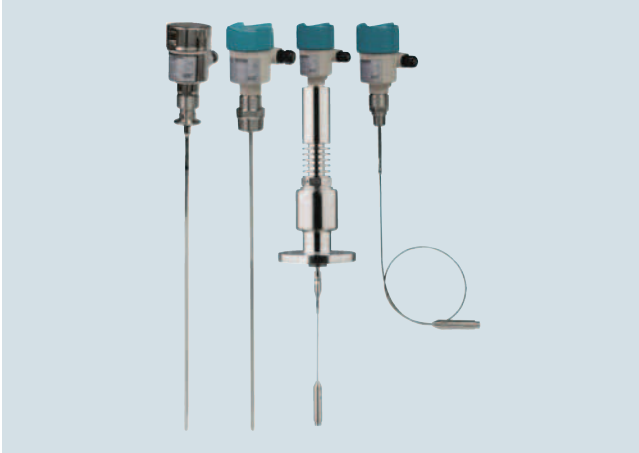


Level Measurement

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 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
- Wide range of Hygienic options

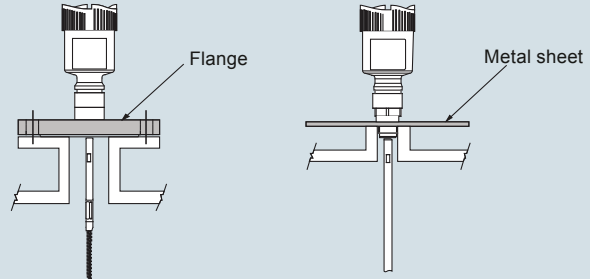
Application

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

Configuration

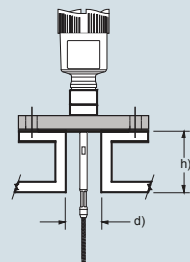
Mounting on nozzle



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

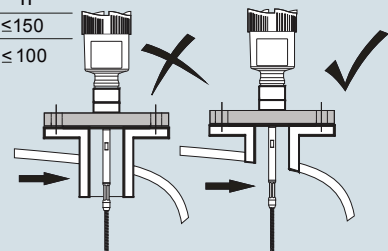
Mounting socket



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.

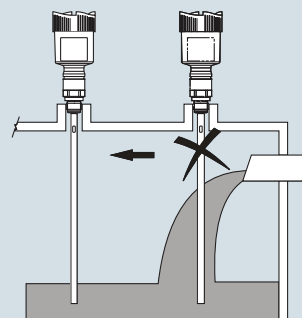
d	h
DN 40 ... DN 150	≤ 150
$> \text{DN } 150 \dots \text{DN } 200$	≤ 100

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

Level Measurement

Continuous level measurement - Guided wave radar transmitters

SITRANS LG series

Technical specifications

Mode of operation		Design	
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	
Output		• Enclosure	<ul style="list-style-type: none"> Plastic housing plastic PBT (Polyester) Aluminum die-casting housing, aluminum die-casting AISi10 mg, powder-coated- basis: polyester Stainless steel housing, precision casting 316L Stainless steel housing, electropolished 316L
mA analog output with HART digital signal	4 ... 20 mA/HART (SIL optional)	• Degree of protection	<ul style="list-style-type: none"> Type 4/NEMA 4, IP65 Plastic housing IP66/IP67 Aluminum and stainless steel housings are IP66/68
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"
Modbus	Modbus RTU, Modbus ASCII, Levelmaster	• Hygienic	Hygienic fittings
PROFIBUS PA		Programming	
Performance		Local	Four button, menu-driven data entry
Process reference conditions according to DIN EN 61298-1		Handheld communicator	Hart communicator
Non-linearity		PC	SIMATIC PDM, AMS, PACTware
• Coaxial		Power	
• Single rod probes		2 wire Hart version	9.6 ... 35 V DC
• Interface models	See manual for more details	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) (Note: Typical deviation, Interface measurement) See manual for more details	Certificates and approvals	
Electromagnetic compatibility (check if needed)		Hazardous approvals:	ATEX, FM, CSA, IECex
• Measuring cycle time	< 500 ms	Hygienic approvals	EHEDG
• Step response time	≤ 3 s	Overfill protection	WHG
• Temperature Effects	The measurement error from the process conditions is in the specified pressure and temperature range of below 1 %	Ship approval	ABS, CCS, GL
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) Note: for measurement below 1.4 use probe end tracking.		
Process temperature range	-196 ... +450 °C (-321 ... +842 °F)		
Vessel pressure	-1 ... +400 bar (-100 ... +40 000 kPa)		

	SITRANS LG240	SITRANS LG250	SITRANS LG260	SITRANS LG270
Industries	Food, Beverage and Pharmaceutical	Chemical/HPI/Power/General	Cement, power generation, food, processing, mineral processing, mining	Chemical/HPI/Power/General
Applications	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
Range	32 m	75 m	60 m	60 m
Performance	± 2 mm	± 2 mm	± 2 mm	± 2 mm
Temperature	-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)
Communications	<ul style="list-style-type: none"> • 4 ... 20 mA/HART • Modbus, Modbus RTU, Modbus ASCII, Levelmaster • PROFIBUS PA • SIMATIC PDM • DTM/FDT for PACTware • Fieldcare 	<ul style="list-style-type: none"> • 4 ... 20 mA/HART • Modbus, Modbus RTU, Modbus ASCII, Levelmaster • PROFIBUS PA • SIMATIC PDM • DTM/FDT for PACTware • Fieldcare 	<ul style="list-style-type: none"> • 4 ... 20 mA/HART • Modbus, Modbus RTU, Modbus ASCII, Levelmaster • PROFIBUS PA • SIMATIC PDM • DTM/FDT for PACTware • Fieldcare 	<ul style="list-style-type: none"> • 4 ... 20 mA/HART • Modbus, Modbus RTU, Modbus ASCII, Levelmaster • PROFIBUS PA • SIMATIC PDM • DTM/FDT for PACTware • Fieldcare

Level Measurement

Continuous level measurement - Guided wave radar transmitters

SITRANS LG series

4

Selection and Ordering data	Article No.	Order Code	Selection and Ordering data	Article No.	Order Code
SITRANS LG240	7ML5880-		SITRANS LG240	7ML5880-	
Guided Wave Radar sensor for Hygienic and corrosive continuous level and interface measurement of liquids.			Guided Wave Radar sensor for Hygienic and corrosive continuous level and interface measurement of liquids.		
Click on the Article No. for the online configuration in the PIA Life Cycle Portal.					
Approvals					
Ordinary location CE ⁹⁾	0 A		Bolting DN 50, PN 25 DIN11851/1.4435(BN2) ⁴⁾	1 3	
ATEX II 1G, 1/2G, 2G Ex ia IIC T6 ⁹⁾	0 E		Bolting DN 50, PN 25 DIN11851/PTFE-TFM 1600	1 4	
ATEX II 1G, 1/2G 2G Ex ia IIC + ATEX II 1D, 1/2D, 1/3D, 2D, Ex t IIIC IP66 T ¹¹⁾¹³⁾¹⁵⁾²⁴⁾	0 H		Bolting DN 65, PN 25 DIN11851/PTFE-TFM 1600	1 5	
ATEX II 1/2G, 2G Ex d ia IIC T6 ¹⁾¹²⁾	0 J		Flange DN 25, PN 40 Form C, DIN 2501/PTFE-TFM 1600	2 0	
ATEX II 1/2G, 2G Ex d ia IIC + ATEX II 1/2D, 2D IP6x ¹⁾¹¹⁾¹²⁾¹³⁾¹⁵⁾²⁴⁾	0 K		Flange DN 40, PN 40 Form C, DIN 2501/PTFE-TFM 1600	2 1	
ATEX II 1D, 1/2D, 1/3D, 2D, Ex t IIIC IP66 T ¹¹⁾¹³⁾¹⁵⁾²⁴⁾	0 N		Flange DN 50, PN 40 Form C, DIN 2501/PTFE-TFM 1600	2 2	
IEC Ex ia IIC T6 ⁹⁾	0 P		Flange DN 50, PN 40 Form V13, DIN 2513/PTFE-TFM 1600	2 3	
IEC Ex ia IIC T6 + IEC IP6x T tD ¹¹⁾¹³⁾¹⁵⁾²⁴⁾	0 Q		Flange DN 65, PN 40 Form C, DIN 2513/PTFE-TFM 1600	2 4	
IEC Ex d ia IIC T6 ¹⁾¹²⁾	0 R		Flange DN 80, PN 40 Form C, DIN 2501/PTFE-TFM 1600	2 5	
IEC Ex d ia IIC T6 + IEC IP6x T tD ¹⁾¹¹⁾¹²⁾¹³⁾¹⁵⁾²⁴⁾	0 S		Flange DN 100, PN 16 Form C, DIN 2501/PTFE-TFM 1600	2 6	
FM (NI) Class I, Div. 2, Groups A, B, C, D	1 A		Flange DN 80, PN 40 EN1092-1 Form B1/PTFE-TFM 1600	2 7	
FM (IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F	1 B		Flange DN 100, PN 40 EN1092-1 Form B1/PTFE-TFM 1600	2 8	
FM(XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G ¹⁾¹²⁾	1 C		Flange 2" 150 lb RF, ANSI B16.5/PTFE-TFM 1600	3 0	
CSA (NI) Class I, Div. 2, Groups A, B, C, D (DIP) Class II, III, Div. 1, Groups E, F, G ¹⁾¹³⁾¹⁵⁾	1 E		Flange 2" 300 lb RF, ANSI B16.5/PTFE-TFM 1600	3 1	
CSA (IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G	1 F		Flange 3" 150 lb RF, ANSI B16.5/PTFE-TFM 1600	3 2	
CSA (XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G ¹⁾¹²⁾	1 G		Flange 4" 150 lb RF, ANSI B16.5/PTFE-TFM 1600	3 3	
Probe version/Material			Note: The pressure limit for all PTFE coated versions is 16 bar (per manual).		
Probe cable ø4 mm (0.16 inch) with gravity weight/PFA ²⁾⁷⁾	A		Electronics		
Probe exchangeable rod (ø8 mm) / 1.4435 (BN2), can be autoclaved (Ra < 0.76 µm) ³⁾⁷⁾	B		Two-wire 4 ... 20mA/HART	0	
Probe exchangeable rod (ø8 mm) / 1.4435 (BN2), (Ra < 0.76 µm) ³⁾⁷⁾	C		Four-wire Modbus ¹⁹⁾²⁰⁾²¹⁾²²⁾	1	
Probe rod ø10 mm (0.39 inch)/PFA ²⁾⁷⁾	D		Two-wire 4...20mA/HART with SIL qualification ¹⁷⁾¹⁸⁾	2	
Process fitting/Material			Four-wire 4...20mA/HART; 90...253V AC; 50/60 Hz ¹⁾⁸⁾¹⁰⁾	3	
Clamp 2" PN 16 (ø64 mm) DIN 32676, ISO2852/1.4435 (BN2) ⁴⁾	0 0		Four-wire 4...20mA/HART; 9.6...48V DC; 20...42 V AC ¹⁾⁸⁾¹⁰⁾	4	
Clamp 2" PN 16 (ø64 mm) DIN 32676, ISO2852/PTFE-TFM 1600	0 1		PROFIBUS PA	5	
Clamp 2 1/2" PN 10 (ø77.5 mm) DIN 32676, ISO2852/1.4435 (BN2) ⁴⁾	0 2		Seal/Process temperature		
Clamp 2 1/2" PN 10 (ø77.5 mm) DIN 32676, ISO2852/PTFE-TFM 1600	0 3		Without glass seal/-40 ... +150 °C (-40 ... +302 °F) ⁵⁾¹¹⁾	A	
Clamp 3" PN 10 (ø91 mm) DIN 32676, ISO2852/1.4435 (BN2) ⁴⁾	0 4		FFKM (Kalrez 6221)/-20...150 °C (-4... +302 °F)	B	
Clamp 3" PN 10 (ø91 mm) DIN 32676, ISO2852/PTFE-TFM 1600	0 5		EPDM (Freudenberg 70 EPDM 291)/-20 ...130 °C (-4 ... +266 °F)	C	
Clamp 4" PN6 (ø119 mm) DIN 32676, ISO2852/1.4435(BN2) ⁴⁾	0 6		Housing/Protection/Cable		
Clamp 4" PN6 (ø119 mm) DIN 32676, ISO2852/PTFE-TFM 1600	0 7		Plastic IP66/IP67 M20x1.5/blind stopper	A	
Bolting DN 32, PN 40 DIN11851/1.4435(BN2) ⁴⁾	0 8		Plastic IP66/IP67 1/2" NPT/blind stopper	B	
Bolting DN 32, PN 40 DIN11851/PTFE-TFM 1600	1 0		Aluminium/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	C	
Bolting DN 40, PN 40 DIN11851/1.4435 (BN2) ⁴⁾	1 1		Aluminium/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	D	
Bolting DN 40, PN 40 DIN11851/PTFE-TFM 1600	1 2		Aluminium double chamber/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	E	
			Aluminium double chamber/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	F	
			Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	G	

Level Measurement

Continuous level measurement - Guided wave radar transmitters

SITRANS LG series

Selection and Ordering data	Article No.	Order Code	Selection and Ordering data	Order code
SITRANS LG240	7ML5880-		Further designs (mandatory)	
Guided Wave Radar sensor for Hygienic and corrosive continuous level and interface measurement of liquids.			Please add "-Z" to Article No. and specify Order code(s).	
Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper		H	Supplementary electronics	
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) M20x1.5/blind stopper		J	Without	A00
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper		K	Additional current output 4 ... 20 mA ¹⁾²³⁾	A01
Stainless steel double chamber/IP66/IP68 (0.2 bar) M20x1.5/blind stopper		L	Local display interface	
Stainless steel double chamber/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper		M	Without	E00
Aluminium/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel		N	Mounted	E01
Aluminium double chamber/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel		P	Laterally mounted ¹⁾	E02
Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) M20x1.5/Cable gland stainless steel		Q	Language of display	
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel		R	German	L00
Aluminium single chamber / IP66/IP68 (0.2 bar) M20x1.5 / Cable gland brass nickel-plated		W	English	L01
Aluminium double chamber / IP66/IP68 (0.2 bar) M20x1.5 / Cable gland brass nickel-plated		X	French	L02
Stainless steel single chamber (precision casting) / IP66/IP68 (0.2 bar) M20x1.5 / Cable gland brass nickel-plated		Y	Dutch	L03
			Italian	L04
			Spanish	L05
			Portuguese	L06
			Russian	L07
			Chinese	L08
			Japanese	L09
			Operating instructions	
			German	M00
			English	M01
			French	M02
			Spanish	M03
Lengths			Selection and Ordering data	Order code
Rod ø8 mm (0.31 inch)/1.4435 (Basle standard 300 ... 4 000 mm)			Further designs (optional)	
300 ... 1 000 mm (11.81 ... 39.37 inch) ¹⁴⁾		0	Please add "-Z" to Article No. and specify Order code(s).	
1 001 ... 2 000 mm (39.41 ... 78.74 inch) ¹⁴⁾		1	Enter the total insertion length in plain text description	Y01
2 001 ... 3 000 mm (78.78 ... 118.11 inch) ¹⁴⁾		2	Enter the total length of rigid part	Y02
3 001 ... 4 000 mm (118.15 ... 157.48 inch) ¹⁴⁾		3	Cleaning included certificate: oil, grease and silicone free	W01
Rod ø10 mm (0.24 inch)/PFA (300 ... 4 000 mm)			Identification Label (measurement loop) stainless steel	Y17
300 mm (11.81 inch) ¹⁴⁾	9	R 1 A	Identification Label (measurement loop) Foil	Y18
500 mm (19.69 inch) ¹⁴⁾	9	R 1 B	3.1 Certificate instrument ¹⁶⁾	C12
300 ... 1 000 mm (11.81 ... 39.37 inch) ¹⁴⁾	9	R 1 C	3.1 Certificate material (NACE0175) ¹⁶⁾	D07
1 001 ... 5 000 mm (39.41 ... 78.74 inch) ¹⁴⁾	9	R 1 D	3.1 Certificate instrument with test data ¹⁶⁾	C25
2 001 ... 3 000 mm (78.78 ... 118.11 inch) ¹⁴⁾	9	R 1 E	2.2 Certificate material ¹⁶⁾	C15
3 001 ... 4 000 mm (118.15 ... 157.48 inch) ¹⁴⁾	9	R 1 F	Quality/test plan ¹⁶⁾	C26
Cable ø4 mm (0.16 inch)/PFA (500 ... 32 000 mm)			Dye penetration test + 3.1 certificate/instrument ¹⁶⁾	C13
500 mm (9.69 inch)	9	R 1 G	X-ray test + 3.1 certificate/instrument ¹⁶⁾	C14
501 ... 1 000 mm (19.72 ... 39.37 inch)	9	R 1 H	Positive material identification test + 3.1 certificate/instrument ¹⁶⁾	C16
1 001 ... 2 000 mm (39.37 ... 196.85 inch)	9	R 1 J	Roughness test + 3.1 certificate/instrument ¹⁶⁾	C18
2 001 ... 4 000 mm (196.89 ... 393.70 inch)	9	R 1 K	Pressure test + 3.1 certificate/instrument ¹⁶⁾	C31
4 001 ... 5 000 mm (393.74 ... 590.55 inch)	9	R 1 L	Helium leak test + 3.1 certificate/instrument ¹⁶⁾	C32
5 001 ... 10 000 mm (590.59 ... 787.40 inch)	9	R 1 M	Ferrite measuring accuracy to DIN32514-1 + 3.1 certificate/instrument ¹⁶⁾	C60
10 001 ... 15 000 mm (787.44 ... 984.25 inch)	9	R 1 N	Pressure test according to Norsok + 3.1 certificate/instrument ¹⁶⁾	C61
15 001 ... 20 000 mm (984.29 ... 1 181.10 inch)	9	R 1 P	5 point calibration certificate + 3.1 certificate/instrument ¹⁶⁾	C62
20 001 ... 25 000 mm (1 181.14 ... 1 377.95 inch)	9	R 1 Q		
25 001 ... 32 000 mm (1 377.99 ... 1 574.80 inch)	9	R 1 R		

Level Measurement

Continuous level measurement - Guided wave radar transmitters

SITRANS LG series

Selection and Ordering data

Article No.

