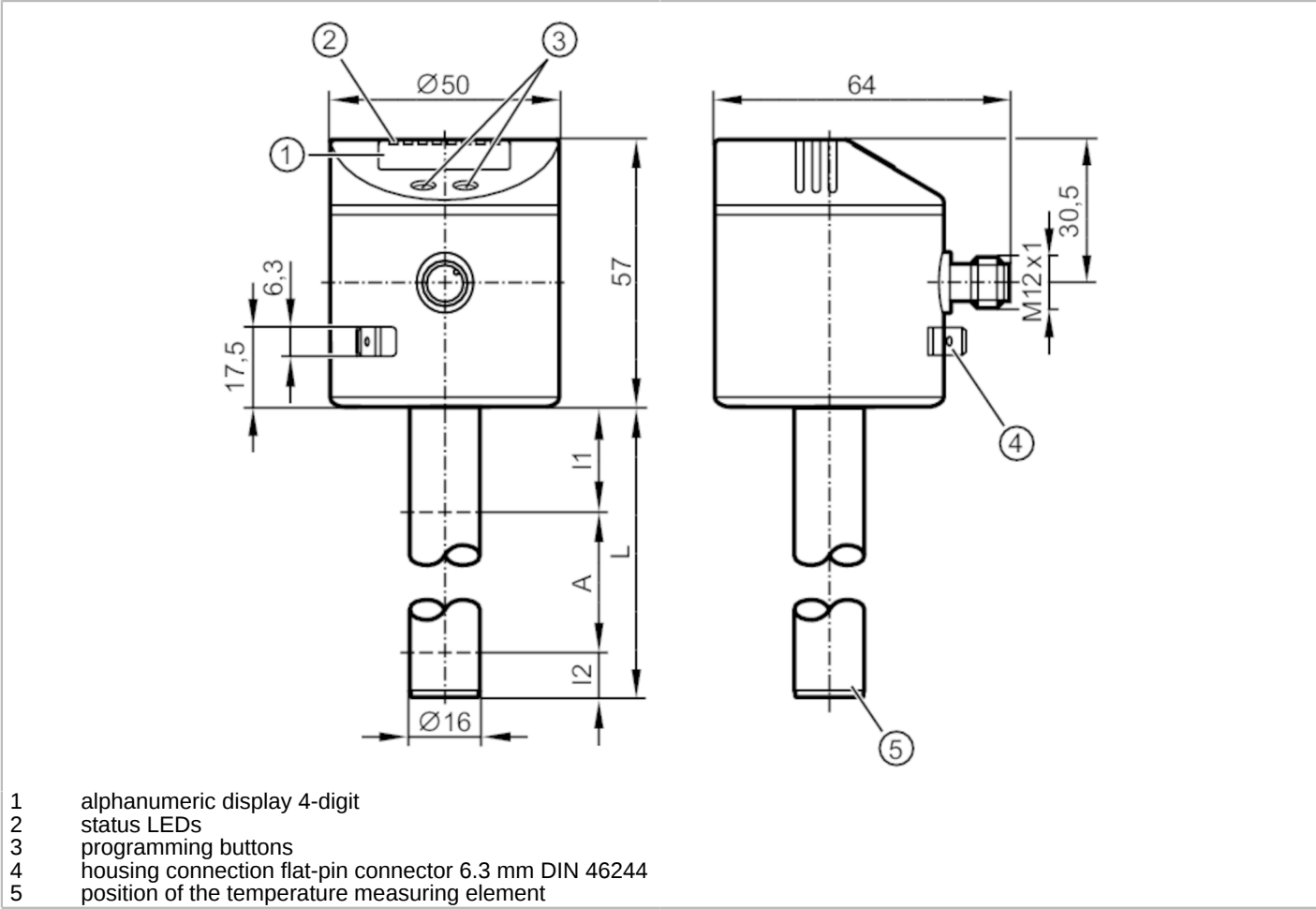




Electronic level and temperature sensor

LT0728B-B-00KSPKG/US

For 8-pole sockets the core colours are not standardised.  
Please note the wiring of the sensor and the sockets (see data sheet).



| Product characteristics           |  |
|-----------------------------------|--|
| Number of inputs and outputs      | Number of digital outputs: 4   |
| Factory setting                   | 2 switching outputs level (OUT1, OUT2); 2 switching outputs temperature (OUT3, OUT4); mineral oils |
| 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               |
| 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   |



