

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 build-up using auto learn function
- Wide range of Hygienic options

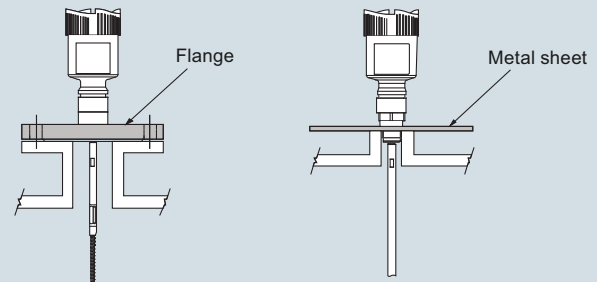
Application

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

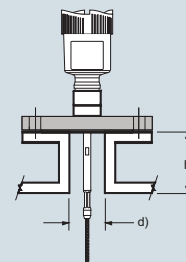


Installation in non-metal vessel

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

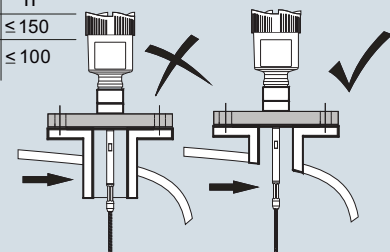
Mounting socket



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.

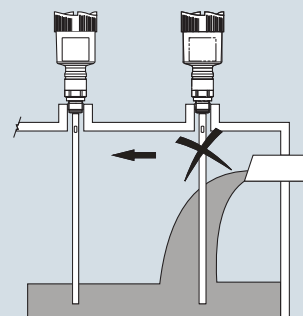
d	h
DN 40 ... DN 150	≤ 150
$> \text{DN } 150 \dots \text{DN } 200$	≤ 100

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

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 AlSi10 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 IP 66/68
Output range		• Cable inlet	2x M20 x 1.5 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	• 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	See manual for more details	2 wire Hart version	9.6 ... 35 V DC
• Interface models	Accuracy +/- 2 mm (0.08 inch)	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		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)	Certificates and approvals	
	(Note: Typical deviation, Interface measurement)	Hazardous approvals:	ATEX, FM, CSA, IECex
	See manual for more details	Hygienic approvals:	EHEDG
Electromagnetic compatibility (check if needed)		Overfill protection	WHG
• Measuring cycle time	< 500 ms	Ship approval	ABS, CCS, GL, DNV
• Step response time	≤ 3 s		
• Temperature Effects	The measurement error from the process conditions is in the specified pressure and temperature range of below 1 %		
Rated operating conditions			
Ambient temperature for enclosure	-40 ... +80 °C (-40 ... +176 °F)		
LCD readable temperature range	-40 ... +80 °C (-40 ... +176 °F) with display heated option		
Location	Indoor/outdoor		
Installation category	II		
Pollution degree	2		
Relative Humidity	20 ... 85 %		
Medium conditions			
Dielectric constant	dK ≥ 1.4 (configuration dependent) 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)		

Level Measurement

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SITRANS LG series

	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 • PROFIBUS PA • SIMATIC PDM • DTM/FDT for PACTware • Fieldcare 	<ul style="list-style-type: none"> • 4 ... 20 mA/HART • Modbus: Modbus RTU, Modbus ASCII • PROFIBUS PA • SIMATIC PDM • DTM/FDT for PACTware • Fieldcare 	<ul style="list-style-type: none"> • 4 ... 20 mA/HART • Modbus: Modbus RTU, Modbus ASCII • PROFIBUS PA • SIMATIC PDM • DTM/FDT for PACTware • Fieldcare 	<ul style="list-style-type: none"> • 4 ... 20 mA/HART • Modbus: Modbus RTU, Modbus ASCII • PROFIBUS PA • SIMATIC PDM • DTM/FDT for PACTware • Fieldcare

Level Measurement

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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		Clamp 2 1/2" PN 10 (ø77.5 mm) DIN 32676, ISO2852/1.4435 (BN2) ⁴⁾	0 2	
Overfill protection (WHG; VLAREM) ²⁸⁾	0 C		Clamp 2 1/2" PN 10 (ø77.5 mm) DIN 32676, ISO2852/PTFE-TFM 1600	0 3	
ATEX II 1G, 1/2G, 2G Ex ia IIC T6 ⁹⁾	0 E		Clamp 3" PN 10 (ø91 mm) DIN 32676, ISO2852/1.4435 (BN2) ⁴⁾	0 4	
ATEX II 1G, 1/2G, 2G Ex ia IIC + Overfill (WHG;VLAREM) ⁹⁾²⁸⁾	0 F		Clamp 3" PN 10 (ø91 mm) DIN 32676, ISO2852/PTFE-TFM 1600	0 5	
ATEX II 1G, 1/2G 2G Ex ia IIC + ATEX II 1D, 1/2D, 2D IP6x ¹³⁾¹⁵⁾²⁴⁾²⁶⁾²⁷⁾	0 H		Clamp 4" PN 6 (ø119 mm) DIN 32676, ISO2852/1.4435(BN2) ⁴⁾	0 6	
ATEX II 1/2G, 2G Ex d ia IIC T6 ¹⁾¹²⁾²⁷⁾	0 J		Clamp 4" PN 6 (ø119 mm) DIN 32676, ISO2852/PTFE-TFM 1600	0 7	
ATEX II 1/2G, 2G Ex d ia IIC + ATEX II 1/2D, 2D IP6x ¹⁾¹²⁾¹³⁾¹⁵⁾²⁴⁾²⁷⁾	0 K		Bolting DN 32, PN 40 DIN 11851/1.4435(BN2) ⁴⁾	0 8	
ATEX II 1D, 1/2D, 2D IP6x T ¹³⁾¹⁵⁾²⁴⁾²⁶⁾²⁷⁾	0 N		Bolting DN 32, PN 40 DIN 11851/PTFE-TFM 1600	1 0	
IEC Ex ia IIC T6 ⁹⁾	0 P		Bolting DN 40, PN 40 DIN 11851/1.4435 (BN2) ⁴⁾	1 1	
IEC Ex ia IIC T6 + IEC IP6x T ¹³⁾¹⁵⁾²⁴⁾²⁶⁾²⁷⁾	0 Q		Bolting DN 40, PN 40 DIN 11851/PTFE-TFM 1600	1 2	
IEC Ex d ia IIC T6 ¹⁾¹²⁾²⁷⁾	0 R		Bolting DN 50, PN 25 DIN 11851/1.4435(BN2) ⁴⁾	1 3	
IEC Ex d ia IIC T6 + IEC IP6x T ¹⁾¹²⁾¹³⁾¹⁵⁾²⁴⁾²⁷⁾	0 S		Bolting DN 50, PN 25 DIN 11851/PTFE-TFM 1600	1 4	
FM (NI) Class I, Div. 2, Groups A, B, C, D	1 A		Bolting DN 65, PN 25 DIN 11851/PTFE-TFM 1600	1 5	
FM (IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G	1 B		Flange DN 25, PN 40 Form C, DIN 2501/PTFE-TFM 1600	2 0	
FM (XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G ¹⁾¹²⁾	1 C		Flange DN 40, PN 40 Form C, DIN 2501/PTFE-TFM 1600	2 1	
CSA (NI) Class I, Div. 2, Groups A, B, C, D; (DIP) Class II, III, Div. 1, Groups E, F, G ¹³⁾¹⁵⁾²⁶⁾²⁷⁾	1 E		Flange DN 50, PN 40 Form C, DIN 2501/PTFE-TFM 1600	2 2	
CSA (IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G	1 F		Flange DN 50, PN 40 Form V13, DIN 2513/PTFE-TFM 1600	2 3	
CSA (XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G ¹⁾¹²⁾	1 G		Flange DN 65, PN 40 Form C, DIN 2513/PTFE-TFM 1600	2 4	
NEPSI Ex ia IIC T6	2 A		Flange DN 80, PN 40 Form C, DIN 2501/PTFE-TFM 1600	2 5	
NEPSI Ex ia IIC T6 + DIP A20/21 TA T*	2 B		Flange DN 100, PN 16 Form C, DIN 2501/PTFE-TFM 1600	2 6	
NERSI Ex d ia IIC T6	2 C		Flange 2" 150 lb RF, ANSI B16.5/PTFE-TFM 1600	3 0	
NEPSI Ex d ia IIC T6 + DIP A20/21 TA T*	2 D		Flange 2" 300 lb RF, ANSI B16.5/PTFE-TFM 1600	3 1	
NEPSI Ex d IIC T6	2 E		Flange 3" 150 lb RF, ANSI B16.5/PTFE-TFM 1600	3 2	
NEPSI Ex d IIC T6 + DIP A20/21 TA T*	2 F		Flange 4" 150 lb RF, ANSI B16.5/PTFE-TFM 1600	3 3	
NEPSI DIP A20/21 TA T*	2 G		Note: The pressure limit for all PTFE coated versions is 16 bar (per manual).		
INMETRO Ex ia IIC T6 ... T1	3 A		Electronics		
INMETRO Ex t IIIC T* IP6X, Da, Da/Db, Da/Dc, Db + Ex ia IIC T6, Ga, Ga/Gb	3 B		Two-wire 4 ... 20mA/HART	0	
INMETRO Ex d ia IIC T6 ... T1	3 C		Four-wire Modbus ¹⁹⁾²⁰⁾²¹⁾²²⁾	1	
INMETRO Ex t IIIC T* IP6X, Da, Da/Db, Da/Dc, Db + Ex d ia IIC T6 Ga/Gb	3 D		Two-wire 4 ... 20mA/HART with SIL qualification ¹⁾⁷⁾¹⁸⁾	2	
INMETRO Ex d IIC T6 ... T1	3 E		Four-wire 4 ... 20mA/HART; 90...253V AC; 50/60 Hz ¹⁾⁸⁾¹⁰⁾	3	
INMETRO Ex t IIIC T* IP6X, Da, Da/Db, Da/Dc, Db + Ex d IIC T6 Ga/Gb	3 F		Four-wire 4 ... 20mA/HART; 9.6...48V DC; 20 ... 42 V AC ¹⁾⁸⁾¹⁰⁾	4	
INMETRO Ex t IIIC T* IP6X, Da, Da/Db, Da/Dc, Db	3 G		PROFIBUS PA ²⁵⁾	5	
Probe version/Material					
Probe cable ø4 mm (0.16 inch) with gravity weight/PFA ²⁾⁷⁾	A				
Probe exchangeable rod (ø8 mm) / 1.4435 (BN2), can be autoclaved (Ra < 0.76 µm) ³⁾⁷⁾	B				
Probe exchangeable rod (ø8 mm) / 1.4435 (BN2), (Ra < 0.76 µm) ³⁾⁷⁾	C				
Probe rod ø10 mm (0.39 inch)/PFA ²⁾⁷⁾	D				
Probe exchangeable rod (ø8 mm) /1.4435 (BN2), electropolished (Ra < 0.38 µm) ⁷⁾	E				
Process fitting/Material					
Clamp 2" PN 16 (ø64 mm) DIN 32676, ISO2852/1.4435 (BN2) ⁴⁾	0 0				
Clamp 2" PN 16 (ø64 mm) DIN 32676, ISO2852/PTFE-TFM 1600	0 1				

Level Measurement

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SITRANS LG series

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.		
Seal/Process temperature			<u>Rod \varnothing10 mm (0.24 inch)/PFA (300 ... 4 000 mm)</u>		
Without glass seal/-40 ... +150 °C (-40 ... +302 °F) ⁵⁾¹¹⁾	A		300 mm (11.81 inch) ¹⁴⁾	9 R 1 A	
FFKM (Kalrez 6221)/-20 ... 150 °C (-4 ... +302 °F)	B		500 mm (19.69 inch) ¹⁴⁾	9 R 1 B	
EPDM (Freudenberg 70 EPDM 291)/-20... 130 °C (-4 ... +266 °F)	C		300 ... 1 000 mm (11.81 ... 39.37 inch) ¹⁴⁾	9 R 1 C	
Housing/Protection/Cable			1 001 ... 5 000 mm (39.41 ... 78.74 inch) ¹⁴⁾	9 R 1 D	
Plastic IP66/IP67 M20 x 1.5/blind stopper	A		2 001 ... 3 000 mm (78.78 ... 118.11 inch) ¹⁴⁾	9 R 1 E	
Plastic IP66/IP67 1/2" NPT/blind stopper	B		3 001 ... 4 000 mm (118.15 ... 157.48 inch) ¹⁴⁾	9 R 1 F	
Aluminum/IP66/IP68 (0.2 bar) M20 x 1.5/ blind stopper	C		<u>Cable \varnothing4 mm (0.16 inch)/PFA (500 ... 32 000 mm)</u>		
Aluminum/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	D		500 mm (9.69 inch)	9 R 1 G	
Aluminum double chamber/IP66/IP68 (0.2 bar) M20 x 1.5/blind stopper	E		501 ... 1 000 mm (19.72 ... 39.37 inch)	9 R 1 H	
Aluminum double chamber/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	F		1 001 ... 2 000 mm (39.37 ... 196.85 inch)	9 R 1 J	
Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) M20 x 1.5/blind stopper	G		2 001 ... 4 000 mm (196.89 ... 393.70 inch)	9 R 1 K	
Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	H		4 001 ... 5 000 mm (393.74 ... 590.55 inch)	9 R 1 L	
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) M20 x 1.5/blind stopper	J		5 001 ... 10 000 mm (590.59 ... 787.40 inch)	9 R 1 M	
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	K		10 001 ... 15 000 mm (787.44 ... 984.25 inch)	9 R 1 N	
Stainless steel double chamber/IP66/IP68 (0.2 bar) M20 x 1.5/blind stopper	L		15 001 ... 20 000 mm (984.29 ... 1 181.10 inch)	9 R 1 P	
Stainless steel double chamber/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	M		20 001 ... 25 000 mm (1 181.14 ... 1 377.95 inch)	9 R 1 Q	
Aluminum/IP66/IP68 (0.2 bar) M20 x 1.5/ cable gland stainless steel	N		25 001 ... 32 000 mm (1 377.99 ... 1 574.80 inch)	9 R 1 R	
Aluminum double chamber/IP66/IP68 (0.2 bar) M20 x 1.5/cable gland stainless steel	P		<u>Exchange rod \varnothing8 mm (0.31 inch)/1.4435 (BN2), electropolished (Ra < 0.38 μm)</u>		
Stainless steel (precision casting) 316L/IP66/IP68 (0.2 bar) M20 x 1.5/cable gland stainless steel	Q		300 ... 1 000 mm (11.81 ... 39.37 inch) ¹⁴⁾	9 R 2 A	
Stainless steel (electropolished) 316L/IP66/IP68 (0.2 bar) M20 x 1.5/cable gland stainless steel	R		1 001 ... 2 000 mm (39.41 ... 78.74 inch) ¹⁴⁾	9 R 2 B	
Aluminum single chamber / IP66/IP68 (0.2 bar) M20 x 1.5/cable gland brass nickel-plated	W		2 001 ... 3 000 mm (78.78 ... 118.11 inch) ¹⁴⁾	9 R 2 C	
Aluminum double chamber / IP66/IP68 (0.2 bar) M20 x 1.5/cable gland brass nickel-plated	X		3 001 ... 4 000 mm (118.15 ... 157.48 inch) ¹⁴⁾	9 R 2 D	
Stainless steel single chamber (precision casting) / IP66/IP68 (0.2 bar) M20 x 1.5/ cable gland brass nickel-plated	Y				
Stainless steel double chamber / IP66/IP68 (0.2 bar) M20 x 1.5/cable gland brass nickel-plated	S				
Lengths					
<u>Rod \varnothing8 mm (0.31 inch)/1.4435 (Basle standard 300 ... 4 000 mm)</u>					
300 ... 1 000 mm (11.81 ... 39.37 inch) ¹⁴⁾		0			
1 001 ... 2 000 mm (39.41 ... 78.74 inch) ¹⁴⁾		1			
2 001 ... 3 000 mm (78.78 ... 118.11 inch) ¹⁴⁾		2			
3 001 ... 4 000 mm (118.15 ... 157.48 inch) ¹⁴⁾		3			

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Selection and Ordering data

Order code

Further designs (mandatory)

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

Supplementary electronics

Without

A00

Additional current output 4 ... 20 mA¹⁾²³⁾

A01

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

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 (cable version only) range from 100 ... 1 000 mm

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-Inspection Certificate for material (EN 10204 NACE MR 0175)¹⁶⁾

