b>
1 001 ... 5 000 mm (39.41 ... 78.74 inch) <sup>14)</sup>	<b>9R1D</b>	X-ray test + 3.1 certificate/instrument <sup>16)</sup>	<b>C14</b>
2 001 ... 3 000 mm (78.78 ... 118.11 inch) <sup>14)</sup>	<b>9R1E</b>	Positive material identification test + 3.1 certificate/instrument <sup>16)</sup>	<b>C16</b>
3 001 ... 4 000 mm (118.15 ... 157.48 inch) <sup>14)</sup>	<b>9R1F</b>	Roughness test + 3.1 certificate/instrument <sup>16)</sup>	<b>C18</b>
<u>Cable ø4 mm (0.16 inch)/PFA (500 ... 32 000 mm)</u>		Pressure test + 3.1 certificate/instrument <sup>16)</sup>	<b>C31</b>
500 mm (9.69 inch)	<b>9R1G</b>	Helium leak test + 3.1 certificate/instrument <sup>16)</sup>	<b>C32</b>
501 ... 1 000 mm (19.72 ... 39.37 inch)	<b>9R1H</b>	Ferrite measuring accuracy to DIN32514-1 + 3.1 certificate/instrument <sup>16)</sup>	<b>C60</b>
1 001 ... 2 000 mm (39.37 ... 196.85 inch)	<b>9R1J</b>	Pressure test according to Norsok + 3.1 certificate/instrument <sup>16)</sup>	<b>C61</b>
2 001 ... 4 000 mm (196.89 ... 393.70 inch)	<b>9R1K</b>	5 point calibration certificate + 3.1 certificate/instrument <sup>16)</sup>	<b>C62</b>
4 001 ... 5 000 mm (393.74 ... 590.55 inch)	<b>9R1L</b>		
5 001 ... 10 000 mm (590.59 ... 787.40 inch)	<b>9R1M</b>		
10 001 ... 15 000 mm (787.44 ... 984.25 inch)	<b>9R1N</b>		
15 001 ... 20 000 mm (984.29 ... 1 181.10 inch)	<b>9R1P</b>		
20 001 ... 25 000 mm (1 181.14 ... 1 377.95 inch)	<b>9R1Q</b>		
25 001 ... 32 000 mm (1 377.99 ... 1 574.80 inch)	<b>9R1R</b>		
<b>Further designs (mandatory)</b>		<b>Additional Operating Instructions</b>	Article No.
Please add <b>"-Z"</b> to Order No. and specify Order code(s).		<b>German</b>	
<b>Supplementary electronics</b>		4 ... 20 mA/HART - two-wire, PFA insulated	<b>PBD-51041000</b>
Without	<b>A00</b>	4 ... 20 mA/HART - two-wire, Polished version	<b>PBD-51041001</b>
Additional current output 4 ... 20 mA <sup>1)</sup>	<b>A01</b>	4 ... 20 mA/HART - two-wire, Rod and cable probe PFA insulated with SIL qualification	<b>PBD-51041375</b>
<b>Local display interface</b>		4 ... 20 mA/HART - two-wire, Rod probe polished Version with SIL qualification	<b>PBD-51041376</b>
Without	<b>E00</b>	4 ... 20 mA/HART - four-wire PFA insulated	<b>PBD-51041002</b>
Mounted	<b>E01</b>	4 ... 20 mA/HART - four-wire Polished version	<b>PBD-51041003</b>
Laterally mounted <sup>1)</sup>	<b>E02</b>	Modbus- PFA insulated	<b>PBD-51041004</b>
<b>Language of display</b>		Modbus protocol, Polished version	<b>PBD-51041005</b>
German	<b>L00</b>	Profibus PA, PFA insulated	<b>PBD-51041006</b>
English	<b>L01</b>	Profibus PA, polished version	<b>PBD-51041007</b>
French	<b>L02</b>		
Dutch	<b>L03</b>	<b>English</b>	
Italian	<b>L04</b>	4 ... 20 mA/HART - two-wire PFA insulated	<b>PBD-51041037</b>
Spanish	<b>L05</b>	4 ... 20 mA/HART - two-wire Polished version	<b>PBD-51041038</b>
Portuguese	<b>L06</b>	4 ... 20 mA/HART - two-wire, Rod and cable probe PFA insulated with SIL qualification	<b>PBD-51041385</b>
Russian	<b>L07</b>	4 ... 20 mA/HART - two-wire Rod probe Polished Version with SIL qualification	<b>PBD-51041386</b>
Chinese	<b>L08</b>	4 ... 20 mA/HART - four-wire PFA insulated	<b>PBD-51041039</b>
Japanese	<b>L09</b>	4 ... 20 mA/HART - four-wire Polished version	<b>PBD-51041040</b>
<b>Operating instructions</b>		Modbus- PFA insulated	<b>PBD-51041041</b>
German	<b>M00</b>	Modbus protocol, Polished version	<b>PBD-51041042</b>
English	<b>M01</b>	Profibus PA, PFA insulated	<b>PBD-51041043</b>
French	<b>M02</b>	Profibus PA, polished version	<b>PBD-51041044</b>
Spanish	<b>M03</b>		

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#### French

4 ... 20 mA/HART - two-wire PFA insulated	<b>PBD-51041111</b>
4 ... 20 mA/HART - two-wire Polished version	<b>PBD-51041112</b>
4 ... 20 mA/HART - two-wire Rod and cable probe PFA insulated with SIL qualification	<b>PBD-51041405</b>
4 ... 20 mA/HART - two-wire Rod probe Polished Version with SIL qualification	<b>PBD-51041406</b>
4 ... 20 mA/HART - four-wire PFA insulated	<b>PBD-51041113</b>
4 ... 20 mA/HART - four-wire Polished version	<b>PBD-51041114</b>
Modbus- PFA insulated	<b>PBD-51041115</b>
Modbus protocol, Polished version	<b>PBD-51041116</b>
Profibus PA, PFA insulated	<b>PBD-51041117</b>
Profibus PA, polished version	<b>PBD-51041118</b>

#### Spanish

4 ... 20 mA/HART - two-wire PFA insulated	<b>PBD-51041074</b>
4 ... 20 mA/HART - two-wire Polished version	<b>PBD-51041075</b>
4 ... 20 mA/HART - two-wire Rod and cable probe PFA insulated with SIL qualification	<b>PBD-51041395</b>
4 ... 20 mA/HART - two-wire Rod probe Polished Version with SIL qualification	<b>PBD-51041396</b>
4 ... 20 mA/HART - four-wire PFA insulated	<b>PBD-51041076</b>
4 ... 20 mA/HART - four-wire Polished version	<b>PBD-51041077</b>
Modbus- PFA insulated	<b>PBD-51041078</b>
Modbus protocol, Polished version	<b>PBD-51041079</b>
Profibus PA, PFA insulated	<b>PBD-51041080</b>
Profibus PA, polished version	<b>PBD-51041081</b>

#### Accessories

Sitrans LG, GWR sensor Display Module	<b>A5E34143449</b>
SITRANS RD100, loop powered display - see Chapter 7	<b>7ML5741-...</b>
SITRANS RD200, universal input display with Modbus conversion - see Chapter 7	<b>7ML5740-...</b>
SITRANS RD300, dual line display with totalizer and linearization curve and Modbus conversion - see Chapter 7	<b>7ML5744-...</b>
SITRANS RD500 web, universal remote monitoring solution for instrumentation - see Chapter 7	<b>7ML5750-...</b>
For applicable back up point level switch - see point level measurement section	

- 1) Available with Housing/Protection/Cable options E,F, L, M only
- 2) Available only with PFA Process Fitting/Material including options 01, 03, 05, 07, 10, 12, 14 ... 33 (PTFE-TFM 1600 options)
- 3) Available only with Process Fitting/Material options 00, 02, 04, 06, 08, 11, and 13 [1.4435 (BN2) options]
- 4) Available with Length options 0, 1, 2, 3 only (Rod ø8 mm 1.4435 options)
- 5) Available with Length options R1A ... R1R only (Rod ø10 mm/PFA and Cable ø4 mm/PFA options)
- 7) Available only with the same rod or cable diameter in Length options
- 8) Available with Supplementary electronic option A00 and Indicating/Adjustment modules E00, E01
- 9) Available with Supplementary electronic option A01 approval options 0A,0E,0H,0P, and 0Q
- 10) Available with Approval options 0A,0J,0K,0N,0R,0S,1A,1C,1E,1F, and 1G
- 11) Available with Version/Material options A and D only
- 12) Available with Indicating/adjustment modules E00 and E01
- 13) Available with Seal/Process temperature C only
- 14) Not available with Y02
- 15) Available with Housing/Protection options C, D, E, F, G, H, L, M
- 16) Listed Certificates are not available with all configurations, please contact factory for more information
- 17) SIL electronic option 2 available with Approval options 0E and 0P
- 18) Available with Supplementary electronic option A00, SIL electronics

- 19) Modbus only available with Approval options GP and NI and XP-IS / Ex d ia
- 20) Modbus only available with two chamber housing options
- 21) Modbus not available with Supplementary electronic (only for HART) option
- 22) Modbus not available with lateral mount display option

# Level measurement

## Continuous level measurement – Guided wave radar transmitters

SITRANS LG series

Selection and Ordering data	Article No.	Selection and Ordering data	Article No.
<b>SITRANS LG250</b>	<b>7ML5881-</b>	<b>SITRANS LG250</b>	<b>7ML5881-</b>
A guided wave radar sensor for continuous level and interface measurement of liquids.		A guided wave radar sensor for continuous level and interface measurement of liquids.	
<b>Approvals</b>		Thread G 1" (DIN 3852-A) PN 40 / 316L	<b>06</b>
Ordinary location CE <sup>16)</sup>	<b>0A</b>	Thread 1" NPT (ASME B1.20.1) PN 40 / 316L	<b>07</b>
Shipping approval (GL) <sup>19)28)29)</sup>	<b>0B</b>	Thread G 1" (DIN 3852-A) PN 100 / 316L	<b>08</b>
ATEX II 1G, 1/2G, 2G Ex ia IIC T6 <sup>16)</sup>	<b>0E</b>	Thread 1" NPT (ASME B1.20.1) PN 100 / 316L	<b>10</b>
ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + shipping approval GL <sup>19)28)29)</sup>	<b>0G</b>	Thread G 1 1/2" (DIN 3852-A) PN 40 / 316L	<b>11</b>
ATEX II 1G, 1/2G 2G Ex ia IIC + ATEX II 1D, 1/2D, 1/3D, 2D, Ex t IIIC IP66 <sup>16)23)</sup>	<b>0H</b>	Thread 1 1/2" NPT (ASME B1.20.1) PN 40 / 316L	<b>12</b>
ATEX II 1/2G, 2G Ex d ia IIC T6 <sup>1)21)</sup>	<b>0J</b>	Thread G1 1/2" (DIN 3852-A) PN1 00 / 316L	<b>13</b>
ATEX II 1/2G, 2G Ex d ia IIC + ATEX II 1D, 1/2D, 1/3D, 2D, Ex t IIIC IP66 T <sup>1)21)23)</sup>	<b>0K</b>	Thread 1 1/2" NPT (ASME B1.20.1) PN 100 / 316L	<b>14</b>
ATEX II 1/2G, 2G Ex d IIC T6 <sup>14)20)</sup>	<b>0L</b>	Thread 2 NPT PN 40, ASME B1.20.1 / 316L	<b>15</b>
ATEX II 1/2G, 2G Ex d IIC + ATEX II 1D, 1/2D, 1/3D, 2D, Ex t IIIC IP66 T <sup>14)20)23)</sup>	<b>0M</b>	Flange DN 25 PN 40 Form C, DIN 2501 / 316L	<b>20</b>
ATEX II 1D, 1/2D, 1/3D, 2D, Ex t IIIC IP66 T <sup>20)23)</sup>	<b>0N</b>	Flange DN 25 PN 40 Form F, DIN 2501 / 316L	<b>21</b>
IEC Ex ia IIC <sup>16)</sup>	<b>0P</b>	Flange DN 40 PN 40 Form C, DIN 2501 / 316L	<b>22</b>
IEC Ex ia IIC T6 + IEC IP6x T tD <sup>16)20)23)</sup>	<b>0Q</b>	Flange DN 50 PN 40 Form C, DIN 2501 / 316L	<b>23</b>
IEC Ex d ia IIC T6 <sup>1)21)23)</sup>	<b>0R</b>	Flange DN 50 PN 40 form V13, DIN 2513 / 316L	<b>24</b>
IEC Ex d ia IIC T6 + IEC IP6x T tD <sup>1)20)21)</sup>	<b>0S</b>	Flange DN 80 PN 40 Form C, DIN 2501 / 316L	<b>25</b>
IEC Ex d IIC T6 <sup>14)20)</sup>	<b>0T</b>	Flange DN 80 PN 40 Form V13, DIN 2501 / 316L	<b>26</b>
IEC Ex d IIC T6 + IEC IP6x T tD <sup>14)20)23)</sup>	<b>0U</b>	Flange DN 100 PN 16 Form C, DIN 2501 / 316L	<b>28</b>
FM (NI) Class I, Div. 2, Groups A, B, C, D	<b>1A</b>	Flange DN 100PN 40 Form C, DIN 2501 / 316L	<b>30</b>
FM (IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F	<b>1B</b>	Flange DN 100 PN 40 Form V13, DIN 2513 / 316L	<b>31</b>
FM(XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G <sup>1)21)</sup>	<b>1C</b>	Flange DN 150 PN 16 Form C, DIN 2501 / 316L	<b>32</b>
FM (XP) Class I, Div. 1, Groups A, B, C, D <sup>20)</sup>	<b>1D</b>	Flange DN 50 PN 40 EN1092-1 Form B1 / 316L	<b>33</b>
CSA (NI) Class I, Div. 2, Groups A, B, C, D (DIP) Class II, III, Div. 1, Groups E, F, G	<b>1E</b>	Flange DN 80 PN 40 EN1092-1 Form B1 / 316L	<b>34</b>
CSA (IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G	<b>1F</b>	Flange 1" 150 lb RF, ANSI B16.5 / 316L	<b>35</b>
CSA (XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G <sup>1)21)</sup>	<b>1G</b>	Flange 1 1/2" 150 lb RF, ANSI B16.5 / 316L	<b>36</b>
CSA (XP) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G <sup>14)20)</sup>	<b>1H</b>	Flange 2" 150 lb RF, ANSI B16.5 / 316L	<b>37</b>
<b>Probe version/Material</b>		Flange 2" 300 lb RF, ANSI B16.5 / 316L	<b>38</b>
Probe exchangeable cable ø2 mm (0.08 inch) with gravity weight/316L <sup>8)9)11)26)</sup>	<b>A</b>	Flange 3" 150 lb RF, ANSI B16.5 / 316L	<b>40</b>
Probe exchangeable cable ø2 mm (0.08 inch) center weight/316L <sup>8)9)12)26)</sup>	<b>B</b>	Flange 3" 300 lb RF, ANSI B16.5 / 316L	<b>41</b>
Probe exchangeable cable ø4 mm (0.16 inch) with gravity weight/316L <sup>8)9)11)26)</sup>	<b>C</b>	Flange 4" 150 lb RF, ANSI B16.5 / 316L	<b>42</b>
Probe exchangeable cable ø4 mm (0.16 inch) with center weight/316L <sup>8)9)12)26)</sup>	<b>D</b>	Flange 4" 300 lb RF, ANSI B16.5 / 316L	<b>43</b>
Probe exchangeable rod ø8 mm (0.31 inch)/316L <sup>2)8)10)11)26)</sup>	<b>E</b>	Flange 6" 150 lb RF, ANSI B16.5 / 316L	<b>44</b>
Probe exchangeable rod ø12 mm (0.47 inch)/316L <sup>3)8)10)11)24)26)</sup>	<b>F</b>	Flange 6" 300lb RF, ANSI B16.5 / 316L	<b>45</b>
Probe coax version ø21.3 mm (0.84 inch) with single hole/316L <sup>8)9)11)26)27)</sup>	<b>G</b>		
Probe coax version ø21.3 mm (0.84 inch) with multiple hole/316L <sup>8)9)11)26)27)</sup>	<b>H</b>		
Probe coax version ø21.3 mm (0.84 inch) for Ammonia application/316L <sup>4)8)9)11)25)31)</sup>	<b>J</b>		
Probe coax version ø42.2 mm (1.66 inch) with multiple hole/316L <sup>5)8)9)11)24)26)27)</sup>	<b>K</b>		
<b>Process fitting/Material</b>			
Thread G 3/4" (DIN 3852-A) PN 6 / 316L	<b>00</b>		
Thread 3/4" NPT (ASME B1.20.1) PN 6 / 316L	<b>01</b>		
Thread G 3/4" (DIN 3852-A) PN 40 / 316L	<b>02</b>		
Thread 3/4" NPT (ASME B1.20.1) PN 40 / 316L	<b>03</b>		
Thread G 3/4" (DIN 3852-A) PN 100 / 316L	<b>04</b>		
Thread 3/4" NPT (ASME B1.20.1) PN 100 / 316L	<b>05</b>		
		<b>Electronics</b>	
		Two-wire 4 ... 20mA/HART	<b>0</b>
		Four-wire Modbus <sup>33)34)35)36)</sup>	<b>1</b>
		Two-wire 4...20mA/HART with SIL qualification <sup>24)32)</sup>	<b>2</b>
		Four-wire 4...20mA/HART; 90...253V AC; 50/60Hz <sup>1)15)17)</sup>	<b>3</b>
		Four-wire 4...20mA/HART; 9.6...48V DC; 20...42V AC <sup>1)15)17)</sup>	<b>4</b>
		Profibus PA	<b>5</b>
		<b>Seal/Second line of defense/Process temperature</b>	
		FKM (SHS FPM 70C3 GLT)/without glass seal/ -40 ... +80 °C (-40 ... +176 °F) <sup>6)</sup>	<b>A</b>
		FKM (SHS FPM 70C3 GLT)/without glass seal/ -40 ... +150 °C (-40 ... +302 °F)	<b>B</b>
		FFKM (Kalrez 6375)/with glass seal/ -20 ... +200 °C (-4 ... +392 °F)	<b>C</b>
		EPDM (A+P 75.5/KW75F)/without glass seal/ -40 ... +80 °C (-40 ... +176 °F)	<b>D</b>
		EPDM (A+P 75.5/KW75F)/with glass seal/ -40 ... +150 °C (-40 ... +302 °F)	<b>E</b>
		FFKM (Kalrez 6375)/with glass seal/ -20 ... +200 °C (-4 ... +392 °F)	<b>F</b>
		EPDM (A+P 75.5/KW75F)/without glass seal/ -40 ... +80°C (-40 ... +176 °F) <sup>6)</sup>	<b>G</b>



