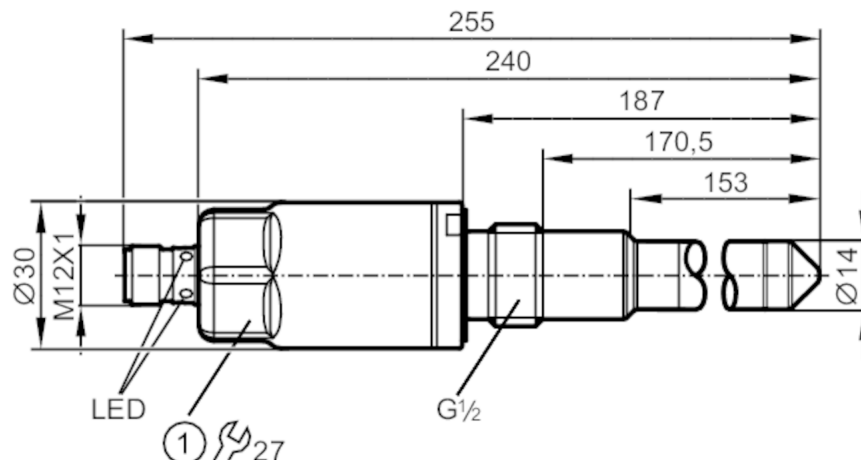


# LMT104



## Sensor for point level detection

LMDCE-A12E-QSKG-2/US



1 Tightening torque 20...25 Nm



### Product characteristics

|                              |                                        |
|------------------------------|----------------------------------------|
| Number of inputs and outputs | Number of digital outputs: 2           |
| Factory setting              | hydrous media                          |
| Process connection           | threaded connection G 1/2 sealing cone |

### Application

|                                                |                                                                  |
|------------------------------------------------|------------------------------------------------------------------|
| Special feature                                | Gold-plated contacts                                             |
| Media                                          | Liquids; viscous media; powder                                   |
| Recommended media                              | water; hydrous media; oils; oil-based media; powder              |
| Cannot be used for                             | See the operating instructions, chapter "Function and features". |
| Probe length [mm]                              | 153                                                              |
| Tank pressure [bar]                            | -1...40                                                          |
| MAWP (for applications according to CRN) [bar] | 40                                                               |

|                                    |                  |
|------------------------------------|------------------|
| Oil                                |                  |
| Medium temperature [°C]            | -20...100        |
| Medium temperature short time [°C] | -20...150; (1 h) |

|                                    |                  |
|------------------------------------|------------------|
| Water                              |                  |
| Medium temperature [°C]            | -20...100        |
| Medium temperature short time [°C] | -20...150; (1 h) |

### Electrical data

|                             |            |
|-----------------------------|------------|
| Operating voltage [V]       | 18...30 DC |
| Current consumption [mA]    | < 50       |
| Protection class            | III        |
| Reverse polarity protection | yes        |
| Measuring principle         | capacitive |



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LMDCE-A12E-QSKG-2/US

| 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] | 100                                                        |                    |
| Short-circuit protection                             | yes                                                        |                    |
| Type of short-circuit protection                     | pulsed                                                     |                    |
| Overload protection                                  | yes                                                        |                    |
| Measuring/setting range                              |                                                            |                    |
| Factory setting                                      | hydrous media                                              |                    |
| Response times                                       |                                                            |                    |
| Response time [s]                                    | < 0.5                                                      |                    |
| 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 |                    |
| SIO mode                                             | yes                                                        |                    |
| Required master port type                            | A                                                          |                    |
| Process data analogue                                | 1                                                          |                    |
| Process data binary                                  | 2                                                          |                    |
| Min. process cycle time [ms]                         | 2.3                                                        |                    |
| Supported DeviceIDs                                  | Type of operation                                          | DeviceID           |
|                                                      | Default                                                    | 370                |
| Operating conditions                                 |                                                            |                    |
| Ambient temperature [°C]                             | -20...85                                                   |                    |
| Note on ambient temperature                          | Medium temperature: < 100 °C                               |                    |
|                                                      | -20...60 °C                                                |                    |
|                                                      | Medium temperature: < 150 °C                               |                    |
| Storage temperature [°C]                             | -40...85                                                   |                    |
| Protection                                           | IP 68; IP 69K                                              |                    |
| Tests / approvals                                    |                                                            |                    |
| EMC                                                  | DIN EN 61000-6-2                                           |                    |
|                                                      | DIN EN 61000-6-4                                           | : closed tanks     |
| Shock resistance                                     | DIN EN 60068-2-27                                          | 50 g (11 ms)       |
| Vibration resistance                                 | DIN EN 60068-2-6                                           | 8 g (10...2000 Hz) |

# LMT104



## Sensor for point level detection

LMDCE-A12E-QSKG-2/US

|             |                 |      |
|-------------|-----------------|------|
| MTTF        | [years]         | 222  |
| UL approval | UL Approval no. | H001 |

### Mechanical data

|                          |                                                                                                                       |       |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------|-------|
| Weight                   | [g]                                                                                                                   | 321.5 |
| Materials                | stainless steel (1.4404 / 316L); stainless steel (1.4571/316Ti ); PEEK; PEI; FKM                                      |       |
| Materials (wetted parts) | stainless steel (1.4404 / 316L); stainless steel (1.4571/316Ti ); PEEK; surface characteristics: Ra < 0,8 / Rz 4; FKM |       |
| Process connection       | threaded connection G 1/2 sealing cone                                                                                |       |

### Displays / operating elements

|         |                  |             |
|---------|------------------|-------------|
| Display | switching status | LED, yellow |
|         | operating status | LED, green  |

### Remarks

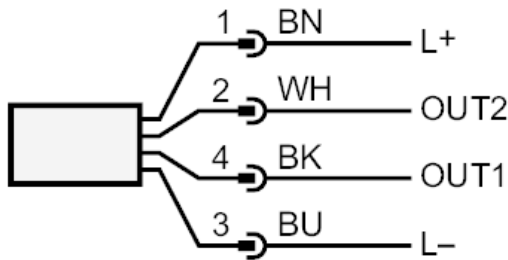
|               |        |
|---------------|--------|
| Pack quantity | 1 pcs. |
|---------------|--------|

### Electrical connection

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



### Connection



|       |                                |
|-------|--------------------------------|
| OUT1: | switching output IO-Link Teach |
| OUT2: | switching output               |
|       | colours to DIN EN 60947-5-2    |
|       | Core colours :                 |
| BK =  | black                          |
| BN =  | brown                          |
| BU =  | blue                           |
| WH =  | white                          |