D07

3.1-Inspection Certificate for instrument with test data (EN 10204)¹⁶⁾

C25

(H) 2.2-Factory certificate for material (EN 10204)¹⁶⁾

C15

Quality and test plan¹⁶⁾

C26

Dye penetration test + 3.1 certificate/instrument¹⁶⁾

C13

X-ray test + 3.1 certificate/instrument¹⁶⁾

C14

Positive material identification test + 3.1 certificate/instrument¹⁶⁾

C16

Roughness test + 3.1 certificate/instrument¹⁶⁾

C18

Pressure test + 3.1 certificate/instrument¹⁶⁾

C31

Helium leak test + 3.1 certificate/instrument¹⁶⁾

C32

Ferrite measuring accuracy to DIN 32514-1 + 3.1 certificate/instrument¹⁶⁾

C60

Pressure test according to Norsok + 3.1 certificate/instrument¹⁶⁾

C61

5 point calibration certificate + 3.1 certificate/instrument¹⁶⁾

C62

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.	Selection and Ordering data	Article No.	Order Code
Accessories		SITRANS LG250		
SITRANS LG, GWR sensor Display Module	A5E34143449	A guided wave radar sensor for continuous level and interface measurement of liquids.	7ML5881-	
SITRANS LG, USB communicator	A5E35192015	↗ Click on the Article No. for the online configuration in the PIA Life Cycle Portal.		
SITRANS RD100, loop powered display - see Chapter 7	7ML5741-...			
SITRANS RD200, universal input display with Modbus conversion - see Chapter 7	7ML5740-...	Approvals		
SITRANS RD300, dual line display with totalizer and linearization curve and Modbus conversion - see Chapter 7	7ML5744-...	Ordinary location CE ¹⁶⁾		0 A
SITRANS RD500 web, universal remote monitoring solution for instrumentation - see Chapter 7	7ML5750-...	Shipping approval ¹⁹⁾²⁸⁾²⁹⁾		0 B
For applicable back up point level switch - see point level measurement section		Overfill protection (WHG; VLAREM) ⁴⁶⁾		0 C
		ATEX II 1G, 1/2G, 2G Ex ia IIC T6 ¹⁶⁾		0 E
		ATEX II 1G, 1/2G, 2G Ex ia IIC + Overfill (WHG; VLAREM) ⁴⁶⁾		0 F
		ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + shipping approval ¹⁹⁾²⁸⁾²⁹⁾		0 G
		ATEX II 1G, 1/2G 2G Ex ia IIC + ATEX II 1D, 1/2D, 2D IP6x ²³⁾⁴⁰⁾⁴⁴⁾⁴⁵⁾		0 H
		ATEX II 1/2G, 2G Ex d ia IIC T6 ¹⁾²¹⁾²³⁾⁴⁵⁾		0 J
		ATEX II 1/2G, 2G Ex d ia IIC + ATEX II 1/2D, 2D IP6x ¹⁾²¹⁾²³⁾⁴⁰⁾⁴⁵⁾		0 K
		ATEX II 1/2G, 2G Ex d IIC T6 ¹⁴⁾²⁰⁾		0 L
		ATEX II 1/2G, 2G Ex d IIC + ATEX II 1/2D, 2D IP6x ¹⁴⁾²⁰⁾²³⁾⁴⁰⁾⁴⁴⁾		0 M
		ATEX II 1D, 1/2D, 2D IP6x T ²⁰⁾²³⁾⁴⁰⁾⁴⁴⁾⁴⁵⁾		0 N
		IEC Ex ia IIC T6 ¹⁶⁾		0 P
		IEC Ex ia IIC T6 + IEC IP6x T tD ²⁰⁾²³⁾⁴⁰⁾⁴⁴⁾⁴⁵⁾		0 Q
		IEC Ex d ia IIC T6 ¹⁾²¹⁾²³⁾⁴⁰⁾⁴⁵⁾		0 R
		IEC Ex d ia IIC T6 + IEC IP6x T tD ¹⁾²⁰⁾²¹⁾⁴⁰⁾⁴⁴⁾⁴⁵⁾		0 S
		IEC Ex d IIC T6 ¹⁴⁾²⁰⁾		0 T
		IEC Ex d IIC T6 + IEC IP6x T tD ¹⁴⁾²⁰⁾²³⁾⁴⁰⁾⁴⁴⁾		0 U
		FM (NI) Class I, Div. 2, Groups A, B, C, D ²⁰⁾		1 A
		FM (IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F		1 B
		FM (XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G ¹⁾²¹⁾²³⁾		1 C
		FM (XP) Class I, Div. 1, Groups A, B, C, D ²⁰⁾		1 D
		CSA (NI) Class I, Div. 2, Groups A, B, C, D (DIP) Class II, III, Div. 1, Groups E, F, G ¹⁶⁾⁴⁴⁾⁴⁵⁾		1 E
		CSA (IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G ¹⁶⁾		1 F
		CSA (XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G ¹⁾²¹⁾²³⁾		1 G
		CSA (XP) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G ¹⁴⁾²⁰⁾		1 H
		NEPSI Ex ia IIC T6 ⁴⁶⁾		2 A
		NEPSI Ex ia IIC T6 + DIP A20/21 TA T ^{*43)}		2 B
		NEPSI Ex d ia IIC T6 ⁴³⁾⁴⁷⁾		2 C
		NEPSI Ex d ia IIC T6 + DIP A20/21 TA T ^{*43)47)}		2 D
		NEPSI Ex d IIC T6 ⁴³⁾		2 E
		NEPSI Ex d IIC T6 + DIP A20/21 TA T ^{*43)}		2 F
		NEPSI DIP A20/21 TA T ^{*43)48)}		2 G
		INMETRO Ex ia IIC T6 ... T1 ⁴⁶⁾		3 A
		INMETRO Ex t IIIC T* IP6X, Da, Da/Db, Da/Dc, Db + Ex ia IIC T6, Ga, Ga/Gb ⁴³⁾		3 B
		INMETRO Ex d ia IIC T6 ... T1 ⁴³⁾⁴⁷⁾		3 C
		INMETRO Ex t IIIC T* IP6X, Da, Da/Db, Da/Dc, Db + Ex d ia IIC T6 Ga/Gb ⁴³⁾⁴⁷⁾		3 D
		INMETRO Ex d IIC T6 ... T1 ⁴³⁾⁴⁶⁾		3 E
		INMETRO Ex t IIIC T* IP6X, Da, Da/Db, Da/Dc, Db + Ex d IIC T6 Ga/Gb ⁴³⁾		3 F
		INMETRO Ex t IIIC T* IP6X, Da, Da/Db, Da/Dc, Db ⁴³⁾⁴⁸⁾		3 G

Note: Please consult manual for further details.

Level Measurement

Guided wave radar transmitters

SITRANS LG series

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.		
Probe version/Material					
Probe exchangeable cable ø2 mm (0.08 inch) with gravity weight/316L ⁽⁸⁾⁽⁹⁾⁽¹¹⁾⁽²⁶⁾	A		Flange DN 100 PN 40 Form V13, DIN 2513/316L	3 1	
Probe exchangeable cable ø2 mm (0.08 inch) center weight/316L ⁽⁸⁾⁽⁹⁾⁽¹²⁾⁽²⁶⁾	B		Flange DN 150 PN 16 Form C, DIN 2501/316L	3 2	
Probe exchangeable cable ø4 mm (0.16 inch) with gravity weight/316L ⁽⁸⁾⁽⁹⁾⁽¹¹⁾⁽²⁶⁾	C		Flange DN 50 PN 40 EN 1092-1 Form B1/316L	3 3	
Probe exchangeable cable ø4 mm (0.16 inch) with center weight/316L ⁽⁸⁾⁽⁹⁾⁽¹²⁾⁽²⁶⁾	D		Flange DN 80 PN 40 EN 1092-1 Form B1/316L	3 4	
Probe exchangeable rod ø8 mm (0.31 inch)/316L ⁽²⁾⁽⁸⁾⁽¹⁰⁾⁽¹¹⁾⁽²⁶⁾	E		Flange 1" 150 lb RF, ANSI B16.5/316L	3 5	
Probe exchangeable rod ø12 mm (0.47 inch)/316L ⁽³⁾⁽⁸⁾⁽¹⁰⁾⁽¹¹⁾⁽²⁴⁾⁽²⁶⁾	F		Flange 1 1/2" 150 lb RF, ANSI B16.5/316L	3 6	
Probe coax version ø21.3 mm (0.84 inch) with single hole/316L ⁽⁸⁾⁽⁹⁾⁽¹¹⁾⁽²⁶⁾⁽²⁷⁾	G		Flange 2" 150 lb RF, ANSI B16.5/316L	3 7	
Probe coax version ø21.3 mm (0.84 inch) with multiple hole/316L ⁽⁸⁾⁽⁹⁾⁽¹¹⁾⁽²⁶⁾⁽²⁷⁾	H		Flange 2" 300 lb RF, ANSI B16.5/316L	3 8	
Probe coax version ø42.2 mm (1.66 inch) with multiple hole/316L ⁽⁵⁾⁽⁸⁾⁽⁹⁾⁽¹¹⁾⁽²⁴⁾⁽²⁶⁾⁽²⁷⁾	K		Flange 3" 150 lb RF, ANSI B16.5/316L	4 0	
Probe exchangeable cable ø4 mm (0.16 inch) with gravity weight/Hastelloy C22 (2.4602) ⁽⁸⁾	L		Flange 3" 300 lb RF, ANSI B16.5/316L	4 1	
Probe exchangeable cable ø4 mm (0.16 inch) with centre weight/Hastelloy C22 (2.4602) ⁽⁸⁾	M		Flange 4" 150 lb RF, ANSI B16.5/316L	4 2	
Probe exchangeable rod ø8 mm (0.31 inch)/Hastelloy C22 (2.4602) ⁽⁸⁾	N		Flange 4" 300 lb RF, ANSI B16.5/316L	4 3	
Probe exchangeable rod ø12 mm (0.47 inch)/Hastelloy C22 (2.4602) ⁽⁸⁾	P		Flange 6" 150 lb RF, ANSI B16.5/316L	4 4	
Probe coax version ø21.3 mm (0.84 inch) with multiple hole / Hastelloy C22 (2.4602) ⁽⁸⁾	Q		Flange 6" 300 lb RF, ANSI B16.5/316L	4 5	
Probe coax version ø42.2 mm (1.66 inch) with multiple hole/Hastelloy C22 (2.4602) ⁽⁸⁾	R		Thread G 3/4" PN 40, DIN3852-A /Hastelloy C22 (2.4602)	4 6	
Probe exchangeable rod ø8 mm (0.31 inch)/Duplex (1.4462) ⁽⁸⁾	S		Thread G 1" PN 40, DIN 3852-A/Hastelloy C22 (2.4602)	4 7	
Exchangeable rod ø12 mm (0.47 inch)/Alloy 400 (2.4360) ⁽⁸⁾	T		Thread G 1 1/2" PN 40, DIN 3852-A/Hastelloy C22 (2.4602)	4 8	
Process fitting/Material			Thread 1 1/2" NPT PN 40, ASME B1.20.1/ Hastelloy C22 (2.4602)	5 0	
Thread G 3/4" (DIN 3852-A) PN 6/316L	0 0		Flange DN 50 PN 40 Form C, DIN 2501/ 316L with Hastelloy C22 (2.4602) coating	5 1	
Thread 3/4" NPT (ASME B1.20.1) PN 6/316L	0 1		Flange DN 50 PN 40 Form B1, EN 1092-1/ 316L with Hastelloy C22 (2.4602) coating	5 2	
Thread G 3/4" (DIN 3852-A) PN 40/316L	0 2		Flange DN 80 PN 40 Form B1, EN 1092-1/ 316L with Hastelloy C22 (2.4602) coating	5 3	
Thread 3/4" NPT (ASME B1.20.1) PN 40/316L	0 3		Flange DN 100 PN 40 Form B1, EN 1092-1/ 316L with Hastelloy C22 (2.4602) coating	5 4	
Thread G 3/4" (DIN 3852-A) PN 100 / 316L ⁽⁴²⁾	0 4		Flange DN 150 PN 16 Form B1, EN 1092-1/ 316L with Hastelloy C22 (2.4602) coating	5 5	
Thread 3/4" NPT (ASME B1.20.1) PN 100/ 316L ⁽⁴²⁾	0 5		Flange DN 200 PN 16 Form B1, EN 1092-1/ 316L with Hastelloy C22 (2.4602) coating	5 6	
Thread G 1" (DIN 3852-A) PN 40/316L	0 6		Flange 2" 150 lb RF, ASME B16.5/316L with Hastelloy C22 (2.4602) coating	5 7	
Thread 1" NPT (ASME B1.20.1) PN 40/316L	0 7		Flange 2" 300 lb RF, ASME B16.5/316L with Hastelloy C22 (2.4602) coating	5 8	
Thread G 1" (DIN 3852-A) PN 100/316L ⁽⁴²⁾	0 8		Flange 3" 150 lb RF, ASME B16.5/316L with Hastelloy C22 (2.4602) coating	6 0	
Thread 1" NPT (ASME B1.20.1) PN 100/316L ⁽⁴²⁾	1 0		Flange 4" 150 lb RF, ASME B16.5/316L with Hastelloy C22 (2.4602) coating	6 1	
Thread G 1 1/2" (DIN 3852-A) PN 40/316L	1 1		Flange 4" 300 lb RF, ASME B16.5/316L with Hastelloy C22 (2.4602) coating	6 2	
Thread 1 1/2" NPT (ASME B1.20.1) PN 40/316L	1 2		Flange 6" 150 lb RF, ASME B16.5/316L with Hastelloy C22 (2.4602) coating	6 3	
Thread G1 1/2" (DIN 3852-A) PN 100/316L ⁽⁴²⁾	1 3		Flange 6" 300 lb RF, ASME B16.5/316L with Hastelloy C22 (2.4602) coating	6 4	
Thread 1 1/2" NPT (ASME B1.20.1) PN 100/ 316L ⁽⁴²⁾	1 4		Thread G 3/4" (DIN 3852-A) PN 40/Duplex 1.4462	6 5	
Thread 2 NPT PN 40, ASME B1.20.1/316L ⁽³⁷⁾⁽³⁸⁾	1 5		Flange DN 80 PN 40 Form F, DIN 2501/Duplex (1.4462)	6 6	
Flange DN 25 PN 40 Form C, DIN 2501/316L	2 0		Flange DN 50 PN 40 Form B1, EN 1092-1/ Duplex (1.4462)	6 7	
Flange DN 25 PN 40 Form F, DIN 2501/316L	2 1		Flange 1" 150 lb RF, ASME16.5/Duplex (1.4462)	6 8	
Flange DN 40 PN 40 Form C, DIN 2501/316L	2 2		Flange 1 1/2" 150 lb RF, ASME B16.5/Duplex (1.4462)	7 0	
Flange DN 50 PN 40 Form C, DIN 2501/316L	2 3		Flange 2" 150 lb RF, ASME B16.5/Duplex (1.4462)	7 1	
Flange DN 50 PN 40 form V13, DIN 2513/316L	2 4		Flange 2" 300 lb RF, ASME B16.5/Duplex (1.4462)	7 2	
Flange DN 80 PN 40 Form C, DIN 2501/316L	2 5		Flange 2" 600 lb RF, ASME B16.5/Duplex (1.4462)	7 3	
Flange DN 80 PN 40 Form V13, DIN 2501/316L	2 6		Flange 3" 150 lb RF, ASME B16.5/Duplex (1.4462)	7 4	
Flange DN 100 PN 16 Form C, DIN 2501/316L	2 7		Flange 3" 300 lb RF, ASME B16.5/Duplex (1.4462)	7 5	
Flange DN 100 PN 16 Form C, DIN 2501/ 316L	2 8				
Flange DN 100 PN 40 Form C, DIN 2501 /316L	3 0				

Level Measurement

Guided wave radar transmitters

SITRANS LG series


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.		
Flange 4" 150 lb RF, ANSI B16.5/Duplex (1.4462)	7 6		Electronics		
Flange 4" 150 lb FF, ANSI B16.5/Duplex (1.4462)	7 7		Two-wire 4 ... 20mA/HART	0	
Flange 4" 300 lb RF, ASME B16.5/Duplex (1.4462)	7 8		Four-wire Modbus ³³⁾³⁵⁾³⁶⁾	1	
Flange 4" 600 lb RF, ASME B16.5/Duplex (1.4462)	8 0		Two-wire 4 ... 20mA/HART with SIL qualification ²⁴⁾³²⁾	2	
Thread 1 1/2" NPT PN 40, ASME B1.20.1/ Alloy 400 (2.4360)	8 1		Four-wire 4 ... 20mA/HART; 90 ... 253 V AC; 50/60Hz ¹⁾¹⁵⁾¹⁷⁾	3	
Flange 2" 150 lb RF, ASME B16.5/Alloy 400 (2.4360)	8 2		Four-wire 4 ... 20mA/HART; 9.6 ... 48 V DC; 20 ... 42 V AC ¹⁾¹⁵⁾¹⁷⁾	4	
Flange 2" 300 lb RF, ASME B16.5/Alloy 400 (2.4360) solid	8 3		PROFIBUS PA ⁴³⁾	5	
Flange 3" 150 lb RF, ASME B16.5/Alloy 400 (2.4360)	8 4		Seal/Second line of defense/ Process temperature		
Flange 3" 300 lb RF, ASME B16.5/Alloy 400 (2.4360)	8 5		FKM (SHS FPM 70C3 GLT)/without glass seal/-40 ... +80 °C (-40 ... +176 °F) ⁶⁾	A	
Flange 3" 300 lb RJF, ASME B16.5/Alloy 400 (2.4360)	8 6		FKM (SHS FPM 70C3 GLT)/without glass seal/-40 ... +150 °C (-40 ... +302 °F)	B	
Flange 4" 150 lb RF, ASME B16.5/Alloy 400 (2.4360)	8 7		FKM (SHS FPM 70C3 GLT)/with glass seal/-40 ... +150 °C (-40 ... +302 °F)	C	
Flange 4" 300 lb RF, ASME B16.5/Alloy 400 (2.4360)	8 8		EPDM (A+P 75.5/KW75F)/without glass seal/-40 ... +80 °C (-40 ... +176 °F)	D	
Flange DN 25 PN 40 Form C, DIN 2501/ Hastelloy C22 (2.4602) solid	9 0	L 1 A	EPDM (A+P 75.5/KW75F)/with glass seal/-40 ... +150 °C (-40 ... +302 °F)	E	
Flange DN 25 PN 40 Form B1, EN 1092-1/ Hastelloy C22 (2.4602) solid	9 0	L 1 B	EPDM (A+P 75.5/KW75F)/without glass seal/-40 ... +80 °C (-40 ... +176 °F) ⁶⁾	F	
Flange DN 80 PN 40 Form B1, EN 1092-1/ Hastelloy C22 (2.4602) solid	9 0	L 1 C	EPDM (A+P 75.5/KW75F)/with glass seal/-40 ... +150 °C (-40 ... +302 °F)	G	
Flange 1" 150 lb RF, ASME B16.5/Hastelloy C22 (2.4602) solid	9 0	L 1 D	EPDM (A+P 75.5/KW75F)/without glass seal/-40 ... +150 °C (-40 ... +302 °F)	H	
Flange 1 1/2" 150 lb RF, ASME B16.5/ Hastelloy C22 (2.4602) solid	9 0	L 1 E	EPDM (A+P 75.5/KW75F)/with glass seal/-40 ... +150 °C (-40 ... +302 °F)	J	
Flange 1 1/2" 300 lb RF, ASME B16.5/ Hastelloy C22 (2.4602) solid	9 0	L 1 F	Silicone FEP coated (A+P FEP-O-SEAL)/ without glass seal/-40 ... +80 °C (-40 ... +176 °F) ⁶⁾	K	
Flange 2" 150 lb RF, ASME B16.5/Hastelloy C22 (2.4602) solid	9 0	L 1 G	Silicone FEP coated (A+P FEP-O-SEAL)/ without glass seal/-40 ... +150 °C (-40 ... +302 °F)	L	
Flange 2" 300 lb RF, ASME B16.5/Hastelloy C22 (2.4602) solid	9 0	L 1 H	Silicone FEP coated (A+P FEP-O-SEAL)/with glass seal/-40 ... +150 °C (-40 ... +302 °F)	M	
Flange 2" 600 lb RF, ASME B16.5/Hastelloy C22 (2.4602) solid	9 0	L 1 J	With borosilicate glass lead through/ with glass seal/-60 ... +150 °C (-76 ... +302 °F)	N	
Flange 2" 1 500 lb RJF, ASME B16.5/Hastelloy C22 (2.4602) solid	9 0	L 1 K	FFKM (Kalrez 6375)/without glass seal/-20 ... +200 °C (-4 ... +392 °F)	P	
Flange 3" 150 lb RF, ASME B16.5/Hastelloy C22 (2.4602) solid	9 0	L 1 L	FFKM (Kalrez 6375)/with glass seal/-40 ... 80 °C (-40 ... +176 °F) ⁶⁾	Q	
Flange 3" 300 lb RF, ASME B16.5/Hastelloy C22 (2.4602) solid	9 0	L 1 M	Housing/Protection/Cable		
Flange 3" 300 lb RF, ASME B16.5/316L with Hastelloy C22 (2.4602) coating	9 0	L 1 N	Plastic IP66/IP67 M20 x 1.5/blind stopper	A	
Flange 4" 150 lb RF, ASME B16.5/Hastelloy C22 (2.4602) solid	9 0	L 1 P	Plastic IP66/IP67 1/2" NPT/blind stopper	B	
Flange 4" 150 lb FF, ASME B16.5/Hastelloy C22 (2.4602) solid	9 0	L 1 Q	Plastic 2-chamber/IP66/IP67/M20 x 1.5/blind stopper	G	
Flange 4" 300 lb RF, ASME B16.5/Hastelloy C22 (2.4602) solid	9 0	L 1 R	Plastic 2-chamber/IP66/IP67 /1/2" NPT/blind stopper	H	
Flange 4" 300 lb RJF, ASME B16.5/Hastelloy C22 (2.4602) solid	9 0	L 1 S	Aluminum/IP66/IP68 (0.2 bar) M20 x 1.5/ Blind stopper	C	
Flange 4" 300 lb LT, ASME B16.5/Hastelloy C22 (2.4602) solid	9 0	L 1 T	Aluminum/IP66/IP68 (0.2 bar) 1/2" NPT/Blind stopper	D	
Flange 4" 600 lb RF, ASME B16.5/Hastelloy C22 (2.4602) solid	9 0	L 1 U	Aluminum double chamber/IP66/IP68 (0.2 bar) M20 x 1.5 / Blind stopper	E	
Flange 6" 150 lb RF, ASME B16.5/Hastelloy C22 (2.4602) solid	9 0	L 1 V	Aluminum double chamber/IP66/IP68 (0.2 bar) 1/2" NPT/Blind stopper	F	
Flange 2 1/2" 600 lb RF, Masoneilan/Hastelloy C22 (2.4602) solid	9 0	L 1 W	Stainless Steel (precision casting) 316L/ IP66/IP68 (0.2 bar) M20 x 1.5/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) M20 x 1.5/Blind stopper	N	

