Continuous level measurement Radar transmitters

#### SITRANS LR250 Flanged Encapsulated Antenna

#### Overview



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SITRANS LR250 with flanged encapsulated antenna is a 2-wire, 25 GHz pulse radar level transmitter for continuous monitoring of liquids and slurries in storage and process vessels including corrosives or aggressive materials, to a range of 20 m (66 ft) (antenna dependent).

#### Benefits

- Fully encapsulated horn antenna design with FDA approved TFM 1600 PTFE lens for use in chemical and sanitary environments where aggressive and corrosive materials are used
- Cost effective replacement for transmitters made of exotic materials
- 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 and 50 mm (2 inch) process connection/antenna allow for easy mounting
- 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, 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
- Functional Safety (SIL 2). Device suitable for use in accordance with IEC 61508 and IEC 61511
- Suitable for API 2350

#### 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 Quick Start Wizard with a few parameters required for basic operation.

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

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

SITRANS LR250 measures superbly in small vessels and in tanks/vessels up to 20 m (66 ft) on materials with dk > 1.6.

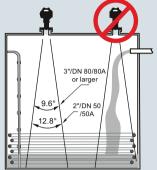
 Key Applications: liquid bulk storage tanks, process vessels with agitators, vaporous liquids, temperatures to 170 °C (338 °F), corrosive and aggressive materials and applications where ease of cleaning is required such as food or fine chemicals

#### Configuration

#### Installation

#### Note:

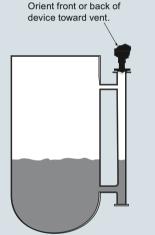
- Beam angle is the width of the cone where the energy density is half of the peak energy density.
- The peak energy density is directly in front of and in line with the antenna.
- There is a signal transmitted outside of the beam angle; therefore false targets may be detected.



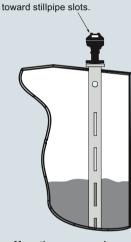
#### Mounting on bypass

Mounting on stilling well

Orient front or back of device



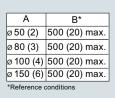
Mounting on vessel



Mounting on a nozzle

в





SITRANS LR250 Flanged Encapsulated Antenna installation, dimensions in mm (inch)

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SITRANS LR250 Flanged Encapsulated Antenna

# Technical specifications

Technical specifications		
Mode of operation		Process
Measuring principle	Radar level measurement	Flanged
Frequency	K-band (25.0 GHz)	
Minimum measuring range	50 mm (2 inch) from end of antenna	
Maximum measuring range	20 m (66 ft)	
Output		Power s
HART	Version 5.1	4 20 n
Analog output	4 20 mA + 0.02 mA	4 20 11
<ul><li>Accuracy</li><li>Fail-safe</li></ul>	<ul> <li>Programmable as high low or hold</li> </ul>	PROFIB
	(loss of echo) • NE 43 programmable	
PROFIBUS PA	Profile 3.01	FOUNDA
Function blocks	2 Analog Input (AI)	Certifica
FOUNDATION Fieldbus	H1	General
Functionality	Basic or LAS	Radio
<ul><li>Version</li><li>Function blocks</li></ul>	ITK 5.2.0 2 Analog Input (AI)	Hazardo
Performance (according to refer-		<ul> <li>Explos</li> </ul>
ence conditions IEC60770-1)		<ul> <li>Increase</li> </ul>
Maximum measured error	• > 500 mm from sensor reference	
	<ul><li>point: 3 mm (0.118 inch)</li><li>&lt; 500 mm from sensor reference</li></ul>	<ul> <li>Intrinsi</li> </ul>
	point: 25 mm (1 inch)	<ul> <li>Explos</li> </ul>
Influence of ambient temperature	< 0.003 %/K	
Rated operating conditions		<ul> <li>Intrinsi</li> </ul>
Installation conditions		
Location	Indoor/outdoor	• Non-in
Ambient conditions (enclosure)		<ul> <li>Flame</li> </ul>
Ambient temperature	-40 +80 °C (-40 +176 °F)	(China
<ul> <li>Installation category</li> </ul>	1	<ul> <li>Intrinsi</li> </ul>
Pollution degree	4	
Medium conditions		<ul> <li>Non-sp (China)</li> </ul>
Dielectric constant $\varepsilon_r$	≥ 1.6 (antenna dependent)	<ul> <li>Intrinsi</li> </ul>
Process temperature	-40 +170 °C (-40 +338 °F) at process connection	
Process pressure	See Pressure/Temperature curves for	<ul> <li>Non-sp (Europ)</li> </ul>
	more information (page 4/242)	• Flame
Design		
Enclosure		Increase
<ul><li>Material</li><li>Cable inlet</li></ul>	Aluminum, polyester powder-coated 2 x M20 x 1.5 or 2 x 1/2" NPT	(-Interr
Degree of protection	Type 4X/NEMA 4X, Type 6/NEMA 6,	<ul> <li>Intrinsi</li> </ul>
203.00 01 21000001	IP67, IP68	
Weight (dependent on process con-	Approx. 7 kg (15.43 lb) for 2" Class     ASME P16 E reject for a flange	<ul> <li>Explos (Russia)</li> </ul>
nection)	150 ASME B16.5 raised face flange (smallest size)	<ul> <li>Increase</li> </ul>
	<ul> <li>Approx. 17.7 kg (39.02 lb) for 6" Class 150 ASME B16.5 raised face</li> </ul>	(Russia
	flange (largest size)	<ul> <li>Intrinsi (Russia)</li> </ul>
Display (local)	Graphic local user interface including	<ul> <li>Marine</li> </ul>
	quick start wizard and echo profile display	
Antenna	. ,	<ul> <li>Function</li> </ul>
Material	Stainless Steel 316L (1.4435 or	
	1.4404) and TFM 1600 PTFE Lens (lens is the only wetted part)	
<ul> <li>Dimensions (nominal sizes)</li> </ul>	48 mm (2 inch), 80 mm (3 inch),	
	100 mm (4 inch), 150 mm (6 inch)	

