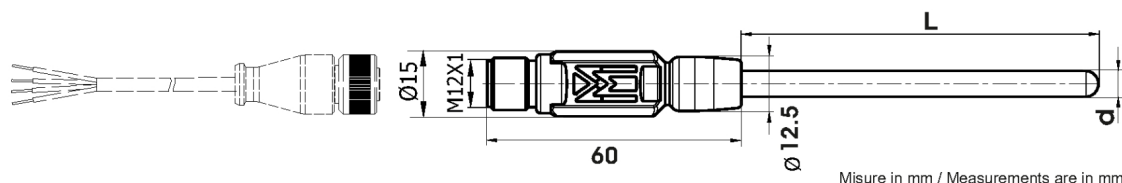


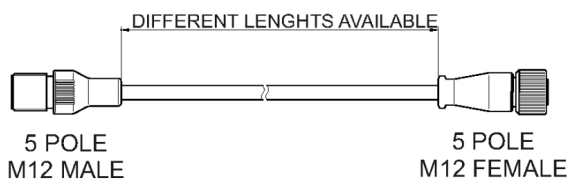
EvominiSerI-RTD

Programmable temperature transmitter with mineral insulated probe and Modbus RTU digital output (RS485)

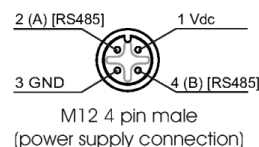
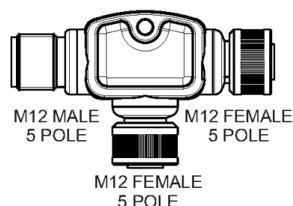
Temperature transmitter with overmolded IP67 casing with M12 output connection. By using a single cable, it is possible to build a sensors network which can be directly connected to a PLC or a PC equipped with a supervisory software (SCADA). These devices are equipped with M12 connectors allowing for an easy and quick installation with degree of protection IP67.



Extension Cable



«T» Distributor



TECHNICAL SPECIFICATION

Power supply	9 ±32 Vdc (polarity protected)
Electronic board input	RTD Pt100 / Pt1000 ($\alpha = 0,00385$ / $\alpha = 0,003916$) 2, 3 o 4 wire connection
Sensor exciting current	~100 uA
Sensor wire maximum resistance	2 wire connection: 40 ohm 3 or 4 wire connection: 20 ohm/wire
Accuracy (*) (*) @25°C	Converter: $\leq \pm 0.2^\circ\text{C}$ of the range Sensor element: Pt100 class A up to 300 °C according to IEC751
Temperature influence (*) (*) deviation from 20°C	$< \pm 0.25^\circ\text{C}/25^\circ\text{C}$ of the range
Electronic board operating temperature	-40 ÷80°C
Resolution	0,1 °C
Linear error	Negligible
Sensor error compensation	(±5°C) over two points
Current consumption	<4mA with RS485 (<10mA at power on for approx. 8mS)
Communication protocol	Modbus RTU (max. baud rate 38.400)
Serial interface	RS-485 (not insulated)
Input/Output insulation	None
Maximum connection distance	1000 meters, this distance depends on the power supply voltage and the type of cable used to connect the various devices
Maximum devices on network	maximum 32 (over is required to add a serial repeater) Maximum 256 nodes (it is recommended to use isolators / repeaters along the serial line)
Indicator LED	Blue LED, power supply and device operations indicator Red LED (ERR), sensor error indicator White LEDs (TX and RX), serial transmission and reception indicators
International protection marking (*) (*) According to IEC 60529	IP65/67
EMC	In accordance to EN 61326-1:2013 (CE) In accordance to BS EN 61326-1:2013 (UKCA)
Configuration	By using the EVOPLATFORMSET configuration kit (a PC with Windows OS is required).
Main device design parameters	Maximum and minimum temperature peak measured Temperature offset for measurement correction Serial communication and power-on watch-dog Temperature tenths °C
Measurement range	-50 ÷350°C
Material body	Thermoplastic
Type of connector	1 input connector M12 x 4 male according to IEC 61076-2-101 STANDARDS (power supply / serial interface)
Stem length L	150 mm 250 mm 350 mm Other lengths on request
Dimensional notes	Lengths other than those listed can be produced for minimum quantities to be agreed (after our feasibility study)
Sheet material	AISI 316L
Sheath diameter d	Ø 6 mm Ø 3 mm
M.I.C. min. bending radius	3 times the outer diameter (except the sensing tip which length is ~30 mm)
Insulation resistance	100 M Ω @ 100 Vdc.
Response time (*) (*) test in water in accordance with IEC 751. Time taken to reach 63.2% of temperature step	less than 3.5 seconds for Ø 3 mm and less than 13 seconds for diameter Ø 6 mm
Weight	14g (L=100mm e Ø3mm); 28g (L=100mm e Ø6mm) 28g (L=100mm e Ø=6mm)
Option	"T" distributor Female / Male / Female M12 x 5 poles Extension cables with M12 overmoulded female and male connectors Wall mounting bracket EVOPLATFORMSET configuration kit

ORDER CODES

EOSI#			XX
	↑	↑	
	Diameter (mm)	Lenght	
	Ø3	100	0100
	Ø3,17 (1/8")	150	0150
	Ø6	250	0250
	Ø6,35 (1/4")	350	0350
		500	0500
		750	0750
		1000	1000
		L = (mm)	