

LR7300

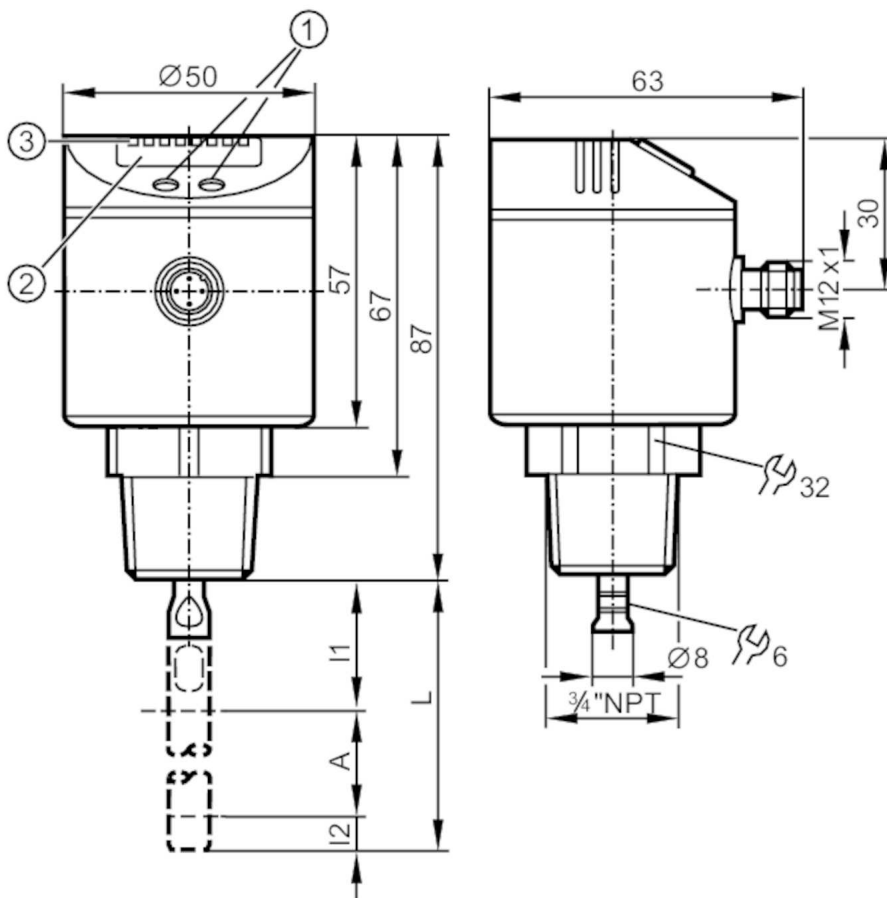


Continuous level sensor (guided wave radar)

LR0000B-BN34AQPKG/US

Please see the technical note under "Downloads"

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



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



Product characteristics

Number of inputs and outputs	Number of digital outputs: 2
Probe length L [mm]	100...1600
Process connection	threaded connection 3/4" NPT external thread

Application

System	gold-plated contacts
Application	for industrial applications
Media	Liquids
Dielectric constant of the medium	≥ 5
Recommended media	water; water-based media

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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: 2
Outputs		
Total number of outputs		2
Output signal		switching signal; IO-Link
Electrical design		PNP
Number of digital outputs		2
Output function		normally open / closed; (configurable)
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
Offset error	[mm]	5
Resolution	[mm]	1

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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 class		A
Process data analog		1
Process data binary		2
Min. process cycle time [ms]		2.3
Supported DeviceIDs	Type of operation	DeviceID
	default	9
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]		233
UL approval	UL approval number	H007
	File number UL	E174191
Mechanical data		
Weight [g]		397.25
Material	stainless steel (1.4301 / 304); stainless steel (1.4404 / 316L); FKM; PBT; PC; PEI; TPE-V	
Materials (wetted parts)	stainless steel (1.4305 / 303); probe connection: stainless steel (1.4435 / 316L); PTFE; FKM	
Process connection	threaded connection 3/4" NPT external thread	
Displays / operating elements		
Display	Display unit	3 x LED, green
	Switching status	2 x LED, yellow
	Level	alphanumeric display, 4-digit
	Parameter setting	alphanumeric display, 4-digit
Remarks		
Notes	Please see the technical note under "Downloads"; 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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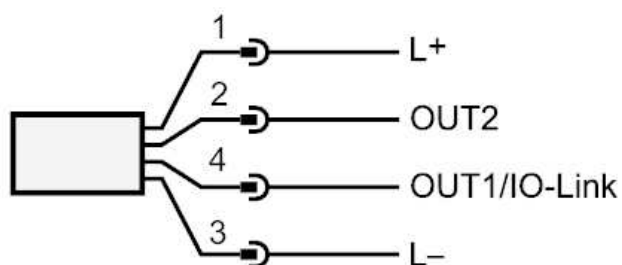
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Electrical connection

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



Connection



Diagrams and graphs

Measurement deviation D at the limits of the active rod range