Additional Operating Instructions

German

4 ... 20 mA/HART - two-wire, PFA insulated	PBD-51041000
4 ... 20 mA/HART - two-wire, Polished version	PBD-51041001
4 ... 20 mA/HART - four-wire PFA insulated	PBD-51041002
4 ... 20 mA/HART - four-wire Polished version	PBD-51041003
Modbus- PFA insulated	PBD-51041004
Modbus protocol, Polished version	PBD-51041005
PROFIBUS PA, PFA insulated	PBD-51041006
PROFIBUS PA, polished version	PBD-51041007

Note: Operating instructions should be ordered as a separate line on the order.

This device is shipped with the Siemens Milltronics manual DVD containing the operating instructions library.

English

4 ... 20 mA/HART - two-wire PFA insulated	PBD-51041037
4 ... 20 mA/HART - two-wire Polished version	PBD-51041038
4 ... 20 mA/HART - four-wire PFA insulated	PBD-51041039
4 ... 20 mA/HART - four-wire Polished version	PBD-51041040
Modbus, PFA insulated	PBD-51041041
Modbus protocol, Polished version	PBD-51041042
PROFIBUS PA, PFA insulated	PBD-51041043
PROFIBUS PA, Polished version	PBD-51041044

Note: Operating instructions should be ordered as a separate line on the order.

This device is shipped with the Siemens Milltronics manual DVD containing the operating instructions library.

French

4 ... 20 mA/HART - two-wire PFA insulated	PBD-51041111
4 ... 20 mA/HART - two-wire Polished version	PBD-51041112
4 ... 20 mA/HART - four-wire PFA insulated	PBD-51041113
4 ... 20 mA/HART - four-wire Polished version	PBD-51041114
Modbus, PFA insulated	PBD-51041115
Modbus protocol, Polished version	PBD-51041116
PROFIBUS PA, PFA insulated	PBD-51041117
PROFIBUS PA, Polished version	PBD-51041118

Note: Operating instructions should be ordered as a separate line on the order.

This device is shipped with the Siemens Milltronics manual DVD containing the operating instructions library.

Spanish

4 ... 20 mA/HART - two-wire PFA insulated	PBD-51041074
4 ... 20 mA/HART - two-wire Polished version	PBD-51041075
4 ... 20 mA/HART - four-wire PFA insulated	PBD-51041076
4 ... 20 mA/HART - four-wire Polished version	PBD-51041077
Modbus, PFA insulated	PBD-51041078
Modbus protocol, Polished version	PBD-51041079
PROFIBUS PA, PFA insulated	PBD-51041080

Note: Operating instructions should be ordered as a separate line on the order.

This device is shipped with the Siemens Milltronics manual DVD containing the operating instructions library.

Selection and Ordering data

Article No.

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

- Available with Housing/Protection/Cable options E,F, L, M only
- Available only with PFA Process Fitting/Material including options 01, 03, 05, 07, 10, 12, 14 ... 33 (PTFE-TFM 1600 options)
- Available only with Process Fitting/Material options 00, 02, 04, 06, 08, 11, and 13 [1.4435 (BN2) options]
- Available with Length options 0, 1, 2, 3 only (Rod ø8 mm 1.4435 options)
- Available with Length options R1A ... R1R only (Rod ø10 mm/PFA and Cable ø4 mm/PFA options)
- Available only with the same rod or cable diameter in Length options
- Available with Supplementary electronic option A00 and Indicating/Adjustment modules E00, E01
- Available with Supplementary electronic option A01 approval options 0A,0E, and 0P
- Available with Approval options 0A, 0J, 0K, 0N, 0R, 0S, 1A,1 C, 1E, 1F, and 1G
- Available with Version/Material options A and D only
- Available with Indicating/adjustment modules E00 and E01
- Available with Seal/Process temperature C only
- Not available with Y02
- Available with Housing/Protection options C, D, E, F, G, H, L, M
- Listed Certificates are not available with all configurations, please contact factory for more information
- SIL electronic option 2 available with Approval options 0A, 0E, 0H, 0N, 0P, 0Q, 1A, 1B, 1E and 1F
- Available with Supplementary electronic option A00, SIL electronics
- Only available with Approval options 0A, 0J, 0K, 0R, 0S, 1A, 1C, 1E, and 1G
- Available with housings/protection/cable options E, F, L, M and P
- Available with supplementary electronic option A00
- Available with Indicating/adjustment module option E00, E01
- Not available with indicating/adjustment module E02
- Available with Housing/protection options D, F, H and M

Note: Please consult manual for further details.

Selection and Ordering data	Article No.	Order Code	Selection and Ordering data	Article No.	Order Code
SITRANS LG250	7ML5881-		SITRANS LG250	7ML5881-	
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.		
Click on the Article No. for the online configuration in the PIA Life Cycle Portal.					
Approvals					
Ordinary location CE ¹⁶⁾	0 A		Thread G 3/4" (DIN 3852-A) PN 100 / 316L	0 4	
Shipping approval ¹⁹⁾²⁸⁾²⁹⁾	0 B		Thread 3/4" NPT (ASME B1.20.1) PN 100 / 316L	0 5	
ATEX II 1G, 1/2G, 2G Ex ia IIC T6 ¹⁶⁾	0 E		Thread G 1" (DIN 3852-A) PN 40 / 316L	0 6	
ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + shipping approval ¹⁹⁾²⁸⁾²⁹⁾	0 G		Thread 1" NPT (ASME B1.20.1) PN 40 / 316L	0 7	
ATEX II 1G, 1/2G 2G Ex ia IIC + ATEX II 1D, 1/2D, 1/3D, 2D, Ex t IIIC IP66 ¹⁶⁾²³⁾⁴⁰⁾	0 H		Thread G 1" (DIN 3852-A) PN 100 / 316L	0 8	
ATEX II 1/2G, 2G Ex d ia IIC T6 ¹⁾²¹⁾	0 J		Thread 1" NPT (ASME B1.20.1) PN 100 / 316L	1 0	
ATEX II 1/2G, 2G Ex d ia IIC + ATEX II 1D, 1/2D, 1/3D, 2D, Ex t IIIC IP66 T ¹⁾²¹⁾²³⁾⁴⁰⁾	0 K		Thread G 1 1/2" (DIN 3852-A) PN 40 / 316L	1 1	
ATEX II 1/2G, 2G Ex d IIC T6 ¹⁴⁾²⁰⁾	0 L		Thread 1 1/2" NPT (ASME B1.20.1) PN 40 / 316L	1 2	
ATEX II 1/2G, 2G Ex d IIC + ATEX II 1D, 1/2D, 1/3D, 2D, Ex t IIIC IP66 T ¹⁴⁾²⁰⁾²³⁾⁴⁰⁾	0 M		Thread G1 1/2" (DIN 3852-A) PN1 00 / 316L	1 3	
ATEX II 1D, 1/2D, 1/3D, 2D, Ex t IIIC IP66 T ²⁰⁾²³⁾⁴⁰⁾	0 N		Thread 1 1/2" NPT (ASME B1.20.1) PN 100 / 316L	1 4	
IEC Ex ia IIC ¹⁶⁾	0 P		Thread 2" NPT PN 40, ASME B1.20.1 / 316L ³⁷⁾³⁸⁾	1 5	
IEC Ex ia IIC T6 + IEC IP6x T tD ¹⁶⁾²⁰⁾²³⁾⁴⁰⁾	0 Q		Flange DN 25 PN 40 Form C, DIN 2501 / 316L	2 0	
IEC Ex d ia IIC T6 ¹⁾²¹⁾²³⁾⁴⁰⁾	0 R		Flange DN 25 PN 40 Form F, DIN 2501 / 316L	2 1	
IEC Ex d ia IIC T6 + IEC IP6x T tD ¹⁾²⁰⁾²¹⁾⁴⁰⁾	0 S		Flange DN 40 PN 40 Form C, DIN 2501 / 316L	2 2	
IEC Ex d IIC T6 ¹⁴⁾²⁰⁾	0 T		Flange DN 50 PN 40 Form C, DIN 2501 / 316L	2 3	
IEC Ex d IIC T6 + IEC IP6x T tD ¹⁴⁾²⁰⁾²³⁾⁴⁰⁾	0 U		Flange DN 50 PN 40 form V13, DIN 2513 / 316L	2 4	
FM (NI) Class I, Div. 2, Groups A, B, C, D	1 A		Flange DN 80 PN 40 Form C, DIN 2501 / 316L	2 5	
FM (IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F	1 B		Flange DN 80 PN 40 Form V13, DIN 2501 / 316L	2 6	
FM(XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G ¹⁾²¹⁾	1 C		Flange DN 100 PN 16 Form C, DIN 2501 / 316L	2 7	
FM (XP) Class I, Div. 1, Groups A, B, C, D ²⁰⁾	1 D		Flange DN 100 PN 16 Form C, DIN 2501 / 316L	2 8	
CSA (NI) Class I, Div. 2, Groups A, B, C, D (DIP) Class II, III, Div. 1, Groups E, F, G	1 E		Flange DN 100PN 40 Form C, DIN 2501 / 316L	3 0	
CSA (IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G	1 F		Flange DN 100 PN 40 Form V13, DIN 2513 / 316L	3 1	
CSA (XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G ¹⁾²¹⁾	1 G		Flange DN 100 PN 40 Form V13, DIN 2513 / 316L	3 1	
CSA (XP) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G ¹⁴⁾²⁰⁾	1 H		Flange DN 150 PN 16 Form C, DIN 2501 / 316L	3 2	
Probe version/Material			Flange DN 50 PN 40 EN1092-1 Form B1 / 316L	3 3	
Probe exchangeable cable ø2 mm (0.08 inch) with gravity weight/316L ⁸⁾⁹⁾¹¹⁾²⁶⁾	A		Flange DN 80 PN 40 EN1092-1 Form B1 / 316L	3 4	
Probe exchangeable cable ø2 mm (0.08 inch) center weight/316L ⁸⁾⁹⁾¹²⁾²⁶⁾	B		Flange 1 1/2" 150 lb RF, ANSI B16.5 / 316L	3 5	
Probe exchangeable cable ø4 mm (0.16 inch) with gravity weight/316L ⁸⁾⁹⁾¹¹⁾²⁶⁾	C		Flange 2" 150 lb RF, ANSI B16.5 / 316L	3 6	
Probe exchangeable cable ø4 mm (0.16 inch) with center weight/316L ⁸⁾⁹⁾¹²⁾²⁶⁾	D		Flange 2" 300 lb RF, ANSI B16.5 / 316L	3 7	
Probe exchangeable rod ø8 mm (0.31 inch)/316L ²⁾⁸⁾¹⁰⁾¹¹⁾²⁶⁾	E		Flange 3" 150 lb RF, ANSI B16.5 / 316L	3 8	
Probe exchangeable rod ø12 mm (0.47 inch)/316L ³⁾⁸⁾¹⁰⁾¹¹⁾²⁴⁾²⁶⁾	F		Flange 3" 300 lb RF, ANSI B16.5 / 316L	4 0	
Probe coax version ø21.3 mm (0.84 inch) with single hole/316L ⁸⁾⁹⁾¹¹⁾²⁶⁾²⁷⁾	G		Flange 4" 150 lb RF, ANSI B16.5 / 316L	4 1	
Probe coax version ø21.3 mm (0.84 inch) with multiple hole/316L ⁸⁾⁹⁾¹¹⁾²⁶⁾²⁷⁾	H		Flange 4" 300 lb RF, ANSI B16.5 / 316L	4 2	
Probe coax version ø42.2 mm (1.66 inch) with multiple hole/316L ⁵⁾⁸⁾⁹⁾¹¹⁾²⁴⁾²⁶⁾²⁷⁾	K		Flange 6" 150 lb RF, ANSI B16.5 / 316L	4 3	
Process fitting/Material			Flange 6" 300lb RF, ANSI B16.5 / 316L	4 4	
Thread G 3/4" (DIN 3852-A) PN 6 / 316L	0 0		Flange 1 1/2" 150 lb RF, ANSI B16.5 / 316L	4 5	
Thread 3/4" NPT (ASME B1.20.1) PN 6 / 316L	0 1		Electronics		
Thread G 3/4" (DIN 3852-A) PN 40 / 316L	0 2		Two-wire 4 ... 20mA/HART	0	
Thread 3/4" NPT (ASME B1.20.1) PN 40 / 316L	0 3		Four-wire Modbus ³³⁾³⁴⁾³⁵⁾³⁶⁾	1	
			Two-wire 4...20mA/HART with SIL qualification ²⁴⁾³²⁾	2	
			Four-wire 4...20mA/HART; 90...253V AC; 50/60Hz ¹⁾¹⁵⁾¹⁷⁾	3	
			Four-wire 4...20mA/HART; 9.6...48V DC; 20...42V AC ¹⁾¹⁵⁾¹⁷⁾	4	
			PROFIBUS PA	5	

Level Measurement

Continuous level measurement - Guided wave radar transmitters

SITRANS LG series

Selection and Ordering data

Article No. Order Code

SITRANS LG250	7ML5881-
A guided wave radar sensor for continuous level and interface measurement of liquids.	
Seal/Second line of defense/ Process temperature	
FKM (SHS FPM 70C3 GLT)/ without glass seal/-40 ... +80 °C (-40 ... +176 °F) ⁶⁾	A
FKM (SHS FPM 70C3 GLT)/ without glass seal/-40 ... +150 °C (-40 ... +302 °F)	B
FKM (SHS FPM 70C3 GLT)/ with glass seal/-40 ... +150 °C (-40 ... +302 °F)	C
EPDM (A+P 75.5/KW75F)/ without glass seal/-40 ... +80 °C (-40 ... +176 °F)	D
EPDM (A+P 75.5/KW75F)/ with glass seal/-40 ... +150 °C (-40 ... +302 °F)	E
FFKM (Kalrez 6375)/ with glass seal/-20 ... +200 °C (-4 ... +392 °F)	F
EPDM (A+P 75.5/KW75F)/ without glass seal/-40 ... +80 °C (-40 ... +176 °F) ⁶⁾	G
EPDM (A+P 75.5/KW75F)/ without glass seal/-40 ... +150 °C (-40 ... +302 °F)	H
EPDM (A+P 75.5/KW75F)/ with glass seal/-40 ... +150 °C (-40 ... +302 °F)	J
Silicone FEP coated (A+P FEP-O-SEAL)/ without glass seal/-40 ... +80 °C (-40 ... +176 °F) ⁶⁾	K
Silicone FEP coated (A+P FEP-O-SEAL)/ without glass seal/-40 ... +150 °C (-40 ... +302 °F)	L
Silicone FEP coated (A+P FEP-O-SEAL)/ with glass seal/-40 ... +150 °C (-40 ... +302 °F)	M
With borosilicate glass lead through/ with glass seal/-60 ... +150 °C (-76 ... +302 °F) ⁷⁾	N
FFKM (Kalrez 6375)/ without glass seal/-20 ... +200 °C (-4 ... +392 °F)	P
FKM (SHS FPM 70C3 GLT)/ with glass seal/-40 ... 80 °C (-40 ... +176 °F) ⁶⁾	Q
Housing/Protection/Cable	
Plastic IP66/IP67 M20x1.5/blind stopper	A
Plastic IP66/IP67 1/2" NPT/blind stopper	B
Aluminium/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	C
Aluminium/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	D
Aluminium double chamber/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	E
Aluminium double chamber/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	F
Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	L
Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	M
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	N
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	P
Stainless steel double chamber/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	Q
Stainless steel double chamber/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	R
Aluminium/IP66/IP68 (0.2 bar) M20x1.5/ cable gland stainless steel	S
Aluminium double chamber/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	T

