

# Level Measurement

## Continuous level measurement – Radar transmitters

### SITRANS LR250 horn antenna

#### Overview



SITRANS LR250 is a 2-wire, 25 GHz pulse radar level transmitter for continuous monitoring of liquids and slurries in storage and process vessels including high temperature and pressure, to a range of 20 m (66 ft).

#### Benefits

- Graphical local user interface (LUI) makes operation simple with plug-and-play setup using the intuitive Quick Start Wizard
- LUI displays echo profiles for diagnostic support
- 25 GHz high frequency allows for small antennas for easy mounting in nozzles
- Insensitive to mounting location and obstructions, and less sensitive to nozzle interference
- Short blanking distance for improved minimum measuring range to 50 mm (2 inch) from the end of the antenna
- Communication using HART or PROFIBUS PA, or FOUNDATION Fieldbus
- Process Intelligence signal processing for improved measurement reliability and Auto False-Echo Suppression of fixed obstructions
- Programming using infrared Intrinsically Safe handheld programmer or over a network using SIMATIC PDM, Emerson AMS, or Field Device Tools, such as PACTware or Fieldcare via SITRANS DTM
- Suitable for use in Ssafety related systems in accordance with IEC 61508/61511 (SIL-2)
- 3mm (0.118 inch) accuracy in accordance with IEC 60770-1

#### Application

SITRANS LR250 includes a graphical local user interface (LUI) that improves setup and operation by including an intuitive Quick Start Wizard, and echo profile displays for diagnostic support. Startup is easy using the Quick Start wizard with a few parameters required for basic operation.

The 25 GHz frequency creates a narrow, focused beam allowing for smaller horn antenna options and decreasing sensitivity to obstructions.

SITRANS LR250's unique design allows safe and simple programming using the Intrinsically Safe handheld programmer without saving to open the instrument's lid.

SITRANS LR250 measures superbly on low dielectric media, and in small vessels, as well as tall and narrow vessels.

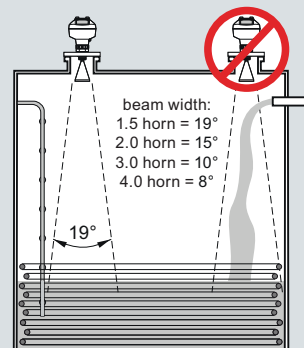
- Key Applications: liquid bulk storage tanks, process vessels with agitators, vaporous liquids, high temperatures, low dielectric media and applications with functional safety requirements

#### Configuration

##### Installation

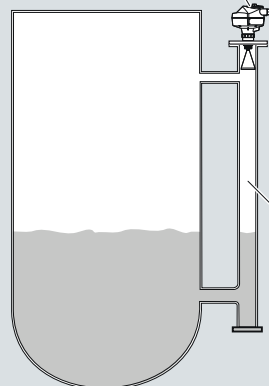
##### Note:

- Beam angle is the width of the cone where the energy density is half of the peak energy density.
- The peak energy density is directly in front of and in line with the horn antenna.
- There is a signal transmitted outside of the beam angle; therefore false targets may be detected.



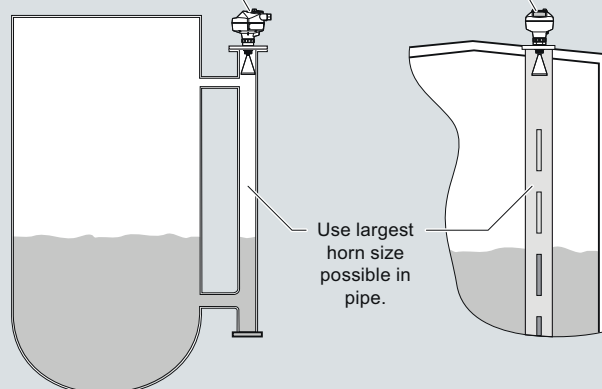
##### Mounting unit on bypass

Orient front or back of device toward vent.

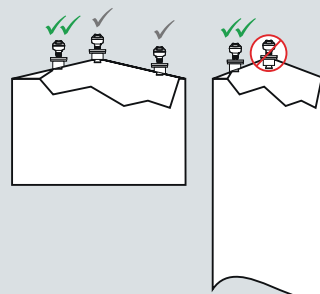


##### Mounting unit on stilling well

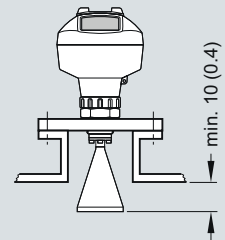
Orient front or back of device toward stillpipe slots.