Level Measurement

Guided wave radar transmitters

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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.		
Stainless Steel (electropolished) 316L/IP66/IP68 (0.2 bar) 1/2" NPT/Blind stopper		P	25 001 ... 30 000 mm (984.29 ... 1 181.10 inch)		9 R 2 L
Stainless Steel double chamber/IP66/IP68 (0.2 bar) M20 x 1.5/Blind stopper		Q	30 001 ... 35 000 mm (1 181.14 ... 1 377.95 inch)		9 R 2 M
Stainless Steel double chamber/IP66/IP68 (0.2 bar) 1/2" NPT/Blind stopper		R	35 001 ... 40 000 mm (1 377.99 ... 1 574.80 inch)		9 R 2 N
Aluminum/IP66/IP68 (0.2 bar) M20 x 1.5/ Cable gland stainless steel		S	40 001 ... 45 000 mm (1 574.84 ... 1 771.65 inch)		9 R 2 P
Aluminum double chamber/IP66/IP68 (0.2 bar) M20 x 1.5/Cable gland stainless steel		T	45 001 ... 50 000 mm (1 771.69 ... 1 968.50 inch)		9 R 2 Q
Stainless Steel (precision casting) 316L/IP66/IP68 (0.2 bar) M20 x 1.5/Cable gland stainless steel		U	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) M20 x 1.5/Cable gland stainless steel		V	55 001 ... 60 000 mm (2 165.39 ... 2 362.20 inch)		9 R 2 S
Stainless steel single chamber (precision casting)/IP66/IP68 (0.2 bar) M20 x 1.5/ Cable gland brass nickel-plated		W	60 001 ... 65 000 mm (2 362.24 ... 2 559.06 inch)		9 R 2 T
Aluminum single chamber/IP66/IP68 (0.2 bar) M20 x 1.5/Cable gland brass nickel-plated		X	65 001 ... 70 000 mm (2 559.09 ... 2 755.91 inch)		9 R 2 U
Stainless steel single chamber (precision casting)/IP66/ IP68 (0.2 bar) M20 x 1.5/ Cable gland brass nickel-plated		Y	70 001 ... 75 000 mm (2 759.94 ... 2 952.76 inch)		9 R 2 V
Stainless steel double chamber / IP66/ IP68 (0.2 bar) M20 x 1.5 / Cable gland brass nickel-plated		J			
Lengths			<u>Cable Lengths ø2 mm or ø4 mm/C22</u>		
<u>Rod ø8 mm/316L</u>			501 ... 1 000 mm (19.72 ... 39.37 inch)		9 R 4 A
300 ... 1 000 mm (11.81 ... 39.37 inch) ²²⁾		0	1 001 ... 5 000 mm (39.41 ... 196.85 inch)		9 R 4 B
1 001 ... 2 000 mm (39.41 ... 78.74 inch) ²²⁾		1	5 001 ... 10 000 mm (196.89 ... 393.70 inch)		9 R 4 C
2 001 ... 3 000 mm (78.78 ... 118.11 inch) ²²⁾		2	10 001 ... 15 000 mm (393.74 ... 590.55 inch)		9 R 4 D
3 001 ... 4 000 mm (118.15 ... 157.48 inch) ²²⁾		3	15 001 ... 20 000 mm (590.59 ... 787.40 inch)		9 R 4 E
4 001 ... 5 000 mm (157.52 ... 196.85 inch) ²²⁾		4	20 001 ... 25 000 mm (787.44 ... 984.25 inch)		9 R 4 F
5 001 ... 6 000 mm (196.89 ... 236.22 inch) ²²⁾		5	25 001 ... 30 000 mm (984.29 ... 1 181.10 inch)		9 R 4 G
<u>Rod ø8 mm/Duplex</u>			30 001 ... 35 000 mm (1 181.14 ... 1 377.95 inch)		9 R 4 H
300 ... 1 000 mm (11.81 ... 39.37 inch) ²²⁾	9	R 1 A	35 001 ... 40 000 mm (1 377.99 ... 1 574.80 inch)		9 R 4 J
1 001 ... 2 000 mm (39.41 ... 78.74 inch) ²²⁾	9	R 1 B	40 001 ... 45 000 mm (1 574.84 ... 1 771.65 inch)		9 R 4 K
2 001 ... 3 000 mm (78.78 ... 118.11 inch) ²²⁾	9	R 1 C	45 001 ... 50 000 mm (1 771.69 ... 1 968.50 inch)		9 R 4 L
3 001 ... 4 000 mm (118.15 ... 157.48 inch) ²²⁾	9	R 1 D	50 001 ... 55 000 mm (1 968.54 ... 2 165.35 inch)		9 R 4 M
4 001 ... 5 000 mm (157.52 ... 196.85 inch) ²²⁾	9	R 1 E	55 001 ... 60 000 mm (2 165.39 ... 2 362.20 inch)		9 R 4 N
5 001 ... 6 000 mm (196.89 ... 236.22 inch) ²²⁾	9	R 1 F	60 001 ... 65 000 mm (2 362.24 ... 2 559.06 inch)		9 R 4 P
<u>Rod ø8 mm or ø12 mm / C22</u>			65 001 ... 70 000 mm (2 559.09 ... 2 755.91 inch)		9 R 4 Q
300 ... 1 000 mm (11.81 ... 39.37 inch) ²²⁾	9	R 1 J	70 001 ... 75 000 mm (2 755.94 ... 2 952.76 inch)		9 R 4 R
1 001 ... 2 000 mm (39.41 ... 78.74 inch) ²²⁾	9	R 1 K			
2 001 ... 3 000 mm (78.78 ... 118.11 inch) ²²⁾	9	R 1 L			
3 001 ... 4 000 mm (118.15 ... 157.48 inch) ²²⁾	9	R 1 M			
4 001 ... 5 000 mm (157.52 ... 196.85 inch) ²²⁾	9	R 1 N			
5 001 ... 6 000 mm (196.89 ... 236.22 inch) ²²⁾	9	R 1 P			
<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			

Selection and Ordering data	Article No.	Order Code	Selection and Ordering data	Order code
SITRANS LG250	7ML5881-		Further designs (mandatory)	
A guided wave radar sensor for continuous level and interface measurement of liquids.			Please add "-Z" to Article No. and specify Order code(s).	
Coax ø21.3 mm/316L			Local display interface	
300 ... 1 000 mm (11.81 ... 39.37 inch) ²²⁾		9 R 3 A	Without ¹³⁾	E00
1 001 ... 2 000 mm (39.41 ... 78.74 inch) ²²⁾		9 R 3 B	Mounted	E01
2 001 ... 3 000 mm (78.78 ... 118.11 inch) ²²⁾		9 R 3 C	Laterally mounted ¹⁾	E02
3 001 ... 4 000 mm (118.15 ... 157.48 inch) ²²⁾		9 R 3 D	Language of display	
4 001 ... 5 000 mm (157.52 ... 196.85 inch) ²²⁾		9 R 3 E	German	L00
5 001 ... 6 000 mm (196.89 ... 236.22 inch) ²²⁾		9 R 3 F	English	L01
Coax ø21.3 mm/C22			French	L02
300 ... 1 000 mm (11.81 ... 39.37 inch) ²²⁾		9 R 5 A	Dutch	L03
1 001 ... 2 000 mm (39.41 ... 78.74 inch) ²²⁾		9 R 5 B	Italian	L04
2 001 ... 3 000 mm (78.78 ... 118.11 inch) ²²⁾		9 R 5 C	Spanish	L05
3 001 ... 4 000 mm (118.15 ... 157.48 inch) ²²⁾		9 R 5 D	Portuguese	L06
4 001 ... 5 000 mm (157.52 ... 196.85 inch) ²²⁾		9 R 5 E	Russian	L07
5 001 ... 6 000 mm (196.89 ... 236.22 inch) ²²⁾		9 R 5 F	Chinese	L08
Coax ø42.2 mm/316L			Japanese	L09
300 ... 1 000 mm (11.81 ... 39.37 inch) ²²⁾		9 R 3 G	Operating instructions	
1 001 ... 2 000 mm (39.41 ... 78.74 inch) ²²⁾		9 R 3 H	German	M00
2 001 ... 3 000 mm (78.78 ... 118.11 inch) ²²⁾		9 R 3 J	English	M01
3 001 ... 4 000 mm (118.15 ... 157.48 inch) ²²⁾		9 R 3 K	French	M02
4 001 ... 5 000 mm (157.52 ... 196.85 inch) ²²⁾		9 R 3 L	Spanish	M03
5 001 ... 6 000 mm (196.89 ... 236.22 inch) ²²⁾		9 R 3 M		
Coax ø42.2 mm/C22			Selection and Ordering data	Order code
300 ... 1 000 mm (11.81 ... 39.37 inch) ²²⁾		9 R 5 G	Further designs (optional)	
1 001 ... 2 000 mm (39.41 ... 78.74 inch) ²²⁾		9 R 5 H	Please add "-Z" to Article No. and specify Order code(s).	
2 001 ... 3 000 mm (78.78 ... 118.11 inch) ²²⁾		9 R 5 J	Enter the total insertion length in plain text description	Y01
3 001 ... 4 000 mm (118.15 ... 157.48 inch) ²²⁾		9 R 5 K	Enter the total length of rigid part (cable version only) range from 100 ... 1 000 mm	Y02
4 001 ... 5 000 mm (157.52 ... 196.85 inch) ²²⁾		9 R 5 L	Cleaning included certificate: oil, grease and silicone free	W01
5 001 ... 6 000 mm (196.89 ... 236.22 inch) ²²⁾		9 R 5 M	Identification Label (measurement loop) stainless steel	Y17
			Identification Label (measurement loop) Foil	Y18
			3.1-Inspection Certificate for material (EN 10204 NACE MR 0175) ³⁰⁾	D07
			3.1-Inspection Certificate for instrument with test data (EN 10204) ³⁰⁾	C25
			(H) 2.2-Factory certificate for material (EN 10204) ³⁰⁾	C15
			Quality and 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 DIN 32514-1 + 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
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			
ø40 mm/30 mm				
ø1.77/1.18 inch (for 2 inch Schedule 40/80)	B06			
ø45 mm/30 mm (for 2 inch tubes)				
ø2.95/1.18 inch (for 3 inch Schedule 10/40)	B07			
ø75 mm/30 mm (for 3 inch tubes)				
ø3.74/1.18 inch (for 4 inch Schedule 80)	B08			
ø95 mm/30 mm (for 4 inch tubes)				
Rod mounted				
Without Rod, applicable for coax or cable probe types only	C00			
Mounted	C01			
Not mounted	C02			

Level Measurement

Guided wave radar transmitters

SITRANS LG series

Selection and Ordering data	Article No.
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Additional Operating Instructions

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.

French

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.

Selection and Ordering data	Article No.
Accessories	
SITRANS LG, GWR sensor Display Module	A5E34143449
SITRANS LG, USB communicator	A5E35192015
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	

- 44) Available with Housing/protection options W and Y
 45) Available with Housing/protection options J and X
 46) Available with Electronics options 0, 2, and 5
 47) Available with Electronics options 0, 1, 3, 4
 48) Available with Electronics options 0, 1, 2, 3, 4

Note: Please consult manual for further details.

- 1) Available with Housing/Protection cable options E, F, G, H, Q, R, and T (double chamber 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, G, H, Q, R, T (double chamber options only)
- 14) Available only with Housing/Protection cable options C, D, L, M
- 15) Available with Supplementary electronic option A00 and Local display interface options E00, E01
- 16) Available with Supplementary electronic option A01 and Approval options 0A, 0E, 0P, 1E, and 1F
- 17) Not Available with Approval options 0B ... 0H 0P, 0Q, and 1B (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 Local display interface options 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
- 35) Available with supplementary electronic option A00
- 36) Available with Local display interface options 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 with Local display interface option 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
- 42) Only available with Seal/Process temperature N
- 43) Not available with Supplementary electronic option A01

Level Measurement

Guided wave radar transmitters

SITRANS LG series

Selection and Ordering data

SITRANS LG260

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)21)22)	0 A
Shipping approval ⁹)10)21)	0 B
Overfill protection (WHG; VLAREM) ²⁶	0 C
ATEX II 1G, 1/2G, 2G Ex ia IIC T6 ⁴)12)21)22)	0 E
ATEX II 1G, 1/2G, 2G Ex ia IIC + Overfill (WHG; VLAREM) ⁴)12)21)22)26)	0 F
ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + shipping approval ⁹)21)	0 G
ATEX II 1G, 1/2G, 2G Ex ia IIC + II 1D, 1/2D, 1/3D, 2D IP66 ⁸)10)12)21)23)24)	0 H
ATEX II 1/2G, 2G Ex d ia IIC T6 ¹⁷)12)	0 J
ATEX II 1/2G, 2G Ex d ia IIC + shipping approval ¹⁷)9)10)	0 L
ATEX II 1/2G, 2G Ex d ia IIC + II 1D, 1/2D, 1/3D, 2D IP66 ⁷)8)12)24)	0 M
ATEX II 1/2G, 2G Ex d IIC T6 ⁸)11)12)21)25)27)	0 N
ATEX II 1/2G, 2G Ex d IIC + shipping approval ⁸)9)10)11)21)25)27)	0 Q
ATEX II 1/2G, 2G Ex d IIC + II 1D, 1/2D, 1/3D, 2D IP66 ⁸)11)12)21)23)25)27)	0 R
ATEX II 1D, 1/2D, 2D IP6x T ⁸)11)12)21)23)24)25)	0 S
IEC Ex ia IIC T6 ⁴)12)21)22)	0 T
IEC Ex ia IIC T6 + IEC IP6x T tD ⁸)11)12)21)25)27)	0 U
IEC Ex d ia IIC T6 ¹⁷)12)	1 A
IEC Ex d ia IIC T6 + IEC IP6x T tD ⁷)8)12)21)	1 B
IEC Ex d IIC T6 ⁸)11)12)21)25)27)	1 C
IEC Ex d IIC T6 + IEC IP6x T tD ⁸)11)12)21)23)25)27)	1 D
FM (NI) Class I, Div. 2, Groups A, B, C, D ¹²)21)	1 F
FM (NI) Class I, Div. 2, Groups A, B, C, D + Ship approval ⁹)10)21)	1 G
FM (IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F ¹²)21)	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 ¹⁷)12)	1 K
FM (XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G + shipping approval ¹⁷)9)10)	1 L
FM (XP) Class I, Div. 1, Groups A, B, C, D ⁸)11)12)21)25)27)	1 M
CSA (NI) Class I, Div. 2, Groups A, B, C, D; (DIP) Class II, III, Div. 1, Groups E, F, G ⁴)8)12)21)22)23)24)	1 N
CSA (IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G ⁴)12)21)22)	1 P
CSA (XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G ¹⁷)12)	1 Q
CSA (XP) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G ⁸)11)12)21)25)27)	1 R
NEPSI Ex ia IIC T6	2 A
NEPSI Ex ia IIC T6 + DIP A20/21 TA T*	2 B
NERSI Ex d ia IIC T6	2 C
NEPSI Ex d ia IIC T6 + DIP A20/21 TA T*	2 D
NEPSI Ex d IIC T6 ²⁷	2 E
NEPSI Ex d IIC T6 + DIP A20/21 TA T* ²⁷	2 F
NEPSI DIP A20/21 TA T*	2 G
INMETRO Ex ia IIC T6 ... T1	3 A
INMETRO Ex t IIIC T* IP6X, Da, Da/Db, Da/Dc, Db + Ex ia IIC T6, Ga, Ga/Gb	3 B

Article No. Order Code

7ML5882-

Selection and Ordering data

SITRANS LG260

A guided wave radar sensor for level measurement of solids.

