

# 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. It is unaffected by 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 module 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
- Measures complete range of probe, which is perfect for small vessels
- 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 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

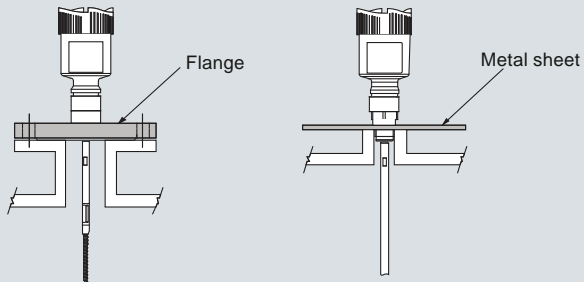
# Level measurement

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SITRANS LG series

### Configuration

#### Mounting on nozzle

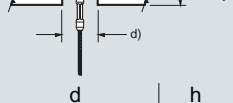


#### Installation in non-metal vessel

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,  $\varnothing > 200$  mm (8 inch), beneath the process fitting when screwing it in. Make sure that the plate has direct contact with the process fitting.

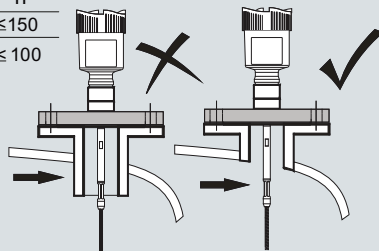
#### Mounting socket

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.

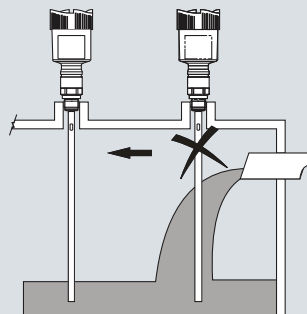


d	h
DN 40 ... DN 150	$\leq 150$
> DN 150 ... DN 200	$\leq 100$

#### Socket must be installed flush



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.



#### Inflowing medium

Do not mount the instruments in or above the filling stream. Make sure that you detect the product surface, not the inflowing product.

SITRANS LG series installation, dimensions in mm (inch)

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#### Technical specifications

##### Mode of operation

Measuring principle	Guided wave radar measurement
Measuring range	300 ... 75 000 mm (11.81 ... 2 952.75 inch)

##### Output

mA analog output with HART digital signal	4 ... 20 mA/HART
Output range	Current: minimum 3.8 mA, maximum 20.5 mA
• Analog	≤ 10 mA for 5 ms after switching on, ≤ 3.6 mA
• Start-up current	
Diagnostic alarm	Failure signal current output (adjustable): last valid measured value, ≥ 21 mA, ≤ 3.6 mA
Digital communication	HART Version 7 x and multidrop compatible

##### Performance

Process reference conditions according to DIN EN 61298-1	
Non-linearity	
• Coaxial	
• Single rod probes	
• Interface models	
Resolution and repeatability	Accuracy +/- 2 mm (0.08 inch)
Accuracy	+/- 2 mm (0.08 inch)
• Coaxial/rod/cable probes	± 5 mm (0.197 inch)
• Interface models	(Note: Typical deviation, Interface measurement)
	See manual for more details
Electromagnetic compatibility (check if needed)	
• Measuring cycle time	< 500 ms
• Step response time	≤ 3 s
• Temperature Effects	The measurement error from the process conditions is in the specified pressure and temperature range of below 1 %

##### Rated operating conditions

• 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 %

##### Medium conditions

Dielectric constant	dK ≥ 1.4 (configuration dependent)
Process temperature range	-196 ... +450 °C (-321 ... +842 °F)
Vessel pressure	-1 ... +400 bar (-100 ... +40 000 kPa)

##### Design

Instrument weight (dependent on process fitting) see manual for further details	Approx. 0.8 ... 8 kg (0.176 ... 17.64 lb)
Materials	
• Enclosure	<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, electropolished 316L</li> </ul>
• 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>
• Cable inlet	2x M20x1.5 or 2 x 1/2" NPT
Process connections	
• Pipe thread, cylindrical (ISO 228 T1)	G3/4" A, G1" A, G1 1/2" A according to DIN 3852-A
• American pipe thread, conical (ASME B1.20.1)	3/4" NPT, 1" NPT, 1 1/2" NPT
• Flanged	DIN from DN 25, ANSI from 1" hygienic fittings
• Hygienic	
<b>Programming</b>	
Local	Four button, menu-driven data entry
Handheld communicator	HART communicator
PC	SIMATIC PDM, AMS, PACTware
<b>Power</b>	9.6 ... 35 V DC
<b>Certificates and approvals</b>	
Hazardous approvals:	ATEX, FM, CSA, IECEx
Overfill protection	WHG
Ship approval	

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	<b>SITRANS LG240</b>	<b>SITRANS LG250</b>	<b>SITRANS LG260</b>	<b>SITRANS LG270</b>
<b>Industries</b>	<b>Food, Beverage and Pharmaceutical</b>	<b>Chemical/HPI/Power/General</b>	<b>Cement, power generation, food, processing, mineral processing, mining</b>	<b>Chemical/HPI/Power/General</b>
<b>Applications</b>	Hygienic 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>	4 ... 20 mA/HART SIMATIC PDM DTM/FDT for PACTware, Fieldcare	4 ... 20 mA/HART SIMATIC PDM DTM/FDT for PACTware, Fieldcare	4 ... 20 mA/HART SIMATIC PDM DTM/FDT for PACTware, Fieldcare	4 ... 20 mA/HART SIMATIC PDM DTM/FDT for PACTware, Fieldcare
<b>Power</b>	24 V DC nominal Loop powered	24 V DC nominal Loop powered	24 V DC nominal Loop powered	24 V DC nominal Loop powered

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Selection and Ordering data	Article No.
<b>SITRANS LG240</b>	<b>7ML5880-</b>
Guided Wave Radar sensor for Hygienic continuous level and interface measurement of liquids.	
<b>Approvals</b>	
Ordinary location CE <sup>9)</sup>	<b>0A</b>
Shipping approval (GL)	<b>0B</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 T6 + shipping approval GL	<b>0G</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)</sup>	<b>0H</b>
ATEX II 1/2G, 2G Ex d ia IIC T6 <sup>1)</sup>	<b>0J</b>
ATEX II 1/2G, 2G Ex d ia IIC + ATEX II 1/2D, 2D IP6x <sup>1)</sup>	<b>0K</b>
ATEX II 1D, 1/2D, 1/3D, 2D, Ex t IIIC IP66 T IEC Ex ia IIC T6 <sup>9)</sup>	<b>0N</b>
IEC Ex ia IIC T6 <sup>9)</sup>	<b>0P</b>
IEC Ex ia IIC T6 + IEC IP6x T d <sup>9)</sup>	<b>0Q</b>
IEC Ex d ia IIC T6 <sup>1)</sup>	<b>0R</b>
IEC Ex d ia IIC T6 + IEC IP6x T d <sup>1)</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)</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	<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)</sup>	<b>1G</b>
<b>Version/Material</b>	
Cable ø4 mm (0.16 inch) with gravity weight/PFA <sup>2)7)</sup>	<b>A</b>
Exchange. rod ø8 mm (0.31 inch)/1.4435 (according to Basle Standard) <sup>3)7)</sup>	<b>B</b>
Exchange rod ø8 mm (0.31 inch)/1.4435 (Basle standard) can be autoclaved <sup>3)7)</sup>	<b>C</b>
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>

Selection and Ordering data	Article No.
<b>SITRANS LG240</b>	<b>7ML5880-</b>
Guided Wave Radar sensor for Hygienic continuous level and interface measurement of liquids.	
Flange DN 40, PN 40 Form C, DIN 2501/PTFE-TFM 1600	<b>21</b>
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 4...20mA/HART; 90...253V AC; 50/60 Hz <sup>1)8)</sup>	<b>3</b>
Four-wire 4...20mA/HART; 9.6...48V DC; 20...42 V AC <sup>1)8)</sup>	<b>4</b>
<b>Seal/Process temperature</b>	
Without/-40 ... +150 °C (-40 ... +238 °F) <sup>5)</sup>	<b>A</b>
FFKM (Kalrez 6221)/-20...150 °C (-4... +238 °F)	<b>B</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>
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	<b>R</b>

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<b>SITRANS LG240</b>	<b>7ML5880-</b>	<b>Further designs</b>	
Guided Wave Radar sensor for Hygienic continuous level and interface measurement of liquids.		Please add <b>"-Z"</b> to Order No. and specify Order code(s).	
<b>Lengths</b>		Enter the total insertion length in plain text description	<b>Y01</b>
<u>Rod ø8 mm (0.31 inch)/1.4435 (Basle standard 300 ... 4 000 mm)</u>		Enter the total length of rigid part (cable version only)	<b>Y02</b>
300 ... 1 000 mm (11.81 ... 39.37 inch)	<b>0</b>	Cleaning included certificate: oil, grease and silicone free	<b>W01</b>
1 001 ... 2 000 mm (39.41 ... 78.74 inch)	<b>1</b>	Identification Label (measurement loop) stainless steel	<b>Y17</b>
2 001 ... 3 000 mm (78.78 ... 118.11 inch)	<b>2</b>	Identification Label (measurement loop) Foil	<b>Y18</b>
3 001 ... 4 000 mm (118.15 ... 157.48 inch)	<b>3</b>	3.1 Certificate instrument	<b>C12</b>
<u>Rod ø10 mm (0.24 inch)/PFA (300 ... 4 000 mm)</u>		3.1 Certificate material (NACE0175)	<b>D07</b>
300 mm (11.81 inch)	<b>9R1A</b>	3.1 Certificate instrument with test data	<b>C25</b>
500 mm (19.69 inch)	<b>9R1B</b>	2.2 Certificate material	<b>C15</b>
300 ... 1 000 mm (11.81 ... 39.37 inch)	<b>9R1C</b>	Quality/test plan	<b>C26</b>
1 001 ... 5 000 mm (39.41 ... 78.74 inch)	<b>9R1D</b>	<b>Additional Operating Instructions</b>	Article No.
2 001 ... 3 000 mm (78.78 ... 118.11 inch)	<b>9R1E</b>	<b>German</b>	
3 001 ... 4 000 mm (118.15 ... 157.48 inch)	<b>9R1F</b>	4 ... 20 mA/HART - two-wire PFA insulated	<b>PBD-51041000</b>
<u>Cable ø4 mm (0.16 inch)/PFA (500 ... 32 000 mm)</u>		4 ... 20 mA/HART - two-wire Polished version	<b>PBD-51041001</b>
500 mm (9.69 inch)	<b>9R1G</b>	4 ... 20 mA/HART - four-wire PFA insulated	<b>PBD-51041002</b>
501 ... 1 000 mm (19.72 ... 39.37 inch)	<b>9R1H</b>	4 ... 20 mA/HART - four-wire Polished version	<b>PBD-51041003</b>
1 001 ... 2 000 mm (39.37 ... 196.85 inch)	<b>9R1J</b>	<b>English</b>	
2 001 ... 4 000 mm (196.89 ... 393.70 inch)	<b>9R1K</b>	4 ... 20 mA/HART - two-wire PFA insulated	<b>PBD-51041037</b>
4 001 ... 5 000 mm (393.74 ... 590.55 inch)	<b>9R1L</b>	4 ... 20 mA/HART - two-wire Polished version	<b>PBD-51041038</b>
5 001 ... 10 000 mm (590.59 ... 787.40 inch)	<b>9R1M</b>	4 ... 20 mA/HART - four-wire PFA insulated	<b>PBD-51041039</b>
10 001 ... 15 000 mm (787.44 ... 984.25 inch)	<b>9R1N</b>	4 ... 20 mA/HART - four-wire Polished version	<b>PBD-51041040</b>
15 001 ... 20 000 mm (984.29 ... 1 181.10 inch)	<b>9R1P</b>	<b>French</b>	
20 001 ... 25 000 mm (1 181.14 ... 1 377.95 inch)	<b>9R1Q</b>	4 ... 20 mA/HART - two-wire PFA insulated	<b>PBD-51041111</b>
25 001 ... 32 000 mm (1 377.99 ... 1 574.80 inch)	<b>9R1R</b>	4 ... 20 mA/HART - two-wire Polished version	<b>PBD-51041112</b>
<b>Supplementary electronics</b>		4 ... 20 mA/HART - four-wire PFA insulated	<b>PBD-51041113</b>
Without <sup>1)</sup>	<b>A00</b>	4 ... 20 mA/HART - four-wire Polished version	<b>PBD-51041114</b>
Additional current output 4 ... 20 mA <sup>1)</sup>	<b>A01</b>	<b>Spanish</b>	
<b>Indicating/adjustment module</b>		4 ... 20 mA/HART - two-wire PFA insulated	<b>PBD-51041074</b>
Without <sup>1)</sup>	<b>E00</b>	4 ... 20 mA/HART - two-wire Polished version	<b>PBD-51041075</b>
Mounted <sup>1)</sup>	<b>E01</b>	4 ... 20 mA/HART - four-wire PFA insulated	<b>PBD-51041076</b>
Laterally mounted <sup>1)</sup>	<b>E02</b>	4 ... 20 mA/HART - four-wire Polished version	<b>PBD-51041077</b>
<b>Language of display</b>		<b>Spanish</b>	
German	<b>L00</b>	4 ... 20 mA/HART - two-wire PFA insulated	<b>PBD-51041074</b>
English	<b>L01</b>	4 ... 20 mA/HART - two-wire Polished version	<b>PBD-51041075</b>
French	<b>L02</b>	4 ... 20 mA/HART - four-wire PFA insulated	<b>PBD-51041076</b>
Dutch	<b>L03</b>	4 ... 20 mA/HART - four-wire Polished version	<b>PBD-51041077</b>
Italian	<b>L04</b>	<b>Spanish</b>	
Spanish	<b>L05</b>	4 ... 20 mA/HART - two-wire PFA insulated	<b>PBD-51041074</b>
Portuguese	<b>L06</b>	4 ... 20 mA/HART - two-wire Polished version	<b>PBD-51041075</b>
Russian	<b>L07</b>	4 ... 20 mA/HART - four-wire PFA insulated	<b>PBD-51041076</b>
Chinese	<b>L08</b>	4 ... 20 mA/HART - four-wire Polished version	<b>PBD-51041077</b>
Japanese	<b>L09</b>	<b>Spanish</b>	
<b>Operating instructions</b>		4 ... 20 mA/HART - two-wire PFA insulated	<b>PBD-51041074</b>
German	<b>M01</b>	4 ... 20 mA/HART - two-wire Polished version	<b>PBD-51041075</b>
English	<b>M01</b>	4 ... 20 mA/HART - four-wire PFA insulated	<b>PBD-51041076</b>
French	<b>M02</b>	4 ... 20 mA/HART - four-wire Polished version	<b>PBD-51041077</b>
Spanish	<b>M03</b>		

