



Gas expansion thermometers manufactured according to **EN 13190** standard. Reliable tools that withstand extreme working conditions: engine vibration, humidity and aggressive media such as seawater.

Especially designed to measure the temperature of the exhaust gases of the engines. The pyrometer box is filled with silicon oil serving as a vibration dampener.

## STANDARD PARAMETERS

Design: **EN 13190**

Mounting: See attached diagrams **A** or **B**

Closing: Ring threaded to case. Sealed by rubber gasket

IP protection: IP65 (**EN 60529**)

Accuracy: Class 1.6

Temperature limits:

Room temperature: -40+65°C

Fluid overtemperature: maximum 15% end of scale

Max. pressure on stem: 50 bar

Temperature range: +50+650 °C/°F

Sensor element: Bourdon tube (Inert gas expansion)

Stem length (P): **150; 200; 300; 400** mm

Process connection: Sliding on the stem

Threaded connection: ½"BSP, ½"NPT, ¾"BSP, ¾"BSP, M20x150 or M22x150

Antivibration liquid: Silicon oil

Vibration damping system: Rigid

## MATERIALS

Case and ring: Black anodized aluminum

Moving parts and bourdon tube: Copper alloy

Threaded connection: AISI 304 Stainless steel

Display: Glass

Dial: White lacquered aluminum

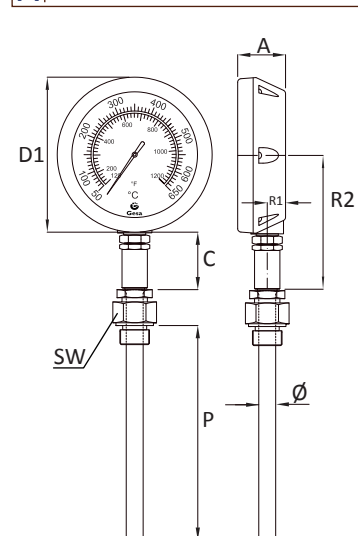
Pointer: Black lacquered aluminum

Stem: AISI 304 Stainless steel

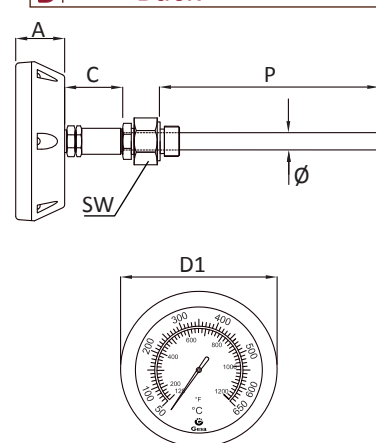
## Application:

- Engines
- HVAC

## A Bottom



## B Back



## DIMENSIONS (mm)

## WEIGHT (g)

| DN   | Mounting | R1 | A  | D1  | Ø  | R2  | SW | C  |     |
|------|----------|----|----|-----|----|-----|----|----|-----|
| Ø100 | <b>A</b> | 12 | 32 | 118 | 12 | 100 | 27 | 42 | 877 |
| Ø100 | <b>B</b> | -  | 32 | 118 | 12 | -   | 27 | 42 | 877 |

## Temperature scale according to DIN 16206

| Scale printed on the dial (°C) | Working range (°C) | Subdivision °C/line | Maximum error |
|--------------------------------|--------------------|---------------------|---------------|
| +50+650                        | +100+600           | 10                  | 10            |

## How to order

### 1.Mounting

**A**

**B**



### 2.Stem length (mm)

150

200

300

400



### 3.Process connection

Sliding on stem



### 4.Threaded connection

½"BSP

½"NPT

¾"BSP

¾"BSP

M20x150

M22x150

More on demand



### 5.Connection type

Male

Female



### 6.Connection material

AISI 304 Stainless steel



### 7.Calibration certificate traceable to ENAC

3 points

4 points

5 points

6 points

7 points

Without certificate

D23 -

1

2

3

4

5

6

7



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D5

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