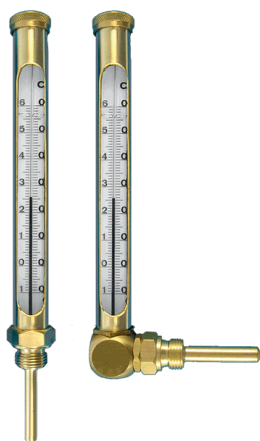


Liquid expansion thermometers for temperatures from -40°C to 200°C.
These instruments are very tough, easy to install and reliable.
They resist extreme hard conditions: vibrations, humidity, indoor and outdoors.



STANDARD PARAMETERS

Design: **DIN 16167, DIN 16174, DIN 16168, DIN 16175**

Structure: The opal is secured by a metallic case. The temperature range is printed on the opal. The metallic stem is fixed into the system by male or female thread or through a bolt.

Case dimension (HxØF): **145xØ20, 170xØ20, 200xØ22 or 260xØ22mm**

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

Connection system: **Male or female thread or Bolt**

Threads: **Standard BSP, metrics or NPT**

Stem length (L), including thread: **40-300mm**

Stem diameter (ØV) : **10 or 12mm**

Range: **-40...0...200°C**

Scale: **°C or double scale °C / °F**

MATERIALS

Case: **Chromed steel, Stainless steel AISI 316 or Brass**

Scale: **Opal**

Insert: **Glass**

Thread and Stem: **Chromed steel, Stainless steel AISI 316 or Brass**

Termometric liquid: **Blue or red alcohol**

Application:

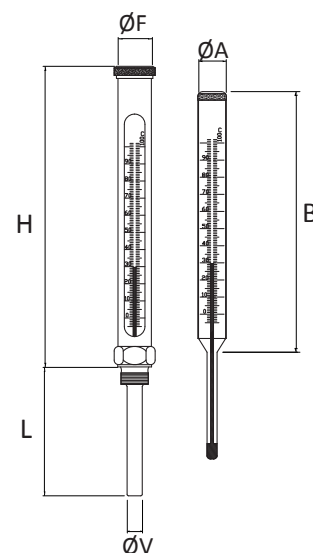
- Heater
- Boilers
- Naval sector

DIMENSIONS(mm)						WEIGHT (g)	DIN
Mounting	H	B	ØF	ØA	ØV		
Straight	145	135	20	16	10	81	-
	170	160	20	16	10	81	DIN 16167
	200	190	22	18	10	130	-
	260	220	22	18	10	152	DIN 16174
Angle 90°	145	135	20	16	10	81	-
	170	160	20	16	10	81	DIN 16168
	200	190	22	18	10	130	-
	260	220	22	18	10	152	DIN 16175

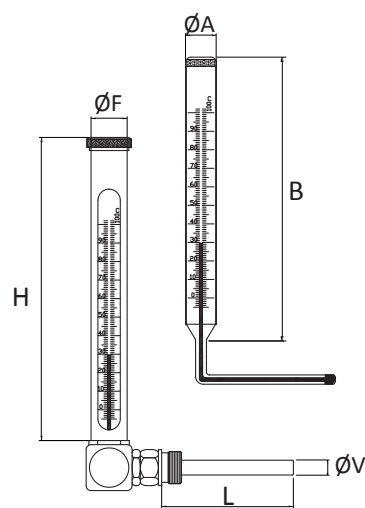
Temperature range according to DIN 16195

Tmp. in °C	H	Subdivision °C/line	Maximum error	Liquid
-40+40	145	1	2	Blue alcohol
	170			
	200			
	260			
-10+50 -10+60 0+60 0+100 0+120	145	2	1	
	170	1		
	200			
	260			
0+150 0+200	145	2	2	
	170			
	200			
	260			

A Straight



B Angle 90°



How to order

1. Case dimension

145xØ20mm
170xØ20mm
200xØ22mm
260xØ22mm

2. Case material

Brass
Chromed steel
Stainless steel AISI 316

3. Mounting

A **B**

4. Temperature range (°C)

-40+40 0+60 0+120 0+200
-10+60 0+100 0+150

5. Temperature scale

Single °C
Double °C / °F

6. Thermometric liquid

Blue alcohol
Red alcohol
Mercury

7. Stem length in mm (L), including thread

40 55 100 250
45 63 160 300
50 80 200

8. Stem diameter in mm (ØV)

Ø10
Ø12

9. Stem material

Brass
Chromed carbon steel
Galvanized carbon steel
Stainless steel AISI 304
Stainless steel AISI 316



½" BSP male
½" BSPT male
¾" NPT male
¾" BSP male



¾" BSP male
¾" NPT male
Bolt Ø16 mm
Bolt Ø18 mm



M18x150male
M20x150 male
M22x150 male
M27x200 male



Without threaded connection
More threads on demand

11. Calibration certificate traceable to ENAC

3 points 6 points
4 points 7 points
5 points Without certificate

F0101 -

1	2	3	4	5	6	7	8	9	10	11