# Level measurement

## Continuous level measurement – Guided wave radar transmitters

### SITRANS LG series

Selection and Ordering data	Article No.	Selection and Ordering data	Article No.
<b>SITRANS LG250</b>	<b>7ML5881-</b>	<b>SITRANS LG250</b>	<b>7ML5881-</b>
A guided wave radar sensor for continuous level and interface measurement of liquids.		A guided wave radar sensor for continuous level and interface measurement of liquids.	
EPDM (A+P 75.5/KW75F)/without glass seal/ -40 ... +150 °C (-40 ... +302 °F)	<b>H</b>	501 ... 1 000 mm (19.72 ... 39.37 inch)	<b>9R2E</b>
EPDM (A+P 75.5/KW75F)/with glass seal/ -40 ... +150 °C (-40 ... +302 °F)	<b>J</b>	1 000 ... 5 000 mm (39.37 ... 196.85 inch)	<b>9R2F</b>
Silicone FEP coated (A+P FEP-O-SEAL)/without glass seal/-40 ... +80 °C (-40 ... +176 °F) <sup>6)</sup>	<b>K</b>	5 001 ... 10 000 mm (196.89 ... 393.70 inch)	<b>9R2G</b>
Silicone FEP coated (A+P FEP-O-SEAL)/without glass seal/-40 ... +150 °C (-40 ... +302 °F)	<b>L</b>	10 001 ... 15 000 mm (393.74 ... 590.55 inch)	<b>9R2H</b>
Silicone FEP coated (A+P FEP-O-SEAL)/with glass seal/-40 ... +150 °C (-40 ... +302 °F)	<b>M</b>	15 001 ... 20 000 mm (590.59 ... 787.40 inch)	<b>9R2J</b>
With borosilicate glass lead through/with glass seal/-60 ... +150 °C (-76 ... +302 °F) <sup>7)</sup>	<b>N</b>	20 001 ... 25 000 mm (787.44 ... 984.25 inch)	<b>9R2K</b>
FFKM (Kalrez 6375)/without glass seal/ -20 ... +200 °C	<b>P</b>	25 001 ... 30 000 mm (984.29 ... 1 181.10 inch)	<b>9R2L</b>
FKM (SHS FPM 70C3 GLT)/with glass seal/ -40 ... 80 °C <sup>6)</sup>	<b>Q</b>	30 001 ... 35 000 mm (1 181.14 ... 1 377.95 inch)	<b>9R2M</b>
<b>Housing/Protection/Cable</b>		35 001 ... 40 000 mm (1 377.99 ... 1 574.80 inch)	<b>9R2N</b>
Plastic IP66/IP67 M20x1.5/blind stopper	<b>A</b>	40 001 ... 45 000 mm (1 574.84 ... 1 771.65 inch)	<b>9R2P</b>
Plastic IP66/IP67 1/2" NPT/blind stopper	<b>B</b>	45 001 ... 50 000 mm (1 771.69 ... 1 968.50 inch)	<b>9R2Q</b>
Aluminium/IP66/IP68 (0.2 bar) M20x1.5/blind stop- per	<b>C</b>	50 001 ... 55 000 mm (1 968.54 ... 2 165.35 inch)	<b>9R2R</b>
Aluminium/IP66/IP68 (0.2 bar) 1/2" NPT/blind stop- per	<b>D</b>	55 001 ... 60 000 mm (2 165.39 ... 2 362.20 inch)	<b>9R2S</b>
Aluminium double chamber/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	<b>E</b>	60 001 ... 65 000 mm (2 362.24 ... 2 559.06 inch)	<b>9R2T</b>
Aluminium double chamber/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	<b>F</b>	65 001 ... 70 000 mm (2 559.09 ... 2 755.91 inch)	<b>9R2U</b>
Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	<b>L</b>	70 001 ... 75 000 mm (2 759.94 ... 2 952.76 inch)	<b>9R2V</b>
Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	<b>M</b>	<u>Coax ø21.3 mm/316L</u>	
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	<b>N</b>	300 ... 1 000 mm (11.81 ... 39.37 inch) <sup>22)</sup>	<b>9R3A</b>
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	<b>P</b>	1 001 ... 2 000 mm (39.41 ... 78.74 inch) <sup>22)</sup>	<b>9R3B</b>
Stainless steel double chamber/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	<b>Q</b>	2 001 ... 3 000 mm (78.78 ... 118.11 inch) <sup>22)</sup>	<b>9R3C</b>
Stainless steel double chamber/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	<b>R</b>	3 001 ... 4 000 mm (118.15 ... 157.48 inch) <sup>22)</sup>	<b>9R3D</b>
Aluminium/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	<b>S</b>	4 001 ... 5 000 mm (157.52 ... 196.85 inch) <sup>22)</sup>	<b>9R3E</b>
Aluminium double chamber/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	<b>T</b>	5 001 ... 6 000 mm (196.89 ... 236.22 inch) <sup>22)</sup>	<b>9R3F</b>
Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	<b>U</b>	<u>Coax ø42.2 mm/316L</u>	
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	<b>V</b>	300 ... 1 000 mm (11.81 ... 39.37 inch) <sup>22)</sup>	<b>9R3G</b>
<b>Lengths</b>		1 001 ... 2 000 mm (39.41 ... 78.74 inch) <sup>22)</sup>	<b>9R3H</b>
<u>Rod ø8 mm/316L</u>		2 001 ... 3 000 mm (78.78 ... 118.11 inch) <sup>22)</sup>	<b>9R3J</b>
300 ... 1 000 mm (11.81 ... 39.37 inch) <sup>22)</sup>	<b>0</b>	3 001 ... 4 000 mm (118.15 ... 157.48 inch) <sup>22)</sup>	<b>9R3K</b>
1 001 ... 2 000 mm (39.41 ... 78.74 inch) <sup>22)</sup>	<b>1</b>	4 001 ... 5 000 mm (157.52 ... 196.85 inch) <sup>22)</sup>	<b>9R3L</b>
2 001 ... 3 000 mm (78.78 ... 118.11 inch) <sup>22)</sup>	<b>2</b>	5 001 ... 6 000 mm (196.89 ... 236.22 inch) <sup>22)</sup>	<b>9R3M</b>
3 001 ... 4 000 mm (118.15 ... 157.48 inch) <sup>22)</sup>	<b>3</b>	<b>Further designs (mandatory)</b>	
4 001 ... 5 000 mm (157.52 ... 196.85 inch) <sup>22)</sup>	<b>4</b>	Please add "-Z" to Order No. and specify Order code(s).	
5 001 ... 6 000 mm (196.89 ... 236.22 inch) <sup>22)</sup>	<b>5</b>	<b>Supplementary electronics</b>	
<u>Rod ø12 mm/316L</u>		Without	<b>A00</b>
300 ... 1 000 mm (11.81 ... 39.37 inch) <sup>22)</sup>	<b>9R2A</b>	Additional current output 4 ... 20 mA <sup>1)</sup>	<b>A01</b>
1 001 ... 2 000 mm (39.41 ... 196.85 inch) <sup>22)</sup>	<b>9R2B</b>	<b>Dimensions centering weight (diameter/height)</b>	
2 001 ... 3 000 mm (78.78 ... 118.11 inch) <sup>22)</sup>	<b>9R2C</b>	Without	<b>B00</b>
3 001 ... 4 000 mm (118.15 ... 157.48 inch) <sup>22)</sup>	<b>9R2D</b>	ø40/30 mm	<b>B01</b>
<b>Cable lengths ø2 or 4 mm/316L</b>		ø45/30 mm (for 2 inch tubes)	<b>B02</b>
		ø75/30 mm (for 3 inch tubes)	<b>B03</b>
		ø95/30 mm (for 4 inch tubes)	<b>B04</b>
		ø1.57/1.18 inch (for 2 inch schedule 160)	<b>B05</b>
		ø1.77/1.18 inch (for 2 inch schedule 40/80)	<b>B06</b>
		ø2.95/1.18 inch (for 3 inch schedule 10/40)	<b>B07</b>
		ø3.74/1.18 inch (for 4 inch schedule 80)	<b>B08</b>
		<b>Rod mounted</b>	
		Without Rod, applicable for coax or cable probe types only	<b>C00</b>
		Mounted	<b>C01</b>
		Not mounted	<b>C02</b>
		<b>Local display interface</b>	
		Without	<b>E00</b>
		Mounted	<b>E01</b>
		Laterally mounted <sup>1)13)</sup>	<b>E02</b>
		<b>Language of display</b>	
		German	<b>L00</b>
		English	<b>L01</b>

# Level measurement

## Continuous level measurement – Guided wave radar transmitters

SITRANS LG series

Selection and Ordering data	Article No.
<b>SITRANS LG250</b>	<b>7ML5881-</b>
A guided wave radar sensor for continuous level and interface measurement of liquids.	
French	L 02
Dutch	L 03
Italian	L 04
Spanish	L 05
Portuguese	L 06
Russian	L 07
Chinese	L 08
Japanese	L 09
<b>Operating instructions</b>	
German	M 00
English	M 01
French	M 02
Spanish	M 03

Selection and Ordering data	Order code
<b>Further designs (optional)</b>	
Please add <b>"-Z"</b> to Order No. and specify Order code(s).	
Enter the total insertion length in plain text description	<b>Y01</b>
Enter the total length of rigid part (cable version only)	<b>Y02</b>
Cleaning included certificate: oil, grease and silicone free	<b>W01</b>
Identification Label (measurement loop) stainless steel	<b>Y17</b>
Identification Label (measurement loop) Foil	<b>Y18</b>
3.1 Certificate instrument <sup>(30)</sup>	<b>C12</b>
3.1 Certificate material (NACE0175) <sup>(30)</sup>	<b>D07</b>
3.1-Certificate instrument with test data <sup>(30)</sup>	<b>C25</b>
2.2-Certificate material <sup>(30)</sup>	<b>C15</b>
Quality/test plan <sup>(30)</sup>	<b>C26</b>
Dye penetration test + 3.1 certificate/instrument <sup>(30)</sup>	<b>C13</b>
X-ray test + 3.1 certificate/instrument <sup>(30)</sup>	<b>C14</b>
Positive material identification test + 3.1 certificate/instrument <sup>(30)</sup>	<b>C16</b>
Roughness test + 3.1 certificate/instrument <sup>(30)</sup>	<b>C18</b>
Pressure test + 3.1 certificate/instrument <sup>(30)</sup>	<b>C31</b>
Helium leak test + 3.1 certificate/instrument <sup>(30)</sup>	<b>C32</b>
Ferrite measuring accuracy to DIN32514-1 + 3.1 certificate/instrument <sup>(30)</sup>	<b>C60</b>
Pressure test according to Norsok + 3.1 certificate/instrument <sup>(30)</sup>	<b>C61</b>
5 point calibration certificate + 3.1 certificate/instrument <sup>(30)</sup>	<b>C62</b>
<b>Additional Operating Instructions</b>	Article No.
<b>German</b>	
4 ... 20 mA/HART - two-wire	<b>PBD-51041010</b>
4 ... 20 mA/HART - two-wire coax probe	<b>PBD-51041011</b>
4 ... 20 mA/HART - two-wire Coax probe with SIL qualification	<b>PBD-51041377</b>
4 ... 20 mA/HART - two-wire Rod and cable probe with SIL qualification	<b>PBD-51041378</b>
4 ... 20 mA/HART - four-wire	<b>PBD-51041012</b>
4 ... 20 mA/HART - four-wire coax probe	<b>PBD-51041013</b>
Modbus	<b>PBD-51041014</b>
Modbus- coax probe	<b>PBD-51041015</b>
Profibus PA	<b>PBD-51041016</b>

Profibus PA - coax probe

**PBD-51041017****English**

4 ... 20 mA/HART - two-wire

**PBD-51041047**

4 ... 20 mA/HART - two-wire Coax probe

**PBD-51041048**

4 ... 20 mA/HART - two-wire Coax probe with SIL qualification

**PBD-51041387**

4 ... 20 mA/HART - two-wire Rod and cable probe with SIL qualification

**PBD-51041388**

4 ... 20 mA/HART - four-wire

**PBD-51041049**

4 ... 20 mA/HART - four-wire Coax probe

**PBD-51041050**

Modbus

**PBD-51041051**

Modbus- coax probe

**PBD-51041052**

Profibus PA

**PBD-51041053**

Profibus PA - coax probe

**PBD-51041054****French**

4 ... 20 mA/HART - two-wire

**PBD-51041121**

4 ... 20 mA/HART - two-wire Coax probe

**PBD-51041122**

LG250 - 4 ... 20 mA/HART - two-wire Coax probe With SIL qualification

**PBD-51041407**

4 ... 20 mA/HART - two-wire Rod and cable probe with SIL qualification

**PBD-51041408**

4 ... 20 mA/HART - four-wire

**PBD-51041123**

4 ... 20 mA/HART - four-wire Coax probe

**PBD-51041124**

Modbus

**PBD-51041125**

Modbus- coax probe

**PBD-51041126**

Profibus PA

**PBD-51041127**

Profibus PA - coax probe

**PBD-51041128****Spanish**

4 ... 20 mA/HART - two-wire

**PBD-51041084**

4 ... 20 mA/HART - two-wire Coax probe

**PBD-51041085**

4 ... 20 mA/HART - two-wire Coax probe with SIL qualification

**PBD-51041397**

4 ... 20 mA/HART - two-wire Rod and cable probe with SIL qualification

**PBD-51041398**

4 ... 20 mA/HART - four-wire

**PBD-51041086**

4 ... 20 mA/HART - four-wire Coax probe

**PBD-51041087**

Modbus

**PBD-51041088**

Modbus- Coax probe

**PBD-51041089**

Profibus PA

**PBD-51041090**

Profibus PA - coax probe

**PBD-51041091****Accessories**

Sitrans LG, GWR sensor Display Module

**A5E34143449**

SITRANS RD100, loop powered display - see Chapter 7

**7ML5741-...**

SITRANS RD200, universal input display with Modbus conversion - see Chapter 7

**7ML5740-...**

SITRANS RD300, dual line display with totalizer and linearization curve and Modbus conversion - see Chapter 7

