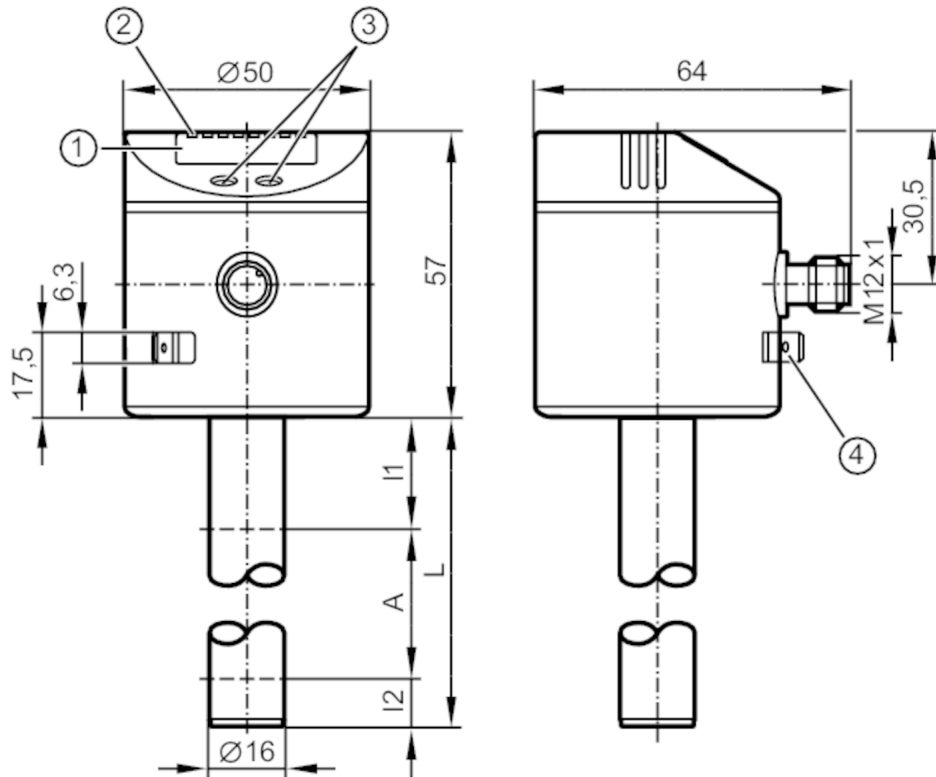


# LK1024



## Electronic level sensor

LK0728B-B-00KQPKG/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: 2                    |
| Factory setting              | hydrous coolants; water; media similar to water |
| Probe length L [mm]          | 728   |

### Application

|   |  |
|---|--|
| 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)   |
| <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  |
| <b>Inputs / outputs</b>                         |  |
| Number of inputs and outputs                    | Number of digital outputs: 2   |
| <b>Outputs</b>                                  |  |
| Total number of outputs                         | 2  |
| Output signal                                   | switching signal; IO-Link  |
| Electrical design                               | PNP/NPN  |
| Number of digital outputs                       | 2  |
| 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   |
| 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                                 | [% of the final value] ± 5   |
| Repeatability                                   | ± 2  |
| Resolution                                      | [mm] 5   |
| <b>Software / programming</b>                   |  |
| Parameter setting options                       | hysteresis / window; normally open / normally closed; switching logic; SP/rP position; adjustment OP; medium selection; offset setting; switch-on/switch-off delay |

# LK1024



## Electronic level sensor

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| Interfaces                                |   |                               |
|---|---|-------------------------------|
| Communication interface                   | IO-Link   |                               |
| Transmission type                         | COM2 (38,4 kBaud)   |                               |
| IO-Link revision                          | 1.1   |                               |
| SDCI standard                             | IEC 61131-9   |                               |
| IO-Link device ID                         | 0x00028E  |                               |
| Profiles                                  | Smart Sensor: Process Data Variable; Device Identification, Device Diagnosis                    |                               |
| SIO mode                                  | yes   |                               |
| Required master port type                 | A   |                               |
| Process data analogue                     | 2   |                               |
| Process data binary                       | 2   |                               |
| Min. process cycle time [ms]              | 3.2   |                               |
| 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]                              | 265   |                               |
| Mechanical data                           |   |                               |
| Weight [g]                                | 545   |                               |
| Dimensions [mm]                           | Ø 16  |                               |
| Materials                                 | stainless steel (1.4301 / 304); stainless steel (1.4404 / 316L); FKM; NBR; PBT; PC; PA; PP; TPV |                               |
| Materials (wetted parts)                  | PP  |                               |
| Displays / operating elements             |   |                               |
| Display                                   | display unit / status   | 2 x LED, green (cm, inch)     |
|   | switching status  | 2 x LED, yellow               |
|   | measured values   | alphanumeric display, 4-digit |
|   | parameter setting   | alphanumeric display, 4-digit |
| Remarks                                   |   |                               |
| Notes                                     | Please see the technical note under "Downloads"   |                               |
| Pack quantity                             | 1 pcs.  |                               |
| Electrical connection                     |   |                               |
| Connector: 1 x M12; Contacts: gold-plated |   |                               |

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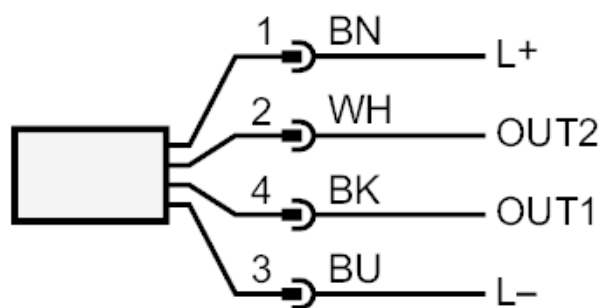


## Electronic level sensor

LK0728B-B-00KQPKG/US



### Connection



OUT1: switching output IO-Link

OUT2: switching output

colours to DIN EN 60947-5-2

Core colours :

BK = black

BN = brown

BU = blue

WH = white