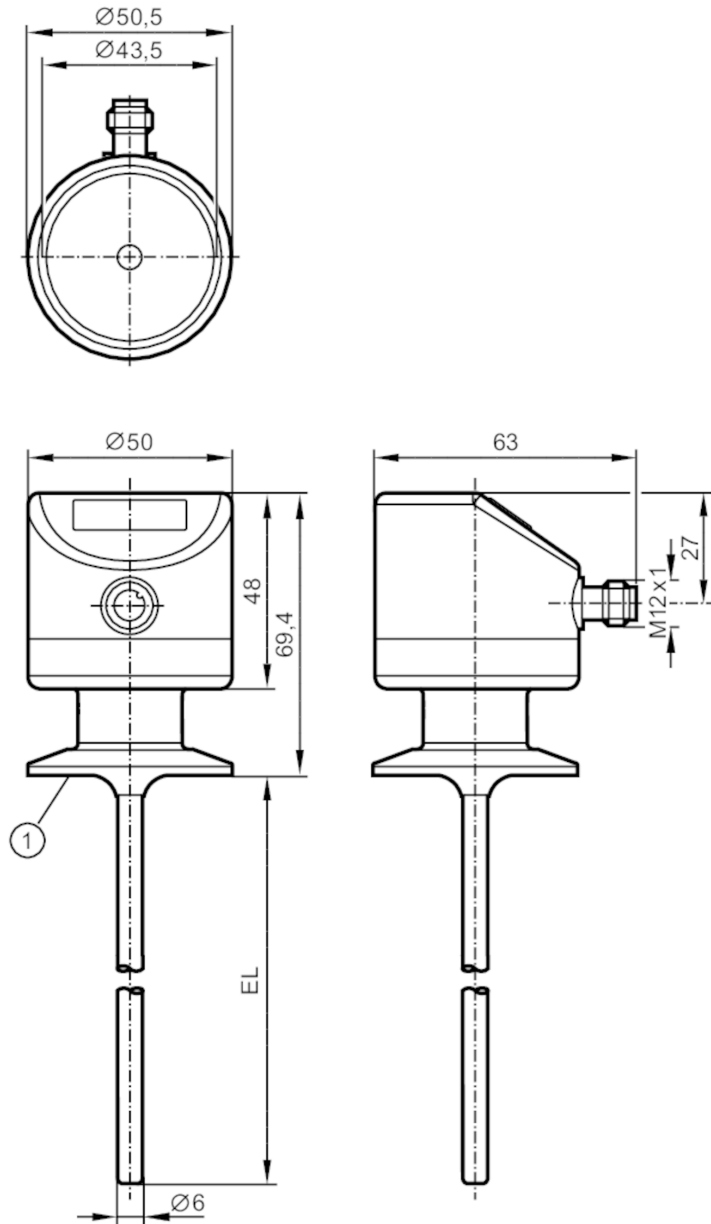


TD2837



Temperature Transmitter with Display

TD-100CFEC01-A-ZVG/US



1 1.5" Clamp ISO 2852
EL = Installation length



Product characteristics

| | | |
|------------------------------|---|--------------|
| Number of inputs and outputs | Number of analog outputs: 1 | |
| Measuring range | -50...150 °C | -58...302 °F |
| Communication interface | IO-Link | |
| Process connection | Clamp DN25...DN40 (1...1,5") DIN 32676 (ISO 2852) | |
| Installation length EL [mm] | 100 | |

Application

| | |
|-------------------|---|
| Measuring element | 1 x Pt 1000; (to DIN EN 60751, class A) |
| Media | liquids and gases |

TD2837



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| | | |
|--|--|-------------------------|
| Pressure rating | 100 bar | 10 MPa |
| Vacuum resistance | -1000 mbar | -0.1 MPa |
| MAWP (for applications according to CRN) [bar] | | 60 |
| Electrical data | | |
| Operating voltage [V] | 18...32 DC; (cULus - Class 2 source required) | |
| Current consumption [mA] | < 50 | |
| Protection class | III | |
| Reverse polarity protection | yes | |
| Power-on delay time [s] | 2 | |
| Inputs / outputs | | |
| Number of inputs and outputs | Number of analog outputs: 1 | |
| Outputs | | |
| Total number of outputs | 1 | |
| Output signal | analog signal; IO-Link; (configurable) | |
| Number of analog outputs | 1 | |
| Analog current output [mA] | 4...20 | |
| Max. load [Ω] | 300 | |
| Short-circuit protection | yes | |
| Overload protection | yes | |
| Measuring/setting range | | |
| Probe length L [mm] | 100 | |
| Measuring range | -50...150 °C | -58...302 °F |
| Factory setting | 0...100 °C | |
| Resolution | | |
| Resolution of analog output [K] | 0.04 | |
| Resolution of display [K] | 0.1 | |
| Accuracy / deviations | | |
| Precision analog output [K] | $\pm 0,3 + (\pm 0,1 \% MS)$ | |
| Temperature coefficient [% of the span / 10 K] | 0,1; (In case of deviation from the reference condition 25 °C) | |
| Reaction times | | |
| Dynamic response T05 / T09 [s] | 1 / 3 | |
| Interfaces | | |
| Communication interface | IO-Link | |
| Transmission type | COM2 (38,4 kBaud) | |
| IO-Link revision | 1.1 | |
| Profiles | Smart Sensor - SSP 0 | Generic Profiled Sensor |
| Min. process cycle time [ms] | 2.3 | |
| Supported DeviceIDs | Type of operation | DeviceID |
| | default | 374 |
| Operating conditions | | |
| Ambient temperature [°C] | -25...80 | |
| Storage temperature [°C] | -40...100 | |

TD2837



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| | |
|------------|----------------------|
| Protection | IP 67; IP 68; IP 69K |
|------------|----------------------|

Tests / approvals

| | | |
|----------------------|---|---------------------|
| EMC | DIN EN 61000-6-2 | |
| | DIN EN 61000-6-3 | |
| Shock resistance | DIN IEC 68-2-27 | 50 g (11 ms) |
| Vibration resistance | DIN IEC 68-2-6 | 10 g (10...2000 Hz) |
| MTTF [years] | | 405 |
| Note on approval | Factory certificate available as download at www.factory-certificate.ifm | |
| UL approval | UL approval number | K001 |

Mechanical data

| | |
|---|---|
| Weight [g] | 339.5 |
| Housing | tubular |
| Dimensions [mm] | Ø 50.5 / L = 169.4 |
| Material | stainless steel (1.4404 / 316L); PEI; FKM |
| Materials (wetted parts) | stainless steel (1.4404 / 316L) electropolished |
| Process connection | Clamp DN25...DN40 (1...1,5") DIN 32676 (ISO 2852) |
| Surface characteristics Ra/Rz of the wetted parts | Ra < 0.8 µm |
| Probe diameter [mm] | 6 |
| Installation length EL [mm] | 100 |

Displays / operating elements

| | |
|---------|--------------------------------|
| Display | 7-segment LED display, 4-digit |
| | Display unit / status, °C / °F |

Remarks

| | |
|---------------|---|
| Remarks | MS = set measuring span |
| | The values for accuracy apply to flowing water. |
| Pack quantity | 1 pcs. |

Electrical connection

Connector: 1 x M12; coding: A



TD2837



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Connection

