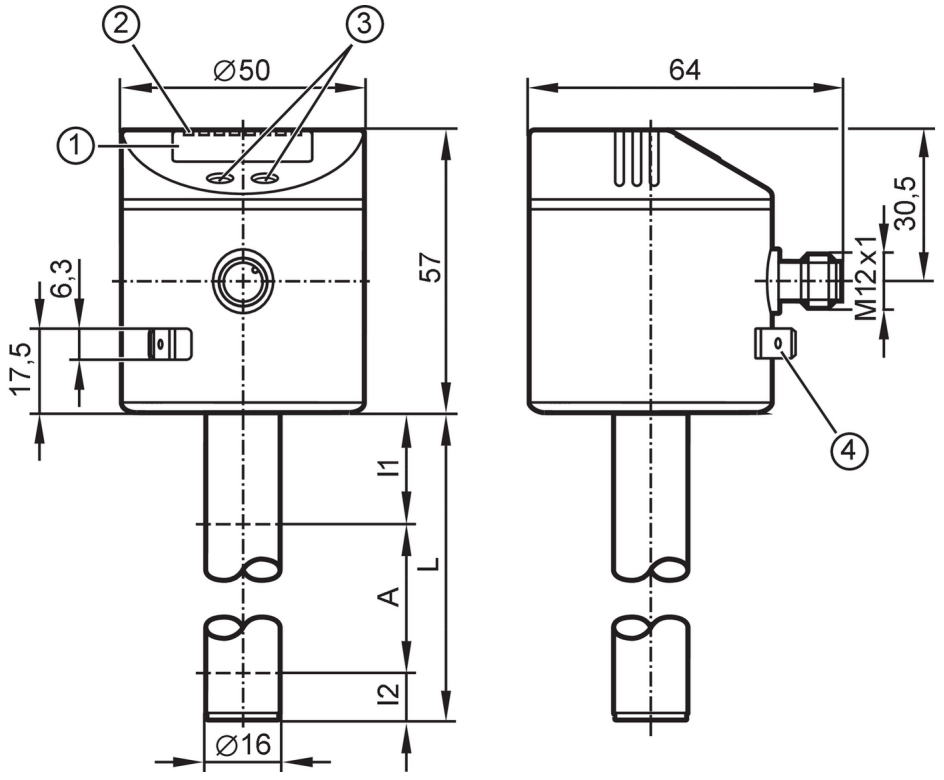
# LK3124

## Electronic level sensor

LK0728B-B-00KLPKG/US




1 alphanumeric display 4-digit
2 status LEDs
3 programming buttons
4 housing connection flat-pin connector 6.3 mm DIN 46244

| | | |
|---|---|---|
| **Product characteristics** | | |
| Number of inputs and outputs | | Number of digital outputs: 1; Number of analogue outputs: 1 |
| Factory setting | | hydrous coolants; water; media similar to water |
| Probe length L | [mm] | 728 |
| **Application** | | |
| Special feature | | Gold-plated contacts |
| Media | | hydrous coolants; oils; oil-based media; water; media similar to water |
| Dielectric constant of the medium | | > 2 |
| Cannot be used for | | extremely conductive media; adhering media; granulates; bulk material; acids; alkali; food and electroplating industry |
| Maximum speed of the change of level | [mm/s] | 300 |
| Tank pressure | [bar] | 0.5; (when mounting with mounting accessories: E43001 - E43007, E43019) |
| Coolants | | |
| Medium temperature | [°C] | 0...35; (with climatic tube E43102: 35...55 °C) |
| Oil | | |
| Medium temperature | [°C] | 0...70 |
| Medium temperature short time | [°C] | 0...90; (< 1 h) |

