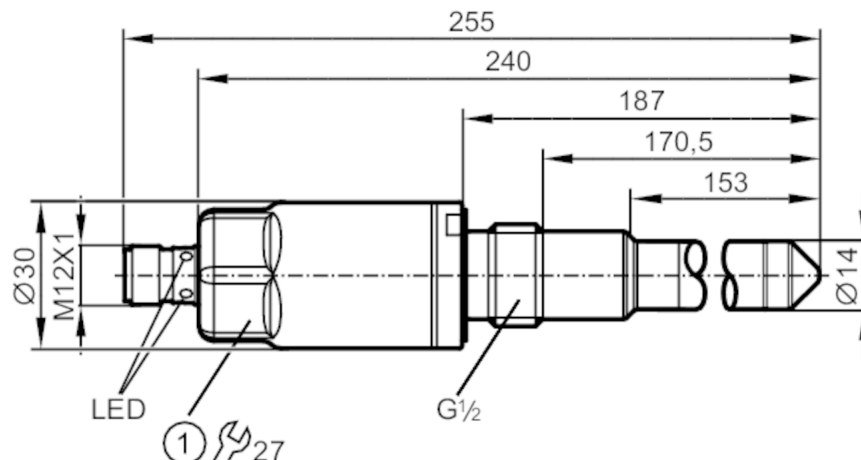


# LMT03A



## Sensor for point level detection in hazardous areas

LMDCE-A12E-QSKG-1/US/3D/3G



1 Tightening torque 20...25 Nm



EC 1935/2004



FCM

FDA



Hygienic Cleanable

IO-Link



### Product characteristics

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

### Application

|                         |                                                                  |
|-------------------------|------------------------------------------------------------------|
| System                  | gold-plated contacts                                             |
| Media                   | Liquids; viscous media; powder                                   |
| Cannot be used for      | See the operating instructions, chapter "Function and features". |
| Medium temperature [°C] | -20...85                                                         |
| Probe length [mm]       | 153                                                              |
| Tank pressure           | -1...40 bar<br>-0.1...4 MPa                                      |

### Electrical data

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

### 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                                    |

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|                                                 |                          |                                                                                                                                 |
|-------------------------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Permanent current rating of switching output DC | [mA]                     | 100                                                                                                                             |
| Short-circuit protection                        |                          | yes                                                                                                                             |
| Type of short-circuit protection                |                          | yes (non-latching)                                                                                                              |
| Overload protection                             |                          | yes                                                                                                                             |
| <b>Measuring/setting range</b>                  |                          |                                                                                                                                 |
| Factory setting                                 |                          | oils; oil-based media; powder                                                                                                   |
| <b>Reaction times</b>                           |                          |                                                                                                                                 |
| Response time                                   | [s]                      | < 0.5                                                                                                                           |
| <b>Interfaces</b>                               |                          |                                                                                                                                 |
| Communication interface                         |                          | IO-Link                                                                                                                         |
| Transmission type                               |                          | COM2 (38,4 kBaud)                                                                                                               |
| IO-Link revision                                |                          | 1.1                                                                                                                             |
| SDCI standard                                   |                          | IEC 61131-9                                                                                                                     |
| 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                             | <b>Type of operation</b> | <b>DeviceID</b>                                                                                                                 |
|                                                 | default                  | 642                                                                                                                             |
| <b>Operating conditions</b>                     |                          |                                                                                                                                 |
| Ambient temperature                             | [°C]                     | -20...60                                                                                                                        |
| Storage temperature                             | [°C]                     | -40...85                                                                                                                        |
| Protection                                      |                          | IP 67; (when used outside the hazardous area: IP 68 / IP 69)                                                                    |
| <b>Tests / approvals</b>                        |                          |                                                                                                                                 |
| ATEX marking                                    |                          | II 3D Ex tc IIIC T90°C Dc X                                                                                                     |
|                                                 |                          | II 3G Ex nA IIC T4 Gc X                                                                                                         |
| 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)                                                                                                              |
| MTTF                                            | [years]                  | 222                                                                                                                             |
| <b>Mechanical data</b>                          |                          |                                                                                                                                 |
| Weight                                          | [g]                      | 329                                                                                                                             |
| Dimensions                                      | [mm]                     | Ø 30 / L = 255                                                                                                                  |
| Material                                        |                          | 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 );<br>PEEK surface characteristics: Ra < 0,8 µm / Rz = 4 µm; FKM |
| Process connection                              |                          | threaded connection G 1/2 sealing cone                                                                                          |
| <b>Displays / operating elements</b>            |                          |                                                                                                                                 |
| Display                                         | Switching status         | LED, yellow                                                                                                                     |
|                                                 | operating status         | LED, green                                                                                                                      |

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### Remarks

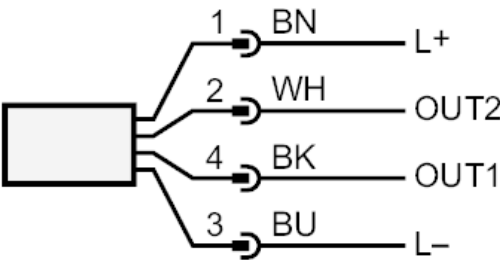
|               |        |
|---------------|--------|
| Pack quantity | 1 pcs. |
|---------------|--------|

### Electrical connection

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



### Connection



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