rocess connections	
langed connection	Raised Face
	<ul> <li>2, 3, 4, 6" Class 150 ASME B16.5</li> <li>50A, 80A, 100A, 150A 10K JIS B 2220</li> </ul>
	• DN 50, DN 80, DN 100 & DN 150 PN 10/16 EN 1092-1 type B1
ower supply	
20 mA/HART	Nominal 24 V DC (max. 30 V DC) with max. 550 $\Omega$
ROFIBUS PA	<ul><li>15 mA</li><li>Per IEC 61158-2</li></ul>
OUNDATION Fieldbus	• 20.0 mA • Per IEC 61158-2
ertificates and approvals	
ieneral	CSA <sub>US/C</sub> , CE, FM, RCM
adio	FCC, Industry Canada, RED, RCM
lazardous	
Explosion Proof (Brazil)	INMETRO Ex d ia mb IIC T4 Ga/Gb, Ex ia ta IIIC T100 °C Da
Increased Safety (Brazil)	INMETRO Ex e ia mb IIC T4 Ga/Gb, Ex ia ta IIIC T100 °C Da
Intrinsically Safe (Brazil)	INMETRO Ex ia IIC T4 Ga, Ex ia ta IIIC T100 °C Da
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
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
Flame Proof/Increased Safety (China)	NEPSI Ex d ia mb IIC T4 Ga/Gb, Ex e ia mb IIC T4 Ga/Gb, Ex iaD tD A20 IP67 T100 °C
Intrinsically Safe (China)	NEPSI Ex ia IIC T4 Ga, Ex iaD tD A20 IP67 T100 °C
Non-sparking/Energy Limited (China)	NEPSI Ex nA IIC T4 Gc
Intrinsically Safe (Europe)	ATEX II 1G Ex ia IIC T4 Ga
Non-sparking/Energy Limited	ATEX II 1D Ex ia ta IIIC T100 °C Da ATEX II 3G Ex nA IIC T4 Gc
(Europe) Flame Proof (International/Europe)	IECEx/ATEX II 1/2 GD, 1D, 2D Ex d mb ia IIC T4 Ga/Gb, Ex ia ta IIC T100 °C Da
Increased Safety (-International/Europe)	IECEx/ATEX II 1/2 GD, 1D, 2D, Ex e mb ia IIC T4 Ga/Gb, Ex ia ta IIIC T100 °C Da
Intrinsically Safe (International)	IECEx/ATEX II 1 G Ex ia IIC T4 Ga, IECEx/ATEX II 1D Ex ia ta IIIC T100 °C Da
Explosion Proof (Russia/Kazakhstan)	EAC Ex d
Increased Safety (Russia/Kazakhstan)	EAC Ex e
Intrinsically Safe (Russia/Kazakhstan)	EAC Ex ia
Marine	<ul> <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

