

LL8023

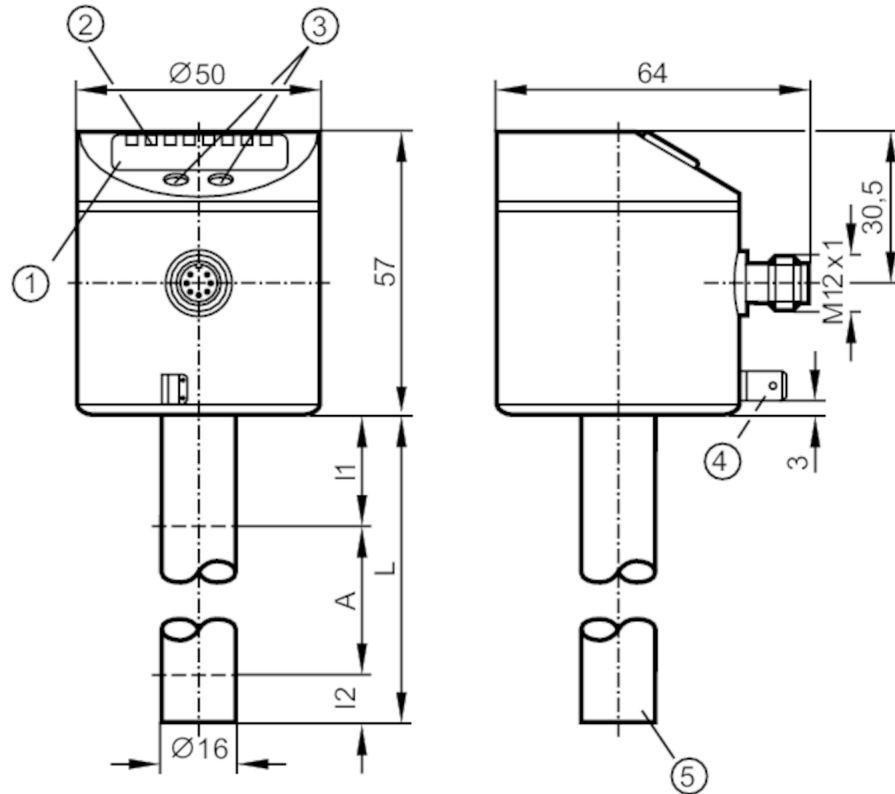


Continuous level sensor with leakage monitoring

LL0472B-B-00KVPKG/US

discontinued article

Discontinuation date: 31.03.2017



- 1 alphanumeric display 4-digit
- 2 status LEDs
- 3 programming buttons
- 4 housing connection flat-pin connector 6.3 mm DIN 46244
- 5 position of the temperature measuring element



Product characteristics

| | |
|------------------------------|------------------------------|
| Number of inputs and outputs | Number of digital outputs: 4 |
| Probe length L [mm] | 472 |

Application

| | |
|-----------------------------------|--|
| Special feature | Gold-plated contacts |
| Media | hydrous coolants; oils; 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; (LL8023 + E43101: 0...60; For water and hydrous media with temperatures > 35 °C install the unit into a climatic tube.) |
|-------------------------|---|

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| | | |
|---|------|---|
| Oil | | |
| Medium temperature | [°C] | 0...70 |
| Medium temperature short time | [°C] | 0...90 |
| Water | | |
| Medium temperature | [°C] | 0...35; (LL8023 + E43101: 0...60; For water and hydrous media with temperatures > 35 °C install the unit into a climatic tube.) |
| Electrical data | | |
| Operating voltage | [V] | 18...30 DC; (operating voltage "supply class 2" according to cULus) |
| Current consumption | [mA] | < 60 |
| Protection class | | III |
| Reverse polarity protection | | yes |
| Power-on delay time | [s] | 3 |
| Inputs / outputs | | |
| Number of inputs and outputs | | Number of digital outputs: 4 |
| Outputs | | |
| Total number of outputs | | 4 |
| Output signal | | switching signal |
| Electrical design | | PNP |
| 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 | | |
| Probe length L | [mm] | 472 |
| Active range A | [mm] | 390 |
| Inactive range I1 / I2 | [mm] | 53 / 30 |
| Setting range | | |
| Set point SP | [mm] | 40...390 |
| Reset point rP | [mm] | 35...385 |
| In steps of | [mm] | 5 |
| Hysteresis | [mm] | 5 |
| Overflow switch point OP | [mm] | 139 - 163 - 188 - 212 - 236 - 261 - 285 - 310 - 334 - 358 - 383 - 407 |
| Hysteresis, OP | [mm] | 3 |
| Temperature monitoring | | |
| Display range | [°C] | -10...100 |
| Accuracy / deviations | | |
| Measuring error | | ± 5 |

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| | | |
|---------------|------------------------|-----|
| | [% of the final value] | |
| Repeatability | | ± 2 |

Software / programming

| | |
|---------------------------|--|
| Parameter setting options | hysteresis / window; normally open / normally closed; SP/ rP position; OP position; adjustment OP; medium selection; offset setting; Display unit; settings for leakage monitoring |
|---------------------------|--|

Operating conditions

| | | |
|---------------------|------|----------|
| Ambient temperature | [°C] | 0...60 |
| Storage temperature | [°C] | -25...80 |
| 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] | 202 |

Mechanical data

| | | |
|--------------------------|------|---|
| Weight | [g] | 424 |
| Dimensions | [mm] | Ø 16 |
| Materials | | stainless steel (1.4301 / 304); FKM; NBR; PBT; PC; PEI; PP; TPE-V |
| Materials (wetted parts) | | PP |

Displays / operating elements

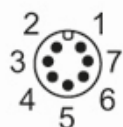
| | | |
|---------|-----------------------|-------------------------------|
| Display | display unit / status | 4 x LED, green |
| | switching status | 4 x LED, yellow |
| | level | alphanumeric display, 4-digit |
| | parameter setting | alphanumeric display, 4-digit |

Remarks

| | |
|---------------|---|
| Notes | discontinued article; For 8-pole sockets the core colours are not standardised.; Please note the wiring of the sensor and the sockets (see data sheet). |
| Pack quantity | 1 pcs. |

Electrical connection

Connector: 1 x M12; Contacts: gold-plated



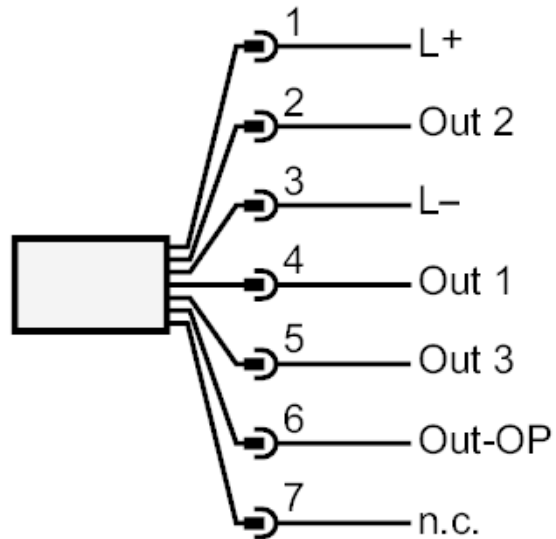
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Connection



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