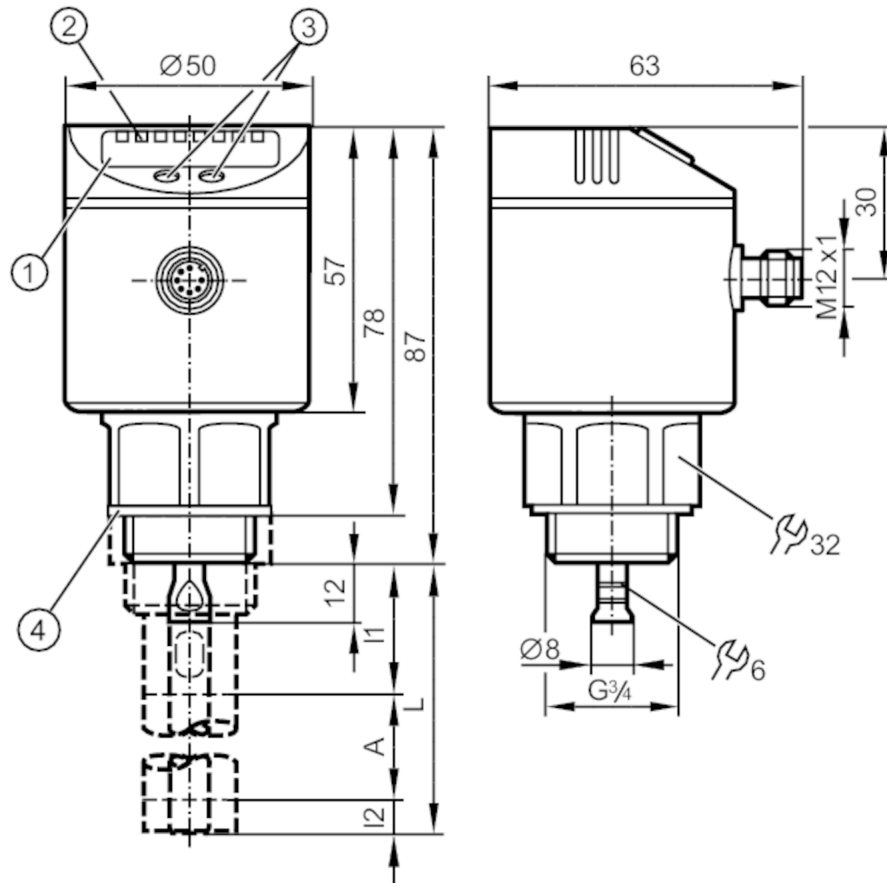


LR8000



Continuous level sensor (guided wave radar)

LR0000B-BR34ASPKG/US



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



Application

Media	hydrous coolants; oils; oil-based media; water; media similar to water
Dielectric constant of the medium	≥ 2 ; (for media with a dielectric constant of 2...20 (e.g. oils), a coaxial pipe is needed for operation)
Cannot be used for	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

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



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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
Measuring/setting range	
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)
Setting range	
Set point SP [mm]	≥ 15 (35) / $\leq L-30$
Note on setpoint SP	when set to oil and oil based media
Reset point rP [mm]	≥ 10 (30) / $\leq L-35$
Note on reset point rP	when set to oil and oil based media
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)
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	010 d / 00 00 0A h
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

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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]	182.01
Mechanical data		
Weight	[g]	396.5
Materials	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; Sealing: NBR-PPTA 20	
Process connection	G 3/4 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
Accessories		
Accessories (optional)	Probe:, E43203...E43205 / E43207...E43210	
	Coaxial pipe:, E43211...E43221, E43223, E43224	
Remarks		
Notes	For 8-pole sockets the core colours are not standardised.; Please note the wiring of the sensor and the sockets (see data sheet).	
Pack quantity	1 pcs.	
Electrical connection		
Connector: 1 x M12; Contacts: gold-plated		
		

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Connection