Selection and Ordering data

Article No. Order Code

SITRANS LG250	7ML5881-
A guided wave radar sensor for continuous level and interface measurement of liquids.	
Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	U
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	V
Aluminium single chamber / IP66/IP68 (0.2 bar) M20x1.5 / Cable gland brass nickel-plated	W
Aluminium double chamber / IP66/IP68 (0.2 bar) M20x1.5 / Cable gland brass nickel-plated	X
Stainless steel single chamber (precision casting) / IP66/IP68 (0.2 bar) M20x1.5 / Cable gland brass nickel-plated	Y
Lengths	
<u>Rod ø8 mm/316L</u>	
300 ... 1 000 mm (11.81 ... 39.37 inch) ²²⁾	0
1 001 ... 2 000 mm (39.41 ... 78.74 inch) ²²⁾	1
2 001 ... 3 000 mm (78.78 ... 118.11 inch) ²²⁾	2
3 001 ... 4 000 mm (118.15 ... 157.48 inch) ²²⁾	3
4 001 ... 5 000 mm (157.52 ... 196.85 inch) ²²⁾	4
5 001 ... 6 000 mm (196.89 ... 236.22 inch) ²²⁾	5
<u>Rod ø12 mm/316L</u>	
300 ... 1 000 mm (11.81 ... 39.37 inch) ²²⁾	9 R 2 A
1 001 ... 2 000 mm (39.41 ... 196.85 inch) ²²⁾	9 R 2 B
2 001 ... 3 000 mm (78.78 ... 118.11 inch) ²²⁾	9 R 2 C
3 001 ... 4 000 mm (118.15 ... 157.48 inch) ²²⁾	9 R 2 D
<u>Cable lengths ø2 or 4 mm/316L</u>	
501 ... 1 000 mm (19.72 ... 39.37 inch)	9 R 2 E
1 000 ... 5 000 mm (39.37 ... 196.85 inch)	9 R 2 F
5 001 ... 10 000 mm (196.89 ... 393.70 inch)	9 R 2 G
10 001 ... 15 000 mm (393.74 ... 590.55 inch)	9 R 2 H
15 001 ... 20 000 mm (590.59 ... 787.40 inch)	9 R 2 J
20 001 ... 25 000 mm (787.44 ... 984.25 inch)	9 R 2 K
25 001 ... 30 000 mm (984.29 ... 1 181.10 inch)	9 R 2 L
30 001 ... 35 000 mm (1 181.14 ... 1 377.95 inch)	9 R 2 M
35 001 ... 40 000 mm (1 377.99 ... 1 574.80 inch)	9 R 2 N
40 001 ... 45 000 mm (1 574.84 ... 1 771.65 inch)	9 R 2 P
45 001 ... 50 000 mm (1 771.69 ... 1 968.50 inch)	9 R 2 Q
50 001 ... 55 000 mm (1 968.54 ... 2 165.35 inch)	9 R 2 R
55 001 ... 60 000 mm (2 165.39 ... 2 362.20 inch)	9 R 2 S
60 001 ... 65 000 mm (2 362.24 ... 2 559.06 inch)	9 R 2 T
65 001 ... 70 000 mm (2 559.09 ... 2 755.91 inch)	9 R 2 U
70 001 ... 75 000 mm (2 759.94 ... 2 952.76 inch)	9 R 2 V

Level Measurement

Continuous level measurement - Guided wave radar transmitters

SITRANS LG series

Selection and Ordering data	Article No.	Order Code
SITRANS LG250	7ML5881-	
A guided wave radar sensor for continuous level and interface measurement of liquids.		
<u>Coax ø21.3 mm/316L</u>		
300 ... 1 000 mm (11.81 ... 39.37 inch) ²²⁾	9	R 3 A
1 001 ... 2 000 mm (39.41 ... 78.74 inch) ²²⁾	9	R 3 B
2 001 ... 3 000 mm (78.78 ... 118.11 inch) ²²⁾	9	R 3 C
3 001 ... 4 000 mm (118.15 ... 157.48 inch) ²²⁾	9	R 3 D
4 001 ... 5 000 mm (157.52 ... 196.85 inch) ²²⁾	9	R 3 E
5 001 ... 6 000 mm (196.89 ... 236.22 inch) ²²⁾	9	R 3 F
<u>Coax ø42.2 mm/316L</u>		
300 ... 1 000 mm (11.81 ... 39.37 inch) ²²⁾	9	R 3 G
1 001 ... 2 000 mm (39.41 ... 78.74 inch) ²²⁾	9	R 3 H
2 001 ... 3 000 mm (78.78 ... 118.11 inch) ²²⁾	9	R 3 J
3 001 ... 4 000 mm (118.15 ... 157.48 inch) ²²⁾	9	R 3 K
4 001 ... 5 000 mm (157.52 ... 196.85 inch) ²²⁾	9	R 3 L
5 001 ... 6 000 mm (196.89 ... 236.22 inch) ²²⁾	9	R 3 M

Selection and Ordering data	Order code
Further designs (mandatory)	
Please add "-Z" to Article No. and specify Order code(s).	
Supplementary electronics	
Without ¹³⁾	A00
Additional current output 4 ... 20 mA ¹⁾³⁹⁾	A01
Dimensions centering weight (diameter/height)	
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
Rod mounted	
Without Rod, applicable for coax or cable probe types only ¹⁸⁾	C00
Mounted	C01
Not mounted	C02
Local display interface	
Without ¹³⁾	E00
Mounted	E01
Laterally mounted ¹⁾	E02
Language of display	
German	L00
English	L01
French	L02
Dutch	L03
Italian	L04
Spanish	L05
Portuguese	L06
Russian	L07
Chinese	L08
Japanese	L09
Operating instructions	
German	M00
English	M01
French	M02
Spanish	M03

Selection and Ordering data	Order code
Further designs (optional)	
Please add "-Z" to Article No. and specify Order code(s).	
Enter the total insertion length in plain text description	Y01
Enter the total length of rigid part	Y02
Cleaning included certificate: oil, grease and silicone free	W01
Identification Label (measurement loop) stainless steel	Y17
Identification Label (measurement loop) Foil	Y18
3.1 Certificate instrument ³⁰⁾	C12
3.1 Certificate material (NACE0175) ³⁰⁾	D07
3.1-Certificate instrument with test data ³⁰⁾	C25
2.2-Certificate material ³⁰⁾	C15
Quality/test plan ³⁰⁾	C26
Dye penetration test + 3.1 certificate/instrument ³⁰⁾	C13
X-ray test + 3.1 certificate/instrument ³⁰⁾	C14
Positive material identification test + 3.1 certificate/instrument ³⁰⁾	C16
Roughness test + 3.1 certificate/instrument ³⁰⁾	C18
Pressure test + 3.1 certificate/instrument ³⁰⁾	C31
Helium leak test + 3.1 certificate/instrument ³⁰⁾	C32
Ferrite measuring accuracy to DIN32514-1 + 3.1 certificate/instrument ³⁰⁾	C60
Pressure test according to Norsok + 3.1 certificate/instrument ³⁰⁾	C61
5 point calibration certificate + 3.1 certificate/instrument ³⁰⁾⁴¹⁾	C62
Additional Operating Instructions	Article No.
German	
4 ... 20 mA/HART - two-wire	PBD-51041010
4 ... 20 mA/HART - two-wire coax probe	PBD-51041011
4 ... 20 mA/HART - four-wire	PBD-51041012
4 ... 20 mA/HART - four-wire coax probe	PBD-51041013
Modbus	PBD-51041014
Modbus- coax probe	PBD-51041015
PROFIBUS PA	PBD-51041016
PROFIBUS PA - coax probe	PBD-51041017
Note: Operating instructions should be ordered as a separate line on the order.	
This device is shipped with the Siemens Milltronics manual DVD containing the operating instructions library.	
English	
4 ... 20 mA/HART - two-wire	PBD-51041047
4 ... 20 mA/HART - two-wire Coax probe	PBD-51041048
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
Note: Operating instructions should be ordered as a separate line on the order.	
This device is shipped with the Siemens Milltronics manual DVD containing the operating instructions library.	

Level Measurement

Continuous level measurement - Guided wave radar transmitters

SITRANS LG series

Selection and Ordering data

French

Selection and Ordering data	Article No.
4 ... 20 mA/HART - two-wire	PBD-51041121
4 ... 20 mA/HART - two-wire Coax probe	PBD-51041122
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
Note: Operating instructions should be ordered as a separate line on the order.	
This device is shipped with the Siemens Milltronics manual DVD containing the operating instructions library.	

Spanish

4 ... 20 mA/HART - two-wire	PBD-51041084
4 ... 20 mA/HART - two-wire Coax probe	PBD-51041085
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
Note: Operating instructions should be ordered as a separate line on the order.	
This device is shipped with the Siemens Milltronics manual DVD containing the operating instructions library.	

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	

- 14) Available only with Housing/Protection cable options C, D, L, M
- 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, and 0P
- 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 0A, 0E, 0G, 0H, 0L, 0M, 0N, 0P, 0U, 0Q, 0T, 1A, 1B, 1D, 1E, 1F and 1H
- 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) Available with Approvals options 0A,0J,0K,0R,0S,1A,1C,1E,and 1G
- 34) Available with housings/protection/cable options E,F,L,M and P
- 35) Available with supplementary electronic option A00
- 36) Available with Indicating/adjustment module option E00, E01
- 37) Not available with version/material option K
- 38) Not available with Seal/Process temperature options A, G, K and Q
- 39) Not available Indicating/adjustment module E02
- 40) Available with Housing/protection options D, F, M, R (dust approvals)
- 41) Available with Version/Material A, B, C, D, E and F

Note: Please consult manual for further details.

- 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
- 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)

Selection and Ordering data	Article No.	Order Code
SITRANS LG260	7ML5882-	
A guided wave radar sensor for level measurement of solids.		
Click on the Article No. for the online configuration in the PIA Life Cycle Portal.		
Approvals		
Ordinary location CE ⁴⁾¹²⁾	0 A	
Shipping approval ⁹⁾¹⁰⁾	0 B	
ATEX II 1G, 1/2G, 2G Ex ia IIC T6 ⁴⁾¹²⁾	0 E	
ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + shipping approval ⁹⁾	0 G	
ATEX II 1G, 1/2G 2G Ex ia IIC + ATEX II 1D, 1/2D, 1/3D, 2D, Ex t IIC IP66 T ⁸⁾¹⁰⁾¹²⁾²¹⁾	0 H	
ATEX II 1/2G, 2G Ex d ia IIC T6 ¹⁾⁷⁾¹²⁾	0 J	
ATEX II 1/2G, 2G Ex d ia IIC + shipping approval ¹⁾⁷⁾⁹⁾¹⁰⁾	0 L	
ATEX II 1/2G, 2G Ex d IIC + ATEX II 1D, 1/2D, 1/3D, 2D, Ex t IIC IP66 ⁷⁾⁸⁾¹²⁾²¹⁾	0 M	
ATEX II 1D, 1/2D, 1/3D, 2D, Ex t IIC IP66 ¹⁾¹²⁾	0 N	
ATEX II 1/2G, 2G Ex d IIC + shipping approval ⁹⁾¹⁰⁾¹¹⁾	0 Q	
ATEX II 1/2G, 2G Ex d IIC + II 1D, 1/2D, 1/3D, 2D IP66 ⁸⁾¹¹⁾¹²⁾²¹⁾	0 R	
ATEX II 1D, 1/2D, 2D IP6x T ⁸⁾¹¹⁾¹²⁾²¹⁾	0 S	
IEC Ex ia IIC T6 ⁴⁾¹²⁾	0 T	
IEC Ex ia IIC T6 + IEC IP6x T tD ⁸⁾¹¹⁾¹²⁾²¹⁾	0 U	
IEC Ex d ia IIC T6 ¹⁾⁷⁾¹²⁾	1 A	
IEC Ex d ia IIC T6 + IEC IP6x T tD ⁷⁾⁸⁾¹²⁾²¹⁾	1 B	
IEC Ex d IIC T6 ¹⁾¹²⁾	1 C	
IEC Ex d IIC T6 + IEC IP6x T tD ⁸⁾¹¹⁾¹²⁾²¹⁾	1 D	
FM (NI) Class I, Div. 2, Groups A, B, C, D ¹²⁾	1 F	
FM (NI) Class I, Div. 2, Groups A, B, C, D + shipping approval ⁹⁾¹⁰⁾	1 G	
FM (IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F ¹²⁾	1 H	
FM (IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G + shipping approval ⁹⁾¹⁰⁾	1 J	
FM (XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G ¹⁾⁷⁾¹²⁾	1 K	
FM (XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G + shipping approval ¹⁾⁷⁾⁹⁾¹⁰⁾	1 L	
FM (XP) Class I, Div. 1, Groups A, B, C, D ¹⁾¹²⁾	1 M	
CSA (NI) Class I, Div. 2, Groups A, B, C, D; (DIP) Class II, III, Div. 1, Groups E, F, G ⁸⁾¹²⁾	1 N	
CSA (IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G ¹²⁾	1 P	
CSA (XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G ¹⁾⁷⁾¹²⁾	1 Q	
CSA (XP) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G ¹⁾¹²⁾	1 R	
Probe version/Material		
Probe exchangeable cable ø 4 mm (0.16 inch) with gravity weight/316	A	
Probe exchangeable cable ø 6 mm (0.24 inch) with gravity weight/316 ²⁾	B	
Probe exchangeable rod ø 16 mm (0.63 inch) / 316L ²⁾⁶⁾	E	
Process fitting/Material		
Thread G 3/4" (DIN 3852-A) PN 40/316L	0 0	
Thread 3/4" NPT (ASME B1.20.1) PN 40/316L	0 1	
Thread G 1" (DIN 3852-A) PN 40/316L	0 2	
Thread 1" NPT (ASME B1.20.1) PN 40/316L	0 3	
Thread G 1 1/2" (DIN 3852-A) PN 40/316L	0 4	
Thread 1 1/2" NPT (ASME B1.20.1) PN 40/316L	0 5	

Selection and Ordering data	Article No.	Order Code
SITRANS LG260	7ML5882-	
A guided wave radar sensor for level measurement of solids.		
Thread G 2" (DIN 3852-A) PN 40/316L	0 6	
Flange DN 50 PN 40 Form C, DIN 2501/316L	1 0	
Flange DN 80 PN 40 Form C, DIN 2501/316L	1 2	
Flange DN 100 PN 16 Form C, DIN 2501/316L	1 3	
Flange DN 100 PN 40 Form C, DIN 2501/316L	1 4	
Flange DN 150 PN 16 Form C, DIN 2501/316L	1 5	
Flange DN 50 PN 40 EN1092-1 Form B1/316L	1 6	
Flange DN 80 PN 40 EN1092-1 Form B1/316L	1 7	
Flange DN 100 PN16 EN1092-1 Form B1/316L	1 8	
Flange 2" 150 lb RF, ANSI B16.5/316L	3 0	
Flange 2" 300 lb RF, ANSI B16.5/316L	3 2	
Flange 3" 150 lb RF, ANSI B16.5/316L	3 3	
Flange 3" 300 lb RF, ANSI B16.5/316L	3 4	
Flange 4" 150 lb RF, ANSI B16.5/316L	3 5	
Flange 4" 300 lb RF, ANSI B16.5/316L	3 6	
Flange 6" 150 lb RF, ANSI B16.5/316L	3 7	
Electronics		
Two-wire 4 ... 20mA/HART	0	
Four-wire Modbus ¹⁶⁾¹⁷⁾¹⁸⁾¹⁹⁾	1	
Two-wire 4...20mA/HART with SIL qualification ¹⁴⁾¹⁵⁾	2	
Four-wire 4...20mA/HART; 90...253V AC; 50/60Hz ¹⁾³⁾⁵⁾	3	
Four-wire 4...20mA/HART; 9.6...48V DC; 20...42 V AC ¹⁾³⁾⁵⁾	4	
PROFIBUS PA	5	
Seal/Process temperature		
FKM (SHS FPM 70C3 GLT)/-40 ... +80 °C (-40 ... +176 °F)	A	
FKM (SHS FPM 70C3 GLT)/-40 ... +150 °C (-40 ... +302 °F)	B	
FFKM (Kalrez 6375)/-20 ... +200 °C (-4 ... +392 °F)	C	
EPDM (A+P 75.5/KW75F)/-40 ... +80 °C (-40 ... +176 °F)	D	
EPDM (A+P 75.5/KW75F)/-40 ... +150 °C (-40 ... +392 °F)	E	
Housing/Protection/Cable		
Plastic IP66/IP67 M20x1.5/blind stopper	A	
Plastic IP66/IP67 1/2" NPT/blind stopper	B	
Plastic 2-chamber/IP66/IP67/M20x1.5/blind stopper	C	
Plastic 2-chamber/IP66/IP67 /1/2" NPT/blind stopper	D	
Aluminium/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	E	
Aluminium/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	F	
Aluminium double chamber/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	G	
Aluminium double chamber/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	H	
Stainless Steel (precision casting) 316L/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	J	
Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	K	

Level Measurement

Continuous level measurement - Guided wave radar transmitters

SITRANS LG series

Selection and Ordering data

Article No. Order Code

SITRANS LG260

7ML5882-

A guided wave radar sensor for level measurement of solids.

Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) M20x1.5/blind stopper

L

Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper

M

Stainless steel double chamber/IP66/IP68 (0.2 bar) M20x1.5/blind stopper

N

Stainless steel double chamber/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper

P

Aluminium/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel

Q

Aluminium double chamber/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel

R

Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel

S

Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel

T

Aluminium single chamber/IP66/IP68 (0.2 bar) M20x1.5/cable gland brass nickel-plated

W

Aluminium double chamber/IP66/IP68 (0.2 bar) M20x1.5/cable gland brass nickel-plated

X

Stainless steel single chamber (precision casting)/IP66/IP68 (0.2 bar) M20x1.5/cable gland brass nickel-plated

Y

Lengths

Rod ø16 mm/316L

500 mm (19.69 inch)

0

501 ... 1 000 mm (19.72 ... 39.37 inch)

1

1 001 ... 2 000 mm (39.41 ... 78.74 inch)

2

2 001 ... 3 000 mm (78.78 ... 118.11 inch)

3

3 001 ... 4 000 mm (118.15 ... 157.48 inch)

4

4 001 ... 5 000 mm (157.52 ... 196.85 inch)

5

5 001 ... 6 000 mm (196.89 ... 216.53 inch)

6

Cable lengths ø2 or 4 mm/316

501 ... 1 000 mm (19.72 ... 39.37 inch)

9

R 2 E

1 001 ... 5 000 mm (39.41 ... 196.85 inch)

9

R 2 F

5 001 ... 10 000 mm (196.89 ... 393.70 inch)

9

R 2 G

10 001 ... 15 000 mm (393.74 ... 590.55 inch)

9

R 2 H

15 001 ... 20 000 mm (590.59 ... 787.40 inch)

9

R 2 J

20 001 ... 25 000 mm (787.44 ... 984.25 inch)

9

R 2 K

25 001 ... 30 000 mm

9

R 2 L

(984.29 ... 1 181.10 inch)

30 001 ... 35 000 mm

9

R 2 M

(1 181.14 ... 1 377.95 inch)

35 001 ... 40 000 mm

9

R 2 N

(1 377.99 ... 1 574.80 inch)

40 001 ... 45 000 mm

9

R 2 P

(1 574.84 ... 1 771.65 inch)

45 001 ... 50 000 mm

9

R 2 Q

(1 771.69 ... 1 968.50 inch)

50 001 ... 55 000 mm

9

R 2 R

(1 968.54 ... 2 165.35 inch)

55 001 ... 60 000 mm

9

R 2 S

(2 165.39 ... 2 362.20 inch)

Cable lengths ø6 mm/316L

500 mm (19.69 inch)

9

R 4 A

501 ... 1 000 mm (19.72 ... 39.37 inch)

9

R 4 B

1 001 ... 5 000 mm (39.41 ... 196.85 inch)

9

R 4 C

5 001 ... 10 000 mm (196.89 ... 393.70 inch)

9

R 4 D

Selection and Ordering data

Article No. Order Code

SITRANS LG260

7ML5882-

A guided wave radar sensor for level measurement of solids.

10 001 ... 15 000 mm (393.74 ... 590.55 inch)

9 R 4 E

15 001 ... 20 000 mm

9 R 4 F

(590.59 ... 787.40 inch)

20 001 ... 25 000 mm

9 R 4 G

(787.44 ... 984.25 inch)

25 001 ... 30 000 mm

9 R 4 H

(984.29 ... 1 181.10 inch)

30 001 ... 35 000 mm

9 R 4 J

(1 181.14 ... 1 377.95 inch)

35 001 ... 40 000 mm

9 R 4 K

(1 377.99 ... 1 574.80 inch)

40 001 ... 45 000 mm

9 R 4 L

(1 574.84 ... 1 771.65 inch)

45 001 ... 50 000 mm

9 R 4 M

(1 771.69 ... 1 968.50 inch)

50 001 ... 55 000 mm

9 R 4 N

(1 968.54 ... 2 165.35 inch)

55 001 ... 60 000 mm

9 R 4 P

(2 165.39 ... 2 362.20 inch)

Selection and Ordering data

Order code

Further designs (mandatory)

Please add **"-Z"** to Article No. and specify Order code(s).

Supplementary electronics

Without¹⁾

A00

Additional current output 4 ... 20 mA¹⁾²⁰⁾

A01

Rod mounted

Without Rod, applicable for coax or cable probe types only

C00

Mounted

C01

Not mounted

C02

Local display interface

Without

E00

Mounted

E01

Laterally mounted¹⁾

E02

Language of display

German

L00

English

L01

French

L02

Dutch

L03

Italian

L04

Spanish

L05

Portuguese

L06

Russian

L07

Chinese

L08

Japanese

L09

Operating instructions

German

M00

English

M01

French

M02

Spanish

M03

Level Measurement

Continuous level measurement - Guided wave radar transmitters

SITRANS LG series

Selection and Ordering data	Order code	Selection and Ordering data	Article No.
Further designs (optional)		Spanish	
Please add "-Z" to Article No. and specify Order code(s).	Order code	4 ... 20 mA/HART - two-wire	PBD-51041094
Enter the total insertion length in plain text description	Y01	4 ... 20 mA/HART - four-wire	PBD-51041095
Cleaning included certificate: oil, grease and silicone free	W01	Modbus	PBD-51041096
Identification Label (measurement loop) stainless steel	Y17	PROFIBUS PA	PBD-51041097
Identification Label (measurement loop) Foil	Y18	Note: Operating instructions should be ordered as a separate line on the order.	
3.1 Certificate instrument ¹³⁾	C12	This device is shipped with the Siemens Milltronics manual DVD containing the operating instructions library.	
3.1 Certificate material (NACE0175) ¹³⁾	D07	Accessories	
3.1-Certificate instrument with test data ¹³⁾	C25	SITRANS LG, GWR sensor Display Module	A5E34143449
2.2-Certificate material ¹³⁾	C15	SITRANS RD100, loop powered display - see Chapter 7	7ML5741-...
Quality/test plan ¹³⁾	C26	SITRANS RD200, universal input display with Modbus conversion - see Chapter 7	7ML5740-...
Dye penetration test + 3.1 certificate/instrument ¹³⁾	C13	SITRANS RD300, dual line display with totalizer and linearization curve and Modbus conversion - see Chapter 7	7ML5744-...
X-ray test + 3.1 certificate/instrument ¹³⁾	C14	SITRANS RD500 web, universal remote monitoring solution for instrumentation - see Chapter 7	7ML5750-...
Positive material identification test + 3.1 certificate/instrument ¹³⁾	C16	For applicable back up point level switch - see point level measurement section	
Roughness test + 3.1 certificate/instrument ¹³⁾	C18		
Pressure test + 3.1 certificate/instrument ¹³⁾	C31		
Helium leak test + 3.1 certificate/instrument ¹³⁾	C32		
Ferrite measuring accuracy to DIN32514-1 + 3.1 certificate/instrument ¹³⁾	C60		
Pressure test according to Norsok + 3.1 certificate/instrument ¹³⁾	C61		
5 point calibration certificate + 3.1 certificate/instrument ¹³⁾	C62		
Operating Instructions			
German			
4 ... 20 mA/HART - two-wire	PBD-51041020		
4 ... 20 mA/HART - four-wire	PBD-51041021		
Modbus	PBD-51041022		
PROFIBUS PA	PBD-51041023		
Note: Operating instructions should be ordered as a separate line on the order.			
This device is shipped with the Siemens Milltronics manual DVD containing the operating instructions library.			
English			
4 ... 20 mA/HART - two-wire	PBD-51041057		
4 ... 20 mA/HART - four-wire	PBD-51041058		
Modbus	PBD-51041059		
PROFIBUS PA	PBD-51041060		
Note: Operating instructions should be ordered as a separate line on the order.			
This device is shipped with the Siemens Milltronics manual DVD containing the operating instructions library.			
French			
4 ... 20 mA/HART - two-wire	PBD-51041131		
4 ... 20 mA/HART - four-wire	PBD-51041132		
Modbus	PBD-51041133		
PROFIBUS PA	PBD-51041134		
Note: Operating instructions should be ordered as a separate line on the order.			
This device is shipped with the Siemens Milltronics manual DVD containing the operating instructions library.			

- 1) Available only with Housing/Protection/Cable Options G, H, N, P
- 2) Not available with Process/Fitting/Material options 00, 01, 02, and 03
- 3) Available with Supplementary electronic option A00 and Indicating/adjustment modules E00, E01
- 4) Available with Supplementary electronic option A01
- 5) Not Available with Approval options 0B ... 0H 0L, 0Q, 1B, 1F, 1G, 1J, 1L (not available with Intrinsically Safe and shipping approvals)
- 6) Available with Rod Mounted options C01 and C02
- 7) Available with Indicating/adjustment modules E00 and E01
- 8) Available with Housing Protection options E, F, G, H, J, K, N, P
- 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 electronics option 2 available with Approval options 0A, 0E, 0G, 0H, 0N, 0Q, 0R, 0S, 0T, 0U, 1C, 1D, 1F, 1H, 1M, 1N, 1P, and 1R
- 15) Available with supplementary electronic option A00, SIL electronics
- 16) Available with Approvals options 0A,0J,0K,0R,0S,1A,1C,1E,and 1G
- 17) Available with housings/protection/cable options E,F,L,M and P
- 18) Available with supplementary electronic option A00
- 19) Available with Indicating/adjustment module option E00, E01
- 20) Not available with Indicating/adjustment module E02
- 21) Available with Housing Protection F, H, P and K

Note: Please consult manual for further details.

Level Measurement

Continuous level measurement - Guided wave radar transmitters

SITRANS LG series

Selection and Ordering data Article No. Order Code

SITRANS LG270

7ML5883-

A guided wave radar sensor for continuous level and interface measurement of liquids in aggressive applications

Click on the Article No. for the online configuration in the PIA Life Cycle Portal.

Approvals

- Ordinary location CE³⁾ **0 A**
- Shipping approval¹⁷⁾¹⁸⁾¹⁹⁾ **0 B**
- ATEX II 1G, 1/2G, 2G Ex ia IIC T6³⁾ **0 E**
- ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + shipping approval¹⁷⁾¹⁸⁾¹⁹⁾ **0 G**
- ATEX II 1G, 1/2G, 2G Ex ia IIC + ATEX II 1D, 1/2D, 2D IP6x¹⁶⁾²⁸⁾ **0 H**
- ATEX II 1/2G, 2G Ex d ia IIC T6¹⁾¹⁰⁾¹⁴⁾ **0 J**
- ATEX II 1/2G, 2G Ex d ia IIC + ship¹⁾¹⁰⁾¹⁴⁾¹⁷⁾¹⁸⁾¹⁹⁾ **0 L**
- ATEX II 1/2G, 2G Ex d ia IIC + ATEX II 1/2D, 2D IP6x¹⁰⁾¹⁴⁾¹⁶⁾²⁸⁾ **0 M**
- ATEX II 1/2G, 2G Ex d IIC T6¹¹⁾ **0 N**
- ATEX II 1/2G, 2G Ex d IIC + ship approval¹⁷⁾¹⁸⁾¹⁹⁾ **0 Q**
- ATEX II 1/2G, 2G Ex d IIC + ATEX II 1/2D, 2D IP6x¹¹⁾¹⁶⁾²⁸⁾ **0 R**
- ATEX II 1D, 1/2D, 2D IP6x T¹⁶⁾²⁸⁾ **0 S**
- IEC Ex ia IIC T6³⁾ **0 T**
- IEC Ex ia IIC T6 + IEC IP6x T tD¹⁶⁾²⁸⁾ **0 U**
- IEC Ex d ia IIC T6¹⁾¹⁰⁾¹⁴⁾ **1 A**
- IEC Ex d ia IIC T6 + IEC IP6x T tD¹⁰⁾¹⁴⁾¹⁶⁾²⁸⁾ **1 B**
- IEC Ex d IIC T6¹¹⁾ **1 C**
- IEC Ex d IIC T6 + IEC IP6x T tD¹¹⁾¹⁶⁾²⁸⁾ **1 D**
- FM (NI) Class I, Div. 2, Groups A, B, C, D **1 F**
- FM (NI) Class I, Div. 2, Groups A, B, C, D + ship approval¹⁷⁾¹⁸⁾¹⁹⁾ **1 G**
- FM (IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F **1 H**
- FM (IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G + ship approval¹⁷⁾¹⁸⁾¹⁹⁾ **1 J**
- FM (XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G¹⁾¹⁰⁾¹⁴⁾ **1 K**
- FM (XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G + shipping approval¹⁾¹⁰⁾¹⁷⁾¹⁸⁾¹⁹⁾ **1 L**
- FM (XP) Class I, Div. 1, Groups A, B, C, D **1 M**
- CSA (NI) Class I, Div. 2, Groups A, B, C, D; (DIP) Class II, III, Div. 1, Groups E, F, G¹⁶⁾ **1 N**
- CSA (IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G **1 P**
- CSA (XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G¹⁾¹⁰⁾¹⁴⁾ **1 Q**
- CSA (XP) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G¹¹⁾ **1 R**

Version/Material

- Probe exchangeable cable ø 2 mm (0.08 inch) with gravity weight/316L⁴⁾⁷⁾ **A**
- Probe exchangeable cable ø 2 mm (0.08 inch) center weight/316L⁵⁾⁷⁾ **B**
- Probe exchangeable cable ø 4 mm (0.16 inch) with gravity weight/316L⁴⁾⁷⁾ **C**
- Probe exchangeable cable ø 4 mm (0.16 inch) with center weight/316L⁵⁾⁷⁾ **D**
- Probe exchangeable rod ø 16 mm (0.63 inch) /316L⁴⁾⁷⁾⁹⁾ **E**
- Probe coax version ø 42.2 mm (1.66 inch) with multiple hole/316L⁴⁾⁷⁾ **F**
- Probe coax version ø 42.2 mm (1.66 inch); multiple hole; reference distances/316L⁴⁾⁷⁾¹³⁾³⁰⁾ **G**

Selection and Ordering data Article No. Order Code

SITRANS LG270

7ML5883-

A guided wave radar sensor for continuous level and interface measurement of liquids in aggressive applications

Process fitting/Material

- Thread G 1 1/2" (DIN 3852-A) PN400/316L **0 0**
- Thread 1 1/2" NPT (ASME B1.20.1) PN400/316L **0 1**
- Flange DN 50 PN 40 Form C, DIN 2501/316L **1 0**
- Flange DN 50 PN 40 form V13, DIN 2513/316L **1 1**
- Flange DN 65 PN 64 Form V13, DIN 2501/316L **1 2**
- Flange DN 80 PN 40 Form C, DIN 2501/316L **1 3**
- Flange DN 80 PN 40 Form V13, DIN 2501/316L **1 4**
- Flange DN 80 PN 100 Form L, DIN 2501/316L **1 5**
- Flange DN 100 PN 16 Form C, DIN 2501/316L **1 6**
- Flange DN 100 PN 16 Form C, DIN 2501/316L **1 7**
- Flange DN 100 PN 40 Form C, DIN 2501/316L **1 8**
- Flange DN 100 PN 40 Form V13, DIN 2513/316L **2 0**
- Flange DN 150 PN 16 Form C, DIN 2501/316L **2 1**
- Flange DN 50 PN 40 EN1092-1 Form B1/316L **2 2**
- Flange DN 100 PN 160 GOST 12815-80.7/316L **2 3**
- Flange DN 80 PN 160 Form C, DIN 2501/316L **6 0**
- Flange DN 80 PN 250 Form L, DIN 2501/316L **6 1**
- Flange DN 50 PN 160, EN1092-1 Form B1/316L **6 2**
- Flange DN 50 PN 160, EN1092-1 Form B2/316L **6 3**
- Flange DN 50 PN 320, EN1092-1 Form B1/316L **6 4**
- Flange DN 65 PN 250, EN1092-1 Form B1/316L **6 5**
- Flange DN 100 PN 160, EN1092-1 Form B2/316L **6 6**
- Flange 2" 150 lb RF, ANSI B16.5/316L **3 0**
- Flange 2" 300 lb RF, ANSI B16.5/316L **3 1**
- Flange 2" 600 lb RF, ANSI B16.5/316L **3 2**
- Flange 2" 1 500 lb RF, ANSI B16.5/316L **3 3**
- Flange 3" 150 lb RF, ANSI B16.5/316L **3 4**
- Flange 3" 300 lb RF, ANSI B16.5/316L **3 5**
- Flange 3" 600 lb RF, ANSI B16.5/316L **3 6**
- Flange 3" 900 lb RF, ANSI B16.5/316L **3 7**
- Flange 3" 2 500 lb RF, ANSI B16.5/316L **3 8**
- Flange 3 1/2" 600 lb RF, ANSI B16.5/316L **4 0**
- Flange 4" 150 lb RF, ANSI B16.5/316L **4 1**
- Flange 4" 300 lb RF, ANSI B16.5/316L **4 2**
- Flange 4" 600 lb RF, ANSI B16.5/316L **4 3**
- Flange 6" 150 lb RF, ANSI B16.5/316L **4 4**
- Flange 6" 300 lb RF, ANSI B16.5/316L **4 5**
- Flange 6" 600 lb RF, ANSI B16.5/316L **4 6**
- Flange 2"150 lb Fisher special return/316L **4 7**
- Flange 2" 900 lb RF, ANSI B16.5/316L **5 0**
- Flange 3" 1 500 lb RF, ANSI B16.5/316L **5 1**

