

CWF



CANTHERM

Supplying high-quality bimetal and thermal sensor products.



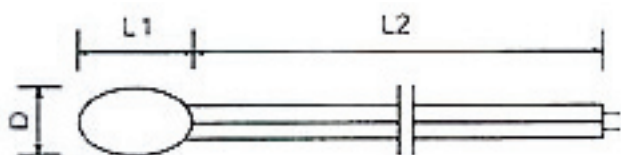
CWF Precision NTC Thermistor Probes for Temperature Measurement



The CWF series NTC Thermistors are supplied in 5 basic styles of enclosures designed to facilitate installation in a wide variety of applications. PVC leads are applied to a precision, high-reliability NTC thermistor, insulated with heat conductive water resistant materials and potted into any of a wide variety of probe bodies. CWF thermistors are also available with custom housings or custom lead lengths for remote sensing and temperature control in difficult conditions.

Also see the **Cantherm Thermistor Probe Brochure** for additional models.

Dimensions (mm)

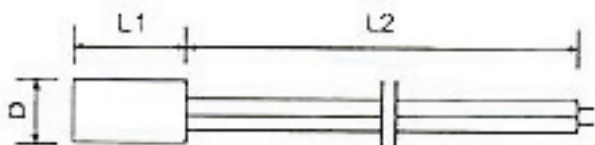


Code	A	B	C	D
D	3	5	6	7
L1	5	10	15	15
L2	Customer Specified			

CWF1 (Ethoxyline dipped)

Characteristics: Moisture resistant, good insulation, high reliability, small time constant, quick responses.

Applications: Household air-conditioning, refrigeration and many others.

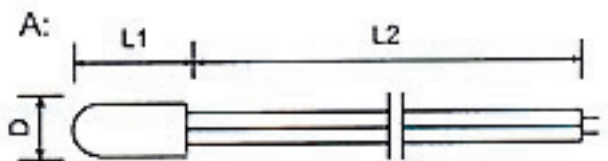


Code	A	B	C	D	E	F	G
D	3	5	5	5	6	6	6
L1	20	20	25	30	20	25	30
L2	Customer Specified						

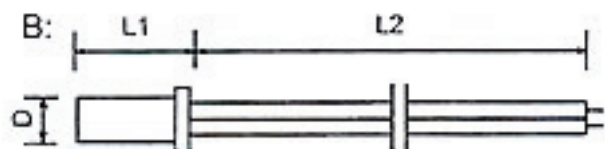
CWF2 (Packaged in aluminum, copper, or stainless steel probe body)

Characteristics: High resistance to thermal shock, moisture resistant, strong and secure structure, high dissipation coefficient, the test current can be higher than that of the ethoxyline resin-package.

Applications: All kinds of refrigeration, air-conditioning, water heaters, drinking fountains, and more.



Code	A	B	C	D
D	3	3.5	4	5
L1	10	15	15	15
L2	Customer Specified			



Code	A	B
D	8	8
L1	35	50
L2	Customer Specified	

CWF3 (Plastic body)

Characteristics: Good dimensional tolerances, good heat resistance and moisture protection, high voltage resistance.

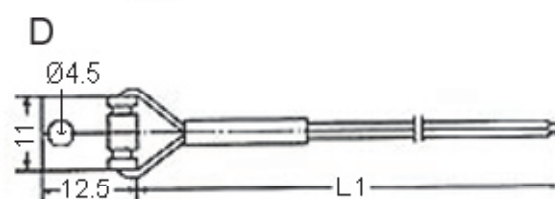
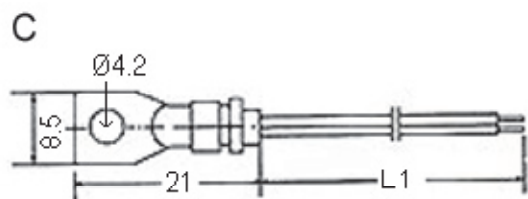
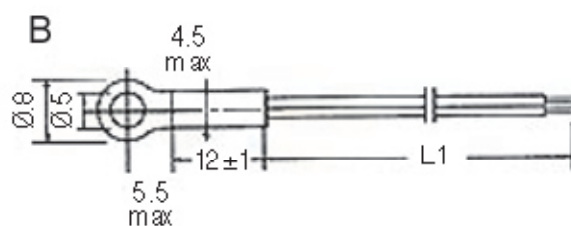
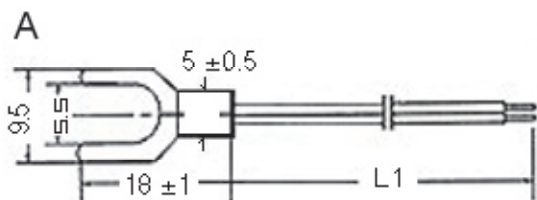
Applications: All kinds of Air-conditioning, refrigeration, and more.