**7ML5744-...**

SITRANS RD500 web, universal remote monitoring solution for instrumentation - see Chapter 7

**7ML5750-...**

For applicable back up point level switch - see point level measurement section

- 1) Available with Housing/Protection cable options E, F, Q, and R only
- 2) Not available with Process fitting/Material options 04, 05, 08, 10, 13, and 14
- 3) Available only with Process Fitting/Material options 00 ... 10, 11, 12, 23 ... 34 and 37 ... 45 (Not available with threaded connections less than 1.5 inch and flanges < DN 50/2 inch)
- 4) Available with Seal option N only

# Level measurement

## Continuous level measurement – Guided wave radar transmitters

### SITRANS LG series

- 5) Not available with Process fitting/Material options 00 ... 10, 11, 12, 23 ... 34 and 37 ... 45. (Not available with threaded connections less than 1.5 inch and flanges < DN 50/2 inch)
- 6) Available only with Process fitting/Material options 00 and 01 (options with max temp of 80 °C (176 °F) only available with PN 6 rated threaded connections)
- 7) Available with Version/Material option J only
- 8) Available only with the same diameter probe lengths
- 9) Available with Rod mounted option C00 only (Coax and cable version only)
- 10) Available with Rod mounted options C01, C02 only (rod versions only)
- 11) Available only with Centering weight option B00 (no centering weight option)
- 12) Available with Centering weight options B01 ... B08 only
- 13) Available only with Housing/Protection cable options E, F, Q, R, T (double chamber options only)
- 14) Available only with Housing/Protection cable options C, D, L, M and approval option 1D
- 15) Available with Supplementary electronic option A00 and Indicating/Adjustment modules E00, E01
- 16) Available with Supplementary electronic option A01 and Approval options 0A, 0E, 0H, 0P and 0Q
- 17) Not Available with Approval options 0B ... 0H 0P, 0Q, 1B, and 1F (not available with Intrinsically Safe and shipping approvals)
- 19) Not available with Length options 3, 4, 5, R2C and R2D
- 20) Available only with Seal options C, E, F, J, M, N and Q [second line of defense (with glass seal) for all explosion proof options]
- 21) Available with Indicating/adjustment modules E00 and E01
- 22) Not available with Y02
- 23) Available with Housing/Protection options C, D, E, F, L, M, Q, R (dust approvals)
- 24) SIL electronics option 2 available with Approval options 0E, 0G, 0L, 0P and 0T
- 25) Available with Process Fitting/Material options 04, 05, 08, 10, 13 ... 45
- 26) Not available with Process fitting /Material options 04, 05, 08, 10, 13, and 14
- 27) Not available with Process Fitting/Material options 00 and 01
- 28) Available with Housing/Protection/Cable options A, B, C, D, E, F, L, M, R, S, T, and U
- 29) Available with Electronic option 0 only
- 30) Listed Certificates are not available with all configurations, please contact factory for more information
- 31) Not available with Process fitting/Material options 02, 03, 06, 07, 11, and 12 or threaded options below PN 100
- 32) Available with supplementary electronic option A00, SIL electronics
- 33) Modbus only available with Approval options GP and NI and XP-IS / Ex d ia
- 34) Modbus only available with two chamber housing options
- 35) Modbus not available with Supplementary electronic (only for HART) option
- 36) Modbus not available with lateral mount display option

# Level measurement

## Continuous level measurement – Guided wave radar transmitters

SITRANS LG series

Selection and Ordering data	Article No.	Selection and Ordering data	Article No.
<b>SITRANS LG260</b>	<b>7ML5882-</b>	<b>SITRANS LG260</b>	<b>7ML5882-</b>
A guided wave radar sensor for level measurement of solids.		A guided wave radar sensor for level measurement of solids.	
<b>Approvals</b>		Flange DN 100 PN 40 Form C, DIN 2501/316L	<b>14</b>
Ordinary location CE <sup>4)12)</sup>	<b>0A</b>	Flange DN 150 PN 16 Form C, DIN 2501/316L	<b>15</b>
Shipping approval <sup>9)10)</sup>	<b>0B</b>	Flange DN 50 PN 40 EN1092-1 Form B1/316L	<b>16</b>
ATEX II 1G, 1/2G, 2G Ex ia IIC T <sub>6</sub> <sup>4)12)</sup>	<b>0E</b>	Flange DN 80 PN 40 EN1092-1 Form B1/316L	<b>17</b>
ATEX II 1G, 1/2G, 2G Ex ia IIC T <sub>6</sub> + shipping approval GL <sup>9)</sup>	<b>0G</b>	Flange DN 100 PN16 EN1092-1 Form B1/316L	<b>18</b>
ATEX II 1G, 1/2G 2G Ex ia IIC + ATEX II 1D, 1/2D, 1/3D, 2D, Ex t IIIC IP66 T <sup>4)8)10)12)</sup>	<b>0H</b>	Flange 2" 150 lb RF, ANSI B16.5/316L	<b>30</b>
ATEX II 1/2G, 2G Ex d ia IIC T <sub>6</sub> <sup>1)7)12)</sup>	<b>0J</b>	Flange 2" 300 lb RF, ANSI B16.5/316L	<b>32</b>
ATEX II 1/2G, 2G Ex d ia IIC + shipping approval (GL) <sup>1)7)9)10)</sup>	<b>0L</b>	Flange 3" 150 lb RF, ANSI B16.5/316L	<b>33</b>
ATEX II 1/2G, 2G Ex d IIC + ATEX II 1D, 1/2D, 1/3D, 2D, Ex t IIIC IP66 <sup>7)8)12)</sup>	<b>0M</b>	Flange 3" 300 lb RF, ANSI B16.5/316L	<b>34</b>
ATEX II 1D, 1/2D, 1/3D, 2D, Ex t IIIC IP66 <sup>11)12)</sup>	<b>0N</b>	Flange 4" 150 lb RF, ANSI B16.5/316L	<b>35</b>
ATEX II 1/2G, 2G Ex d IIC + shipping approval (GL) <sup>4)9)10)11)</sup>	<b>0Q</b>	Flange 4" 300 lb RF, ANSI B16.5/316L	<b>36</b>
ATEX II 1/2G, 2G Ex d IIC + II 1D, 1/2D, 1/3D, 2D IP66 <sup>8)11)12)</sup>	<b>0R</b>	Flange 6" 150 lb RF, ANSI B16.5/316L	<b>37</b>
ATEX II 1D, 1/2D, 2D IP6x T <sup>8)11)12)</sup>	<b>0S</b>	<b>Electronics</b>	
IEC Ex ia IIC T <sub>6</sub> <sup>12)</sup>	<b>0T</b>	Two-wire 4 ... 20mA/HART	<b>0</b>
IEC Ex ia IIC T <sub>6</sub> + IEC IP6x T <sup>8)11)12)</sup>	<b>0U</b>	Four-wire Modbus <sup>16)17)18)19)</sup>	<b>1</b>
IEC Ex d ia IIC T <sub>6</sub> <sup>1)7)12)</sup>	<b>1A</b>	Two-wire 4...20mA/HART with SIL qualification <sup>14)15)</sup>	<b>2</b>
IEC Ex d ia IIC T <sub>6</sub> + IEC IP6x T <sup>7)8)12)</sup>	<b>1B</b>	Four-wire 4...20mA/HART; 90...253V AC; 50/60Hz <sup>1)3)5)</sup>	<b>3</b>
IEC Ex d IIC T <sub>6</sub> <sup>11)12)</sup>	<b>1C</b>	Four-wire 4...20mA/HART; 9.6...48V DC; 20...42 V AC <sup>1)3)5)</sup>	<b>4</b>
IEC Ex d IIC T <sub>6</sub> + IEC IP6x T <sup>8)11)12)</sup>	<b>1D</b>	Profibus PA	<b>5</b>
FM (NI) Class I, Div. 2, Groups A, B, C, D <sup>12)</sup>	<b>1E</b>	<b>Seal/Process temperature</b>	
FM (NI) Class I, Div. 2, Groups A, B, C, D + shipping approval (GL) <sup>9)10)</sup>	<b>1F</b>	FKM (SHS FPM 70C3 GLT)/-40 ... +80 °C (-40 ... +176 °F)	<b>A</b>
FM (IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F <sup>12)</sup>	<b>1G</b>	FKM (SHS FPM 70C3 GLT)/-40 ... +150 °C (-40 ... +302 °F)	<b>B</b>
FM (IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G + shipping approval (GL) <sup>9)10)</sup>	<b>1H</b>	FFKM (Kalrez 6375)/-20 ... +200 °C (-4 ... +392 °F)	<b>C</b>
FM (XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G <sup>1)7)12)</sup>	<b>1I</b>	EPDM (A+P 75.5/KW75F)/-40 ... +80 °C (-40 ... +176 °F)	<b>D</b>
FM (XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G + shipping approval (GL) <sup>1)7)9)10)</sup>	<b>1J</b>	EPDM (A+P 75.5/KW75F)/-40 ... +150 °C (-40 ... +392 °F)	<b>E</b>
FM (XP) Class I, Div. 1, Groups A, B, C, D <sup>11)12)</sup>	<b>1K</b>	<b>Housing/Protection/Cable</b>	
CSA (NI) Class I, Div. 2, Groups A, B, C, D; (DIP) Class II, III, Div. 1, Groups E, F, G <sup>8)12)</sup>	<b>1L</b>	Plastic IP66/IP67 M20x1.5/blind stopper	<b>A</b>
CSA (IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G <sup>12)</sup>	<b>1M</b>	Plastic IP66/IP67 1/2" NPT/blind stopper	<b>B</b>
CSA (XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G <sup>1)7)12)</sup>	<b>1N</b>	Plastic 2-chamber/IP66/IP67/M20x1.5/blind stopper	<b>C</b>
CSA (XP) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G <sup>11)12)</sup>	<b>1P</b>	Plastic 2-chamber/IP66/IP67 /1/2" NPT/blind stopper	<b>D</b>
	<b>1Q</b>	Aluminium/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	<b>E</b>
	<b>1R</b>	Aluminium/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	<b>F</b>
<b>Probe version/Material</b>		Aluminium double chamber/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	<b>G</b>
Probe exchangeable cable ø 4 mm (0.16 inch) with gravity weight/316	<b>A</b>	Aluminium double chamber/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	<b>H</b>
Probe exchangeable cable ø 6 mm (0.24 inch) with gravity weight/316 <sup>2)</sup>	<b>B</b>	Stainless Steel (precision casting) 316L/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	<b>J</b>
Probe exchangeable rod ø 16 mm (0.63 inch) / 316L <sup>2)6)</sup>	<b>E</b>	Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	<b>K</b>
<b>Process fitting/Material</b>		Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	<b>L</b>
Thread G 3/4" (DIN 3852-A) PN 40/316L	<b>00</b>	Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	<b>M</b>
Thread 3/4" NPT (ASME B1.20.1) PN 40/316L	<b>01</b>	Stainless steel double chamber/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	<b>N</b>
Thread G 1" (DIN 3852-A) PN 40/316L	<b>02</b>	Stainless steel double chamber/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	<b>P</b>
Thread 1" NPT (ASME B1.20.1) PN 40/316L	<b>03</b>	Aluminium/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	<b>Q</b>
Thread G 1 1/2" (DIN 3852-A) PN 40/316L	<b>04</b>	Aluminium double chamber/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	<b>R</b>
Thread 1 1/2" NPT (ASME B1.20.1) PN 40/316L	<b>05</b>		
Thread G 2" (DIN 3852-A) PN 40/316L	<b>06</b>		
Flange DN 50 PN 40 Form C, DIN 2501/316L	<b>10</b>		
Flange DN 80 PN 40 Form C, DIN 2501/316L	<b>12</b>		
Flange DN 100 PN 16 Form C, DIN 2501/316L	<b>13</b>		

# Level measurement

## Continuous level measurement – Guided wave radar transmitters

### SITRANS LG series

Selection and Ordering data	Article No.	Selection and Ordering data	Article No.
<b>SITRANS LG260</b>	<b>7ML5882-</b>	<b>SITRANS LG260</b>	<b>7ML5882-</b>
A guided wave radar sensor for level measurement of solids.		A guided wave radar sensor for level measurement of solids.	
Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	<b>S</b>	<b>Language of display</b>	
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	<b>T</b>	German	<b>L00</b>
<b>Lengths</b>		English	<b>L01</b>
<u>Rod ø16 mm/316L</u>		French	<b>L02</b>
500 mm (19.69 inch)	<b>0</b>	Dutch	<b>L03</b>
501 ... 1 000 mm (19.72 ... 39.37 inch)	<b>1</b>	Italian	<b>L04</b>
1 001 ... 2 000 mm (39.41 ... 78.74 inch)	<b>2</b>	Spanish	<b>L05</b>
2 001 ... 3 000 mm (78.78 ... 118.11 inch)	<b>3</b>	Portuguese	<b>L06</b>
3 001 ... 4 000 mm (118.15 ... 157.48 inch)	<b>4</b>	Russian	<b>L07</b>
4 001 ... 5 000 mm (157.52 ... 196.85 inch)	<b>5</b>	Chinese	<b>L08</b>
5 001 ... 6 000 mm (196.89 ... 216.53 inch)	<b>6</b>	Japanese	<b>L09</b>
<u>Cable lengths ø2 or 4 mm/316</u>		<b>Operating instructions</b>	
501 ... 1 000 mm (19.72 ... 39.37 inch)	<b>9R2E</b>	German	<b>M00</b>
1 001 ... 5 000 mm (39.41 ... 196.85 inch)	<b>9R2F</b>	English	<b>M01</b>
5 001 ... 10 000 mm (196.89 ... 393.70 inch)	<b>9R2G</b>	French	<b>M02</b>
10 001 ... 15 000 mm (393.74 ... 590.55 inch)	<b>9R2H</b>	Spanish	<b>M03</b>
15 001 ... 20 000 mm (590.59 ... 787.40 inch)	<b>9R2J</b>		
20 001 ... 25 000 mm (787.44 ... 984.25 inch)	<b>9R2K</b>		
25 001 ... 30 000 mm (984.29 ... 1 181.10 inch)	<b>9R2L</b>		
30 001 ... 35 000 mm (1 181.14 ... 1 377.95 inch)	<b>9R2M</b>		
35 001 ... 40 000 mm (1 377.99 ... 1 574.80 inch)	<b>9R2N</b>		
40 001 ... 45 000 mm (1 574.84 ... 1 771.65 inch)	<b>9R2P</b>		
45 001 ... 50 000 mm (1 771.69 ... 1 968.50 inch)	<b>9R2Q</b>		
50 001 ... 55 000 mm (1 968.54 ... 2 165.35 inch)	<b>9R2R</b>		
55 001 ... 60 000 mm (2 165.39 ... 2 362.20 inch)	<b>9R2S</b>		
<u>Cable lengths ø6 mm/316L</u>			
500 mm (19.69 inch)	<b>9R4A</b>		
501 ... 1 000 mm (19.72 ... 39.37 inch)	<b>9R4B</b>		
1 001 ... 5 000 mm (39.41 ... 196.85 inch)	<b>9R4C</b>		
5 001 ... 10 000 mm (196.89 ... 393.70 inch)	<b>9R4D</b>		
10 001 ... 15 000 mm (393.74 ... 590.55 inch)	<b>9R4E</b>		
15 001 ... 20 000 mm (590.59 ... 787.40 inch)	<b>9R4F</b>		
20 001 ... 25 000 mm (787.44 ... 984.25 inch)	<b>9R4G</b>		
25 001 ... 30 000 mm (984.29 ... 1 181.10 inch)	<b>9R4H</b>		
30 001 ... 35 000 mm (1 181.14 ... 1 377.95 inch)	<b>9R4J</b>		
35 001 ... 40 000 mm (1 377.99 ... 1 574.80 inch)	<b>9R4K</b>		
40 001 ... 45 000 mm (1 574.84 ... 1 771.65 inch)	<b>9R4L</b>		
45 001 ... 50 000 mm (1 771.69 ... 1 968.50 inch)	<b>9R4M</b>		
50 001 ... 55 000 mm (1 968.54 ... 2 165.35 inch)	<b>9R4N</b>		
55 001 ... 60 000 mm (2 165.39 ... 2 362.20 inch)	<b>9R4P</b>		
<b>Further designs (mandatory)</b>			
Please add <b>"-Z"</b> to Order No. and specify Order code(s).			
<b>Supplementary electronics</b>			
Without <sup>1)</sup>	<b>A00</b>		
Additional current output 4 ... 20 mA <sup>1)</sup>	<b>A01</b>		
<b>Rod mounted</b>			
Without Rod, applicable for coax or cable probe types only	<b>C00</b>		
Mounted	<b>C01</b>		
Not mounted	<b>C02</b>		
<b>Local display interface</b>			
Without	<b>E00</b>		
Mounted	<b>E01</b>		
Laterally mounted <sup>1)</sup>	<b>E02</b>		

