

Gas filled Thermometers TSF Ø 63 - 80 - 100 - 160

| | |
|-------------------------------------|---|
| Application | Industrial thermometer for remote measurement |
| Temperature Range | -200 ... 800°C |
| Accuracy | according DIN 16 203 Class 1 |
| Dial | White, graduation black DIN 16 109, 16 128 For graduation marking and layout see T0.305 |
| Pointer | Aluminium, alloy black, DIN 16 099 |
| Zero point correction device | At the back or at the side of the case |
| Window | Normal glass Polycarbonate for auxiliary units with adjusting device |
| Protection | IP 67 according DIN 40 050 |
| Accessories | For screw connections and protection pipes see T6.115, T6.215 (Ø 8) or T6.120 resp. T6.220 (Ø 14) |



Selection chart

Ordering TSFE xxx / xxx.xxx

| | | | | | |
|---|------|--|--|--|--|
| System design | | | | | |
| with electrical contact | TSFE | | | | |
| Nominal size²⁾ | | | | | |
| NS 63 ¹⁾ | 63 | | | | |
| NS 80 ¹⁾ | 80 | | | | |
| NS 100 | 100 | | | | |
| NS 160 | 160 | | | | |
| Case and Ring | | | | | |
| Stainless steel 1.4301, bright drawn | 2 | | | | |
| Structural shape | | | | | |
| Panel mounting A, front flange | 2 | | | | |
| Wall mounting, flange at rear | 3 | | | | |
| Wall mounting with gauge clamp | 6 | | | | |
| Capillary tube outlet³⁾ | | | | | |
| Bottom | 1 | | | | |
| Center back (only with structural shape 2) | 2 | | | | |
| Indicator / Immersion tube | | | | | |
| Standard / Ø 8, stainless steel 1.4541 | 1 | | | | |
| Standard / Ø 14, stainless steel 1.4541 | 7 | | | | |
| Capillary tube | | | | | |
| Ø 2.5 Cu alloy up to 250°C | 4 | | | | |
| Ø 2.5, 4 Cu alloy, PVC up to 250°C | 5 | | | | |
| Ø 2.5 stainless steel 1.4541 | 6 | | | | |
| Ø 2.5, 4 stainless steel 1.4541, PVC | 7 | | | | |
| Ø 2.5 steel | 8 | | | | |
| Ø 2.5, 4 steel, PVC | 9 | | | | |
| Immersion tube / Installed length I | | | | | |
| 100 mm (Ø 8 I _T = 144, Ø 14 I _T = 152) | 2 | | | | |
| 160 mm (Ø 8 I _T = 204, Ø 14 I _T = 212) | 4 | | | | |
| 250 mm (Ø 8 I _T = 294, Ø 14 I _T = 302) | 6 | | | | |
| 400 mm (Ø 8 I _T = 444, Ø 14 I _T = 452) | 7 | | | | |
| 600 mm (Ø 8 I _T = 644, Ø 14 I _T = 652) | 8 | | | | |
| 1000 mm (Ø 8 I _T = 1044, Ø 14 I _T = 1052) | 9 | | | | |

Range

| Order No. | Range °C | Order No. | Range °C |
|-----------|-------------|-----------|-----------|
| 69T | -200 ... 50 | 27T | 0 ... 80 |
| 77T | -120 ... 40 | 12T | 0 ... 100 |
| 76T | -100 ... 60 | 20T | 0 ... 120 |
| 74T | -80 ... 40 | 13T | 0 ... 160 |
| 50T | -60 ... 40 | 22T | 0 ... 200 |
| 65T | -40 ... 40 | 14T | 0 ... 250 |
| 61T | -30 ... 30 | 23T | 0 ... 300 |
| 51T | -30 ... 70 | 15T | 0 ... 400 |
| 54T | -20 ... 60 | 25T | 0 ... 500 |
| 52T | -20 ... 40 | 16T | 0 ... 600 |
| 11T | 0 ... 60 | 82T | 0 ... 800 |

Capillary tube length CT 9000 / xxxx

1 2 3 4 6 10 16 25 m

Length in cm (example: CT 1 m = 0100)

Special designs and electrical auxiliary units

For special designs see T2.905

Electrical contacts and connections see section T4

Notes:

1) Electrical contacts not available.

