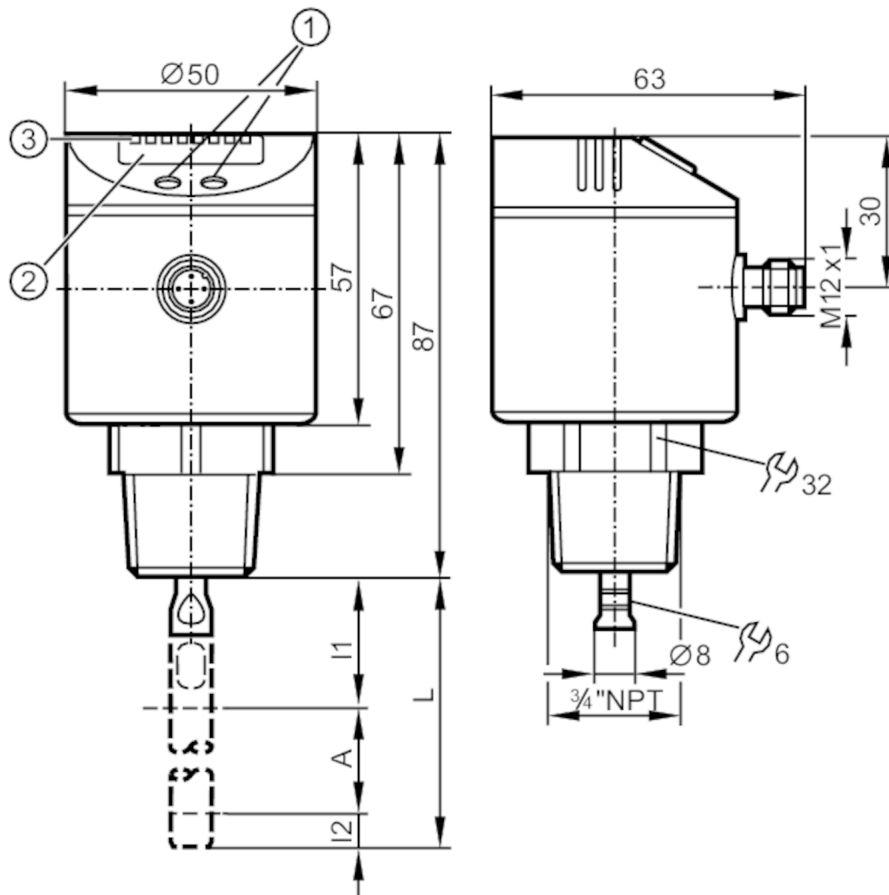


LR3300



Continuous level sensor (guided wave radar)

LR0000B-BN34AMPKG/US



- 1 alphanumeric display 4-digit
- 2 LEDs Display unit / Switching status
- 3 Programming buttons
- A Active zone
- I1 / I2 Inactive ranges



Application	
Media	hydrous coolants; water; media similar to water
Dielectric constant of the medium	≥ 20
Recommended media	hydrous coolants; water; media similar to water
Conditionally suitable for	acids; alkali
Cannot be used for	oils; greases; granulates; bulk material; acids; alkali; heavily foaming media
Medium temperature [°C]	0...80; (90 < 1 h)
Tank pressure [bar]	-1...16
MAWP (for applications according to CRN) [bar]	25

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Electrical data		
Operating voltage [V]		18...30 DC
Current consumption [mA]		< 80
Protection class		III
Reverse polarity protection		yes
Power-on delay time [s]		< 3
Inputs / outputs		
Number of inputs and outputs		Number of digital outputs: 1; Number of analog outputs: 1
Outputs		
Total number of outputs		2
Output signal		switching signal; analog signal; IO-Link
Electrical design		PNP
Number of digital outputs		1
Output function		normally open / closed; (configurable)
Max. voltage drop switching output DC [V]		2.5
Permanent current rating of switching output DC [mA]		200
Number of analog outputs		1
Analog current output [mA]		4...20
Max. load [Ω]		500
Analog voltage output [V]		0...10
Min. load resistance [Ω]		2000
Short-circuit protection		yes
Type of short-circuit protection		thermal, pulsed
Overload protection		yes
Measuring/setting range		
Probe length L [mm]		100...1600
Active range A [mm]		L-40
Inactive range I1 / I2 [mm]		30 / 10
Setting range		
Set point SP [mm]		$\geq 15 / \leq L-30$
Reset point rP [mm]		$\geq 10 / \leq L-35$
in steps of [mm]		5
Hysteresis [mm]		> 5
Accuracy / deviations		
Repeatability [mm]		± 5
Switch point accuracy [mm]		$\pm (15 + 0,5 \%)$; (% of the final value of the measuring range: L - 30 mm)
Characteristics deviation		± 10
Offset error [mm]		10
Resolution [mm]		0.5 (L < 300 mm)

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		0.2% MEW (L > 300 mm)
Zero signal (voltage)	[V]	0...0.02
Zero signal (current)	[mA]	3.95...4.0
Full signal (voltage)	[V]	10.0...10.1
Full signal (current)	[mA]	20...20.2

Interfaces

Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
SDCI standard		IEC 61131-9 CDV
IO-Link device ID		345 d / 00 01 59 h
Profiles		no profile
SIO mode		yes
Required master port class		A
Process data analogue		1
Process data binary		1
Min. process cycle time	[ms]	2.3

Operating conditions

Ambient temperature	[°C]	0...60
Storage temperature	[°C]	-25...80
Protection		IP 67

Tests / approvals

EMC		IEC 60947-1	
Shock resistance		DIN IEC 68-2-27	50 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	5 g (10...2000 Hz)
MTTF	[years]		174.71

Mechanical data

Weight	[g]	345
Material		stainless steel (1.4301 / 304); FKM; PBT; PC; PEI; TPE-V; PTFE
Materials (wetted parts)		stainless steel (1.4305 / 303); probe connection: stainless steel (1.4435 / 316L); PTFE; FKM
Process connection		3/4" NPT

Displays / operating elements

Display	Display unit	3 x LED, green
	Switching status	1 x LED, yellow
	Level	alphanumeric display, 4-digit
	Parameter setting	alphanumeric display, 4-digit

Accessories

Accessories (optional)	Probe:, E43203...E43205 / E43207...E43210
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Remarks

Pack quantity	1 pcs.
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Electrical connection

Connector: 1 x M12; Contacts: gold-plated

LR3300

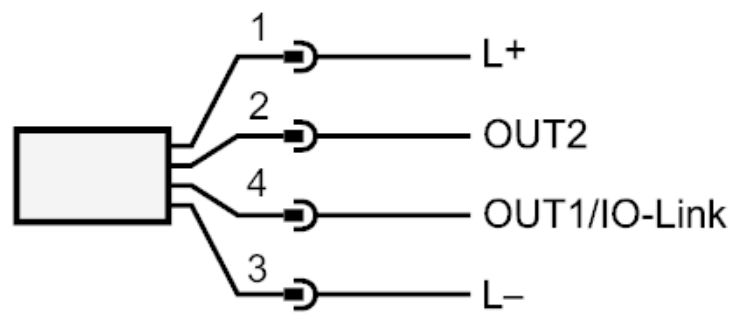


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Connection



OUT1: Switching output

OUT2: analog output