# Level measurement

## Continuous level measurement – Guided wave radar transmitters

SITRANS LG series

Selection and Ordering data	Order code	Accessories
<b>Further designs (optional)</b>		
Please add <b>"-Z"</b> to Order No. and specify Order code(s).		Sitrans LG, GWR sensor Display Module <b>A5E34143449</b>
Enter the total insertion length in plain text description	<b>Y01</b>	SITRANS RD100, loop powered display - see Chapter 7 <b>7ML5741-...</b>
Cleaning included certificate: oil, grease and silicone free	<b>W01</b>	SITRANS RD200, universal input display with Modbus conversion - see Chapter 7 <b>7ML5740-...</b>
Identification Label (measurement loop) stainless steel	<b>Y17</b>	SITRANS RD300, dual line display with totalizer and linearization curve and Modbus conversion - see Chapter 7 <b>7ML5744-...</b>
Identification Label (measurement loop) Foil	<b>Y18</b>	SITRANS RD500 web, universal remote monitoring solution for instrumentation - see Chapter 7 <b>7ML5750-...</b>
3.1 Certificate instrument <sup>13)</sup>	<b>C12</b>	For applicable back up point level switch - see point level measurement section
3.1 Certificate material (NACE0175) <sup>13)</sup>	<b>D07</b>	
3.1-Certificate instrument with test data <sup>13)</sup>	<b>C25</b>	
2.2-Certificate material <sup>13)</sup>	<b>C15</b>	
Quality/test plan <sup>13)</sup>	<b>C26</b>	
Dye penetration test + 3.1 certificate/instrument <sup>13)</sup>	<b>C13</b>	1) Available only with Housing/Protection/Cable Options G, H, N, P
X-ray test + 3.1 certificate/instrument <sup>13)</sup>	<b>C14</b>	2) Not available with Process/Fitting/Material options 00, 01, 02, and 03
Positive material identification test + 3.1 certificate/instrument <sup>13)</sup>	<b>C16</b>	3) Available with Supplementary electronic option A00 and Indicating/adjustment modules E00, E01
Roughness test + 3.1 certificate/instrument <sup>13)</sup>	<b>C18</b>	4) Available with Supplementary electronic option A01
Pressure test + 3.1 certificate/instrument <sup>13)</sup>	<b>C31</b>	5) Not Available with Approval options 0B ... 0H 0L, 0Q, 1B, 1F, 1G, 1J, 1L (not available with Intrinsically Safe and shipping approvals)
Helium leak test + 3.1 certificate/instrument <sup>13)</sup>	<b>C32</b>	6) Available with Rod Mounted options C01 and C02
Ferrite measuring accuracy to DIN32514-1 + 3.1 certificate/instrument <sup>13)</sup>	<b>C60</b>	7) Available with Indicating/adjustment modules E00 and E01
Pressure test according to Norsok + 3.1 certificate/instrument <sup>13)</sup>	<b>C61</b>	8) Available with Housing Protection options E, F, G, H, J, K, N, P
5 point calibration certificate + 3.1 certificate/instrument <sup>13)</sup>	<b>C62</b>	9) Not available with Housing/Protection/Cable options L, M, and T
		10) Available with Electronic option 0 only
		11) Available with Seal/Process temperature option C only
		12) Available with Version/Material option E only
		13) Listed Certificates are not available with all configurations, please contact factory for more information
		14) SIL electronic option 2 available with approval options 0E, 0G, 0N, 0Q, 0T, and 1C
		15) Available with supplementary electronic option A00, SIL electronics
		16) Modbus available only with Approval options GP and NI and XP-IS / Ex d ia
		17) Modbus available only with two chamber housing options
		18) Modbus not available with supplementary electronic (only for HART) option
		19) Modbus not available with lateral mount display option
<b>Operating Instructions</b>	Article No.	
<b>German</b>		
4 ... 20 mA/HART - two-wire	<b>PBD-51041020</b>	
4 ... 20 mA/HART - two-wire Rod and cable probe with SIL qualification	<b>PBD-51041379</b>	
4 ... 20 mA/HART - four-wire	<b>PBD-51041021</b>	
Modbus	<b>PBD-51041022</b>	
Profibus PA	<b>PBD-51041023</b>	
<b>English</b>		
4 ... 20 mA/HART - two-wire	<b>PBD-51041057</b>	
4 ... 20 mA/HART - two-wire Rod and cable probe with SIL qualification	<b>PBD-51041389</b>	
4 ... 20 mA/HART - four-wire	<b>PBD-51041058</b>	
Modbus	<b>PBD-51041059</b>	
Profibus PA	<b>PBD-51041060</b>	
<b>French</b>		
4 ... 20 mA/HART - two-wire	<b>PBD-51041131</b>	
4 ... 20 mA/HART - two-wire Rod and cable probe with SIL qualification	<b>PBD-51041409</b>	
4 ... 20 mA/HART - four-wire	<b>PBD-51041132</b>	
Modbus	<b>PBD-51041133</b>	
Profibus PA	<b>PBD-51041134</b>	
<b>Spanish</b>		
4 ... 20 mA/HART - two-wire	<b>PBD-51041094</b>	
4 ... 20 mA/HART - two-wire Rod and cable probe with SIL qualification	<b>PBD-51041399</b>	
4 ... 20 mA/HART - four-wire	<b>PBD-51041095</b>	
Modbus	<b>PBD-51041096</b>	
Profibus PA	<b>PBD-51041097</b>	

# Level measurement

## Continuous level measurement – Guided wave radar transmitters

### SITRANS LG series

Selection and Ordering data	Article No.
<b>SITRANS LG270</b>	<b>7ML5883-</b>
A guided wave radar sensor for continuous level and interface measurement of liquids in aggressive applications	
<b>Approvals</b>	
Ordinary location CE <sup>3)</sup>	<b>0A</b>
Shipping approval <sup>17)18)19)</sup>	<b>0B</b>
ATEX II 1G, 1/2G, 2G Ex ia IIC T6 <sup>3)</sup>	<b>0E</b>
ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + shipping approval <sup>17)18)19)</sup>	<b>0G</b>
ATEX II 1G, 1/2G 2G Ex ia IIC + ATEX II 1D, 1/2D, 2D IP6x <sup>3)16)</sup>	<b>0H</b>
ATEX II 1/2G, 2G Ex d ia IIC T6 <sup>1)10)14)</sup>	<b>0J</b>
ATEX II 1/2G, 2G Ex d ia IIC + ship (GL) <sup>1)10)14)17)18)19)</sup>	<b>0L</b>
ATEX II 1/2G, 2G Ex d ia IIC + ATEX II 1/2D, 2D IP6x <sup>10)14)16)</sup>	<b>0M</b>
ATEX II 1/2G, 2G Ex d IIC T6 <sup>11)</sup>	<b>0N</b>
ATEX II 1/2G, 2G Ex d IIC + ship approval (GL) <sup>3)17)18)19)</sup>	<b>0Q</b>
ATEX II 1/2G, 2G Ex d IIC + ATEX II 1/2D, 2D IP6x <sup>11)16)</sup>	<b>0R</b>
ATEX II 1D, 1/2D, 2D IP6x T <sup>16)</sup>	<b>0S</b>
IEC Ex ia IIC T6	<b>0T</b>
IEC Ex ia IIC T6 + IEC IP6x T tD <sup>16)</sup>	<b>0U</b>
IEC Ex d ia IIC T6 <sup>1)10)14)</sup>	<b>1A</b>
IEC Ex d ia IIC T6 + IEC IP6x T tD <sup>10)14)16)</sup>	<b>1B</b>
IEC Ex d IIC T6 <sup>11)</sup>	<b>1C</b>
IEC Ex d IIC T6 + IEC IP6x T tD <sup>11)16)</sup>	<b>1D</b>
FM (NI) Class I, Div.2, Groups A, B, C, D	<b>1F</b>
FM (NI) Class I, Div.2, Groups A, B, C, D + ship approval (GL) <sup>17)18)19)</sup>	<b>1G</b>
FM (IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F	<b>1H</b>
FM (IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G + ship approval (GL) <sup>17)18)19)</sup>	<b>1J</b>
FM (XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G <sup>1)10)14)</sup>	<b>1K</b>
FM (XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G + shipping approval (GL) <sup>1)10)17)18)19)</sup>	<b>1L</b>
FM (XP) Class I, Div.1, Groups A, B, C, D	<b>1M</b>
CSA (NI) Class I, Div. 2, Groups A, B, C, D; (DIP) Class II, III, Div.1, Groups E, F, G <sup>16)</sup>	<b>1N</b>
CSA (IS) Class I, II, III, Div.1, Groups A, B, C, D, E, F, G	<b>1P</b>
CSA (XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G <sup>1)10)14)</sup>	<b>1Q</b>
CSA (XP) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G <sup>11)</sup>	<b>1R</b>
<b>Probe version/Material</b>	
Probe exchangeable cable ø 2 mm (0.08 inch) with gravity weight/316L <sup>4)7)</sup>	<b>A</b>
Probe exchangeable cable ø2 mm (0.08 inch) center weight/316L <sup>5)7)</sup>	<b>B</b>
Probe exchangeable cable ø4 mm (0.16 inch) with gravity weight/316L <sup>4)7)</sup>	<b>C</b>
Probe exchangeable cable ø4 mm (0.16 inch) with center weight/316L <sup>5)7)</sup>	<b>D</b>
Probe exchangeable rod ø 16 mm (0.63 inch) /316L <sup>4)7)9)</sup>	<b>E</b>
Probe coax version ø 42.2 mm (1.66 inch) with multiple hole/316L <sup>4)7)</sup>	<b>F</b>
Probe coax version ø 42.2 mm (1.66 inch); multiple hole; reference distances/316L <sup>4)7)13)</sup>	<b>G</b>
<b>Process fitting/Material</b>	
Thread G 1 1/2" (DIN 3852-A) PN400/316L	<b>00</b>
Thread 1 1/2" NPT (ASME B1.20.1) PN400/316L	<b>01</b>
Thread 1 1/2" NPT (ASME B1.20.1) PN400/C22	<b>02</b>

Selection and Ordering data	Article No.
<b>SITRANS LG270</b>	<b>7ML5883-</b>
A guided wave radar sensor for continuous level and interface measurement of liquids in aggressive applications	
Flange DN 50 PN 40 Form C, DIN 2501/316L	<b>10</b>
Flange DN 50 PN 40 form V13, DIN 2513/316L	<b>11</b>
Flange DN 65 PN 64 Form V13, DIN 2501/316L	<b>12</b>
Flange DN 80 PN 40 Form C, DIN 2501/316L	<b>13</b>
Flange DN 80 PN 40 Form V13, DIN 2501/316L	<b>14</b>
Flange DN 80 PN 100 Form L, DIN 2501/316L	<b>15</b>
Flange DN 100 PN 16 Form C, DIN 2501/316L	<b>16</b>
Flange DN 100 PN 16 Form C, DIN 2501/316L	<b>17</b>
Flange DN 100 PN 40 Form C, DIN 2501/316L	<b>18</b>
Flange DN 100 PN 40 Form V13, DIN 2513/316L	<b>20</b>
Flange DN 150 PN 16 Form C, DIN 2501/316L	<b>21</b>
Flange DN 50 PN 40 EN1092-1 Form B1/316L	<b>22</b>
Flange DN 100 PN 160 GOST 12815-80.7/316L	<b>23</b>
Flange DN 80 PN 160 Form C, DIN 2501/316L	<b>60</b>
Flange DN 80 PN 250 Form L, DIN 2501/316L	<b>61</b>
Flange DN 50 PN 160, EN1092-1 Form B1/316L	<b>62</b>
Flange DN 50 PN 160, EN1092-1 Form B2/316L	<b>63</b>
Flange DN 50 PN 320, EN1092-1 Form B1/316L	<b>64</b>
Flange DN 65 PN 250, EN1092-1 Form B1/316L	<b>65</b>
Flange DN 100 PN 160, EN1092-1 Form B2/316L	<b>66</b>
Flange 2" 150 lb RF, ANSI B16.5/316L	<b>30</b>
Flange 2" 300 lb RF, ANSI B16.5/316L	<b>31</b>
Flange 2" 600 lb RF, ANSI B16.5/316L	<b>32</b>
Flange 2" 1 500 lb RF, ANSI B16.5/316L	<b>33</b>
Flange 3" 150 lb RF, ANSI B16.5/316L	<b>34</b>
Flange 3" 300 lb RF, ANSI B16.5/316L	<b>35</b>
Flange 3" 600 lb RF, ANSI B16.5/316L	<b>36</b>
Flange 3" 900 lb RF, ANSI B16.5/316L	<b>37</b>
Flange 3" 2 500 lb RF, ANSI B16.5/316L	<b>38</b>
Flange 3 1/2" 600 lb RF, ANSI B16.5/316L	<b>40</b>
Flange 4" 150 lb RF, ANSI B16.5/316L	<b>41</b>
Flange 4" 300 lb RF, ANSI B16.5/316L	<b>42</b>
Flange 4" 600 lb RF, ANSI B16.5/316L	<b>43</b>
Flange 6" 150 lb RF, ANSI B16.5/316L	<b>44</b>
Flange 6" 300 lb RF, ANSI B16.5/316L	<b>45</b>
Flange 6" 600 lb RF, ANSI B16.5/316L	<b>46</b>
Flange 2"150 lb Fisher special return/316L	<b>47</b>
Flange 2" 900 lb RF, ANSI B16.5/316L	<b>50</b>
Flange 3" 1 500 lb RF, ANSI B16.5/316L	<b>51</b>
Flange 4" 900 lb RF, ANSI B16.5/316L	<b>52</b>
Flange 4" 1 500 lb RF, ANSI B16.5/316L	<b>53</b>
Flange 4" 2 500 lb RF, ANSI B16.5/316L	<b>54</b>
<b>Electronics</b>	
Two-wire 4 ... 20mA/HART	<b>0</b>
Four-wire Modbus <sup>23)24)25)26)</sup>	<b>1</b>
Two-wire 4...20mA/HART with SIL qualification <sup>21)22)</sup>	<b>2</b>
Four-wire 4...20mA/HART; 90...253V AC; 50/60Hz <sup>1)2)6)</sup>	<b>3</b>
Four-wire 4...20mA/HART; 9.6...48V DC; 20...42 V AC <sup>1)2)6)</sup>	<b>4</b>
Profibus PA	<b>5</b>
<b>Seal/Second line of defense/Process temperature</b>	
Ceramic-graphite/with glass seal/ -196 ... +280 °C (-321 ... +536 °F)	<b>A</b>
Ceramic-graphite /with glass seal/ -196 ... +450 °C (-321 ... +842 °F)	<b>B</b>
<b>Housing/Protection/Cable</b>	
Plastic IP66/IP67 M20x1.5/blind stopper	<b>A</b>
Plastic IP66/IP67 1/2" NPT/blind stopper	<b>B</b>

