

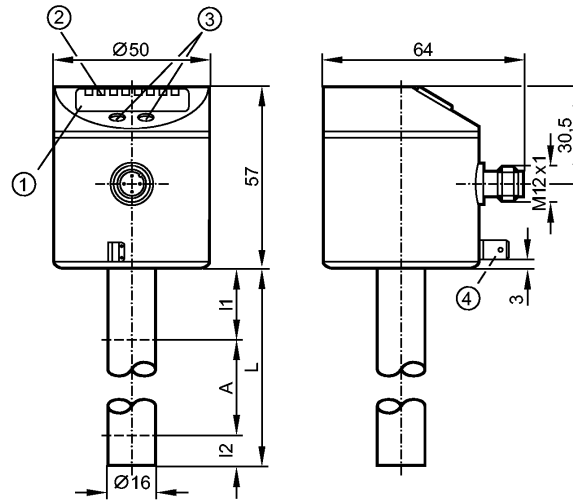


# LK1023

LK0472B-B-00KQPKG/US



Level sensors



- 1: 4-digit alphanumeric display
- 2: status LEDs
- 3: Programming buttons
- 4: Housing connection (flat-pin connector 6.3 mm following DIN 46244)



## Product characteristics

Electronic level sensor

Quick disconnect

Probe length: L = 472 mm

2 switching outputs

4-digit alphanumeric display

## Application

Application	Hydrous coolants, oils, water, media similar to water
Cannot be used for:	extremely conductive and adhering media, granulates and bulk materials, acids and alkalis, food and electroplating applications
Dielectric constant medium	> 2
<b>Medium temperature oil</b>	
- Continuous [°C]	0...70
- Short time [°C]	0...90
Medium temperature water and hydrous media [°C]	0...35 (LK1023 + E43101: 0...60) **
Medium temperature coolant emulsions [°C]	0...35 (LK1023 + E43101: 0...60) **
Maximum speed of the change of level [mm/s]	200

## Electrical data

Electrical design	DC PNP
Operating voltage [V]	18...30 DC
Current consumption [mA]	< 60
Protection class	III
Reverse polarity protection	yes

## Outputs

Output	2 switching outputs
Output function	2 x normally open / closed programmable



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Current rating	[mA]	200
Voltage drop	[V]	< 2.5
Short-circuit protection		thermal, pulsed
Overload protection		yes

### Measuring / setting range

Probe length L	[mm]	472
Active range A	[mm]	390
Inactive range I1 / I2	[mm]	53 / 30
Setting range		
Set point, SP	[mm]	40...395
Reset point, rP	[mm]	35...390
in steps of	[mm]	5
Hysteresis	[mm]	5
Overflow prevention OP	[mm]	139 - 163 - 188 - 212 - 236 - 261 - 285 - 310 - 334 - 358 - 383 - 407
Hysteresis OP	[mm]	3

### Accuracy / deviations

Deviations (% of value of measuring range)		
Switch point accuracy		± 5
Repeatability		± 2

### Reaction times

Power-on delay time	[s]	3
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### Software / programming

Programming options	hysteresis / window function; N.O. / N.C; position of SP/rP; position of OP; OP adjustment; medium adjustment; offset; display unit	
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### Environment

Ambient temperature	[°C]	0...60
Storage temperature	[°C]	-25...80
Maximum vessel pressure	[bar]	0.5 (mounted with mounting accessories E43001 - E43007)
Protection		IP 67

### Tests / approvals

EMC	EN 61000-4-2 ESD:	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated:	10 V/m
	EN 61000-4-4 Burst:	2 kV
	EN 61000-4-6 HF conducted:	10 V
Shock resistance	DIN EN 60068-2-29:	15 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	5 g (10...2000 Hz)
MTTF	[Years]	265

### Mechanical data

Materials (wetted parts)		PP
Housing materials		stainless steel (304S15); FKM; NBR; PBT; PC; PEI; PP; TPE / V
Weight	[kg]	0.405

### Displays / operating elements

Display	Display unit / status	2 x LED green
	Switching status	2 x LED yellow
	Measured values	4-digit alphanumeric display
	Programming	4-digit alphanumeric display



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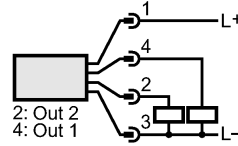
Level sensors

## Electrical connection

Connection M12 connector (according to EN 61076-2-101); gold-plated contacts

### Wiring

Programming of the output function:  
 Hno = hysteresis / normally open  
 Hnc = hysteresis / normally closed  
 Fno = window function / normally open  
 Fnc = window function / normally closed



## Remarks

Remarks cULus - Class 2 source required  
 \*\*) for water and hydrous media with temperatures > 35 °C install the unit into a climatic tube (order no. E43101)

Pack quantity [piece] 1