

## 1. Characteristics

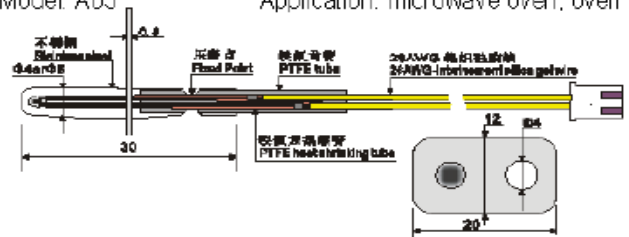
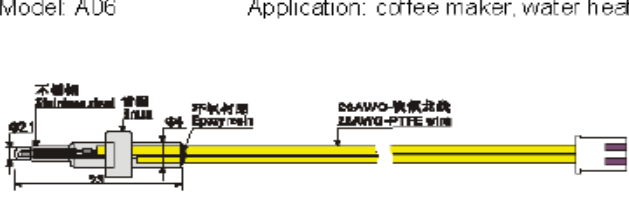
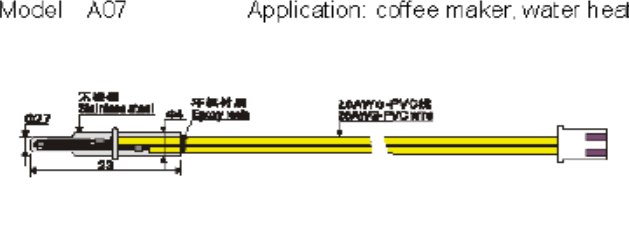
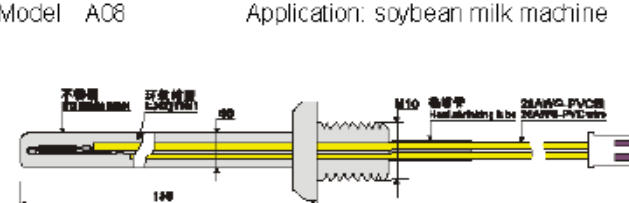
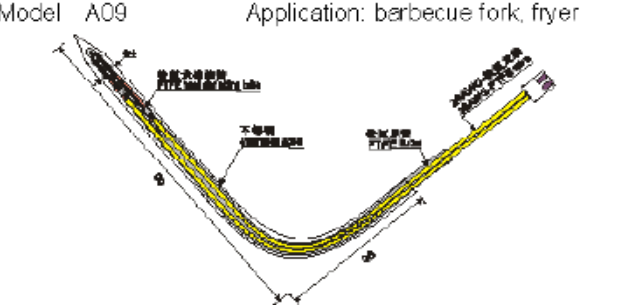
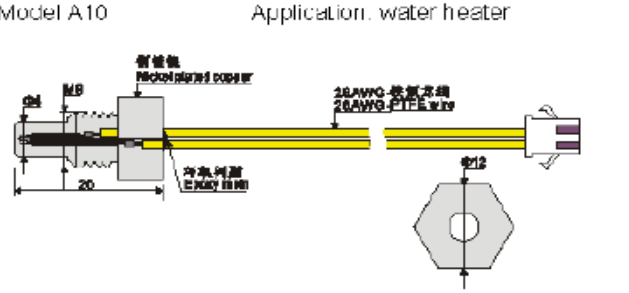
- 1.1 CWF series is specifically designed NTC thermistor temperature sensor.
- 1.2 Long time stability, annual resistance excursion rate  $\leq 5\%$ .
- 1.3 High precision resistance and B value, good consistency, interchangeable.  
(Resistance and B value tolerance can be  $\pm 1\%$ )
- 1.4 High sensitivity, fast response, resistance temperature coefficient can be  $-(2\sim 5)\%/^{\circ}\text{C}$ .
- 1.5 Good insulation, anti mechanical collision, anti bending, high reliability.
- 1.6 Can be encapsulated upon specific installation condition, convenient for installation.
- 1.7 High temperature measurement precision

## 2. Application

Applied in the temperature measurement and control of home air conditioner, automobile air conditioner, refrigerator, freezer, water heater, coffee maker, microwave oven, oven, drinking machine, warm machine, dish washer, disinfection tank, washing machine, drying machine, soybean milk machine, bathroom, etc.

