

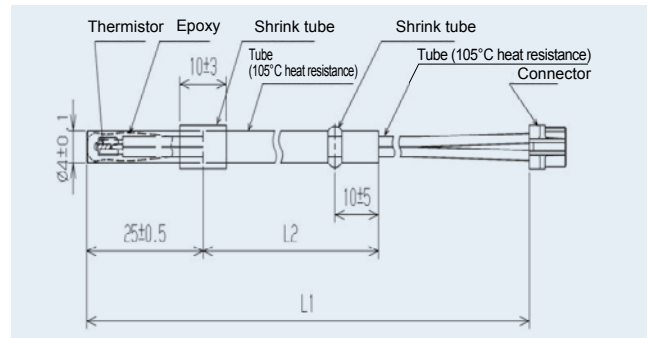
Air conditioning

17. Copper pipe sensor

Temperature sensor that is inserted into a copper pipe and can be used for a wide variety of purposes.



Zero power resistance R_{55} :
 $14.05 \text{ k}\Omega \pm 3\%$
 B value $B_{25/50}$:
 $4120 \text{ K} \pm 2\%$
 Temperature range:
 -20°C to 80°C



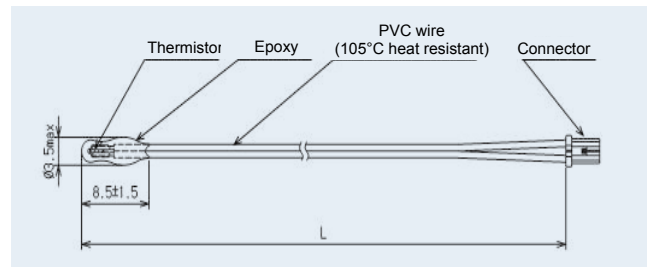
Thermal time constant: approx. 8 sec. (in stirred water)
 Breakdown voltage: AC 2200 V 1 sec.
 Insulation resistance: DC 500 V 100 M Ω +

18. Epoxy-dipped sensor

Temperature sensor that has been dipped in epoxy resin and optimized for measuring room temperature.



Zero power resistance R_{25} :
 $10.0 \text{ k}\Omega \pm 3\%$
 B value $B_{25/50}$:
 $3950 \text{ K} \pm 2\%$
 Temperature range:
 -20°C to 80°C



Thermal time constant: approx. 5 sec. (in stirred water)
 Breakdown voltage: AC 2200 V 1 sec.
 Insulation resistance: DC 500 V 100 M Ω +

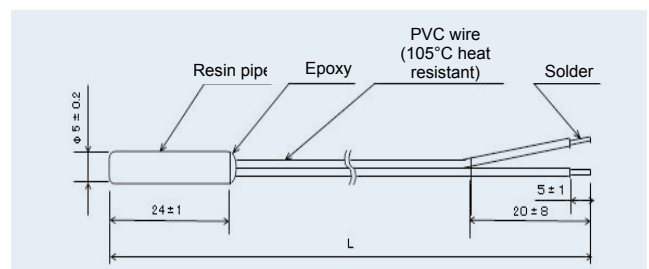
Refrigerator

19. Resin pipe sensor

Temperature sensor in a resin pipe that allows accurate measurement of low temperatures.



Zero power resistance R_{25} :
 $10.0 \text{ k}\Omega \pm 1\%$
 B value $B_{25/85}$:
 $3435 \text{ K} \pm 1\%$
 Temperature range:
 -30 to 90°C



Thermal time constant: approx. 20 sec.
 Breakdown voltage: AC 1800 V 1 sec.
 Insulation resistance: DC 500 V 100 M Ω +

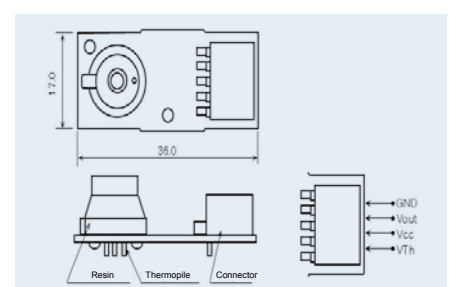
20. Thermopile module

Module version of the infrared based thermopile non contact sensor.



