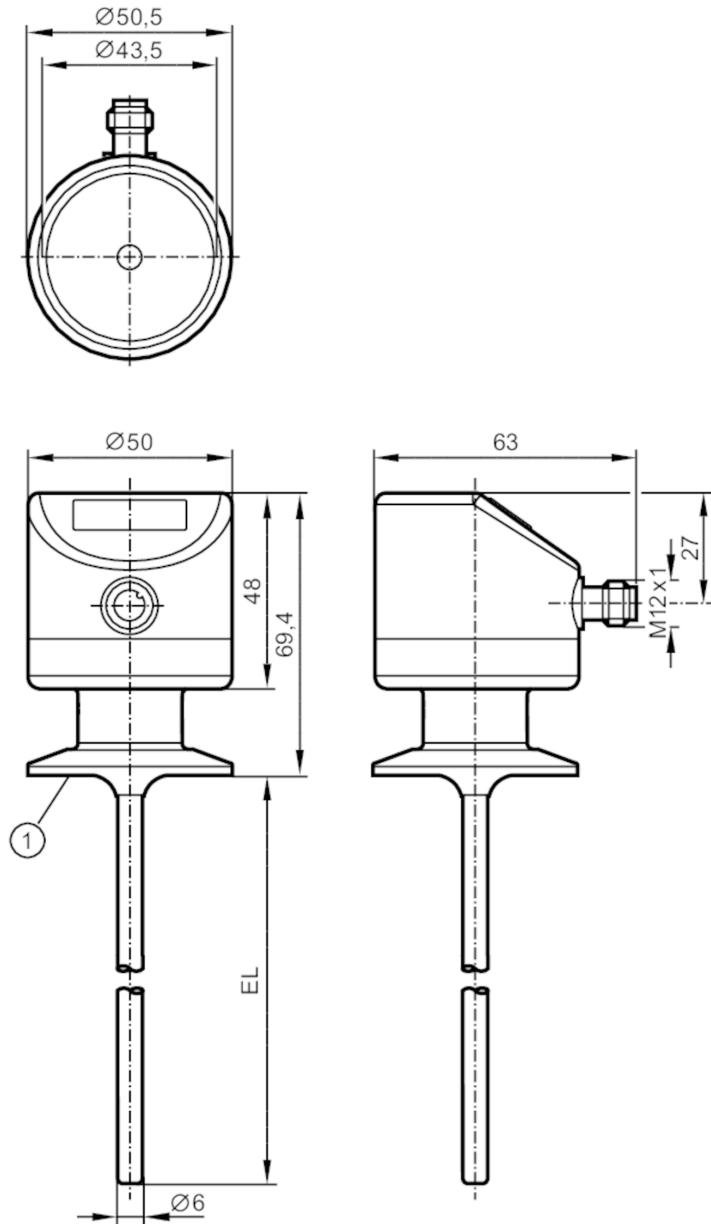


TD2831



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 analog 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; (cULus - Class 2 source required)	
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 analog outputs: 1
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Outputs

Total number of outputs	1
Output signal	analog signal; IO-Link; (configurable)
Number of analog outputs	1
Analog 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	-10...150 °C	

Resolution

Resolution of analog output [K]	0.04
Resolution of display [K]	0.1

Accuracy / deviations

Precision analog output [K]	$\pm 0,3 + (\pm 0,1 \% MS)$	
Temperature coefficient [% of the span / 10 K]	0,1; (In case of deviation from the reference condition 25 °C)	

Reaction times

Dynamic response T05 / T09 [s]	1 / 3
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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	375

Operating conditions

Ambient temperature [°C]	-25...80
Storage temperature [°C]	-40...100

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Protection	IP 67; IP 68; IP 69K
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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 number	K001

Mechanical data

Weight [g]	344
Housing	tubular
Dimensions [mm]	Ø 50.5 / L = 169.4
Material	stainless steel (1.4404 / 316L); PEI; FKM
Materials (wetted parts)	stainless steel (1.4404 / 316L) 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

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