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# SITRANS LR250 Flanged Encapsulated Antenna

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#### Programming

riogramming	
Intrinsically Safe Siemens handheld programmer	Infrared receiver
Approvals for handheld-program- mer	IS model: ATEX II 1 GD Ex ia IIC T4 Ga Ex ia D 20 T135 °C T <sub>a</sub> = -20 +50 °C CSA/FM Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G, T6 T <sub>a</sub> = 50 °C IECEx SIR 09.0073
Handheld communicator	HART communicator 375/475
PC	<ul> <li>SIMATIC PDM</li> <li>Emerson AMS</li> <li>SITRANS DTM (for connection into FDT such as PACTware or Field- care)</li> </ul>
Display (local)	Graphic local user interface including quick start wizard and echo profile displays

Selection and Ordering data	Article No.
SITRANS LR250 flanged encapsulated antenna 🧷	7ML5432-
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) (antenna dependant). Ideal for corrosive, aggressive and low dielectric media.	0 -
Click on the Article No. for the online configura- tion in the PIA Life Cycle Portal.	
Process Connection Material	
Stainless steel 1.4404/1.4435	0
Process Connection Type Flanged Process Connection Types (stainless steel 1.4404/1.4435) 2" Class 150 ASME B16.5 raised face <sup>1)</sup> 3" Class 150 ASME B16.5 raised face 4" Class 150 ASME B16.5 raised face 6" Class 150 ASME B16.5 raised face 6" Class 150 ASME B16.5 raised face	BF BG BH BJ
50A 10K JIS B 2220 raised face <sup>1)</sup> 80A 10K JIS B 2220 raised face 100A 10K JIS B 2220 raised face 150A 10K JIS B 2220 raised face DN 50 PN 10/16 EN 1092-1 type B1 raised face <sup>1)</sup> DN 80 PN 10/16 EN 1092-1 type B1 raised face DN 100 PN 10/16 EN 1092-1 type B1 raised face DN 150 PN 10/16 EN 1092-1 type B1 raised face	F D F E F G G A G B G C G D
Communication/Output PROFIBUS PA 4 20 mA, HART, start-up at < 3.6 mA FOUNDATION Fieldbus	1 2 3
Enclosure/Cable inlet	
Aluminum, Epoxy painted 2 x ½" NPT 2 x M20 x 1.5	0
Antenna lens material	
TFM 1600 PTFE Flush Lens	Α
Approvals	
General Purpose, CE, CSA, FM, FCC, RED, RCM Intrinsically Safe: CSA/FM Class I, Div. 1, Groups A, B, C, D, Class II, Div. 1, Groups E, F, G, Class III T4 FCC, Industry Canada	A B
Intrinsically Safe: IECEx/ATEX II 1 G Ex ia IIC T4 Ga, IECEx/ATEX II 1D Ex ia ta IIIC T100 °C Da, INMETRO Ex ia IIC T4 Ga, Ex ia ta IIIC T100 °C Da, CE, RED, RCM	С
Non-incendive: CSA/FM Class I, Div. 2, Groups A, B, C, D T5, FCC, Industry Canada	D
Non Sparking: ATEX II 3G Ex nA IIC T4 Gc, CE, RED, RCM	E
Increased Safety: IECEx/ATEX II 1/2 GD,1D, 2D Ex e mb ia IIC T4 Ga/Gb, Ex ia ta IIIC T100 °C Da, INMETRO Ex e ia mb IIC T4 Ga/Gb, Ex ia ta IIIC T100 °C Da, CE, RED, RCM <sup>2)</sup>	F
Flameproof: IECEX/ATEX II 1/2 GD 1D, 2D Ex d mb ia IIC T4 Ga/Gb, Ex ia ta IIIC T100 °C Da, INMETRO Ex d ia mb IIC T4 Ga/Gb, Ex ia ta IIIC T100 °C Da, CE, RED, RCM <sup>2)</sup>	G
Explosion proof: CSA/FM Class I, II and III, Div. 1, Groups A, B, C, D, E, F, G, FCC, Industry Canada <sup>2)</sup> Non Sparking: NEPSI Ex nA IIC T4 Gc	н к
Intrinsically Safe: NEPSI Ex ia IIC T4 Ga, Ex iaD tD A20 IP67 T100 °C	L
Flameproof: NEPSI Ex d ia mb IIC T4 Ga/Gb, Ex iaD tD A20 IP67 T100 $^{\circ}C^{2}$ Increased Safety: NEPSI Ex e ia mb IIC T4 Ga/Gb, Ex iaD tD A20 IP67 T100 $^{\circ}C^{2}$	M
Pressure rating	
Rating per Pressure/Temperature curves in instruction manual	0
<sup>1)</sup> Maximum range 10 m (32.8 ft), dk > 3 [20 m (66 ft)] an	d dk > 1.6 when