INMETRO Ex d ia IIC T6 ... T1

INMETRO Ex t IIIC T* IP6X, Da, Da/Db, Da/Dc, Db + Ex d ia IIC T6 Ga/Gb	3 C
INMETRO Ex d IIC T6 ... T1 ²⁷	3 D
INMETRO Ex t IIIC T* IP6X, Da, Da/Db, Da/Dc, Db + Ex d IIC T6 Ga/Gb ²⁷	3 E
INMETRO Ex t IIIC T* IP6X, Da, Da/Db, Da/Dc, Db	3 F
	3 G

Probe version/Material

Probe exchangeable cable ø4 mm (0.16 inch) with gravity weight/316 ²)28)	A
Probe exchangeable cable ø6 mm (0.24 inch) with gravity weight/316 ²)28)	B
Probe exchangeable cable ø6 mm (0.24 inch) with gravity weight/PA coated	C
Probe exchangeable cable ø11 mm (0.43 inch) with gravity weight/PA coated	D
Probe exchangeable rod ø 16 mm (0.63 inch)/316L ²)6)28)	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
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 EN 1092-1 Form B1/316L	1 6
Flange DN 80 PN 40 EN 1092-1 Form B1/316L	1 7
Flange DN 100 PN 16 EN 1092-1 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 ... 20 mA/HART	0
Four-wire Modbus ¹⁶)17)18)19)	1
Two-wire 4 ... 20 mA/HART with SIL qualification ¹⁴)15)	2
Four-wire 4 ... 20 mA/HART; 90 ... 253 V AC; 50/60 Hz ¹³)5)	3
Four-wire 4 ... 20 mA/HART; 9.6 ... 48 V DC; 20 ... 42 V AC ¹³)5)	4
PROFIBUS PA ²²	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)/without/-40...+80 °C (-40 ... +176 °F)	D

Article No. Order Code

7ML5882-

Selection and Ordering data	Article No.	Order Code	Selection and Ordering data	Article No.	Order Code
SITRANS LG260	7ML5882-		SITRANS LG260	7ML5882-	
A guided wave radar sensor for level measurement of solids.			A guided wave radar sensor for level measurement of solids.		
EPDM (A+P 75.5/KW75F)/without/ -40 ... +150 °C (-40 ... +392 °F)			<u>Cable lengths ø4 mm/316</u>		
Housing/Protection/Cable			501 ... 1 000 mm (19.72 ... 39.37 inch)	9 R 2 E	
Plastic IP66/IP67 M20 x 1.5/blind stopper	A		1 001 ... 5 000 mm (39.41 ... 196.85 inch)	9 R 2 F	
Plastic IP66/IP67 1/2" NPT/blind stopper	B		5 001 ... 10 000 mm (196.89 ... 393.70 inch)	9 R 2 G	
Plastic 2-chamber/IP66/IP67/M20 x 1.5/ blind stopper	C		10 001 ... 15 000 mm (393.74 ... 590.55 inch)	9 R 2 H	
Plastic 2-chamber/IP66/IP67/ 1/2" NPT/ blind stopper	D		15 001 ... 20 000 mm (590.59 ... 787.40 inch)	9 R 2 J	
Aluminum/IP66/IP68 (0.2 bar) M20 x 1.5/ blind stopper	E		20 001 ... 25 000 mm (787.44 ... 984.25 inch)	9 R 2 K	
Aluminum/IP66/IP68 (0.2 bar) 1/2" NPT/ blind stopper	F		25 001 ... 30 000 mm (984.29 ... 1 181.10 inch)	9 R 2 L	
Aluminum double chamber/IP66/IP68 (0.2 bar) M20 x 1.5/blind stopper	G		30 001 ... 35 000 mm (1 181.14 ... 1 377.95 inch)	9 R 2 M	
Aluminum double chamber/IP66/ IP68 (0.2 bar) 1/2" NPT/blind stopper	H		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) M20 x 1.5/blind stopper	J		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	K		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) M20 x 1.5/blind stopper	L		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) M20 x 1.5/blind stopper	M		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) M20 x 1.5/blind stopper	N		<u>Cable lengths ø6 mm/316L</u>		
Stainless steel double chamber/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper	P		500 mm (19.69 inch)	9 R 4 A	
Aluminum/IP66/IP68 (0.2 bar) M20 x 1.5/ cable gland stainless steel	Q		501 ... 1 000 mm (19.72 ... 39.37 inch)	9 R 4 B	
Aluminum double chamber/IP66/IP68 (0.2 bar) M20 x 1.5/cable gland stainless steel	R		1 001 ... 5 000 mm (39.41 ... 196.85 inch)	9 R 4 C	
Stainless steel (precision casting) 316L/ IP66/ IP68 (0.2 bar) M20 x 1.5/cable gland stainless steel	S		5 001 ... 10 000 mm (196.89 ... 393.70 inch)	9 R 4 D	
Stainless steel (electropolished) 316L/IP66/ IP68 (0.2 bar) M20 x 1.5/cable gland stainless steel	T		10 001 ... 15 000 mm (393.74 ... 590.55 inch)	9 R 4 E	
Aluminum single chamber/IP66/IP68 (0.2 bar) M20 x 1.5/cable gland brass nickel-plated	W		15 001 ... 20 000 mm (590.59 ... 787.40 inch)	9 R 4 F	
Aluminum double chamber/IP66/IP68 (0.2 bar) M20 x 1.5/cable gland brass nickel- plated	X		20 001 ... 25 000 mm (787.44 ... 984.25 inch)	9 R 4 G	
Stainless steel single chamber (precision casting)/IP66/IP68 (0.2 bar) M20 x 1.5/cable gland brass nickel-plated	Y		25 001 ... 30 000 mm (984.29 ... 1 181.10 inch)	9 R 4 H	
Stainless steel double chamber/IP66/IP68 (0.2 bar) M20 x 1.5/cable gland brass nickel- plated	U		30 001 ... 35 000 mm (1 181.14 ... 1 377.95 inch)	9 R 4 J	
Lengths			35 001 ... 40 000 mm (1 377.99 ... 1 574.80 inch)	9 R 4 K	
<u>Rod ø16 mm/316L</u>			40 001 ... 45 000 mm (1 574.84 ... 1 771.65 inch)	9 R 4 L	
500 mm (19.69 inch)	0		45 001 ... 50 000 mm (1 771.69 ... 1 968.50 inch)	9 R 4 M	
501 ... 1 000 mm (19.72 ... 39.37 inch)	1		50 001 ... 55 000 mm (1 968.54 ... 2 165.35 inch)	9 R 4 N	
1 001 ... 2 000 mm (39.41 ... 78.74 inch)	2		55 001 ... 60 000 mm (2 165.39 ... 2 362.20 inch)	9 R 4 P	
2 001 ... 3 000 mm (78.78 ... 118.11 inch)	3		<u>Cable lengths ø6 mm or ø11 mm/PA coated</u>		
3 001 ... 4 000 mm (118.15 ... 157.48 inch)	4		501 ... 1 000 mm (19.72 ... 39.37 inch)	9 R 6 A	
4 001 ... 5 000 mm (157.52 ... 196.85 inch)	5		1 001 ... 5 000 mm (39.41 ... 196.85 inch)	9 R 6 B	
5 001 ... 6 000 mm (196.89 ... 216.53 inch)	6		5 001 ... 10 000 mm (196.89 ... 393.70 inch)	9 R 6 C	
			10 001 ... 15 000 mm (393.74 ... 590.55 inch)	9 R 6 D	
			15 001 ... 20 000 mm (590.59 ... 787.40 inch)	9 R 6 E	
			20 001 ... 25 000 mm (787.44 ... 984.25 inch)	9 R 6 F	
			25 001 ... 30 000 mm (984.29 ... 1 181.10 inch)	9 R 6 G	
			30 001 ... 35 000 mm (1 181.14 ... 1 377.95 inch)	9 R 6 H	
			35 001 ... 40 000 mm (1 377.99 ... 1 574.80 inch)	9 R 6 J	
			40 001 ... 45 000 mm (1 574.84 ... 1 771.65 inch)	9 R 6 K	
			45 001 ... 50 000 mm (1 771.69 ... 1 968.50 inch)	9 R 6 L	
			50 001 ... 55 000 mm (1 968.54 ... 2 165.35 inch)	9 R 6 M	
			55 001 ... 65 000 mm (2 165.39 ... 2 559 inch)	9 R 6 N	

Level Measurement

Guided wave radar transmitters

SITRANS LG series

Selection and Ordering data

Order code

Further designs (mandatory)

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

Supplementary electronics

Without

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

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

Identification Label (measurement loop) stainless steel

Y17

Identification Label (measurement loop) Foil

Y18

3.1-Inspection Certificate for material (EN 10204 NACE MR 0175)¹³⁾

D07

3.1-Inspection Certificate for instrument with test data (EN 10204)¹³⁾

C25

(H) 2.2-Factory certificate for material (EN 10204)¹³⁾

C15

Quality and test plan¹³⁾

C26

Dye penetration test + 3.1 certificate/instrument¹³⁾

C13

X-ray test + 3.1 certificate/instrument¹³⁾

C14

Positive material identification test + 3.1 certificate/instrument¹³⁾

C16

Roughness test + 3.1 certificate/instrument¹³⁾

C18

Pressure test + 3.1 certificate/instrument¹³⁾

C31

Helium leak test + 3.1 certificate/instrument¹³⁾

C32

Ferrite measuring accuracy to DIN 32514-1 + 3.1 certificate/instrument¹³⁾

C60

Pressure test according to Norsok + 3.1 certificate/instrument¹³⁾

C61

5 point calibration certificate + 3.1 certificate/instrument¹³⁾

C62

Selection and Ordering data

Article No.

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.

Spanish

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

PBD:51041094

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

PBD:51041095

Modbus

PBD:51041096

PROFIBUS PA

PBD:51041097

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 LG, USB communicator	A5E35192015
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 only with Housing/Protection/Cable Options C, D, 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 Local display interface options 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 Local display interface options E00 and E01	
8) Available with Housing Protection options C,D 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 Local display interface options E00, E01	
20) Not available with Local display interface option E02	
21) Available with Housing Protection F, H, P, and K	
22) Not available with Supplementary electronic option A01	
23) Available with Housing/ protection options W and Y	
24) Available with Housing/ protection options X and U	
25) Available with Housing/ protection Cable option E, F, J, K, W, Y only	
26) Available with Electronics options 0, 2, and 5	
27) Available with Seal/ Process option C	
28) Probe options A, B, and E cannot be paired with seal options A and D	

Note: Please consult manual for further details.

Level Measurement

Guided wave radar transmitters

SITRANS LG series

Selection and Ordering data

SITRANS LG270

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 CE ³⁾	0 A
Shipping approval ¹⁷⁾¹⁸⁾¹⁹⁾	0 B
Overfill protection (WHG; VLAREM) ³⁴⁾	0 C
ATEX II 1G, 1/2G, 2G Ex ia IIC T6 ³⁾	0 E
ATEX II 1G, 1/2G, 2G Ex ia IIC + Overfill (WHG; VLAREM) ³⁾³⁴⁾	0 F
ATEX II 1G, 1/2G, 2G Ex ia IIC T6 + shipping approval ¹⁷⁾¹⁸⁾¹⁹⁾	0 G
ATEX II 1G, 1/2G 2G Ex ia IIC + ATEX II 1D, 1/2D, 2D IP6x ¹⁶⁾²⁸⁾³²⁾³³⁾	0 H
ATEX II 1/2G, 2G Ex d ia IIC T6 ¹⁾¹⁰⁾¹⁴⁾³³⁾	0 J
ATEX II 1/2G, 2G Ex d ia IIC + shipping approval ¹⁾¹⁰⁾¹⁴⁾¹⁷⁾¹⁸⁾¹⁹⁾	0 L
ATEX II 1/2G, 2G Ex d ia IIC + ATEX II 1/2D, 2D IP6x ¹⁰⁾¹⁴⁾¹⁶⁾²⁸⁾³³⁾	0 M
ATEX II 1/2G, 2G Ex d IIC T6 ¹¹⁾	0 N
ATEX II 1/2G, 2G Ex d IIC + ship approval ¹⁷⁾¹⁸⁾¹⁹⁾	0 Q
ATEX II 1/2G, 2G Ex d IIC + ATEX II 1/2D, 2D IP6x ¹¹⁾¹⁶⁾²⁸⁾³²⁾	0 R
ATEX II 1D, 1/2D, 2D IP6x T ¹⁶⁾²⁸⁾³²⁾³³⁾	0 S
IEC Ex ia IIC T6 ³⁾	0 T
IEC Ex ia IIC T6 + IEC IP6x T d ¹⁶⁾²⁸⁾³²⁾³³⁾	0 U
IEC Ex d ia IIC T6 ¹⁾¹⁰⁾¹⁴⁾³³⁾	1 A
IEC Ex d ia IIC T6 + IEC IP6x T d ¹⁰⁾¹⁴⁾¹⁶⁾²⁸⁾³³⁾	1 B
IEC Ex d IIC T6 ¹¹⁾	1 C
IEC Ex d IIC T6 + IEC IP6x T d ¹¹⁾¹⁶⁾²⁸⁾³²⁾	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 approval ¹⁷⁾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 approval ¹⁷⁾¹⁸⁾¹⁹⁾	1 J
FM (XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G ¹⁾¹⁰⁾¹⁴⁾	1 K
FM (XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G + shipping approval ¹⁾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, G ³⁾¹⁶⁾³²⁾³³⁾	1 N
CSA (IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G ³⁾	1 P
CSA (XP-IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G ¹⁾¹⁰⁾¹⁴⁾	1 Q
CSA (XP) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G ¹¹⁾	1 R
NEPSI Ex ia IIC T6	2 A
NEPSI Ex ia IIC T6 + DIP A20/21 TA T*	2 B
NERSI Ex d ia IIC T6	2 C
NEPSI Ex d ia IIC T6 + DIP A20/21 TA T*	2 D
NEPSI Ex d IIC T6	2 E
NEPSI Ex d IIC T6 + DIP A20/21 TA T*	2 F
NEPSI DIP A20/21 TA T*	2 G
INMETRO Ex ia IIC T6 ... T1	3 A
INMETRO Ex t IIIC T* IP6X, Da, Da/Db, Da/Dc, Db + Ex ia IIC T6, Ga, Ga/Gb	3 B
INMETRO Ex d ia IIC T6 ... T1	3 C

Article No. Order Code

7ML5883-

Selection and Ordering data

SITRANS LG270

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

INMETRO Ex t IIIC T* IP6X, Da, Da/Db, Da/Dc, Db + Ex d ia IIC T6 Ga/Gb	3 D
INMETRO Ex d IIC T6 ... T1	3 E
INMETRO Ex t IIIC T* IP6X, Da, Da/Db, Da/Dc, Db + Ex d IIC T6 Ga/Gb	3 F
INMETRO Ex t IIIC T* IP6X, Da, Da/Db, Da/Dc, Db	3 G

Version/Material

Probe exchangeable cable ø 2 mm (0.08 inch) with gravity weight/316L ⁴⁾⁷⁾	A
Probe exchangeable cable ø2 mm (0.08 inch) center weight/316L ⁵⁾⁷⁾	B
Probe exchangeable cable ø4 mm (0.16 inch) with gravity weight/316L ⁴⁾⁷⁾	C
Probe exchangeable cable ø4 mm (0.16 inch) with center weight/316L ⁵⁾⁷⁾	D
Probe exchangeable rod ø16 mm (0.63 inch)/316L ⁴⁾⁷⁾⁹⁾	E
Probe coax version ø42.2 mm (1.66 inch) with multiple hole/316L ⁴⁾⁷⁾	F
Probe coax version ø42.2 mm (1.66 inch); multiple hole; reference distances/316L ⁴⁾⁷⁾¹³⁾³⁰⁾	G
Probe exchangeable cable ø4 mm (0.16 inch) with gravity weight/ Hastelloy C22 (2.4602) ⁷⁾	H
Probe exchangeable rod ø16 mm (0.63 inch)/ Hastelloy C22 (2.4602) ⁷⁾	J
Coax version ø42.2 mm (1.66 inch) with multiple hole/ Hastelloy C22 (2.4602) ⁷⁾	K

Process fitting/Material

Thread G 1 1/2" (DIN 3852-A) PN 400/316L	0 0
Thread 1 1/2" NPT (ASME B1.20.1) PN 400/316L	0 1
Thread G1 1/2" PN 400, DIN 3852-A/ Hastelloy C22 (2.4602)	0 2
Thread 1 1/2" NPT PN 400, ASME B1.20.1/ Hastelloy C22 (2.4602)	0 3
Flange DN 50 PN 40 Form C, DIN 2501/316L with Hastelloy C22 (2.4602) coating	0 4
Flange DN 80 PN 40 Form C, DIN 2501/316L with Hastelloy C22 (2.4602) coating	0 5
Flange DN 100 PN 16 Form C, DIN 2501/316L with Hastelloy C22 (2.4602) coating	0 6
Flange DN 50 PN 40 Form B1, EN 1092-1/316L with Hastelloy C22 (2.4602) coating	0 7
Flange DN 50 PN 63 Form B1, EN 1092-1/316L with Hastelloy C22	0 8
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 V13, 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 EN 1092-1 Form B1/316L	2 2
Flange DN 100 PN 160 GOST 12815-80.7/316L	2 3

