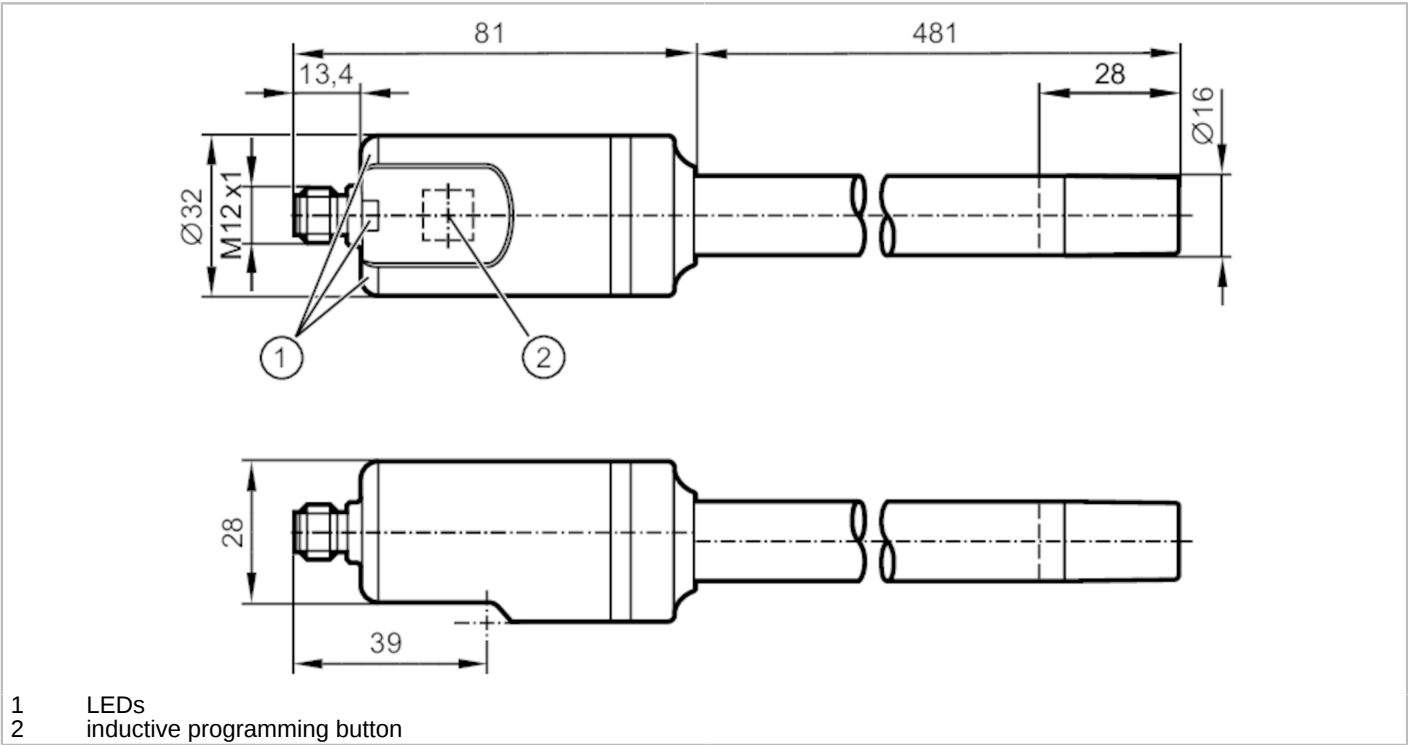


LI2133



Sensor for point level detection

LI0481--K-00KQPKG/US/WHG



Product characteristics		
Number of inputs and outputs	Number of digital outputs: 2	
Factory setting	oils; oil-based media	
Probe length L	[mm]	481
Application		
System	gold-plated contacts	
Media	Liquids	
Dielectric constant of the medium	> 1,8	
Recommended media	water; water-based media; oils; oil-based media	
Cannot be used for	See operating instructions, chapter "Intended use".	
Medium temperature	[°C]	-25...85; (Applications according to the German Federal Water Act (WHG) 0...85°C)
Pressure rating	0.5 bar	0.05 MPa
Vacuum resistance	[mbar]	-500
Electrical data		
Operating voltage	[V]	9.6...35 DC; (IO-Link: 18...30 DC)
Current consumption	[mA]	< 15
Protection class	III	
Reverse polarity protection	yes	
Power-on delay time	[s]	< 1
Measuring principle	capacitive	
Inputs / outputs		
Number of inputs and outputs	Number of digital outputs: 2	



Sensor for point level detection

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Outputs		
Total number of outputs	2	
Output signal	switching signal; IO-Link	
Electrical design	PNP/NPN	
Number of digital outputs	2	
Output function	OUT-OP	normally closed
	OUT2	normally open / closed; (configurable)
Max. voltage drop switching output DC [V]	2.5	
Permanent current rating of switching output DC [mA]	100	
Short-circuit protection	yes	
Type of short-circuit protection	yes (non-latching)	
Overload protection	yes	
Measuring/setting range		
Factory setting	oils; oil-based media	
Probe length L [mm]	481	
Active range A [mm]	28	
Temperature measurement		
Measuring range [°C]	-25...85	
Accuracy / deviations		
Temperature measurement		
Accuracy [K]	1,5	
Resolution [K]	0.1	
Dynamic response T09 [s]	240	
Reaction times		
Response time [s]	< 0.3	
Interfaces		
Communication interface	IO-Link	
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.1	
SDCI standard	IEC 61131-9	
Profiles	Common - I&D	Identification and Diagnosis
SIO mode	yes	
Required master port class	A	
Process data analog	5	
Process data binary	2	
Min. process cycle time [ms]	4.5	
Supported DeviceIDs	Type of operation	DeviceID
	default	1588
Operating conditions		
Ambient temperature [°C]	-25...85	
Storage temperature [°C]	-25...85	

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Protection	IP 68; IP 69K; (7 days / 3 m water depth / 0.3 bar: IP 68)
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Tests / approvals

Approval	WHG; General building authority approval; overflow prevention; leakage detection	
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	12 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	5 g (10...2000 Hz)
MTTF [years]	433	
UL approval	UL approval number	H013
	File number UL	E174191

Mechanical data

Weight [g]	408.6
Material	PP fiber-reinforced
Materials (wetted parts)	PP
Probe diameter [mm]	16

Displays / operating elements

Display	Power	LED, green
	Switching status	LED, yellow
Operating elements	inductive programming button	

Remarks

Pack quantity	1 pcs.
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Electrical connection

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



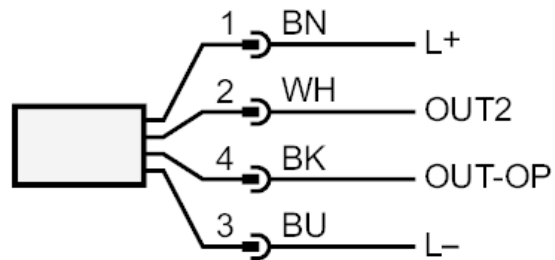
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Sensor for point level detection

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Connection



OUT-OP : IO-Link
Switching output overflow prevention to the German Federal Water Act (WHG)
Switching output leakage detection to WHG (German Federal Water Act)

OUT2 : Switching output Level
Switching output temperature