Measured temperature: $0^\circ\text{C} \pm 3.0^\circ\text{C}$
 Output voltage: 0.547 V to 3.453 V
 Measuring temp. range: -35°C to 35°C
 Temperature range: -35°C to 35°C

Response time: approx. 10 msec.
 Angle: type 55
 Rated voltage: $+5.5 \text{ V}$



Microwave oven

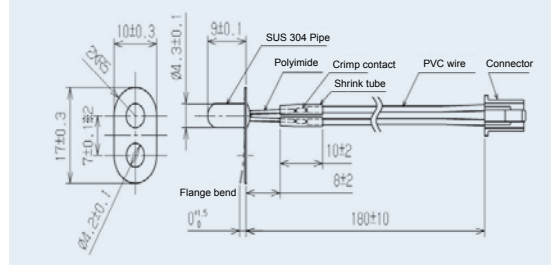
21. Flange pipe sensor

Easy to mount highly heat resistant temperature sensor with integrated flange.



Zero power resistance R_{50} : 4.367 k Ω \pm 5%
 B value $B_{0/100}$: 3450 K \pm 3%
 Temperature range: -30°C to 180°C
 (sensing part)

Thermal time constant: approx. 80 sec.
 Breakdown voltage: AC 1200 V 1 sec.
 Insulation resistance: DC 500 V 100 M Ω +



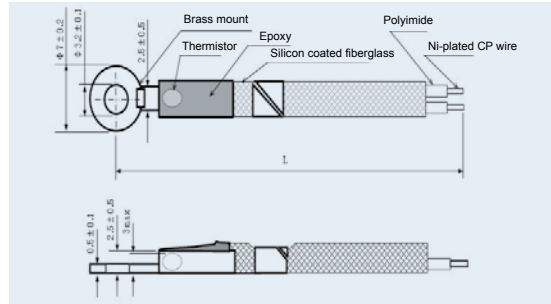
22. Eyelet (lug terminal) sensor

Highly heat resistant screw mount type temperature sensor with a metal terminal part.



Zero power resistance R_{75} : 7.241 k Ω \pm 7%
 B value $B_{0/100}$: 3970 K \pm 2%
 Temperature range: -20°C to 200°C

Thermal time constant: approx. 9 sec.
 (on hot plate at room temperature)
 Breakdown voltage: AC 1200 V 1 sec.
 Insulation resistance: DC 500 V 100 M Ω +



Water heater / warm water toilet seat

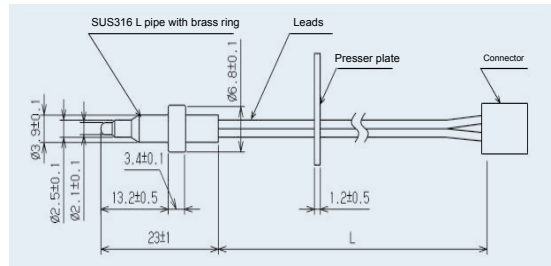
23. Stainless steel triple-staged pipe

Temperature sensor optimized for water temperature measurement with thin stainless steel pipe terminal for fast response speed.



Zero power resistance R_{50} : 17.60 k Ω \pm 3%
 B value $B_{0/100}$: 3970 K \pm 2%
 Temperature range: -20 to 120°C
 (except connector)

Thermal time constant : approx. 1 sec.
 (in stirred water)
 Breakdown voltage : AC 1200 V 1 sec.
 Insulation resistance : DC 500 V 100 M Ω +



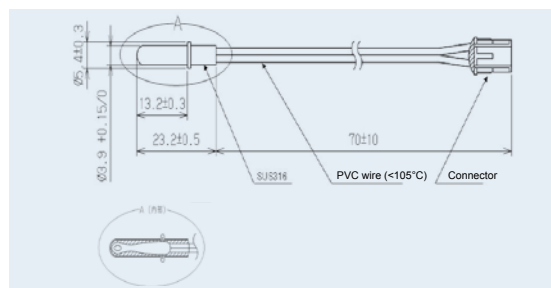
24. Stainless steel pipe sensor

Temperature sensor optimized for water temperature measurement that is inserted into a stainless steel pipe.



