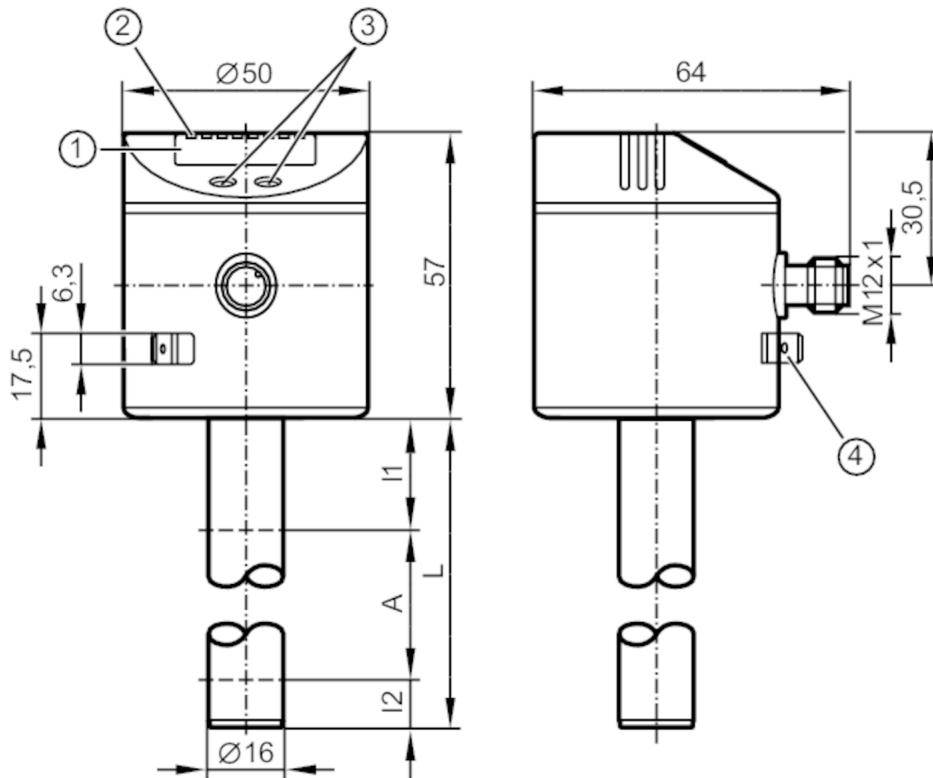


## Electronic level sensor

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 analog outputs: 1  |  |
| Factory setting                             | hydrous coolants; water; media similar to water  |  |
| Probe length L [mm]                         | 728  |  |
| <b>Application</b>                          |  |  |
| System                                      | 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)  |  |
| <b>Coolants</b>                             |  |  |
| Medium temperature [°C]                     | 0...35; (with climate tube E43102: 35...55 °C)   |  |
| <b>Oil</b>                                  |  |  |
| Medium temperature [°C]                     | 0...70   |  |
| Medium temperature short time [°C]          | 0...90; (< 1 h)  |  |

# LK3124



## Electronic level sensor

LK0728B-B-00KLPKG/US

Water

|   |      |   |
|---|------|---|
| Medium temperature                              | [°C] | 0...35; (with climate tube E43102: 35...55 °C)                              |
| <b>Electrical data</b>                          |      |   |
| 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  |
| <b>Inputs / outputs</b>                         |      |   |
| Number of inputs and outputs                    |      | Number of digital outputs: 1; Number of analog outputs: 1                   |
| <b>Outputs</b>                                  |      |   |
| Total number of outputs                         |      | 2   |
| Output signal                                   |      | switching signal; analog signal; IO-Link                                    |
| Electrical design                               |      | PNP/NPN   |
| Number of digital outputs                       |      | 1   |
| Output function                                 |      | normally open / closed; (configurable)                                      |
| Max. voltage drop switching output DC           | [V]  | 2.5   |
| Permanent current rating of switching output DC | [mA] | 200   |
| Number of analog outputs                        |      | 1   |
| Analog current output                           | [mA] | 4...20, invertible  |
| Max. load                                       | [Ω]  | 500   |
| Analog 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   |
| <b>Measuring/setting range</b>                  |      |   |
| 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  |
| <b>Setting range</b>                            |      |   |
| 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   |
| <b>Accuracy / deviations</b>                    |      |   |
| Measuring error                                 |      | ± 5   |

# LK3124



## Electronic level sensor

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|                                      |   |                               |
|--------------------------------------|---|-------------------------------|
| [% of the final value]               |   |                               |
| 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                            |
| <b>Software / programming</b>        |   |                               |
| Parameter setting options            | hysteresis / window; normally open / closed; switching logic; current/voltage output; SP/DP position; adjustment OP; medium selection; offset setting; switch-on/switch-off delay |                               |
| <b>Interfaces</b>                    |   |                               |
| Communication interface              | IO-Link   |                               |
| Transmission type                    | COM2 (38,4 kBaud)   |                               |
| IO-Link revision                     | 1.1   |                               |
| SDCI standard                        | IEC 61131-9   |                               |
| Profiles                             | Smart Sensor: Process Data Variable; Device Identification, Device Diagnosis  |                               |
| SIO mode                             | yes   |                               |
| Required master port class           | A   |                               |
| Process data analog                  | 2   |                               |
| Process data binary                  | 1   |                               |
| Min. process cycle time              | [ms]  | 3.2                           |
| Supported DeviceIDs                  | Type of operation<br>default  | DeviceID<br>651               |
| <b>Operating conditions</b>          |   |                               |
| Ambient temperature                  | [°C]  | 0...60                        |
| Storage temperature                  | [°C]  | -25...80                      |
| Protection                           | IP 67   |                               |
| <b>Tests / approvals</b>             |   |                               |
| EMC                                  | DIN EN 61000-6-4<br>DIN EN 61000-6-2  |                               |
| Shock resistance                     | DIN EN 60068-2-29<br>15 g (11 ms)   |                               |
| Vibration resistance                 | DIN EN 60068-2-6<br>5 g (10...2000 Hz)  |                               |
| MTTF                                 | [years]   | 194                           |
| <b>Mechanical data</b>               |   |                               |
| Weight                               | [g]   | 548.6                         |
| Dimensions                           | [mm]  | Ø 16                          |
| Material                             | stainless steel (1.4301 / 304); stainless steel (1.4404 / 316L); FKM; NBR; PBT; PC; PA; PP; TPV   |                               |
| Materials (wetted parts)             | PP  |                               |
| <b>Displays / operating elements</b> |   |                               |
| 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 |

# LK3124



## Electronic level sensor

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### Remarks

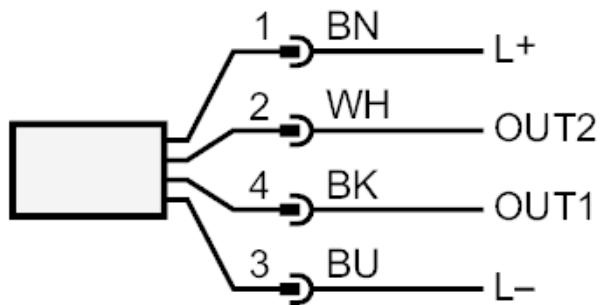
|               |        |
|---------------|--------|
| Pack quantity | 1 pcs. |
|---------------|--------|

### Electrical connection

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



### Connection



OUT1: Switching output IO-Link

OUT2: analog output

Colors to DIN EN 60947-5-2

OUT1: Switching output

OUT2: analog output

Core colors :

BK = black

BN = brown

BU = blue

WH = white