- 1) Available with Housing/protection/cable options E, F, L, M only
- 2) Available with Process Fitting/material options 01, 03, 05, 07, 10, 12, 14 ... 33 only
- 3) Available with Process fitting/material options 00, 02, 04, 06, 08, 11, and 13 only
- 4) Available with Length options 0, 1, 2, and 3 only
- 5) Available with Length options R1A ... R1R only
- 6) Available with housing protection cable C, D, L, and M
- 7) Available only with the same diameter probe lengths
- 8) Available with supplementary electronics A00 and Indicating /adjustment module E00, E01
- 9) Available with Supplementary electronics A01 approval options 0A,0E,0H,0P and 0Q

# Level measurement

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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.	
<b>Approvals</b>	
Ordinary location CE <sup>16)</sup>	<b>0A</b>
Shipping approval (GL)	<b>0B</b>
ATEX II 1G, 1/2G, 2G Ex ia IIC T6 <sup>16)</sup>	<b>0E</b>
ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + shipping approval GL	<b>0G</b>
ATEX II 1G, 1/2G 2G Ex ia IIC + ATEX II 1D, 1/2D, 1/3D, 2D, Ex t IIIC IP66 <sup>16)</sup>	<b>0H</b>
ATEX II 1/2G, 2G Ex d ia IIC T6 <sup>1)</sup>	<b>0J</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)</sup>	<b>0K</b>
ATEX II 1/2G, 2G Ex d IIC T6 <sup>14)</sup>	<b>0L</b>
ATEX II 1/2G, 2G Ex d IIC + ATEX II 1D, 1/2D, 1/3D, 2D, Ex t IIIC IP66 T <sup>14)</sup>	<b>0M</b>
ATEX II 1D, 1/2D, 1/3D, 2D, Ex t IIIC IP66 T	<b>0N</b>
IEC Ex ia IIC T6 <sup>16)</sup>	<b>0P</b>
IEC Ex ia IIC T6 + IEC IP6x T tD <sup>16)</sup>	<b>0Q</b>
IEC Ex d ia IIC T6 <sup>1)</sup>	<b>0R</b>
IEC Ex d ia IIC T6 + IEC IP6x T tD <sup>1)</sup>	<b>0S</b>
IEC Ex d IIC T6 <sup>14)</sup>	<b>0T</b>
IEC Ex d IIC T6 + IEC IP6x T tD <sup>14)</sup>	<b>0U</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)</sup>	<b>1C</b>
FM (XP) Class I, Div. 1, Groups A, B, C, D <sup>14)</sup>	<b>1D</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>
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)</sup>	<b>1G</b>
CSA (XP) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G <sup>14)</sup>	<b>1H</b>
<b>Version/Material</b>	
Exchangeable cable ø2 mm (0.08 inch) with gravity weight/316L <sup>8)9)11)</sup>	<b>A</b>
Exchangeable cable ø2 mm (0.08 inch) center weight/316L <sup>8)9)12)</sup>	<b>B</b>
Exchangeable cable ø4 mm (0.16 inch) with gravity weight/316L <sup>8)9)11)</sup>	<b>C</b>
Exchangeable cable ø4 mm (0.16 inch) with center weight/316L <sup>8)9)12)</sup>	<b>D</b>
Exchangeable rod ø8 mm (0.31 inch)/316L <sup>2)8)10)11)</sup>	<b>E</b>
Exchangeable rod ø12 mm (0.47 inch)/316L <sup>3)8)10)11)</sup>	<b>F</b>
Coax version ø21.3 mm (0.84 inch) with single hole/316L <sup>8)9)11)</sup>	<b>G</b>
Coax version ø21.3 mm (0.84 inch) with multiple hole/316L <sup>8)9)11)</sup>	<b>H</b>
Coax version ø21.3 mm (0.84 inch) for Ammonia application/316L <sup>4)8)9)11)</sup>	<b>J</b>
Coax version ø42.2 mm (1.66 inch) with multiple hole/316L <sup>5)8)9)11)</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>

