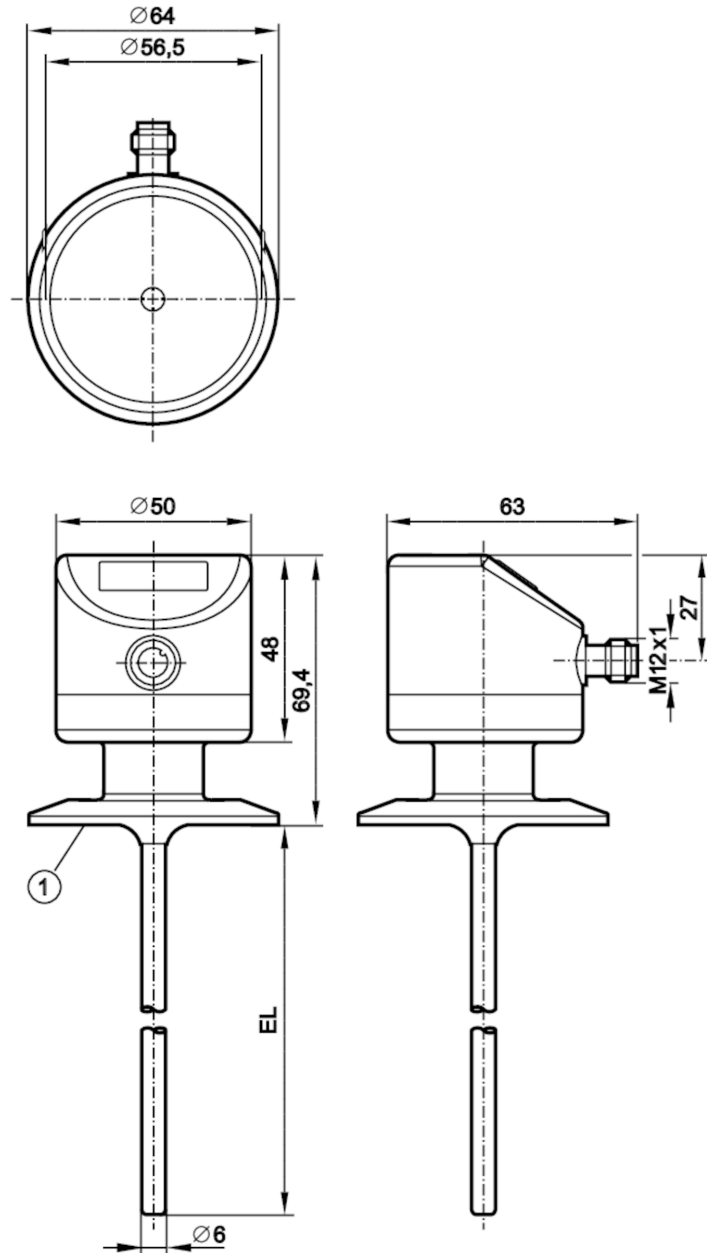


# TD2903



## Temperature Transmitter with Display

TD-030FFEC02-A-ZVG/US



1 2" Clamp ISO 2852  
EL = Installation length



EC 1935/2004

EHEG Certified

FCM



IO-Link



### 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 DN50 (2") DIN 32676 (ISO 2852)	
Installation length EL [mm]	30	

### 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
<b>Electrical data</b>		
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	
<b>Inputs / outputs</b>		
Number of inputs and outputs	Number of analog outputs: 1	
<b>Outputs</b>		
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 [ $\Omega$ ]	300	
Short-circuit protection	yes	
Overload protection	yes	
<b>Measuring/setting range</b>		
Probe length L [mm]	30	
Measuring range	-50...150 °C	-58...302 °F
Factory setting	0...300 °F	
<b>Resolution</b>		
Resolution of analog output [K]	0.04	
Resolution of display [K]	0.28	
<b>Accuracy / deviations</b>		
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)	
<b>Reaction times</b>		
Dynamic response T05 / T09 [s]	1 / 3	
<b>Interfaces</b>		
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	<b>Type of operation</b>	<b>DeviceID</b>
	default	376
<b>Operating conditions</b>		
Ambient temperature [°C]	-25...80	
Storage temperature [°C]	-40...100	
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)
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 number	K001

Mechanical data		
Weight [g]		388
Housing		tubular
Dimensions [mm]		Ø 64 / L = 99.4
Material		stainless steel (1.4404 / 316L); PEI; FKM
Materials (wetted parts)		stainless steel (1.4404 / 316L) electropolished
Process connection		Clamp DN50 (2") DIN 32676 (ISO 2852)
Surface characteristics Ra/Rz of the wetted parts		Ra < 0.8 µm
Probe diameter [mm]		6
Installation length EL [mm]		30

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