Selection and Ordering data	Article No.	Order Code	Selection and Ordering data	Article No.	Order Code
SITRANS LG270	7ML5883-		SITRANS LG270	7ML5883-	
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		
Flange 4" 900 lb RF, ANSI B16.5/316L	5 2		Lengths		
Flange 4" 1 500 lb RF, ANSI B16.5/316L	5 3		300 mm (11.81 inch) ¹⁵⁾		
Flange 4" 2 500 lb RF, ANSI B16.5/316L	5 4		500 mm (19.69 inch) ¹⁵⁾	0	
Electronics			501 ... 1 000 mm (19.72 ... 39.37 inch) ¹⁵⁾	1	
Two-wire 4 ... 20mA/HART	0		1 001 ... 2 000 mm (39.41 ... 78.74 inch) ¹⁵⁾	2	
Four-wire Modbus ²³⁾²⁴⁾²⁵⁾²⁶⁾	1		2 001 ... 3 000 mm (78.78 ... 118.11 inch) ¹⁵⁾	3	
Two-wire 4... 20mA/HART with SIL qualification ²¹⁾²²⁾	2		3 001 ... 4 000 mm (118.15 ... 157.48 inch) ¹⁵⁾	4	
Four-wire 4... 20mA/HART; 90 ... 253V AC; 50/60Hz ¹⁾²⁾⁶⁾	3		4 001 ... 5 000 mm (157.52 ... 196.85 inch) ¹⁵⁾	5	
Four-wire 4 ... 20mA/HART; 9.6 ... 48V DC; 20 ... 42 V AC ¹⁾²⁾⁶⁾	4		5 001 ... 6 000 mm (196.89 ... 216.53 inch) ¹⁵⁾	6	
PROFIBUS PA	5		300 mm (11.81 inch) ¹⁵⁾	7	
Seal/Second line of defense/ Process temperature			<u>Cable lengths ø2 or 4 mm/316L</u>		
Ceramic-graphite/with glass seal/ -196 ... +280 °C (-321 ... +536 °F)	A		501 ... 1 000 mm (19.72 ... 39.37 inch)	9	R 2 E
Ceramic-graphite /with glass seal/ -196 ... +450 °C (-321 ... +842 °F)	B		1 000 ... 5 000 mm (39.37 ... 196.85 inch)	9	R 2 F
Housing/Protection/Cable			5 001 ... 10 000 mm (196.89 ... 393.70 inch)	9	R 2 G
Plastic IP66/IP67 M20x1.5/blind stopper	A		10 001 ... 15 000 mm (393.74 ... 590.55 inch)	9	R 2 H
Plastic IP66/IP67 1/2" NPT/blind stopper	B		15 001 ... 20 000 mm (590.59 ... 787.40 inch)	9	R 2 J
Aluminium/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	C		20 001 ... 25 000 mm (787.44 ... 984.25 inch)	9	R 2 K
Aluminium/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	D		25 001 ... 30 000 mm (984.29 ... 1 181.10 inch)	9	R 2 L
Aluminium double chamber/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	E		30 001 ... 35 000 mm (1 181.14 ... 1 377.95 inch)	9	R 2 M
Aluminium double chamber/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	F		35 001 ... 40 000 mm (1 377.99 ... 1 574.80 inch)	9	R 2 N
Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	L		40 001 ... 45 000 mm (1 574.84 ... 1 771.65 inch)	9	R 2 P
Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	M		45 001 ... 50 000 mm (1 771.69 ... 1 968.50 inch)	9	R 2 Q
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	N		50 001 ... 55 000 mm (1 968.54 ... 2 165.35 inch)	9	R 2 R
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	P		55 001 ... 60 000 mm (2 165.39 ... 2 362.20 inch)	9	R 2 S
Stainless steel double chamber/IP66/IP68 (0.2 bar) M20x1.5/blind stopper	Q		<u>Coax ø42.2 mm/316L</u>		
Stainless steel double chamber/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	R		300 ... 1 000 mm (11.81 ... 39.37 inch) ¹⁵⁾	9	R 3 G
Aluminium/IP66/IP68 (0.2 bar) M20x1.5/ cable gland stainless steel	S		1 001 ... 2 000 mm (39.41 ... 78.74 inch) ¹⁵⁾³⁰⁾	9	R 3 H
Aluminium double chamber/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	T		2 001 ... 3 000 mm (78.78 ... 118.11 inch) ¹⁵⁾	9	R 3 J
Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	U		3 001 ... 4 000 mm (118.15 ... 157.48 inch) ¹⁵⁾	9	R 3 K
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) M20x1.5/cable gland stainless steel	V		4 001 ... 5 000 mm (157.52 ... 196.85 inch) ¹⁵⁾	9	R 3 L
Aluminium single chamber / IP66/IP68 (0.2 bar) M20x1.5/cable gland brass nickel-plated	W		5 001 ... 6 000 mm (196.89 ... 236.22 inch) ¹⁵⁾	9	R 3 M
Aluminium double chamber / IP66/IP68 (0.2 bar) M20x1.5/cable gland brass nickel-plated	X				
Stainless steel single chamber (precision casting) / IP66/IP68 (0.2 bar) M20x1.5/cable gland brass nickel-plated	Y				

Level Measurement

Continuous level measurement - Guided wave radar transmitters

SITRANS LG series

Selection and Ordering data	Order code	Selection and Ordering data	Order code
Further designs (mandatory)		Further designs (optional)	
Please add "-Z" to Article No. and specify Order code(s).		Please add "-Z" to Article No. and specify Order code(s).	
Supplementary electronics		Enter the total insertion length in plain text description	Y01
Without	A00	Enter the total length of rigid part [to a maximum of 100 mm (4 inch) (cable version only)]	Y02
Additional current output 4 ... 20 mA ¹⁾²⁷⁾	A01	Cleaning included certificate: oil, grease and silicone free	W01
Dimensions centering weight (diameter/height)		Identification Label (measurement loop) stainless steel	Y17
Without	B00	Identification Label (measurement loop) Foil	Y18
ø40/30 mm	B01	3.1 Certificate instrument ²⁰⁾	C12
ø45/30 mm (for 2 inch tubes)	B02	3.1 Certificate material (NACE0175) ²⁰⁾	D07
ø75/30 mm (for 3 inch tubes)	B03	3.1-Certificate instrument with test data ²⁰⁾	C25
ø95/30 mm (for 4 inch tubes)	B04	2.2-Certificate material ²⁰⁾	C15
ø1.57/1.18 inch (for 2 inch schedule 160)	B05	Quality/test plan ²⁰⁾	C26
ø1.77/ 1.18 inch (for 2 inch schedule 40/80)	B06	Dye penetration test + 3.1 certificate/instrument ²⁰⁾	C13
ø2.95/1.18 inch (for 3 inch schedule 10/40)	B07	X-ray test + 3.1 certificate/instrument ²⁰⁾	C14
ø3.74/ 1.18 inch (for 4 inch schedule 80)	B08	Positive material identification test + 3.1 certificate/instrument ²⁰⁾	C16
Rod mounted		Roughness test + 3.1 certificate/instrument ²⁰⁾	C18
Without Rod, applicable for coax or cable probe types only ⁸⁾	C00	Pressure test + 3.1 certificate/instrument ²⁰⁾	C31
Mounted	C01	Helium leak test + 3.1 certificate/instrument ²⁰⁾	C32
Not mounted	C02	Ferrite measuring accuracy to DIN32514-1 + 3.1 certificate/instrument ²⁰⁾	C60
Local display interface		Pressure test according to Norsok + 3.1 certificate/instrument ²⁰⁾	C61
Without	E00	5 point calibration certificate + 3.1 certificate/instrument ²⁰⁾²⁹⁾	C62
Mounted	E01		
Laterally mounted ¹⁾	E02		
Language of display		Additional Operating Instructions	Article No.
German	L00	German	
English	L01	4 ... 20 mA/HART - two-wire	PBD-51041025
French	L02	4 ... 20 mA/HART - two-wire coax probe	PBD-51041026
Dutch	L03	4 ... 20 mA/HART - four-wire	PBD-51041027
Italian	L04	4 ... 20 mA/HART - four-wire coax probe	PBD-51041028
Spanish	L05	Modbus	PBD-51041029
Portuguese	L06	Modbus, Coax probe	PBD-51041030
Russian	L07	PROFIBUS PA	PBD-51041031
Chinese	L08	PROFIBUS PA, Coax probe	PBD-51041032
Japanese	L09	Note: Operating instructions should be ordered as a separate line on the order.	
Operating instructions		This device is shipped with the Siemens Milltronics manual DVD containing the operating instructions library.	
German	M00	English	
English	M01	4 ... 20 mA/HART - two-wire	PBD-51041062
French	M02	4 ... 20 mA/HART - two-wire coax probe	PBD-51041063
Spanish	M03	4 ... 20 mA/HART - four-wire	PBD-51041064
Russian	L07	4 ... 20 mA/HART - four-wire coax probe	PBD-51041065
Chinese	L08	Modbus	PBD-51041066
Japanese	L09	Modbus, Coax probe	PBD-51041067
		PROFIBUS PA	PBD-51041068
		PROFIBUS PA, Coax probe	PBD-51041069
		Note: Operating instructions should be ordered as a separate line on the order.	
		This device is shipped with the Siemens Milltronics manual DVD containing the operating instructions library.	

Selection and Ordering data	Article No.
French	
4 ... 20 mA/HART - two-wire	PBD-51041136
4 ... 20 mA/HART - two-wire coax probe	PBD-51041137
4 ... 20 mA/HART - four-wire	PBD-51041138
4 ... 20 mA/HART - four-wire coax probe	PBD-51041139
Modbus	PBD-51041140
Modbus, Coax probe	PBD-51041141
PROFIBUS PA	PBD-51041142
PROFIBUS PA, Coax probe	PBD-51041143
Note: Operating instructions should be ordered as a separate line on the order.	
This device is shipped with the Siemens Milltronics manual DVD containing the operating instructions library.	
Spanish	
4 ... 20 mA/HART - two-wire	PBD-51041099
4 ... 20 mA/HART - two-wire coax probe	PBD-51041100
4 ... 20 mA/HART - four-wire	PBD-51041101
4 ... 20 mA/HART - four-wire coax probe	PBD-51041102
Modbus	PBD-51041103
Modbus, Coax probe	PBD-51041104
PROFIBUS PA	PBD-51041105
PROFIBUS PA, Coax probe	PBD-51041105
Note: Operating instructions should be ordered as a separate line on the order.	
This device is shipped with the Siemens Milltronics manual DVD containing the operating instructions library.	
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, R, and T	
2) Available with Supplementary electronic option A00 and Indicating/adjustment modules E00, E01	
3) Available with Supplementary electronics A01	
4) Available with Centering weight option B00 only	
5) Available with Centering weight options B01 ... B08 only	
6) Available with Approval options 0A, 0B, 0J, 0K, 0N, 0R, 0S, 1A, 1C, 1E, 1F, and 1G	
7) Available only with the same diameter probe lengths	
8) Available with Version/Material options A, B, C, D, F, G	
9) Available with Rod Mounted options C01 and C02	
10) Available with Indicating/adjustment modules E00 and E01	
11) Available with Housing/Protection Cable options C, D, L, M only	
12) Version/Material Hastelloy C22, temperature is limited to 400 °C (752 °F)	
13) Minimum probe length (Y01) is 1 250 mm (49 inch)	
14) Available with Housing/Protection Cable options E, F, Q, and R	
15) Not available with Y02	
16) Available with Housing protection options C, D, E, F, L, M, Q, and R	
17) Not available with Housing/Protection/Cable options N, P, and V	
18) Available with Electronic option 0 only	
19) Not available with Version/Material options E, F, and G	
20) Listed Certificates are not available with all configurations, please contact factory for more information	
21) SIL electronics option 2 available with Approval options 0A, 0E, 0G, 0H, 0N, 0Q, 0R, 0S, 0T, 0U, 1C, 1D, 1F, 1H, 1M, 1N, 1P, and 1R	
22) Available with Supplementary electronic option A00, SIL electronics	

- 23) Available with Approval options 0A, 0H, 0K, 0R, 0S, 0U, 1A, 1C, 1D, 1E, 1F, 1H, 1N, 1P, and 1R
- 24) Available with housings/protection/cable options E,F,L,M and P
- 25) Available with supplementary electronic option A00
- 26) Available with Indicating/adjustment module option E00, E01
- 27) Not available with Indicating/adjustment module E02
- 28) Available with Housing protection options D, F, M, and R
- 29) Available with Version/Material A, B, C, D, and E
- 30) Accuracy is application dependent, please consult factory

Note: Please consult manual for further details.

Level Measurement

Continuous level measurement - Guided wave radar transmitters

SITRANS LG series


Selection and Ordering data	Article No.
SITRANS LG Remote Interface	7ML5841- - - - - - 0
Click on the Article No. for the online configuration in the PIA Life Cycle Portal.	
Instrument	
LG240 ⁴⁾⁵⁾	0
LG250 ⁶⁾	1
LG260 ⁷⁾	2
LG270 ⁹⁾¹⁰⁾	3
Probe Type	
Exchangeable cable ø 2 mm with gravity weight/316 ¹⁾	A A
Exchangeable cable ø2 mm center weight/316 ²⁾	A C
Exchangeable cable ø4 mm without weight/316 ¹⁾	A D
Exchangeable cable ø4 mm with gravity weight/316 ¹⁾	A E
Exchangeable cable ø 4 mm with center weight/316 ²⁾	A G
Exchangeable cable ø 6 mm with gravity weight/316 ¹⁾⁸⁾	A H
Exchangeable rod ø8 mm / 316L ¹⁾	A P
Exchangeable rod ø 8 mm/1.4435 (acc. to Basle Standard) ¹⁾	A Q
Exchangeable rod ø12 mm / 316L ¹⁾	A U
Exchangeable rod ø16 mm / 316L ¹⁾	A W
Process fitting	
Thread to 1 1/2 inch	0
Thread to 2 inch	1
Flange less than DN 50 or 2 inch	2
Flange greater or equal to DN 50 or 2 inch or hygienic fitting (not for safety in gold 25 x 46 mm)	3
Dimension centering weight	
Without	0
ø40 mm/ 30 mm	1
ø45 mm/ 30 mm (for 2 inch tubes)	2
ø75 mm/ 30 mm (for 3 inch tubes)	3
ø95 mm/ 30 mm (for 4 inch tubes)	4
ø1.57 inch/ 1.18 inch (for 2 inch Schedule 160)	5
ø1.77 inch/ 1.18 inch (for 2 inch Schedule 40/80)	6
ø2.95 inch/ 1.18 inch (for 3 inch Schedule 10/40)	7
ø3.74 inch/ 1.18 inch (for 4 inch Schedule 80)	8
Certificates	
Without	0
2.2 Material certificate	1
3.1 Material certificate	2
Lengths	
<u>Rod ø8 mm</u>	
300 ... 1 000 mm (11.81 ... 39.37 inch)	A A
1 001 ... 2 000 mm (39.41 ... 78.74 inch)	A B
2 001 ... 3 000 mm (78.78 ... 118.11 inch)	A C
3 001 ... 4 000 mm (118.15 ... 157.48 inch)	A D
4 001 ... 5 000 mm (157.52 ... 196.85 inch)	A E
5 001 ... 6 000 mm (196.89 ... 236.22 inch)	A F

Selection and Ordering data	Article No.
SITRANS LG Remote Interface	7ML5841- - - - - - 0
<u>Rod ø12 mm</u>	
300 ... 1 000 mm (11.81 ... 39.37 inch)	A G
1 001 ... 2 000 mm (39.41 ... 78.74 inch)	A H
2 001 ... 3 000 mm (78.78 ... 118.11 inch)	A J
3 001 ... 4 000 mm (118.15 ... 157.48 inch)	A K
4 001 ... 5 000 mm (157.52 ... 196.85 inch)	A L
5 001 ... 6 000 mm (196.89 ... 236.22 inch)	A M
<u>Rod ø16 mm</u>	
300 ... 1 000 mm (11.81 ... 39.37 inch)	A N
1 001 ... 2 000 mm (39.41 ... 78.74 inch)	A P
2 001 ... 3 000 mm (78.78 ... 118.11 inch)	A Q
3 001 ... 4 000 mm (118.15 ... 157.48 inch)	A R
4 001 ... 5 000 mm (157.52 ... 196.85 inch)	A S
5 001 ... 6 000 mm (196.89 ... 236.22 inch)	A T
<u>Cable Lengths ø2mm and 4 mm/316</u>	
501 ... 1000 mm (19.72 ... 39.37 inch)	A U
1 001 ... 5 000 mm (39.41 ... 196.85 inch)	A V
5 000 ... 10 000 mm (196.89 ... 393.70 inch)	A W
10 001 ... 15 000 mm (393.74 ... 590.55 inch)	A X
15 001 ... 20 000 mm (590.59 ... 787.40 inch)	A Y
20 001 ... 25 000 mm (787.44 ... 984.25 inch)	B A
25 001 ... 30 000 mm (984.29 ... 1 181.10 inch)	B B
30 001 ... 35 000 mm (1 181.14 ... 1 377.95 inch)	B C
35 001 ... 40 000 mm (1 377.99 ... 1 574.80 inch)	B D
40 001 ... 45 000 mm (1 574.84 ... 1 771.65 inch)	B E
45 001 ... 50 000 mm (1 771.69 ... 1 968.50 inch)	B F
50 001 ... 55 000 mm (1 968.54 ... 2 165.35 inch)	B G
55 001 ... 60 000 mm (2 165.39 ... 2 362.20 inch)	B H
60 001 ... 65 000 mm (2 362.24 ... 2 559.06 inch)	B J
65 001 ... 70 000 mm (2 559.09 ... 2 755.91 inch)	B K
70 001 ... 75 000 mm (2 755.94 ... 2 952.76 inch)	B L

Level Measurement

Continuous level measurement - Guided wave radar transmitters

SITRANS LG series

Selection and Ordering data	Article No.
SITRANS LG Remote Interface	7ML5841-
	 0
Cable Lengths ø6mm/316	
501 ... 1000 mm (19.72 ... 39.37 inch)	B M
1 001 ... 5 000 mm (39.41 ... 196.85 inch)	B N
5 000 ... 10 000 mm (196.89 ... 393.70 inch)	B P
10 001 ... 15 000 mm (393.74 ... 590.55 inch)	B Q
15 001 ... 20 000 mm (590.59 ... 787.40 inch)	B R
20 001 ... 25 000 mm (787.44 ... 984.25 inch)	B S
25 001 ... 30 000 mm (984.29 ... 1 181.10 inch)	B T
30 001 ... 35 000 mm (1 181.14 ... 1 377.95 inch)	B U
35 001 ... 40 000 mm (1 377.99 ... 1 574.80 inch)	B V
40 001 ... 45 000 mm (1 574.84 ... 1 771.65 inch)	B W
45 001 ... 50 000 mm (1 771.69 ... 1 968.50 inch)	B X
50 001 ... 55 000 mm (1 968.54 ... 2 165.35 inch)	B Y
55 001 ... 60 000 mm (2 165.39 ... 2 362.20 inch)	C A
60 001 ... 65 000 mm (2 362.24 ... 2 559.06 inch)	C B
65 001 ... 70 000 mm (2 559.09 ... 2 755.91 inch)	C C
70 001 ... 75 000 mm (2 755.94 ... 2 952.76 inch)	C D

