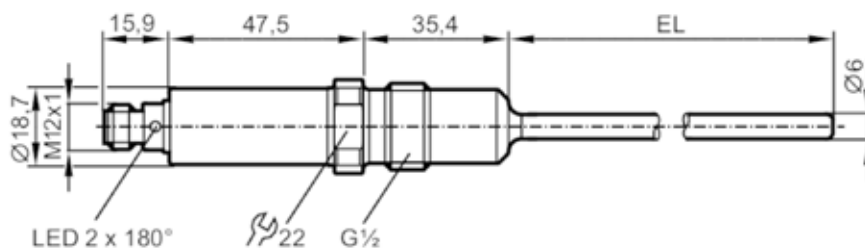


Temperature Transmitter TA2531



Product characteristics		
Number of inputs and outputs	Number of analogue outputs: 1	
Measuring range [°C]	-50...200	
Communication interface	IO-Link	
Process connection	threaded connection G 1/2 external thread sealing cone	
Installation length EL [mm]	100	
Application		
Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)	
Media	liquids and gases	
Pressure rating	100 bar	10 MPa
Vacuum resistance	-1000 mbar	-0.1 MPa
MAWP for applications [bar] according to CRN	55	
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]	250; ((18...19 V); 19...32 V: 300 Ω)	
Short-circuit protection	yes	
Overload protection	yes	
Measuring/setting range		
Probe length L [mm]	100	
Measuring range [°C]	-50...200	
Factory setting	-10...150 °C	
Resolution		
Resolution of analogue output [K]	0.04	
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 ± 5 °C)	

Response times		
Dynamic response T05 / T09 [s]	< 0,5 / < 2	
Interfaces		
Communication interface	IO-Link	
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.1	
Operating conditions		
Ambient temperature [°C]	-25...80	
Note on ambient temperature	at medium temperature: < 160 °C -25...60 °C at medium temperature: < 200 °C	
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	334	
Note on approval	factory certificate available as download at www.factory-certificate.ifm	
UL approval	UL Approval no.	K002
Mechanical data		
Weight [g]	231.5	
Housing	cylindrical	
Dimensions [mm]	Ø 18.7 / L = 198.8	
Materials	stainless steel (316L/1.4404); PEI; FKM	
Materials (wetted parts)	stainless steel (316L/1.4404) electropolished	
Tightening torque [Nm]	30...50	
Process connection	threaded connection G 1/2 external thread sealing cone	
Surface characteristics Ra/Rz of the wetted parts	Ra: < 0.8	
Probe diameter [mm]	6	
Installation length EL [mm]	100	
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	