 $^{1)}$  Maximum range 10 m (32.8 ft), dk > 3 [20 m (66 ft)] and dk > 1.6 when mounted in stillpipe]

<sup>2)</sup> Applicable with communication option 2 only

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Selection and Ordering data	Order code	Selection and Ordering data	Article No.
Further designs		Compact Operating Instructions for	
Please add "-Z" to Article No. and specify Order		FOUNDATION Fieldbus device	
code(s).		English, French, German, Spanish, Italian, Dutch, Danish, Finnish, Greek, Portuguese (Portugal),	A5E33472700
Plug M12 with mating Connector <sup>1)2)3)</sup>	A50	Swedish	
Plug 7/8" with mating Connector <sup>2)3)4)</sup>	A55	English, Bulgarian, Czech, Estonian, Hungarian,	A5E33472738
Stainless steel tag [69 x 50 mm (2.71 x 1.97 inch)]: Measuring-point number/identification (max. 27 characters); specify in plain text	Y15	Latvian, Lithuanian, Polish, Romanian, Slovakian, Slovenian	
	011	English, Portuguese (Brazil), Chinese	A5E34046626
Manufacturer's test certificate: M to DIN 55350, Part 18 and to ISO 9000	C11	Note: The Operating Instructions should be ordered as a separate line item on the order.	
Material inspection Certificate Type 3.1 per EN 10204	C12	All literature is available to download for free, in a range of languages, at http://www.siemens.com/	
Functional Safety (SIL 2). Device suitable for use in	C20	processinstrumentation/documentation	
accordance with IEC 61508 and IEC 61511 <sup>5)6)</sup>		Other Operating Instructions	
Namur NE43 compliant, device preset to failsafe	N07	SITRANS LR250 Functional Safety manual, English	A5E32286471
Compact Operating Instructions for HART/	Article No	Note: The Operating Instructions should be ordered as a separate line item on the order.	
mA device English, French, German, Spanish, Italian, Dutch,	A5E33469191	All literature is available to download for free, in a range of languages, at http://www.siemens.com/	
Danish, Finnish, Greek, Portuguese (Portugal),		processinstrumentation/documentation	
Swedish		Accessories	
English, Bulgarian, Czech, Estonian, Hungarian, _atvian, Lithuanian, Polish, Romanian, Slovakian,	A5E33469171	Handheld programmer, Intrinsically safe, EEx ia	7ML1930-1BK
Slovenian		HART modem/USB	7MF4997-1DE
English, Portuguese (Brazil), Chinese	A5E34046583	(for use with a PC and SIMATIC PDM)	
Note: The Operating Instructions should be ordered as a separate line item on the order.		One metallic cable gland M20 x 1.5, rated -40 +80 °C (-40 +176 °F), HART (2 are required) <sup>6)</sup>	7ML1930-1AP
All literature is available to download for free, in a		One metallic cable gland M20 $\times$ 1.5,	7ML1930-1AC
ange of languages, at http://www.siemens.com/ processinstrumentation/documentation		rated -40 +80 °C (-40 +176 °F), PROFIBUS PA and FOUNDATION Fieldbus (2 are required) <sup>2)</sup>	TME 1950-TAG
Compact Operating Instructions for PROFIBUS PA device		SITRANS RD100, loop powered display - see Chapter 7	7ML5741
English, French, German, Spanish, Italian, Dutch, Danish, Finnish, Greek, Portuguese (Portugal), Swedish	A5E33469239	SITRANS RD200, universal input display with Modbus conversion - see Chapter 7	7ML5740
English, Bulgarian, Czech, Estonian, Hungarian, Latvian, Lithuanian, Polish, Romanian, Slovakian, Slovenian	A5E33472685	SITRANS RD300, dual line display with totalizer and linearization curve and Modbus conversion - see Chapter 7	7ML5744
English, Portuguese (Brazil), Chinese	A5E34046624	SITRANS RD500 web, universal remote monitoring solution for instrumentation - see Chapter 7	7ML5750
Note: The Operating Instructions should be ordered as a separate line item on the order.		For applicable back up point level switch - see point level measurement section	
All literature is available to download for free, in a			
ange of languages, at http://www.siemens.com/ processinstrumentation/documentation		1) Available with enclosure option 1 only	
πος ε ε ε πει α ΠΕΠΙΔΙΙΟΠ/αος α ΠΕΠΙΔΙΙΟΠ		<sup>2)</sup> Available with communication options 1 and 3 only	
		<ol> <li>Available with approval options A, B, C, and L only</li> <li>Available with enclosure option 0 only</li> </ol>	