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.	
Thread G 1" (DIN 3852-A) PN 40 / 316L	<b>06</b>
Thread 1" NPT (ASME B1.20.1) PN 40 / 316L	<b>07</b>
Thread G 1" (DIN 3852-A) PN 100 / 316L	<b>08</b>
Thread 1" NPT (ASME B1.20.1) PN 100 / 316L	<b>10</b>
Thread G 1 1/2" (DIN 3852-A) PN 40 / 316L	<b>11</b>
Thread 1 1/2" NPT (ASME B1.20.1) PN 40 / 316L	<b>12</b>
Thread G 1 1/2" (DIN 3852-A) PN 100 / 316L	<b>13</b>
Thread 1 1/2" NPT (ASME B1.20.1) PN 100 / 316L	<b>14</b>
Flange DN 25 PN 40 Form C, DIN 2501 / 316L	<b>20</b>
Flange DN 25 PN 40 Form F, DIN 2501 / 316L	<b>21</b>
Flange DN 40 PN 40 Form C, DIN 2501 / 316L	<b>22</b>
Flange DN 50 PN 40 Form C, DIN 2501 / 316L	<b>23</b>
Flange DN 50 PN 40 form V13, DIN 2513 / 316L	<b>24</b>
Flange DN 80 PN 40 Form C, DIN 2501 / 316L	<b>25</b>
Flange DN 80 PN 40 Form V13, DIN 2501 / 316L	<b>26</b>
Flange DN 100 PN 16 Form C, DIN 2501 / 316L	<b>27</b>
Flange DN 100 PN 16 Form C, DIN 2501 / 316L	<b>28</b>
Flange DN 100PN 40 Form C, DIN 2501 / 316L	<b>30</b>
Flange DN 100 PN 40 Form V13, DIN 2513 / 316L	<b>31</b>
Flange DN 150 PN 16 Form C, DIN 2501 / 316L	<b>32</b>
Flange DN 50 PN 40 EN1092-1 Form B1 / 316L	<b>33</b>
Flange DN 80 PN 40 EN1092-1 Form B1 / 316L	<b>34</b>
Flange 1" 150 lb RF, ANSI B16.5 / 316L	<b>35</b>
Flange 1 1/2" 150 lb RF, ANSI B16.5 / 316L	<b>36</b>
Flange 2" 150 lb RF, ANSI B16.5 / 316L	<b>37</b>
Flange 2" 300 lb RF, ANSI B16.5 / 316L	<b>38</b>
Flange 3" 150 lb RF, ANSI B16.5 / 316L	<b>40</b>
Flange 3" 300 lb RF, ANSI B16.5 / 316L	<b>41</b>
Flange 4" 150 lb RF, ANSI B16.5 / 316L	<b>42</b>
Flange 4" 300 lb RF, ANSI B16.5 / 316L	<b>43</b>
Flange 6" 150 lb RF, ANSI B16.5 / 316L	<b>44</b>
Flange 6" 300lb RF, ANSI B16.5 / 316L	<b>45</b>
<b>Electronics</b>	
Two-wire 4 ... 20mA/HART	<b>0</b>
Four-wire 4...20mA/HART; 90...253V AC; 50/60Hz <sup>1)15)</sup>	<b>3</b>
Four-wire 4...20mA/HART; 9.6...48V DC; 20...42V AC <sup>1)15)</sup>	<b>4</b>
<b>Seal/Second line of defense/Process temperature</b>	
FKM (SHS FPM 70C3 GLT)/without/-40 ... +80 °C (-40 ... +176 °F) <sup>6)</sup>	<b>A</b>
FKM (SHS FPM 70C3 GLT)/without/-40 ... +150 °C (-40 ... +302 °F)	<b>B</b>
FFKM (Kalrez 6375)/with/-20 ... +200 °C (-4 ... +392 °F)	<b>C</b>
EPDM (A+P 75.5/KW75F)/without/-40 ... +80 °C (-40 ... +176 °F)	<b>D</b>
EPDM (A+P 75.5/KW75F)/with/-40 ... +150 °C (-40 ... +302 °F)	<b>E</b>
FFKM (Kalrez 6375) /with/ -20 ... +200 °C (-4 ... +392 °F)	<b>F</b>
EPDM (A+P 75.5/KW75F) /without/ -40 ... +80°C (-40 ... +176 °F) <sup>6)</sup>	<b>G</b>
EPDM (A+P 75.5/KW75F) /without/ -40 ... +150 °C (-40 ... +302 °F)	<b>H</b>
EPDM (A+P 75.5/KW75F) /with/ -40 ... +150 °C (-40 ... +302 °F)	<b>J</b>
Silicone FEP coated(A+P FEP-O-SEAL)/without/ -40 ... +80 °C (-40 ... +176 °F)	<b>K</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.	
Silicone FEP coated(A+P FEP-O-SEAL)/without/ -40 ... +150 °C (-40 ... +302 °F)	L	45 001 ... 50 000 mm (1 771.69 ... 1 968.50 inch)	9R2Q
Silicone FEP coated(A+P FEP-O-SEAL)/with/ -40 ... +150 °C (-40 ... +302 °F)	M	50 001 ... 55 000 mm (1 968.54 ... 2 165.35 inch)	9R2R
With borosilicate glass leadthrough / with / -60 ... +150 °C (-76 ... +302 °F) <sup>7)</sup>	N	55 001 ... 60 000 mm (2 165.39 ... 2 362.20 inch)	9R2S
		60 001 ... 65 000 mm (2 362.24 ... 2 559.06 inch)	9R2T
		65 001 ... 70 000 mm (2 559.09 ... 2 755.91 inch)	9R2U
		70 001 ... 75 000 mm (2 759.94 ... 2 952.76 inch)	9R2V
<b>Housing/Protection/Cable</b>		<u>Coax ø21.3 mm/316L</u>	
Plastic IP66/IP67 M20x1.5/blind stopper	A	300 ... 1 000 mm (11.81 ... 39.37 inch)	9R3A
Plastic IP66/IP67 1/2" NPT/blind stopper	B	1 001 ... 2 000 mm (39.41 ... 78.74 inch)	9R3B
Aluminium/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	C	2 001 ... 3 000 mm (78.78 ... 118.11 inch)	9R3C
Aluminium/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	D	3 001 ... 4 000 mm (118.15 ... 157.48 inch)	9R3D
Aluminium double chamber/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	E	4 001 ... 5 000 mm (157.52 ... 196.85 inch)	9R3E
Aluminium double chamber/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	F	5 001 ... 6 000 mm (196.89 ... 236.22 inch)	9R3F
Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	L	<u>Coax ø42.2 mm/316L</u>	
Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	M	300 ... 1 000 mm (11.81 ... 39.37 inch)	9R3G
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	N	1 001 ... 2 000 mm (39.41 ... 78.74 inch)	9R3H
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	P	2 001 ... 3 000 mm (78.78 ... 118.11 inch)	9R3J
Stainless steel double chamber/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	Q	3 001 ... 4 000 mm (118.15 ... 157.48 inch)	9R3K
Stainless steel double chamber/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	R	4 001 ... 5 000 mm (157.52 ... 196.85 inch)	9R3L
Aluminium/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	S	5 001 ... 6 000 mm (196.89 ... 236.22 inch)	9R3M
Aluminium double chamber/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	T		
Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	U	<b>Supplementary electronics</b>	
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	V	Without <sup>1)13)</sup>	A00
		Additional current output 4 ... 20 mA <sup>1)</sup>	A01
		<b>Dimensions centering weight (diameter/height)</b>	
		Without	B00
		ø40/30 mm	B01
		ø45/30 mm (for 2 inch tubes)	B02
		ø75/30 mm (for 3 inch tubes)	B03
		ø95/30 mm (for 4 inch tubes)	B04
		ø1.57/1.18 inch (for 2 inch schedule 160)	B05
		ø1.77/1.18 inch (for 2 inch schedule 40/80)	B06
		ø2.95/1.18 inch (for 3 inch schedule 10/40)	B07
		ø3.74/1.18 inch (for 4 inch schedule 80)	B08
		<b>Rod mounted</b>	
		Cable/not applicable	C00
		Mounted	C01
		Not mounted	C02
		<b>Indicating/adjustment module</b>	
		Without <sup>1)</sup>	E00
		Mounted <sup>1)</sup>	E01
		Laterally mounted <sup>1)</sup>	E02
		<b>Language of display</b>	
		German	L00
		English	L01
		French	L02
		Dutch	L03
		Italian	L04
		Spanish	L05
		Portuguese	L06
		Russian	L07
		Chinese	L08
		Japanese	L09
		<b>Operating instructions</b>	
		German	M01
		English	M01
		French	M02
		Spanish	M03
<b>Lengths</b>			
<u>Rod ø8 mm/316L</u>			
300 ... 1 000 mm (11.81 ... 39.37 inch)	0		
1 001 ... 2 000 mm (39.41 ... 78.74 inch)	1		
2 001 ... 3 000 mm (78.78 ... 118.11 inch)	2		
3 001 ... 4 000 mm (118.15 ... 157.48 inch)	3		
4 001 ... 5 000 mm (157.52 ... 196.85 inch)	4		
5 001 ... 6 000 mm (196.89 ... 236.22 inch)	5		
<u>Rod ø12 mm/316L</u>			
300 ... 1 000 mm (11.81 ... 39.37 inch)	9R2A		
1 001 ... 2 000 mm (39.41 ... 196.85 inch)	9R2B		
2 001 ... 3 000 mm (78.78 ... 118.11 inch)	9R2C		
3 001 ... 4 000 mm (118.15 ... 157.48 inch)	9R2D		
<u>Cable lengths ø2 or 4 mm/316L</u>			
501 ... 1 000 mm (19.72 ... 39.37 inch)	9R2E		
1 000 ... 5 000 mm (39.37 ... 196.85 inch)	9R2F		
5 001 ... 10 000 mm (196.89 ... 393.70 inch)	9R2G		
10 001 ... 15 000 mm (393.74 ... 590.55 inch)	9R2H		
15 001 ... 20 000 mm (590.59 ... 787.40 inch)	9R2J		
20 001 ... 25 000 mm (787.44 ... 984.25 inch)	9R2K		
25 001 ... 30 000 mm (984.29 ... 1 181.10 inch)	9R2L		
30 001 ... 35 000 mm (1 181.14 ... 1 377.95 inch)	9R2M		
35 001 ... 40 000 mm (1 377.99 ... 1 574.80 inch)	9R2N		
40 001 ... 45 000 mm (1 574.84 ... 1 771.65 inch)	9R2P		



# Level measurement

## Continuous level measurement – Guided wave radar transmitters

### SITRANS LG series

Selection and Ordering data	Order code
<b>Further designs</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	<b>C12</b>
3.1 Certificate material (NACE0175)	<b>D07</b>
3.1-Certificate instrument with test data	<b>C25</b>
2.2-Certificate material	<b>C15</b>
Quality/test plan	<b>C26</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 - four-wire	<b>PBD-51041012</b>
4 ... 20 mA/HART - four-wire coax probe	<b>PBD-51041013</b>
<b>English</b>	
4 ... 20 mA/HART - two-wire	<b>PBD-51041047</b>
4 ... 20 mA/HART - two-wire coax probe	<b>PBD-51041048</b>
4 ... 20 mA/HART - four-wire	<b>PBD-51041049</b>
4 ... 20 mA/HART - four-wire coax probe	<b>PBD-51041050</b>
<b>French</b>	
4 ... 20 mA/HART - two-wire	<b>PBD-51041121</b>
4 ... 20 mA/HART - two-wire coax probe	<b>PBD-51041122</b>
4 ... 20 mA/HART - four-wire	<b>PBD-51041123</b>
4 ... 20 mA/HART - four-wire coax probe	<b>PBD-51041124</b>
<b>Spanish</b>	
4 ... 20 mA/HART - two-wire	<b>PBD-51041084</b>
4 ... 20 mA/HART - two-wire coax probe	<b>PBD-51041085</b>
4 ... 20 mA/HART - four-wire	<b>PBD-51041086</b>
4 ... 20 mA/HART - four-wire coax probe	<b>PBD-51041087</b>
1) Available with Housing/Protection cable options E, F, Q, R, and T only 2) Not available with Process fitting/Material options 00, 01, 02, 03, 04, and 05 3) Available with Process fitting/Material options 11,12,13, and 14 only 4) Available with Seal option N only 5) Not available with Process fitting/Material options 00 ... 10, and 35 6) Available with Process fitting /Material options 00 and 01 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 10) Available with Rod mounted options C01, C02 only 11) Available with centering weight option B00 only 12) Available with centering weight options B01 ... B08 only 13) Available with Housing/protection cable options A, B, C, D, L, M, N, P, and S only 14) Available with Housing/protection cable options C, D, L, M only 15) Available with Supplementary electronics A00 and Indicating/adjustment module E00, E01 16) Available with Supplementary electronics A01 approval options 0A,0E,0H,0P and 0Q	

