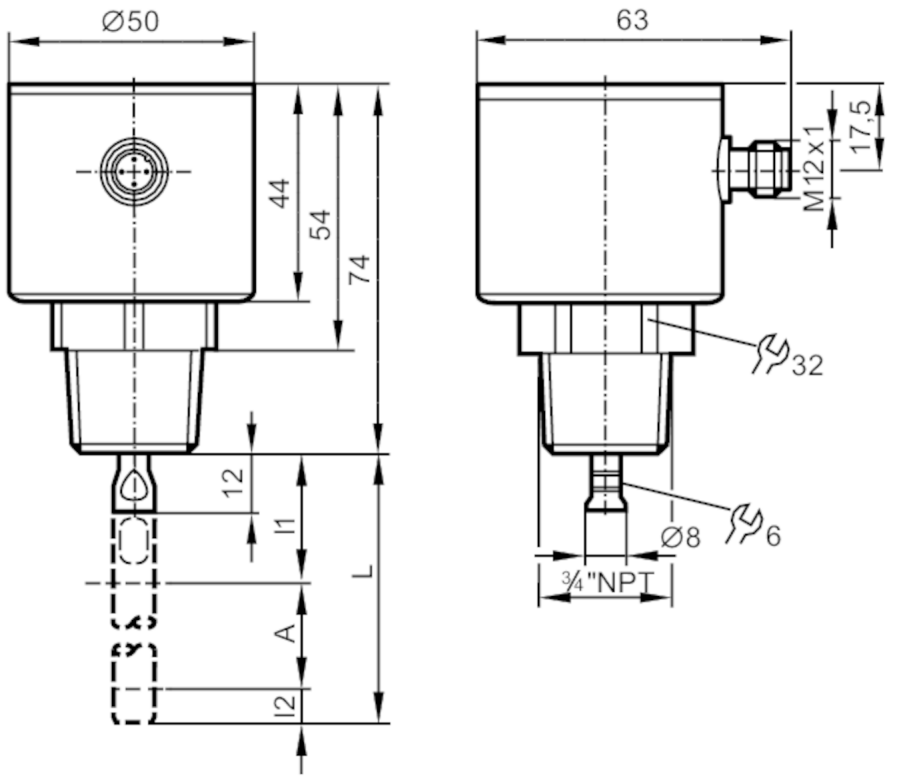
LR7320

Continuous level sensor (guided wave radar)

LR0000--BN34AQPKG/US



A active range
I1 / I2 inactive ranges

IO-Link

Product characteristics		
Number of inputs and outputs		Number of digital outputs: 2
Probe length L	[mm]	100...2000
Process connection		3/4" NPT
Application		
Special feature		Gold-plated contacts
Media		Liquids
Dielectric constant of the medium		> 5
Recommended media		water; hydrous media
Medium temperature	[°C]	-25...80; (90: < 1 h)
Tank pressure	[bar]	-1...16
Electrical data		
Operating voltage	[V]	18...30 DC
Current consumption	[mA]	< 25
Protection class		III
Reverse polarity protection		yes
Power-on delay time	[s]	< 3

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Inputs / outputs		
Number of inputs and outputs		Number of digital outputs: 2
Outputs		
Total number of outputs		2
Output signal		switching signal; IO-Link
Electrical design		PNP/NPN
Number of digital outputs		2
Output function		normally open / normally closed; (parameterisable)
Max. voltage drop switching output DC	[V]	2.5
Permanent current rating of switching output DC	[mA]	200
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Overload protection		yes
Measuring/setting range		
Probe length L	[mm]	100...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]	5
Hysteresis	[mm]	> 5
Accuracy / deviations		
Repeatability	[mm]	5
Measuring error	[% of the measured value]	± 7 mm
Offset error	[mm]	5
Resolution	[mm]	1
Temperature drift per 10 K		± 0.2 %