Article No. Order Code

7ML5883-

Level Measurement

Guided wave radar transmitters



SITRANS LG series


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 2" 150 lb RF, ASME B16.5/316L with Hastelloy C22 (2.4602) coating	2 4		Flange DN 100 PN 40 Form N, DIN 2501/Hastelloy C22 (2.4602) solid	7 3	
Flange 2" 300 lb RF, ASME B16.5/316L with Hastelloy C22 (2.4602) coating	2 5		Flange DN 50 PN 40 Form B1, EN 1092-1/Hastelloy C22 (2.4602) solid	7 4	
Flange 2" 600 lb RF, ASME B16.5/316L with Hastelloy C22 (2.4602) coating	2 6		Flange 2" 150 lb RF, ASME B16.5/Hastelloy C22 (2.4602) solid	7 5	
Flange 3" 150 lb RF, ASME B16.5/316L with Hastelloy C22 (2.4602) coating	2 7		Flange 2" 300 lb RF, ASME B16.5/Hastelloy C22 (2.4602) solid	7 6	
Flange 3" 300 lb RF, ASME B16.5/316L with Hastelloy C22 (2.4602) coating	2 8		Flange 2" 600 lb RF, ASME B16.5/Hastelloy C22 (2.4602) solid	7 7	
Flange DN 80 PN 160 Form C, DIN 2501/316L	6 0		Flange 2" 900 lb RJF, ASME B16.5/Hastelloy C22 (2.4602) solid	7 8	
Flange DN 80 PN 250 Form L, DIN 2501/316L	6 1		Flange 2" 1 500 lb RJF, ASME B16.5/Hastelloy C22 (2.4602) solid	8 0	
Flange DN 50 PN 160, EN 1092-1 Form B1/316L	6 2		Flange 3" 150 lb RF, ASME B16.5/Hastelloy C22 (2.4602) solid	8 1	
Flange DN 50 PN 160, EN 1092-1 Form B2/316L	6 3		Flange 3" 300 lb RF, ASME B16.5/Hastelloy C22 (2.4602) solid	8 2	
Flange DN 50 PN 320, EN 1092-1 Form B1/316L	6 4		Flange 3" 600 lb RF, ASME B16.5/Hastelloy C22 (2.4602) solid	8 3	
Flange DN 65 PN 250, EN 1092-1 Form B1/316L	6 5		Flange 4" 150 lb RF, ASME B16.5/Hastelloy C22 (2.4602) solid	8 4	
Flange DN 100 PN 160, EN 1092-1 Form B2/316L	6 6		Flange 4" 300 lb RF, ASME B16.5/Hastelloy C22 (2.4602) solid	8 5	
Flange DN 80 PN 63, EN 1092-1 Form B2/316L	6 7		Flange 3" 600 lb RJF for R31, ASME B16.5/Hastelloy C22 (2.4602) solid	8 6	
Flange 4" 600 lb RF, ASME B16.5/316L with Hastelloy C22 (2.4602) coating	6 8		Flange 2" 2 500 lb RJF, ASME B16.5/Hastelloy C22 (2.4602) solid	9 0	L 1 A
Flange 2" 150 lb RF, ANSI B16.5/316L	3 0		Flange 3" 1 500 lb RJF, ASME B16.5/Hastelloy C22 (2.4602) solid	9 0	L 1 B
Flange 2" 300 lb RF, ANSI B16.5/316L	3 1		Flange 3" 2 500 lb RJF, ASME B16.5/Hastelloy C22 (2.4602) solid	9 0	L 1 C
Flange 2" 600 lb RF, ANSI B16.5/316L	3 2		Flange 4" 600 lb RF, ASME B16.5/Hastelloy C22 (2.4602) solid	9 0	L 1 D
Flange 2" 1 500 lb RF, ANSI B16.5/316L	3 3		Flange 4" 600 lb RJF, ASME B16.5/Hastelloy C22 (2.4602) solid	9 0	L 1 E
Flange 3" 150 lb RF, ANSI B16.5/316L	3 4		Flange 4" 900 lb RF, ASME B16.5/Hastelloy C22 (2.4602) solid	9 0	L 1 F
Flange 3" 300 lb RF, ANSI B16.5/316L	3 5		Flange 4" 900 lb RJF, ASME B16.5/Hastelloy C22 (2.4602) massiv	9 0	L 1 G
Flange 3" 600 lb RF, ANSI B16.5/316L	3 6		Flange 4" 1 500 lb RJF, ASME B16.5/Hastelloy C22 (2.4602) solid	9 0	L 1 H
Flange 3" 900 lb RF, ANSI B16.5/316L	3 7		Flange 4" 2 500 lb RJF, ASME B16.5/Hastelloy C22 (2.4602) solid	9 0	L 1 J
Flange 3" 2 500 lb RF, ANSI B16.5/316L	3 8		Flange 8" 300 lb RF, ASME B16.5/Hastelloy C22 (2.4602) solid	9 0	L 1 K
Flange 3 1/2" 600 lb RF, ANSI B16.5/316L	4 0		Flange 3 1/2" 600 lb Fisher type 249B and 259B/Hastelloy C22 (2.4602) solid	9 0	L 1 L
Flange 4" 150 lb RF, ANSI B16.5/316L	4 1				
Flange 4" 300 lb RF, ANSI B16.5/316L	4 2		Electronics		
Flange 4" 600 lb RF, ANSI B16.5/316L	4 3		Two-wire 4 ... 20 mA/HART	0	
Flange 6" 150 lb RF, ANSI B16.5/316L	4 4		Four-wire Modbus ²³⁾²⁴⁾²⁵⁾²⁶⁾	1	
Flange 6" 300 lb RF, ANSI B16.5/316L	4 5		Two-wire 4 ... 20 mA/HART with SIL qualification ²⁾¹⁾²²⁾	2	
Flange 6" 600 lb RF, ANSI B16.5/316L	4 6		Four-wire 4 ... 20 mA/HART; 90 ... 253 V AC; 50/60 Hz ¹⁾²⁾⁶⁾	3	
Flange 2" 150 lb Fisher special return/316L	4 7		Four-wire 4 ... 20 mA/HART; 9.6 ... 48 V DC; 20 ... 42 V AC ¹⁾²⁾⁶⁾	4	
Flange 3" 900 lb RJF, ASME B16.5/Hastelloy C22 (2.4602)	4 8		PROFIBUS PA ³¹⁾	5	
Flange 2" 900 lb RF, ANSI B16.5/316L	5 0		Seal/Second line of defense/ Process temperature		
Flange 3" 1 500 lb RF, ANSI B16.5/316L	5 1		Ceramic-graphite/with glass seal/ -196 ... +280 °C (-321 ... +536 °F)	A	
Flange 4" 900 lb RF, ANSI B16.5/316L	5 2		Ceramic-graphite/with glass seal/ -196 ... +450 °C (-321 ... +842 °F)	B	
Flange 4" 1 500 lb RF, ANSI B16.5/316L	5 3				
Flange 4" 2 500 lb RJF, ANSI B16.5/316L	5 4				
Flange 4" 1500 lb RJF, ASME B16.5/316L	5 5				
Flange 3" 600 lb RF, ASME B16.5/316L with Hastelloy C22 (2.4602) coating	5 6				
Flange 4" 150 lb RF, ASME B16.5/316L with Hastelloy C22 (2.4602) coating	5 7				
Flange 4" 300 lb RF, ASME B16.5/316L with Hastelloy C22 (2.4602) coating	5 8				
Flange 6" 150 lb RF, ASME B16.5/316L with Hastelloy C22 (2.4602) coating	7 0				
Flange DN 50 PN 40 Form C, DIN 2501/Hastelloy C22 (2.4602) solid	7 1				
Flange DN 100 PN 16 Form C, DIN 2501/C22 solid	7 2				

Level Measurement

Guided wave radar transmitters

SITRANS LG series

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		
Housing/Protection/Cable					
Plastic IP66/IP67 M20 x 1.5/blind stopper		A	3 001 ... 4 000 mm (118.15 ... 157.48 inch) ¹⁵⁾	9 R1 D	
Plastic IP66/IP67 1/2" NPT/blind stopper		B	4 001 ... 5 000 mm (157.52 ... 196.85 inch) ¹⁵⁾	9 R1 E	
Aluminum/IP66/IP68 (0.2 bar) M20 x 1.5/ blind stopper		C	5 001 ... 6 000 mm (196.89 ... 216.53 inch) ¹⁵⁾	9 R1 F	
Aluminum/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper		D	<u>Cable lengths ø2 or 4 mm/316L</u>		
Aluminum double chamber/IP66/IP68 (0.2 bar) M20 x 1.5/blind stopper		E	501 ... 1 000 mm (19.72 ... 39.37 inch)	9 R2 E	
Aluminum double chamber/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper		F	1 000 ... 5 000 mm (39.37 ... 196.85 inch)	9 R2 F	
Stainless steel (precision casting) 316L/IP66/ IP68 (0.2 bar) M20 x 1.5/blind stopper		L	5 001 ... 10 000 mm (196.89 ... 393.70 inch)	9 R2 G	
Stainless steel (precision casting) 316L/IP66/ IP68 (0.2 bar) 1/2" NPT/blind stopper		M	10 001 ... 15 000 mm (393.74 ... 590.55 inch)	9 R2 H	
Stainless steel (electropolished) 316L/IP66/ IP68 (0.2 bar) M20 x 1.5/blind stopper		N	15 001 ... 20 000 mm (590.59 ... 787.40 inch)	9 R2 J	
Stainless steel (electropolished) 316L/IP66/ IP68 (0.2 bar) 1/2" NPT/blind stopper		P	20 001 ... 25 000 mm (787.44 ... 984.25 inch)	9 R2 K	
Stainless steel double chamber/IP66/IP68 (0.2 bar) M20 x 1.5/blind stopper		Q	25 001 ... 30 000 mm (984.29 ... 1 181.10 inch)	9 R2 L	
Stainless steel double chamber/IP66/IP68 (0.2 bar) 1/2" NPT/blind stopper		R	30 001 ... 35 000 mm (1 181.14 ... 1 377.95 inch)	9 R2 M	
Aluminum/IP66/IP68 (0.2 bar) M20 x 1.5/ cable gland stainless steel		S	35 001 ... 40 000 mm (1 377.99 ... 1 574.80 inch)	9 R2 N	
Aluminum double chamber/IP66/IP68 (0.2 bar) M20 x 1.5/cable gland stainless steel		T	40 001 ... 45 000 mm (1 574.84 ... 1 771.65 inch)	9 R2 P	
Stainless steel (precision casting) 316L/IP66/ IP68 (0.2 bar) M20 x 1.5/cable gland stain- less steel		U	45 001 ... 50 000 mm (1 771.69 ... 1 968.50 inch)	9 R2 Q	
Stainless steel (electropolished) 316L/IP66/ IP68 (0.2 bar) M20 x 1.5/cable gland stain- less steel		V	50 001 ... 55 000 mm (1 968.54 ... 2 165.35 inch)	9 R2 R	
Aluminum single chamber/IP66/IP68 (0.2 bar) M20 x 1.5/cable gland brass nickel-plated		W	55 001 ... 60 000 mm (2 165.39 ... 2 362.20 inch)	9 R2 S	
Aluminum double chamber/IP66/IP68 (0.2 bar) M20 x 1.5/cable gland brass nickel-plated		X	<u>Cable lengths ø4 mm/ C22</u>		
Stainless steel single chamber (precision casting)/IP66/IP68 (0.2 bar) M20 x 1.5/cable gland brass nickel-plated		Y	501 ... 1 000 mm (19.72 ... 39.37 inch)	9 R4 A	
Stainless steel double chamber/IP66/IP68 (0.2 bar) M20 x 1.5/cable gland brass nickel-plated		J	1 000 ... 5 000 mm (39.37 ... 196.85 inch)	9 R4 B	
			5 001 ... 10 000 mm (196.89 ... 393.70 inch)	9 R4 C	
			10 001 ... 15 000 mm (393.74 ... 590.55 inch)	9 R4 D	
			15 001 ... 20 000 mm (590.59 ... 787.40 inch)	9 R4 E	
			20 001 ... 25 000 mm (787.44 ... 984.25 inch)	9 R4 F	
			25 001 ... 30 000 mm (984.29 ... 1 181.10 inch)	9 R4 G	
			30 001 ... 35 000 mm (1 181.14 ... 1 377.95 inch)	9 R4 H	
			35 001 ... 40 000 mm (1 377.99 ... 1 574.80 inch)	9 R4 J	
			40 001 ... 45 000 mm (1 574.84 ... 1 771.65 inch)	9 R4 K	
			45 001 ... 50 000 mm (1 771.69 ... 1 968.50 inch)	9 R4 L	
			50 001 ... 55 000 mm (1 968.54 ... 2 165.35 inch)	9 R4 M	
			55 001 ... 60 000 mm (2 165.39 ... 2 362.20 inch)	9 R4 N	
Lengths					
<u>Rod ø16 mm/316L</u>					
300 mm (11.81 inch) ¹⁵⁾		0			
500 mm (19.69 inch) ¹⁵⁾		1			
501 ... 1 000 mm (19.72 ... 39.37 inch) ¹⁵⁾		2			
1 001 ... 2 000 mm (39.41 ... 78.74 inch) ¹⁵⁾		3			
2 001 ... 3 000 mm (78.78 ... 118.11 inch) ¹⁵⁾		4			
3 001 ... 4 000 mm (118.15 ... 157.48 inch) ¹⁵⁾		5			
4 001 ... 5 000 mm (157.52 ... 196.85 inch) ¹⁵⁾		6			
5 001 ... 6 000 mm (196.89 ... 216.53 inch) ¹⁵⁾		7			
<u>Rod ø16 mm/C22</u>					
501 ... 1000 mm (19.72 ... 39.37 inch) ¹⁵⁾	9	R1 A			
1 001 ... 2 000 mm (39.41 ... 78.74 inch) ¹⁵⁾	9	R1 B			
2 001 ... 3 000 mm (78.78 ... 118.11 inch) ¹⁵⁾	9	R1 C			

Selection and Ordering data	Article No.	Order Code	Selection and Ordering data	Order code
SITRANS LG270	7ML5883-		Further designs (mandatory)	
A guided wave radar sensor for continuous level and interface measurement of liquids in aggressive applications			Please add "-Z" to Article No. and specify Order code(s).	
Coax ø42.2 mm/316L			Supplementary electronics	
300 ... 1 000 mm (11.81 ... 39.37 inch) ¹⁵⁾		9 R 3 G	Without	A00
1 001 ... 2 000 mm (39.41 ... 78.74 inch) ¹⁵⁾³⁰⁾		9 R 3 H	Additional current output 4 ... 20 mA ¹⁾²⁷⁾	A01
2 001 ... 3 000 mm (78.78 ... 118.11 inch) ¹⁵⁾		9 R 3 J	Dimensions centering weight (diameter/height)	
3 001 ... 4 000 mm (118.15 ... 157.48 inch) ¹⁵⁾		9 R 3 K	Without	B00
4 001 ... 5 000 mm (157.52 ... 196.85 inch) ¹⁵⁾		9 R 3 L	ø40/30 mm	B01
5 001 ... 6 000 mm (196.89 ... 236.22 inch) ¹⁵⁾		9 R 3 M	ø45/30 mm (for 2 inch tubes)	B02
Coax ø42.2 mm/ C22			ø75/30 mm (for 3 inch tubes)	B03
300 ... 1 000 mm (11.81 ... 39.37 inch) ¹⁵⁾		9 R 3 Q	ø95/30 mm (for 4 inch tubes)	B04
1 001 ... 2 000 mm (39.41 ... 78.74 inch) ¹⁵⁾³⁰⁾		9 R 3 R	ø1.57 inch/1.18 inch (for 2 inch Schedule 160)	B05
2 001 ... 3 000 mm (78.78 ... 118.11 inch) ¹⁵⁾		9 R 3 S	ø40 mm/30 mm	B06
3 001 ... 4 000 mm (118.15 ... 157.48 inch) ¹⁵⁾		9 R 3 T	ø1.77 inch/1.18 inch (for 2 inch Schedule 40/80 a. 3 inch Schedule) ø45 mm/30 mm (for 2 inch tubes)	B07
4 001 ... 5 000 mm (157.52 ... 196.85 inch) ¹⁵⁾		9 R 3 U	ø2.95 inch/1.18 inch (for 3 inch Schedule 10/40)	B08
5 001 ... 6 000 mm (196.89 ... 216.53 inch) ¹⁵⁾		9 R 3 V	ø75 mm/30 mm (for 3 inch tubes)	
			ø3.74 inch/1.18 inch (for 4 inch Schedule 80)	
			ø95 mm/30 mm (for 4 inch tubes)	
			Rod mounted	
			Without Rod, applicable for coax or cable probe types only ³⁾	C00
			Mounted	C01
			Not mounted	C02
			Local display interface	
			Without	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
			Russian	L07
			Chinese	L08
			Japanese	L09

Level Measurement

Guided wave radar transmitters

SITRANS LG series

Selection and Ordering data	Order code	Selection and Ordering data	Article No.
<i>Further designs (optional)</i>		<i>Additional Operating Instructions</i>	
Please add "-Z" to Article No. and specify Order code(s).		German	
Enter the total insertion length in plain text description	Y01	4 ... 20 mA/HART - two-wire	PBD:51041025
Enter the total length of rigid part (cable version only) range from 100 ... 1 000 mm	Y02	4 ... 20 mA/HART - two-wire, Coax probe	PBD:51041026
Cleaning included certificate: oil, grease and silicone free	W01	4 ... 20 mA/HART - four-wire	PBD:51041027
Identification Label (measurement loop) stainless steel	Y17	4 ... 20 mA/HART - four-wire, Coax probe	PBD:51041028
Identification Label (measurement loop) Foil	Y18	Modbus	PBD:51041029
3.1-Inspection Certificate for material (EN 10204 NACE MR 0175) ²⁰⁾	D07	Modbus, Coax probe	PBD:51041030
3.1-Inspection Certificate for instrument with test data (EN 10204) ²⁰⁾	C25	PROFIBUS PA	PBD:51041031
(H) 2.2-Factory certificate for material (EN 10204) ²⁰⁾	C15	PROFIBUS PA, Coax probe	PBD:51041032
Quality and test plan ²⁰⁾	C26	Note: Operating instructions should be ordered as a separate line on the order.	
Dye penetration test + 3.1 certificate/instrument ²⁰⁾	C13	This device is shipped with the Siemens Milltronics manual DVD containing the operating instructions library.	
X-ray test + 3.1 certificate/instrument ²⁰⁾	C14	English	
Positive material identification test + 3.1 certificate/instrument ²⁰⁾	C16	4 ... 20 mA/HART - two-wire	PBD:51041062
Roughness test + 3.1 certificate/instrument ²⁰⁾	C18	4 ... 20 mA/HART - two-wire, Coax probe	PBD:51041063
Pressure test + 3.1 certificate/instrument ²⁰⁾	C31	4 ... 20 mA/HART - four-wire	PBD:51041064
Helium leak test + 3.1 certificate/instrument ²⁰⁾	C32	4 ... 20 mA/HART - four-wire, Coax probe	PBD:51041065
Ferrite measuring accuracy to DIN 32514-1 + 3.1 certificate/instrument ²⁰⁾	C60	Modbus	PBD:51041066
Pressure test according to Norsok + 3.1 certificate/instrument ²⁰⁾	C61	Modbus, Coax probe	PBD:51041067
5 point calibration certificate + 3.1 certificate/instrument ^{20),29)}	C62	PROFIBUS PA	PBD:51041068
Certificate : Approval for steam boiler according to EN 12952-11, EN 12953-9	C70	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.	
		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.	

Selection and Ordering data	Article No.
Accessories	
SITRANS LG, GWR sensor Display Module	A5E34143449
SITRANS LG, USB communicator	A5E35192015
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 Local display interface options 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 rod, cable and coax diameter in Lengths options
- 8) Available with Version/Material options A, B, C, D, F, G
- 9) Available with Rod Mounted options C01 and C02
- 10) Available with Local display interface options 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 Local display interface options E00, E01
- 27) Not available with Local display interface option 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
- 31) Not available with Supplementary electronic option A01
- 32) Available with Housing/protection options W and Y
- 33) Available with Housing/protection options X and J
- 34) Available with Electronics options 0, 2 and 5

Note: Please consult manual for further details.