# Level measurement

## Continuous level measurement – Guided wave radar transmitters

SITRANS LG series

Selection and Ordering data	Article No.	Selection and Ordering data	Article No.
<b>SITRANS LG270</b>	<b>7ML5883-</b>	<b>SITRANS LG270</b>	<b>7ML5883-</b>
A guided wave radar sensor for continuous level and interface measurement of liquids in aggressive applications		A guided wave radar sensor for continuous level and interface measurement of liquids in aggressive applications	
Aluminium/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	<b>C</b>	<b>Further designs (mandatory)</b>	
Aluminium/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	<b>D</b>	Please add <b>"-Z"</b> to Order No. and specify Order code(s).	
Aluminium double chamber/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	<b>E</b>	<b>Supplementary electronics</b>	
Aluminium double chamber/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	<b>F</b>	Without	<b>A00</b>
Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	<b>L</b>	Additional current output 4 ... 20 mA <sup>1)</sup>	<b>A01</b>
Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	<b>M</b>	<b>Dimensions centering weight (diameter/height)</b>	
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	<b>N</b>	Without	<b>B00</b>
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	<b>P</b>	ø40/30 mm	<b>B01</b>
Stainless steel double chamber/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	<b>Q</b>	ø45/30 mm (for 2 inch tubes)	<b>B02</b>
Stainless steel double chamber/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	<b>R</b>	ø75/30 mm (for 3 inch tubes)	<b>B03</b>
Aluminium/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	<b>S</b>	ø95/30 mm (for 4 inch tubes)	<b>B04</b>
Aluminium double chamber/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	<b>T</b>	ø1.57/1.18 inch (for 2 inch schedule 160)	<b>B05</b>
Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) M20x1.5/Cable gland stainless steel	<b>U</b>	ø1.77/ 1.18 inch (for 2 inch schedule 40/80)	<b>B06</b>
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	<b>V</b>	ø2.95/1.18 inch (for 3 inch schedule 10/40)	<b>B07</b>
		ø3.74/ 1.18 inch (for 4 inch schedule 80)	<b>B08</b>
<b>Lengths</b>		<b>Rod mounted</b>	
<u>Rod ø16 mm/316L</u>		Without Rod, applicable for coax or cable probe types only <sup>8)</sup>	<b>C00</b>
300 mm (11.81 inch) <sup>15)</sup>	<b>0</b>	Mounted	<b>C01</b>
500 mm (19.69 inch) <sup>15)</sup>	<b>1</b>	Not mounted	<b>C02</b>
501 ... 1 000 mm (19.72 ... 39.37 inch) <sup>15)</sup>	<b>2</b>	<b>Local display interface</b>	
1 001 ... 2 000 mm (39.41 ... 78.74 inch) <sup>15)</sup>	<b>3</b>	Without	<b>E00</b>
2 001 ... 3 000 mm (78.78 ... 118.11 inch) <sup>15)</sup>	<b>4</b>	Mounted	<b>E01</b>
3 001 ... 4 000 mm (118.15 ... 157.48 inch) <sup>15)</sup>	<b>5</b>	Laterally mounted <sup>1)</sup>	<b>E02</b>
4 001 ... 5 000 mm (157.52 ... 196.85 inch) <sup>15)</sup>	<b>6</b>	<b>Language of display</b>	
5 001 ... 6 000 mm (196.89 ... 216.53 inch) <sup>15)</sup>	<b>7</b>	German	<b>L00</b>
<u>Cable lengths ø2 or 4 mm/316L</u>		English	<b>L01</b>
501 ... 1 000 mm (19.72 ... 39.37 inch)	<b>9R2E</b>	French	<b>L02</b>
1 000 ... 5 000 mm (39.37 ... 196.85 inch)	<b>9R2F</b>	Dutch	<b>L03</b>
5 001 ... 10 000 mm (196.89 ... 393.70 inch)	<b>9R2G</b>	Italian	<b>L04</b>
10 001 ... 15 000 mm (393.74 ... 590.55 inch)	<b>9R2H</b>	Spanish	<b>L05</b>
15 001 ... 20 000 mm (590.59 ... 787.40 inch)	<b>9R2J</b>	Portuguese	<b>L06</b>
20 001 ... 25 000 mm (787.44 ... 984.25 inch)	<b>9R2K</b>	Russian	<b>L07</b>
25 001 ... 30 000 mm (984.29 ... 1 181.10 inch)	<b>9R2L</b>	Chinese	<b>L08</b>
30 001 ... 35 000 mm (1 181.14 ... 1 377.95 inch)	<b>9R2M</b>	Japanese	<b>L09</b>
35 001 ... 40 000 mm (1 377.99 ... 1 574.80 inch)	<b>9R2N</b>	<b>Operating instructions</b>	
40 001 ... 45 000 mm (1 574.84 ... 1 771.65 inch)	<b>9R2P</b>	German	<b>M00</b>
45 001 ... 50 000 mm (1 771.69 ... 1 968.50 inch)	<b>9R2Q</b>	English	<b>M01</b>
50 001 ... 55 000 mm (1 968.54 ... 2 165.35 inch)	<b>9R2R</b>	French	<b>M02</b>
55 001 ... 60 000 mm (2 165.39 ... 2 362.20 inch)	<b>9R2S</b>	Spanish	<b>M03</b>
<u>Coax ø42.2 mm/316L</u>			
300 ... 1 000 mm (11.81 ... 39.37 inch) <sup>15)</sup>	<b>9R3G</b>		
1 001 ... 2 000 mm (39.41 ... 78.74 inch) <sup>15)</sup>	<b>9R3H</b>		
2 001 ... 3 000 mm (78.78 ... 118.11 inch) <sup>15)</sup>	<b>9R3J</b>		
3 001 ... 4 000 mm (118.15 ... 157.48 inch) <sup>15)</sup>	<b>9R3K</b>		
4 001 ... 5 000 mm (157.52 ... 196.85 inch) <sup>15)</sup>	<b>9R3L</b>		
5 001 ... 6 000 mm (196.89 ... 236.22 inch) <sup>15)</sup>	<b>9R3M</b>		





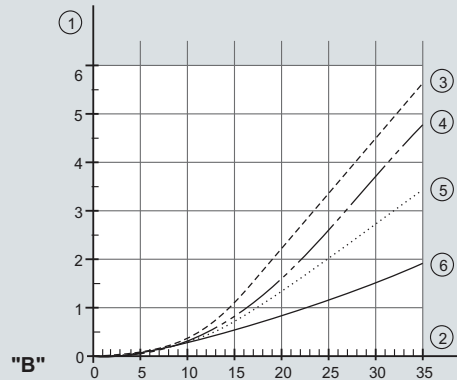
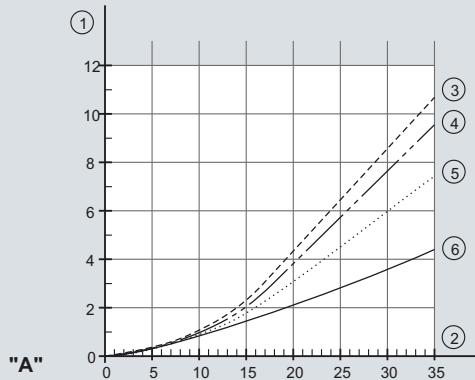
# Level measurement

## Continuous level measurement – Guided wave radar transmitters

SITRANS LG series

### Characteristics Curves

#### SITRANS LG260, Maximum tensile load with cereals and plastic granules - cable: $\varnothing$ 4 mm (0.157 inch)



A. Cereals

B. Plastic granules

1. Tensile force in kN (the determined value must be multiplied with safety factor 2)

2. Cable length in m

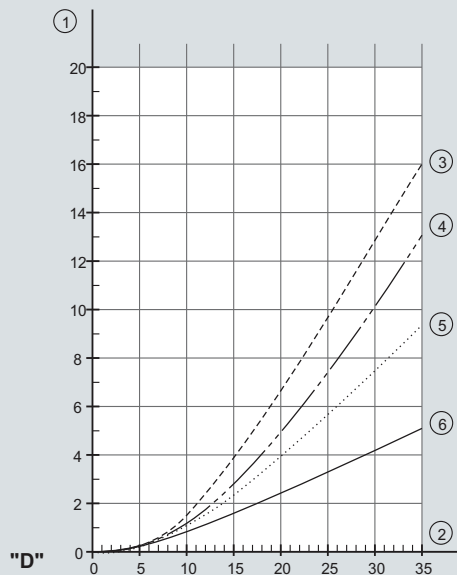
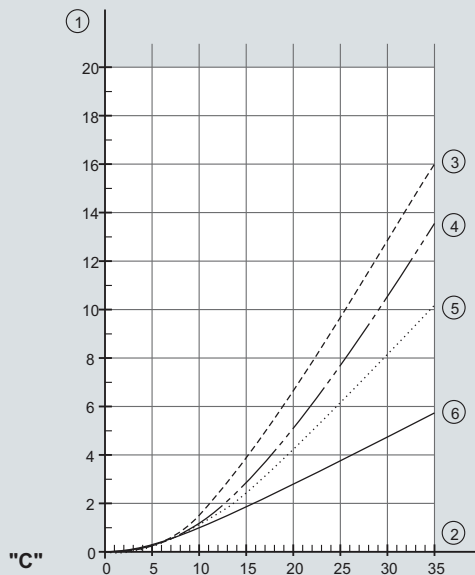
3. Vessel diameter 12 m (39.37 ft)

4. Vessel diameter 9 m (29.53 ft)

5. Vessel diameter 6 m (19.69 ft)

6. Vessel diameter 3 m (9.843 ft)

#### SITRANS LG260, Maximum tensile load with sand and cement - cable: $\varnothing$ 4 mm (0.157 inch)



C. Sand

D. Cement

1. Tensile force in kN (the determined value must be multiplied with safety factor 2)

2. Cable length in m

3. Vessel diameter 12 m (39.37 ft)

4. Vessel diameter 9 m (29.53 ft)

5. Vessel diameter 6 m (19.69 ft)

6. Vessel diameter 3 m (9.843 ft)

SITRANS LG260, maximum tensile load curves

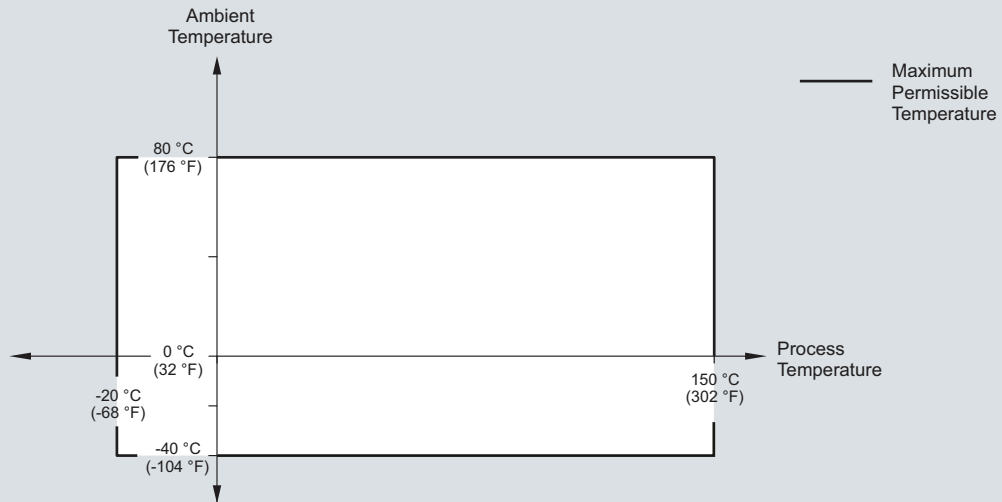
# Level measurement

## Continuous level measurement – Guided wave radar transmitters

### SITRANS LG series

#### Characteristics Curves

SITRANS LG240, Ambient temperature/process temperature, standard version



SITRANS LG240, ambient temperature/process temperature curves

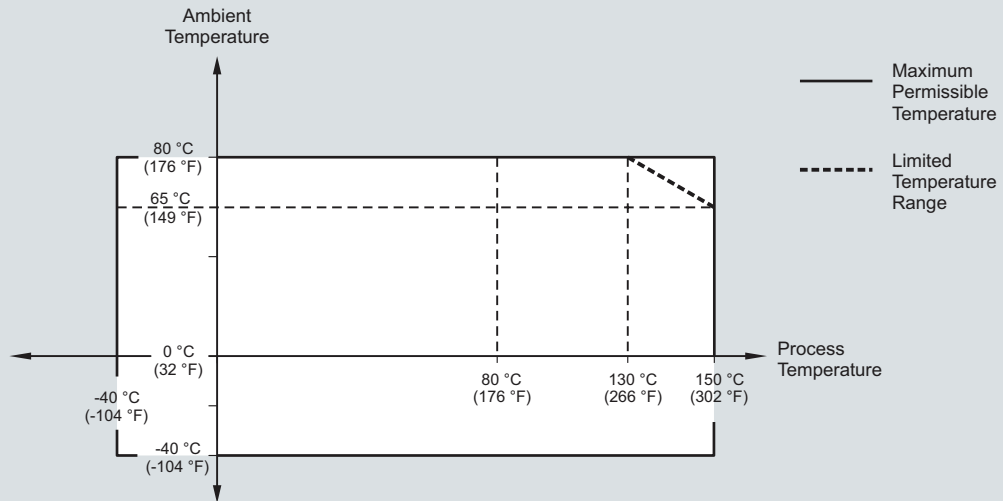
# Level measurement

## Continuous level measurement – Guided wave radar transmitters

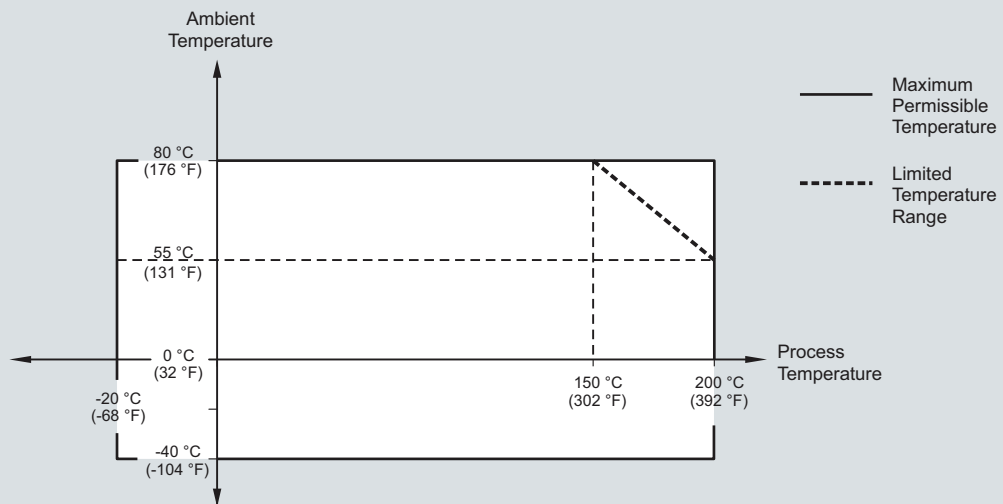
SITRANS LG series

### Characteristics Curves

SITRANS LG250, Ambient temperature/process temperature, standard version



SITRANS LG250, Ambient temperature/process temperature, temperature adapter version