# 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 continuous level of solids.	-	A guided wave radar sensor for continuous level of solids.	-
<b>Approvals</b>			
Ordinary location CE <sup>4)</sup>	<b>0A</b>	Flange DN 100 PN 16 Form C, DIN 2501/316L	<b>13</b>
Shipping approval (GL)	<b>0B</b>	Flange DN 100 PN 40 Form C, DIN 2501/316L	<b>14</b>
ATEX II 1G, 1/2G, 2G Ex ia IIC T6 <sup>4)</sup>	<b>0E</b>	Flange DN 150 PN 16 Form C, DIN 2501/316L	<b>15</b>
ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + shipping approval GL	<b>0G</b>	Flange DN 50 PN 40 EN1092-1 Form B1/316L	<b>16</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)</sup>	<b>0H</b>	Flange DN 80 PN 40 EN1092-1 Form B1/316L	<b>17</b>
ATEX II 1/2G, 2G Ex d ia IIC T6 <sup>1)</sup>	<b>0J</b>	Flange DN 100 PN16 EN1092-1 Form B1/316L	<b>18</b>
ATEX II 1/2G, 2G Ex d ia IIC + shipping approval (GL) <sup>1)</sup>	<b>0L</b>	Flange 2" 150 lb RF, ANSI B16.5/316L	<b>30</b>
ATEX II 1/2G, 2G Ex d IIC + ATEX II 1D, 1/2D, 1/3D, 2D, Ex t IIIC IP66	<b>0M</b>	Flange 2" 150 lb RF, ANSI B16.5/2 .4602(C-22) massive	<b>31</b>
ATEX II 1D, 1/2D, 1/3D, 2D, Ex t IIIC IP66	<b>0N</b>	Flange 2" 300 lb RF, ANSI B16.5/316L	<b>32</b>
ATEX II 1/2G, 2G Ex d IIC + shipping approval (GL) <sup>4)</sup>	<b>0Q</b>	Flange 3" 150 lb RF, ANSI B16.5/316L	<b>33</b>
ATEX II 1/2G, 2G Ex d IIC + II 1D, 1/2D, 1/3D, 2D IP66	<b>0R</b>	Flange 3" 300 lb RF, ANSI B16.5/316L	<b>34</b>
ATEX II 1D, 1/2D, 2D IP6x T	<b>0S</b>	Flange 4" 150 lb RF, ANSI B16.5/316L	<b>35</b>
IEC Ex ia IIC T6	<b>0T</b>	Flange 4" 300 lb RF, ANSI B16.5/316L	<b>36</b>
IEC Ex ia IIC T6 + IEC IP6x T tD	<b>0U</b>	Flange 6" 150 lb RF, ANSI B16.5/316L	<b>37</b>
IEC Ex d ia IIC T6 <sup>1)</sup>	<b>1A</b>	<b>Electronics</b>	
IEC Ex d ia IIC T6 + IEC IP6x T tD	<b>1B</b>	Two-wire 4 ... 20mA/HART	<b>0</b>
IEC Ex d IIC T6	<b>1C</b>	Four-wire 4...20mA/HART; 90...253V AC; 50/60Hz <sup>1)3)</sup>	<b>3</b>
IEC Ex d IIC T6 + IEC IP6x T tD	<b>1D</b>	Four-wire 4...20mA/HART; 9.6...48V DC; 20...42 V AC <sup>1)3)</sup>	<b>4</b>
FM (NI) Class I, Div. 2, Groups A, B, C, D	<b>1F</b>	<b>Seal/Process temperature</b>	
FM (NI) Class I, Div. 2, Groups A, B, C, D + shipping approval (GL)	<b>1G</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	<b>1H</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)	<b>1J</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)</sup>	<b>1K</b>	EPDM (A+P 75.5/KW75F)/without/-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)</sup>	<b>1L</b>	EPDM (A+P 75.5/KW75F)/without/-40 ... +150 °C (-40 ... +392 °F)	<b>E</b>
FM (XP) Class I, Div. 1, Groups A, B, C, D	<b>1M</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	<b>1N</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	<b>1P</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)</sup>	<b>1Q</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	<b>1R</b>	Plastic 2-chamber/IP66/IP67 /1/2" NPT/blind stopper	<b>D</b>
		Aluminium/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	<b>E</b>
<b>Version/Material</b>		Aluminium/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	<b>F</b>
Exchangeable cable ø 4 mm (0.16 inch) with gravity weight/316	<b>A</b>	Aluminium double chamber/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	<b>G</b>
Exchangeable cable ø 6 mm (0.24 inch) with gravity weight/316 <sup>2)</sup>	<b>B</b>	Aluminium double chamber/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	<b>H</b>
Exchangeable rod ø 16 mm (0.63 inch) / 316L <sup>2)</sup>	<b>E</b>	Stainless Steel (precision casting) 316L/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	<b>J</b>
<b>Process fitting/Material</b>		Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	<b>K</b>
Thread G 3/4" (DIN 3852-A) PN 40/316L	<b>00</b>	Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	<b>L</b>
Thread 3/4" NPT (ASME B1.20.1) PN 40/316L	<b>01</b>	Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	<b>M</b>
Thread G 1" (DIN 3852-A) PN 40/316L	<b>02</b>	Stainless steel double chamber/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	<b>N</b>
Thread 1" NPT (ASME B1.20.1) PN 40/316L	<b>03</b>	Stainless steel double chamber/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	<b>P</b>
Thread G 1 1/2" (DIN 3852-A) PN 40/316L	<b>04</b>	Stainless steel double chamber/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	<b>Q</b>
Thread 1 1/2" NPT (ASME B1.20.1) PN 40/316L	<b>05</b>	Aluminium double chamber/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	<b>R</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 50 PN 40 Form C, DIN 2501/2.4602(C22) massive	<b>11</b>		
Flange DN 80 PN 40 Form C, DIN 2501/316L	<b>12</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 continuous level of solids.	-	A guided wave radar sensor for continuous level 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>M01</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>9R3A</b>		
501 ... 1 000 mm (19.72 ... 39.37 inch)	<b>9R3B</b>		
1 000 ... 5 000 mm (39.37 ... 196.85 inch)	<b>9R3C</b>		
5 001 ... 10 000 mm (196.89 ... 393.70 inch)	<b>9R3D</b>		
10 001 ... 15 000 mm (393.74 ... 590.55 inch)	<b>9R3E</b>		
15 001 ... 20 000 mm (590.59 ... 787.40 inch)	<b>9R3F</b>		
20 001 ... 25 000 mm (787.44 ... 984.25 inch)	<b>9R3G</b>		
25 001 ... 30 000 mm (984.29 ... 1 181.10 inch)	<b>9R3H</b>		
30 001 ... 35 000 mm (1 181.14 ... 1 377.95 inch)	<b>9R3J</b>		
35 001 ... 40 000 mm (1 377.99 ... 1 574.80 inch)	<b>9R3K</b>		
40 001 ... 45 000 mm (1 574.84 ... 1 771.65 inch)	<b>9R3L</b>		
45 001 ... 50 000 mm (1 771.69 ... 1 968.50 inch)	<b>9R3M</b>		
50 001 ... 55 000 mm (1 968.54 ... 2 165.35 inch)	<b>9R3N</b>		
55 001 ... 60 000 mm (2 165.39 ... 2 362.20 inch)	<b>9R3P</b>		
<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>			
Cable/not applicable	<b>C00</b>		
Mounted	<b>C01</b>		
Not mounted	<b>C02</b>		
<b>Indicating/adjustment module</b>			
Without <sup>1)</sup>	<b>E00</b>		
Mounted <sup>1)</sup>	<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
<b>Further designs</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	<b>C12</b>
3.1 Certificate material (NACE0175)	<b>D07</b>
3.1-Certificate instrument with test data	<b>C25</b>
2.2-Certificate material	<b>C15</b>
Quality/test plan	<b>C26</b>
<b>Operating Instructions</b>	
	Article No.
<b>German</b>	
4 ... 20 mA/HART - two-wire	<b>PBD-51041020</b>
4 ... 20 mA/HART - four-wire	<b>PBD-51041021</b>
<b>English</b>	
4 ... 20 mA/HART - two-wire	<b>PBD-51041057</b>
4 ... 20 mA/HART - four-wire	<b>PBD-51041058</b>
<b>French</b>	
4 ... 20 mA/HART - two-wire	<b>PBD-51041131</b>
4 ... 20 mA/HART - four-wire	<b>PBD-51041132</b>
<b>Spanish</b>	
4 ... 20 mA/HART - two-wire	<b>PBD-51041094</b>
4 ... 20 mA/HART - four-wire	<b>PBD-51041095</b>

- 1) Available with Housing/Protection/Cable options G, H, N, and P only
- 2) Not available with Proces/Fitting/Material options 00, 01, 02, and 03
- 3) Available with Supplementary electronics A00 and Indicating/adjustment module E00, E01
- 4) Available with Supplementary electronics A01 approval options 0A,0E,0H and 0Q

# 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 (GL)	<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 GL	<b>0G</b>
ATEX II 1G, 1/2G 2G Ex ia IIC + ATEX II 1D, 1/2D, 2D IP6x <sup>3)</sup>	<b>0H</b>
ATEX II 1/2G, 2G Ex d ia IIC T6 <sup>1)</sup>	<b>0J</b>
ATEX II 1/2G, 2G Ex d ia IIC + ship (GL) <sup>1)</sup>	<b>0L</b>
ATEX II 1/2G, 2G Ex d ia IIC + ATEX II 1/2D, 2D IP6x	<b>0M</b>
ATEX II 1/2G, 2G Ex d IIC T6	<b>0N</b>
ATEX II 1/2G, 2G Ex d IIC + ship approval (GL) <sup>3)</sup>	<b>0Q</b>
ATEX II 1/2G, 2G Ex d IIC + ATEX II 1/2D, 2D IP6x	<b>0R</b>
ATEX II 1D, 1/2D, 2D IP6x T	<b>0S</b>
IEC Ex ia IIC T6	<b>0T</b>
IEC Ex ia IIC T6 + IEC IP6x T tD	<b>0U</b>
IEC Ex d ia IIC T6 <sup>1)</sup>	<b>1A</b>
IEC Ex d ia IIC T6 + IEC IP6x T tD	<b>1B</b>
IEC Ex d IIC T6	<b>1C</b>
IEC Ex d IIC T6 + IEC IP6x T tD	<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)	<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)	<b>1J</b>
FM (XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G <sup>1)</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)</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	<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)</sup>	<b>1Q</b>
CSA (XP) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G	<b>1R</b>
<b>Version/Material</b>	
Exchangeable cable ø 2 mm (0.08 inch) with gravity weight/316L	<b>A</b>
Exchangeable cable ø2 mm (0.08 inch) center weight/316L	<b>B</b>
Exchangeable cable ø4 mm (0.16 inch) with gravity weight/316L	<b>C</b>
Exchangeable cable ø4 mm (0.16 inch) with center weight/316L	<b>D</b>
Exchangeable rod ø 16 mm (0.63 inch) /316L	<b>E</b>
Coax version ø 42.2 mm (1.66 inch) with multiple hole/316L	<b>F</b>
Coax version ø 42.2 mm (1.66 inch); multiple hole; reference distances/316L	<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>
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>

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 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 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>
<b>Electronics</b>	
Two-wire 4 ... 20mA/HART	<b>0</b>
Four-wire 4...20mA/HART; 90...253V AC; 50/60Hz <sup>1)2)</sup>	<b>3</b>
Four-wire 4...20mA/HART; 9.6...48V DC; 20...42 V AC <sup>1)2)</sup>	<b>4</b>
<b>Seal/Second line of defense/Process temperature</b>	
Ceramic-graphite/with/ -196 ... +280 °C (-321 ... +536 °F)	<b>A</b>
Ceramic-graphite /with/ -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>
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>L</b>
Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	<b>M</b>
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	<b>N</b>
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	<b>P</b>
Stainless steel double chamber/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	<b>Q</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	
Stainless steel double chamber/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	R	<b>Supplementary electronics</b>	
Aluminium/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	S	Without <sup>1)</sup>	A00
Aluminium double chamber/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	T	Additional current output 4 ... 20 mA <sup>1)</sup>	A01
Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) M20x1.5/Cable gland stainless steel	U	<b>Dimensions centering weight (diameter/height)</b>	
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	V	Without	B00
		ø40/30 mm	B01
		ø45/30 mm (for 2 inch tubes)	B02
		ø75/30 mm (for 3 inch tubes)	B03
		ø95/30 mm (for 4 inch tubes)	B04
		ø1.57/1.18 inch (for 2 inch schedule 160)	B05
		ø1.77/ 1.18 inch (for 2 inch schedule 40/80)	B06
		ø2.95/1.18 inch (for 3 inch schedule 10/40)	B07
		ø3.74/ 1.18 inch (for 4 inch schedule 80)	B08
<b>Lengths</b>		<b>Rod mounted</b>	
<u>Rod ø16 mm/316L</u>		Cable/not applicable	C00
300 mm (11.81 inch)	0	Mounted	C01
500 mm (19.69 inch)	1	Not mounted	C02
501 ... 1 000 mm (19.72 ... 39.37 inch)	2		
1 001 ... 2 000 mm (39.41 ... 78.74 inch)	3	<b>Indicating/adjustment module</b>	
2 001 ... 3 000 mm (78.78 ... 118.11 inch)	4	Without <sup>1)</sup>	E00
3 001 ... 4 000 mm (118.15 ... 157.48 inch)	5	Mounted <sup>1)</sup>	E01
4 001 ... 5 000 mm (157.52 ... 196.85 inch)	6	Laterally mounted <sup>1)</sup>	E02
5 001 ... 6 000 mm (196.89 ... 216.53 inch)	7		
<u>Cable lengths ø2 or 4 mm/316L</u>		<b>Language of display</b>	
501 ... 1 000 mm (19.72 ... 39.37 inch)	9R2E	German	L00
1 000 ... 5 000 mm (39.37 ... 196.85 inch)	9R2F	English	L01
5 001 ... 10 000 mm (196.89 ... 393.70 inch)	9R2G	French	L02
10 001 ... 15 000 mm (393.74 ... 590.55 inch)	9R2H	Dutch	L03
15 001 ... 20 000 mm (590.59 ... 787.40 inch)	9R2J	Italian	L04
20 001 ... 25 000 mm (787.44 ... 984.25 inch)	9R2K	Spanish	L05
25 001 ... 30 000 mm (984.29 ... 1 181.10 inch)	9R2L	Portuguese	L06
30 001 ... 35 000 mm (1 181.14 ... 1 377.95 inch)	9R2M	Russian	L07
35 001 ... 40 000 mm (1 377.99 ... 1 574.80 inch)	9R2N	Chinese	L08
40 001 ... 45 000 mm (1 574.84 ... 1 771.65 inch)	9R2P	Japanese	L09
45 001 ... 50 000 mm (1 771.69 ... 1 968.50 inch)	9R2Q		
50 001 ... 55 000 mm (1 968.54 ... 2 165.35 inch)	9R2R	<b>Operating instructions</b>	
55 001 ... 60 000 mm (2 165.39 ... 2 362.20 inch)	9R2S	German	M01
<u>Coax ø42.2 mm/316L</u>		English	M01
300 ... 1 000 mm (11.81 ... 39.37 inch)	9R3G	French	M02
1 001 ... 2 000 mm (39.41 ... 78.74 inch)	9R3H	Spanish	M03
2 001 ... 3 000 mm (78.78 ... 118.11 inch)	9R3J		
3 001 ... 4 000 mm (118.15 ... 157.48 inch)	9R3K		
4 001 ... 5 000 mm (157.52 ... 196.85 inch)	9R3L		
5 001 ... 6 000 mm (196.89 ... 236.22 inch)	9R3M		

