

# Gas filled Thermometers TSS Ø 63 - 80 - 100 - 160

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



## Selection chart

### Ordering TSSE xxx / xxx.xxx

<b>System design</b>	
with electrical contact	TSSE

<b>Nominal size</b>	
NS 63 <sup>1)</sup>	63
NS 80 <sup>1)</sup>	80
NS 100	100
NS 160	160

<b>Case and Ring</b>	
Stainless steel 1.4301, bright drawn	2

<b>Structural shape</b>	
Direct mounting	1

<b>Immersion tube outlet</b>	
Bottom	1
Center back	2

<b>Indication / immersion tube diameter</b>	
Standard / Ø 8	1
Standard / Ø 14	7

<b>Immersion tube material</b>	
stainless steel 1.4541	6

<b>Immersion tube / Installed length I</b>	
100 mm (Ø 8 I <sub>T</sub> = 145, Ø 14 I <sub>T</sub> = 150)	2
160 mm (Ø 8 I <sub>T</sub> = 205, Ø 14 I <sub>T</sub> = 210)	4
250 mm (Ø 8 I <sub>T</sub> = 295, Ø 14 I <sub>T</sub> = 300)	6
400 mm (Ø 8 I <sub>T</sub> = 445, Ø 14 I <sub>T</sub> = 450)	7
600 mm (Ø 8 I <sub>T</sub> = 645, Ø 14 I <sub>T</sub> = 650)	8
1000 mm (Ø 8 I <sub>T</sub> = 1045, Ø 14 I <sub>T</sub> = 1050)	9

<b>Special designs and electrical auxiliary units</b>	
For special designs see T2.905	
Electrical contacts and connections see section T4	

### Range

Order No.	Range °C
69T	-200 ... 50
77T	-120 ... 40
76T	-100 ... 60
74T	-80 ... 40
50T	-60 ... 40
65T	-40 ... 40 <sup>3)</sup>
61T	-30 ... 30 <sup>3)</sup>
51T	-30 ... 70
54T	-20 ... 60)
52T	-20 ... 40
11T	-30 ... 60 <sup>3)</sup>
27T	-30 ... 80
12T	-30 ... 100 <sup>3)</sup>
20T	-30 ... 120 <sup>3)</sup>
13T	-30 ... 160 <sup>3)</sup>
22T	-30 ... 200
14T	-30 ... 250
23T	-30 ... 300
15T	-30 ... 400
25T	-30 ... 500
16T	-30 ... 600
82T	-30 ... 800

#### Notes

- <sup>1)</sup> For liquid filling case and ring only stainless steel.
- <sup>2)</sup> Electrical contacts not available.
- <sup>3)</sup> Standard ranges without additional price, others see price list.

**BOURDON  
HAENNI**

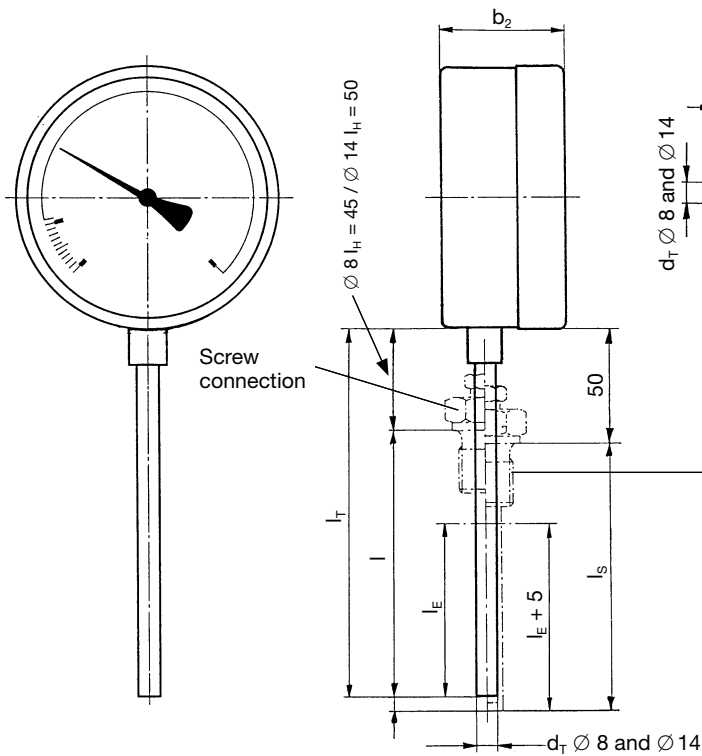
made to measure



## Dimensions

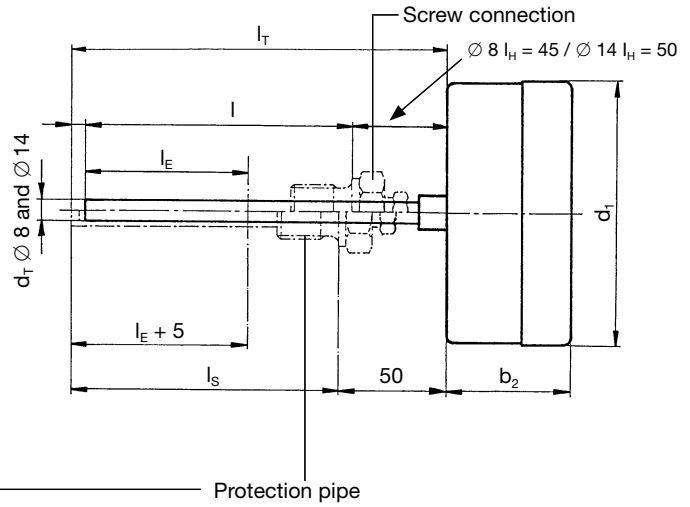
### Direct mounting, bottom

#### Structural shape/Immersion tube outlet 11



### Direct mounting, center back

#### Structural shape/Immersion tube outlet 12



## Application Notes

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

The case must not be heated above 110°C by the heat given off. When there is no insulation between assembly point and case, the distance between the case and screw connection or protective pipe must be increased.

## Measurements

NS	$b_2$	$d_1$
63	38	64
80	38	82
100	$48^{±2}$	100
160	$48^{±2}$	160

$l_E$  for  $\varnothing 8 = 85$  mm

$l_E$  for  $\varnothing 14 = 50$  mm

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