<sup>4)</sup> Available with enclosure option 0 only

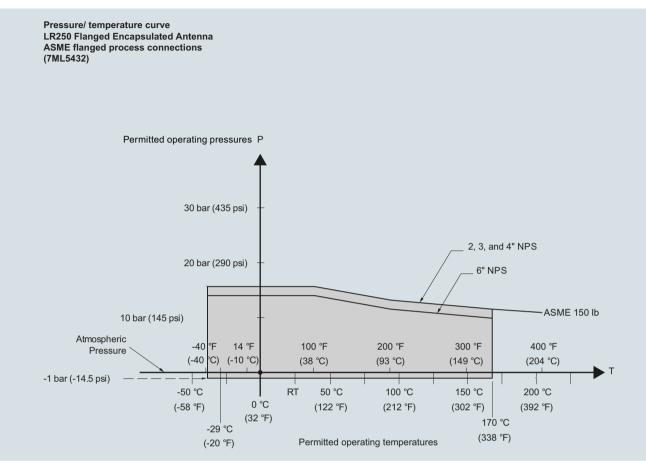
<sup>5)</sup> Applicable with communication option 2 only

<sup>6)</sup> Available with approval options A, B, C, D, E, K, and L only

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SITRANS LR250 Flanged Encapsulated Antenna

### Characteristic curves

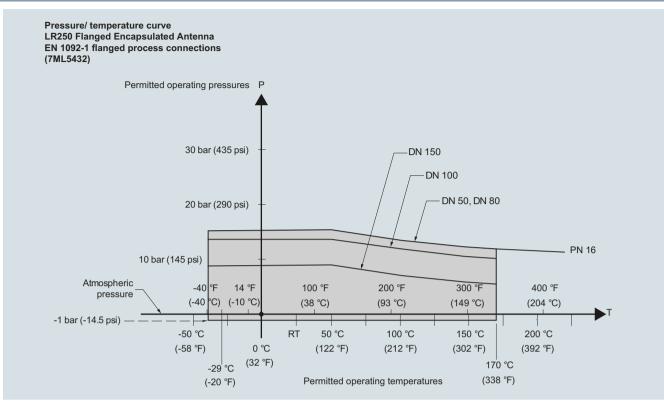


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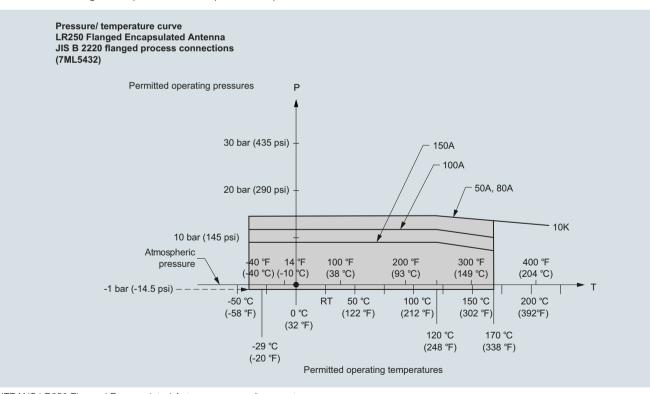
SITRANS LR250 Flanged Encapsulated Antenna pressure/temperature curve

