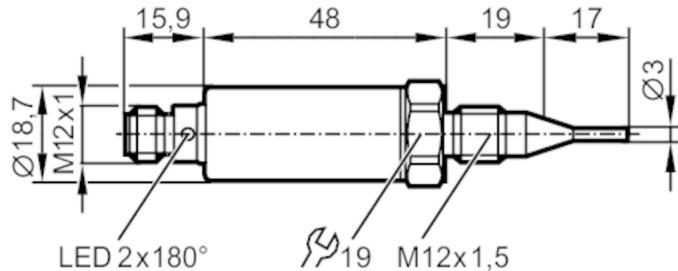


TA1102



Temperature transmitter

TA-017C2EM12-A-ZVG/US



Product characteristics

| | |
|------------------------------|--|
| Number of inputs and outputs | Number of analogue outputs: 1 |
| Measuring range [°C] | -50...200 |
| Process connection | threaded connection M12 x 1,5 sealing cone |
| Installation length EL [mm] | 17 |

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 |

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 [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 |

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| 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] | < 0,25 / < 1 |
| Interfaces | | |
| Communication interface | | IO-Link |
| Transmission type | | COM2 (38,4 kBaud) |
| IO-Link revision | | 1.1 |
| Operating conditions | | |
| Ambient temperature | [°C] | -25...80 at medium temperature: < 160 °C |
| Note on ambient temperature | | -25...60 °C 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 | | DIN IEC 68-2-27 |
| Vibration resistance | | DIN IEC 68-2-6 |
| MTTF | [years] | 334 |
| Note on approval | | factory certificate available as download at www.factory-certificate.ifm |
| UL approval | | UL Approval no. |
| | | K002 |
| Mechanical data | | |
| Weight | [g] | 111.5 |
| Materials | | stainless steel (1.4404 / 316L); PEI; FKM |
| Materials (wetted parts) | | stainless steel (1.4404 / 316L) electropolished |
| Tightening torque | [Nm] | 20 |
| Process connection | | threaded connection M12 x 1,5 sealing cone |
| Surface characteristics Ra/Rz of the wetted parts | | Ra: < 0.8 |
| Probe diameter | [mm] | 3 |
| Installation length EL | [mm] | 17 |
| Remarks | | |
| Remarks | | MS = set measuring span The values for accuracy apply to flowing water. |
| Pack quantity | | 1 pcs. |
| Electrical connection | | |
| Connector: | 1 x M12 | |

TA1102



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Connection

