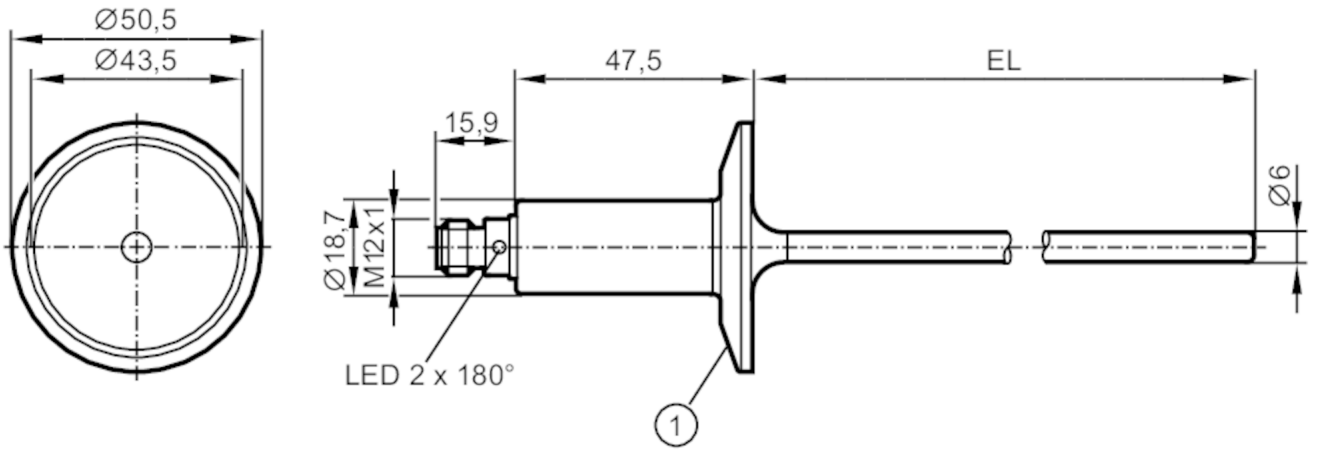
TA2812

Temperature transmitter

TA-050CLEC01- - /US



1 1.5" Clamp ISO 2852

CRN EC 1935/2004 EHEDG Certified FCM IO-Link

Product characteristics			
Number of inputs and outputs		Number of analogue outputs: 1	
Measuring range	[°C]	-50...200	
Communication interface		IO-Link	
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		100 bar	10 MPa
Vacuum resistance		-1000 mbar	-0.1 MPa
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	
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	

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Overload protection			yes
Measuring/setting range			
Probe length L	[mm]		50
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
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	446
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]		232
Note on approval			factory certificate available as download at www.factory-certificate.ifm
UL approval		UL approval no.	K002
Mechanical data			
Weight	[g]		229.6
Housing			cylindrical
Dimensions	[mm]		Ø 50.5 / L = 113.4
Materials			stainless steel (316L/1.4404); PEI; FKM
Materials (wetted parts)			stainless steel (316L/1.4404) electropolished

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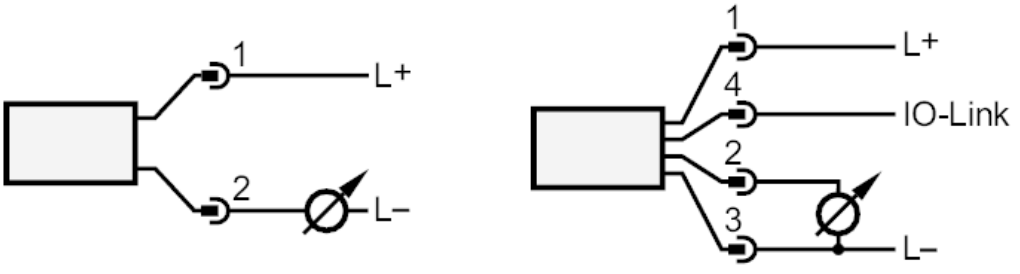
Process connection		Clamp DN25...DN40 (1...1,5") DIN 32676 (ISO 2852)
Surface characteristics Ra/Rz of the wetted parts		Ra < 0.8 µm
Probe diameter	[mm]	6
Installation length EL	[mm]	50

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