##### Mounting unit on vessel



##### Mounting on a nozzle



SITRANS LR250 installation, dimensions in mm (inch)

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#### Technical specifications

##### Mode of operation

Measuring principle	Radar level measurement
Frequency	K-band (25.0 GHz)
Minimum measuring range	50 mm (2 inch) from end of antenna
Maximum measuring range	20 m (65 ft), antenna dependent

##### Output

HART	Version 5.1
• Analog output	4 ... 20 mA
• Accuracy	± 0.02 mA
• Fail-safe	<ul style="list-style-type: none"> <li>• Programmable as high low or hold (loss of echo)</li> <li>• NE 43 programmable</li> </ul>
PROFIBUS PA:	Profile 3.1
• Function blocks	2 Analog Input (AI)
FOUNDATION Fieldbus	H1
• Functionality	Basic or LAS
• Version	ITK 5.2.0
• Function blocks	2 Analog Input (AI)

##### Performance (according to reference conditions IEC60770-1)

Maximum measured error	3 mm (0.118 inch)
Influence of ambient temperature	< 0.003 %/K

##### Rated operating conditions

Installation conditions	Indoor/outdoor
• Location	Indoor/outdoor
Ambient conditions (enclosure)	
• Ambient temperature	-40 ... +80 °C (-40 ... +176 °F)
• Installation category	I
• Pollution degree	4

##### Medium conditions

Dielectric constant $\epsilon_r$	> 1.6, antenna and application dependent
Process temperature	-40 ... +200 °C (-40 ... +392 °F) (at process connection with FKM o-ring) -20 ... +200 °C (-4 ... +392 °F) (at process connection with FFKM o-ring)
Process pressure	Up ... 40 bar g (580 psi g), process connection and temperature dependent. See Pressure/Temperature curves for more information

##### Design

Enclosure	
• Material	Aluminium, polyester powder-coated
• Cable inlet	2 x M20x1.5 or 2 x 1/2" NPT
Degree of protection	Type 4X/NEMA 4X, Type 6/ NEMA 6, IP67, IP68
Weight	< 3 kg (6.6 lb) 3.75 mm (1/2") threaded connection with 1/2" horn antenna
Display (local)	Graphic local user interface including quick start wizard and echo profile display

##### Antenna

• Material	316L stainless steel [optional alloy N06022/2.4602 (Hastelloy C-22 or equivalent)]
• Dimensions (nominal horn sizes)	Standard 1.5" (40 mm), 2" (48 mm), 3" (75 mm), 4" (95 mm) horn and optional 100 mm (4 inch) horn extension
Process connections	
• Process connection	1 1/2" or 2" NPT [(Taper), ANSI/ASME B1.20.1] R 1 1/2" or 2" [(BSPT), EN 10226] G 1 1/2" or 2" [(BSPP), EN ISO 228-1]
• Flange connection	2", 3", 4" (ANSI 150, 300 lb), 50, 80, 100 mm (PN 16, 40, JIS 10K)

##### Power supply

4 ... 20 mA/HART	Nominal 24 V DC (max. 30 V DC) with max. 550 Ω
PROFIBUS PA	<ul style="list-style-type: none"> <li>• 15 mA</li> <li>• per IEC 61158-2</li> </ul>
FOUNDATION Fieldbus	<ul style="list-style-type: none"> <li>• 20.0 mA</li> <li>• per IEC 61158-2</li> </ul>

##### Certificates and approvals

General	CSA <sub>US/C</sub> , CE, FM, NE 21, C-TICK, KC
Radio	FCC, Industry Canada and Europe ETSI EN 302-372, C-TICK
Hazardous	
• Intrinsically Safe (Europe)	ATEX II 1G EEx ia IIC T4 ATEX II 1D Ex iaD 20 tD A20 IP67 T90°C
• Intrinsically Safe (China)	NEPSI Ex ia IIC T4/DIP A20 TA T90°C IP67
• Non-sparking/ Energy Limited (Europe)	ATEX II 3G EEx nA/nL IIC T4 Gc
• Non-sparking/ Energy Limited (China)	NEPSI Ex nA/nL IIC T4
• Intrinsically Safe (Canada/USA)	CSA/FM Class I, Div. 1, Groups A, B, C, D; Class II, Div. 1, Groups E, F, G; Class III T4
• Non-incendive (Canada/USA)	CSA/FM Class I, Div. 2, Groups A, B, C, D T5
• Intrinsically Safe (International)	IECEx Ex ia IIC T4, Ex iaD 20 tD A20 IP67 T90°C
• Intrinsically Safe (Brazil)	INMETRO Ex ia IIC T4 Ga, Ex ta IIC T90°C Da IP67
• Flame Proof (International/Europe)	IECEx/ATEX II 1/2 GD, 1D, 2D, Ex dmbia IIC T4 Ga/Gb, Ex iaD 20 tD A20 IP67 T90°C
• Explosion Proof (Brazil)	INMETRO Ex d ia mb IIC T4 Ga/Gb, Ex tb IIC T90°C Db IP67
• Increased Safety (International/Europe)	IECEx/ATEX II 1/2 GD, 1D, 2D, Ex embia IIC T4 Ga/Gb, Ex iaD 20 tD A20 IP67 T90°C
• Increased Safety (Brazil)	INMETRO Ex e ia mb IIC T4 Ga/Gb, Ex tb IIC T90°C Db IP67
• Explosion Proof (Canada/USA)	CSA/FM Class I, Div. 1, Groups A, B, C, D; Class II, Div. 1, Groups E, F, G; Class III T4
• Increased Safety/ Flameproof (China)	NEPSI Ex dmbia IIC T4/ Ex embia IIC T4/ DIP A20 TA, T90°C IP67

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### SITRANS LR250 horn antenna

