

TD2837



Temperature transmitter with display

TD-100CFEC01-A-ZVG/US



1 1.5" Clamp ISO 2852
EL = installation length



Product characteristics		
Number of inputs and outputs	Number of analogue outputs: 1	
Measuring range	-50...150 °C	-58...302 °F
Communication interface	IO-Link	
Process connection	Clamp DN25...DN40 (1...1,5") DIN 32676 (ISO 2852)	
Installation length EL [mm]	100	
Application		
Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)	
Media	liquids and gases	



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Pressure rating	100 bar	10 MPa
Vacuum resistance	-1000 mbar	-0.1 MPa
MAWP for applications according to CRN [bar]	60	
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]	300	
Short-circuit protection	yes	
Overload protection	yes	
Measuring/setting range		
Probe length L [mm]	100	
Measuring range	-50...150 °C	-58...302 °F
Factory setting	0...100 °C	
Resolution		
Resolution of analogue output [K]	0.04	
Resolution of display [K]	0.1	
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 °C)	
Response times		
Dynamic response T05 / T09 [s]	1 / 3	
Interfaces		
Communication interface	IO-Link	
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.1	
Profiles	Smart Sensor - SSP 0	Generic Profiled Sensor
Min. process cycle time [ms]	2.3	
Supported DeviceIDs	Type of operation	DeviceID
	default	374
Operating conditions		
Ambient temperature [°C]	-25...80	



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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]	405
Note on approval	factory certificate available as download at www.factory-certificate.ifm	
UL approval	UL approval no.	K001

Mechanical data

Weight	[g]	339.5
Housing		cylindrical
Dimensions	[mm]	Ø 50.5 / L = 169.4
Materials		stainless steel (316L/1.4404); PEI; FKM
Materials (wetted parts)		stainless steel (316L/1.4404) electropolished
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]	100

Displays / operating elements

Display		7-segment LED display, 4-digit display unit / status, °C / °F
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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



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Connection

