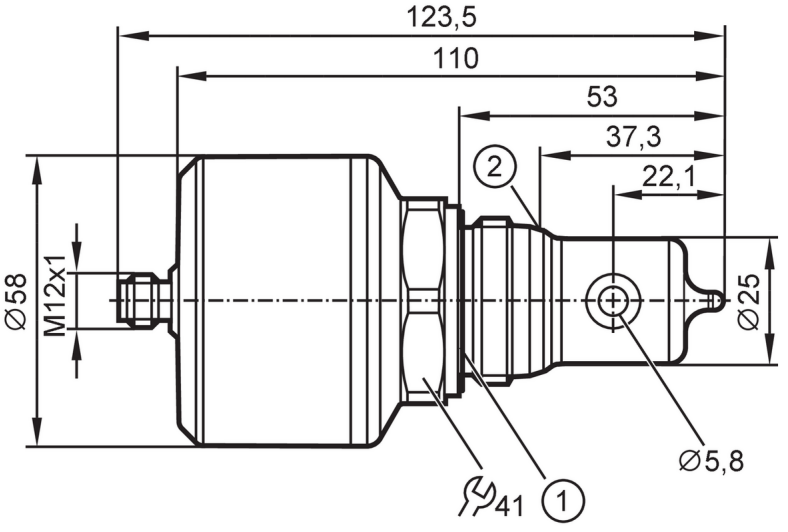
# LDL200

## Inductive conductivity sensor

IND CONDUCTIVITY HYG ASF-V

Digital meets analogue: integrating modern IO-Link sensors the analogue way. The EIO104 allows you to realise two analogue signals from intelligent IO-Link sensors with several process values.




1 Sealing
2 sealing edge

3A CE CRN cULus LISTED EC 1935/2004 EHEDG Certified FCM CN FCM JP FDA IO-Link UKCA

| | | | |
|---|---|---|---|
| **Product characteristics** | | | |
| Number of inputs and outputs | | Number of analogue outputs: 1 | |
| Process connection | | G 1 external thread Aseptoflex Vario | |
| **Application** | | | |
| Special feature | | Gold-plated contacts | |
| Media | | conductive liquids | |
| Note on media | | water | |
| | | milk | |
| | | CIP liquids | |
| Cannot be used for | | See the operating instructions, chapter "Function and features". | |
| Medium temperature | [°C] | -25...100; (< 1 h: 150) | |
| Pressure rating | | 16 bar | 1.6 MPa |
| Vacuum resistance | [mbar] | -1000 | |
| MAWP for applications according to CRN | | 12 bar | 1.2 MPa |
| **Electrical data** | | | |
| Operating voltage | [V] | 18...30 DC | |
| Current consumption | [mA] | < 100 | |
| Protection class | | III | |
| Reverse polarity protection | | yes | |
| Power-on delay time | [s] | 2 | |
| Measuring principle | | inductive | |
| **Inputs / outputs** | | | |
| Number of inputs and outputs | | Number of analogue outputs: 1 | |

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| | | | |
|---|---|---|---|
| **Outputs** | | | |
| Total number of outputs | | 1 | |
| Output signal | | analogue signal; IO-Link | |
| Output function | | analogue output scalable; selectable conductivity / temperature | |
| Number of analogue outputs | | 1 | |
| Analogue current output | [mA] | 4...20 | |
| Max. load | [Ω] | 500 | |
| **Measuring/setting range** | | | |
| Conductivity measurement | | | |
| Measuring range | [µS/cm] | 100...1000000 | |
| Resolution | [µS/cm] | 0...10.000 | 1 |
| | | 10.000...100.000 | 10 |
| | | 100.000...1.000.000 | 100 |
| Temperature measurement | | | |
| Measuring range | [°C] | -25...150 | |
| **Accuracy / deviations** | | | |
| Conductivity measurement | | | |
| Accuracy (in the measuring range) | | 2 % MW ± 25 µS/cm | |
| Drift | [%/K] | 0,1 %/K MW | |
| Repeatability | | 1 % MW ± 25 µS/cm | |
| Long-term stability | | 0,5 % MW ± 25 µS/cm | |
| Temperature measurement | | | |
| Accuracy | [K] | 20...50 °C: < ± 0,2 K;<br>-25...150 °C: < ± 1,5 K | |
| Repeatability | [K] | 0,2 | |
| Resolution | [K] | 0.1 | |
| **Response times** | | | |
| Conductivity measurement | | | |
| Response time | [s] | < 2; (T09; Damping = 0) | |
| Temperature measurement | | | |
| Response time | [s] | < 25; (T09) | |
| **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 3.1 | Measuring Sensor |
| | | Common - I&D | Identification and Diagnosis |
| SIO mode | | no | |
| Required master port type | | A | |
| Process data analogue | | 1 | |
| Min. process cycle time | [ms] | 6.4 | |

# LDL200

## Inductive conductivity sensor

IND CONDUCTIVITY HYG ASF-V

| | | | |
|---|---|---|---|
| Supported DeviceIDs | | **Type of operation** | **DeviceID** |
| | | default | 922 |
| **Operating conditions** | | | |
| Ambient temperature | [°C] | -40...60 | |
| Storage temperature | [°C] | -40...85 | |
| Protection | | IP 68; IP 69K; (7 days / 3 m water depth / 0.3 bar: IP 68) | |
| **Tests / approvals** | | | |
| EMC | | DIN EN 61000-6-2 | |
| | | DIN EN 61000-6-3 | |
| 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] | 129 | |
| UL approval | | File number UL | E364788 |
| **Mechanical data** | | | |
| Weight | [g] | 692.6 | |
| Materials | | stainless steel (316L/1.4404); PEEK; PEI; FKM | |
| Materials (wetted parts) | | PEEK | |
| Process connection | | G 1 external thread Aseptoflex Vario | |
| Surface characteristics Ra/Rz of the wetted parts | | Ra ≤ 0.8 µm | |
| **Remarks** | | | |
| Remarks | | MW = measured value | |
| Notes | | Digital meets analogue: integrating modern IO-Link sensors the analogue way. The EIO104 allows you to realise two analogue signals from intelligent IO-Link sensors with several process values. | |
| Pack quantity | | 1 pcs. | |

**Electrical connection**

Connector: 1 x M12 (EN 61067-2-101); coding: A; Contacts: 4, gold-plated

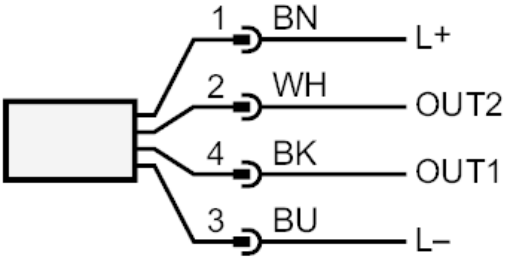


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## Inductive conductivity sensor

IND CONDUCTIVITY HYG ASF-V

### Connection




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