Marine	<ul style="list-style-type: none"> <li>• Lloyd's Register of Shipping</li> <li>• ABS Type Approval</li> <li>• Bureau Veritas</li> </ul>
Functional Safety	SIL-2 suitable in accordance with IEC 61508/61511
<b>Programming</b> <ul style="list-style-type: none"> <li>• Intrinsically Safe Siemens handheld programmer</li> <li>• Approvals for handheld programmer</li> </ul>	Infrared receiver  IS model: ATEX II 1 GD Ex ia IIC T4 Ga Ex ia D 20 T135 °C Ta = -20 ... +50 °C CSA/FM Class I, II, III, Div. 1., Groups A, B, C, D, E, F, G, T6 Ta = 50 °C IECEx SIR 09.0073
Handheld communicator	HART communicator 375/475
PC	<ul style="list-style-type: none"> <li>• SIMATIC PDM</li> <li>• Emerson AMS</li> <li>• SITRANS DTM (for connection into FDT, such as PACTware or Fieldcare)</li> </ul>
Display (local)	Graphic local user interface including quick start wizard and echo profile displays

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### SITRANS LR250 horn antenna

Selection and Ordering data	Order No.	Selection and Ordering data	Order No.
<b>SITRANS LR250</b>	C) <b>7ML5431-</b>	<b>SITRANS LR250</b>	C) <b>7ML5431-</b>
2-wire, 25 GHz pulse radar level transmitter for continuous monitoring of liquids and slurries in storage and process vessels including high temperature and pressure, to a range of 20 m (66 ft). Ideal for small vessels and low dielectric media.	0 -	2-wire, 25 GHz pulse radar level transmitter for continuous monitoring of liquids and slurries in storage and process vessels including high temperature and pressure, to a range of 20 m (66 ft). Ideal for small vessels and low dielectric media.	0 -
<b>Process Connection and Antenna Material</b>		<b>Flanged connection Hastelloy C</b>	
316L (1.4435 or 1.4404) stainless steel, PTFE emitter, FFKM seal <sup>1)</sup>	0	2" Class 150 ASME B16.5 raised faced <sup>4)</sup>	JA
316L (1.4435 or 1.4404) stainless steel, PTFE emitter, FFKM seal <sup>1)</sup>	1	3" Class 150 ASME B16.5 raised faced <sup>4)</sup>	JB
Hastelloy C-22/2.4602 (or equivalent), PTFE emitter, FFKM seal <sup>2)</sup>	2	4" Class 150 ASME B16.5 raised faced <sup>4)</sup>	JC
Hastelloy C-22/2.4602 (or equivalent), PTFE emitter, FFKM seal <sup>2)</sup>	3	2" Class 300 ASME B16.5 raised faced <sup>4)</sup>	JD
		3" Class 300 ASME B16.5 raised faced <sup>4)</sup>	JE
		4" Class 300 ASME B16.5 raised faced <sup>4)</sup>	JF
<b>Process Connection Type</b>		DN 50 PN 16 EN 1092-1 Type A raised faced <sup>4)</sup>	KA
<b>Threaded connection 316L</b>		DN 80 PN 16 EN 1092-1 Type A raised faced <sup>4)</sup>	KB
1½" NPT (ASME B1.20.1) (tapered thread) <sup>3)</sup>	AA	DN 100 PN 16 EN 1092-1 Type A raised faced <sup>4)</sup>	KC
R 1½" [(BSPT), EN 10226-1] (tapered thread) <sup>3)</sup>	AB	DN 50 PN 40 EN 1092-1 Type A raised faced <sup>4)</sup>	KD
G 1½" [(BSPP), EN ISO 228-1] (parallel thread) <sup>3)</sup>	AC	DN 80 PN 40 EN 1092-1 Type A raised faced <sup>4)</sup>	KE
2" NPT (ASME B1.20.1) (tapered thread)	AD	DN 100 PN 40 EN 1092-1 Type A raised faced <sup>4)</sup>	KF
R 2" [(BSPT), EN 10226-1] (tapered thread)	AE	50A 10K JIS B 2220 raised faced <sup>4)</sup>	LA
G 2" [(BSPP), EN ISO 228-1] (parallel thread)	AF	80A 10K JIS B 2220 raised faced <sup>4)</sup>	LB
		100A 10K JIS B 2220 raised faced <sup>4)</sup>	LC
<b>Flanged connection 316L</b>		DN 50 PN 16 DIN EN1092-1 Type B1 raised face	MA
2" Class 150 ASME B16.5 flat faced <sup>4)</sup>	BA	DN 80 PN 16 DIN EN1092-1 Type B1 raised face	MB
3" Class 150 ASME B16.5 flat faced <sup>4)</sup>	BB	DN 100 PN 16 DIN EN1092-1 Type B1 raised face	MC
4" Class 150 ASME B16.5 flat faced <sup>4)</sup>	BC	DN 150 PN 16 DIN EN1092-1 Type B1 raised face	MD
2" Class 300 ASME B16.5 flat faced <sup>4)</sup>	CA	DN 50 PN 40 DIN EN1092-1 Type B1 raised face	ME
3" Class 300 ASME B16.5 flat faced <sup>4)</sup>	CB	DN 80 PN 40 DIN EN1092-1 Type B1 raised face	MF
4" Class 300 ASME B16.5 flat faced <sup>4)</sup>	CC	DN 100 PN 40 DIN EN1092-1 Type B1 raised face	MG
DN 50 PN 16 EN 1092-1 Type A flat faced <sup>4)</sup>	DA	DN 150 PN 40 DIN EN1092-1 Type B1 raised face	MH
DN 80 PN 16 EN 1092-1 Type A flat faced <sup>4)</sup>	DB		
DN 100 PN 16 EN 1092-1 Type A flat faced <sup>4)</sup>	DC	<b>Communication/Output</b>	
DN 50 PN 40 EN 1092-1 Type A flat faced <sup>4)</sup>	EA	PROFIBUS PA	1
DN 80 PN 40 EN 1092-1 Type A flat faced <sup>4)</sup>	EB	4 ... 20 mA, HART, startup at < 3.6 mA	2
DN 100 PN 40 EN 1092-1 Type A flat faced <sup>4)</sup>	EC	FOUNDATION Fieldbus	3
50A 10K JIS B 2220 flat faced <sup>4)</sup>	FA		
80A 10K JIS B 2220 flat faced <sup>4)</sup>	FB	<b>Enclosure/Cable inlet</b>	
100A 10K JIS B 2220 flat faced <sup>4)</sup>	FC	Aluminum, Epoxy painted	0
		2 x ½" NPT	1
		2 x M20x1.5	
DN 50 PN 16 DIN EN1092-1 Type B1 raised face	GA	<b>Antenna</b>	
DN 80 PN 16 DIN EN1092-1 Type B1 raised face	GB	(Note: Please use largest horn size possible)	
DN 100 PN 16 DIN EN1092-1 Type B1 raised face	GC	1½" horn	A
DN 150 PN 16 DIN EN1092-1 Type B1 raised face	GD	2" horn (fits 2" ASME or DN 50 nozzles)	B
DN 50 PN 40 DIN EN1092-1 Type B1 raised face	HA	3" horn (fits 3" ASME or DN 80 nozzles)	C
DN 80 PN 40 DIN EN1092-1 Type B1 raised face	HB	4" horn (fits 4" ASME or DN 100 nozzles)	D
DN 100 PN 40 DIN EN1092-1 Type B1 raised face	HC	1½" horn with 100 mm extension <sup>5)</sup>	E
DN 150 PN 40 DIN EN1092-1 Type B1 raised face	HD	2" horn with 100 mm extension	F
		3" horn with 100 mm extension	G
		4" horn with 100 mm extension	H
		<b>Hastelloy C22 (or equivalent)</b>	
		2" horn (fits 2" ASME or DN 50 nozzles)	J
		3" horn (fits 3" ASME or DN 80 nozzles)	K
		4" horn (fits 4" ASME or DN 100 nozzles)	L
		2" horn (fits 2" ASME or DN 50 nozzles) with 100 mm extension	M
		3" horn (fits 3" ASME or DN 80 nozzles) with 100 mm extension	N
		4" horn (fits 4" ASME or DN 100 nozzles) with 100 mm extension	P