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SITRANS LR250 Flanged Encapsulated Antenna pressure/temperature curve



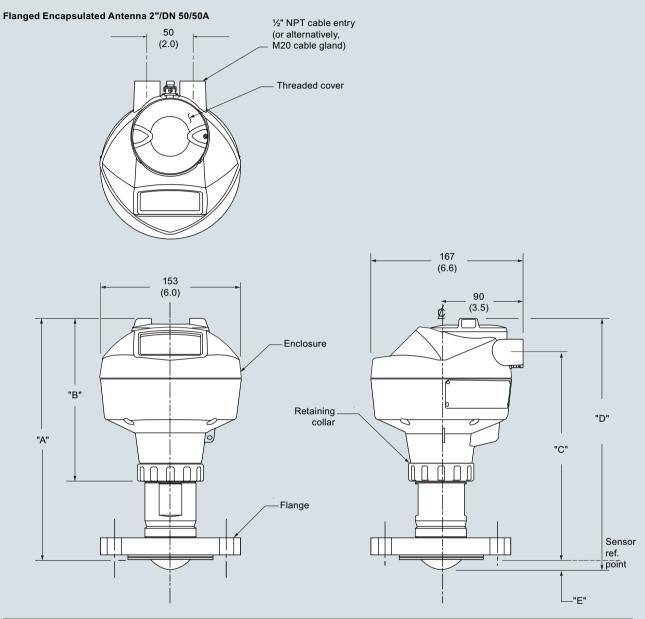
SITRANS LR250 Flanged Encapsulated Antenna pressure/temperature curve

### Level Measurement Continuous level measurement

Radar transmitters

# SITRANS LR250 Flanged Encapsulated Antenna

## Dimensional drawings



Flange Size	Flange Class	Flange O.D.	Antenna aperture size	Height to Sensor reference point dimension E <sup>1)</sup>	Beam angle	Measurement Range	Dimension A	Dimension B	Dimension C	Dimension D
2"	150 lb	152 (5.98)								
DN 50	PN 10/16	165 (6.50)	50	11	12.8°	10 m	263	178	223	274
50A	10K	155 (6.10)	(1.97)	(0.43)		(32.8 ft)	(10.35)	(7)	(8.78)	(10.79)

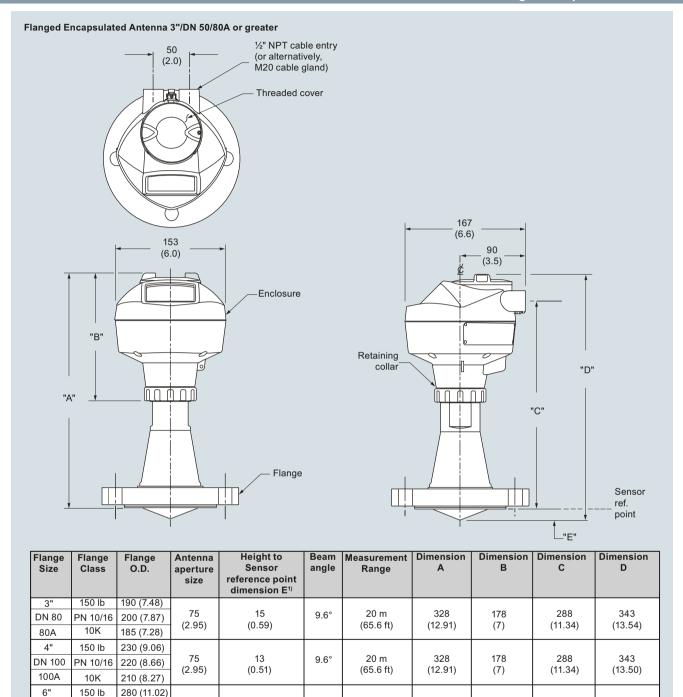
<sup>1)</sup> Height from tip of lens to sensor reference point as shown.

