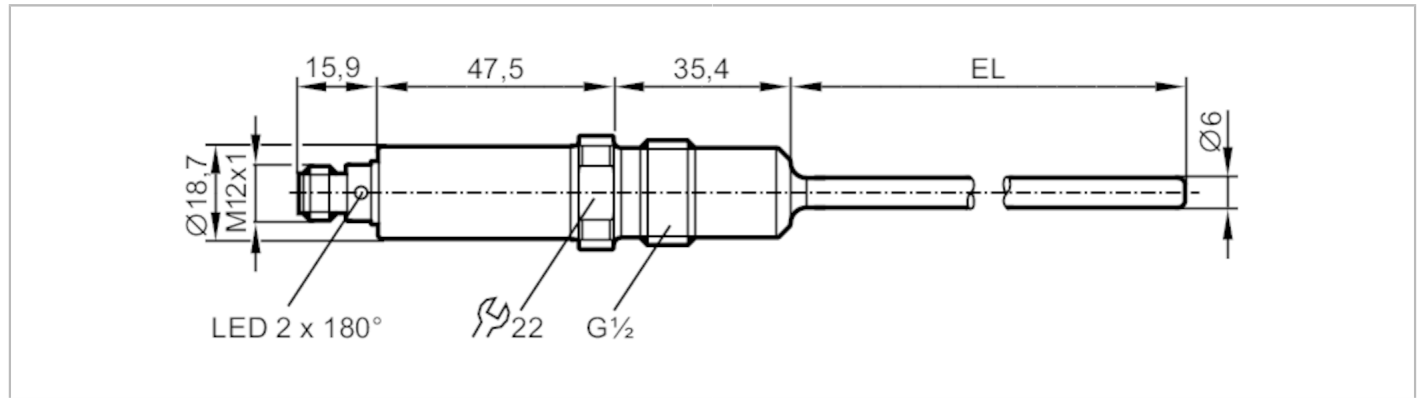


TA2531



Temperature transmitter

TA-100CLER12- - /US



Product characteristics

Number of inputs and outputs	Number of analogue outputs: 1
Measuring range [°C]	-50...200
Communication interface	IO-Link
Process connection	threaded connection G 1/2 external thread sealing cone
Installation length EL [mm]	100

Application

Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)
Media	liquids and gases
Pressure rating	160 bar / 16 MPa
Vacuum resistance	-1000 mbar / -0.1 MPa
MAWP for applications according to CRN [bar]	160

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

Probe length L [mm]	100
Measuring range [°C]	-50...200

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Factory setting		-10...150 °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
Profiles	Smart Sensor - SSP 0	Generic Profiled Sensor
	Function	Device identification
	Function	Process data variable
Min. process cycle time	[ms]	2.3
Supported DeviceIDs	Type of operation	DeviceID
	default	847
Operating conditions		
Ambient temperature	[°C]	-25...80
Note on ambient temperature		at medium temperature: < 160 °C -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	50 g (11 ms)
Vibration resistance	DIN IEC 68-2-6	10 g (10...2000 Hz)
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]	231.5
Housing		cylindrical
Dimensions	[mm]	Ø 18.7 / L = 198.8
Materials		stainless steel (316L/1.4404); PEI; FKM
Materials (wetted parts)		stainless steel (316L/1.4404) electropolished
Tightening torque	[Nm]	30...50
Process connection		threaded connection G 1/2 external thread sealing cone
Surface characteristics Ra/Rz of the wetted parts		Ra < 0.8 µm

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Temperature transmitter

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Probe diameter	[mm]	6
Installation length EL	[mm]	100

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



Connection

