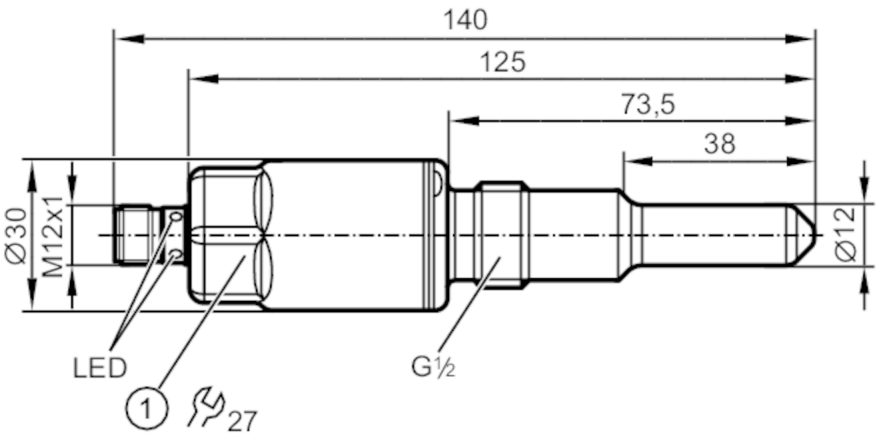


# LMT102



## Sensor for point level detection

LMCCE-A12E-QSKG-2/US



1 Tightening torque 20...25 Nm



ACS



CRN



EC 1935/2004

EHEDG Certified

FCM



IO-Link

KTW/W270

UK  
CA

### Product characteristics

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

### Application

|                    |                                                                          |
|--------------------|--------------------------------------------------------------------------|
| System             | gold-plated contacts                                                     |
| Media              | Liquids; viscous media; powder                                           |
| Recommended media  | water; water-based media; oils; oil-based media; powder                  |
| Cannot be used for | See the operating instructions, chapter "Function and features".         |
| Probe length [mm]  | 38                                                                       |
| Tank pressure      | -1...40; (MAWP (for applications according to CRN): 40 bar / 4 MPa) bar  |
|                    | -0.1...4; (MAWP (for applications according to CRN): 40 bar / 4 MPa) MPa |

|                                    |                  |
|------------------------------------|------------------|
| 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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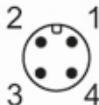
| Inputs / outputs                                     |  |                                        |  |
|------------------------------------------------------|--|----------------------------------------|--|
| Number of inputs and outputs                         |  | Number of digital outputs: 2           |  |
| 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 / closed; (configurable) |  |
| 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                     |  | yes (non-latching)                     |  |
| Overload protection                                  |  | yes                                    |  |
| Measuring/setting range                              |  |                                        |  |
| Factory setting                                      |  | water-based media                      |  |
| Reaction 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 - SSP 0                   |  |
|                                                      |  | Generic Profiled Sensor                |  |
|                                                      |  | Function                               |  |
| Function                                             |  | Device identification                  |  |
| Function                                             |  | Process data variable                  |  |
| SIO mode                                             |  | yes                                    |  |
| Required master port class                           |  | A                                      |  |
| Process data analog                                  |  | 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                          |  |

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## Sensor for point level detection

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| Tests / approvals                                                                              |                                                       |                     |
|------------------------------------------------------------------------------------------------|-------------------------------------------------------|---------------------|
| EMC                                                                                            | DIN EN 61000-6-2                                      |                     |
|                                                                                                | DIN EN 61000-6-4                                      | : open tanks        |
|                                                                                                | DIN EN 61000-6-3                                      | : closed tanks      |
| Shock resistance                                                                               | DIN EN 60068-2-27                                     | 50 g (11 ms)        |
| Vibration resistance                                                                           | DIN EN 60068-2-6                                      | 20 g (10...2000 Hz) |
| MTTF                                                                                           | [years]                                               | 223                 |
| UL approval                                                                                    | UL approval number                                    | H001                |
| Mechanical data                                                                                |                                                       |                     |
| Weight                                                                                         | [g]                                                   | 202                 |
| Dimensions                                                                                     | [mm]                                                  | Ø 30 / L = 125      |
| Material                                                                                       | stainless steel (1.4404 / 316L); PEEK; PEI; FKM       |                     |
| Materials (wetted parts)                                                                       | PEEK surface characteristics: Ra < 0,8 µm / Rz = 4 µm |                     |
| 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                                           |                                                       |                     |
| <div></div> |                                                       |                     |



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## Sensor for point level detection

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### Connection



OUT1: Switching output IO-Link Teach

OUT2: Switching output

Colors to DIN EN 60947-5-2

Core colors :

BK = black  
BN = brown  
BU = blue  
WH = white