

EVOXC

Rev. 2 - 19/01/2023

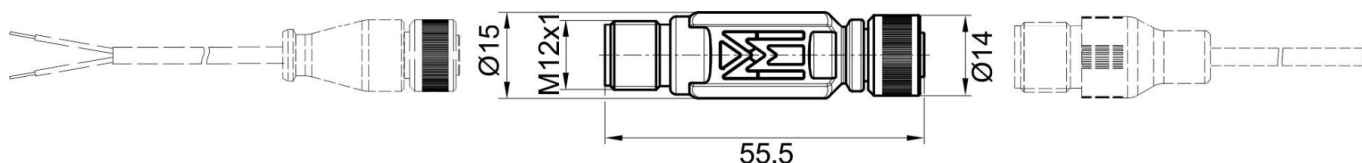
EvominiX C

4÷20mA programmable temperature signal converter

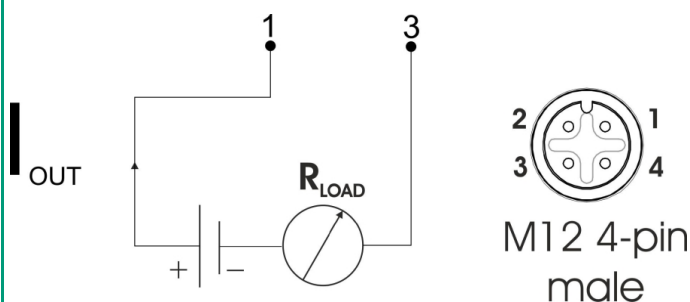
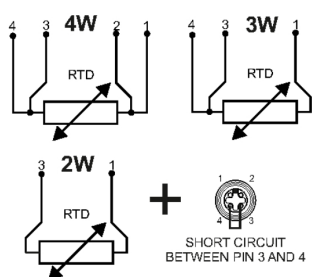
PC-configurable signal converter for Pt100 and Pt1000 probes.

Its integrated connections allow to mount the transmitter directly on the sensor. It comes in a overmolded IP67 casing with M12 connections in both ends.

It is compatible with Italcoppie TRM and TRC probe series.



Measurements are in mm



TECHNICAL SPECIFICATION

Electronic board operating temperature	-40 ÷85°C
Operating humidity	0 ÷100%
Power supply	5.5 ÷32 Vdc (polarity protected)
Input/Output insulation	None
Electronic board input	RTD Pt100/Pt1000 ($\alpha= 0,00385$) 2, 3 o 4 wire connection
Sensor input signal filter (*) (*) time to reach 90% of signal	Configurable from 0.4 to 9.4 seconds
Sensor exciting current	~100 uA
Sensor wire maximum resistance	Max 20 ohm/wire
Signal	4÷20 mA 20÷4 mA
Permitted load	840Ω @ 24 Vdc [Rload= (Vsupply. - 5.5) / 0.022]
Sensor break or short-circuit monitoring	According to NAMUR NE43, selectable between: Upper scale (> 21.0 mA) Lower scale (< 3,6 mA)
Accuracy (*) (*) @25°C	Maximum value between ±0.1K and ±0.1% of span
Temperature influence (*) (*) deviation from 20°C	Maximum value between ±0,3°C/25°C and ±0,3% of span/25°C
Long-term stability	Maximum 0.1% of span per year
Linear error	Negligible
EMC	In accordance to EN 61326-1:2013 (CE) In accordance to BS EN 61326-1:2013 (UKCA)
Range configurations	It is possible set the device by EVOMINI SET configuration kit (it is needed a PC with OS Windows).
Minimum span	20°C
Sensor error compensation	(±5°C) over two points
Measurement range	-200 ÷800°C
International protection marking (*) (*) According to IEC 60529	IP67
Connection body material	THERMOPLASTIC
Type of connector	female 4-pin connector (INPUT SENSOR), 4-pin male connector (OUTPUT), both with M12x1 metal screw lock (in accordance with IEC 61076-2-101)
Response time	<300 ms (63%)
Factory default	Range (0÷150)°C 4-wire Pt100 input (4÷20)mA output Sensor break >21mA Sensor short-circuit <3.6mA
Option	On request adjustment on 1 or 2 points Extension cable in TPE with overmolded M12 connector (IP67). Available cable lengths: (3, 8 or 12)m (others on request)
Weight	12g

ORDER CODES

EVOXC#				X					XX
Input		Connection		Output	Min. range*	Max range*	Probe break	S/C probe	
Pt1000	M	4 fili	X	4÷20mA	M	0 000	+150 150	Out 21mA	X
Pt100	R	3 fili	3	20÷4mA	I			Out 3,6mA	B
		2 fili	2					Out 21mA	A

* Other range on request
Ex. negative value
-20 M20

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WE SENSE

TEMPERATURE