

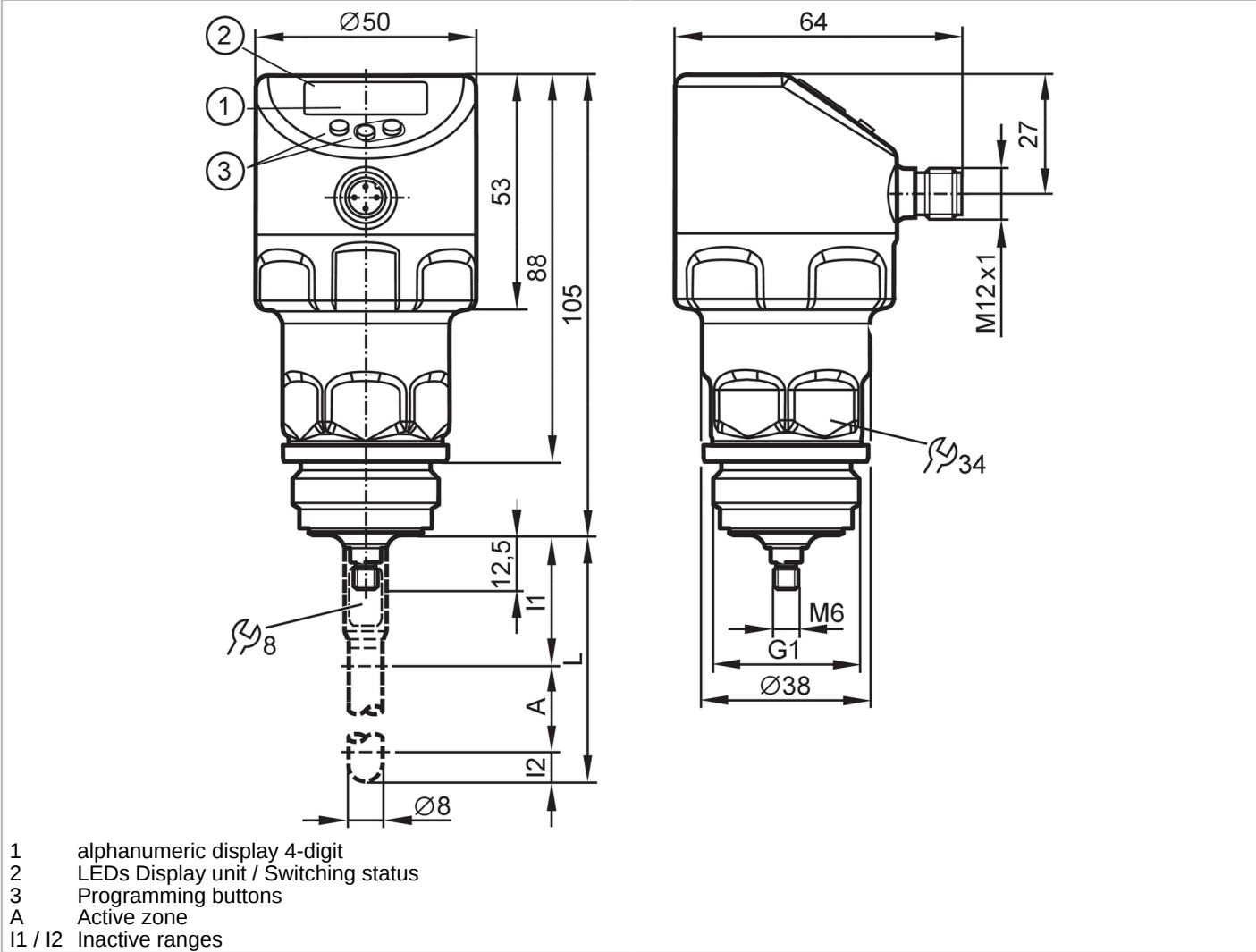
LR2750



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.



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		
Special feature	gold-plated contacts	
Application	hygienic systems	
Media	Liquids	
Dielectric constant of the medium	> 5	
Recommended media	water; water-based 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 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	
Zero signal (current)	[mA]	4.0	
Full signal (current)	[mA]	20	



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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 - SSP 0	Generic Profiled Sensor
	Function	Device identification
	Function	Process data variable
	Function	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	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	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

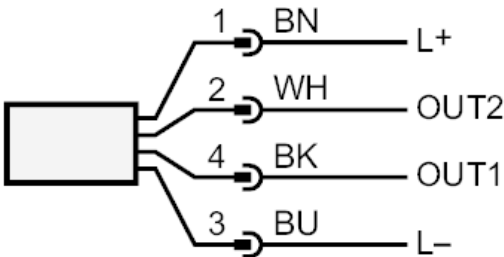
1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: 4, gold-plated



Connection



OUT1:

OUT2:

Switching output IO-Link

Switching output analog output

Colors to DIN EN 60947-5-2

Core colors :

BK =

BN =

BU =

WH =

black

brown

blue

white

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Diagrams and graphs

Measurement deviation D at the limits of the active rod range