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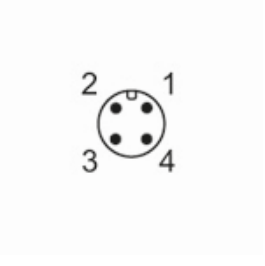
Interfaces			
Communication interface		IO-Link	
Transmission type		COM2 (38,4 kBaud)	
IO-Link revision		1.1	
SDCI standard		IEC 61131-9	
IO-Link device ID		979 d / 00 03 D3 h	
Profiles		Smart Sensor: Process Data Variable; Device Identification, Device Diagnosis	
SIO mode		yes	
Required master port type		A	
Process data analogue		3	
Process data binary		2	
Min. process cycle time	[ms]	3.2	
Operating conditions			
Ambient temperature	[°C]	-25...60	
Storage temperature	[°C]	-40...85	
Protection		IP 68; IP 69K; (IP68: 7 days / 1 m water depth / 0.1 bar)	
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) / 25 g (6 ms) with reference rod 0.5 m
Vibration resistance		DIN EN 60068-2-6	5 g (10...2000 Hz) / 1 g (5...200 Hz) with reference rod 0.5 m
MTTF	[years]	286	
Mechanical data			
Weight	[g]	441.7	
Materials		stainless steel (1.4301 / 304); stainless steel (1.4404 / 316L); FKM; PEI	
Materials (wetted parts)		stainless steel (1.4305 / 303); probe connection: stainless steel (1.4435 / 316L); PTFE; FKM	
Process connection		3/4" NPT	
Remarks			
Pack quantity		1 pcs.	

Electrical connection - plug

Connector: 1 x M12; Contacts: gold-plated



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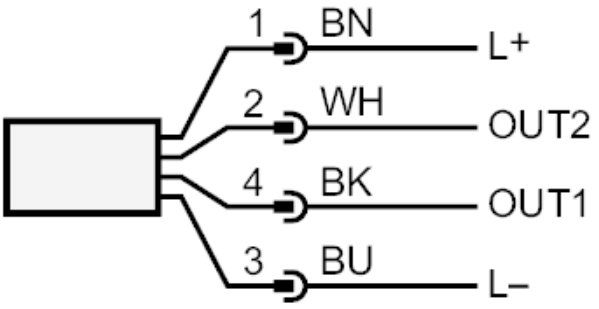
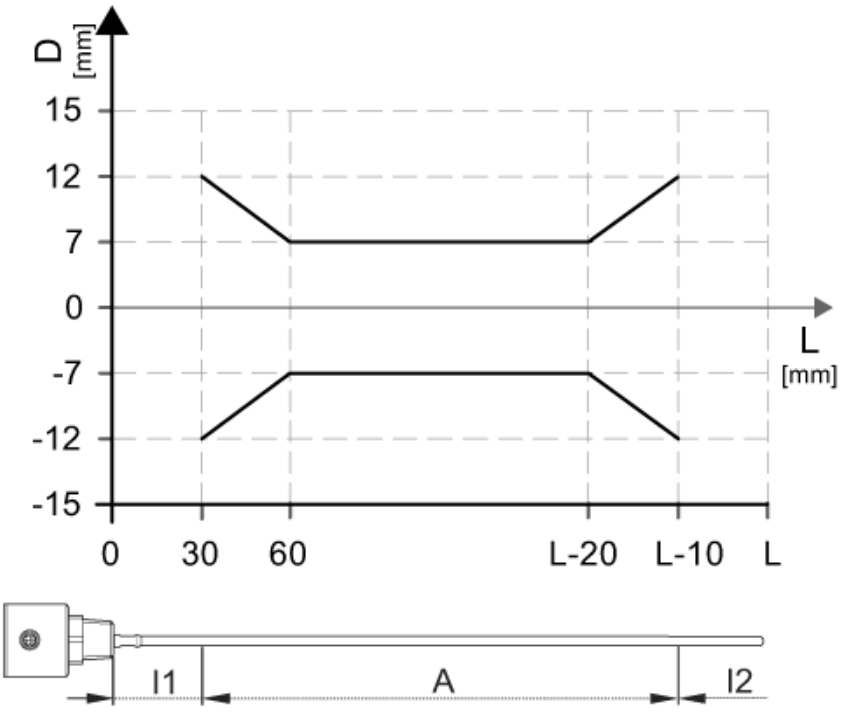
Connection



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

Diagrams and graphs



Measurement deviation D at the limits of the active rod range