

## Application

The new intrinsically safe ThermoPen is an accurate, durable pocket size thermometer with an integrated surface probe, which provides temperature readings in °C or °F in hazardous areas. The new TMTP 200Ex is designed for industries where explosive hazardous environments are present, such as petrochemical and mining, as well as industries where combustible dust(s) are present.

## Description

The Intrinsically Safe ThermoPen is available in one version with selectable Celsius or Fahrenheit indication. It measures temperature ranging from -40 °C (-40 °F) up to 200 °C (392 °F) and is equipped with a memory function for holding the highest measured temperature. The thermometer will automatically switch off after 5 minutes. The TMTP 200Ex is supplied complete with battery and operating instructions. The probe tip has a "heavy-duty construction".

## Ex certification

The TMTP 200Ex has been especially designed and approved for use in high-risk areas and carries ATEX type approval. It is suitable for use in:

- Underground as well as surface installations sections of mines endangered by firedamp and/or combustible dust, Equipment-group I, category M 1 (mines)
- Areas in which explosive atmospheres caused by mixtures of air and gasses, vapours or mists or by air/dust mixtures are continuously present, for long periods or frequently, Equipment-group II, category 1 (zone 0 and 20).

Certified confirming to ATEX: EC type examination ISSEP02ATEX054X

## Approvals

Mining I M1 EEx ia I  
Other areas II 1GD EEx ia IIC T4 IP 65

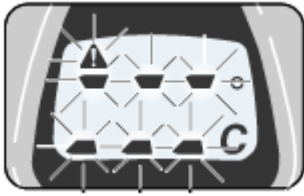
## Safety: X marking

- Only use Duracell Procell batteries (Duracell PC2400).
- Some surfaces such as the label don't answer to clause 4.4 of EN 50284:1999 Standard. All precautions shall be taken when using the ThermoPen in a category I (zone 0), group IIC zone.
- Avoid static charging of keyboard and data sticker.

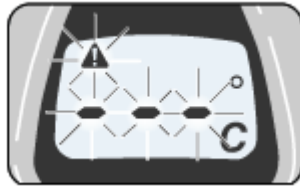


## Technical data

| Designation                        | TMTP 200Ex  |
|------------------------------------|---|
| <b>Description</b>                 | Intrinsically safe general-purpose contact thermometer  |
| <b>Colour</b>                      | Black   |
| <b>Temperature range</b>           | -40 to 200 °C (-40 to 392 °F)   |
| <b>Electronics accuracy</b>        | ≤ 0,5 °C (≤ 0.9 °F)   |
| <b>Display resolution</b>          | 1 °C/°F   |
| <b>Probe</b>                       | Integrated K-Type   |
| <b>Dimensions</b>                  | 165 x 50 x 21 mm (6.5 x 2 x 0.8 in)   |
| <b>Weight</b>                      | 95 g (3.4 oz)   |
| <b>Battery</b>                     | 3 x AAA (LR03)<br>Only Duracell PC2400/MN2400 batteries are allowed in Ex areas   |
| <b>Battery lifetime</b>            | 2000 hours (average)  |
| <b>Switch off</b>                  | Button or automatic after 5 minutes   |
| <b>Display indications</b>         | Temperature, °C or °F, maximum temperature, out of range, defective probe, low battery  |
| <b>IP rate</b>                     | IP 65   |
| <b>Drop resistance</b>             | 1 m (3.2 ft)  |
| <b>EC Type examination</b>         | ISSEP02ATEX054X   |
| <b>Ex classification</b>           | I M1 EEx ia I<br>II 1GD EEx ia IIC T4 IP65  |
| <b>Equipment groups</b>            | I, category M1<br>II, category 1, zone 0 and 20   |
| <b>EC directive</b>                | 94/9/EC   |
| <b>EN standards</b>                | EN 50014: 1997 +A1 and A2: 1999<br>EN 50020: 1994<br>EN 50281-1-1: 1998<br>EN 50284: 1999   |
| <b>X marking</b>                   | Only use Duracell Procell batteries Duracell PC2400.<br>Some surfaces such as the label don't answer to clause 4.4 of EN 50284:1999 Standard.<br>All precautions shall be taken when using the ThermoPen in a category I (zone 0), group IIC zone.<br>Avoid static charging of keyboard and data sticker. |
| <b>Maximum surface temperature</b> | 105 °C  |
| <b>Display indications</b>         |   |



*Out of range*



*Broken probe connection*



*Low battery*