# Level Measurement

## Continuous level measurement – Radar transmitters

### SITRANS LR250 horn antenna

#### Selection and Ordering data

Order No.

#### SITRANS LR250

C) 7ML5431-

2-wire, 25 GHz pulse radar level transmitter for continuous monitoring of liquids and slurries in storage and process vessels including high temperature and pressure, to a range of 20 m (66 ft). Ideal for small vessels and low dielectric media.

#### Approvals

General Purpose, CE, CSA, FM, FCC, R&TTE, C-TICK, KC

Intrinsically Safe, CSA/FM Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G, Industry Canada FCC

Intrinsically Safe, IECEx/ATEX II 1 GD Ex ia IIC T4, Ex iaD 20 tD A20 IP67 T90°C, INMETRO Ex ia IIC T4 Ga, Ex ta IIIC T90°C Da IP67, CE, R&TTE, C-TICK, KC

Non-incendive, CSA/FM Class I, Div. 2, Groups A, B, C, D, FCC

Non-sparking, Energy Limited, ATEX II 3G Ex nA/nL IIC T4, CE, R&TTE, C-TICK, KC

Increased Safety, IECEx/ATEX II 1/2 GD Ex embia IIC T4, Ex iaD 20 tD A20 IP67 T90°C, INMETRO Ex e ia mb IIC T4 Ga/Gb, Ex tb IIIC T90°C Db IP67, CE, R&TTE, C-TICK, KC<sup>5)</sup>

Flame Proof, IECEx/ATEX II 1/2 GD Ex dmbia IIC T4, Ex iaD 20 tD A20 IP67 T90°C, INMETRO Ex d ia mb IIC T4 Ga/Gb, Ex tb IIIC T90°C Db IP67, CE, R&TTE, C-TICK, KC<sup>5)</sup>

Explosion Proof CSA/FM Class I, II, III, Div. 1, Gr. A, B, C, D, E, F, G, Industry Canada FCC<sup>5)</sup>

#### Pressure rating

Rating per Pressure/Temperature curves in manual 0.5 bar g (7.25 psi g) maximum

0 -

A

B

C

D

E

F

G

H

0

1

- 1) Available with process connection options AA to HD & Antenna Versions A to H only
- 2) Available with process connection options JA to MH & Antenna Versions J to P only
- 3) Available For antenna versions A and E only, max. range 10 m (32.8 ft), dk > 3
- 4) Siemens Milltronics type flange (flange bolting patterns and facings dimensionally correspond to the applicable ASME B16.5, or EN 1092-1, or JIS B 2220 standard), see operating instructions for details
- 5) Applicable with communication option 2 only

C) Subject to export regulations AL: N, ECCN: EAR99.

