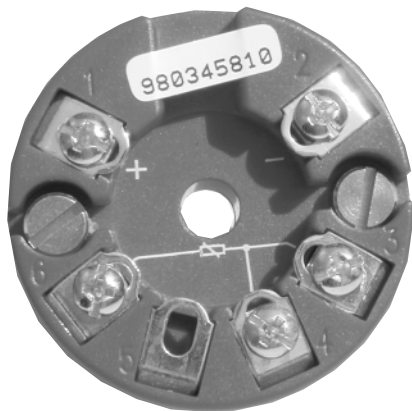


# PROGRAMMABLE 2 WIRES TRANSMITTER T2FR 5333



- PT100 ohm and resistance input
- Programmable by computer
- 4/20mA or 20/4 mA
- SI EEx ia IIC, T1 -T6 in option

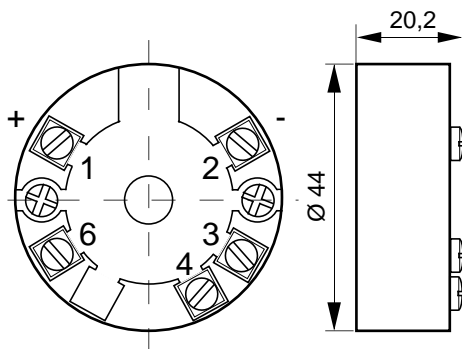
## APPLICATIONS

Temperature linear measure with resistance sensor, Pt 100, Pt 1000, Ni 100. Resistance conversion to a standard 4-20mA signal (RTM)  
With ohmic input, it is possible to make a 60 points linearization from customer specification (specially for RTM)  
To avoid lost or modification of data, in case of power outage, calibration data are saved in a EEPROM.  
T2F5333 is delivered with configuration required by the final user. programming on site is done by the Loop Link 5905 kit (page 601/6)

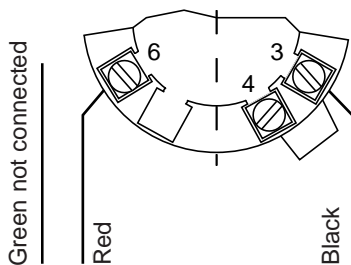
## CHARACTERISTICS

|                                   |  |
|-----------------------------------|--|
| Power supply:                     | non EEx: 8,0 ... 35 V<br>EEx: 8,0 ... 28 V |
| Internal consumption:             | 25 mW ... 0,8 W                            |
| Probe current:                    | > 0,2 mA, < 0,4 mA                         |
| Accuracy:                         | ± 0.3%                                     |
| Power outage:                     | 8 Vdc                                      |
| Response time:                    | from 0.33 to 60 s                          |
| Temperature factor:               | < ± 0.01 % EC / °C                         |
| Linearity error:                  | < 0.1 % EC                                 |
| Power supply effect:              | < 0.005 % EC / Vdc                         |
| Line resistance effect (3 wires): | < 0.002 Ohm / Ohm                          |
| < 100°C temperature               |  |
| Factor (RDT):                     | ± 0.01°C / ambient T°                      |
| CEM data immunity effect:         | < ± 0.5 % EC                               |
| Temp calibration:                 | 24°C ± 4°C                                 |
| Input max difference:             | 50% of max value                           |
| Tightness (box/terminal):         | IP68 / IP00                                |
| Wires max section:                | 1 x 1.5 mm <sup>2</sup>                    |
| Max. line resistance (per wire):  | 10 Ohm                                     |
| Weight:                           | 50 g                                       |

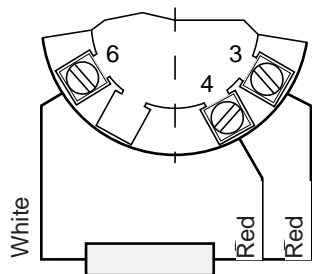
EC = Calibrated scale



### Wiring for RTM



### Wiring for Pt 100 Ω



## ELECTRICAL SPECIFICATION

| Input type | Min. value | Max. value | Min. range | mA Output | Min. range | Breaking safety |         |
|------------|------------|------------|------------|-----------|------------|-----------------|---------|
|            |            |            |            |           |            | Basse           | Haute   |
| Pt 100     | -200 °C    | + 850 °C   | 25 °C      | 4-20      | 16         | 3,5 - 4         | 20 - 23 |
| Ni100      | -60 °C     | + 250 °C   | 25 °C      | 4-20      | 16         | 3,5 - 4         | 20 - 23 |
| R. Lin.    | 0 Ω        | 10 KΩ      | 30 Ω       | 4-20      | 16         | 3,5 - 4         | 20 - 23 |

## CODES & REFERENCES

| Code    | Reference   | Type                           |
|---------|-------------|--------------------------------|
| 601 333 | T2FR 5333-1 | Standard transmeeter           |
| 601 335 | T2FR 5333-2 | Intrinseque safety transmeeter |
| 601 339 | BPR - 5905  | P.Computer programming kit     |

# BAMO MESURES

13, rue Pasteur - 95100 ARGENTEUIL - FRANCE  
Tél : (+33) 01 30 25 83 20 - E-mail : info@bamo.fr  
Fax : (+33) 01 34 10 16 05 - Site : http://www.bamo.fr

PROGRAMMABLE  
2 WIRES TRANSMITTER  
T2FR 5333

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