## Electronic level and temperature sensor

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|   |      |  |
|---|------|--|
| Medium temperature short time                   | [°C] | 0...90; (< 1 h)  |
| 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: 4   |
| Outputs   |      |  |
| Total number of outputs                         |      | 4  |
| Output signal                                   |      | switching signal; IO-Link  |
| Electrical design                               |      | PNP/NPN  |
| Number of digital outputs                       |      | 4  |
| 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  |
| Measuring/setting range                         |      |  |
| Factory setting                                 |      | 2 switching outputs level (OUT1, OUT2); 2 switching outputs temperature (OUT3, OUT4); mineral oils |
| 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  |
| Temperature monitoring                          |      |  |
| Measuring range                                 | [°C] | -20...90   |
| Set point SP                                    | [°C] | -19.5...90   |
| Reset point rP                                  | [°C] | -20...89.5   |
| In steps of                                     | [°C] | 0.5  |



## Electronic level and temperature sensor

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|                                |  |                    |
|--------------------------------|--|--------------------|
| Resolution of switching output | [K]  | 0.5                |
| Accuracy / deviations          |  |                    |
| Measuring error                |  | ± 5                |
|                                | [% of the final value]   |                    |
| Repeatability                  |  | ± 2                |
| Resolution                     | [mm]   | 10                 |
| Temperature monitoring         |  |                    |
| Switch point accuracy          | [K]  | ± 1,5              |
| Resolution                     | [K]  | 0.5                |
| Dynamic response T09           | [s]  | 90                 |
| Software / programming         |  |                    |
| Parameter setting options      | hysteresis / window; normally open / normally closed; SP/rP position; OP position; adjustment OP; medium selection; offset setting; Display unit; process value assignment |                    |
| Interfaces                     |  |                    |
| 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 type      | A  |                    |
| Process data analogue          | 4  |                    |
| Process data binary            | 4  |                    |
| Min. process cycle time        | [ms]   | 4.5                |
| Supported DeviceIDs            | Type of operation  | DeviceID           |
|                                | Default  | 20                 |
| Operating conditions           |  |                    |
| Ambient temperature            | [°C]   | 0...60             |
| Storage temperature            | [°C]   | -25...80           |
| Protection                     | IP 67  |                    |
| Tests / approvals              |  |                    |
| EMC                            | DIN EN 61000-6-2   |                    |
|                                | DIN EN 61000-6-4   |                    |
| Shock resistance               | DIN EN 60068-2-27  | 15 g (11 ms)       |
| Vibration resistance           | DIN EN 60068-2-6   | 5 g (10...2000 Hz) |
| MTTF                           | [years]  | 224                |
| Mechanical data                |  |                    |
| Weight                         | [g]  | 550.5              |
| 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   |                    |

# LT8024



## Electronic level and temperature sensor

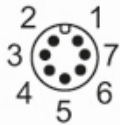
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| Displays / operating elements |                   |                                   |
|-------------------------------|-------------------|-----------------------------------|
| Display                       | Display unit      | 4 x LED, green (cm, inch, °C, °F) |
|                               | switching status  | 4 x LED, yellow (OUT4...OUT1)     |
|                               | measured values   | alphanumeric display, 4-digit     |
|                               | parameter setting | alphanumeric display, 4-digit     |

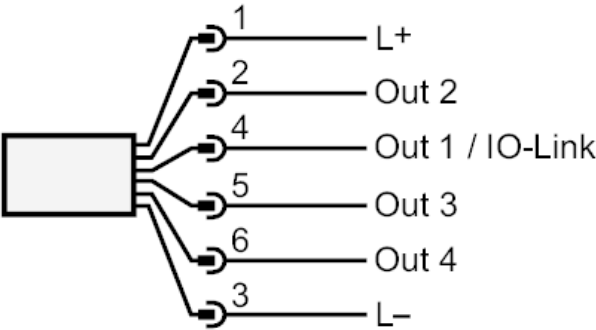
| Remarks       |        |
|---------------|--------|
| Pack quantity | 1 pcs. |

### Electrical connection

Connector: 1 x M12; coding: A



### Connection



OUT1: switching output IO-Link  
OUT2...4: switching output