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### SITRANS LR250 horn antenna

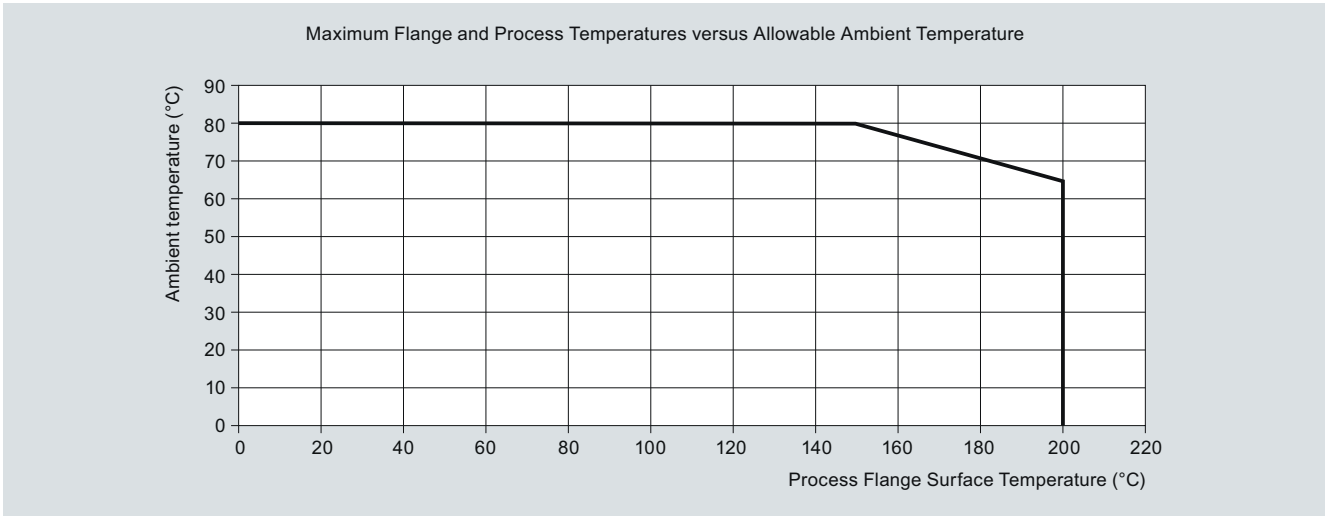
Selection and Ordering data	Order code	Selection and Ordering data	Order code
<b>Further designs</b>		<b>Accessories</b>	
Please add <b>"-Z"</b> to Order No. and specify Order code(s).		Handheld programmer, Intrinsically safe, EEx ia	C) <b>7ML1930-1BK</b>
Plug M12 with mating Connector <sup>1)2)3)</sup>	<b>A50</b>	HART modem/RS-232 (for use with a PC and SIMATIC PDM)	D) <b>7MF4997-1DA</b>
Plug 7/8" with mating Connector <sup>2)3)4)</sup>	<b>A55</b>	HART modem/USB (for use with a PC and SIMATIC PDM)	D) <b>7MF4997-1DB</b>
Stainless steel tag [69 x 50 mm (2.71 x 1.97 inch)]; Measuring-point number/identification (max. 27 characters); specify in plain text	<b>Y15</b>	One metallic cable gland M20x1.5, rated -40 ... +80 °C (-40 ... +176 °F), HART (two are required)	<b>7ML1930-1AP</b>
Manufacturer's Test Certificate: M to DIN 55350, Part 18 and to ISO 9000	<b>C11</b>	One metallic cable gland M20x1.5, rated -40 ... +80 °C (-40 ... +176 °F), PROFIBUS PA and FOUNDATION Fieldbus (two are required) <sup>6)</sup>	<b>7ML1930-1AQ</b>
Acceptance test certificate 3.1 of EN 10204	<b>C12</b>	FDA approved FKM o-ring for 2" G (BSPP) process connections -28 ... 80 °C (-28 ... 176 °F)	<b>7ML1830-3AN</b>
Functional Safety - SIL-2 suitable in accordance with IEC 61508/61511 <sup>3)5)</sup>	<b>C20</b>	SITRANS RD100 Remote display - see Chapter 8	
Namur NE43 compliant, device preset to failsafe < 3.6 mA <sup>5)</sup>	<b>N07</b>	SITRANS RD200 Remote display - see Chapter 8	
<b>Operating Instructions for HART/mA device</b>		SITRANS RD500 web, datalogging, alarming, ethernet, and modem support for instrumentation - see Chapter 8	K) <b>7ML5750- 1AA00-0</b>
English	C) <b>7ML1998-5JE05</b>	1) Available with enclosure option 1 only	
German	C) <b>7ML1998-5JE34</b>	2) To be used with communication options 1 and 3 only. Connector has IP67 rating.	
Note: The Operating Instructions should be orde- red as a separate line item on the order.		3) Available with approval options A and B. Available with approval option C for use on intrinsically safe applications only. Not rated for dust Ex.	
Multi-language Quick Start manual	C) <b>7ML1998-5QX83</b>	4) Available with enclosure option 0 only	
This device is shipped with the Siemens Milltronics manual CD containing the complete ATEX Quick Start and Operating Instructions library.		5) Applicable to communication option 2 only	
<b>Operating Instructions for PROFIBUS PA device</b>		6) For use with communication option 1 and 3 only	
English	C) <b>7ML1998-5JF05</b>	C) Subject to export regulations AL: N, ECCN: EAR99.	
German	C) <b>7ML1998-5JF34</b>	D) Subject to export regulations AL: N, ECCN: EAR99H.	
Note: The Operating Instructions should be orde- red as a separate line item on the order.		K) Subject to export regulations AL: N, ECCN: 5A991X.	
Multi-language Quick Start manual	C) <b>7ML1998-5XE83</b>		
This device is shipped with the Siemens Milltronics manual CD containing the complete ATEX Quick Start and Operating Instructions library.			
<b>Operating Instructions for FOUNDATION Fieldbus device</b>			
English	C) <b>7ML1998-5KL03</b>		
German	C) <b>7ML1998-5KL32</b>		
Note: The Operating Instructions should be orde- red as a separate line item on the order.			
Multi-language Quick Start manual	C) <b>7ML1998-5XN82</b>		
This device is shipped with the Siemens Milltronics manual CD containing the complete ATEX Quick Start and Operating Instructions library.			

