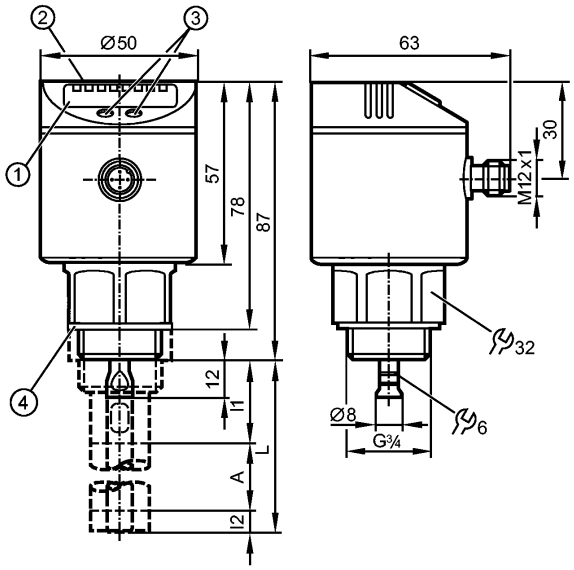
LR7000

LR0000B-BR34AQPKG/US **Level sensors**



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

Made in Germany

Product characteristics		
Electronic level sensor		
Connector		
Process connection: G ¾ A		
Guided wave radar		
Freely rotatable housing 360°		
Probe length: L = 100...1600 mm		
2 switching outputs		
4-digit alphanumeric display		
Application		
Application		Hydrous coolants, oils, oil-based media, water, media similar to water
Cannot be used for:		fats, granulates, bulk materials, acids, alkalis; hygienic and electroplating applications; heavily foaming media
Medium temperature	[°C]	0...80 (90 < 1 h)
Maximum speed of the change of level	[mm/s]	100
Dielectric constant medium		≥ 2 for media with a dielectric constant 2...20 (e.g. oils) a coaxial pipe is required for operation (see below: accessories (optional))
Electrical data		
Electrical design		DC PNP
Operating voltage	[V]	18...30 DC
Current consumption	[mA]	< 80
Protection class		III
Reverse polarity protection		yes
Outputs		
Output		2 switching outputs

LR7000

LR0000B-BR34AQPKG/US **Level sensors**

Output function		2 x normally open / closed programmable
Current rating	[mA]	200
Voltage drop	[V]	< 2.5
Short-circuit protection		thermal, pulsed
Overload protection		yes (max. 10 s)
Measuring / setting range		
Probe length L	[mm]	100...1600
Active range A	[mm]	L-40 (L-60)*)
Inactive range I1 / I2	[mm]	30 / 10 (30)*)
Setting range		
Set point, SP	[mm]	≥ 15 (35)*) / ≤ L-30
Reset point, rP	[mm]	≥ 10 (30)*) / ≤ L-35
in steps of	[mm]	5
Hysteresis	[mm]	≥ 5
Accuracy / deviations		
Deviations (in mm)		
Switch point accuracy		± (15 + 0.5 % MEW**))
Repeatability		± 5
Reaction times		
Power-on delay time	[s]	≤ 3
Interfaces		
IO-Link Device		
Transfer type		COM2 (38.4 kBaud)
IO-Link revision		1.1
SDCI standard		IEC 61131-9 CDV
IO-Link Device ID		008 d / 00 00 08 h
Profiles		no profile
SIO mode		yes
Required master port type		A
Process data analogue		1
Process data binary		2
Min. process cycle time	[ms]	2.3
Environment		
Ambient temperature	[°C]	0...60
Storage temperature	[°C]	-25...80
Maximum vessel pressure	[bar]	-1...4
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]	204.29
Mechanical data		
Process connection		G ¾ A

LR7000

LR0000B-BR34AQPKG/US **Level sensors**

Materials (wetted parts)		stainless steel (303S22); probe connection: stainless steel 316L / 1.4435; PTFE; FKM; sealing: Tesnit
Housing materials		stainless steel (304S15); FKM; PBT; PC; PEI; TPE / V; PTFE
Weight	[kg]	0.386

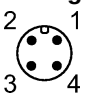
Displays / operating elements

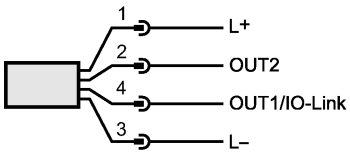
Display	Display unit	3 x LED green
	Switching status	2 x LED yellow
	Level	4-digit alphanumeric display
	Programming	4-digit alphanumeric display

Electrical connection

Connection	M12 connector (according to EN 61076-2-101); Gold-plated contacts

Wiring





Programming of the switching outputs:
Hno = hysteresis / NO
Hnc = hysteresis / NC
Fno = window / NO
Fnc = window / NC

Accessories

Accessories (optional)	Probe, order no. E43203...E43205 / E43207...E43210; Coaxial pipe, order no. E43211...E43221, E43223, E43224; Matching accessories online next to the Datasheet → Accessories

Remarks

Remarks	*) when set to oil and oil based media **) MEW = final value of the measuring range in mm; MEW = L - 30 mm
Pack quantity [piece]	1