4

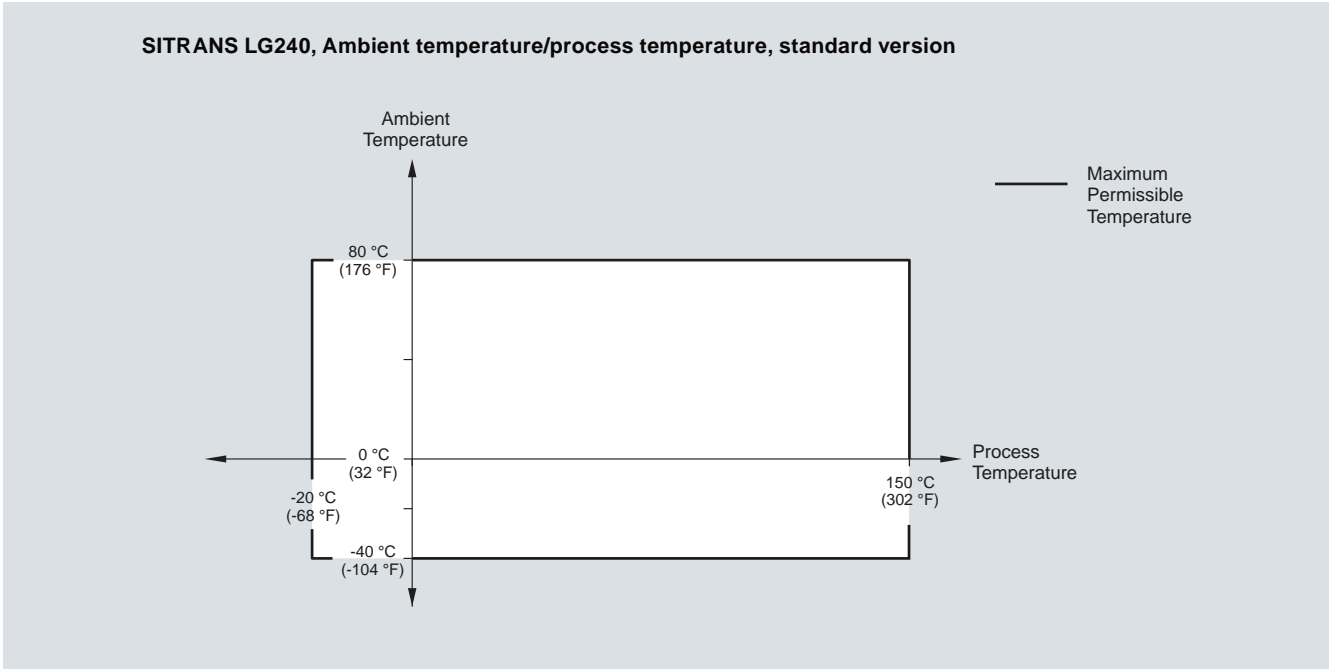
# Level measurement

## Continuous level measurement – Guided wave radar transmitters

### SITRANS LG series

Selection and Ordering data	Order code
<b>Further designs</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	<b>C12</b>
3.1 Certificate material (NACE0175)	<b>D07</b>
3.1-Certificate instrument with test data	<b>C25</b>
2.2-Certificate material	<b>C15</b>
Quality/test plan	<b>C26</b>
<b>Additional Operating Instructions</b>	
Article No.	
<b>German</b>	
4 ... 20 mA/HART - two-wire	<b>PBD-51041025</b>
4 ... 20 mA/HART - two-wire coax probe	<b>PBD-51041026</b>
4 ... 20 mA/HART - four-wire	<b>PBD-51041027</b>
4 ... 20 mA/HART - four-wire coax probe	<b>PBD-51041028</b>
<b>English</b>	
4 ... 20 mA/HART - two-wire	<b>PBD-51041062</b>
4 ... 20 mA/HART - two-wire coax probe	<b>PBD-51041063</b>
4 ... 20 mA/HART - four-wire	<b>PBD-51041064</b>
4 ... 20 mA/HART - four-wire coax probe	<b>PBD-51041065</b>
<b>French</b>	
4 ... 20 mA/HART - two-wire	<b>PBD-51041136</b>
4 ... 20 mA/HART - two-wire coax probe	<b>PBD-51041137</b>
4 ... 20 mA/HART - four-wire	<b>PBD-51041138</b>
4 ... 20 mA/HART - four-wire coax probe	<b>PBD-51041139</b>
<b>Spanish</b>	
4 ... 20 mA/HART - two-wire	<b>PBD-51041099</b>
4 ... 20 mA/HART - two-wire coax probe	<b>PBD-51041100</b>
4 ... 20 mA/HART - four-wire	<b>PBD-51041101</b>
4 ... 20 mA/HART - four-wire coax probe	<b>PBD-51041102</b>
1) Available with Housing/Protection/Cable options E, F, Q, R, and T	
2) Available with Supplementary electronics A00 and Indicating/adjustment module E00, E01	
3) Available with Supplementary electronics A01 approval options 0A,0E,0H, and 0Q	

### Characteristics Curves



SITRANS LG240, ambient temperature/process temperature curve



# Level measurement

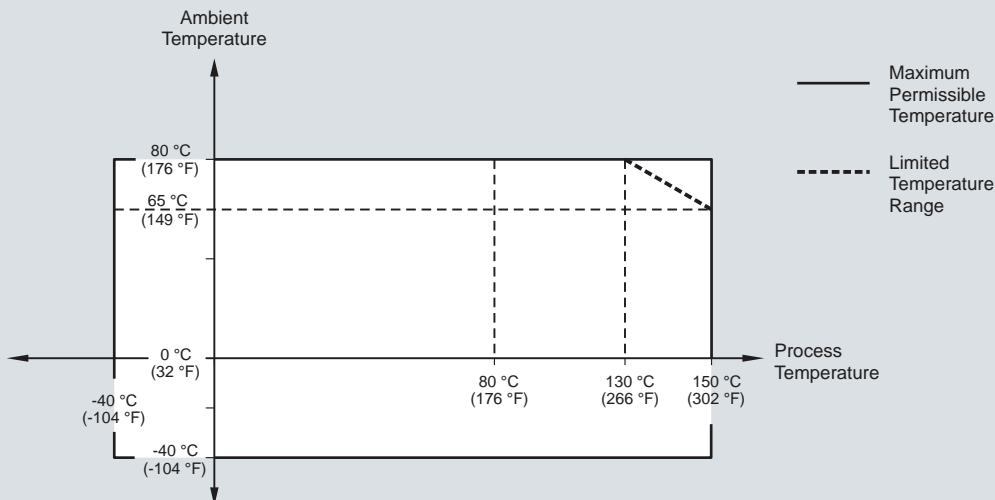
## Continuous level measurement – Guided wave radar transmitters

### SITRANS LG series

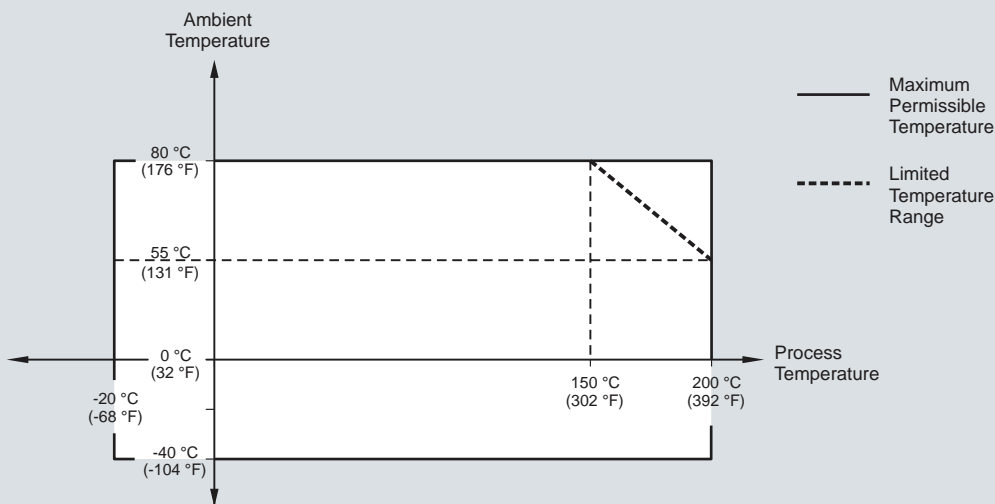
#### Characteristics Curves

4

**SITRANS LG250, Ambient temperature/process temperature, standard version**



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



SITRANS LG250, ambient temperature/process temperature curves

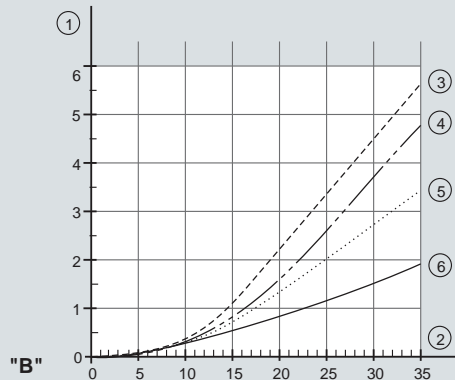
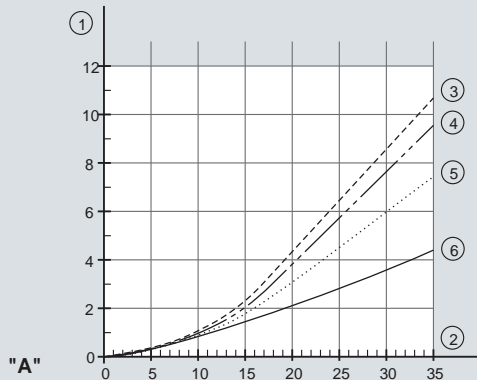
# Level measurement

## 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)

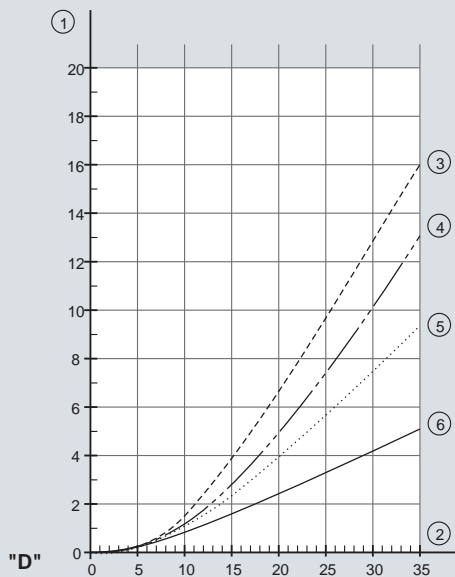
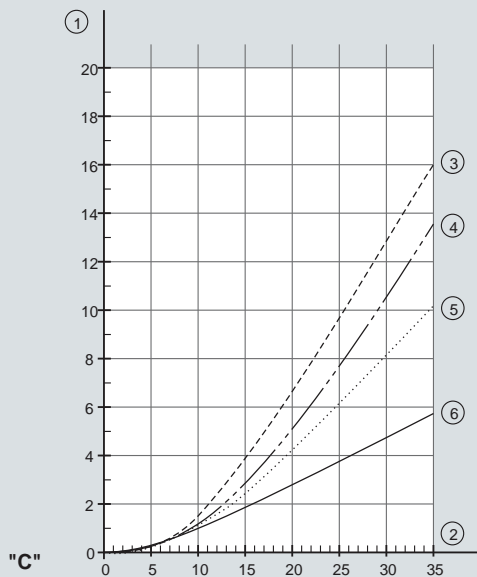


