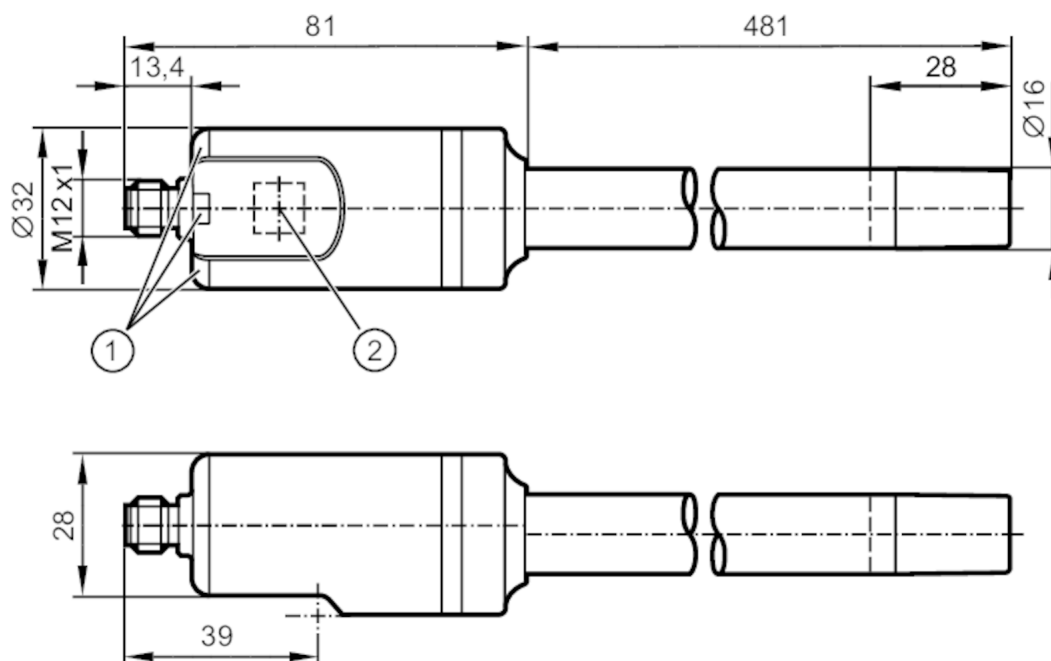


LI2133



Sensor for point level detection

LI0481--K-00KQPKG/US/WHG



- 1 LEDs
2 inductive programming button



Product characteristics

Number of inputs and outputs	Number of digital outputs: 2
Factory setting	oils; oil-based media
Probe length L [mm]	481

Application

Special feature	Gold-plated contacts
Media	Liquids
Dielectric constant of the medium	> 1,8
Recommended media	water; hydrous media; oils; oil-based media
Cannot be used for	See operating instructions, chapter "Intended use".
Medium temperature [°C]	-25...85; (applications subject to the German Federal Water Act 0...85°C)
Pressure rating [bar]	0.5
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

LI0481--K-00KQPKG/US/WHG

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 / normally closed; (parameterisable)
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	pulsed	
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	
Response times		
Response time [s]	< 0.3	
Interfaces		
Communication interface	IO-Link	
Unterstützte Masterportklasse	A	
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.1	
SDCI standard	IEC 61131-9	
Profiles	Smart Sensor ED2: Identification and Diagnosis (0x4000), Measurement Data Channel (0x800A)	
SIO mode	yes	
Process data analogue	5	
Process data binary	2	
Min. process cycle time [ms]	4.5	
Supported DeviceIDs	Type of operation	DeviceID
	default	634

LI2133



Sensor for point level detection

LI0481--K-00KQPKG/US/WHG

Operating conditions		
Ambient temperature	[°C]	-25...85
Storage temperature	[°C]	-25...85
Protection		IP 68; IP 69K; (7 days / 3 m water depth / 0.3 bar: IP 68)
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
Mechanical data		
Weight	[g]	408.6
Materials		PP reinforced fibre
Materials (wetted parts)		PP
Probe diameter	[mm]	16
Displays / operating elements		
Display	operation	LED, green
	switching status	LED, yellow
Operating elements	inductive programming button	
Remarks		
Pack quantity		1 pcs.
Electrical connection		
Connector: 1 x M12; coding: A; Contacts: gold-plated		
		

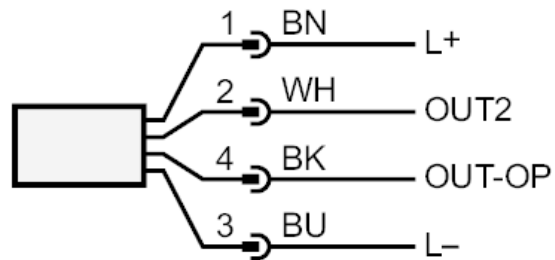
LI2133



Sensor for point level detection

LI0481--K-00KQPKG/US/WHG

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