SITRANS LR250 Flanged Encapsulated Antenna, dimensions in mm (inch)

4

Continuous level measurement Radar transmitters

SITRANS LR250 Flanged Encapsulated Antenna



20 m

(65.6 ft)

9.6°

333

(13.11)

178

(7)

293

(11.54)

348

(13.70)

<sup>1)</sup> Height from tip of lens to sensor reference point as shown.

285 (11.25)

280 (11.02)

DN 150

150A

PN 10/16

10K

SITRANS LR250 Flanged Encapsulated Antenna, dimensions in mm (inch)

75

(2.95)

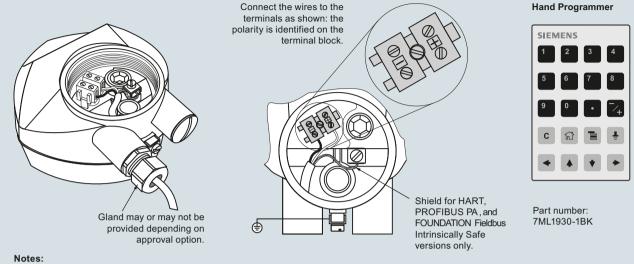
15

(0.59)

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SITRANS LR250 Flanged Encapsulated Antenna

#### Circuit diagrams



- 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 ... 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

Continuous level measurement

Radar transmitters

# SITRANS LR250 Flanged Encapsulated Specials

# Selection and ordering data

SITRANS LR250 Flanged Encapsulated Specials		SITRANS LR250 Flanged Encapsulated Specials	i
	Article No.		Article No.
NOTE: LR260 head can be supplied with any LR250 process connection or antenna as special order. For LR250, this means a stronger signal and longer measurement range is possible.		SITRANS LR250 flanged encapsulated antenna version enclosures (< 3.6 mA start-up HART models) SITRANS LR250 flanged encapsulated antenna version (7ML5432) enclosure with board stack, M20 cable inlet, approval option A,	A5E32462865
SITRANS LR250 flanged encapsulated antenna version enclosures (PROFIBUS PA models) SITRANS LR250 flanged encapsulated antenna version (7ML5432) enclosure with board stack, M20 cable inlet, approval option A, with PROFIBUS PA communication, no process	A5E32462853	with HART communication start-up at < 3.6 mA, no process connection SITRANS LR250 flanged encapsulated antenna version (7ML5432) enclosure with board stack, NPT cable inlet, approval option A, with HART communication start-up	A5E32462866
connection SITRANS LR250 flanged encapsulated antenna version (7ML5432) enclosure with board stack, NPT cable inlet, approval option A, with PROFIBUS PA communication, no process connection SITRANS LR250 flanged encapsulated antenna	A5E32462854	at < 3.6 mA, no process connection SITRANS LR250 flanged encapsulated antenna version (7ML5432) enclosure with board stack, NPT cable inlet, approval option B, with HART communication start-up at < 3.6 mA, no process connection	A5E32462867
version (7ML5432) enclosure with board stack, NPT cable inlet, approval option B, with PROFIBUS PA communication, no process connection SITRANS LR250 flanged encapsulated antenna version (7ML5432) enclosure with board stack,	A5E32462855	SITRANS LR250 flanged encapsulated antenna version (7ML5432) enclosure with board stack, M20 cable inlet, approval option C, with HART communication start-up at < 3.6 mA, no process connection	A5E32462868
M20 cable inlet, approval option C, with PROFIBUS PA communication, no process connection SITRANS LR250 flanged encapsulated antenna version (7ML5432) enclosure with board stack,	A5E32462857	SITRANS LR250 flanged encapsulated antenna version (7ML5432) enclosure with board stack, NPT cable inlet, approval option D, with HART communication start-up at < 3.6 mA, no process connection SITRANS LR250 flanged encapsulated antenna	A5E32462869 A5E32462830
NPT cable inlet, approval option D, with PROFIBUS PA communication, no process connection SITRANS LR250 flanged encapsulated antenna version (7ML5432) enclosure with board stack,	A5E32462858	version (7ML5432) enclosure with board stack, M20 cable inlet, approval option E, with HART communication start-up at < 3.6 mA, no process connection	
M20 cable inlet, approval option E, with PROFIBUS PA communication, no process connection SITRANS LR250 flanged encapsulated antenna version enclosures		SITRANS LR250 flanged encapsulated antenna version (7ML5432) enclosure with board stack, M20 cable inlet, approval option F, with HART communication start-up at < 3.6 mA, no process connection	A5E32462831
(FOUNDATION Fieldbus models) SITRANS LR250 flanged encapsulated antenna version (7ML5432) enclosure with board stack, M20 cable inlet, approval option A, with FOUNDATION Fieldbus communication,	A5E32462859	SITRANS LR250 flanged encapsulated antenna version (7ML5432) enclosure with board stack, M20 cable inlet, approval option G, with HART communication start-up at < 3.6 mA, no process connection	A5E32462832
no process connection SITRANS LR250 flanged encapsulated antenna version (7ML5432) enclosure with board stack, NPT cable inlet, approval option A, with FOUNDATION Fieldbus communication, no process connection	A5E32462860	SITRANS LR250 flanged encapsulated antenna version (7ML5432) enclosure with board stack, NPT cable inlet, approval option H, with HART communication start-up at < 3.6 mA, no process connection	A5E32462833
SITRANS LR250 flanged encapsulated antenna version (7ML5432) enclosure with board stack, NPT cable inlet, approval option B, with FOUNDATION Fieldbus communication, no process connection	A5E32462861		
SITRANS LR250 flanged encapsulated antenna version (7ML5432) enclosure with board stack, M20 cable inlet, approval option C, with FOUNDATION Fieldbus communication, no process connection	A5E32462862		
SITRANS LR250 flanged encapsulated antenna version (7ML5432) enclosure with board stack, NPT cable inlet, approval option D, with FOUNDATION Fieldbus communication, no process connection	A5E32462863		
SITRANS LR250 flanged encapsulated antenna version (7ML5432) enclosure with board stack, M20 cable inlet, approval option E, with FOUNDATION Fieldbus communication, no process connection	A5E32462864		