SITRANS LG250, ambient temperature/process temperature curves

4

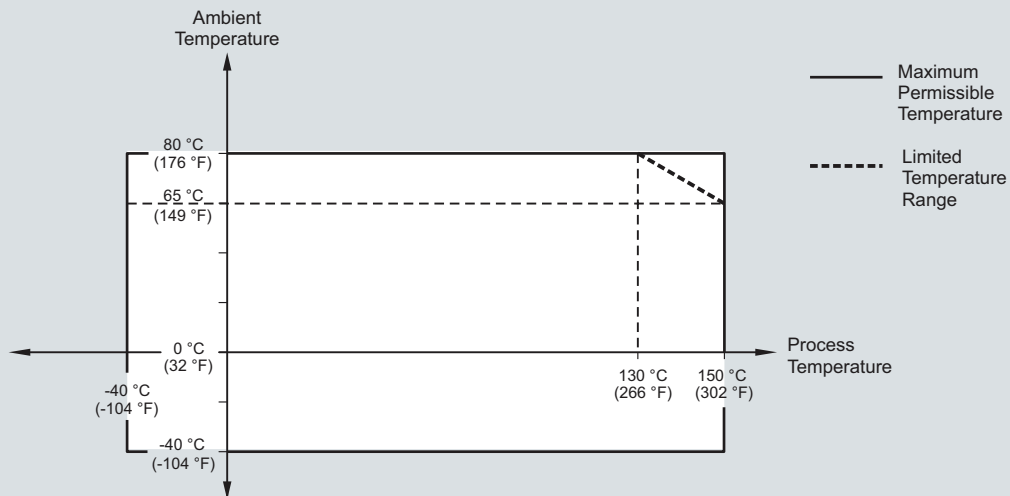
# Level measurement

## Continuous level measurement – Guided wave radar transmitters

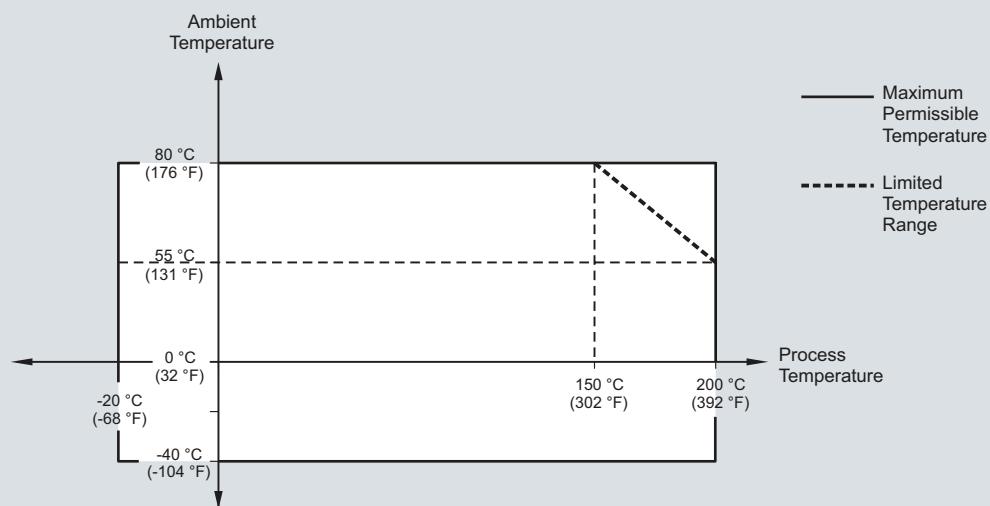
### SITRANS LG series

#### Characteristics Curves

**SITRANS LG260, Ambient temperature/process temperature, standard version**  
**Cable version with  $\varnothing$  4 mm (0.157 inch)**  
**Cable version, PA coated with  $\varnothing$  6 mm (0.236 inch)**



**SITRANS LG260, Ambient temperature/process temperature, temperature adapter version**  
**Cable version with  $\varnothing$  4 mm (0.157 inch)**  
**Cable version, PA coated with  $\varnothing$  6 mm (0.236 inch)**



SITRANS LG260, ambient temperature/process temperature curves

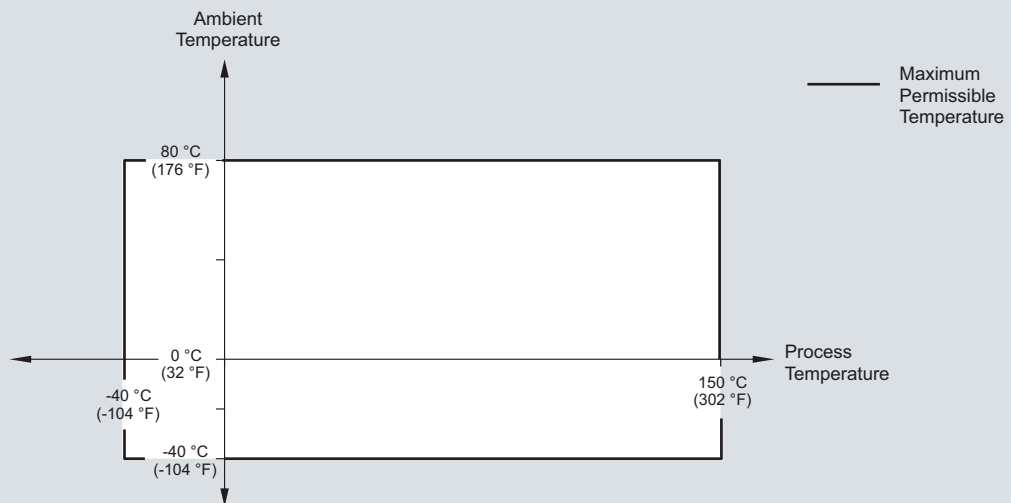
# Level measurement

## Continuous level measurement – Guided wave radar transmitters

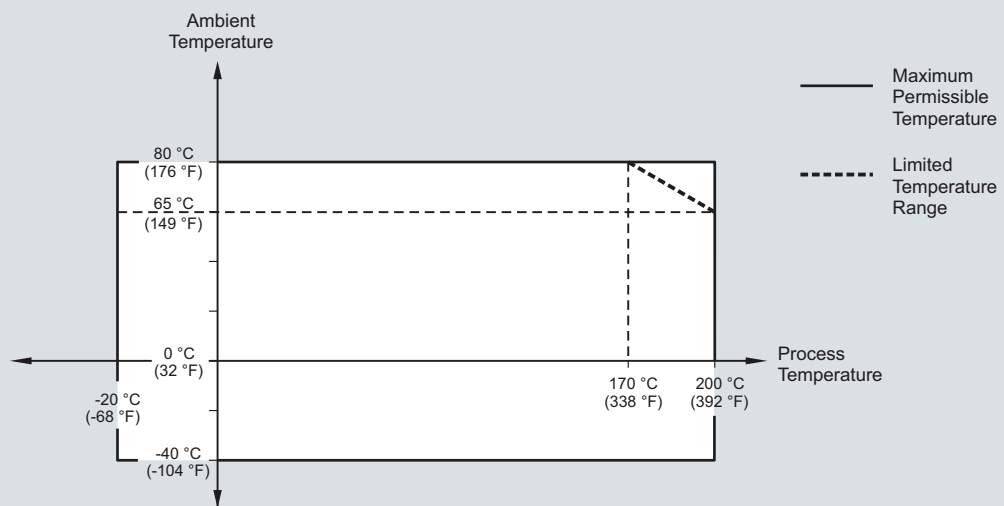
SITRANS LG series

### Characteristics Curves

**SITRANS LG260, Ambient temperature/process temperature, standard version**  
**Cable version with  $\varnothing$  6 mm (0.236 inch)**  
**Cable version, PA coated with  $\varnothing$  11 mm (0.433 inch)**



**SITRANS LG260, Ambient temperature/process temperature, temperature adapter version**  
**Cable version with  $\varnothing$  6 mm (0.236 inch)**  
**Cable version, PA coated with  $\varnothing$  11 mm (0.433 inch)**



SITRANS LG260, ambient temperature/process temperature curves

# Level measurement

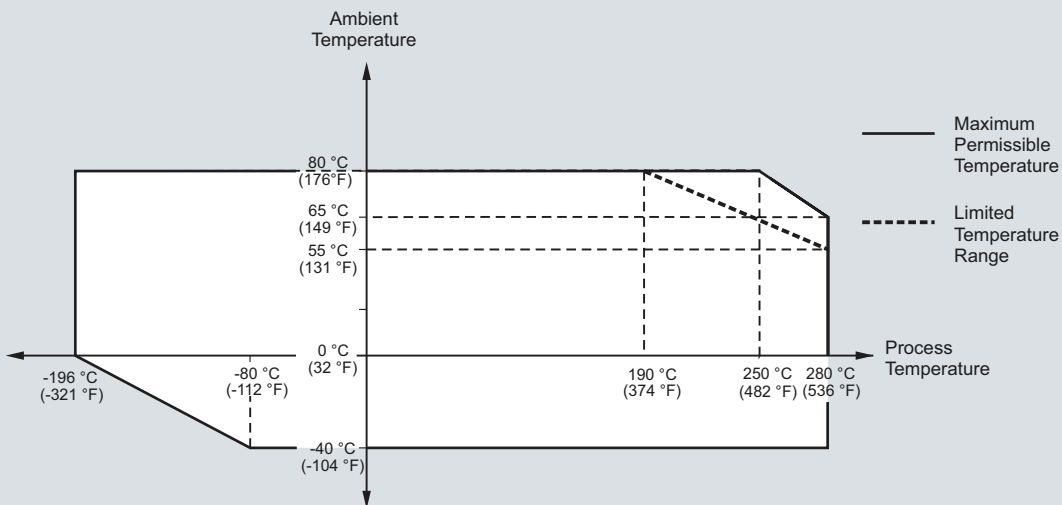
## Continuous level measurement – Guided wave radar transmitters

### SITRANS LG series

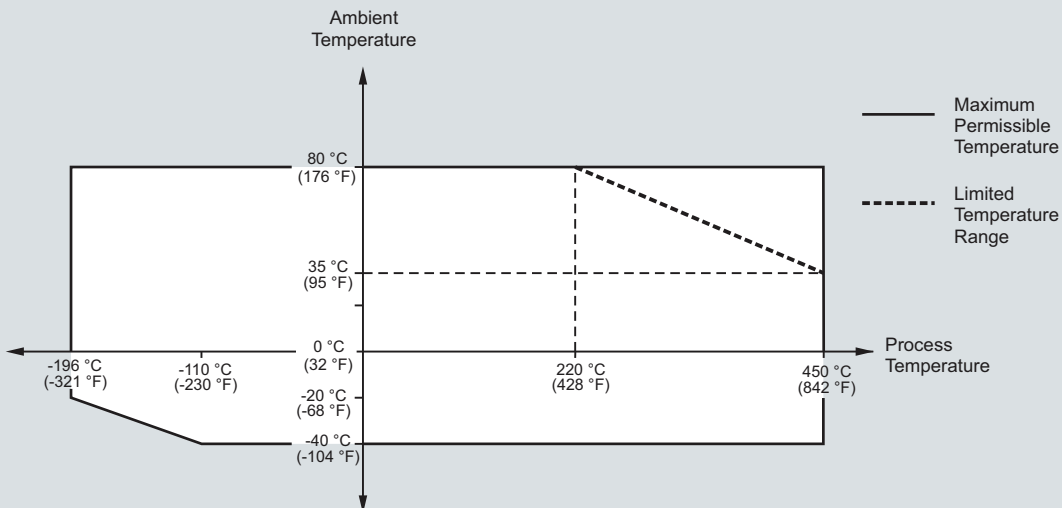
#### Characteristics Curves

4

**SITRANS LG270, Ambient temperature /process temperature ( -196 ... +280 °C/-321 ... +536 °F version)**



**SITRANS LG270, Ambient temperature/process temperature ( -196 ... +450 °C/-321 ... +842 °F version)**



SITRANS LG270, ambient temperature/process temperature curves

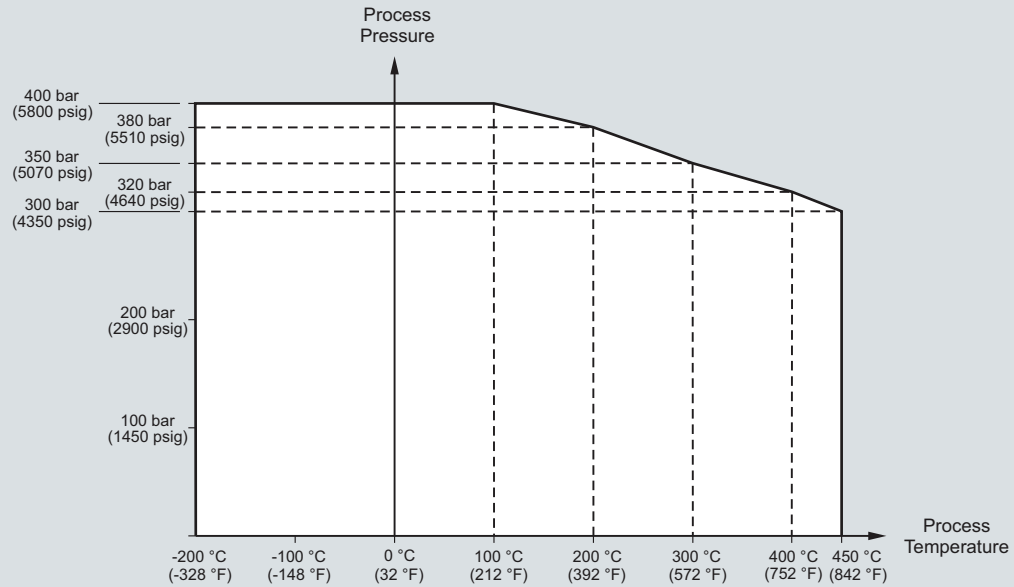
# Level measurement

## Continuous level measurement – Guided wave radar transmitters

SITRANS LG series

### Characteristics Curves

SITRANS LG270, Process pressure/process temperature ( -196 ... +450 °C/-321 ... +842 °F version)



