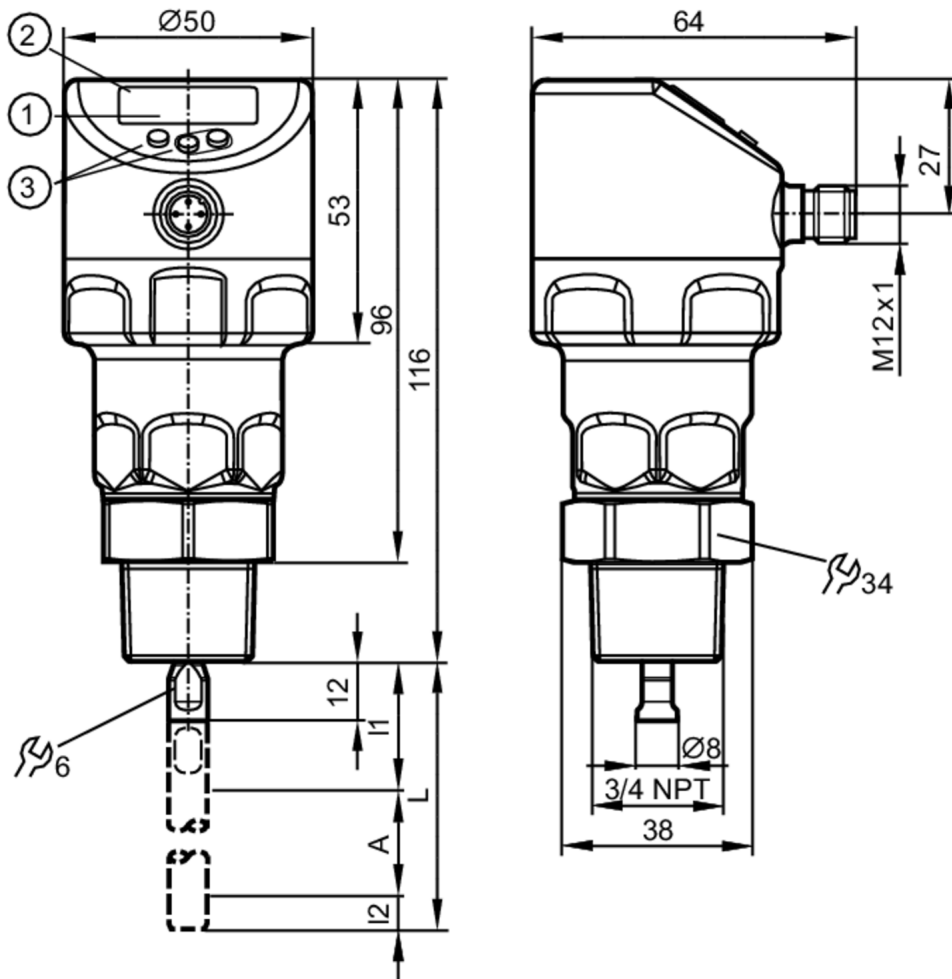


LR2350



Continuous level sensor (guided wave radar)

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






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	3/4" NPT



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Application		
Special feature		Gold-plated contacts
Media		Liquids
Dielectric constant of the medium		> 5
Recommended media		water; hydrous media
Medium temperature	[°C]	-20...100
Tank pressure	[bar]	-1...16
MAWP (for applications according to CRN)	[bar]	16
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
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)
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



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Accuracy / deviations		
Measuring error		
	[% of the measured value]	± 7 mm
Offset error	[mm]	5
Resolution	[mm]	1
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
IO-Link device ID		0x0002DA
Profiles		Smart Sensor: Process Data Variable; Device Identification, 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
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 metal tank
	DIN EN 61000-6-4	: in a plastic tank
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]	448
Materials		stainless steel (1.4404 / 316L); PEI; PFA; PBT; FKM
Materials (wetted parts)		stainless steel (1.4404 / 316L); stainless steel (1.4435 / 316L); PTFE; FKM
Process connection		3/4" NPT
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

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Remarks

Pack quantity

1 pcs.

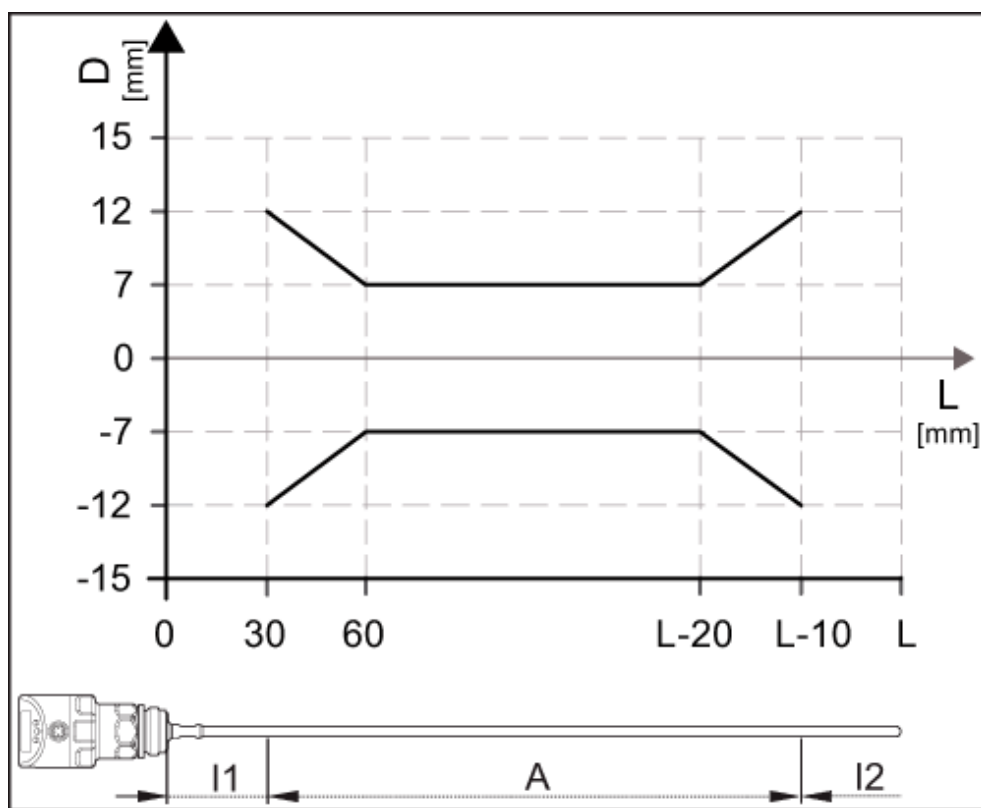
Electrical connection - plug

Connector: 1 x M12; Contacts: gold-plated



Diagrams and graphs

Measurement deviation D at the limits of the active rod range



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Measurement deviation D at the limits of the active rod range