Selection and Ordering data	Order code
Further designs	
Please add "-Z" to Article No. and specify Order code(s).	
Enter the total insertion length in plain text description	Y01
Enter the total length of rigid part (cable version only)	Y02

- 1) Available with Dimension centering weight: Without Option 0
- 2) Available with Dimension centering weight: Without Option 1 ... 8
- 3) All Probe types are only available with corresponding Probe lengths
- 4) Available with Probe type Option AQ
- 5) Available with Process fitting option 2 and 3
- 6) Not available with Probe type option AQ and AW
- 7) Available with Probe type option AE, AH, and AW
- 8) Not available with Process fitting option 2
- 9) Available with Probe type option AA, AC, AE, AG and AW
- 10) Available with Process fitting 0 and 3

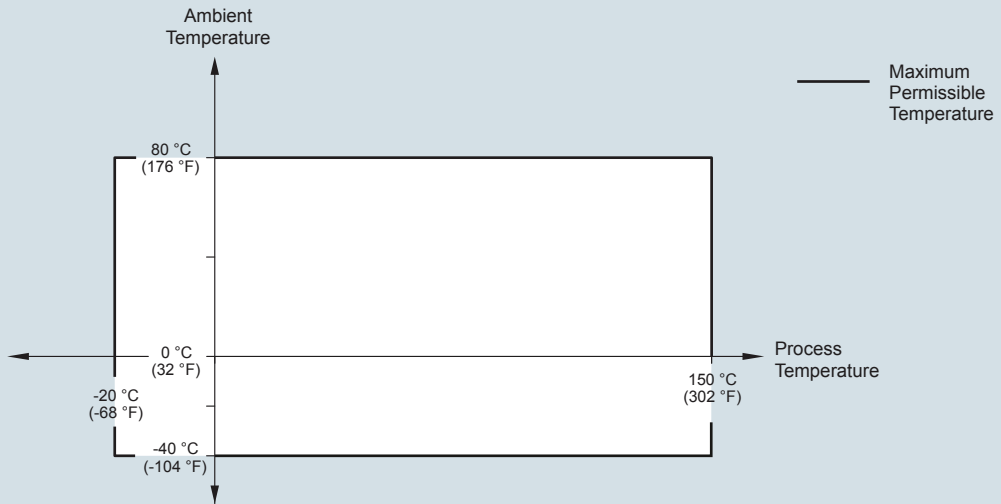
Level Measurement

Continuous level measurement - Guided wave radar transmitters

SITRANS LG series

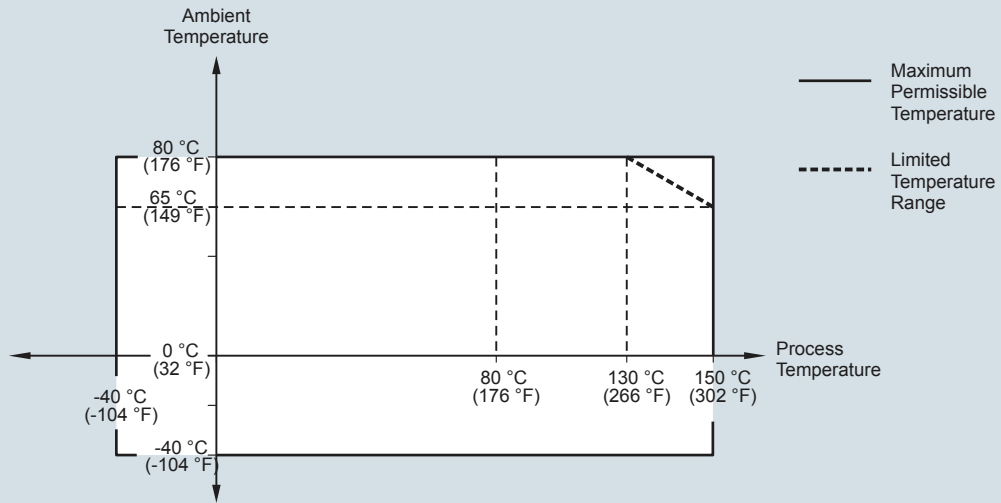
Characteristic curves

SITRANS LG240, Ambient temperature/process temperature, standard version

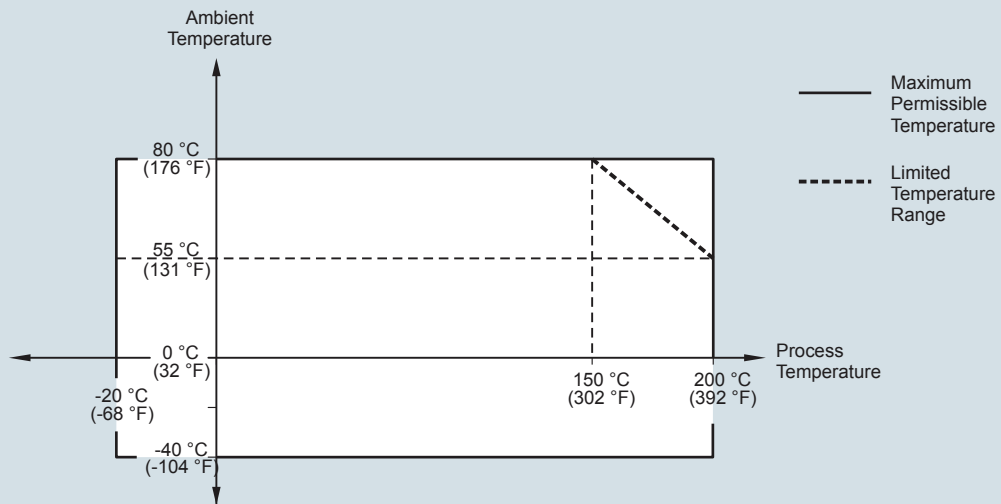


SITRANS LG240, Ambient temperature/process temperature curve

SITRANS LG250, Ambient temperature/process temperature, standard version



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



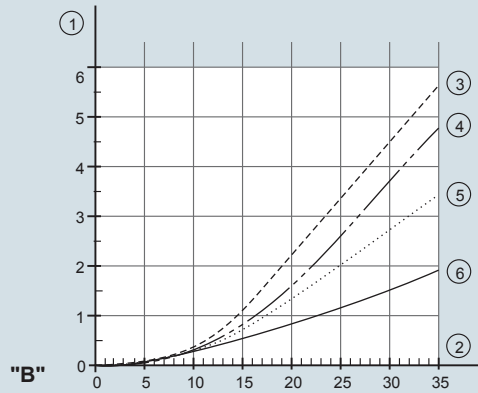
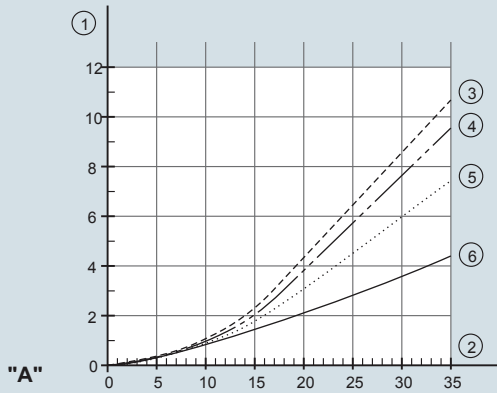
SITRANS LG250, Ambient temperature/process temperature curves

Level Measurement

Continuous level measurement - Guided wave radar transmitters

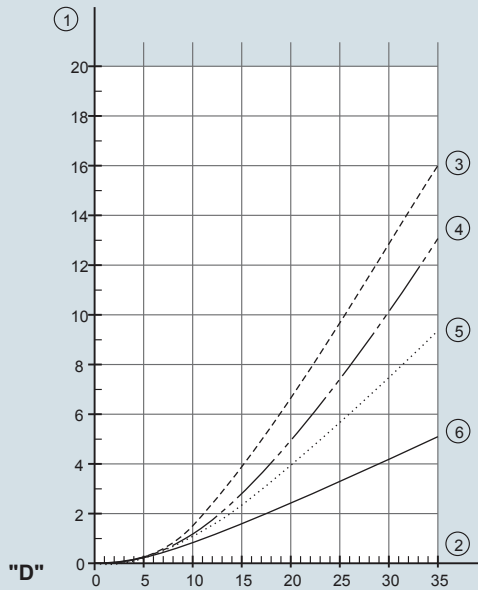
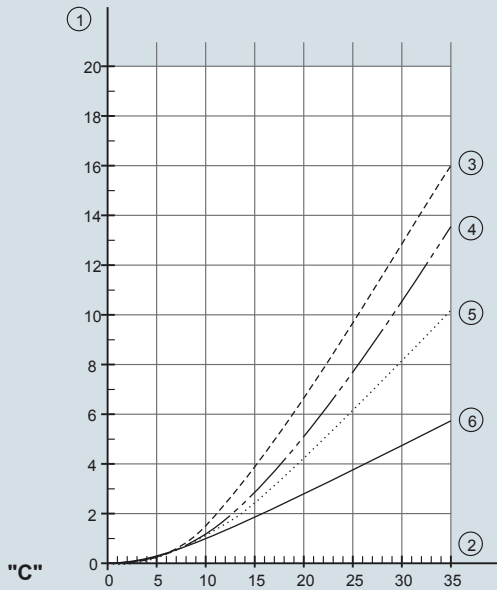
SITRANS LG series

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)

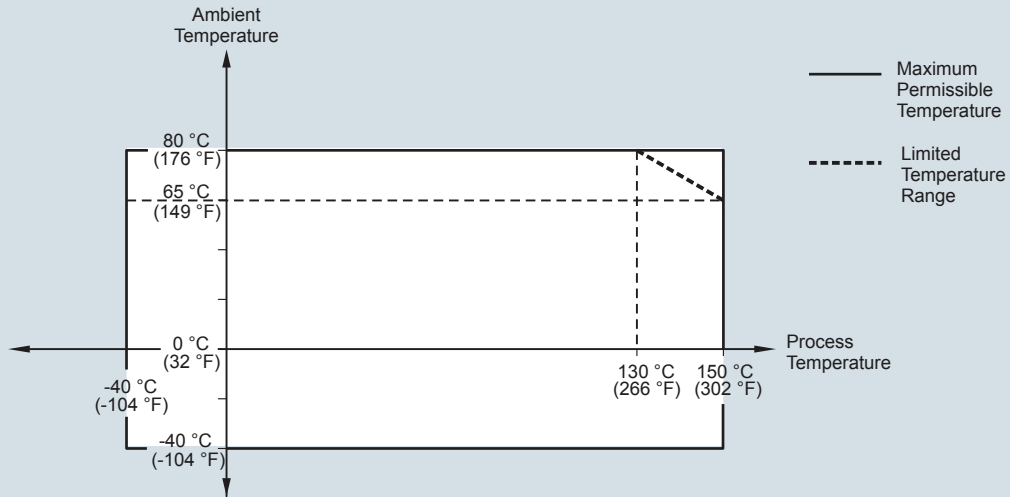
SITRANS LG260, Maximum tensile load with sand and cement - cable: \varnothing 4 mm (0.157 inch)



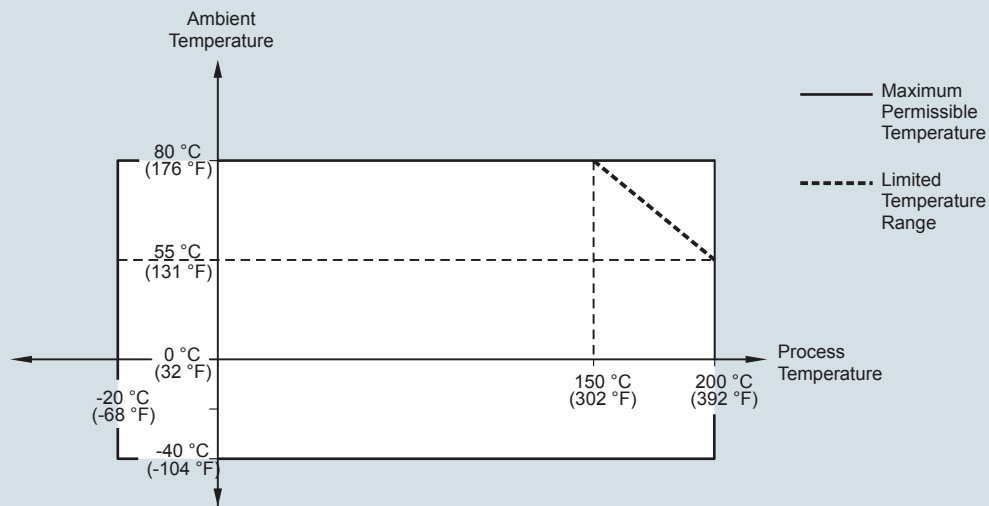
- C. Sand
D. Cement
1. Tensile force in kN (the determined value must be multiplied with safety factor 2)
 2. Cable length in m
 3. Vessel diameter 12 m (39.37 ft)
 4. Vessel diameter 9 m (29.53 ft)
 5. Vessel diameter 6 m (19.69 ft)
 6. Vessel diameter 3 m (9.843 ft)

SITRANS LG260, Maximum tensile load curves

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)



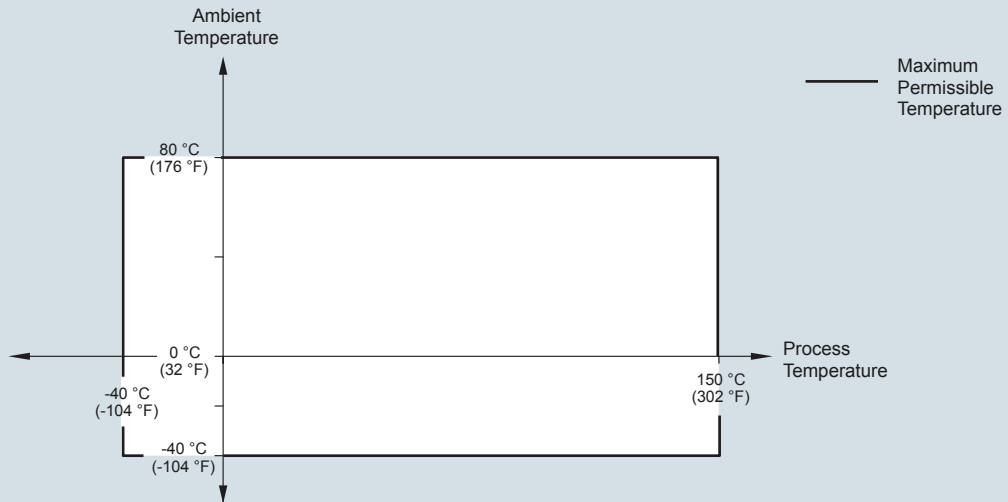
SITRANS LG260, Ambient temperature/process temperature curves

Level Measurement

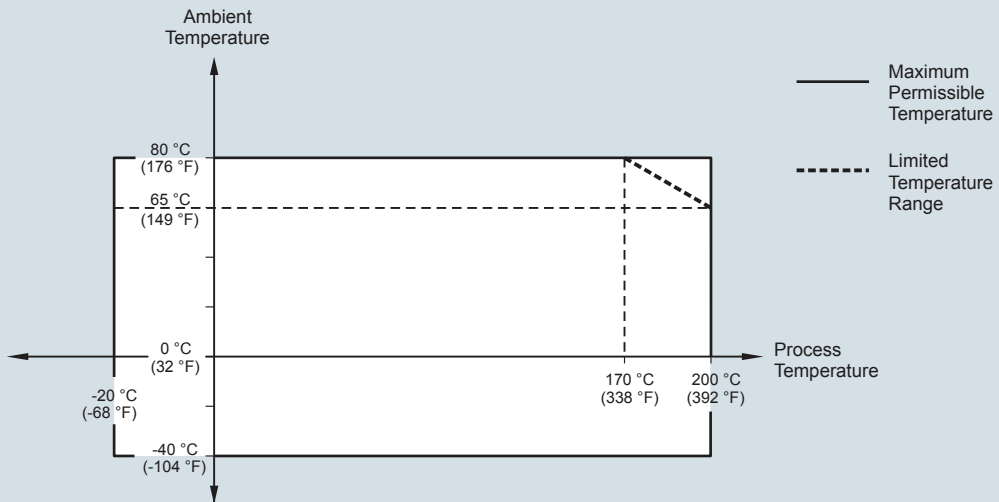
Continuous level measurement - Guided wave radar transmitters

SITRANS LG series

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)

