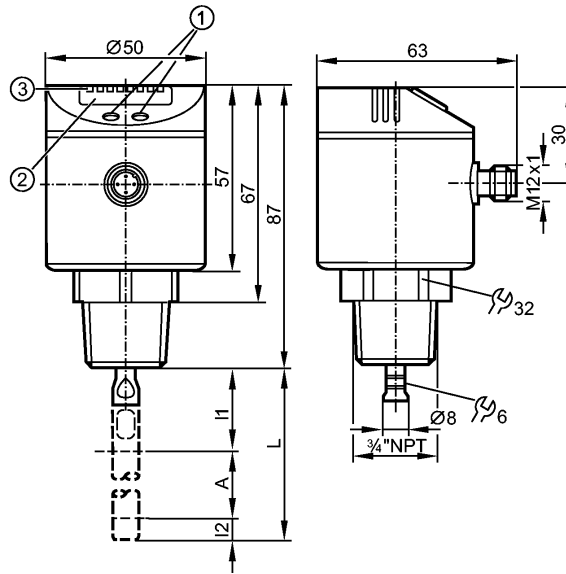


**LR3300**

LR0000B-BN34AMPKG/US

Level sensors



- 1: 4-digit alphanumeric display
- 2: LEDs (display unit / switching status)
- 3: Programming buttons
- A: Active zone
- I1 / I2: Inactive ranges



**Product characteristics**

Electronic level sensor
Quick disconnect
Process connection: 3/4" NPT
Guided wave radar
Freely rotatable housing 360°
Probe length: L = 100...1600 mm
2 Output OUT1 = Switching output OUT2 = Analog output
4-digit alphanumeric display

**Application**

Application	Hydrous coolants, water, media similar to water
Recommended media	Hydrous coolants, water, media similar to water
Conditionally suitable for:	acids or alkalis, in hygienic areas or in electroplating applications (check the compatibility of the materials with the media to be monitored!)
Cannot be used for:	oils, greases, granulates, bulk materials, acids, alkalis; hygienic and electroplating applications; heavily foaming media
Dielectric constant medium	≥ 20
Medium temperature [°C]	0...80 (90 < 1 h)
Maximum speed of the change of level [mm/s]	100

**Electrical data**

Electrical design	DC PNP
Operating voltage [V]	18...30 DC
Current consumption [mA]	< 80
Protection class	III

**LR3300**

LR0000B-BN34AMPKG/US

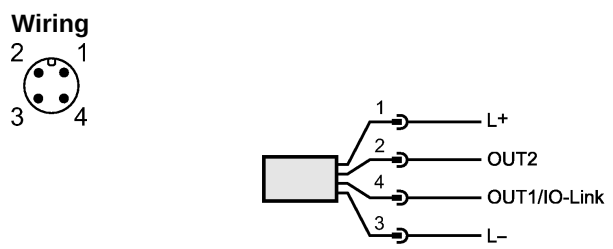
**Level sensors**

Reverse polarity protection		yes
<b>Outputs</b>		
Output		2 Output OUT1 = Switching output OUT2 = Analog output
Output function		normally open / closed programmable; 4...20 mA or 0...10 V
Current rating	[mA]	200
Voltage drop	[V]	< 2.5
Short-circuit protection		thermal, pulsed
Overload protection		yes
Analog output		I: 4...20 mA / U: 0...10 V
Max. load	[Ω]	I: 500
Min. load	[Ω]	U: 2000
<b>Measuring / setting range</b>		
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]	≥ 15 / ≤ L-30
Reset point, rP	[mm]	≥ 10 / ≤ L-35
in steps of	[mm]	5
Hysteresis	[mm]	≥ 5
<b>Accuracy / deviations</b>		
Deviations (in mm)		
Switch point accuracy		± (15 + 0.5 % MEW) *)
Repeatability		± 5
Characteristics deviation		± 10
Offset error	[mm]	± 10
Resolution	[mm]	0.5 (L < 300 mm) 0.2% MEW *) (L > 300 mm)
Zero signal [mA] / [V]		3.6...4.0 / 0...0.2
Full signal [mA] / [V]		20...20.8 / 10.0...10.3
<b>Reaction times</b>		
Power-on delay time	[s]	≤ 3
<b>Interfaces</b>		
IO-Link Device		
Transfer 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

**LR3300**

LR0000B-BN34AMPKG/US

Level sensors

Environment	
Ambient temperature [°C]	0...60
Storage temperature [°C]	-25...80
Maximum vessel pressure [bar]	-1...16
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	
Process connection	3/4" NPT
Materials (wetted parts)	stainless steel (303S22); probe connection: stainless steel 316L / 1.4435; PTFE; FPM (Viton)
Housing materials	stainless steel (304S15); FPM (Viton); PBT; PC; PEI; TPE / V; PTFE
Weight [kg]	0.329
Displays / operating elements	
Display	Display unit 3 x LED green Switching status 1 x LED yellow Level 4-digit alphanumeric display Programming 4-digit alphanumeric display
Electrical connection	
Connection	M12 connector (according to EN 61076-2-101); gold-plated contacts
<b>Wiring</b>	 <p>Programming of the switching output:                      Hno = hysteresis / NO                      Hnc = hysteresis / NC                      Fno = window / NO                      Fnc = window / NC</p>
Accessories	
Accessories (optional)	Probe, part no. E43203...E43205 / E43207...E43210; Matching accessories online next to the Datasheet → Accessories
Remarks	
Remarks	*) MEW = final value of the measuring range in mm; MEW = L - 30 mm
Pack quantity [piece]	1