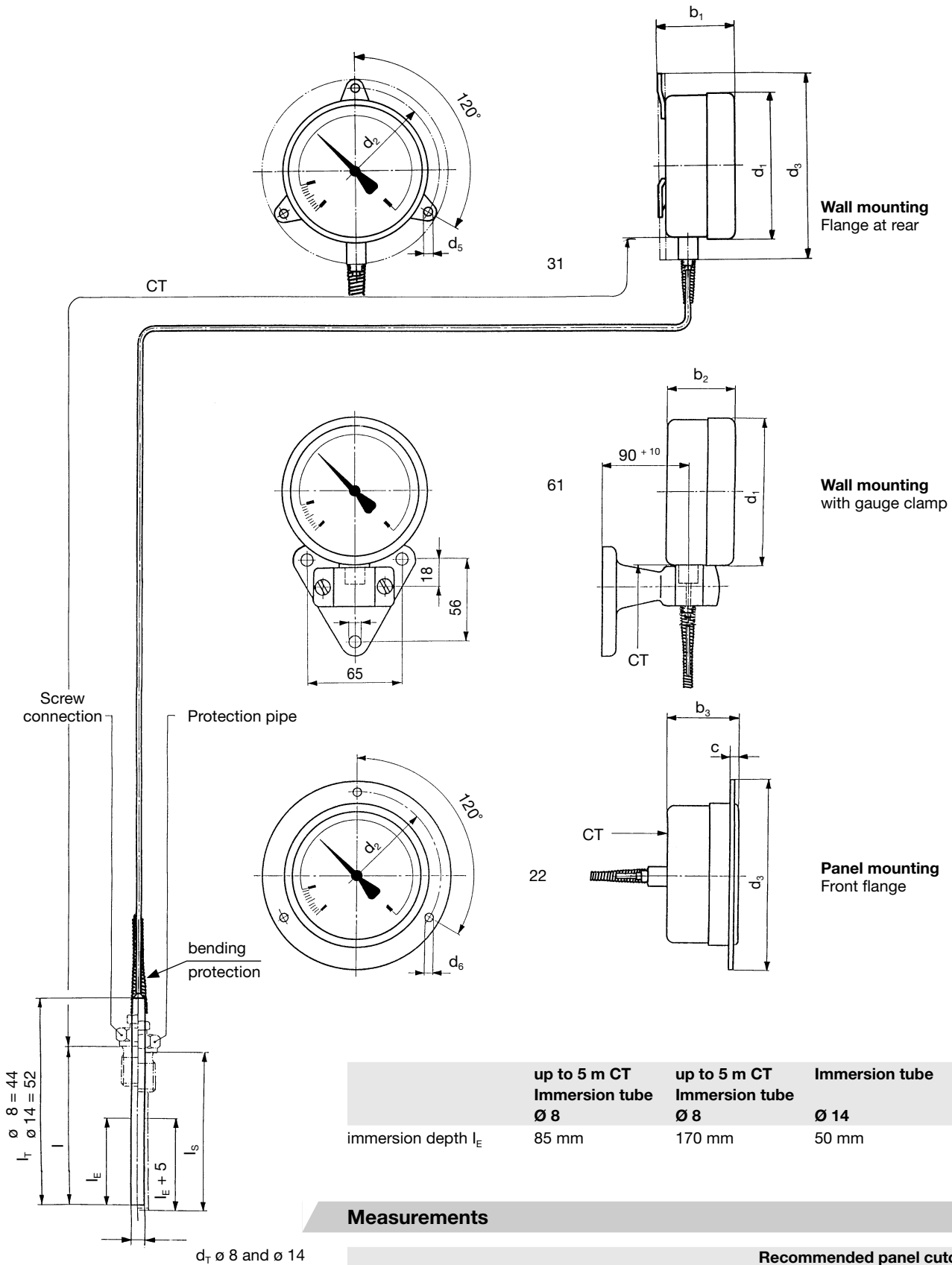
2) Other sizes on request.

3) Kink prevention standard.

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Dimensions



Application Notes

The instruments operate within the specified accuracy only if the minimal immersion depth l_E is adhered to.

Measurements

| NS | b_1 | b_2 | b_3 | c | d_1 | d_2 | d_3 | d_5 | d_6 | Recommended panel cutout for structural shape Capillary tube outlet |
|-----|-----------|-----------|-----------|----|-------|-------|-------|-------|-------|---|
| | | | | | | | | | | 23 |
| 63 | 41 | 38 | 38 | 16 | 64 | 75 | 85 | 4 | 4 | 64 |
| 80 | 42 | 38 | 38 | 22 | 82 | 94 | 110 | 5 | 5 | 84 |
| 100 | 53^{+3} | 48^{+2} | 48^{+2} | 6 | 101 | 116 | 132 | 4,8 | 4,8 | 105 |
| 160 | 53^{+3} | 48^{+2} | 48^{+2} | 6 | 161 | 178 | 196 | 5,8 | 5,8 | 164 |