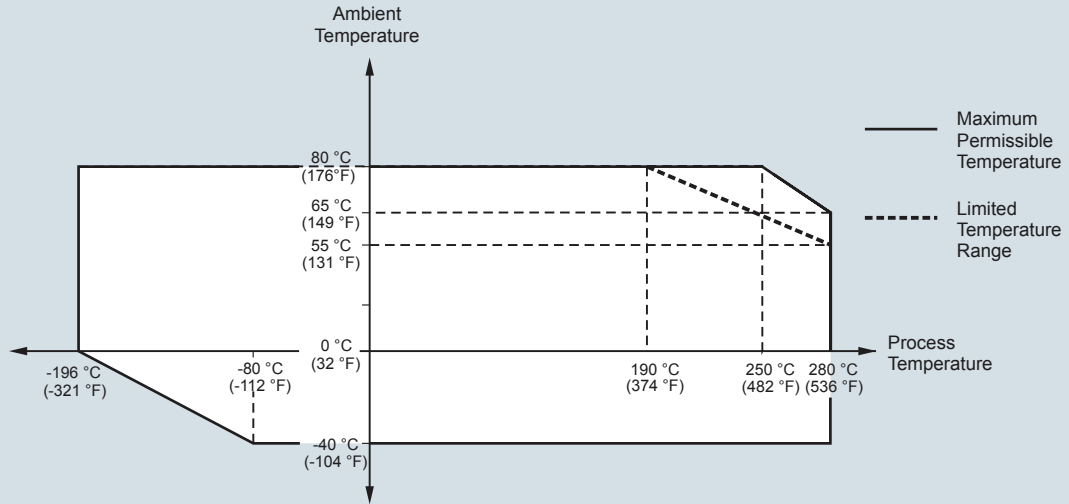


SITRANS LG260, Ambient temperature/process temperature, temperature adapter version
Cable version with \varnothing 6 mm (0.236 inch)
Cable version, PA coated with \varnothing 11 mm (0.433 inch)

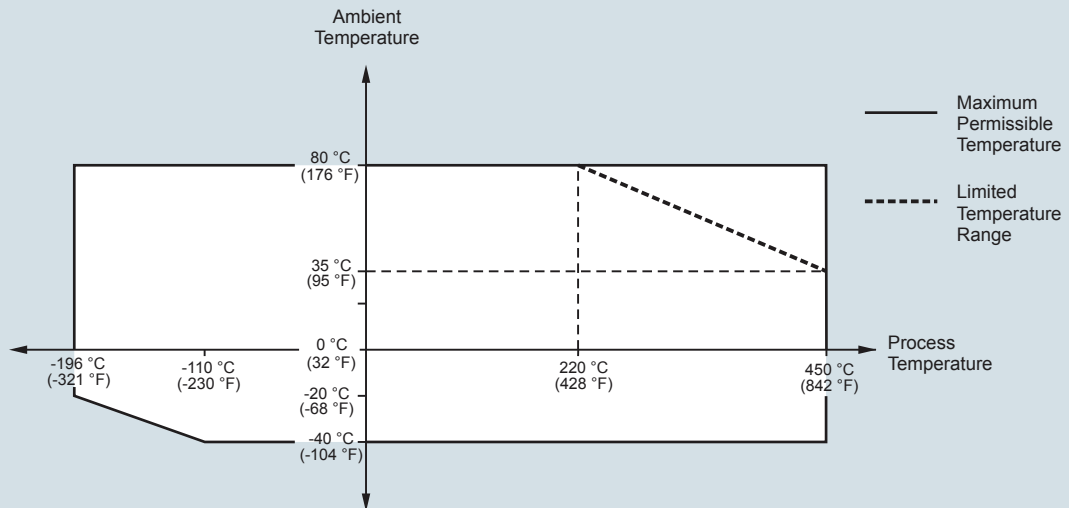


SITRANS LG260, Ambient temperature/process temperature curves

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)



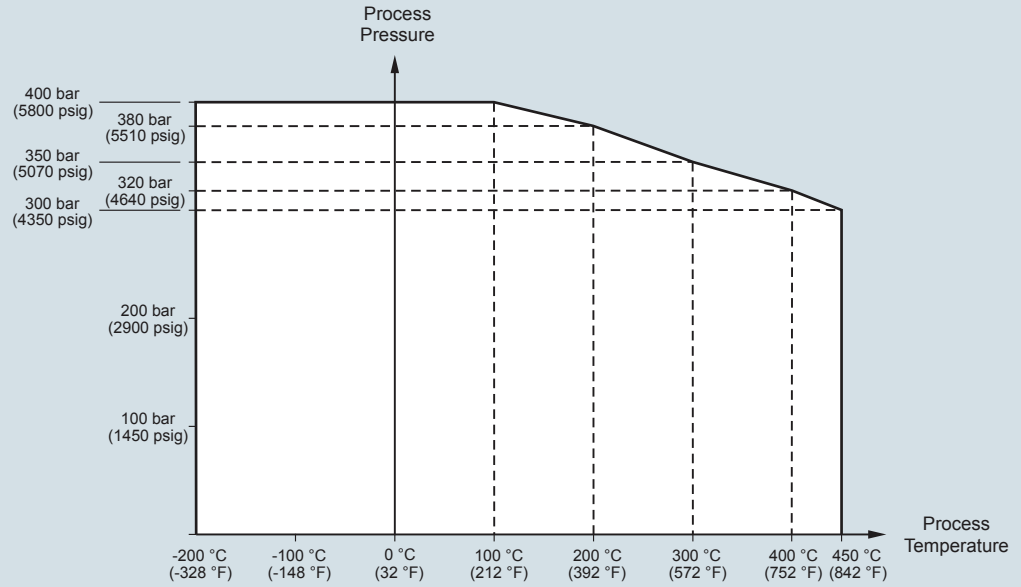
SITRANS LG270, Ambient temperature/process temperature curves

Level Measurement

Continuous level measurement - Guided wave radar transmitters

SITRANS LG series

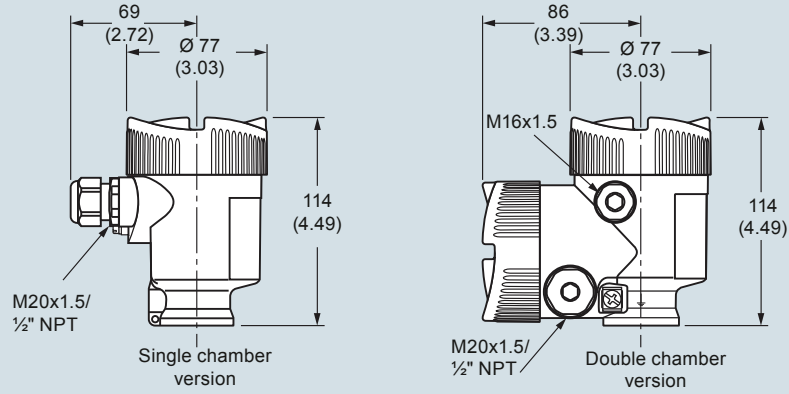
SITRANS LG270, Process pressure/process temperature (-196 ... +450 °C/-321 ... +842 °F version)



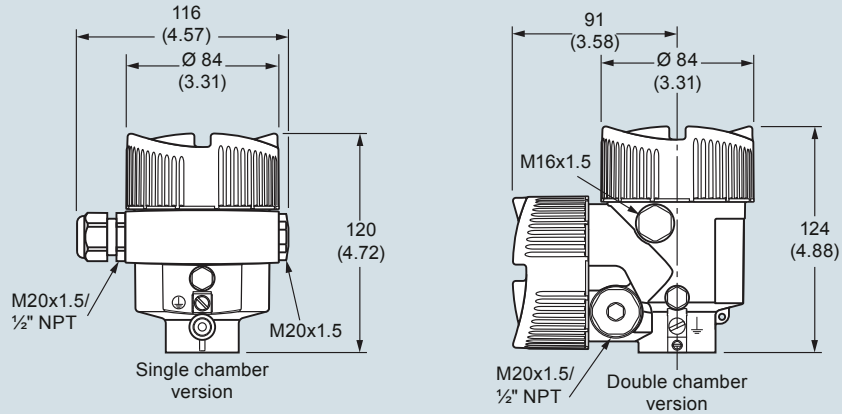
SITRANS LG270, Process pressure/process temperature curve

Dimensional drawings

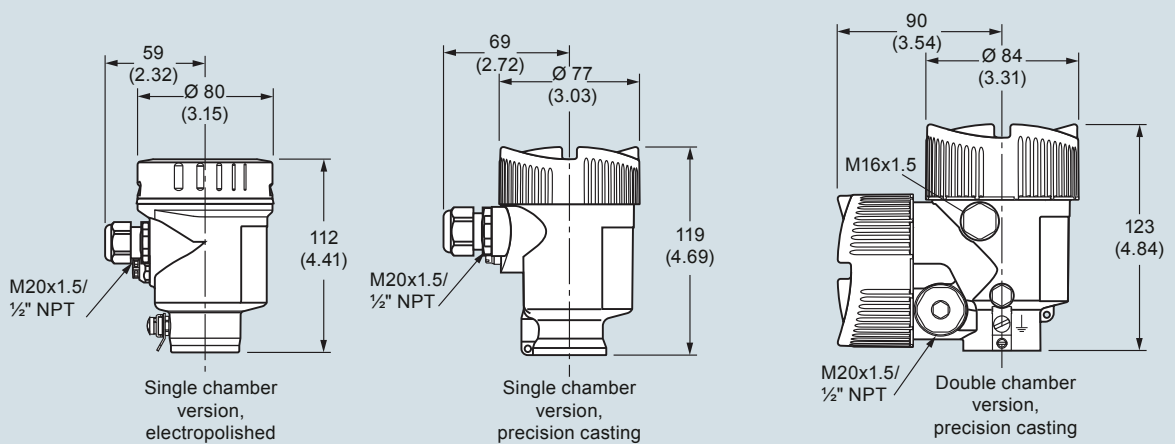
LG Series plastic housing



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)

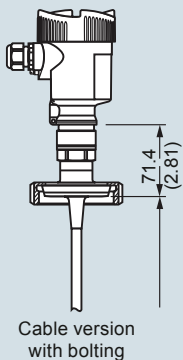
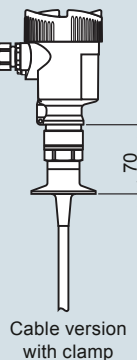
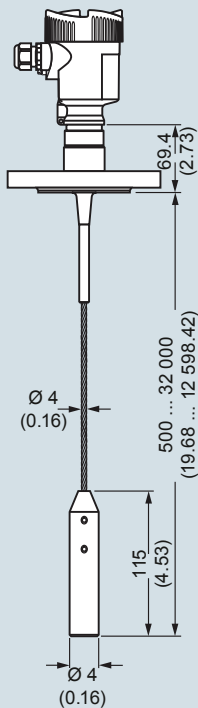
Level Measurement

Continuous level measurement - Guided wave radar transmitters

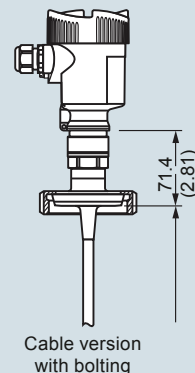
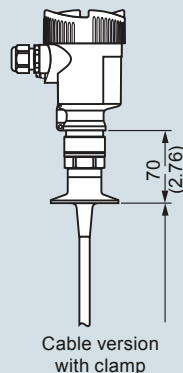
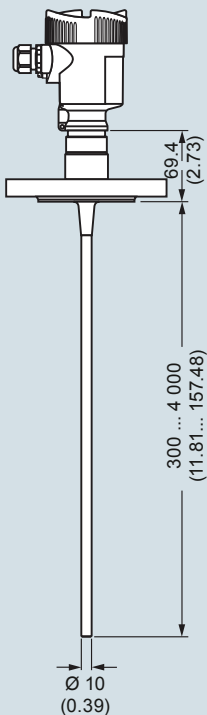
SITRANS LG series

SITRANS LG240

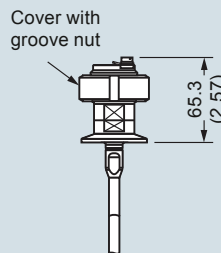
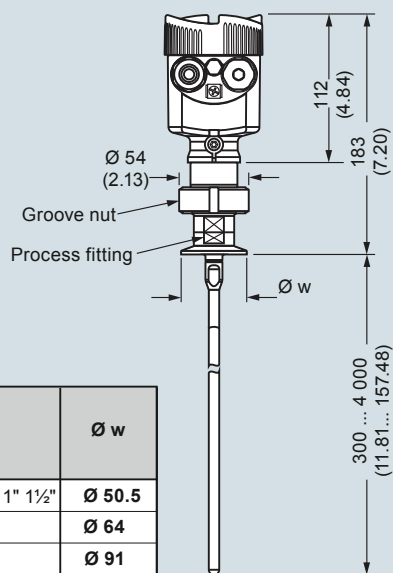
Cable version Ø 4 (0.157), PFA coated



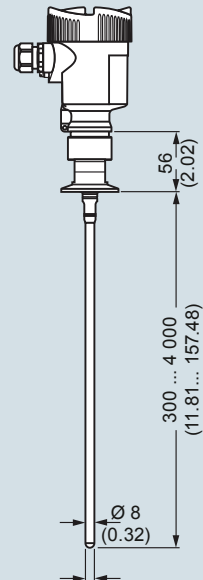
Rod version Ø 10 (0.394), PFA coated



Autoclaved version

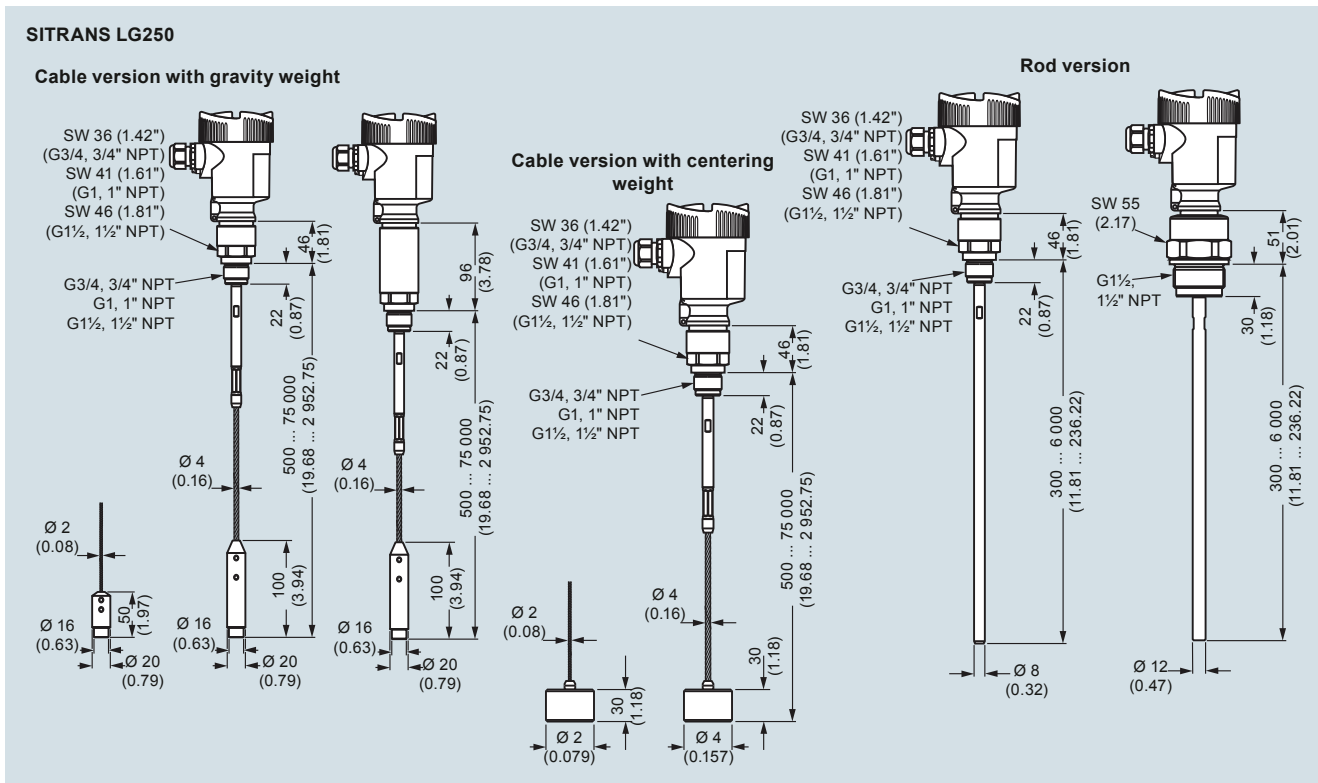


Rod version Ø 8 (0.315), polished

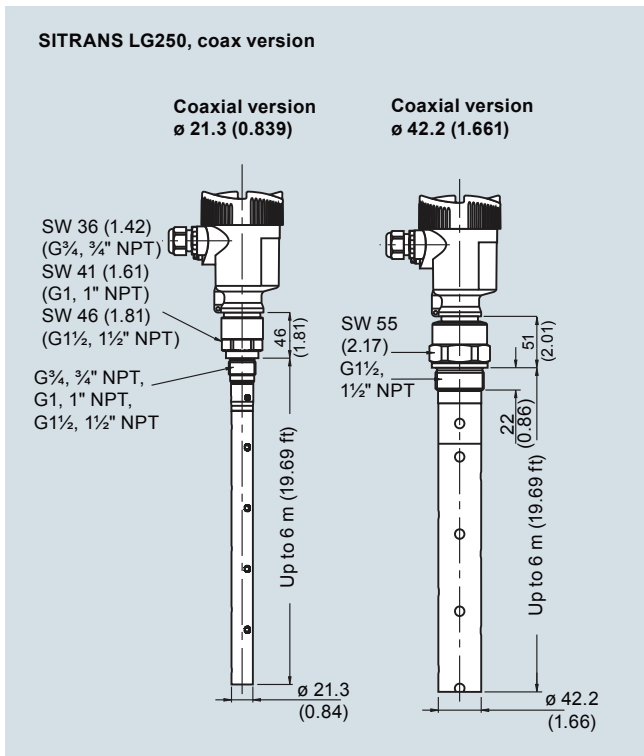


	Ø w
DIN DN 25 DN 32 DN 40/ 1" 1/2"	Ø 50.5
DIN DN 50/ 2"	Ø 64
DIN DN 65/ 3"	Ø 91

SITRANS LG240, dimensions in mm (inch)