Level Measurement

Guided wave radar transmitters

SITRANS LG series

Selection and Ordering data	Article No.
SITRANS LG Remote Interface	7ML5840-
	■ ■ ■ ■ ■ - ■ ■ ■ ■ 0
↗ Click on the Article No. for the online configuration in the PIA Life Cycle Portal.	
Approval	
For Ex-free area ¹⁾	0 A
ATEX II 1G, 2G, Ex ia IIC T6 Ga, Gb ¹⁾	0 C
ATEX II 2G, Ex d IIC T6 Gb	0 E
IEC Ex ia IIC T6 Ga, Gb ¹⁾	0 F
IEC Ex d IIC T6 Gb	0 G
CSA (NI) Class I, Div. 2, Groups A, B, C, D; (DIP) Class II, III, Div. 1, Groups E, F, G ¹⁾	0 H
CSA (IS) Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G ¹⁾	0 J
CSA (XP) Class I, Div. 1, Groups A, B, C, D	0 K
INMETRO Ex ia IIC T6 Ga, Gb ¹⁾	0 L
INMETRO Ex d IIC T6 Gb	0 M
Electronics	
Digital (I ² C communication)	A
Housing	
Plastic ²⁾⁴⁾	0
Aluminum ³⁾⁵⁾	1
Housing protection	
IP66/IP67 NEMA 4X	0
IP66/IP68 NEMA 6P (0.2bar)	1
Cable entry	
M20 x 1.5/ Blind plug	3
½" NPT/ Blind plug	5
Display	
Without	A
Mounted	B
Mounting	
For wall mounting with Aluminum	A
For carrier rail and wall mounting with plastic housing	B
For carrier rail with Aluminum	C
For tube mounting (29 ... 60 mm) including mounting material	D
Certificates	
None	0
3.1 Certificate/Instrument with test data	1
Quality and Test plan	2

¹⁾ Available with Housing option 0 only



²⁾ Available with Housing Protection option 0 only

³⁾ Available with Housing Protection option 1 only

⁴⁾ Available with Mounting Option B only

⁵⁾ Available with Mounting Option A and C only

Selection and Ordering data	Article No.
SITRANS LG Replacement Probes	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⁾	AA
Exchangeable cable ø2 mm center weight/316 ²⁾¹¹⁾	AC
Exchangeable cable ø4 mm without weight/316 ¹⁾¹¹⁾	AD
Exchangeable cable ø4 mm with gravity weight/316 ¹⁾¹¹⁾	AE
Exchangeable cable ø4 mm with center weight/316 ²⁾¹¹⁾	AG
Exchangeable cable ø6 mm with gravity weight/316 ¹⁾⁸⁾¹¹⁾	AH
Exchangeable rod ø8 mm/316L ¹⁾	AP
Exchangeable rod ø8 mm/1.4435 (acc. to Basle Standard) ¹⁾	AQ
Exchangeable rod ø12 mm/316L ¹⁾	AU
Exchangeable rod ø16 mm/316L ¹⁾	AW
Process fitting	
Thread to 1 1/2 inch	0
Thread from 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)	AA
1 001 ... 2 000 mm (39.41 ... 78.74 inch)	AB
2 001 ... 3 000 mm (78.78 ... 118.11 inch)	AC
3 001 ... 4 000 mm (118.15 ... 157.48 inch)	AD
4 001 ... 5 000 mm (157.52 ... 196.85 inch)	AE
5 001 ... 6 000 mm (196.89 ... 236.22 inch)	AF

Selection and Ordering data	Article No.	Selection and Ordering data	Article No.
SITRANS LG Replacement Probes	7ML5841-	SITRANS LG Replacement Probes	7ML5841-
	 0		 0
<u>Rod ø12 mm</u>		<u>Cable Lengths ø6 mm/316</u>	
300 ... 1 000 mm (11.81 ... 39.37 inch)	AG	501 ... 1 000 mm (19.72 ... 39.37 inch)	BM
1 001 ... 2 000 mm (39.41 ... 78.74 inch)	AH	1 001 ... 5 000 mm (39.41 ... 196.85 inch)	BN
2 001 ... 3 000 mm (78.78 ... 118.11 inch)	AJ	5 000 ... 10 000 mm (196.89 ... 393.70 inch)	BP
3 001 ... 4 000 mm (118.15 ... 157.48 inch)	AK	10 001 ... 15 000 mm (393.74 ... 590.55 inch)	BQ
4 001 ... 5 000 mm (157.52 ... 196.85 inch)	AL	15 001 ... 20 000 mm (590.59 ... 787.40 inch)	BR
5 001 ... 6 000 mm (196.89 ... 236.22 inch)	AM	20 001 ... 25 000 mm (787.44 ... 984.25 inch)	BS
<u>Rod ø16 mm</u>		25 001 ... 30 000 mm (984.29 ... 1 181.10 inch)	BT
300 ... 1 000 mm (11.81 ... 39.37 inch)	AN	30 001 ... 35 000 mm (1 181.14 ... 1 377.95 inch)	BU
1 001 ... 2 000 mm (39.41 ... 78.74 inch)	AP	35 001 ... 40 000 mm (1 377.99 ... 1 574.80 inch)	BV
2 001 ... 3 000 mm (78.78 ... 118.11 inch)	AQ	40 001 ... 45 000 mm (1 574.84 ... 1 771.65 inch)	BW
3 001 ... 4 000 mm (118.15 ... 157.48 inch)	AR	45 001 ... 50 000 mm (1 771.69 ... 1 968.50 inch)	BX
4 001 ... 5 000 mm (157.52 ... 196.85 inch)	AS	50 001 ... 55 000 mm (1 968.54 ... 2 165.35 inch)	BY
5 001 ... 6 000 mm (196.89 ... 236.22 inch)	AT	55 001 ... 60 000 mm (2 165.39 ... 2 362.20 inch)	CA
<u>Cable Lengths ø2 mm and 4 mm/316</u>		60 001 ... 65 000 mm (2 362.24 ... 2 559.06 inch)	CB
501 ... 1 000 mm (19.72 ... 39.37 inch)	AU	65 001 ... 70 000 mm (2 559.09 ... 2 755.91 inch)	CC
1 001 ... 5 000 mm (39.41 ... 196.85 inch)	AV	70 001 ... 75 000 mm (2 755.94 ... 2 952.76 inch)	CD
5 000 ... 10 000 mm (196.89 ... 393.70 inch)	AW		
10 001 ... 15 000 mm (393.74 ... 590.55 inch)	AX		
15 001 ... 20 000 mm (590.59 ... 787.40 inch)	AY		
20 001 ... 25 000 mm (787.44 ... 984.25 inch)	BA		
25 001 ... 30 000 mm (984.29 ... 1 181.10 inch)	BB		
30 001 ... 35 000 mm (1 181.14 ... 1 377.95 inch)	BC		
35 001 ... 40 000 mm (1 377.99 ... 1 574.80 inch)	BD		
40 001 ... 45 000 mm (1 574.84 ... 1 771.65 inch)	BE		
45 001 ... 50 000 mm (1 771.69 ... 1 968.50 inch)	BF		
50 001 ... 55 000 mm (1 968.54 ... 2 165.35 inch)	BG		
55 001 ... 60 000 mm (2 165.39 ... 2 362.20 inch)	BH		
60 001 ... 65 000 mm (2 362.24 ... 2 559.06 inch)	BJ		
65 001 ... 70 000 mm (2 559.09 ... 2 755.91 inch)	BK		
70 001 ... 75 000 mm (2 755.94 ... 2 952.76 inch)	BL		

Selection and Ordering data	Order code
<u>Further designs</u>	
Please add "-Z" to Article No. and specify Order code(s).	
Enter the total insertion length in plain text description	Y01
Total length: Enter the total length of rigid part (range 100 ... 1 000 mm LG270 limited to 100 mm) (cable versions only)	Y02

- 1) Available with Dimension centering weight: Without Option 0
- 2) Available with Dimension centering weight: 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
- 11) Not available with certificate option 1 and 2

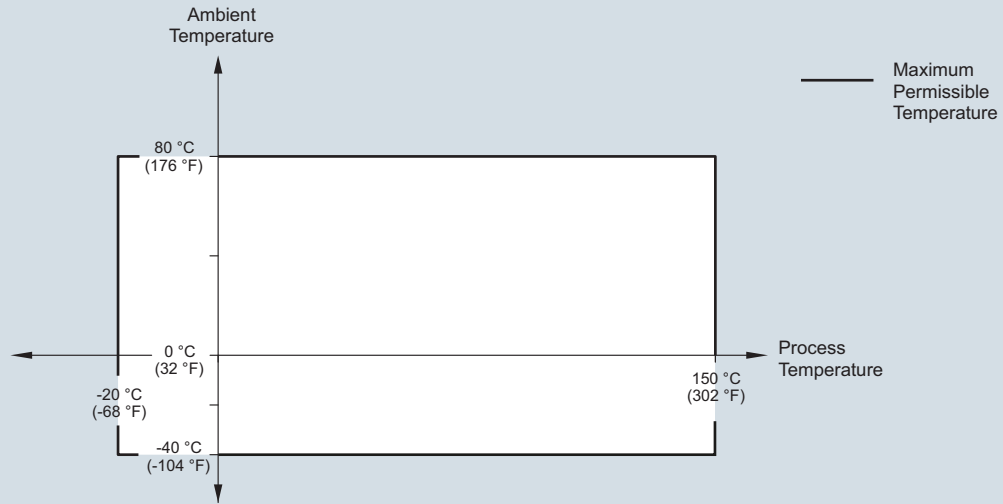
Level Measurement

Guided wave radar transmitters

SITRANS LG series

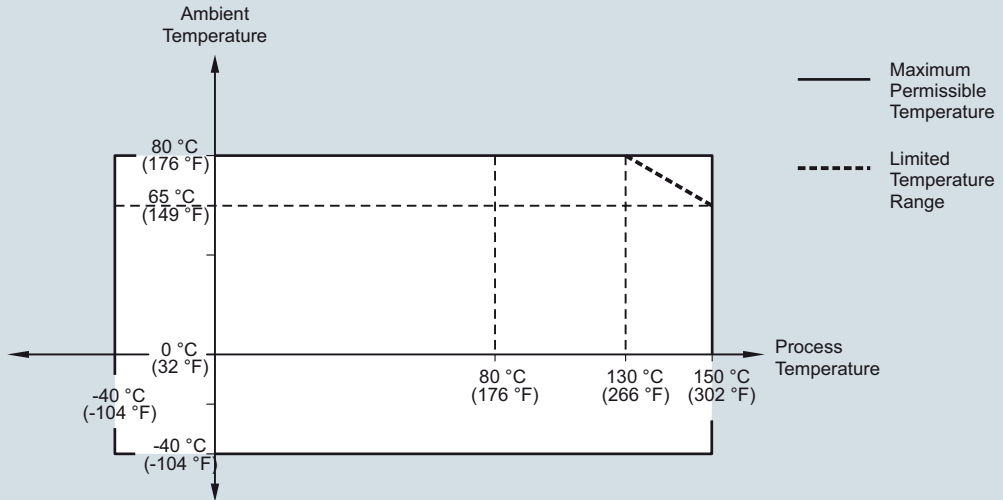
Characteristic curves

SITRANS LG240, Ambient temperature/process temperature, standard version

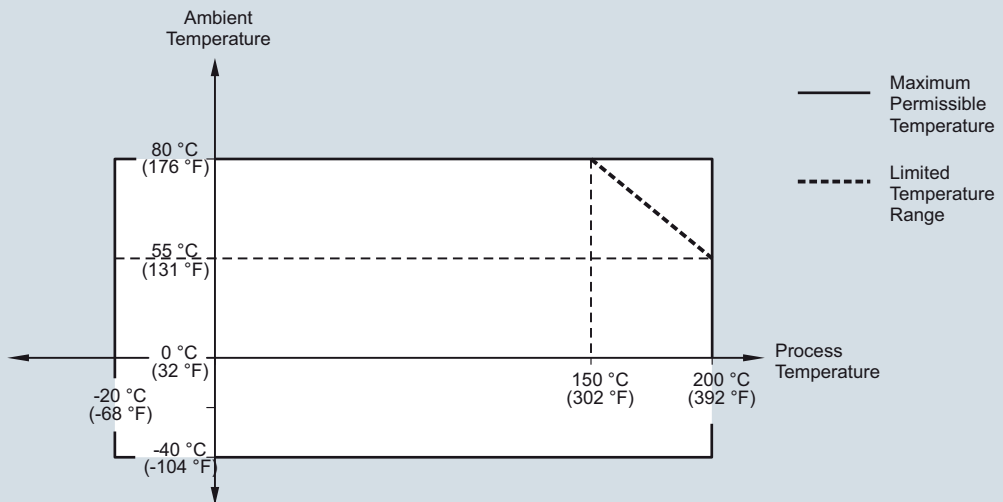


SITRANS LG240, Ambient temperature/process temperature curve

SITRANS LG250, Ambient temperature/process temperature, standard version



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



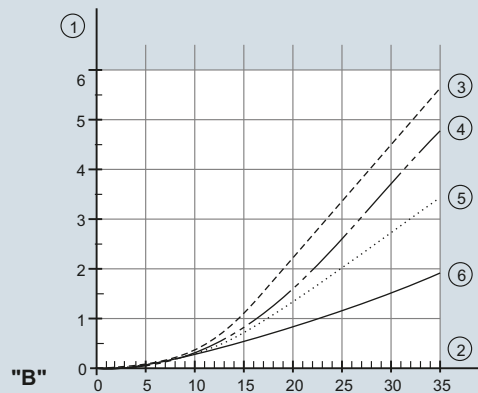
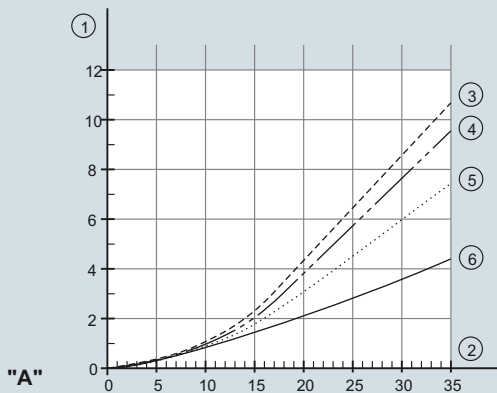
SITRANS LG250, Ambient temperature/process temperature curves

Level Measurement

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

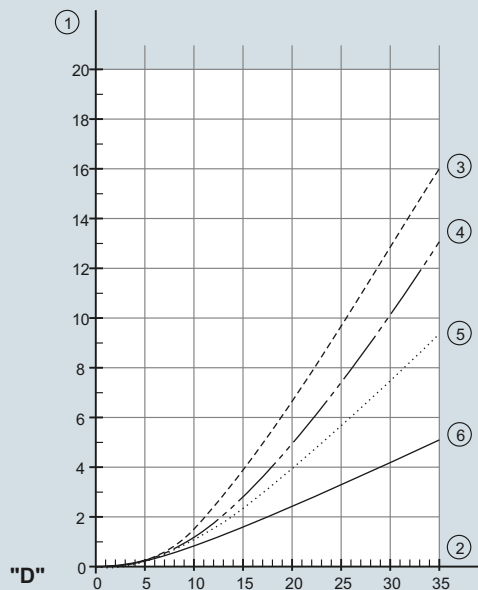
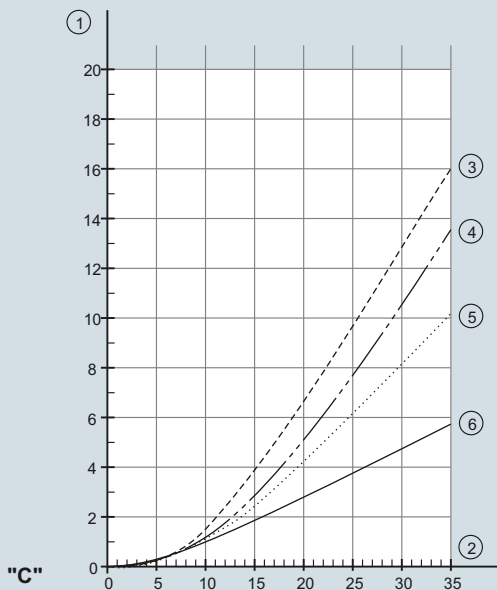
3. Vessel diameter 12 m (39.37 ft)

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)

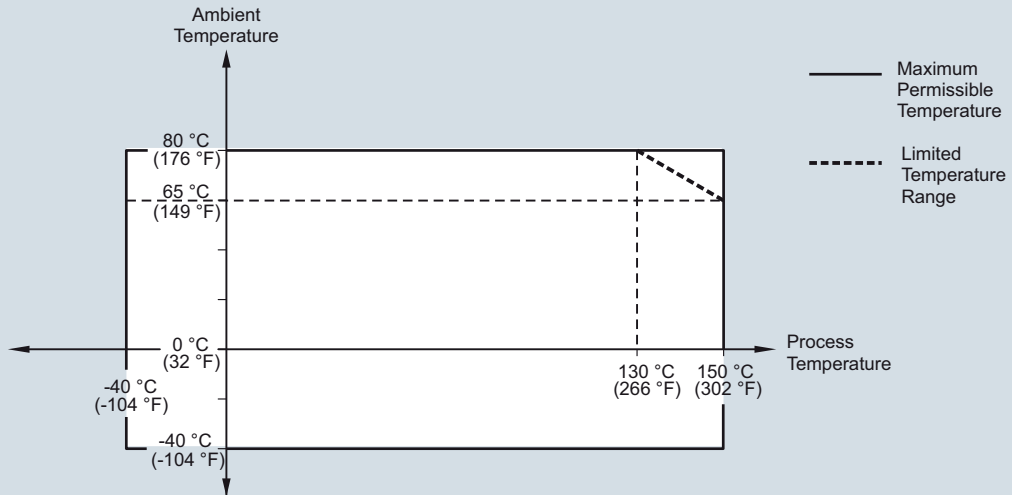
4. Vessel diameter 9 m (29.53 ft)

5. Vessel diameter 6 m (19.69 ft)

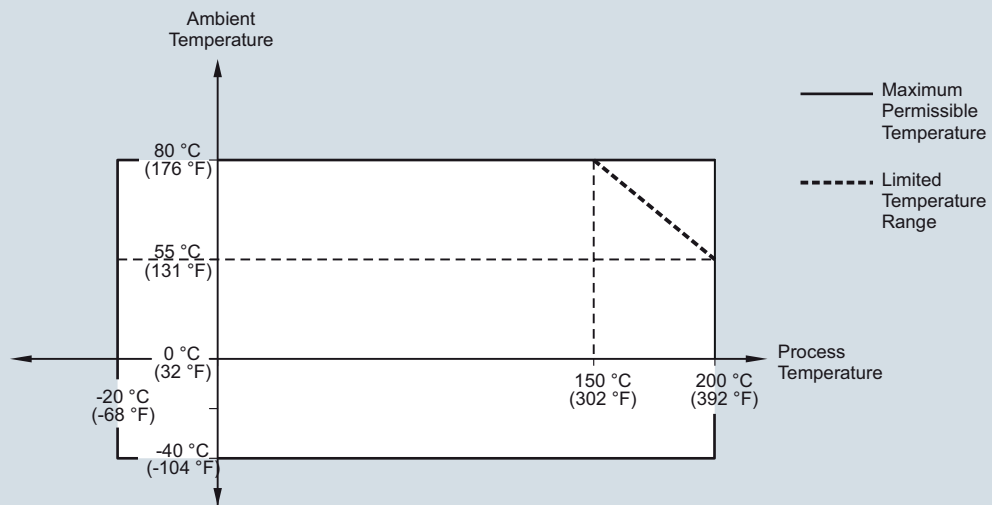
6. Vessel diameter 3 m (9.843 ft)