Zero power resistance R_{25} : 10 k Ω \pm 1%
 B value $B_{25/85}$: 3250 K \pm 1%
 Temperature range : -20 to 80°C

Thermal time constant: approx. 3.6 sec.
 (in stirred water)
 Breakdown voltage: AC 1500 V 1 sec.
 Insulation resistance: DC 500 V 100 M Ω +



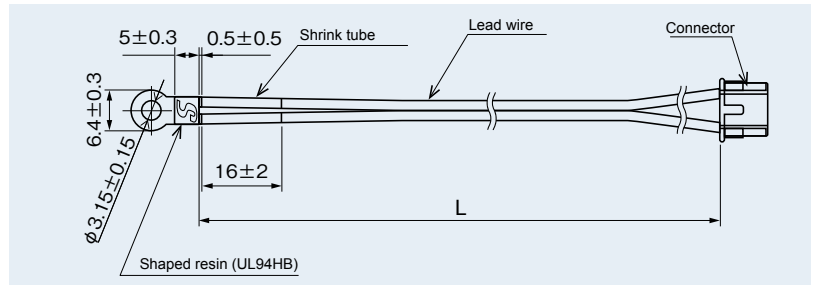
Power conditioner

25. Eyelet (lug terminal) sensor

Formed resin screw mount type temperature sensor with excellent insulation.

Zero power resistance R_{25} : $20.0 \text{ k}\Omega \pm 1\%$
 B value $B_{25/85}$: $4013 \text{ K} \pm 1\%$
 Temperature range: -40°C to 105°C

Thermal time constant: approx. 80 sec.
 Breakdown voltage: AC 2400 V 1 sec.
 Insulation resistance: DC 500 V 100 M Ω +



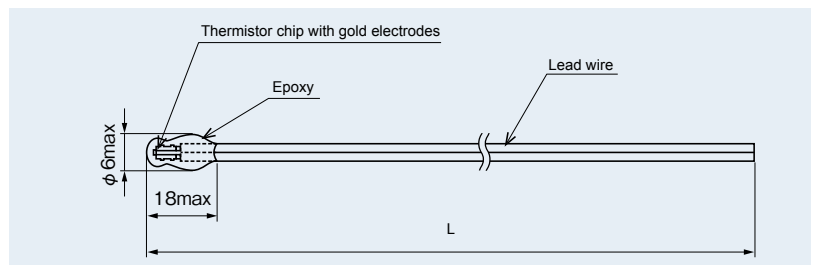
Rechargeable battery

26. Epoxy-dipped sensor (thermistor chip with gold electrodes)

Highly reliable temperature sensor that has been dipped in epoxy resin.

Zero power resistance R_{65} : $14.05 \text{ k}\Omega \pm 1.5\%$
 B value $B_{25/85}$: $4120 \text{ K} \pm 1\%$
 Temperature range: -30°C to 105°C

Thermal time constant: approx. 5 sec. (in stirred water)
 Breakdown voltage: AC 1800 V 1 sec.
 Insulation resistance: DC 500 V 100 M Ω +



Fire alarm

27. Epoxy-dipped sensor

Highly responsive temperature sensor that has been dipped in epoxy resin.

Zero power resistance R_{25} : $226.0 \text{ k}\Omega \pm 3\%$
 B value $B_{25/85}$: $4021 \text{ K} \pm 1\%$
 Temperature range: -40 to 100°C

Thermal time constant: approx. 18 sec.
 Breakdown voltage: AC 600 V 1 sec.
 Insulation resistance: DC 500 V 100 M Ω +