SITRANS LG270, process pressure/process temperature curve



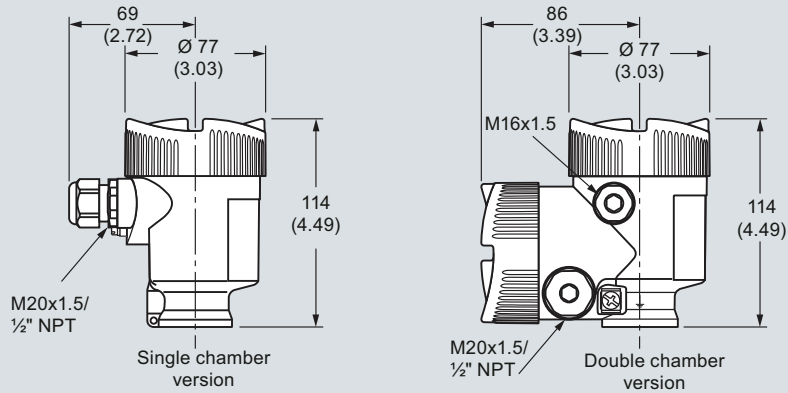
# Level measurement

## Continuous level measurement – Guided wave radar transmitters

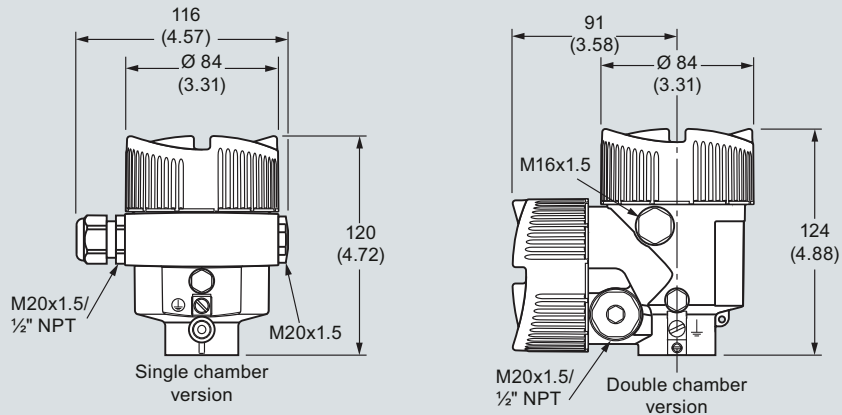
### SITRANS LG series

#### Dimensional drawings

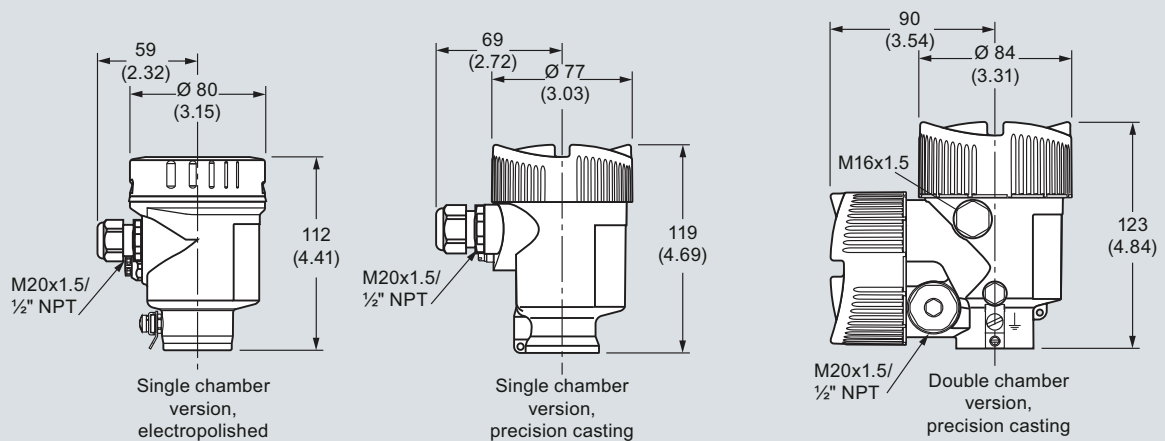
##### LG Series plastic housing



##### LG Series aluminum housing



##### LG Series stainless steel housing



Note: For integrated display and adjustment module the housing is 9 (0.35) higher for all housing options

SITRANS LG series, dimensions in mm (inch)

# Level measurement

## Continuous level measurement – Guided wave radar transmitters

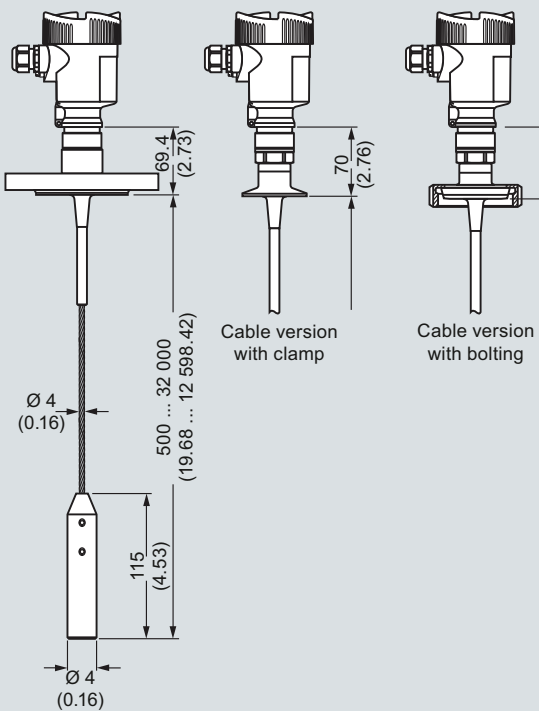
SITRANS LG series

Dimensional drawings

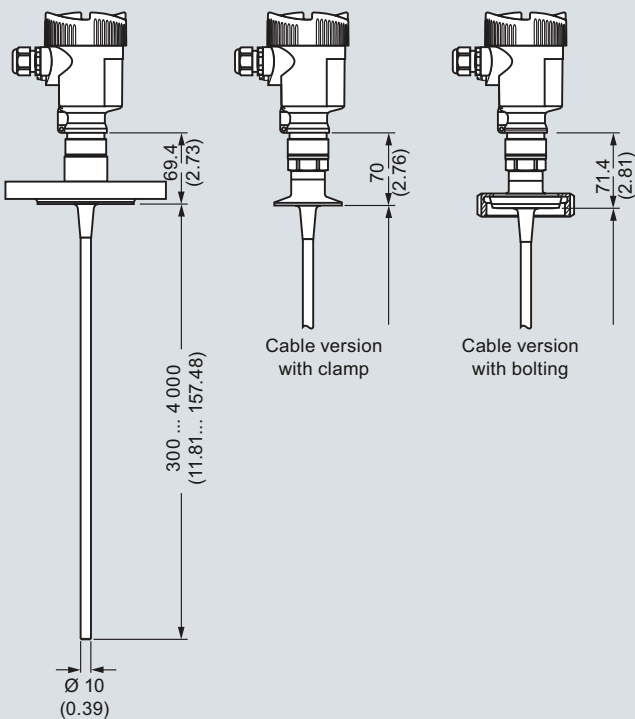
4

SITRANS LG240

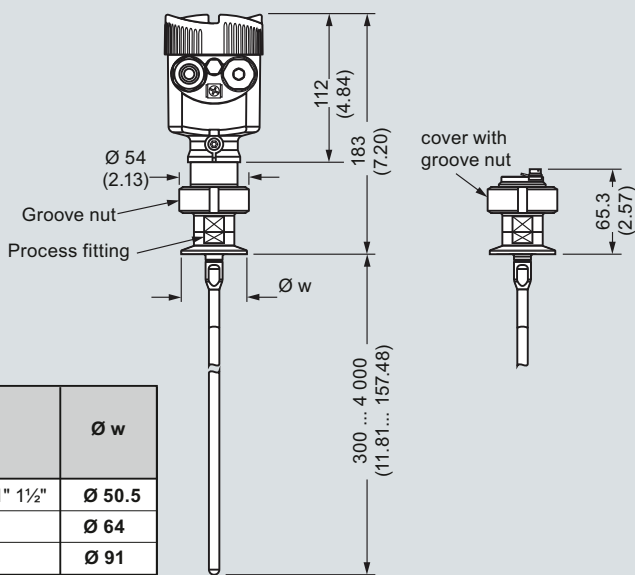
Cable version Ø 4 (0.157), PFA coated



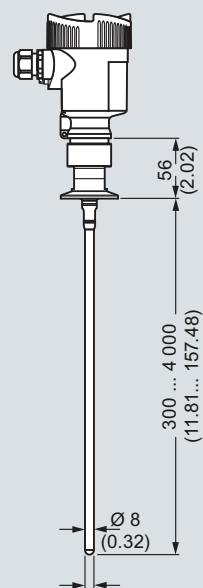
Rod version Ø 10 (0.394), PFA coated



Autoclaved version



Rod version Ø 8 (0.315), polished



	Ø w
DIN DN25 DN32 DN40/ 1" 1½"	Ø 50.5
DIN DN50/ 2"	Ø 64
DIN DN65/ 3"	Ø 91

SITRANS LG240, dimensions in mm (inch)

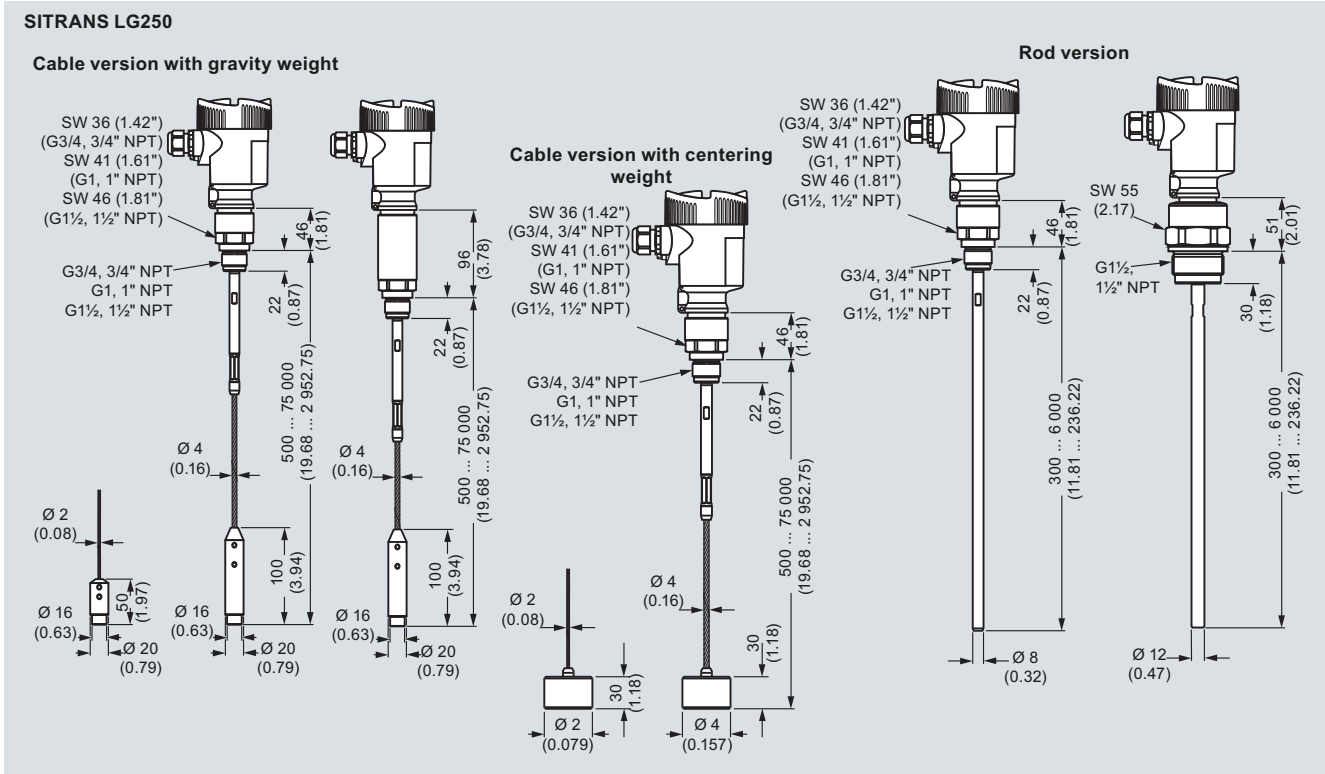
# Level measurement

## Continuous level measurement – Guided wave radar transmitters

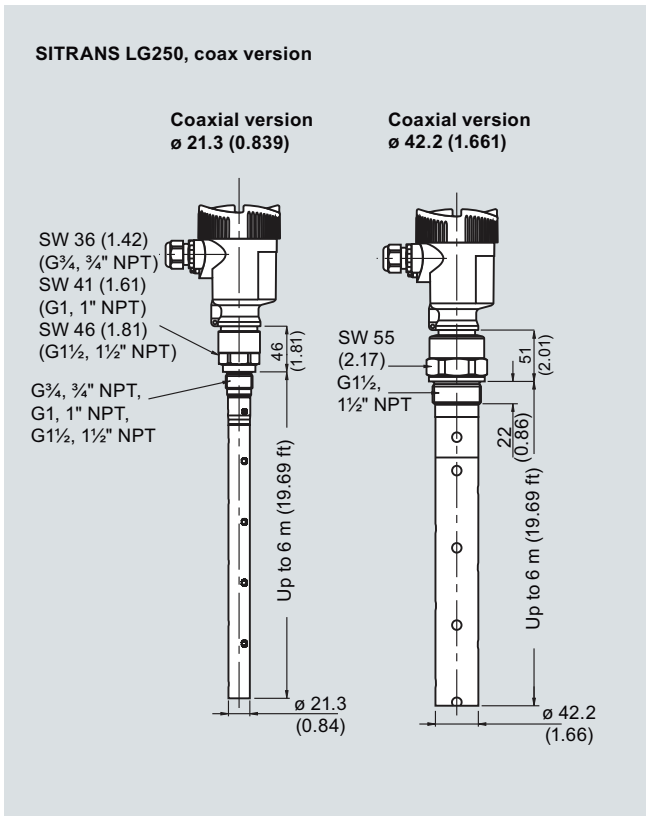
### SITRANS LG series

#### Dimensional drawings

4



SITRANS LG250, dimensions in mm (inch)



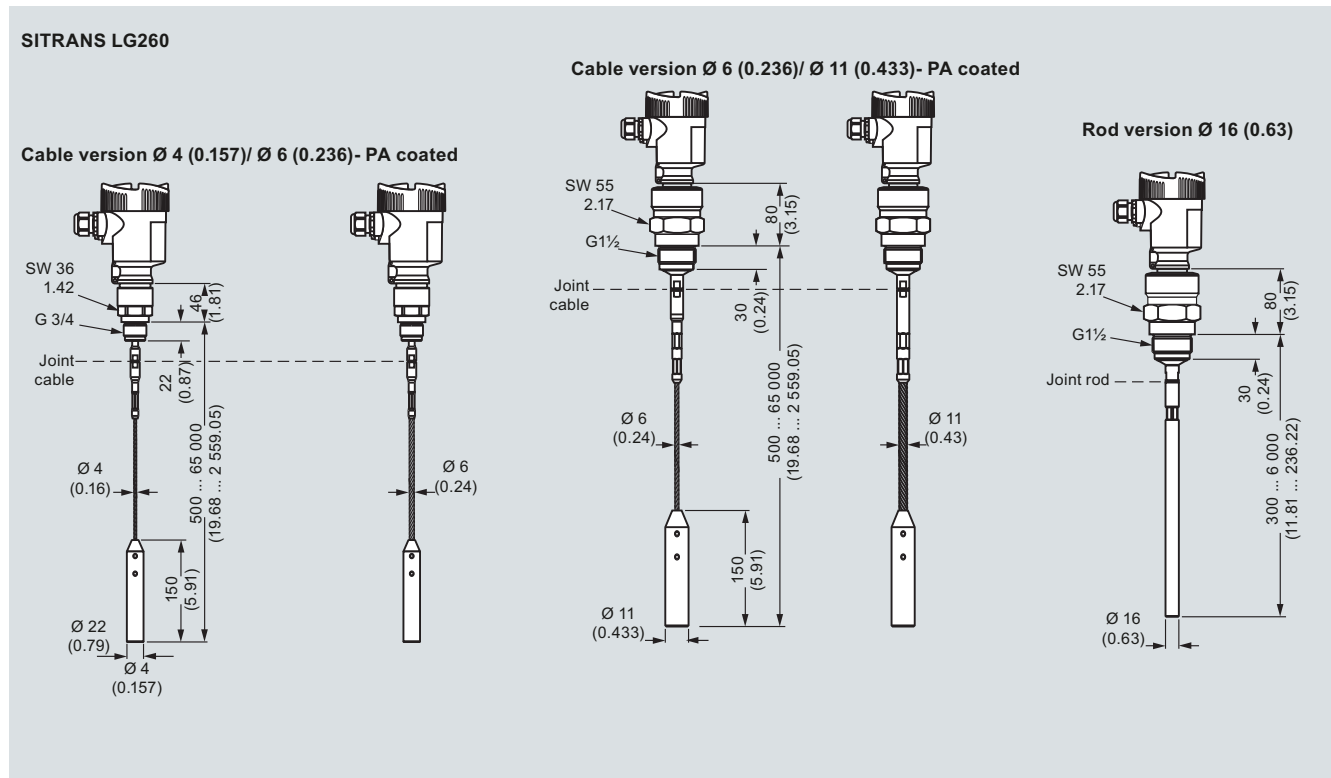
SITRANS LG250, dimensions in mm (inch)