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

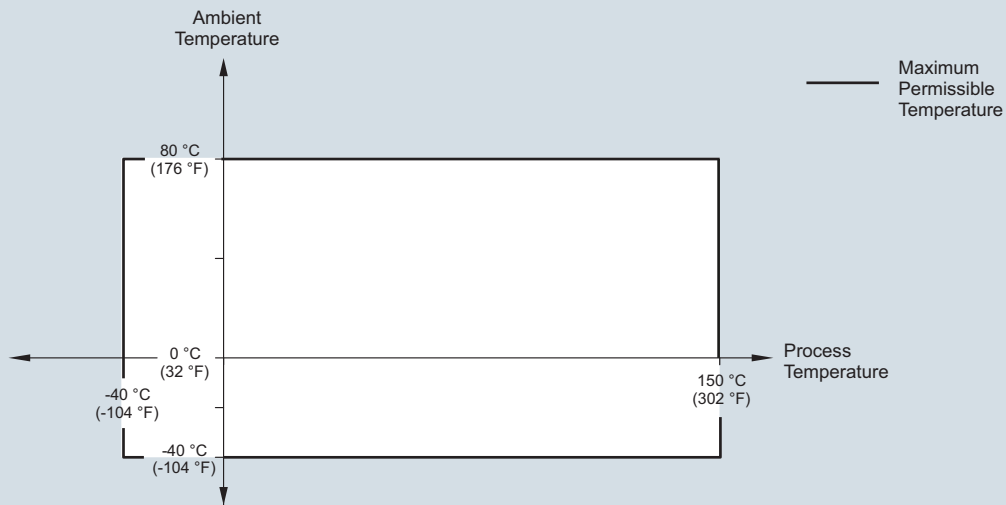
Guided wave radar transmitters

SITRANS LG series

SITRANS LG260, Ambient temperature/process temperature, standard version

Cable version with \varnothing 6 mm (0.236 inch)

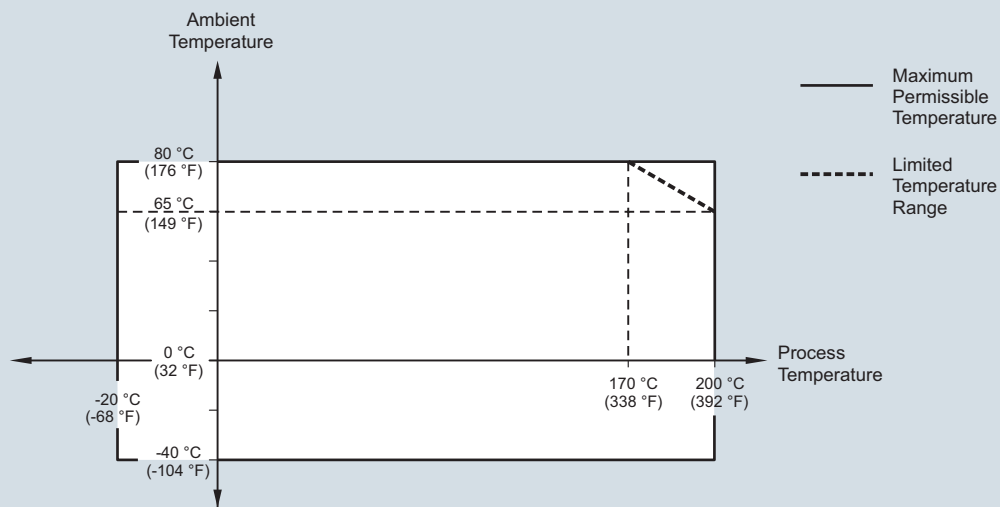
Cable version, PA coated with \varnothing 11 mm (0.433 inch)



SITRANS LG260, Ambient temperature/process temperature, temperature adapter version

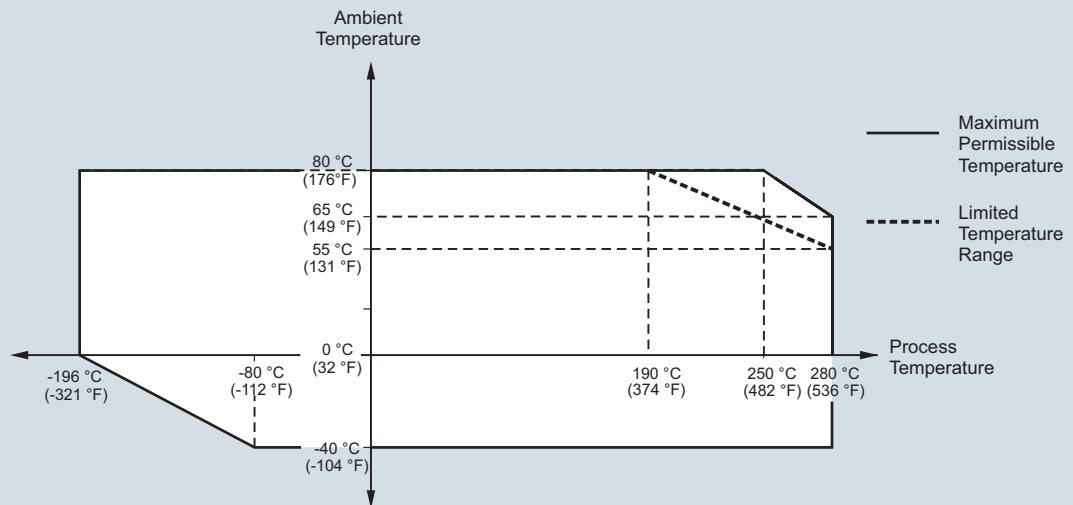
Cable version with \varnothing 6 mm (0.236 inch)

Cable version, PA coated with \varnothing 11 mm (0.433 inch)

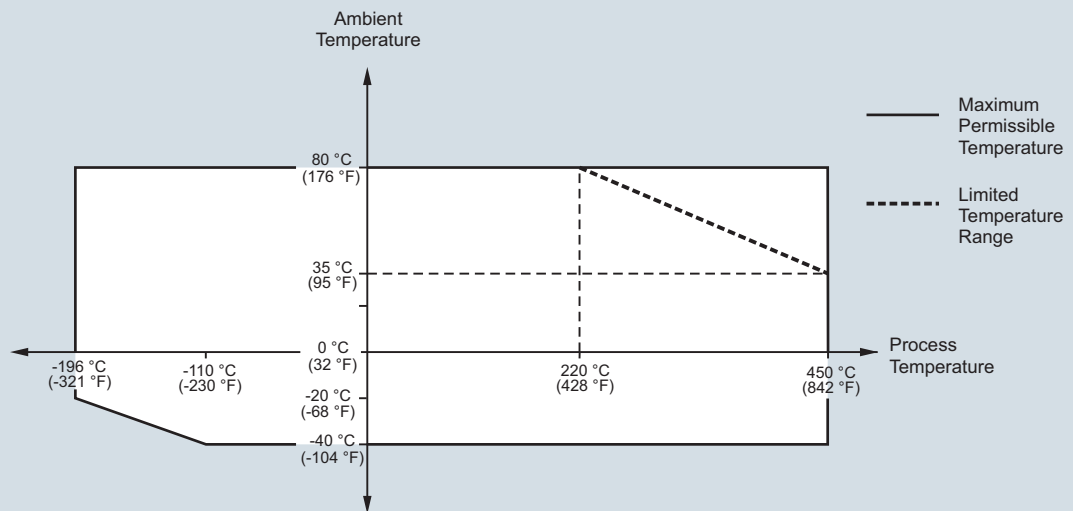


SITRANS LG260, Ambient temperature/process temperature curves

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)



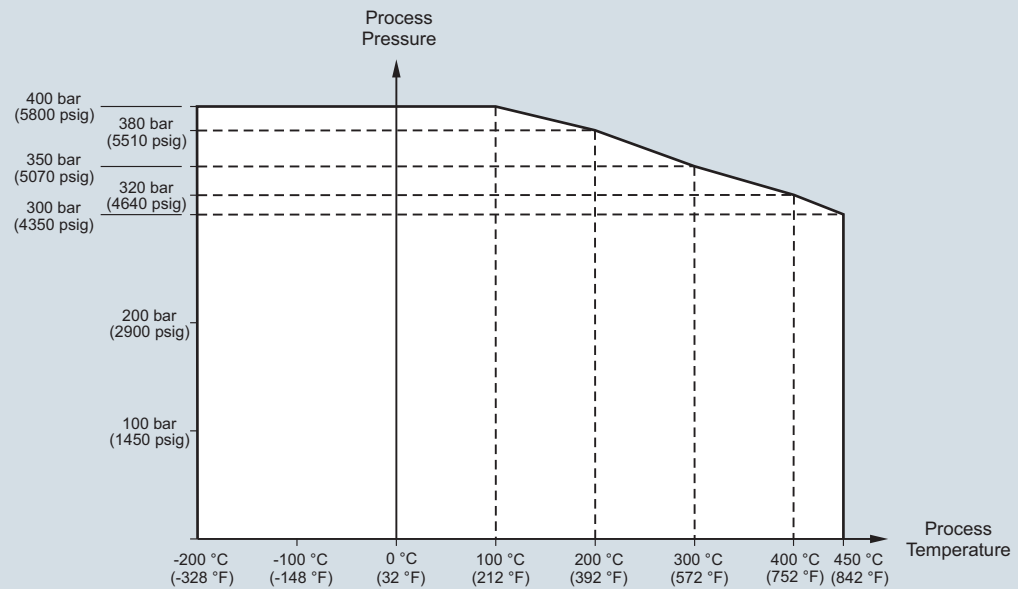
SITRANS LG270, Ambient temperature/process temperature curves

Level Measurement

Guided wave radar transmitters

SITRANS LG series

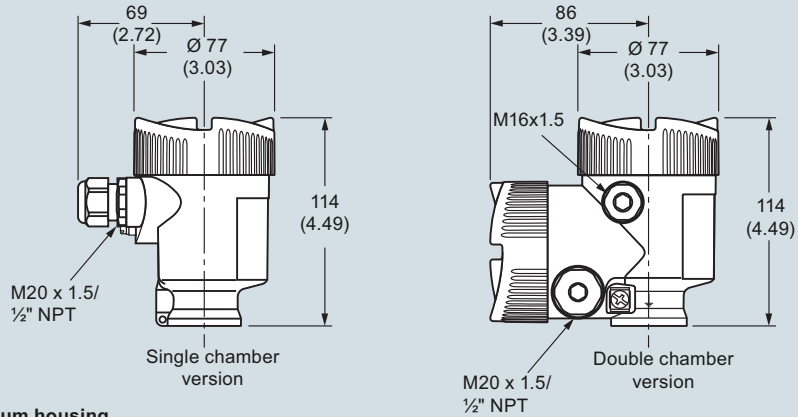
SITRANS LG270, Process pressure/process temperature (-196 ... +450 °C/-321 ... +842 °F version)



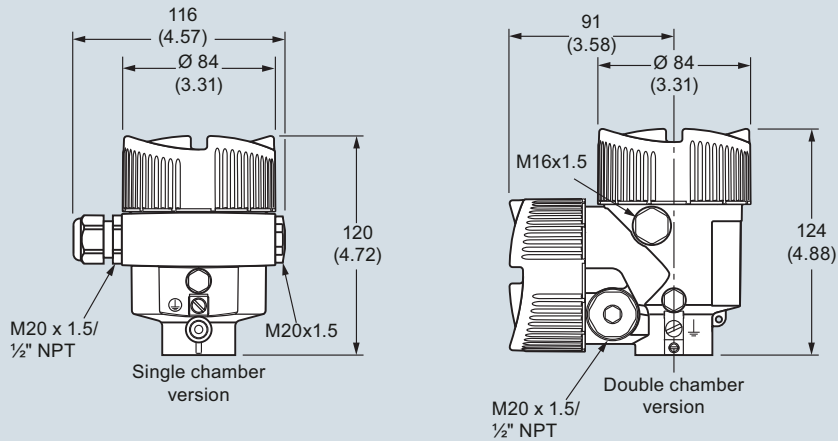
SITRANS LG270, Process pressure/process temperature curve

Dimensional drawings

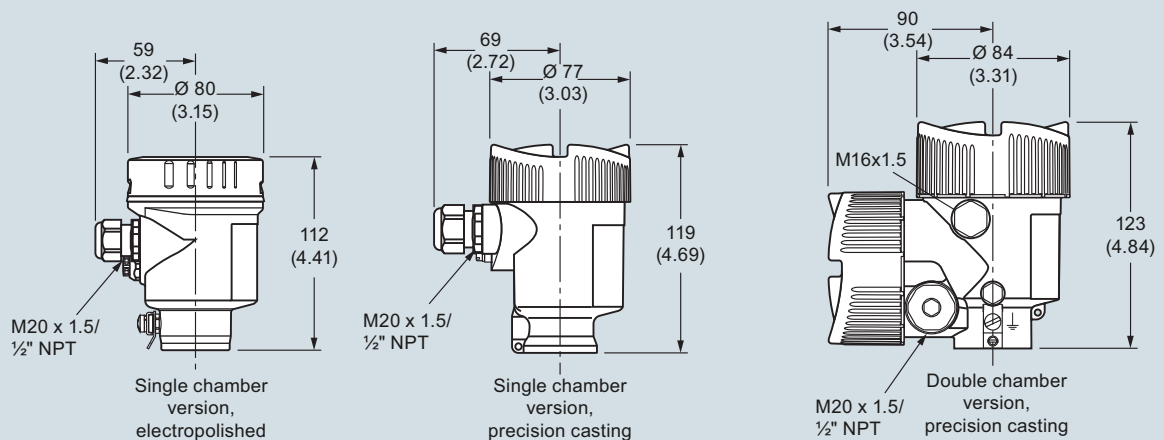
LG Series plastic housing



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)

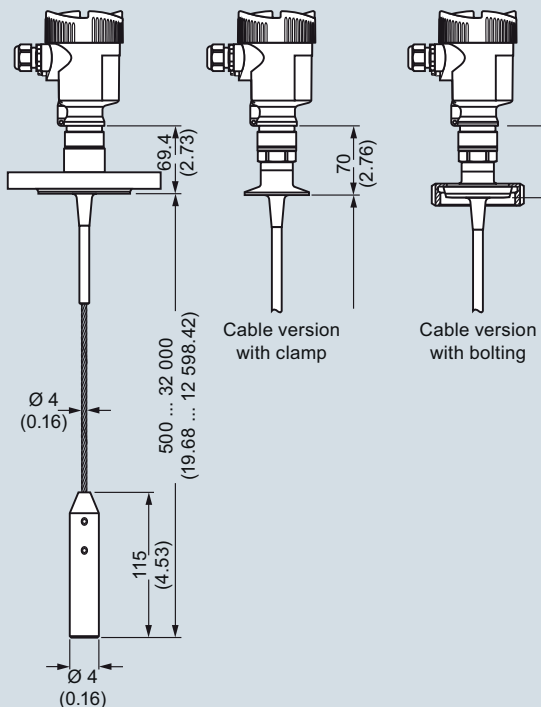
Level Measurement

Guided wave radar transmitters

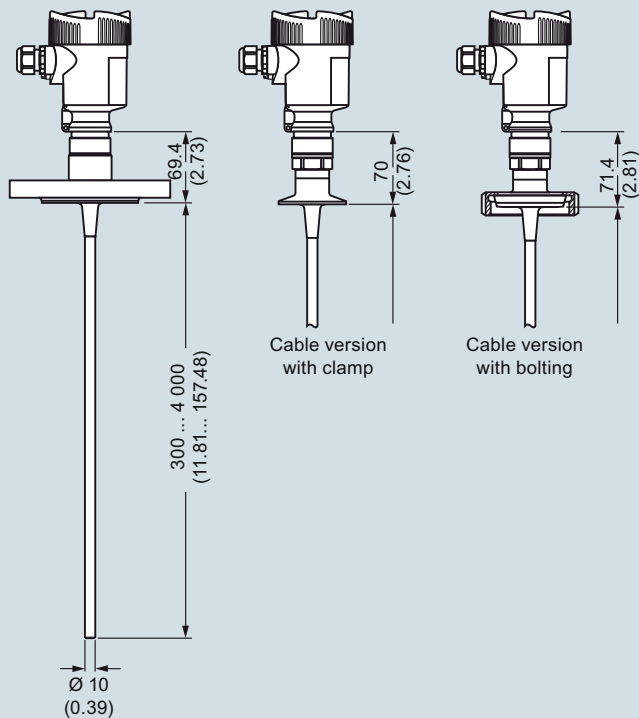
SITRANS LG series

SITRANS LG240

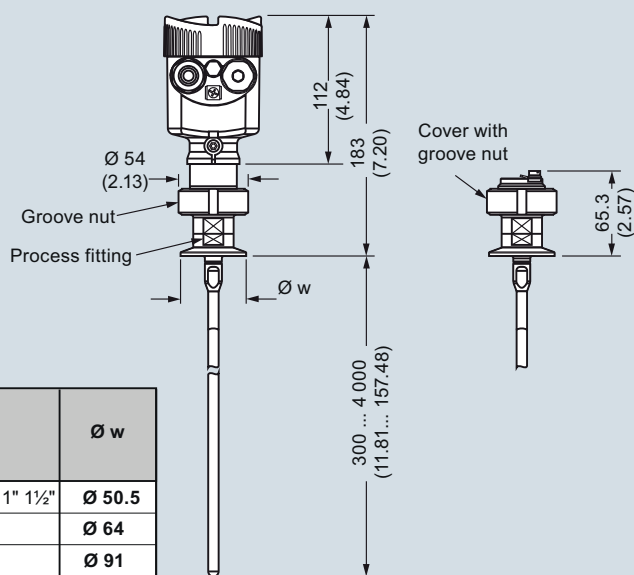
Cable version Ø 4 (0.157), PFA coated



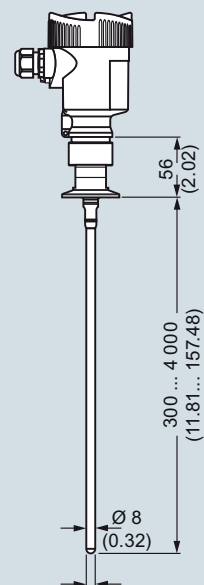
Rod version Ø 10 (0.394), PFA coated



Autoclaved version



Rod version Ø 8 (0.315), polished

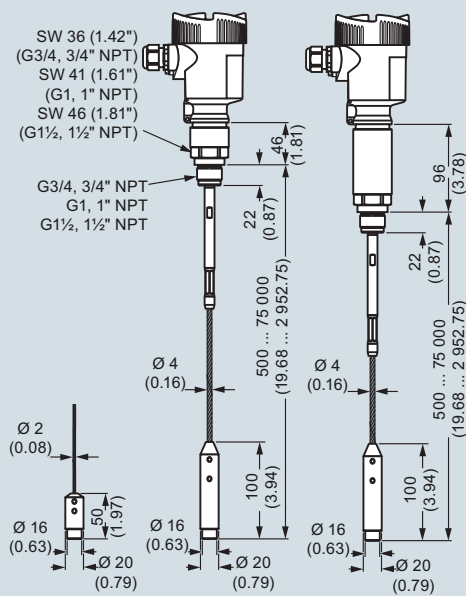


	Ø w
DIN DN 25 DN 32 DN 40/ 1" 1½"	Ø 50.5
DIN DN 50/ 2"	Ø 64
DIN DN 65/ 3"	Ø 91

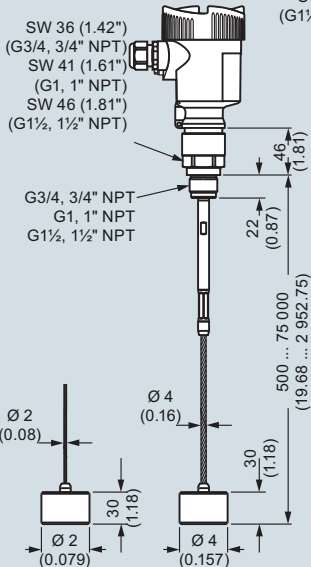
SITRANS LG240, dimensions in mm (inch)