Continuous level measurement Radar transmitters

SITRANS LR250 Flanged Encapsulated Specials	OITD ANO I DOEO		
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SITRANS LR250 Flanged Encapsulated Specials	
	Article No.
SITRANS LR250 flanged encapsulated	
antenna lens kits	
Replacement TFM 1600 Lens and Spring Washer Kit for 2" Class 150 ASME B16.5 raised face	A5E32462817
Replacement TFM 1600 Lens and Spring Washer	A5E32462819
Kit for 3" Class 150 ASME B16.5 raised face	10202102010
Replacement TFM 1600 Lens and Spring Washer Kit for 4" Class 150 ASME B16.5 raised face	A5E32462820
Replacement TFM 1600 Lens and Spring Washer Kit for 6" Class 150 ASME B16.5 raised face	A5E32462821
Replacement TFM 1600 Lens and Spring Washer Kit for 50A 10K JIS B 2220 raised face	A5E32462822
Replacement TFM 1600 Lens and Spring Washer Kit for 80A 10K JIS B 2220 raised face	A5E32462823
Replacement TFM 1600 Lens and Spring Washer Kit for 100A 10K JIS B 2220 raised face	A5E32462824
Replacement TFM 1600 Lens and Spring Washer Kit for 150A 10K JIS B 2220 raised face	A5E32462825
Replacement TFM 1600 Lens and Spring Washer Kit for DN 50 PN 10/16 EN 1092-1 type B1 raised face	A5E32462826
Replacement TFM 1600 Lens and Spring Washer Kit for DN 80 PN 10/16 EN 1092-1 type B1 raised face	A5E32462827
Replacement TFM 1600 Lens and Spring Washer Kit for DN 100 PN 10/16 EN 1092-1 type B1 raised face	A5E32462828
Replacement TFM 1600 Lens and Spring Washer Kit for DN 150 PN 10/16 EN 1092-1 type B1 raised face	A5E32462829
Ex-proof plugs	
Ex-proof plugs kit, 1/2" NPT, qty 5	A5E39979991
Ex-proof plugs kit, M20, qty 5	A5E39979992