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| | | |
|---|---|---|
| Water | | |
| Medium temperature | [°C] | 0...35;  (with climatic tube E43102: 35...55 °C) |
| **Electrical data** | | |
| Operating voltage | [V] | 18...30 DC |
| Current consumption | [mA] | < 50 |
| Protection class | | III |
| Reverse polarity protection | | yes |
| Power-on delay time | [s] | < 3 |
| Measuring principle | | capacitive |
| **Inputs / outputs** | | |
| Number of inputs and outputs | | Number of digital outputs: 1; Number of analogue outputs: 1 |
| **Outputs** | | |
| Total number of outputs | | 2 |
| Output signal | | switching signal; analogue signal; IO-Link |
| Electrical design | | PNP/NPN |
| Number of digital outputs | | 1 |
| 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 |
| Number of analogue outputs | | 1 |
| Analogue current output | [mA] | 4...20, invertible |
| Max. load | [Ω] | 500 |
| Analogue voltage output | [V] | 0...10, invertible |
| Min. load resistance | [Ω] | 2000 |
| Short-circuit protection | | yes |
| Type of short-circuit protection | | thermal, pulsed |
| Overload protection | | yes |
| **Measuring/setting range** | | |
| Factory setting | | hydrous coolants; water; media similar to water |
| Probe length L | [mm] | 728 |
| Active range A | [mm] | 585 |
| Inactive range I1 / I2 | [mm] | 104 / 39 |
| Setting range | | |
| Set point SP | [mm] | 60...590 |
| Reset point rP | [mm] | 50...580 |
| In steps of | [mm] | 10 |
| Reference point OP | [mm] | 200 - 240 - 280 - 310 - 350 - 390 - 420 - 460 - 500 - 530 - 570 - 610 - OFF |
| Hysteresis, OP | [mm] | 4 |
| **Accuracy / deviations** | | |
| Measuring error [% of the final value] | | ± 5 |

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| | | | |
|---|---|---|---|
| Repeatability | | ± 2 | |
| Resolution | [mm] | 5 | |
| Zero signal (voltage) | [V] | 0 | |
| Zero signal (current) | [mA] | 4.0 | |
| Full signal (voltage) | [V] | 10 | |
| Full signal (current) | [mA] | 20 | |
| **Software / programming** | | | |
| Parameter setting options | | hysteresis / window; normally open / normally closed; switching logic; current/voltage output; SP/rP position; adjustment OP; medium selection; offset setting; switch-on/switch-off delay | |
| **Interfaces** | | | |
| Communication interface | | IO-Link | |
| Transmission type | | COM2 (38,4 kBaud) | |
| IO-Link revision | | 1.1 | |
| SDCI standard | | IEC 61131-9 | |
| Profiles | | Smart Sensor - SSP 0 | Generic Profiled Sensor |
| | | Function | Device identification |
| | | Function | Process data variable |
| | | Function | Device diagnosis |
| SIO mode | | yes | |
| Required master port type | | A | |
| Process data analogue | | 2 | |
| Process data binary | | 1 | |
| Min. process cycle time | [ms] | 3.2 | |
| Supported DeviceIDs | | **Type of operation** | **DeviceID** |
| | | default | 651 |
| **Operating conditions** | | | |
| Ambient temperature | [°C] | 0...60 | |
| Storage temperature | [°C] | -25...80 | |
| Protection | | IP 67 | |
| **Tests / approvals** | | | |
| EMC | | DIN EN 61000-6-4 | |
| | | DIN EN 61000-6-2 | |
| 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** | | | |
| Weight | [g] | 548.6 | |
| Dimensions | [mm] | Ø 16 | |
| Materials | | stainless steel (304/1.4301); stainless steel (316L/1.4404); FKM; NBR; PBT; PC; PA; PP; TPV | |
| Materials (wetted parts) | | PP | |

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| Displays / operating elements | | |
|---|---|---|
| Display | display unit / status | 2 x LED, green (cm, inch) |
| | switching status | 1 x LED, yellow |
| | measured values | alphanumeric display, 4-digit |
| | parameter setting | alphanumeric display, 4-digit |

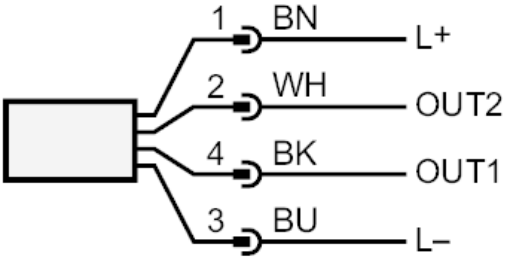
| Remarks | |
|---|---|
| Pack quantity | 1 pcs. |

## Electrical connection

Connector: 1 x M12; coding: A; Contacts: 4, gold-plated




### Connection




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