

Temperature transmitter with display

TD-050CFED06-A-ZVG/US



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 adapter Ø 6 mm	
Installation length EL [mm]	50	

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

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	



Temperature transmitter with display

TD-050CFED06-A-ZVG/US

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			
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	
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]		407	
Note on approval		factory certificate available as download at www.factory-certificate.ifm	
UL approval		UL approval no.	K001

TD2217



Temperature transmitter with display

TD-050CFED06-A-ZVG/US

Mechanical data		
Weight	[g]	254
Housing		cylindrical
Dimensions	[mm]	Ø 6 / L = 98
Materials		stainless steel (316L/1.4404); PEI; FKM
Materials (wetted parts)		stainless steel (316L/1.4404) electropolished
Process connection		clamp adapter Ø 6 mm
Surface characteristics Ra/Rz of the wetted parts		Ra < 0.8 µm
Probe diameter	[mm]	6
Installation length EL	[mm]	50

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

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

