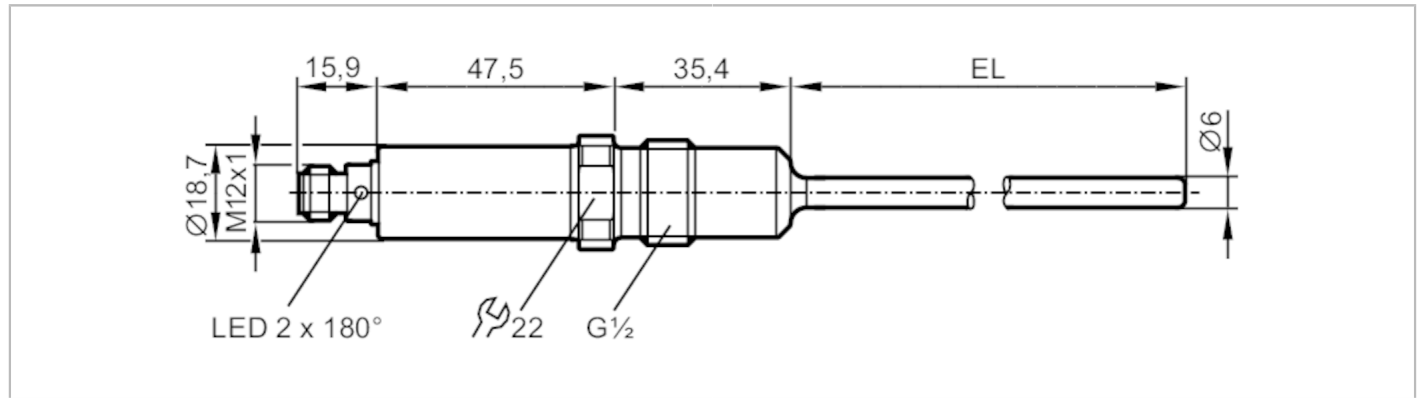


# TA2531



## Temperature transmitter

TA-100CLER12- - /US



EC 1935/2004

FCM



IO-Link

### Product characteristics

Number of inputs and outputs	Number of analogue outputs: 1
Measuring range [°C]	-50...200
Process connection	threaded connection G 1/2 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 [bar]	160
Vacuum resistance [mbar]	-1000
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

Measuring range [°C]	-50...200
Factory setting	-10...150 °C

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Resolution	
Resolution of analogue output [K]	0.04
Accuracy / deviations	
Precision analogue output [K]	$\pm 0,3 + (\pm 0,1 \% \text{ MS})$
Temperature coefficient [% of the span / 10 K]	0,1; (in case of deviation from the reference condition $25 \pm 5 \text{ }^\circ\text{C}$ )
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: $< 160 \text{ }^\circ\text{C}$ -25...60 °C at medium temperature: $< 200 \text{ }^\circ\text{C}$
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 <a href="http://www.factory-certificate.ifm">www.factory-certificate.ifm</a>
UL approval	UL Approval no. K002
Mechanical data	
Weight [g]	231.5
Dimensions [mm]	$\varnothing 18.7$
Materials	stainless steel (1.4404 / 316L); PEI; FKM
Materials (wetted parts)	stainless steel (1.4404 / 316L) electropolished
Process connection	threaded connection G 1/2 sealing cone
Surface characteristics Ra/Rz of the wetted parts	Ra: $< 0.8$
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	

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### Connection

