

# TD2293



## Temperature transmitter with display

TD-350FFED06-A-ZVG/US



EL = installation length



EC 1935/2004 EHEDG Certified



### Application

|                          |                                         |
|--------------------------|-----------------------------------------|
| Measuring element        | 1 x Pt 1000; (to DIN EN 60751, class A) |
| Media                    | liquids and gases                       |
| Pressure rating [bar]    | 160                                     |
| Vacuum resistance [mbar] | -1000                                   |

### 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 |
|------------------------------|-------------------------------|



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| 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 [Ω]                                  | 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]                  | ± 0,3 + (± 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) |
| MTTF [years]                                   | 407                                                            |                     |
| UL approval                                    | UL Approval no.                                                | K001                |

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| Mechanical data                                   |      |                                                 |
|---------------------------------------------------|------|-------------------------------------------------|
| Weight                                            | [g]  | 301.6                                           |
| Dimensions                                        | [mm] | Ø 6                                             |
| Materials                                         |      | stainless steel (1.4404 / 316L); PEI; FKM       |
| Materials (wetted parts)                          |      | stainless steel (1.4404 / 316L) electropolished |
| Process connection                                |      | diameter Ø 6 mm                                 |
| Surface characteristics Ra/Rz of the wetted parts |      | Ra: < 0.8                                       |
| Probe diameter                                    | [mm] | 6                                               |
| Installation length EL                            | [mm] | 350                                             |

| 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

