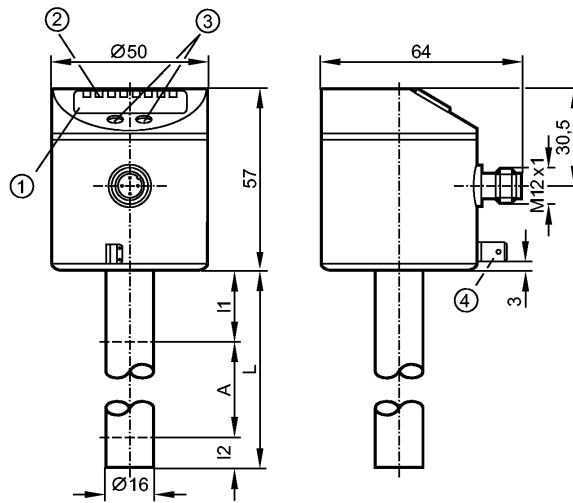


LK3124

LK0728B-B-00KLPKG/US

Level sensors

Technical note: PDF



- 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 = 728 mm

1 analog output (OUT2)

1 overflow output (OUT-OP)

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
Medium temperature oil	
- Continuous [°C]	0...70
- Short time [°C]	0...90
Medium temperature water and hydrous media [°C]	0...35 (LK3124 + E43102: 0...55) **)
Medium temperature coolant emulsions [°C]	0...35 (LK3124 + E43102: 0...55) **)
Maximum speed of the change of level [mm/s]	300

Electrical data

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

Outputs

LK3124

LK0728B-B-00KLPKG/US

Level sensors

Output	1 analog output (OUT2) 1 overflow output (OUT-OP)
Output function	1 x analog 4...20 mA / 0...10 V (OUT2); 1 x normally open / closed programmable (OUT-OP)
Current rating [mA]	200
Voltage drop [V]	< 2.5
Short-circuit protection	thermal, pulsed
Overload protection	yes
Analog output	I: 4...20 mA / U: 0...10 V
Max. load [Ω]	I: max. 500 / U: min. 2000

Measuring / setting range	
Probe length L [mm]	728
Active range A [mm]	585
Inactive range I1 / I2 [mm]	102 / 40
Overflow switch point OP [mm]	200 - 240 - 280 - 310 - 350 - 390 - 420 - 460 - 500 - 530 - 570 - 610
Hysteresis OP [mm]	4

Accuracy / deviations	
Deviations (% of value of measuring range)	
Repeatability	± 2
Characteristics deviation	± 2
Offset error [mm]	± 12
Measuring sensitivity	0.03 mA / mm 0.02 V / mm
Resolution [mm]	6
Zero signal [mA] / [V]	3.6...4.0 / 0...0.2
Full signal [mA] / [V]	20...20.8 / 9.8...10.2

Reaction times	
Power-on delay time [s]	3

Software / programming	
Programming options	Current / voltage output; position of OP; OP adjustment; medium adjustment; offset; display unit

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]	194

Mechanical data	
Materials (wetted parts)	PP
Housing materials	stainless steel (304S15); FKM; NBR; PBT; PC; PEI; PP; TPE / V

LK3124

LK0728B-B-00KLPKG/US

Level sensors

Weight	[kg]	0.503
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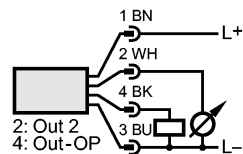
Displays / operating elements

Display	Display unit / status 2 x LED green Switching status 1 x LED yellow Measured values 4-digit alphanumeric display Programming 4-digit alphanumeric display
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Electrical connection

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



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. E43102)
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Pack quantity	[piece]	1
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