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### SITRANS LR250 horn antenna

#### Characteristic curves



SITRANS LR250 Ambient/Process Flange Surface Temperature Curve

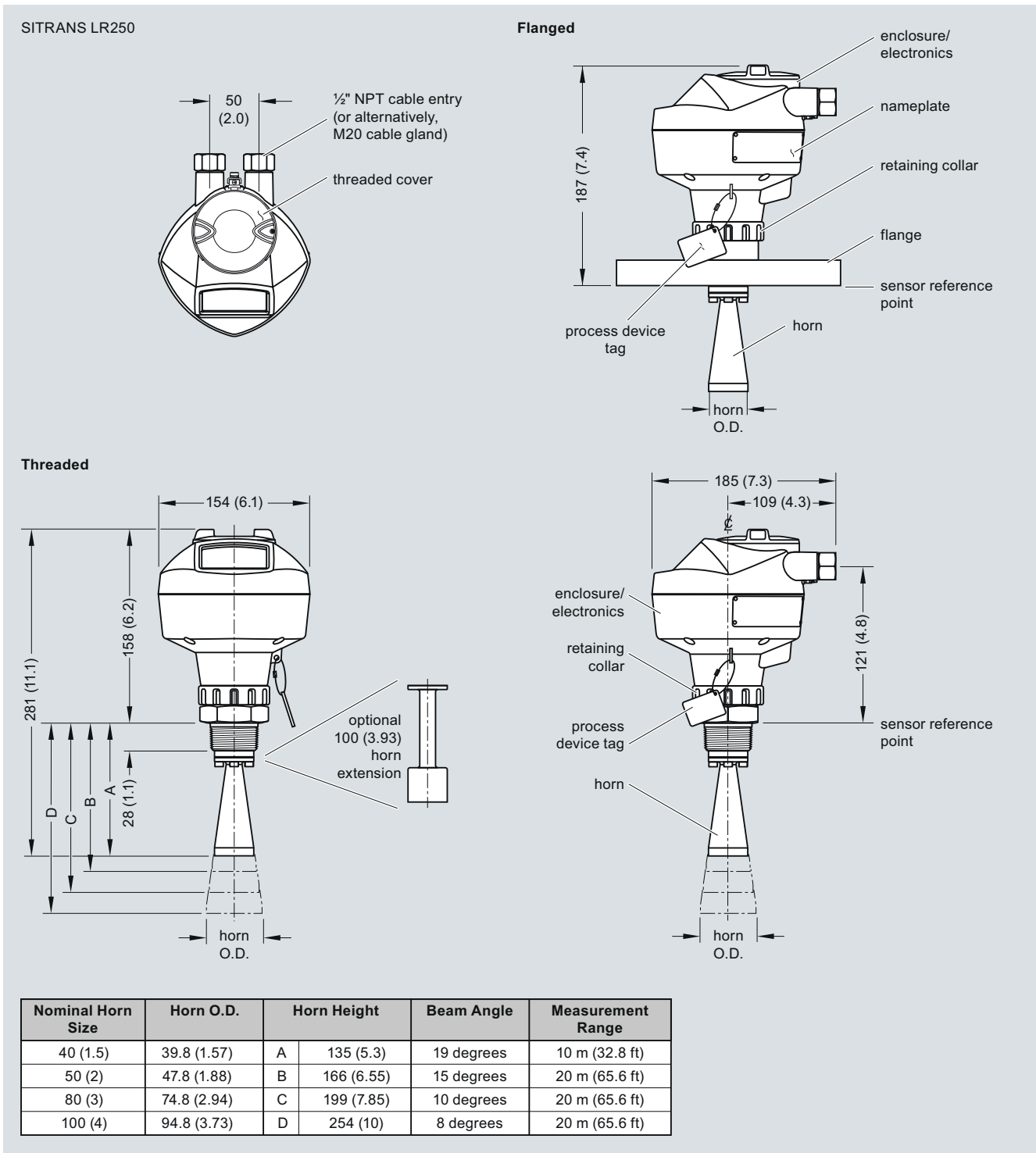
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### SITRANS LR250 horn antenna

