



Electronic level sensor

LK0728A-A-00KQPKG/US



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



| 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)                                                  |
| oil                               |       |                                                                                      |
| Medium temperature                | [°C]  | 0...70                                                                               |
| Medium temperature short time     | [°C]  | 0...90; (< 1 h)                                                                      |
| water                             |       |                                                                                      |
| Medium temperature                | [°C]  | 0...35; (with climatic tube E43102 35...55 °C)                                       |

# LK7024



## Electronic level sensor

LK0728A-A-00KQPKG/US

| Electrical data                                 |                        |                                                                                                                                                                    |
|-------------------------------------------------|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating voltage                               | [V]                    | 12...30 DC                                                                                                                                                         |
| Current consumption                             | [mA]                   | < 50                                                                                                                                                               |
| Protection class                                |                        | III                                                                                                                                                                |
| Reverse polarity protection                     |                        | yes                                                                                                                                                                |
| Power-on delay time                             | [s]                    | < 3                                                                                                                                                                |
| Inputs / outputs                                |                        |                                                                                                                                                                    |
| Number of inputs and outputs                    |                        | Number of digital outputs: 2                                                                                                                                       |
| Outputs                                         |                        |                                                                                                                                                                    |
| 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                                                                                                                                                                |
| Measuring/setting range                         |                        |                                                                                                                                                                    |
| Factory setting                                 |                        | automatic media detection                                                                                                                                          |
| 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                                 |                        | ± 5                                                                                                                                                                |
|                                                 | [% of the final value] |                                                                                                                                                                    |
| Repeatability                                   |                        | ± 2                                                                                                                                                                |
| Resolution                                      | [mm]                   | 5                                                                                                                                                                  |
| Software / programming                          |                        |                                                                                                                                                                    |
| 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 |

# LK7024



## Electronic level sensor

LK0728A-A-00KQPKG/US

| 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                         | 0x000291                                                                                        |                               |
| 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]                                                                                             | 701.8                         |
| 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 |                                                                                                 |                               |

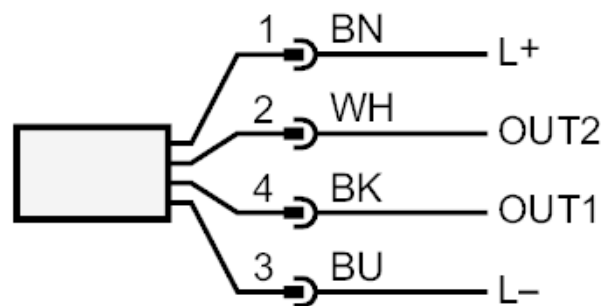
# LK7024

## Electronic level sensor

LK0728A-A-00KQPKG/US



### Connection



OUT1: switching output or IO-Link

OUT2: switching output

colours to DIN EN 60947-5-2

Core colours :

BK = black

BN = brown

BU = blue

WH = white