

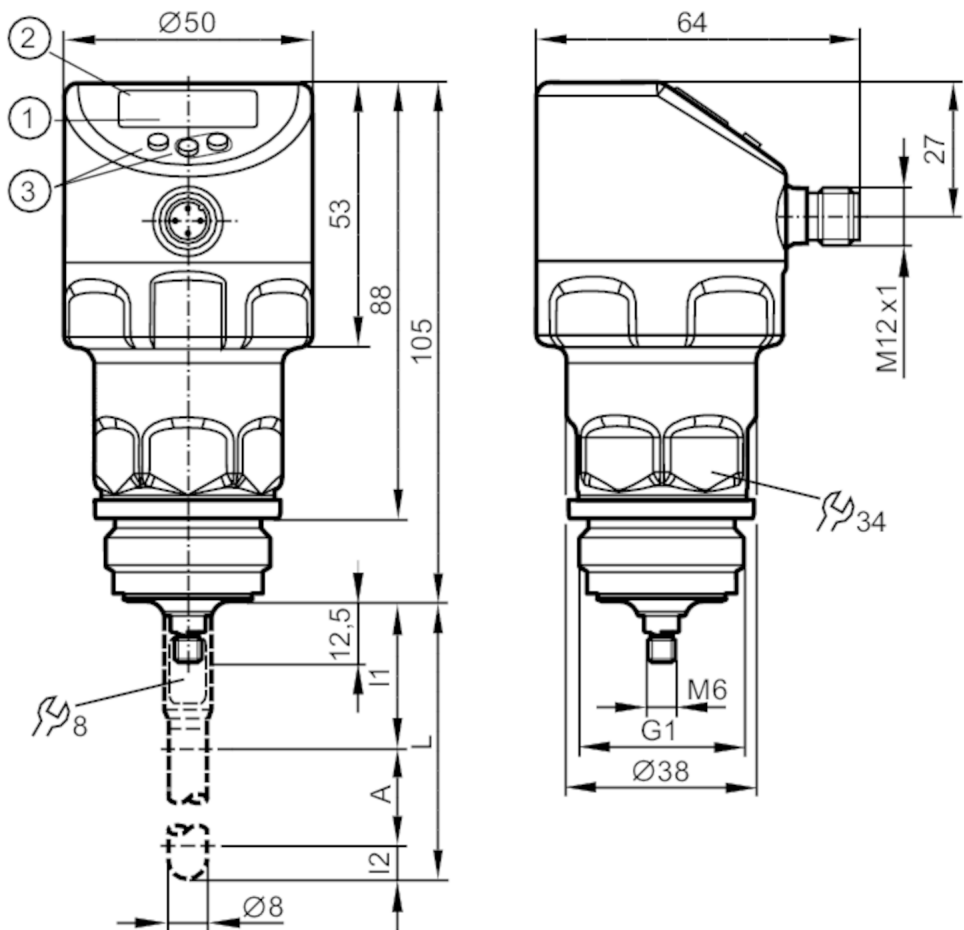
LR2750



Continuous level sensor (guided wave radar)

LR0000B-EA01AKSG/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 zone
- I1 / I2 Inactive ranges



Product characteristics	
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1
Probe length L [mm]	150...2000
Process connection	threaded connection G 1 external thread Aseptoflex Vario
Application	
System	gold-plated contacts
Application	hygienic systems
Media	Liquids
Dielectric constant of the medium	> 5
Recommended media	water; water-based media



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Process temperature	[°C]	-40...150; (see note under remarks)
Pressure rating		40 bar 4 MPa
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 analog outputs: 1
Outputs		
Total number of outputs		2
Output signal		switching signal; analog signal; IO-Link
Electrical design		PNP/NPN
Number of digital outputs		1
Output function		normally open / closed; (configurable)
Max. voltage drop switching output DC	[V]	2.5
Permanent current rating of switching output DC	[mA]	150; (200 (...60 °C))
Number of analog outputs		1
Analog current output	[mA]	4...20, invertible; (scalable)
Max. load	[Ω]	500
Short-circuit protection		yes
Type of short-circuit protection		yes (non-latching)
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

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Zero signal (current)	[mA]	4.0
Full signal (current)	[mA]	20
Temperature drift per 10 K		± 0.2 %

Interfaces

Communication interface	IO-Link				
Transmission type	COM2 (38,4 kBaud)				
IO-Link revision	1.1				
SDCI standard	IEC 61131-9				
Profiles	Smart Sensor: Process Data Variable; Device Identification, Device Diagnosis				
SIO mode	yes				
Required master port class	A				
Process data analog	1				
Process data binary	2				
Min. process cycle time	[ms] 2.3				
Supported DeviceIDs	<table><tr><th>Type of operation</th><th>DeviceID</th></tr><tr><td>default</td><td>478</td></tr></table>	Type of operation	DeviceID	default	478
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
Material		stainless steel (1.4404 / 316L); PEI; PFA; PBT; FKM
Materials (wetted parts)		stainless steel (1.4404 / 316L); PEEK; EPDM
Process connection		threaded connection G 1 external thread Aseptoflex Vario
Surface characteristics Ra/Rz of the wetted parts		< 0.8

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.

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Electrical connection

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



Connection



OUT1: Switching output IO-Link
OUT2: Switching output analog output
Colors to DIN EN 60947-5-2
Core colors :
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