#### Dimensional drawings



SITRANS LR250, dimensions in mm (inch)

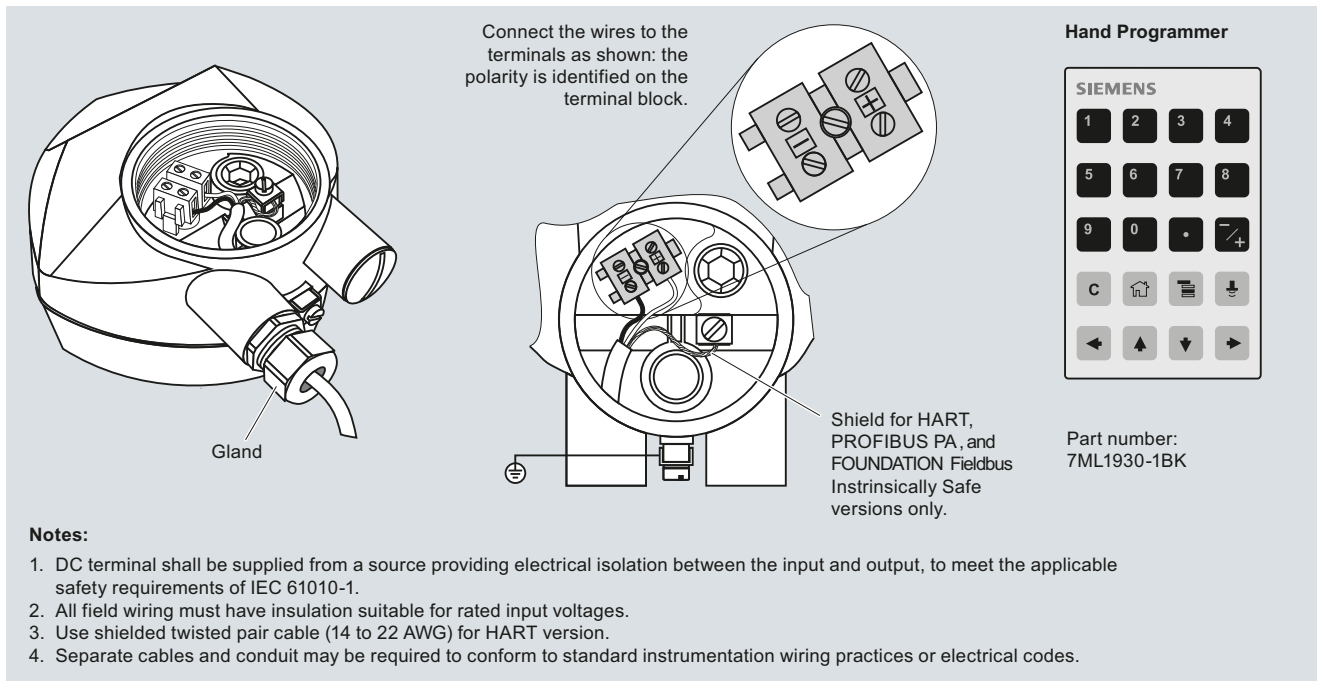


# Level Measurement

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### SITRANS LR250 horn antenna

#### Schematics



Connect the wires to the terminals as shown: the polarity is identified on the terminal block.

Gland

Shield for HART, PROFIBUS PA, and FOUNDATION Fieldbus Intrinsic Safe versions only.

**Hand Programmer**

SIEMENS			
1	2	3	4
5	6	7	8
9	0	.	/+
C	⏠	☰	⏴
←	↑	↓	→

Part number:  
7ML1930-1BK

**Notes:**



1. DC terminal shall be supplied from a source providing electrical isolation between the input and output, to meet the applicable safety requirements of IEC 61010-1.
2. All field wiring must have insulation suitable for rated input voltages.
3. Use shielded twisted pair cable (14 to 22 AWG) for HART version.
4. Separate cables and conduit may be required to conform to standard instrumentation wiring practices or electrical codes.

