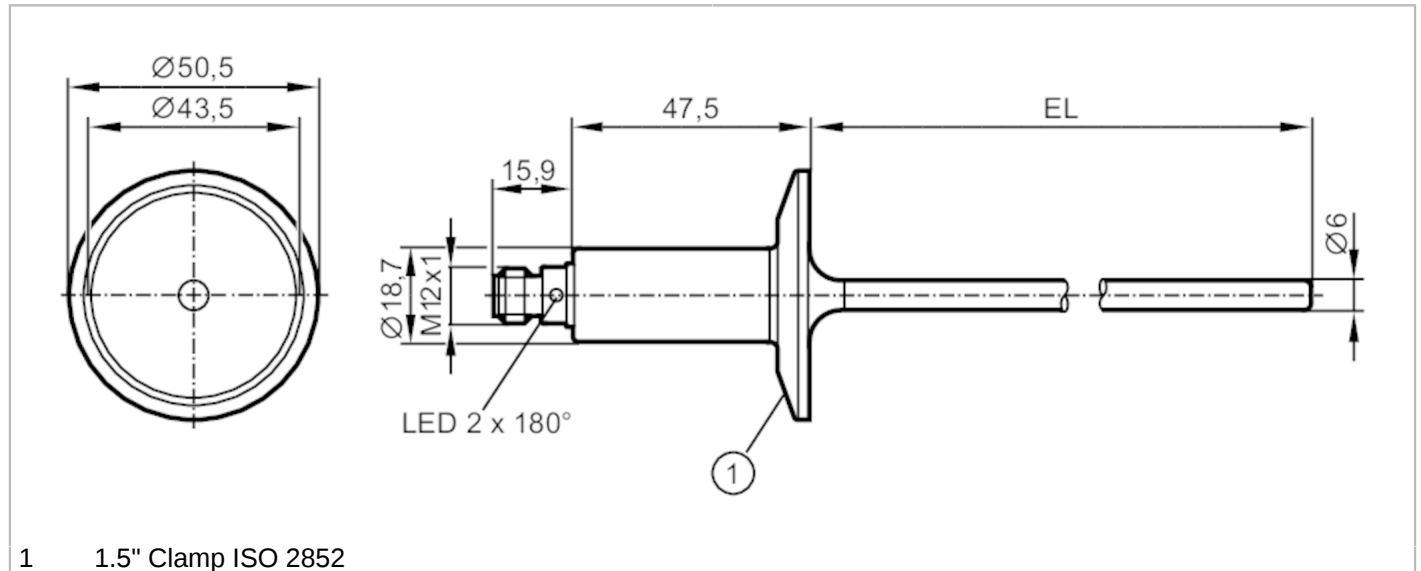


# TA2812



## Temperature transmitter

TA-050CLEC01-- /US



1 1.5" Clamp ISO 2852



### Product characteristics

|                              |   |
|------------------------------|---|
| Number of inputs and outputs | Number of analogue outputs: 1                     |
| Measuring range [°C]         | -50...200   |
| Process connection           | Clamp DN25...DN40 (1...1,5") DIN 32676 (ISO 2852) |
| Installation length EL [mm]  | 50  |

### 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] | 55                                      |

### 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]                    | 250; ((18...19 V); 19...32 V: 300 Ω)  |
| Short-circuit protection      |                        | yes   |
| Overload protection           |                        | yes   |
| Measuring/setting range       |                        |   |
| Measuring range               | [°C]                   | -50...200   |
| Factory setting               |                        | 0...200 °C  |
| Resolution                    |                        |   |
| Resolution of analogue output | [K]                    | 0.04  |
| 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 ± 5 °C)  |
| Response times                |                        |   |
| Dynamic response T05 / T09    | [s]                    | < 0,5 / < 2   |
| Interfaces                    |                        |   |
| Communication interface       |                        | IO-Link   |
| Transmission type             |                        | COM2 (38,4 kBaud)   |
| IO-Link revision              |                        | 1.1   |
| Operating conditions          |                        |   |
| Ambient temperature           | [°C]                   | -25...80  |
| Note on ambient temperature   |                        | at medium temperature: < 160 °C   |
|                               |                        | -25...60 °C<br>at medium temperature: < 200 °C  |
| 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              |                        | 50 g (11 ms)  |
| Vibration resistance          |                        | 10 g (10...2000 Hz)   |
| MTTF                          | [years]                | 232   |
| 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. K002  |

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| Mechanical data                                   |      |   |
|---|------|---|
| Weight  | [g]  | 229.6   |
| Dimensions  | [mm] | Ø 18.71   |
| 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] | 50  |

| 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