# Level measurement

## Continuous level measurement – Guided wave radar transmitters

SITRANS LG series

### Dimensional drawings



SITRANS LG260, dimensions in mm (inch)

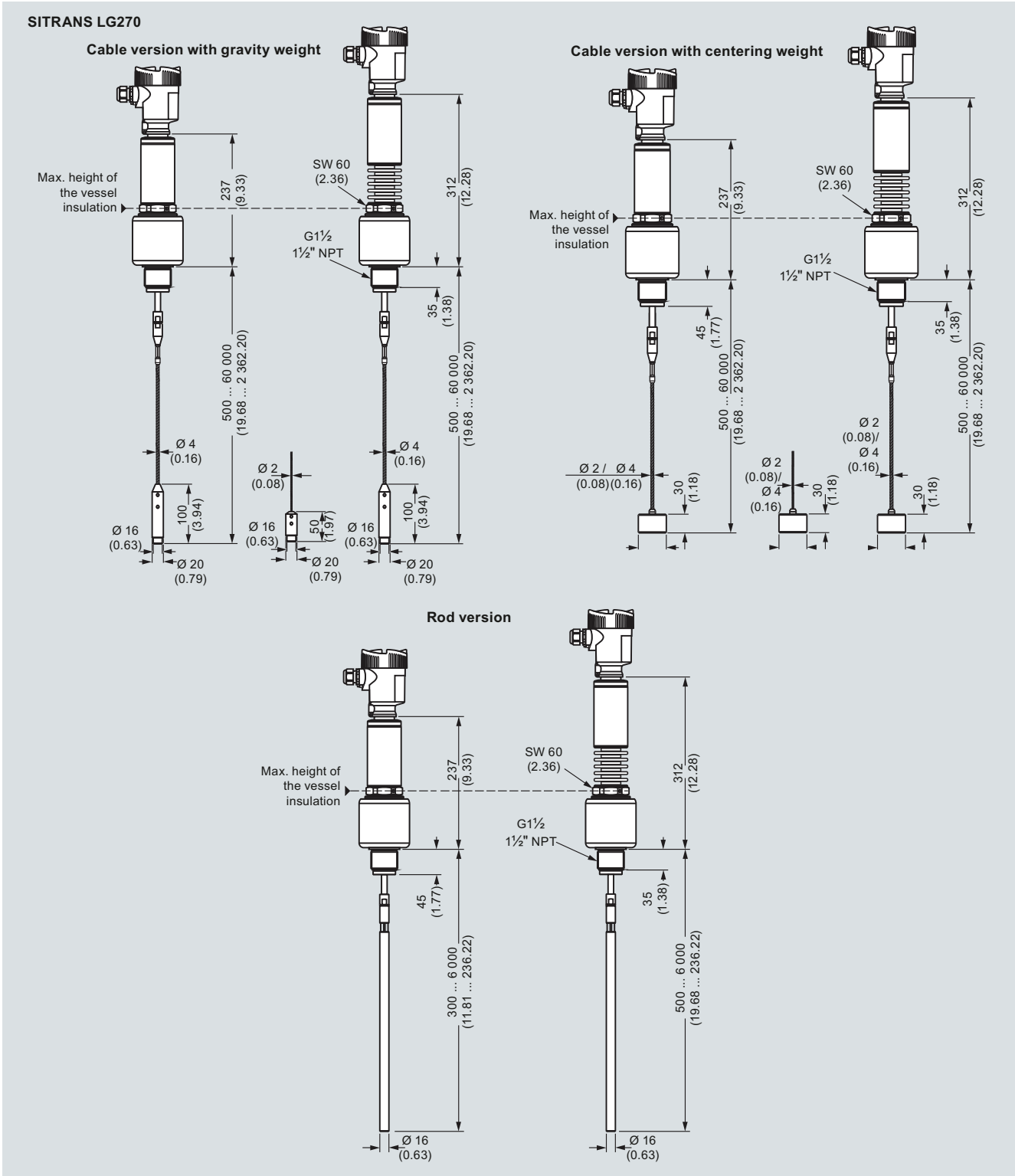
# Level measurement

## Continuous level measurement – Guided wave radar transmitters

### SITRANS LG series

#### Dimensional drawings

4



SITRANS LG270, dimensions in mm (inch)

# Level measurement

## Continuous level measurement – Guided wave radar transmitters

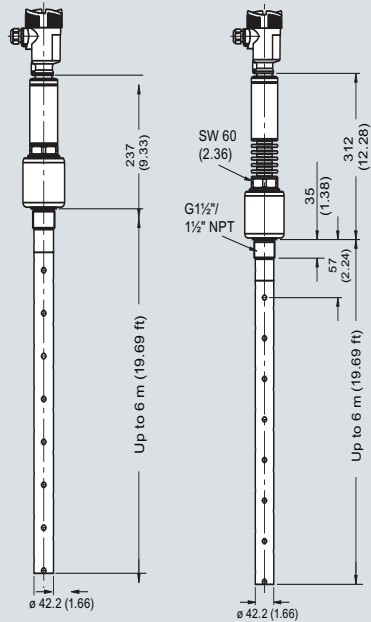
SITRANS LG series

### Dimensional drawings

#### SITRANS LG270, coax version

Temperature version  
-196 ... +280 °C (-321 ... 536 °F)

Temperature version  
-196 ... +450 °C (-321 ... 842 °F)



SITRANS LG270, dimensions in mm (inch)

# Level measurement

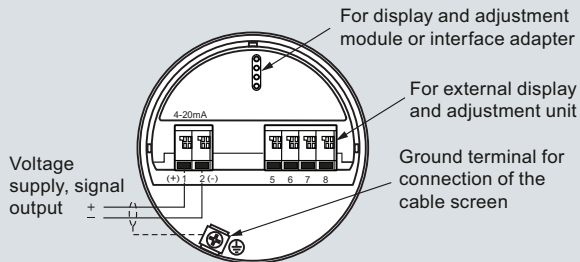
## Continuous level measurement – Guided wave radar transmitters

### SITRANS LG series

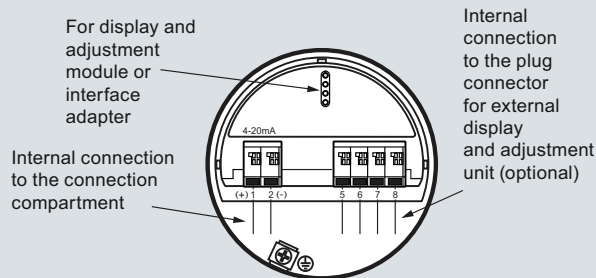
#### Schematics

4

**2-wire HART electronic option, electronics and connection compartment, single chamber housing**

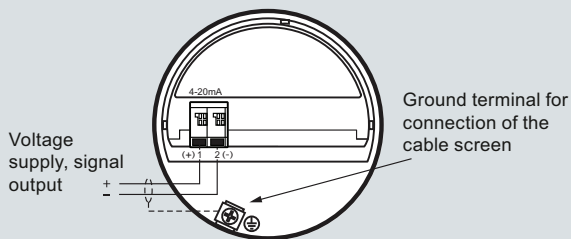


**2-wire HART electronic option, electronics compartment, double chamber housing**



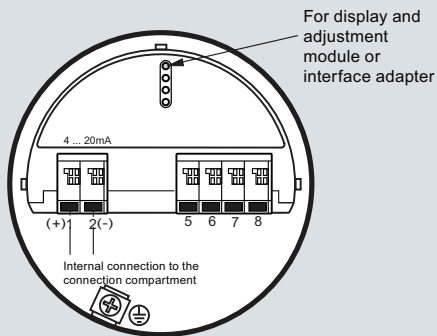
Note: All 2-wire HART connections and electronics are also available with SIL

**2-wire HART electronic option, connection compartment, Ex-d-ia double chamber housing**

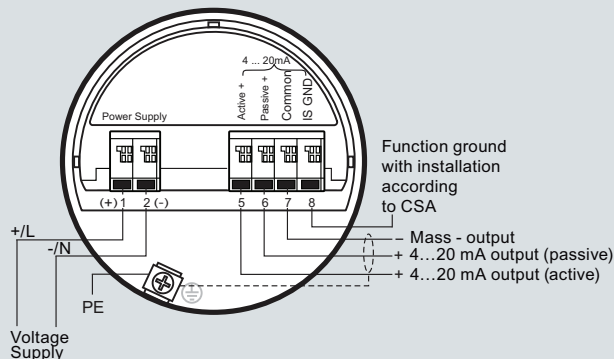


SITRANS LG series, connections

**4-wire HART electronic option, electronics compartment, double chamber housing**



**4-wire HART electronic option, connection compartment with double chamber housing with mains voltage**



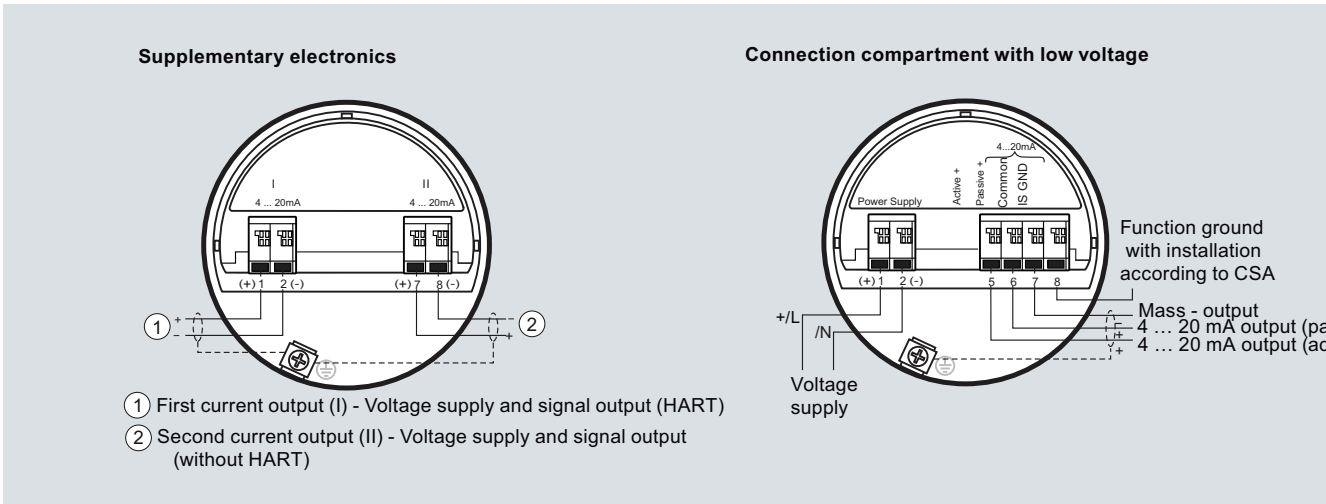
SITRANS LG series, connections

# Level measurement

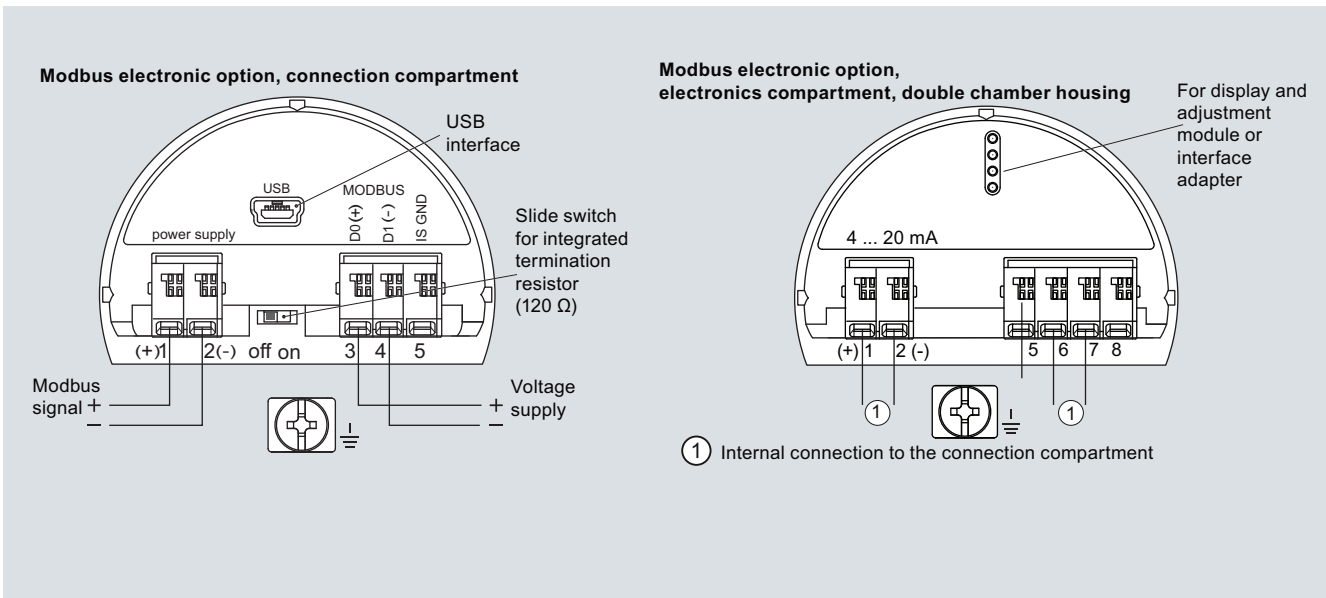
## Continuous level measurement – Guided wave radar transmitters

### SITRANS LG series

#### Schematics



SITRANS LG series, connections



SITRANS LG series, connections



# Level measurement

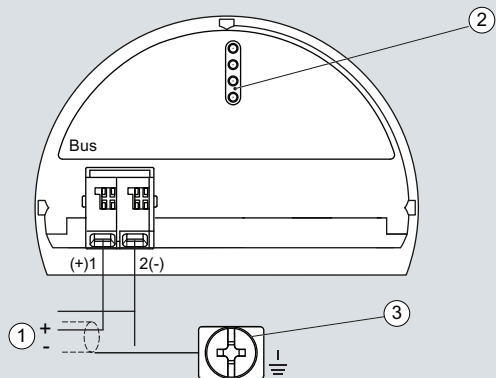
## Continuous level measurement – Guided wave radar transmitters

### SITRANS LG series

#### Schematics

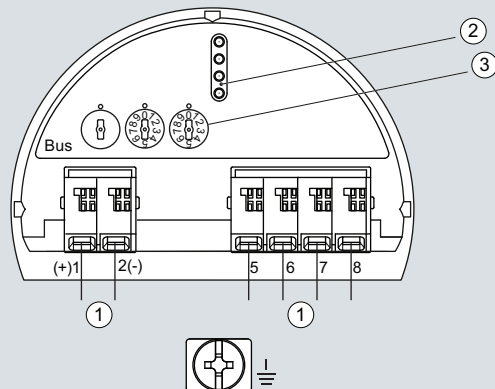
4

**Profibus electronic option, connection compartment, double chamber housing**



- ① Voltage supply, signal output
- ② For display and adjustment module or interface adapter
- ③ Ground terminal for connection of the cable screen

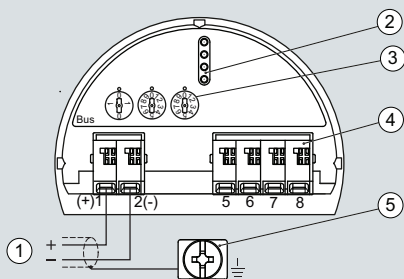
**Profibus electronic option, electronics compartment, double chamber housing**



- ① Internal connection to the connection compartment
- ② Contact pins for the display and adjustment module or interface adapter
- ③ Selection switch for bus address

SITRANS LG series, connections

**Profibus electronic option, electronics and connection compartment, single chamber housing**



- ① Voltage supply, signal output
- ② For display and adjustment module or interface adapter
- ③ Selection switch for bus address
- ④ For external display and adjustment unit
- ⑤ Ground terminal for connection of the cable screen

SITRANS LG series, connections