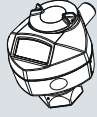

SITRANS LR250 connections

# Level Measurement

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### SITRANS LR250 Specials

SITRANS LR250 Specials	
	Order No.
<b>SITRANS LR250 horn version enclosures (PROFIBUS PA models)</b>	
	
LR250 horn version enclosure with board stack, NPT cable inlet, approval option A, with PROFIBUS PA communication, no process connection	<b>A5E01156836</b>
LR250 horn version enclosure with board stack, M20 cable inlet, approval option A, with PROFIBUS PA communication, no process connection	<b>A5E01156838</b>
LR250 horn version enclosure with board stack, NPT cable inlet, approval option B, with PROFIBUS PA communication, no process connection	<b>A5E01156839</b>
LR250 horn version enclosure with board stack, M20 cable inlet, approval option B, with PROFIBUS PA communication, no process connection	<b>A5E01156841</b>
LR250 horn version enclosure with board stack, NPT cable inlet, approval option C, with PROFIBUS PA communication, no process connection	<b>A5E01156843</b>
LR250 horn version enclosure with board stack, M20 cable inlet, approval option C, with PROFIBUS PA communication, no process connection	<b>A5E01156844</b>
LR250 horn version enclosure with board stack, M20 cable inlet, approval option C, with PROFIBUS PA communication, no process connection	<b>A5E01156846</b>
LR250 horn version enclosure with board stack, M20 cable inlet, approval option D, with PROFIBUS PA communication, no process connection	<b>A5E01156848</b>
LR250 enclosure with board stack, NPT cable inlet, approval option B, with FOUNDATION FIELDBUS communication, no process connection	<b>A5E03769538</b>
LR250 enclosure with board stack, NPT cable inlet, approval option D, with FOUNDATION FIELDBUS communication, no process connection	<b>A5E03769539</b>
LR250 enclosure with board stack, M20 cable inlet, approval option E, with FOUNDATION FIELDBUS communication, no process connection	<b>A5E03769543</b>
<b>SITRANS LR250 horn version enclosures (FOUNDATION Fieldbus models)</b>	
	
LR250 horn version enclosure with board stack, M20 cable inlet, approval option C, with FOUNDATION Fieldbus communication, no process connection	<b>A5E02654608</b>
LR250 horn version enclosure with board stack, NPT cable inlet, approval option A, with FOUNDATION Fieldbus communication, no process connection	<b>A5E02653792</b>
LR250 horn version enclosure with board stack, M20 cable inlet, approval option A, with FOUNDATION Fieldbus communication, no process connection	<b>A5E02653793</b>
LR250 horn version enclosure with board stack, NPT cable inlet, approval option C, with FOUNDATION Fieldbus communication, no process connection	<b>A5E02654606</b>

SITRANS LR250 Specials	
	Order No.
<b>SITRANS LR250 horn version enclosures (&lt; 3.6 mA start-up HART)</b>	
	
SITRANS LR250 horn version enclosure with board stack, M20 cable inlet, approval option A, with HART communication start-up at < 3.6 mA, no process connection	<b>A5E02956317</b>
SITRANS LR250 horn version enclosure with board stack, M20 cable inlet, approval option C, with HART communication start-up at < 3.6 mA, no process connection	<b>A5E02956319</b>
SITRANS LR250 horn version enclosure with board stack, M20 cable inlet, approval option E, with HART communication start-up at < 3.6 mA, no process connection	<b>A5E02956320</b>
SITRANS LR250 horn version enclosure with board stack, M20 cable inlet, approval option F, with HART communication start-up at < 3.6 mA, no process connection	<b>A5E02956322</b>
SITRANS LR250 horn version enclosure with board stack, M20 cable inlet, approval option G, with HART communication start-up at < 3.6 mA, no process connection	<b>A5E02956323</b>
LR250 horn version enclosure with board stack, NPT cable inlet, approval option A, with HART communication start-up at < 3.6 mA, no process connection	<b>A5E03441096</b>
LR250 horn version enclosure with board stack, NPT cable inlet, approval option B, with HART communication start-up at < 3.6 mA, no process connection	<b>A5E03441097</b>
LR250 horn version enclosure with board stack, NPT cable inlet, approval option D, with HART communication start-up at < 3.6 mA, no process connection	<b>A5E03441098</b>
LR250 horn version enclosure with board stack, NPT cable inlet, approval option H, with HART communication start-up at < 3.6 mA, no process connection	<b>A5E03441099</b>
<b>SITRANS LR250 horn antenna and extension kits</b>	
	
38 mm (1.5 inch) horn antenna kit, 1.5 inch Process Connections only	<b>A5E01151539</b>
100 mm (4 inch) horn antenna extension kit, 1.5 inch Process Connections only	<b>A5E01151553</b>
50 mm (2 inch) stainless steel 316L horn antenna kit	<b>A5E01151569</b>
75 mm (3 inch) stainless steel 316L horn antenna kit	<b>A5E01151571</b>
100 mm (4 inch) stainless steel 316L horn antenna kit	<b>A5E01151573</b>
100 mm (4 inch) horn antenna extension kit, 50 mm (2 inch), 75 mm (3 inch) and 100 mm (4 inch) process connection	<b>A5E01151577</b>
50 mm (2 inch) horn antenna kit, Hastelloy C-22	<b>A5E01151584</b>
75 mm (3 inch) horn antenna kit, Hastelloy C-22	<b>A5E01151585</b>
100 mm (4 inch) horn antenna kit, Hastelloy C-22	<b>A5E01151587</b>
5 Dupont 1Gr Polyback, PTFE grease kit	<b>A5E01151626</b>
LR250 lid with O-ring	<b>A5E02465410</b>

C) Subject to export regulations AL: N, ECCN: EAR99.

J) Subject to export regulations AL: 91999, ECCN: EAR99.

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