Applications

- Heating, Ventilation & Air Conditioning
- Temperature Regulation and Measurement
- Automotive Electronics
- Water Heaters
- Household Appliances such as refrigerators, water coolers, dishwashers and many others

Characteristics

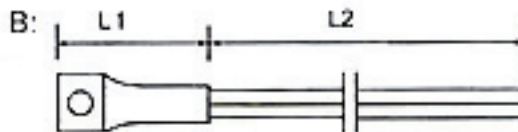
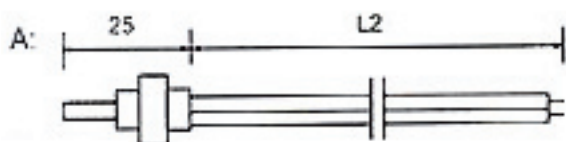
- Wide variety of installation fixtures and probes are available to suit your needs.
- Small size and fast response (temperature coefficient of resistance can reach- (2~5%/°C)
- Long-term Stability and Reliability (yearly drift of $\leq 1\%$)
- Excellent Tolerance and Interchangeability (the accuracy of R and B value can be $\pm 1\%$)
- Double layer packaging provides excellent insulation and high strength and impact resistance.
- Dissipation Constant type 1 package $\geq 2.0\text{mW}/^\circ\text{C}$, type 2 package $\geq 4.0\text{mW}/^\circ\text{C}$
- Time Constant of $\leq 15\text{S}$ to 70S



CWF4 (Sheet metal attachment fixtures)

Characteristics: Wide variety of fixtures, suitable for most applications.

Applications: Fan control, industrial temperature controllers, and more.



CWF5 (Special probes)

Characteristics: Small time constant, fast response, flexible and secure.

Applications: Water heaters, electronic thermometers, and more.

* Also refer to the **Cantherm Custom NTC Thermistor Probe Brochure**.

Specification

C W F **□□ — 103** **J** **3380**
 ① ② ③ ④ ⑤

- ① NTC Temp sensor
- ② Package Option
 - 1- Dipped ethoxyline resin (ex. 1A)
 - 2- Aluminum, copper, or stainless steel housing (ex. 2B)
 - 3- Plastic body (ex. 3AA)
 - 4- Sheet metal attachment fixtures (ex. 4B)
 - 5- Special probes (ex. 5B)
- ③ The Rated Resistance at 25°C
Example: 103 = $10 \times 103 = 10000\Omega = 10K\Omega$
- ④ The Precision Symbol of Rated Resistance
F: $\pm 1\%$ G: $\pm 2\%$ H: $\pm 3\%$ J: $\pm 5\%$
- ⑤ B value (25/50°C) B value example: 3380K

Technical Specifications

Part No.	Rated Resistance R25		B Value (25/50°C)		Dissi.Coef. (mW/°C)	Thermal time Con- stant (S)	Operating Temp. (°C)
	Range (KΩ)	Allowable Tolerance (%)	(K)	Allowable Tolerance (%)			
CWF□□□3100	0.1-20	± 1	3100	± 1	To type 1 package ≥2.0	To type 1 package ≤15	-55 to 125
CWF□□□3270	0.2-20		3270				
CWF□□□3380	0.5-50		3380				
CWF□□□3470	0.5-50		3470				
CWF□□□3600	1-100	± 2	3600	± 2	To type 2 package ≥4.0	To type 2 package ≤70	
CWF□□□3950	5-100	± 3	3950				
CWF□□□4000	5-100	± 4	4000				
CWF□□□4050	5-200		4050				
CWF□□□4150	10-250		4150				
CWF□□□4300	20-1000		4300				
CWF□□□4500	10-1000		4500				



CANTHERM

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