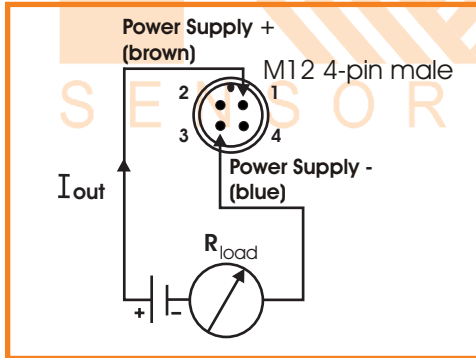


Transmitter for cold temperature with PC-PROGRAMMABLE range. The integrated connections allow to mount the transmitter directly on the sensor. This device it is compatible with TRM and TRC series.

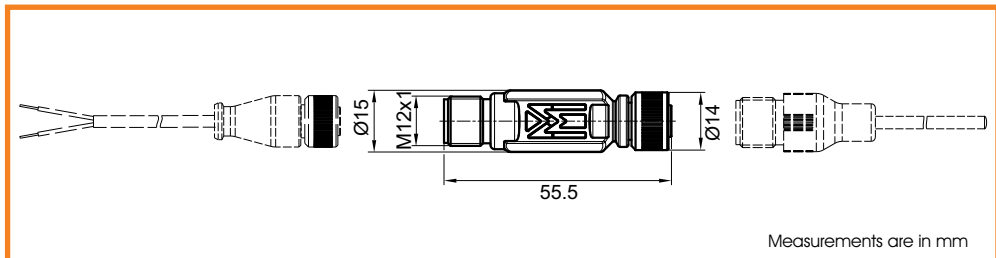
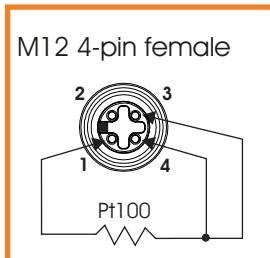
# EVOMINI CRYO TRANSMITTER

## PROGRAMMABLE TRANSMITTER FOR LOW TEMPERATURE WITH INTEGRATED M12 CONNECTORS AND 4-20mA OUTPUT

Output connection



Input sensor connection



### TECHNICAL DATA

**Body:**

Thermoplastic material

**Probe type:**

Connection compatible with RTD's TRM and TRC series

**Connection:**

M12x1 male in accordance to VDE0627 (output connection)  
M12x1 female in accordance to VDE0627 (input connection Pt100)

**Sensor:**

RTD Pt100 ( $\alpha = 0,00385$ ) 3 wire connection  
Range:  $-200 \div 200^\circ\text{C}$

**Sensor current:**

$\sim 0,5\text{mA}$

**Maximum sensor wire resistance:**

$20 \Omega / \text{wire}$

**Sensor break monitoring:**

Selectable:  
Upscale ( $> 21,0 \text{ mA}$ ) or Downscale ( $< 3,6 \text{ mA}$ ) action

**Sensor short-circuit:**

Fixed to Downscale ( $< 3,6 \text{ mA}$ ) action

**Output:**

Signal:  $4 \div 20\text{mA}$   
Permissible load:  $700 \Omega @ 24\text{Vdc}$  [ $R_{Lo} = (V_{supply} - 8,5) / 0,022$ ]  
Response time (90%):  $< 50\text{ms}$

**Isolation In - Out:**

Non-isolated

**Power supply:**

$8,5 \div 32\text{Vdc}$  (polarity protected)

CODE TO ORDER:

EVOMINICR#	R	M	X
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**Environment conditions:**

Temperature:  $-40 \div 80^\circ\text{C}$  (for the plastic body)  
Relative Humidity:  $0 \div 100\%$   
Vibrations: in accordance to IEC 68-2-6, test Fc, 84-2000Hz, 10g  
EMC: in accordance to EN 61326

**Degree of protection:**

IP65 and IP67 in accordance to IEC60529

**Accuracy:**

Max. value between  $\pm 0,2^\circ\text{C}$  and  $\pm 0,2\%$  of span ( $-100 \div 200^\circ\text{C}$ )  
Max. value between  $\pm 0,3^\circ\text{C}$  and  $\pm 0,3\%$  of span ( $< -100^\circ\text{C}$ )

**Temperature influence (Deviation from  $20^\circ\text{C}$ ):**

Max. value between  $\pm 0,3^\circ\text{C} / 25^\circ\text{C}$  and  $\pm 0,3\%$  of span /  $25^\circ\text{C}$

**Sensor wire influence:**

Negligible, with equal wire resistance

**Supply voltage influence:**

Negligible

**Range configurations:**

It is possible to set the input temperature range (span) by the EVOMINI+SET configuration kit ( it is needed a PC with OS Windows).  
Zero adjustments:  $-200^\circ\text{C} / -100^\circ\text{C} / -50^\circ\text{C} / -40^\circ\text{C} / 0^\circ\text{C}$ .  
Minimum Span:  $50^\circ\text{C}$   
Sensor error compensation: over 2 points (max 1% of span)

**Factory setting:**

$-40 \div 60^\circ\text{C} / \text{sensor break } > 21\text{mA}$  (Upscale)

**Option:**

On request, adjustment on 1 or 2 points