## 3. Typical Sensor Outlook and Dimension and Main Electric Performance.

<p>Model A01 Application: induction cooker</p>	<p>Resistance @25C: <math>R_{25}=100\text{K}\Omega\pm 5\%</math> <math>B_{25/50^{\circ}\text{C}}=3950\text{K}\pm 1\%</math>                      Insulation resistance: voltage <math>500\text{V}_{\text{DC}}</math>, <math>\geq 100\text{M}\Omega</math>                      Voltage withstanding: Voltage <math>1200\text{V}_{\text{AC}}\sim 1500\text{V}_{\text{AC}}</math>,                      Time: 5 seconds                      Operating temperature range: <math>-30\sim +125^{\circ}\text{C}</math></p>
<p>Model A02 Application: air conditioner</p>	<p>1 Resistance @25C: <math>R_{25}=5\text{K}\Omega\pm 1\%</math> <math>B_{25/50^{\circ}\text{C}}=3470\text{K}\pm 1\%</math>                      2 Resistance @25C: <math>R_{25}=10\text{K}\Omega\pm 1\%</math> <math>B_{25/50^{\circ}\text{C}}=3470\text{K}\pm 1\%</math>                      3 Resistance @25C: <math>R_{25}=50\text{K}\Omega\pm 1\%</math> <math>B_{25/50^{\circ}\text{C}}=3950\text{K}\pm 1\%</math>                      Insulation resistance: voltage <math>500\text{V}_{\text{DC}}</math>, <math>\geq 100\text{M}\Omega</math>                      Voltage withstanding: Voltage <math>1200\text{V}_{\text{AC}}\sim 1800\text{V}_{\text{AC}}</math>,                      Time: 5 seconds                      Operating temperature range: <math>-30\sim +105^{\circ}\text{C}</math></p>
<p>Model A03 Application: air conditioner, refrigerator</p>	<p>1 Resistance @25C: <math>R_{25}=5\text{K}\Omega\pm 1\%</math> <math>B_{25/50^{\circ}\text{C}}=3470\text{K}\pm 1\%</math>                      2 Resistance @25C: <math>R_{25}=10\text{K}\Omega\pm 1\%</math> <math>B_{25/50^{\circ}\text{C}}=3470\text{K}\pm 1\%</math>                      3 Resistance @25C: <math>R_{25}=10\text{K}\Omega\pm 1\%</math> <math>B_{25/85^{\circ}\text{C}}=3435\text{K}\pm 1\%</math>                      Insulation resistance: voltage <math>500\text{V}_{\text{DC}}</math>, <math>\geq 100\text{M}\Omega</math>                      Voltage withstanding: voltage <math>1200\text{V}_{\text{AC}}\sim 1500\text{V}_{\text{AC}}</math>,                      Time: 5 seconds                      Operating temperature range: <math>30\sim +105^{\circ}\text{C}</math></p>
<p>Model A04 Application: refrigerator, deep freezer.</p>	<p>1 Resistance @5C: <math>R_5=5.06\text{K}\Omega\pm 2\%</math> <math>B_{5/25^{\circ}\text{C}}=3839\text{K}\pm 2\%</math>                      2 Resistance @-18C: <math>R_{-18}=16.9\text{K}\Omega\pm 2\%</math> <math>B_{-18/25^{\circ}\text{C}}=3771\text{K}\pm 2\%</math>                      Insulation resistance: voltage <math>500\text{V}_{\text{DC}}</math>, <math>\geq 100\text{M}\Omega</math>                      Voltage withstanding: voltage <math>1200\text{V}_{\text{AC}}\sim 1800\text{V}_{\text{AC}}</math>,                      Time: 5 seconds                      Operating temperature range: <math>-40\sim +80^{\circ}\text{C}</math></p>

