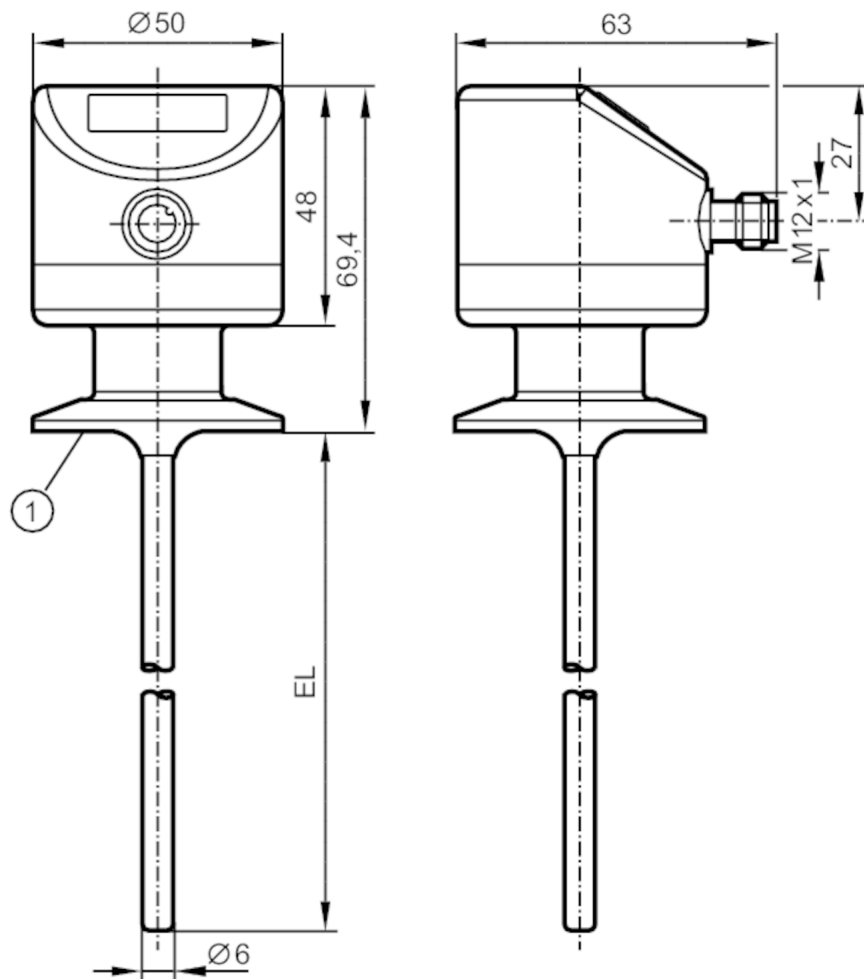


# TD2803



## Temperature transmitter with display

TD-030FFEC01-A-ZVG/US



1 1.5" Clamp ISO 2852  
EL = installation length



EC 1935/2004 EHEDG Certified FCM FDA IO-Link

### Product characteristics

|                              |   |              |
|------------------------------|---|--------------|
| Number of inputs and outputs | Number of analogue outputs: 1                     |              |
| Measuring range              | -50...150 °C                                      | -58...302 °F |
| Process connection           | Clamp DN25...DN40 (1...1,5") DIN 32676 (ISO 2852) |              |
| Installation length EL [mm]  | 30  |              |

### Application

|  |   |  |
|--|---|--|
| Measuring element                              | 1 x Pt 1000; (to DIN EN 60751, class A) |  |
| Media  | liquids and gases                       |  |
| Pressure rating [bar]                          | 100                                     |  |
| Vacuum resistance [mbar]                       | -1000                                   |  |
| MAWP (for applications according to CRN) [bar] | 60                                      |  |

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| Electrical data                                |   |                     |
|--|---|---------------------|
| Operating voltage [V]                          | 18...32 DC; ("supply class 2" to cULus)   |                     |
| 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 analogue outputs: 1   |                     |
| Outputs  |   |                     |
| Total number of outputs                        | 1   |                     |
| Output signal                                  | analogue signal; IO-Link; (configurable)  |                     |
| Number of analogue outputs                     | 1   |                     |
| Analogue current output [mA]                   | 4...20  |                     |
| Max. load [ $\Omega$ ]                         | 300   |                     |
| Short-circuit protection                       | yes   |                     |
| Overload protection                            | yes   |                     |
| Measuring/setting range                        |   |                     |
| Measuring range                                | -50...150 °C  | -58...302 °F        |
| Factory setting                                | 0...300 °F  |                     |
| Resolution                                     |   |                     |
| Resolution of analogue output [K]              | 0.04  |                     |
| Resolution of display [K]                      | 0.28  |                     |
| Accuracy / deviations                          |   |                     |
| Precision analogue 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)  |                     |
| Response times                                 |   |                     |
| Dynamic response T05 / T09 [s]                 | 1 / 3   |                     |
| Interfaces                                     |   |                     |
| Communication interface                        | IO-Link   |                     |
| Transmission type                              | COM2 (38,4 kBaud)   |                     |
| IO-Link revision                               | 1.1   |                     |
| Operating conditions                           |   |                     |
| Ambient temperature [°C]                       | -25...80  |                     |
| Storage temperature [°C]                       | -40...100   |                     |
| 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) |
| Note on approval                               | factory certificate available as download at <a href="http://www.factory-certificate.ifm">www.factory-certificate.ifm</a> |                     |
| UL approval                                    | UL Approval no.   | K001                |

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| Mechanical data                                   |   |
|---|---|
| Weight [g]  | 331   |
| Materials   | 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   |
| Probe diameter [mm]                               | 6   |
| Installation length EL [mm]                       | 30  |

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

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

### Electrical connection

Connector: 1 x M12



### Connection

