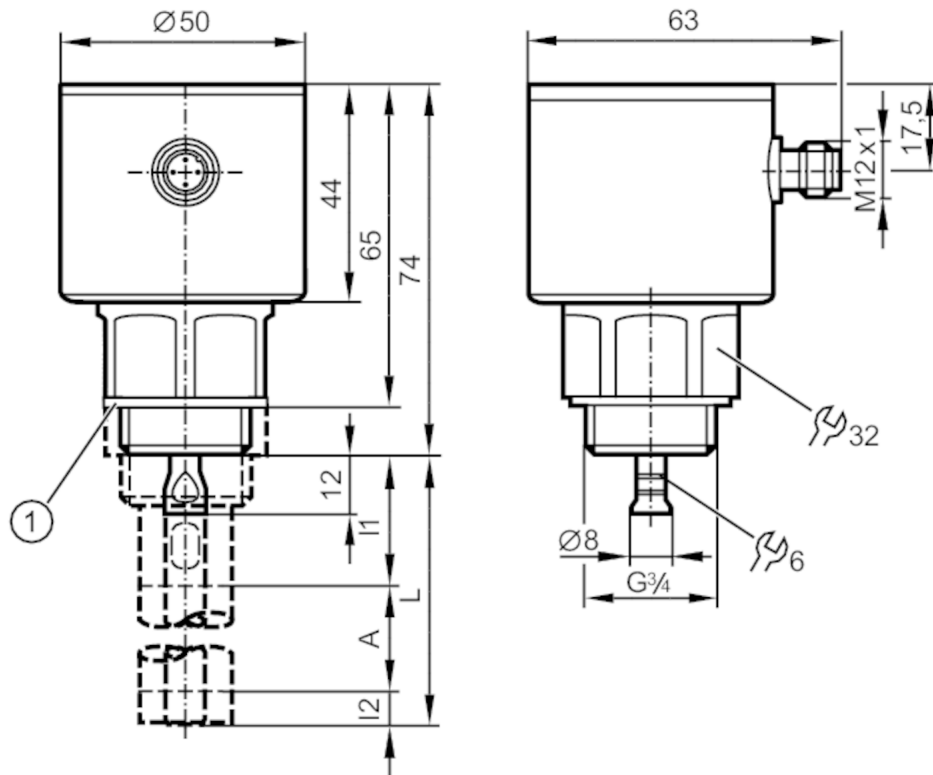


# LX0024



## Continuous level sensor (guided wave radar)

LR0300B--BR34A1DKG/US



- 1 Sealing
- A active range
- I1 / I2 inactive ranges



### Product characteristics

Number of inputs and outputs	Number of analogue outputs: 1
Factory setting	hydrous media; probe length L = 300 mm
Probe length L [mm]	100...1600
Process connection	G 3/4 external thread

### Application

Special feature	Gold-plated contacts
Media	hydrous coolants; oils; oil-based media; water; media similar to water
Dielectric constant of the medium	$\geq 2$ ; (for media with a dielectric constant of 2...20 (e.g. oils), a coaxial pipe is needed for operation)
Conditionally suitable for	See the operating instructions, chapter "Function and features".
Medium temperature [°C]	0...80; (90 < 1 h)
Tank pressure [bar]	-1...16

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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 analogue outputs: 1
Outputs		
Total number of outputs		1
Output signal		analogue signal; IO-Link
Electrical design		PNP
Number of analogue outputs		1
Analogue current output	[mA]	4...20
Max. load	[Ω]	500
Min. load resistance	[Ω]	2000
Overload protection		yes
Measuring/setting range		
Factory setting		hydrous media; probe length L = 300 mm
Probe length L	[mm]	100...1600
Active range A	[mm]	L-40 (L-60); (when set to oil and oil based media)
Inactive range I1 / I2	[mm]	30 / 10 (30); (when set to oil and oil based media)
Accuracy / deviations		
Repeatability	[mm]	± 5
Switch point accuracy	[mm]	± (15 + 0,5 %); (% of the final value of the measuring range: L - 30 mm)
Characteristics deviation		± 10
Offset error	[mm]	10
Measuring sensitivity		16 mA ÷ MEW 10 V ÷ MEW
Resolution	[mm]	0.5
Zero signal (voltage)	[V]	0...0.2
Zero signal (current)	[mA]	3.95...4.0
Full signal (voltage)	[V]	10...10.1
Full signal (current)	[mA]	20...20.2

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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	0x0002AC
Profiles	no profile
SIO mode	yes
Required master port type	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 68; IP 69K

Tests / approvals		
EMC	EN 61000-6-2	
	EN 61000-6-3	in a metal tank
	EN 61000-6-4	in a plastic tank
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]		239

Mechanical data	
Weight [g]	430
Materials	stainless steel (1.4301 / 304); stainless steel (1.4404 / 316L); FKM; PEI
Materials (wetted parts)	stainless steel (1.4305 / 303); probe connection: stainless steel (1.4435 / 316L); PTFE; FKM; Sealing: NBR-PPTA 20
Process connection	G 3/4 external thread

Remarks	
Pack quantity	1 pcs.

### Electrical connection

Connector: 1 x M12; Contacts: gold-plated



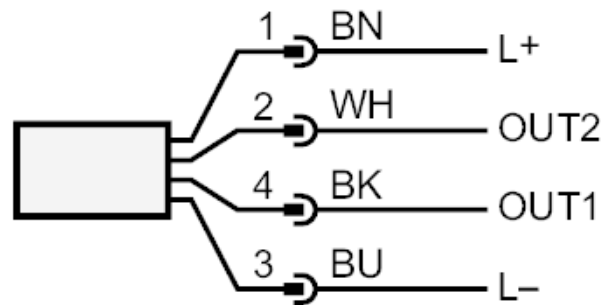
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### Connection



OUT1: IO-Link

OUT2: analogue output

colours to DIN EN 60947-5-2

Core colours :

BK = black

BN = brown

BU = blue

WH = white