

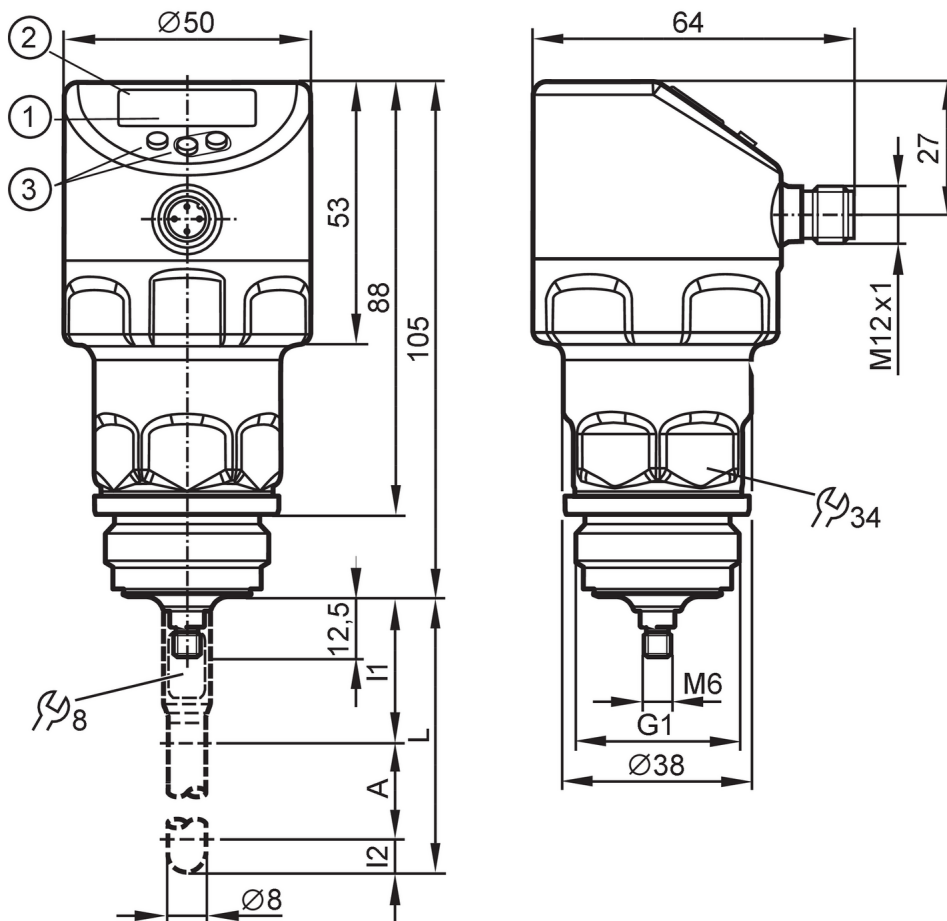
LR2750



Continuous level sensor (guided wave radar)

LR0000B-EA01AKSKG/US

For high process temperatures: The temperature at the process connection is decisive. The actual medium temperature may be higher.
For 3-A applications, the medium temperature is limited to 121 °C and COP cleaning is required.



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



EC 1935/2004

EHEDG Certified

FCM



Product characteristics

Number of inputs and outputs	Number of digital outputs: 1; Number of analogue outputs: 1
Probe length L [mm]	150...2000
Process connection	threaded connection G 1 external thread Aseptoflex Vario

Application

Special feature	Gold-plated contacts
Application	hygienic systems
Media	Liquids
Dielectric constant of the medium	> 5
Recommended media	water; hydrous media
Process temperature [°C]	-40...150; (see note under remarks)
Pressure rating	40 bar / 4 MPa

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Vacuum resistance		-1000 mbar		-0.1 MPa
MAWP for applications according to CRN	[bar]			25
Electrical data				
Operating voltage	[V]			18...30 DC
Current consumption	[mA]			< 50
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: 1; Number of analogue outputs: 1
Outputs				
Total number of outputs				2
Output signal				switching signal; analogue signal; IO-Link
Electrical design				PNP/NPN
Number of digital outputs				1
Output function				normally open / normally closed; (parameterisable)
Max. voltage drop switching output DC	[V]			2.5
Permanent current rating of switching output DC	[mA]			150; (200 (...60 °C))
Number of analogue outputs				1
Analogue current output	[mA]			4...20, invertible; (scalable)
Max. load	[Ω]			500
Short-circuit protection				yes
Type of short-circuit protection				pulsed
Overload protection				yes
Measuring/setting range				
Probe length L	[mm]			150...2000
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]			1
Hysteresis	[mm]			> 5
Accuracy / deviations				
Measuring error	[mm]			± 7
Offset error	[mm]			5
Resolution	[mm]			1
Zero signal (current)	[mA]			4.0
Full signal (current)	[mA]			20

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Temperature drift per 10 K	± 0.2 %
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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	
Profiles	Smart Sensor - SSP 0	Generic Profiled Sensor
	Function	Device identification
	Function	Process data variable
	Function	Device diagnosis
SIO mode	yes	
Required master port type	A	
Process data analogue	1	
Process data binary	2	
Min. process cycle time [ms]	2.3	
Supported DeviceIDs	Type of operation	DeviceID
	default	478

Operating conditions

Ambient temperature [°C]	-40...80
Storage temperature [°C]	-40...100
Protection	IP 68; IP 69K

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) / 20 g (6 ms) with reference rod 0.5 m
Vibration resistance	DIN EN 60068-2-6	20 g (10...2000 Hz) / 1 g (5...200 Hz) with reference rod 0.5 m
MTTF [years]	216	

Mechanical data

Weight [g]	330.75	
Materials	stainless steel (316L/1.4404); PEI; PFA; PBT; FKM	
Materials (wetted parts)	stainless steel (316L/1.4404); PEEK; EPDM	
Process connection	threaded connection G 1 external thread Aseptoflex Vario	
Surface characteristics Ra/Rz of the wetted parts	Ra < 0.8 µm	

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

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Pack quantity

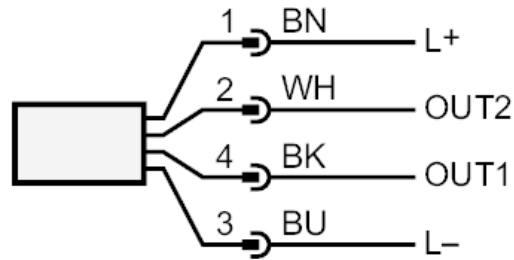
1 pcs.

Electrical connection

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



Connection



OUT1: switching output IO-Link
OUT2: switching output analogue output
colours to DIN EN 60947-5-2
Core colours :
BK = black
BN = brown
BU = blue
WH = white

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Diagrams and graphs

Measurement deviation D at the limits of the active rod range