SITRANS LG250, dimensions in mm (inch)



SITRANS LG250, dimensions in mm (inch)

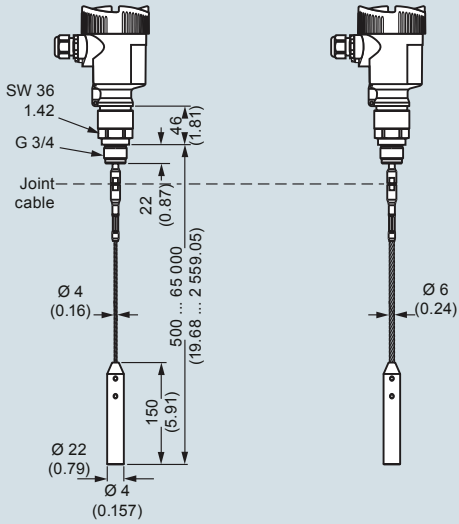
Level Measurement

Continuous level measurement - Guided wave radar transmitters

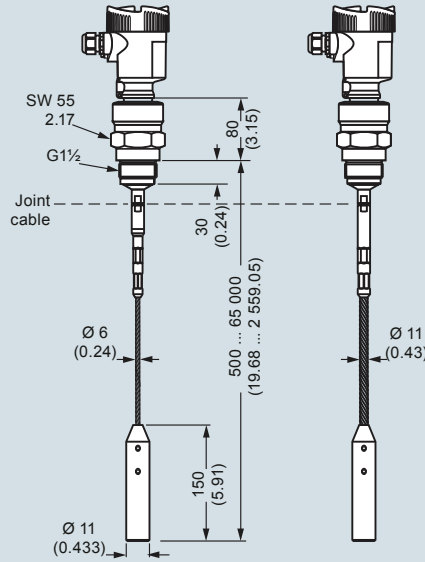
SITRANS LG series

SITRANS LG260

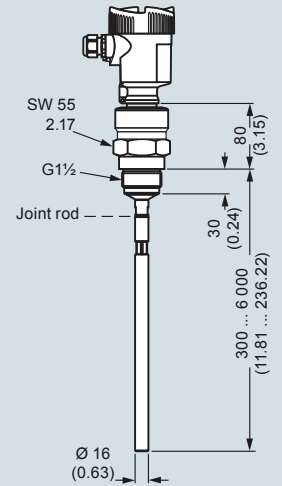
Cable version Ø 4 (0.157) / Ø 6 (0.236) - PA coated



Cable version Ø 6 (0.236) / Ø 11 (0.433) - PA coated

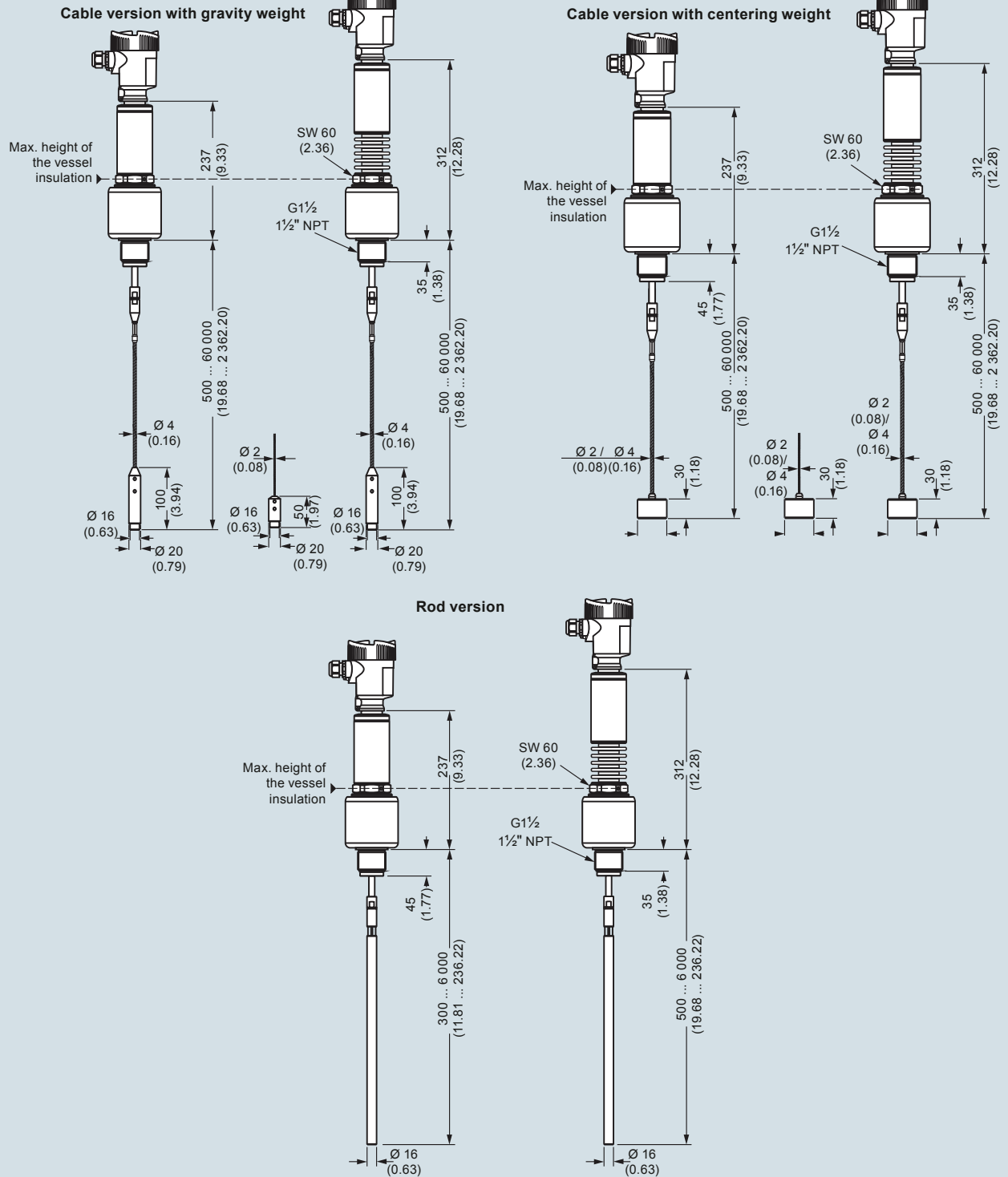


Rod version Ø 16 (0.63)



SITRANS LG260, dimensions in mm (inch)

SITRANS LG270



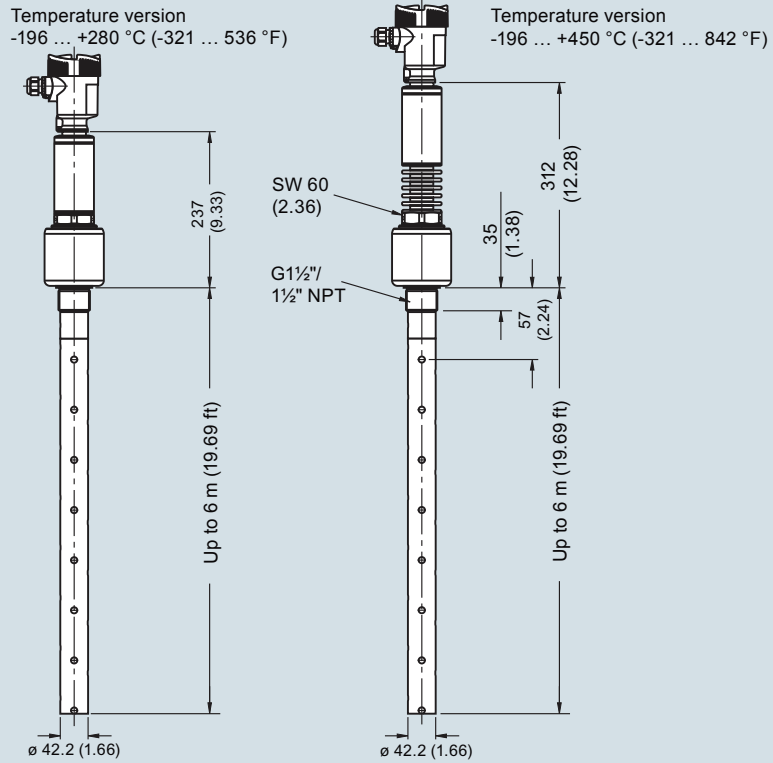
SITRANS LG270, dimensions in mm (inch)

Level Measurement

Continuous level measurement - Guided wave radar transmitters

SITRANS LG series

SITRANS LG270, coax version



SITRANS LG270, dimensions in mm (inch)

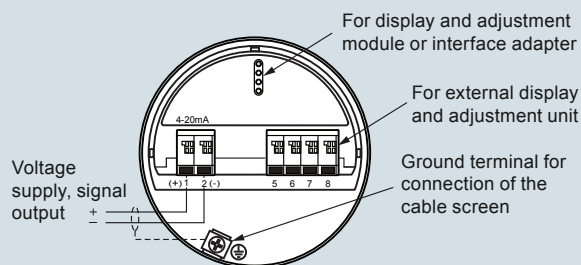
Level Measurement

Continuous level measurement - Guided wave radar transmitters

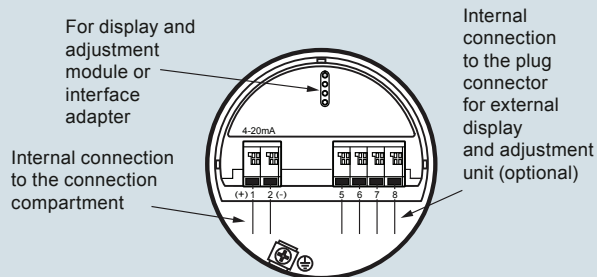
SITRANS LG series

Schematics

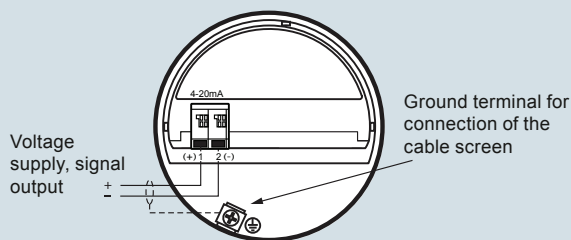
2-wire HART electronic option, electronics and connection compartment, single chamber housing



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



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

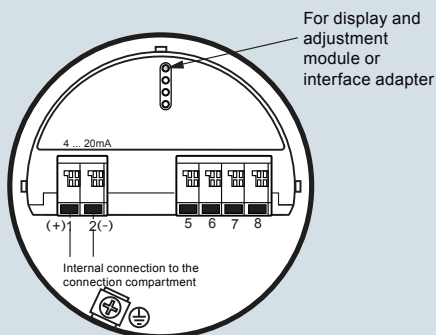


Note: All 2-wire HART connections and electronics are also available with SIL

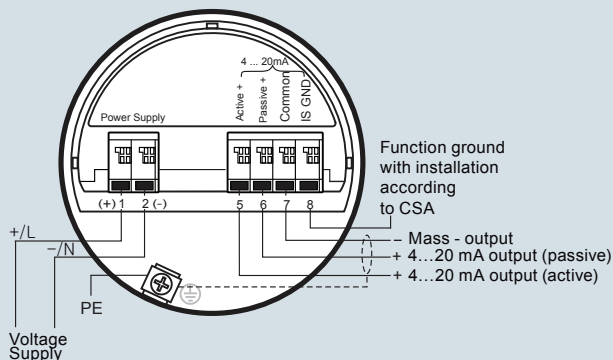
SITRANS LG series, connections

4

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



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



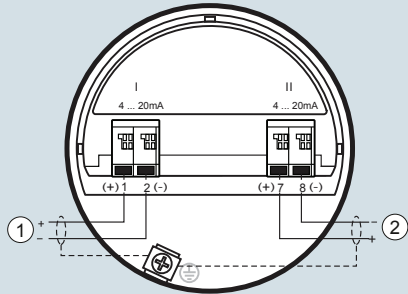
SITRANS LG series, connections

Level Measurement

Continuous level measurement - Guided wave radar transmitters

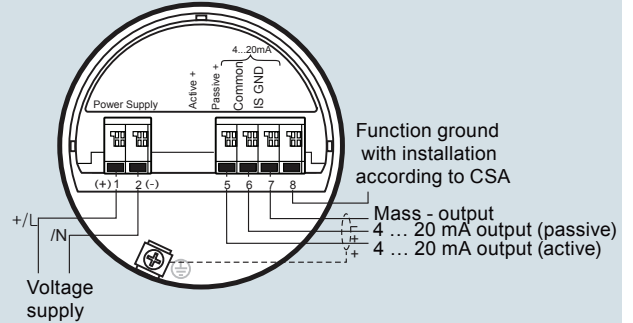
SITRANS LG series

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)

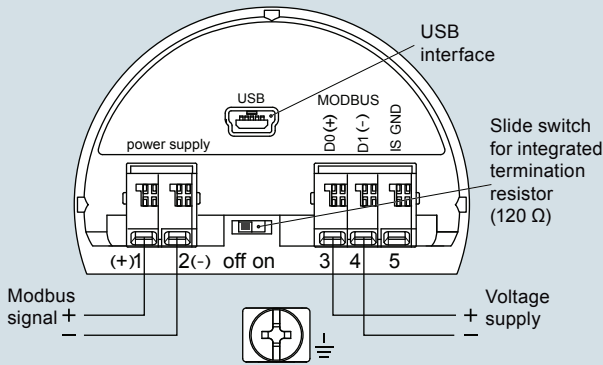
Connection compartment with low voltage



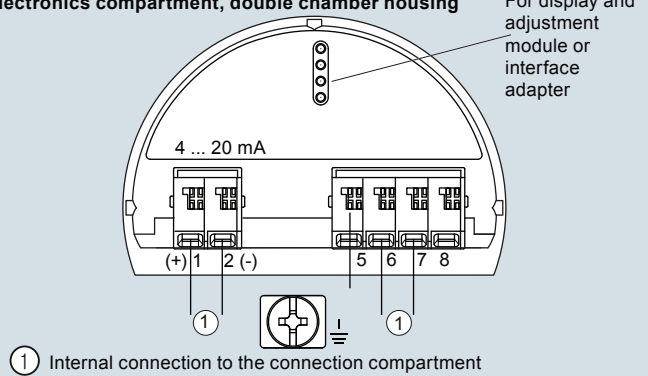
4

SITRANS LG series, connections

Modbus electronic option, connection compartment



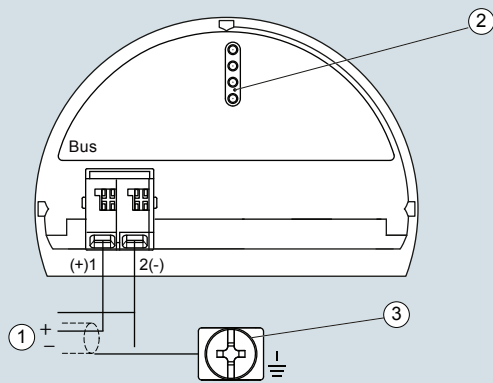
Modbus electronic option, electronics compartment, double chamber housing



- ① Internal connection to the connection compartment

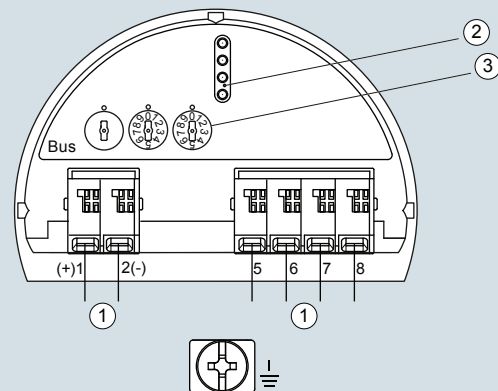
SITRANS LG series, connections

Profibus electronic option, connection compartment, double chamber housing



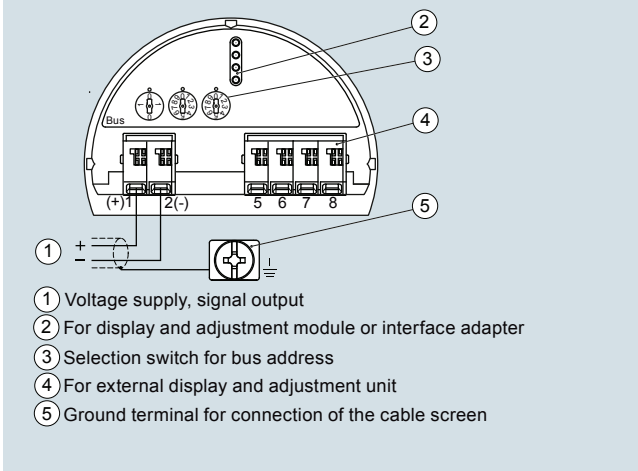
- ① Voltage supply, signal output
- ② For display and adjustment module or interface adapter
- ③ Ground terminal for connection of the cable screen

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

LG series, connections

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

LG series, connections