A. Cereals

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

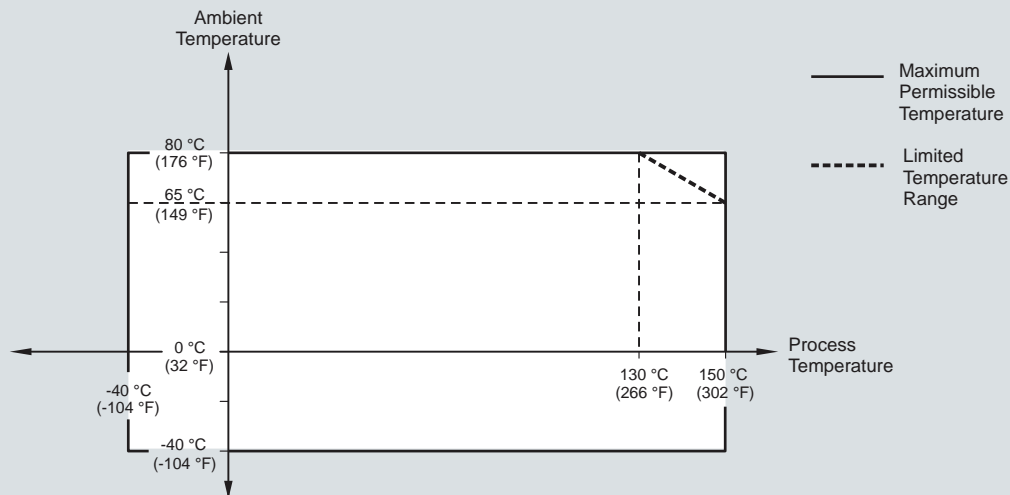
# Level measurement

## Continuous level measurement – Guided wave radar transmitters

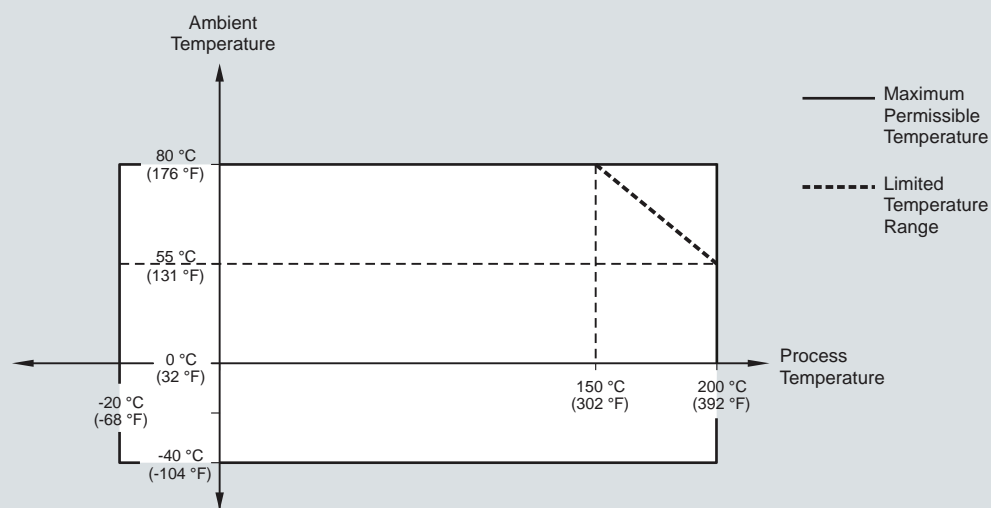
### SITRANS LG series

#### Characteristics Curves

**SITRANS 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

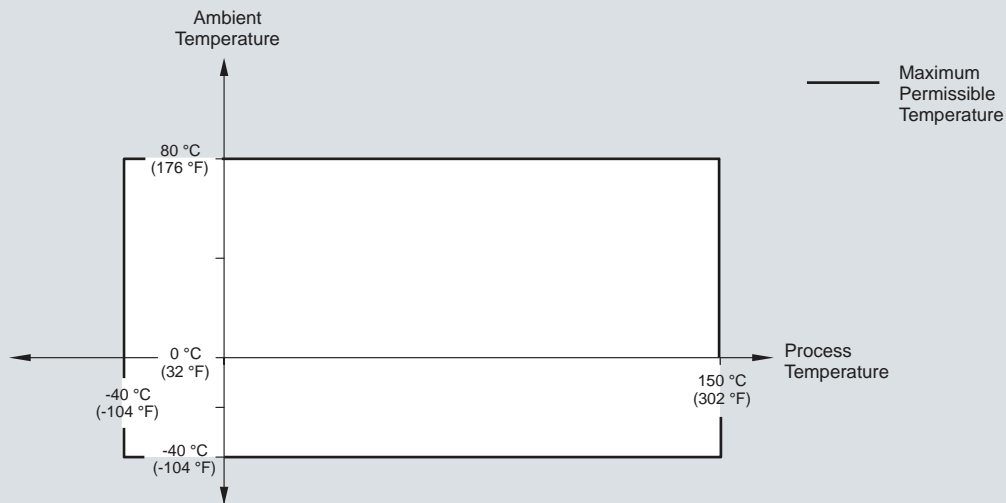
# Level measurement

## Continuous level measurement – Guided wave radar transmitters

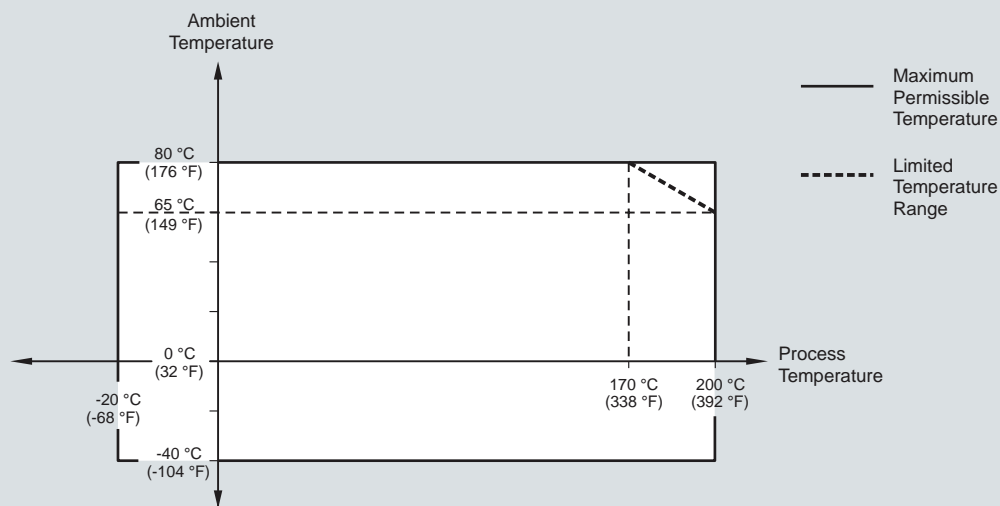
SITRANS LG series

### 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

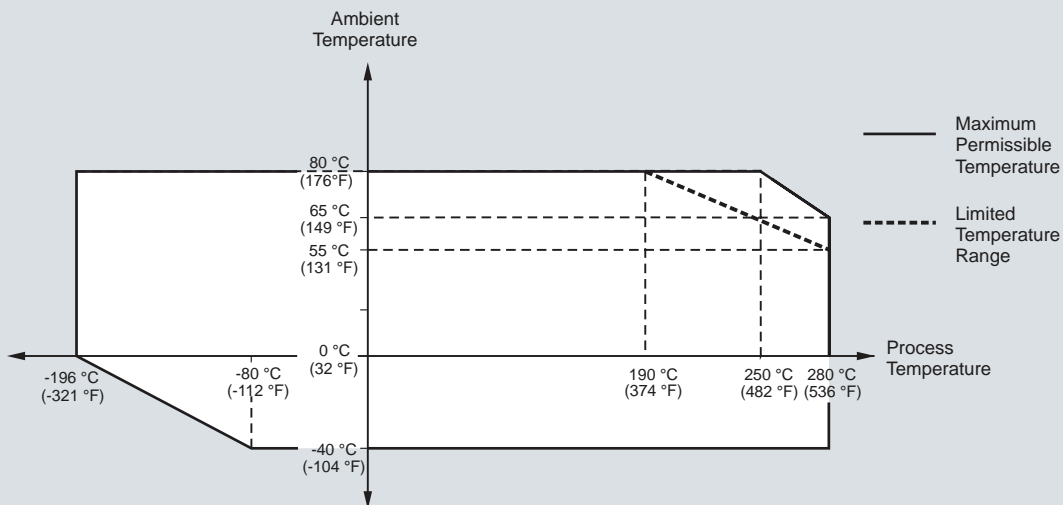
## Continuous level measurement – Guided wave radar transmitters

