



Capillary type thermometers



Application:

- General-purpose temperature measuring instruments for gaseous, liquid and highly-viscous process media in harsh working environments
- Refrigeration industry
- Machine building

Features:

- Wetted parts and case material stainless steel
- According to EN13190
- For corrosive gasses and liquids

Specifications:

Dial size: 2.5", 4", 6",

Accuracy class: 2.5%(2.5");

1.5% (4", 6")

Capillary: SS304,max. length 50m

Case: SS304

Window: Polycarbonate

Stem diameter: Ø6.35mm, Ø8mm, Ø10mm, Ø12mm

Temperature ranges: -40 to 600 °C

Accessories: Sliding connections and thermowells

Temperature limit: 130 % F.S

Immersion tube: SS304 or 316L, max. length 1m

Dial: Aluminum, white

Pointer: Aluminum, black

Options:

Oil filling (silicon oil)

Process connections

With thermowell

Customer specific immersion length

Models:



Front flange for panel mounting,
capillary outlet bottom



U-clamp for panel mounting,
capillary outlet lower back

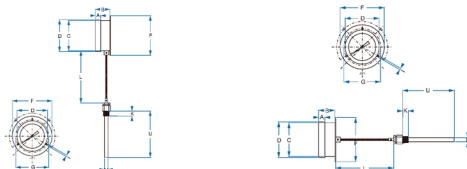


Front flange for panel mounting,
capillary outlet center back



Capillary type thermometers

Dimensions:



Type	Dial Size (inch)	Connection	Bezel Styles	A (mm)	B (mm)	C (mm)	D (mm)	F (mm)	G (mm)	I (mm)	K (mm)	L (mm)	M (mm)	U (mm)
CTT-2.5-BTM-OB-R	2.5	Bottom	Outside Bayonet Ring	12	35	63	73	94	83.5	4.5	15a5	1500	12	150
CTT-4-BTM-BR	4	Bottom	Inside Bayonet Ring	18	50	99	102	130	115	4.5	15a5	1500	10	150

Note: 1) K is relative to the type

2) We have made kinds of screw thread to orders

3) L is made as customer's request

4) F, G, I could be made as OEM based on 500pcs

Minimum immersion length Ls (mm)

Diameter of the Immersion tube (mm)								Capillary length (m)				
φ6	φ8	φ9	φ10	φ11	φ12	φ14	φ16	≤ 2	≤ 5	≤ 10	≤ 20	≤ 30
70	35	30	25	20	18	15	13	80	100	120	n.a.	n.a.
120	60	45	35	30	25	20	17	60	80	80	100	120
190	90	60	55	45	35	30	25	•	•	•	80	100
	135	100	80	65	55	40	30	•	60	•	•	•
	170	130	100	80	65	50	40	•	•	60	•	•
	-	190	150	120	95	70	55	•	•	•	60	60
Length of sensitive part Ls (mm)								Min. temperature span (°C)				

How to use this table:

1. Select in the right table the first column, which covers your capillary length.
2. Move down in this column to the first value, which is not higher than your temperature span.
3. Move horizontal to the left table into the column with your selected immersion tube diameter.
4. Read the minimum length of the sensitive part of the immersion tube for your selection.

If this is too long, choose a larger diameter, a larger range or a shorter capillary.

Example:

4 m capillary, -20 ... 40 °C (span = 60 °C),

Immersion tube Ø 10 mm:

Minimum length of the sensitive part: Ls ≥ 80 mm



How to order capillary type thermometer:

	CODE	CHARACTERISTICS
Basic type	CTT	Capillary type thermometer
Diameter	2.5 4 6	2.5 4 6
Mounting Type	DMB FFB FFCB RFB RFCB UCLB	Direct mounting, capillary outlet bottom Front flange for panel mounting, capillary outlet bottom Front flange for panel mounting, capillary outlet center back Rear flange for wall mounting, capillary outlet bottom Rear flange for wall mounting, capillary outlet center back U-clamp for panel mounting, capillary outlet lower back
Immersion tube diameter	6.35 8 10 12	6.35mm 8mm 10mm 12mm
Immersion tube length	100 160 250 400 600 1000 Customer specific length:	100mm 160mm 250mm 400mm 600mm 1000mm
Types of capillary	2 4 6 7.5	SS304 without protection, Ø 2.0 mm (up to 800 °C) SS304 with PVC, Ø 4.0 mm (up to 120 °C) SS304 with stainless steel protection, Ø 6.0 mm (up to 800 °C) SS304 with stainless steel protection + PVC, Ø 7.5 mm (up to 120 °C)
Capillary length (m)		

Options to be added:
1. temperature range:
2. process connection:

Order example:

	CTT	4	UCLB	14	160	6	25M
Capillary type thermometer	←						
Diameter size 4inch	←						
U-clamp for panel mounting, capillary outlet lower back	←						
Immersion tube diameter 14mm	←						
Immersion tube Length 160mm	←						
Types of capillary ss304 with ss protection	←						
Capillary length 25M	←						
Option: Temperature range: 0-100 °C /F							
Adjustable connection sliding on stem G½							
Oil filling, with thermowell							