

LR8300

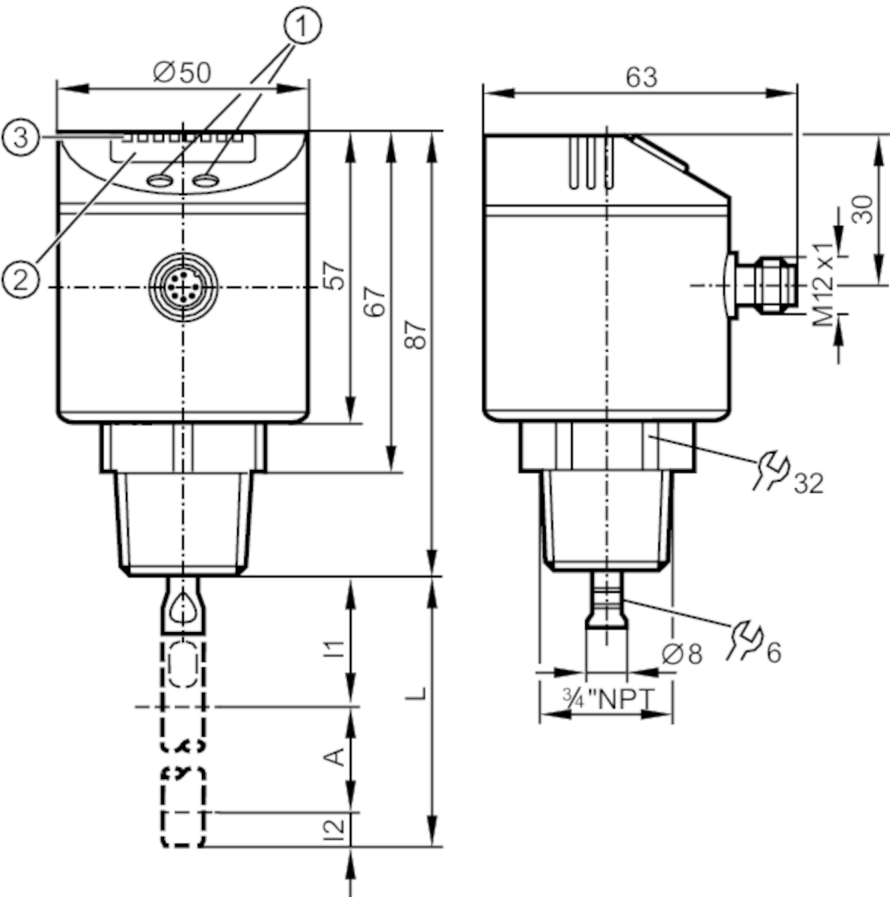


Continuous level sensor (guided wave radar)

LR0000B-BN34ASPKG/US

For high process temperatures: The temperature at the process connection is decisive. The actual medium temperature may be higher.

For 8-pole sockets the core colours are not standardised.
Please note the wiring of the sensor and the sockets (see data sheet).
Please see the technical note under "Downloads"



- 1 alphanumeric display 4-digit
- 2 LEDs Display unit / switching status
- 3 programming buttons
- A active range
- I1 / I2 inactive ranges



Product characteristics	
Number of inputs and outputs	Number of digital outputs: 4
Probe length L [mm]	100...1600
Process connection	threaded connection 3/4" NPT external thread
Application	
Special feature	Gold-plated contacts
Application	for industrial applications
Media	Liquids



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Dielectric constant of the medium		≥ 5
Recommended media		water; hydrous media
Cannot be used for		See the operating instructions, chapter "Function and features".
Process temperature	[°C]	-25...80; (90 < 1 h ; see note under remarks)
Pressure rating	[bar]	16
Vacuum resistance	[mbar]	-1000
MAWP (for applications according to CRN)	[bar]	16

Electrical data		
Operating voltage	[V]	18...30 DC
Current consumption	[mA]	< 30
Protection class		III
Reverse polarity protection		yes
Power-on delay time	[s]	< 3
Measuring principle		guided wave radar

Inputs / outputs	
Number of inputs and outputs	Number of digital outputs: 4

Outputs		
Total number of outputs		4
Output signal		switching signal; IO-Link
Electrical design		PNP
Number of digital outputs		4
Output function		normally open / normally closed; (parameterisable)
Max. voltage drop switching output DC	[V]	2.5
Permanent current rating of switching output DC	[mA]	200
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
Sampling rate	[Hz]	4

Setting range		
Set point SP	[mm]	15...L-30
Reset point rP	[mm]	10... L-35
In steps of	[mm]	5
Hysteresis	[mm]	> 5

Accuracy / deviations		
Repeatability	[mm]	± 5
Measuring error	[mm]	± 7

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Offset error	[mm]	5
Resolution	[mm]	1
Temperature drift per 10 K		± 0.2 %

Interfaces		
Communication interface	IO-Link	
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.1	
SDCI standard	IEC 61131-9 CDV	
Profiles	no profile	
SIO mode	yes	
Required master port type	A	
Process data analogue	1	
Process data binary	4	
Min. process cycle time	[ms]	2.3
Supported DeviceIDs	Type of operation	DeviceID
	default	11

Operating conditions		
Ambient temperature	[°C]	-25...60
Storage temperature	[°C]	-40...85
Protection		IP 67

Tests / approvals		
EMC	DIN EN 61000-6-2	
	DIN EN 61000-6-3	in a closed metal tank
	DIN EN 61000-6-4	in plastic or open metal tanks
Shock resistance	DIN EN 60068-2-27	50 g (11 ms) / 25 g (6 ms) with reference rod 0.5 m
Vibration resistance	DIN EN 60068-2-6	5 g (10...2000 Hz) / 1 g (5...200 Hz) with reference rod 0.5 m
MTTF	[years]	205

Mechanical data		
Weight	[g]	351.5
Materials	stainless steel (304/1.4301); stainless steel (316L/1.4404); FKM; PBT; PC; PEI; TPE-V	
Materials (wetted parts)	stainless steel (303/1.4305); probe connection: stainless steel (316L/1.4435); PTFE; FKM	
Process connection	threaded connection 3/4" NPT external thread	

Displays / operating elements		
Display	Display unit	3 x LED, green
	switching status	4 x LED, yellow
	level	alphanumeric display, 4-digit
	parameter setting	alphanumeric display, 4-digit

Remarks	
Notes	For high process temperatures: The temperature at the process connection is decisive. The actual medium temperature may be higher.
Pack quantity	1 pcs.

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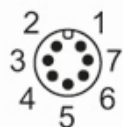


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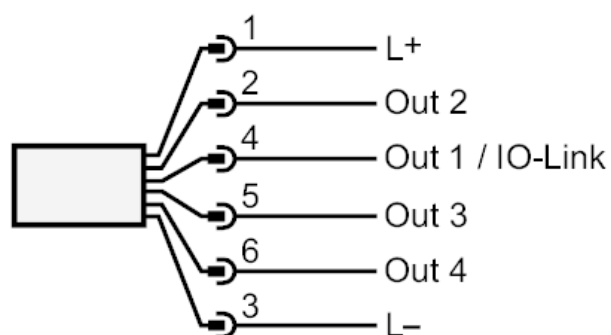
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Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



Diagrams and graphs

Measurement deviation D at the limits of the active rod range

