

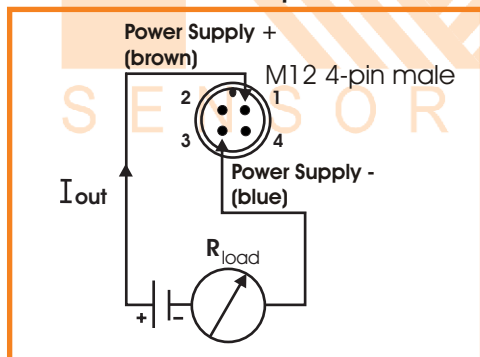
Transmitter for cold temperature with PC-PROGRAMMABLE range. The integrated connections allow to mount the transmitter directly on the sensor. This device it is compatible with TRM and TRC series.

# EVOMINI CRYO CM

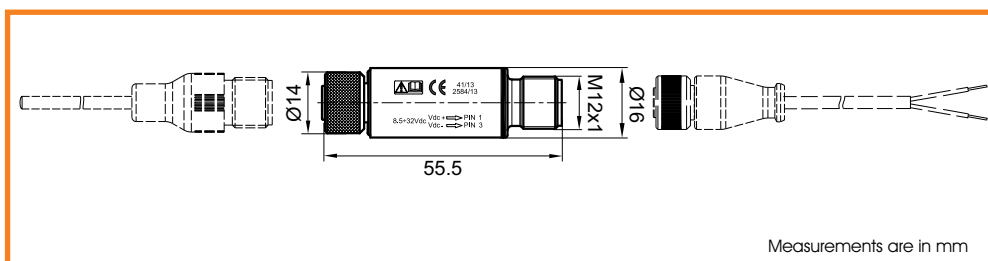
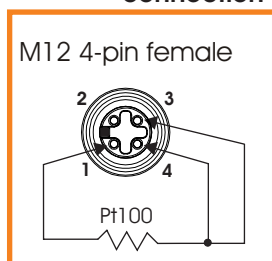
## PROGRAMMABLE TRANSMITTER FOR LOW TEMPERATURE WITH 4-20mA OUTPUT AND METALLIC BODY

ISO 9001:2000

Output connection



Input sensor connection



### TECHNICAL DATA

#### Body:

Stainless steel AISI316L

#### 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:

EVOMINICRCM#	R	M	X
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#### Environment conditions:

Temperature:  $-40 \div 80^{\circ}\text{C}$  (for the metallic 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