SITRANS LG250

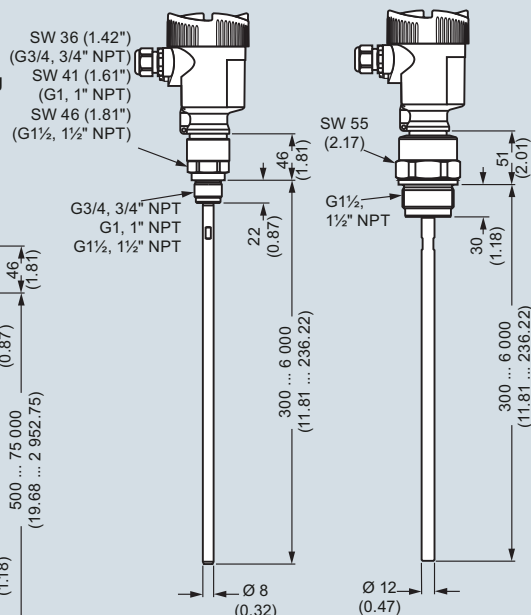
Cable version with gravity weight



Cable version with centering weight



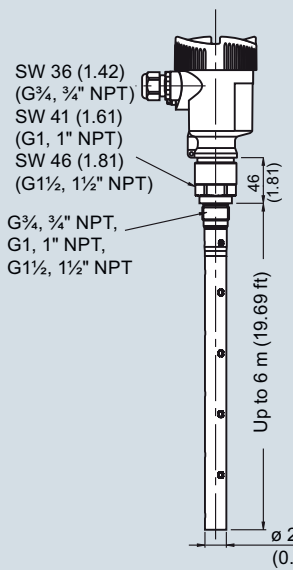
Rod version



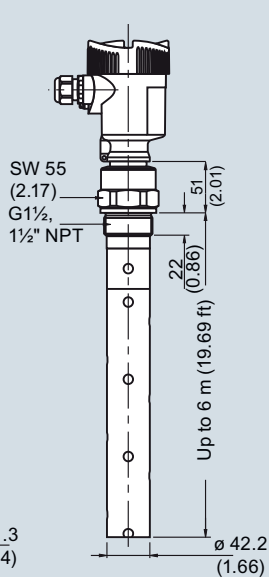
SITRANS LG250, dimensions in mm (inch)

SITRANS LG250, coax version

**Coaxial version
Ø 21.3 (0.839)**



**Coaxial version
Ø 42.2 (1.661)**



SITRANS LG250, dimensions in mm (inch)

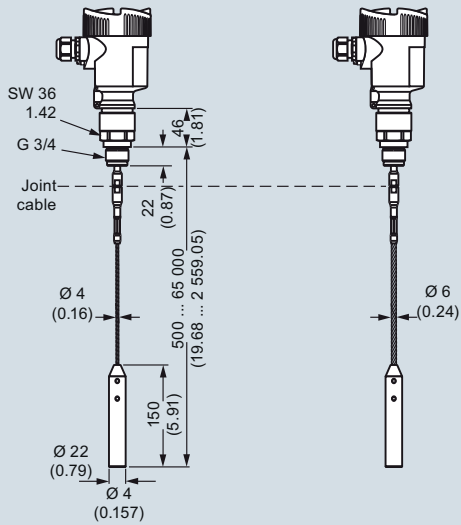
Level Measurement

Guided wave radar transmitters

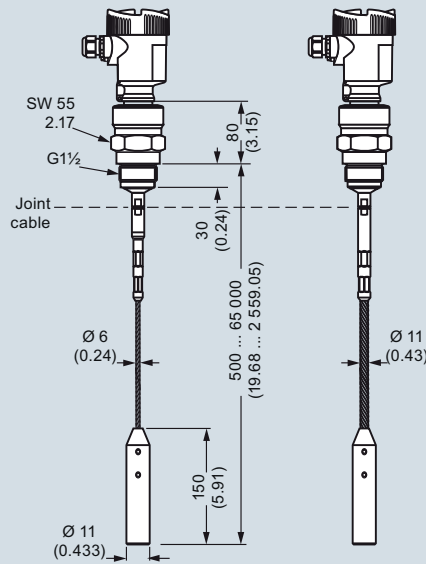
SITRANS LG series

SITRANS LG260

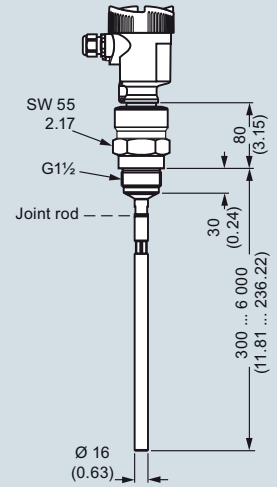
Cable version Ø 4 (0.157) / Ø 6 (0.236) - PA coated



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



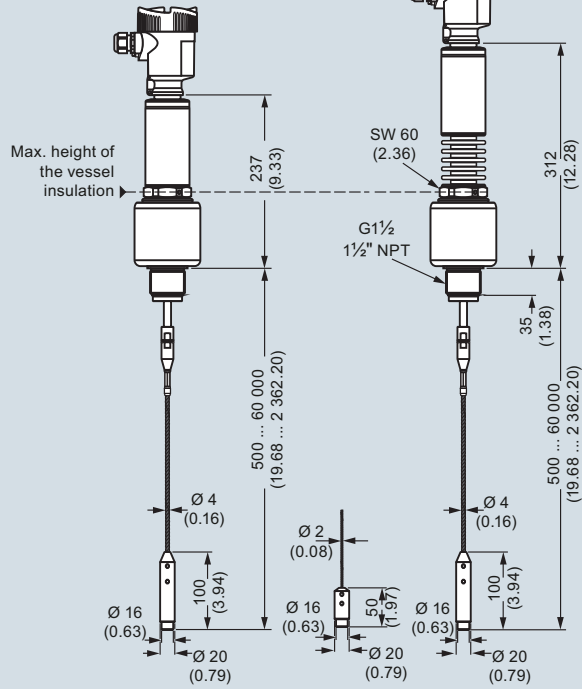
Rod version Ø 16 (0.63)



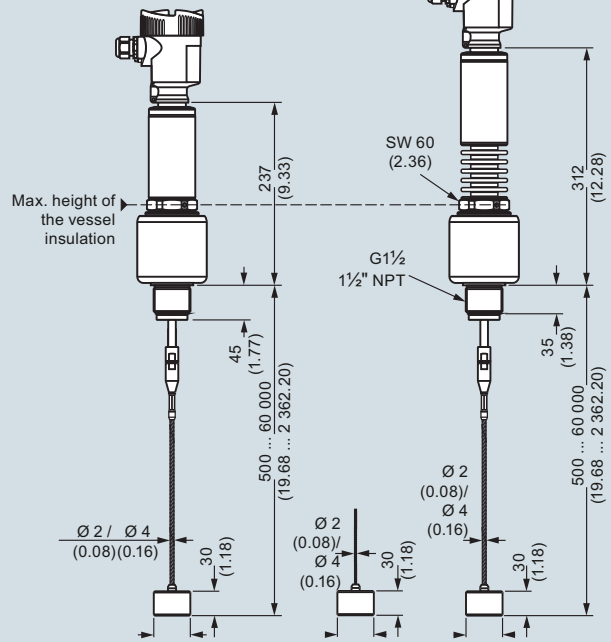
SITRANS LG260, dimensions in mm (inch)

SITRANS LG270

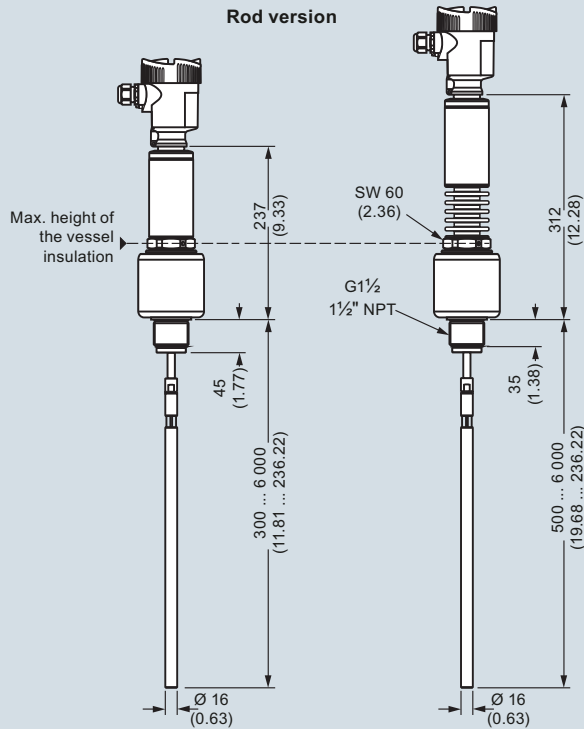
Cable version with gravity weight



Cable version with centering weight



Rod version



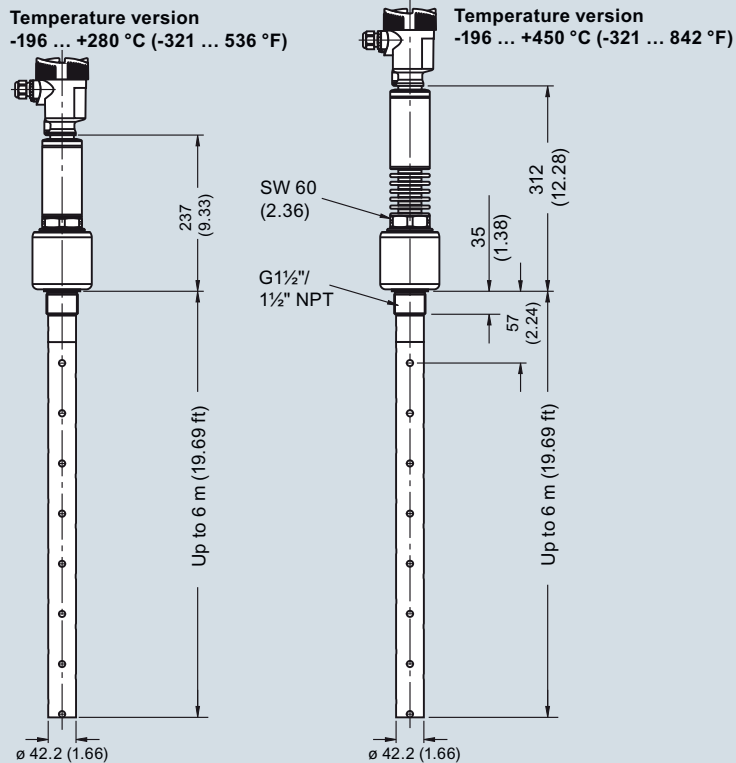
SITRANS LG270, dimensions in mm (inch)

Level Measurement

Guided wave radar transmitters

SITRANS LG series

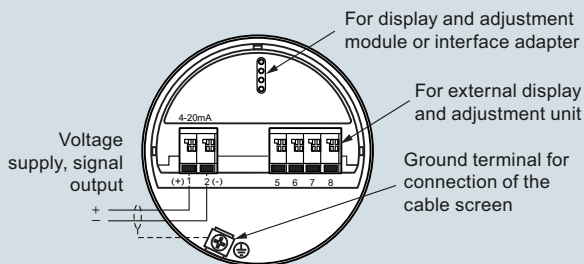
SITRANS LG270, coax version



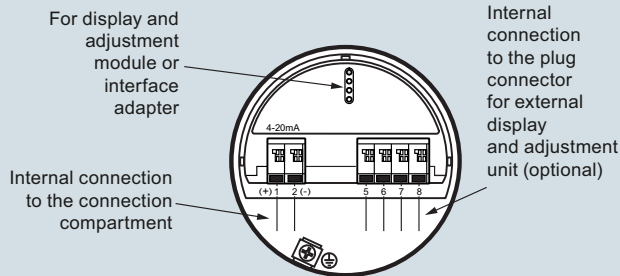
SITRANS LG270, dimensions in mm (inch)

Schematics

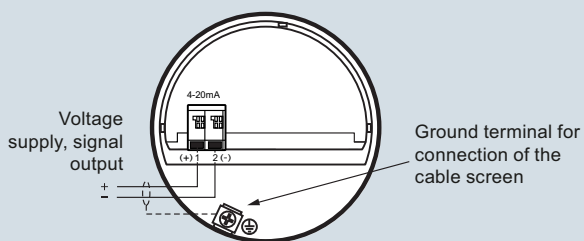
2-wire HART electronic option, electronics and connection compartment, single chamber housing



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



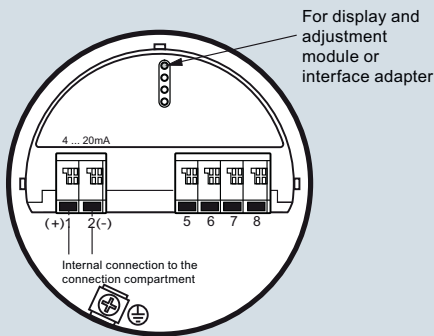
2-wire HART electronic option, connection compartment, Ex-d-ia double chamber housing



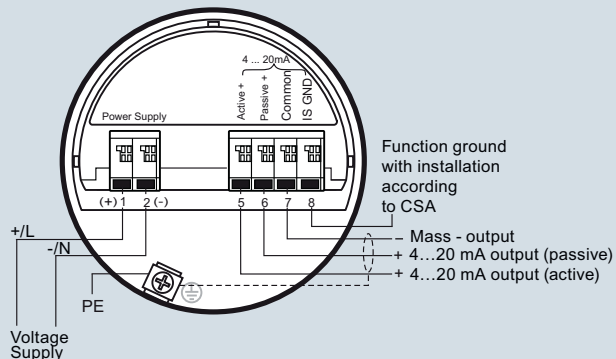
Note: All 2-wire HART connections and electronics are also available with SIL

SITRANS LG series connections

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



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



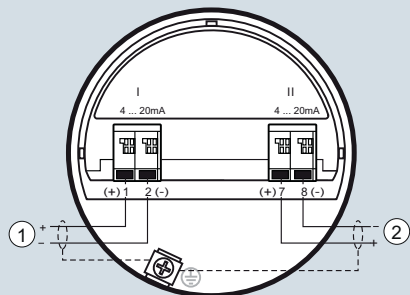
SITRANS LG series connections

Level Measurement

Guided wave radar transmitters

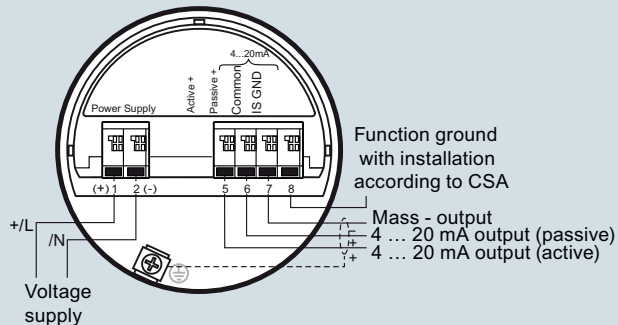
SITRANS LG series

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



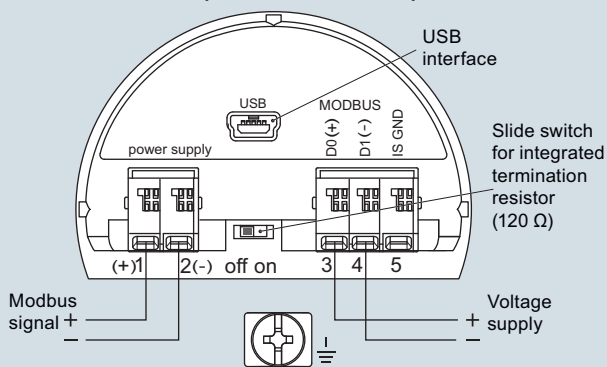
Function ground with installation according to CSA

Mass - output
4 ... 20 mA output (passive)
4 ... 20 mA output (active)

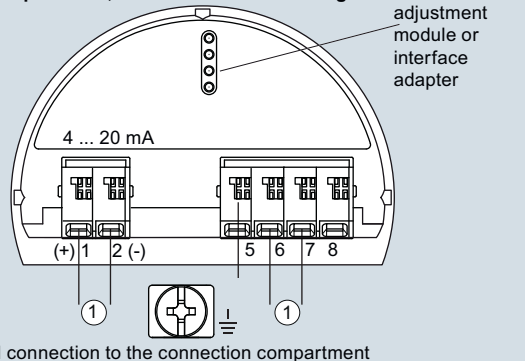
4

SITRANS LG series connections

Modbus electronic option, connection compartment



Modbus electronic option, electronics compartment, double chamber housing

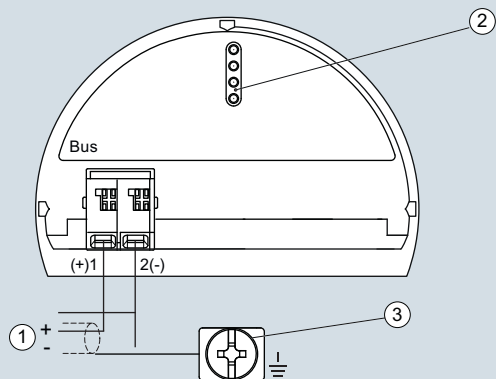


For display and adjustment module or interface adapter

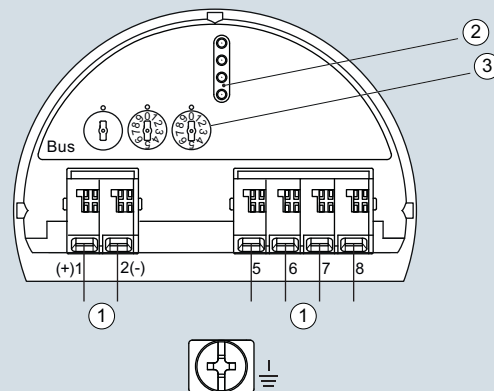
- ① Internal connection to the connection compartment

SITRANS LG series connection

PROFIBUS electronic option, connection compartment, double chamber housing



PROFIBUS electronic option, electronics compartment, double chamber housing

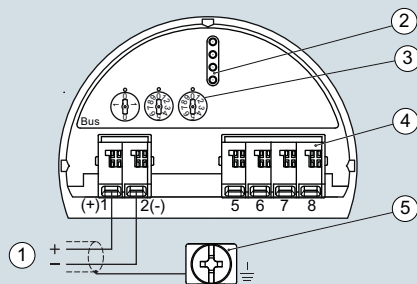


- ① Voltage supply, signal output
- ② For display and adjustment module or interface adapter
- ③ Ground terminal for connection of the cable screen

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

SITRANS LG series connection

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



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

SITRANS LG series connection

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