### SITRANS LG series

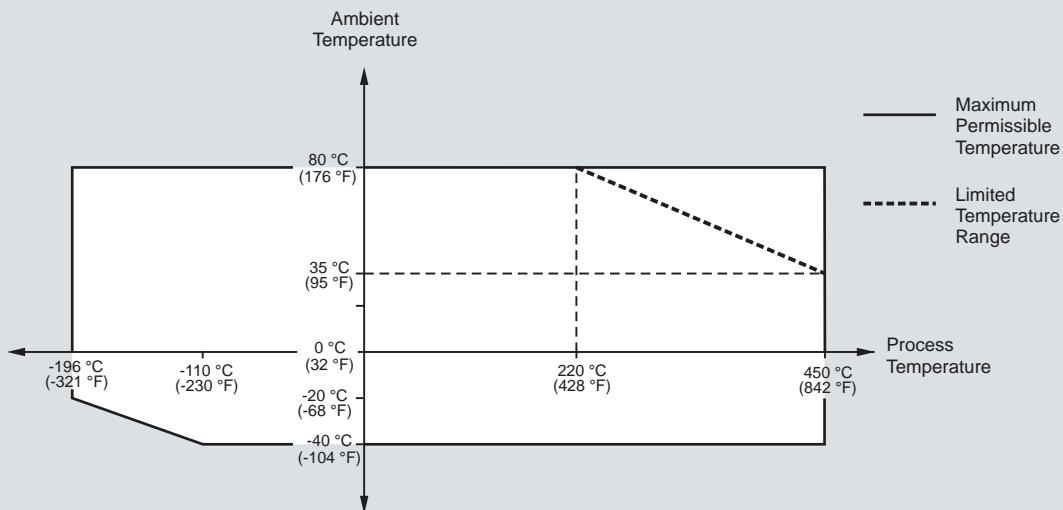
#### Characteristics Curves

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

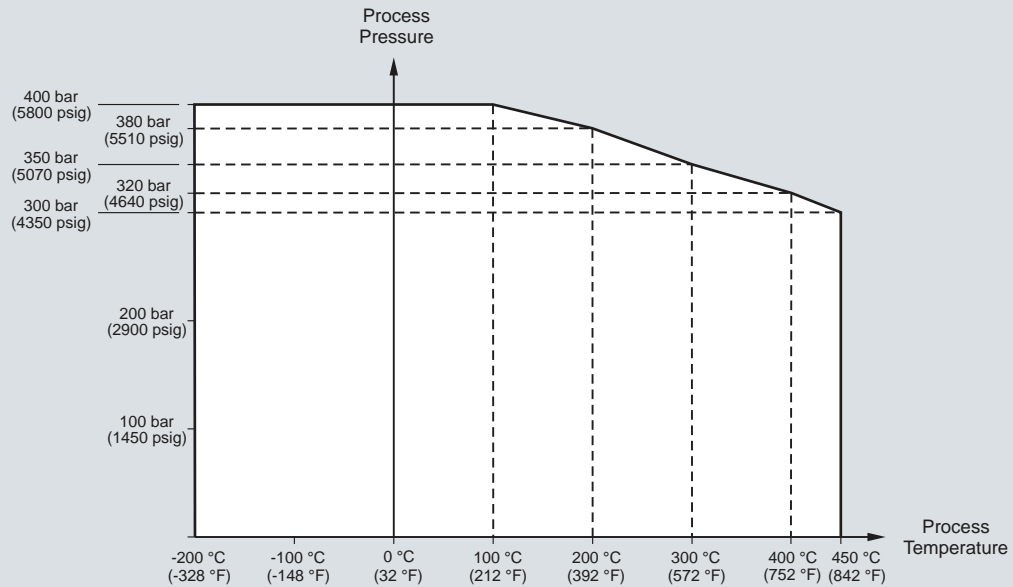
# Level measurement

## 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

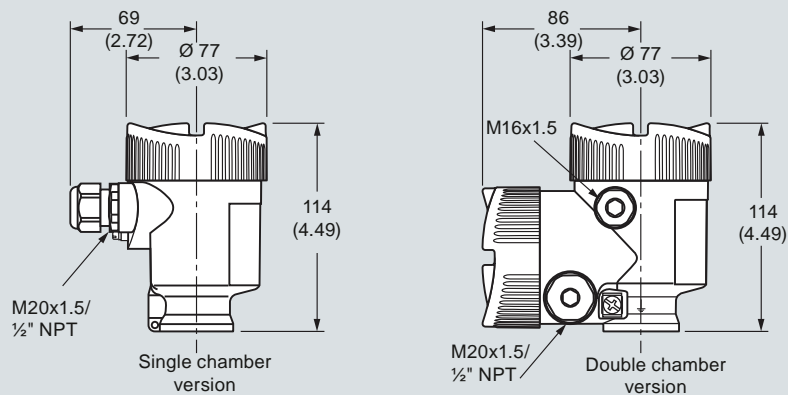
# Level measurement

## Continuous level measurement – Guided wave radar transmitters

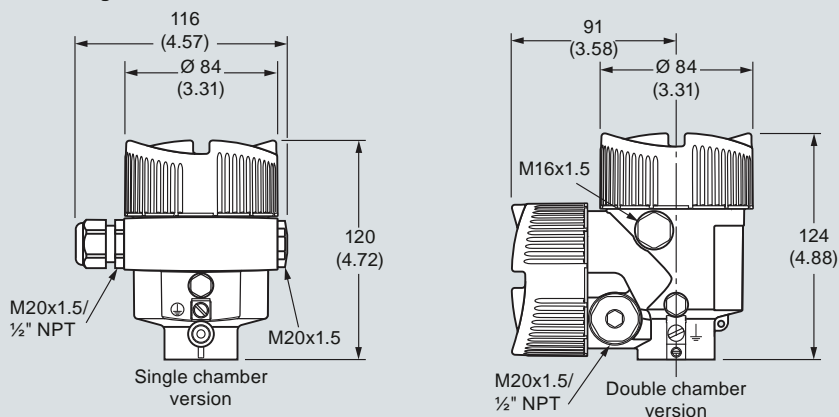
### SITRANS LG series

#### Dimensional drawings

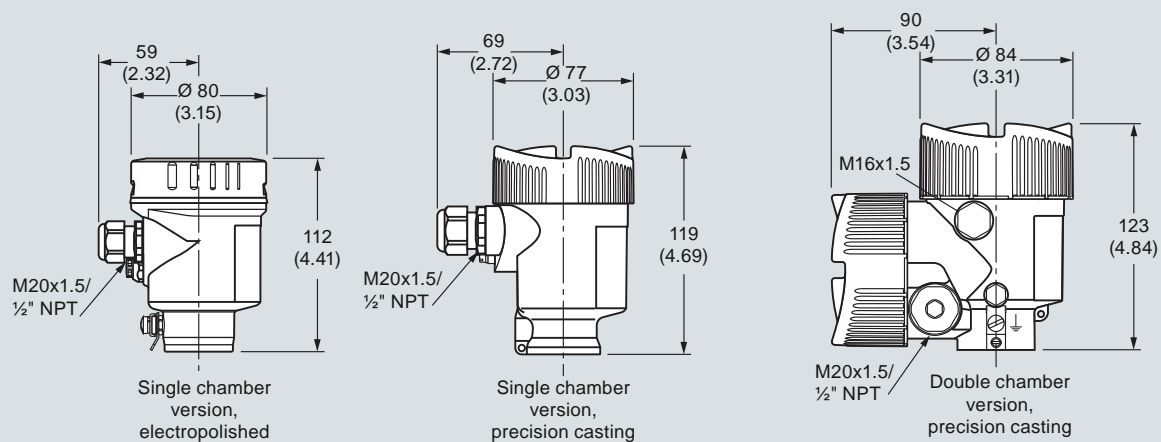
##### LG Series plastic housing



##### 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

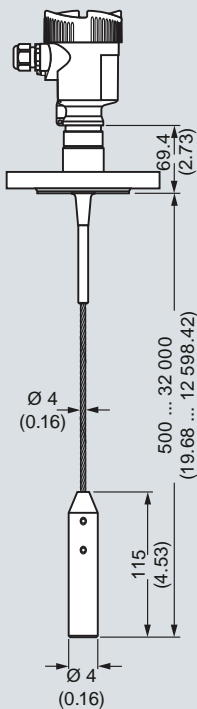
## Continuous level measurement – Guided wave radar transmitters

SITRANS LG series

### Dimensional drawings

#### SITRANS LG240

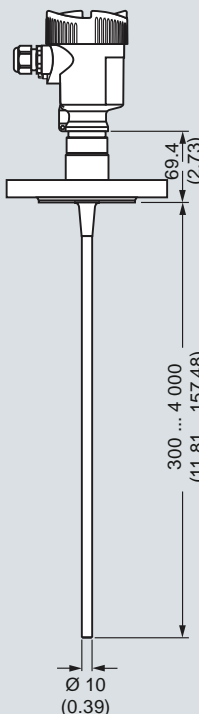
##### Cable version Ø 4 (0.157), PFA coated



Cable version with clamp

Cable version with bolting

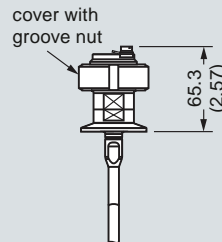
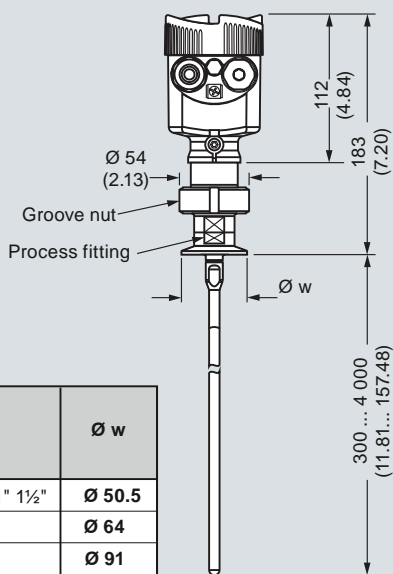
##### Rod version Ø 10 (0.394), PFA coated



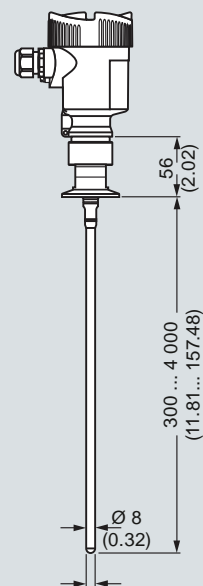
Cable version with clamp

Cable version with bolting

##### 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

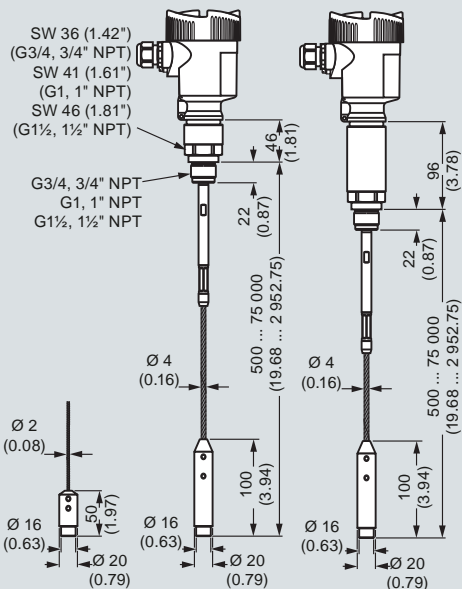
## Continuous level measurement – Guided wave radar transmitters

### SITRANS LG series

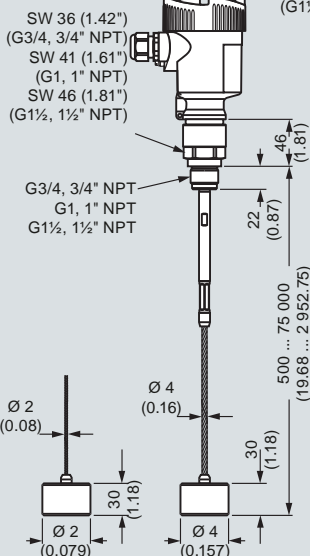
#### Dimensional drawings

#### SITRANS LG250

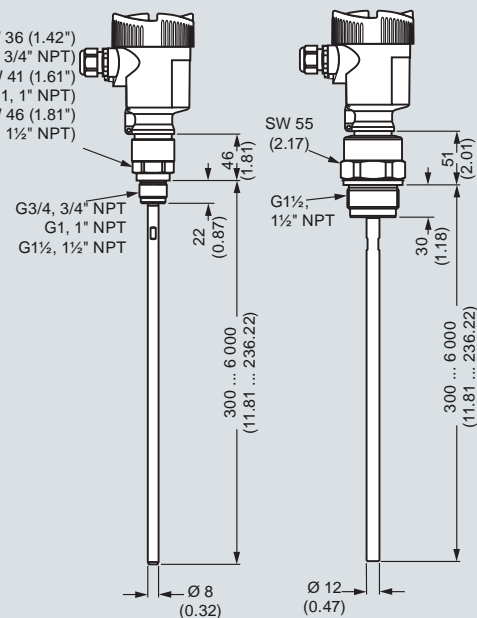
##### Cable version with gravity weight



##### Cable version with centering weight



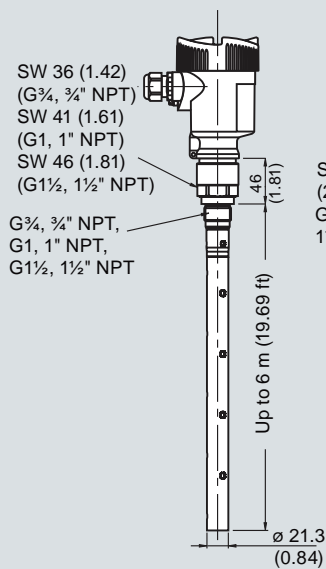
##### Rod version



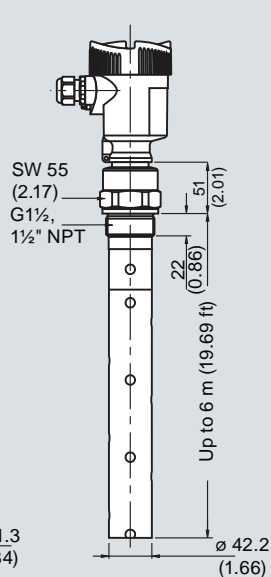
SITRANS LG250, dimensions in mm (inch)

#### SITRANS LG250, coax version

##### Coaxial version ø 21.3 (0.839)



##### Coaxial version ø 42.2 (1.661)



SITRANS LG250, dimensions in mm (inch)

