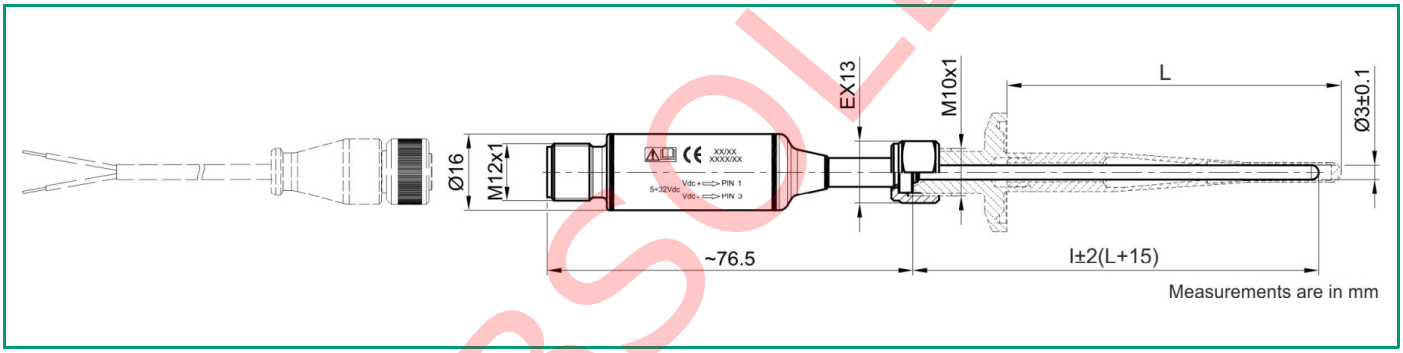
EVOMINI+D

Rev. 0 - 20/05/2021

M.I.C TEMPERATURE PROBE WITH 4 ÷ 20mA OUTPUT AND METALLIC BODY

Programmable range

Trasmitter and probe are integrated in one only device; the TWF thermowells serie (DIN11851 and Clamp) can be used for the process connection. This device is very useful in food, chemical and pharmaceutical industry.



TECHNICAL SPECIFICATION

Supply voltage	8,5 ÷32 Vdc (polarity protected)
Accuracy	maximum value between ±0.2 °C and ±0.2% of range set
Effect of temperature (*) **(*) deviation from 20°C**	Maximum value between ±0,3°C/25°C and ±0,3% of span/25°C
Permitted load	700 Ω @ 24 Vcc [RLΩ= (Valim. - 8,5) / 0,022]
Input/Output insulation	None
PCB input range	-50 ÷800 °C
Signal	4 ÷20 mA
Sensor failure signalling	upper scale (> 21.0 mA) downscale (< 3.6 mA) action
Sensor short circuit signalling	Fixed at lower limit of range (< 3.6 mA)
Range configurations	It is possible set the device by EVOMINI+SET configuration kit (it is needed a PC with OS Windows).
Zero setting range	any value between -50°C and +50°C
Minimum span	50°C (if the zero point is one of these values: -40°C, -20°C, 0°C, 20°C, 40°C, the minimum span is 20°C, otherwise is 50°C)
Sensor error compensation	over 2 points (max 1% of span)

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TECHNICAL SPECIFICATION

Factory default	range 0 ÷ 150°C / sensor break monitoring: > 21 mA (Upscale action)
Effect of power supply	Negligible
PCB operating temperature	-40 ÷80°C
EMC	According to EN 61326-1:2013
Sensing element operating temperature range	-50 ÷500°C
Sensing element	Pt100 Ω @ 0°C
Accuracy class in accordance to IEC751 (*) (*) Pt 100 cl.A only available with 3 or 4 wires, cl.AA 4 wires only; Pt 1000 cl. A available with 2 wires only for cable lengths below 1 m, for longer cables only available with 3 or 4 wires, cl. AA 3 wires for cable lengths below 1 m, for longer cables only 4 wires.	cl. A, Operating range (in which the accuracy class is guaranteed) -30 ÷ 300°C
Sheath diameter d= (*) test in water in accordance with IEC 751. Time taken to reach 63.2% of temperature step	Ø 3 mm, Response time < 3,5 seconds(*)
Sheet material	AISI 316
Insulation resistance	100 M Ω@ 100 Vdc.
Realizable sheat lenghts L= (subject to feasibility check)	50 mm ÷10 m
Type of connector	male 4-pin connector with M12x1 metal screw lock (in accordance with IEC 61076-2-101 STANDARDS)
Connection body material	AISI 316
Fixing system	connection for TWF thermowells (not including TWF2)
Process connection (*) (*) Thread STANDARDS (CYL. GAS in accordance with UNI-ISO 228) (CON. GAS in accordance with UNI-ISO 7-1) (NPT in accordance with ANSI B 1.20.1)	CLAMP 1 1/2" CLAMP 3/4" DIN11851 DN25
Marking	Stating symbol "SEE MANUAL", marking symbol "CE", part number, Week / Year of production, power supply range, pinout and serial number
International protection marking (*) (*) According to IEC 60529	IP65/67
Vibration resistance	According IEC 68-2-6, test Fc, 84-2000 Hz, 10 g

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