<p>Model: A05 Application: microwave oven, oven</p> 	<p>Resistance @200C: <math>R_{200}=1K\Omega\pm 5\%</math> <math>B_{100/200C}=453/K\pm 3\%</math>            Insulation resistance: voltage 500V<sub>DC</sub>, &gt;100M<math>\Omega</math>            Voltage withstanding: voltage 1200V<sub>AC</sub>~1800V<sub>AC</sub>,            Time: 1 minute            Operating temperature range: -40 ~ +260<math>^{\circ}</math>C</p>
<p>Model: A06 Application: coffee maker, water heater</p> 	<p>1 Resistance @25C: <math>R_{25}=100K\Omega\pm 1\%</math> <math>B_{25/85C}=3770K\pm 1\%</math>            2 Resistance @25C: <math>R_{25}=50K\Omega\pm 1\%</math> <math>B_{25/80C}=3950\pm 1\%</math>            3 Resistance @25C: <math>R_{25}=10K\Omega\pm 1\%</math> <math>B_{25/85C}=3435K\pm 1\%</math>            Insulation resistance: voltage 500V<sub>DC</sub>, <math>\geq 100M\Omega</math>            Voltage withstanding: voltage 1200V<sub>AC</sub>~1500V<sub>AC</sub>,            Time: 5 seconds.            Operating temperature range: -30 ~ +125<math>^{\circ}</math>C</p>
<p>Model: A07 Application: coffee maker, water heater</p> 	<p>1 Resistance @25C: <math>R_{25}=100K\Omega\pm 1\%</math> <math>B_{25/85C}=3770K\pm 1\%</math>            2 Resistance @25C: <math>R_{25}=50K\Omega\pm 1\%</math> <math>B_{25/80C}=3950K\pm 1\%</math>            3 Resistance @25C: <math>R_{25}=10K\Omega\pm 1\%</math> <math>B_{25/85C}=3435K\pm 1\%</math>            Insulation resistance: voltage 500V<sub>DC</sub>, <math>\geq 100M\Omega</math>            Voltage withstanding: voltage 1200V<sub>AC</sub>~1500V<sub>AC</sub>,            Time: 5 seconds.            Operating temperature range: -30 ~ +125<math>^{\circ}</math>C</p>
<p>Model: A08 Application: soybean milk machine</p> 	<p>1 Resistance @25C: <math>R_{25}=50K\Omega\pm 1\%</math> <math>B_{25/80C}=3950K\pm 1\%</math>            2 Resistance @25C: <math>R_{25}=23K\Omega\pm 1\%</math> <math>B_{25/80C}=4200K\pm 1\%</math>            Insulation resistance: voltage 500V<sub>DC</sub>, <math>\geq 100M\Omega</math>            Voltage withstanding: voltage 1200V<sub>AC</sub>~1800V<sub>AC</sub>,            Time: 5 seconds.            Operating temperature range: -30 ~ +125<math>^{\circ}</math>C</p>
<p>Model: A09 Application: barbecue fork, fryer</p> 	<p>1 Resistance @25C: <math>R_{25}=100K\Omega\pm 1\%</math> <math>B_{25/80C}=3990K\pm 1\%</math>            2 Resistance @25C: <math>R_{25}=50K\Omega\pm 1\%</math> <math>B_{25/80C}=3950K\pm 1\%</math>            Insulation resistance: voltage 500V<sub>DC</sub>, <math>\geq 100M\Omega</math>            Voltage withstanding: voltage 1200V<sub>AC</sub>~1800V<sub>AC</sub>,            Time: 1 minute            Operating temperature range: -40 ~ +260<math>^{\circ}</math>C</p>
<p>Model: A10 Application: water heater</p> 	<p>Resistance @25C: <math>R_{25}=50K\Omega\pm 1\%</math> <math>B_{25/80C}=3950K\pm 1\%</math>            Insulation resistance: voltage 500V<sub>DC</sub>, <math>\geq 100M\Omega</math>            Voltage withstanding: voltage 1200V<sub>AC</sub>~1500V<sub>AC</sub>,            Time: 5 seconds.            Operating temperature range: -30 ~ +125<math>^{\circ}</math>C</p>