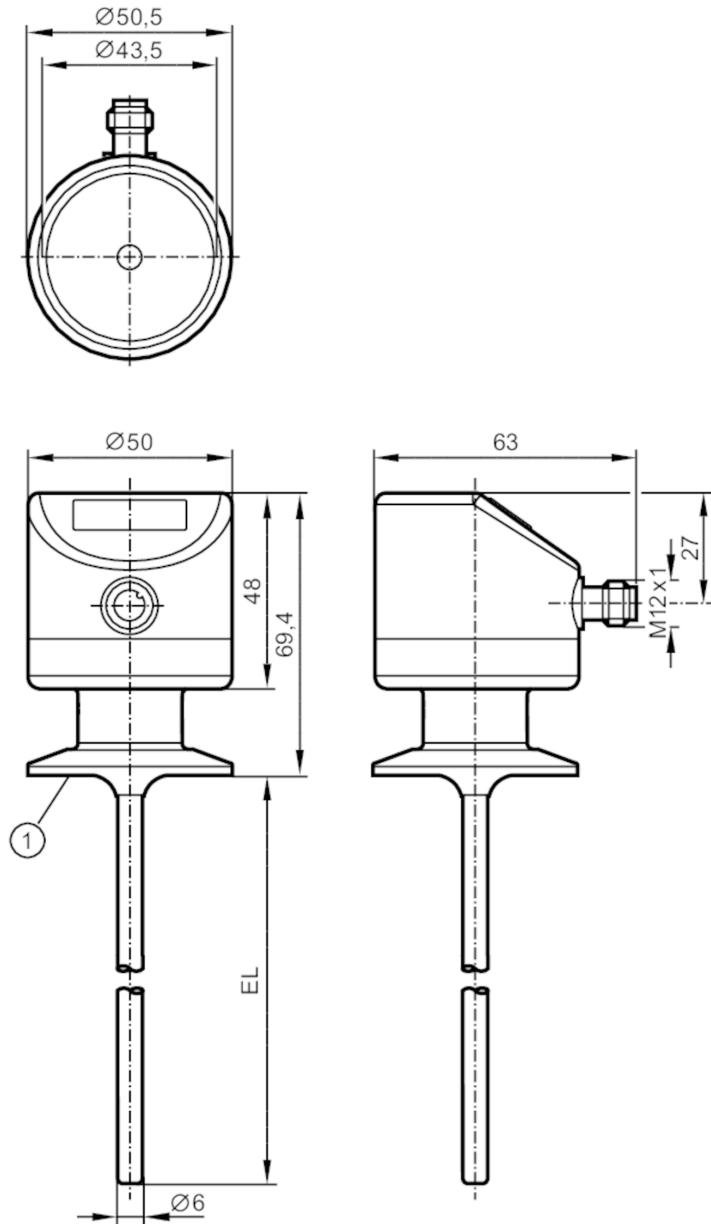


# TD2813



## Temperature transmitter with display

TD-050FFEC01-A-ZVG/US



1 1.5" Clamp ISO 2852  
EL = installation length



EC 1935/2004

EHDG Certified

FCM



IO-Link



### 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]	50	

### Application

Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)
Media	liquids and gases

# TD2813



## Temperature transmitter with display

TD-050FFEC01-A-ZVG/US

Pressure rating	100 bar	10 MPa
Vacuum resistance	-1000 mbar	-0.1 MPa
MAWP for applications according to CRN [bar]		70

### 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 [ $\Omega$ ]	300
Short-circuit protection	yes
Overload protection	yes

### Measuring/setting range

Probe length L [mm]	50	
Measuring range	-50...150 °C	-58...302 °F
Factory setting	0...300 °F	

### Resolution

Resolution of analogue output [K]	0.04
Resolution of display [K]	0.28

### Accuracy / deviations

Precision analogue 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)	

### 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	<b>Type of operation</b>	<b>DeviceID</b>
	default	376

### Operating conditions

Ambient temperature [°C]	-25...80
--------------------------	----------

# TD2813



## Temperature transmitter with display

TD-050FFEC01-A-ZVG/US

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)
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 no.	K001

### Mechanical data

Weight	[g]	335
Housing		cylindrical
Dimensions	[mm]	Ø 50.5 / L = 119.4
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]	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