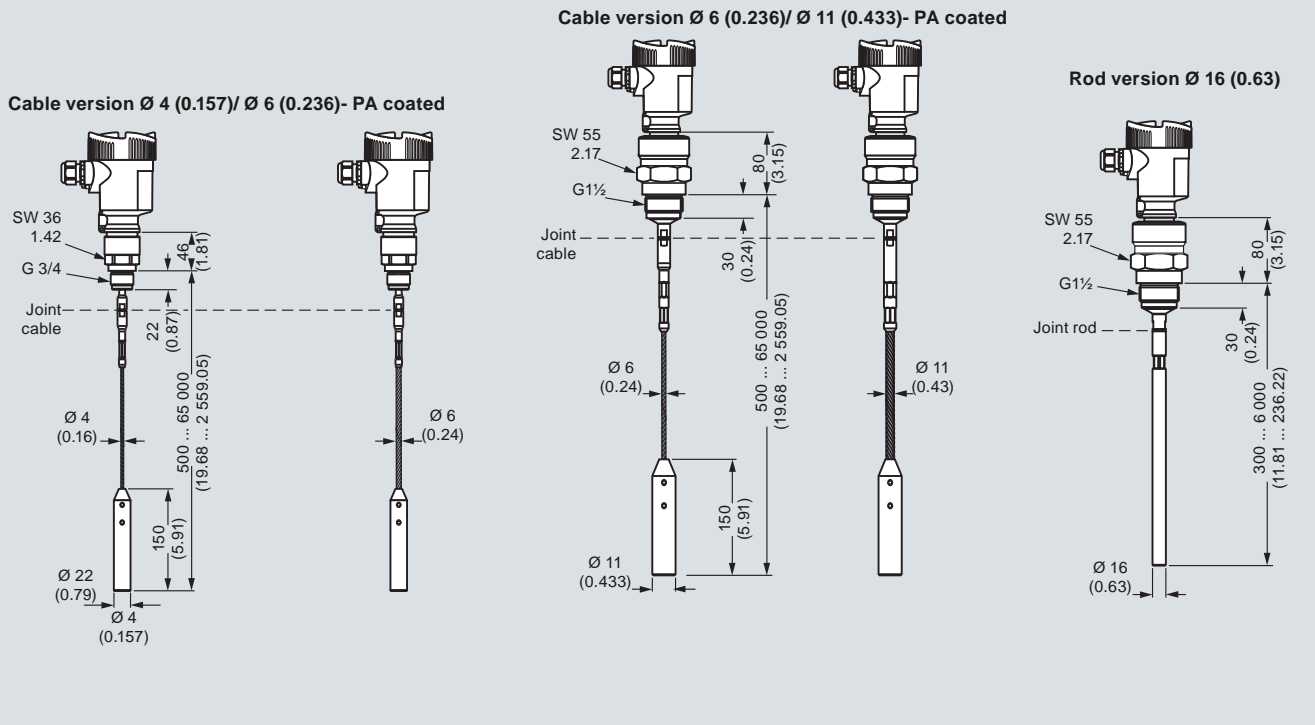
# Level measurement

## Continuous level measurement – Guided wave radar transmitters

SITRANS LG series

### Dimensional drawings

#### SITRANS LG260



SITRANS LG260, dimensions in mm (inch)

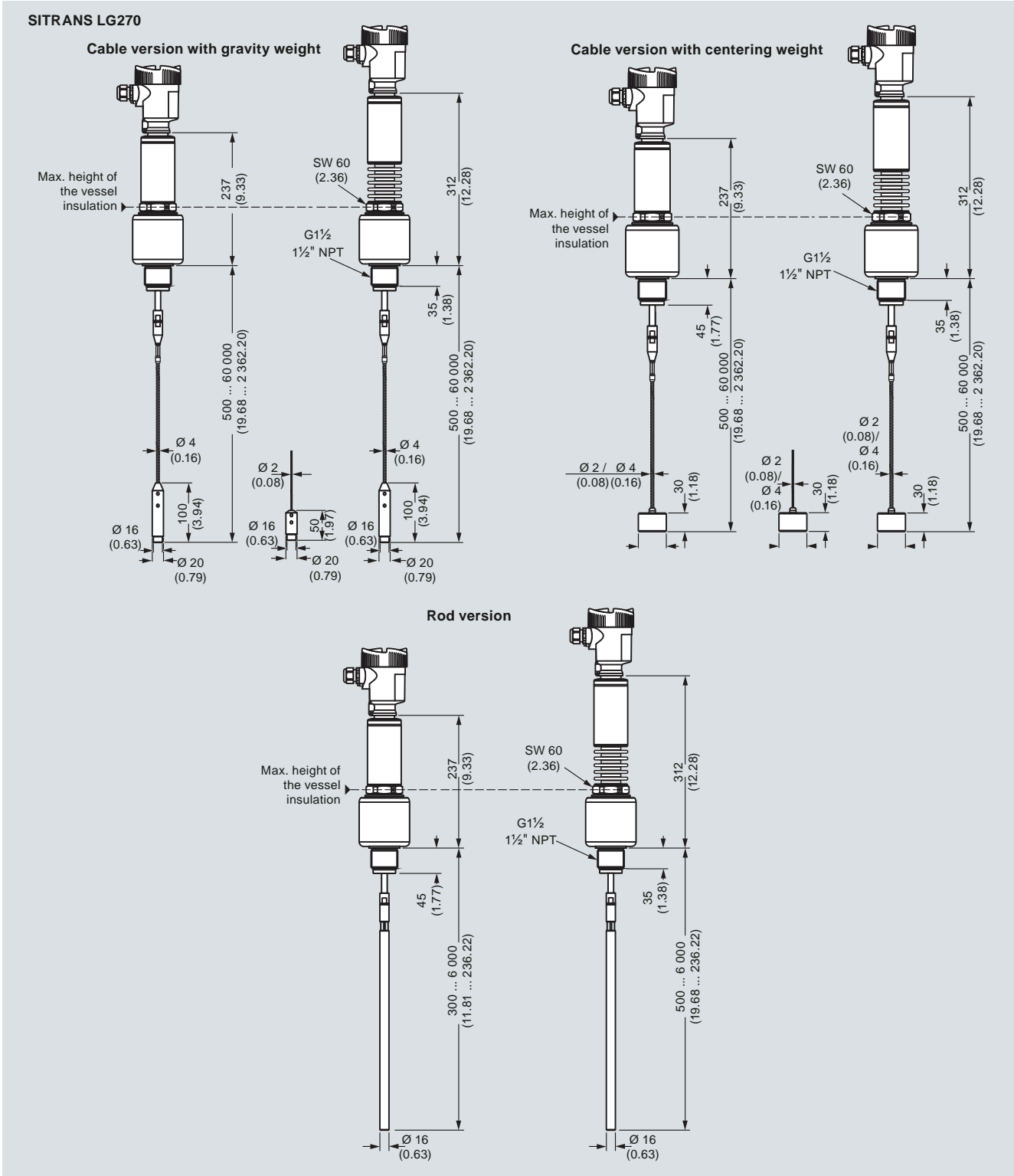
# Level measurement

## Continuous level measurement – Guided wave radar transmitters

### SITRANS LG series

#### Dimensional drawings

4



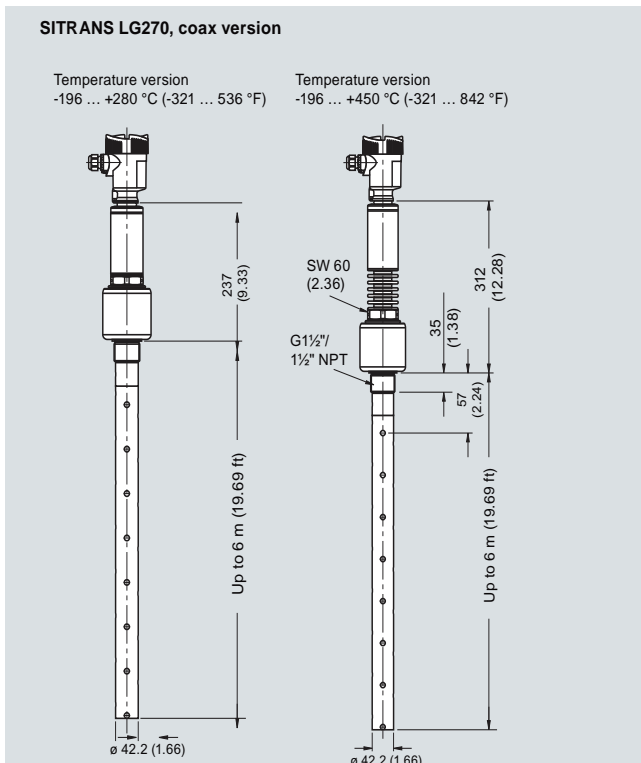
SITRANS LG270, dimensions in mm (inch)

# Level measurement

## Continuous level measurement – Guided wave radar transmitters

SITRANS LG series

### Dimensional drawings



SITRANS LG270, dimensions in mm (inch)

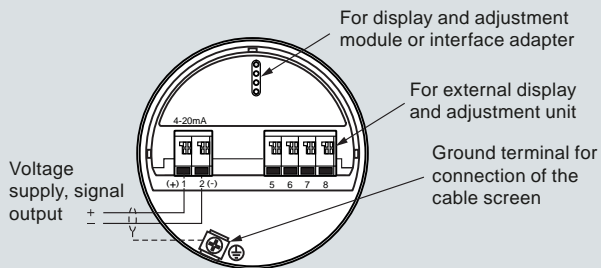
# Level measurement

## Continuous level measurement – Guided wave radar transmitters

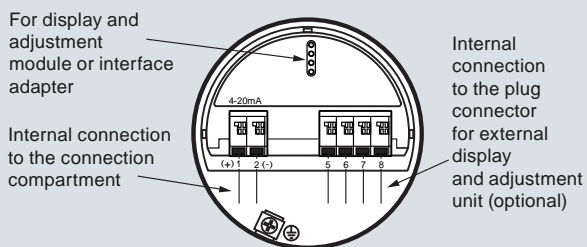
### SITRANS LG series

#### Schematics

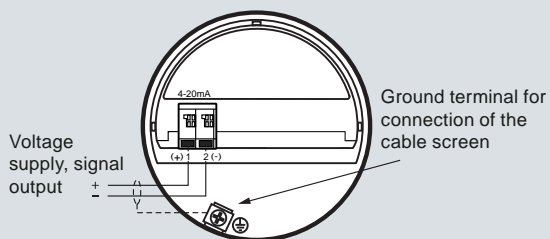
##### Electronics and connection compartment, single and double chamber housing



##### Electronics compartment, double chamber housing



##### Connection compartment, Ex-d-ia double chamber housing

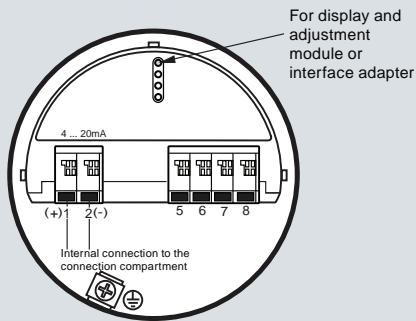


SITRANS LG series, connections

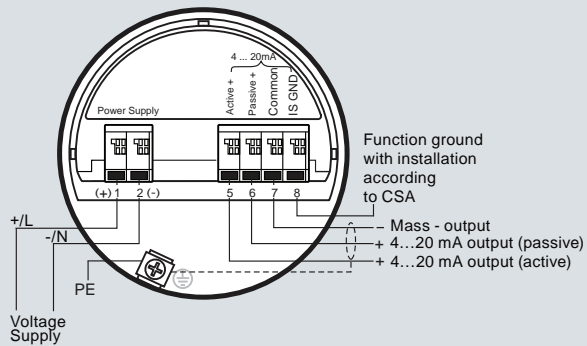
4

### Schematics

#### Electronics compartment, double chamber housing



#### Connection compartment with double chamber housing with mains voltage



SITRANS LG series, connections

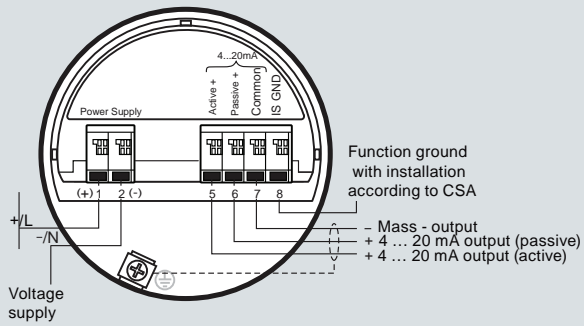
# Level measurement

## Continuous level measurement – Guided wave radar transmitters

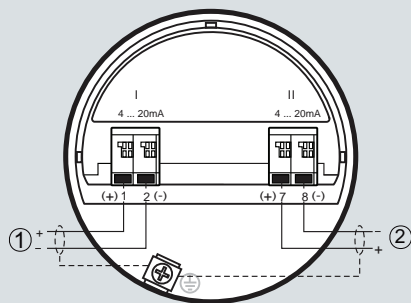
### SITRANS LG series

#### Schematics

##### Connection compartment with low voltage



##### Supplementary electronics



1. First current output (I) - Voltage supply and signal output (HART)
2. Second current output (II) - Voltage supply and signal output (without HART)

SITRANS LG series, connections