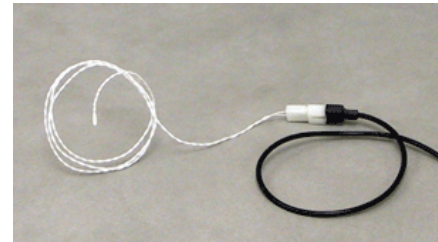


TSD202 SERIES TEMPERATURE TRANSDUCERS



**TSD202A** The TSD202A employs a fast response thermistor, and is appropriate for use in locations where temperature changes rapidly, as with the temperature changes of inspired/expired breath. The TSD202A is useful for measuring skin temperature (in small areas) or airflow rate resulting from respiration, and is not designed for liquid immersion. For measuring skin (surface) temperature, simply tape the TSD202A to the location of interest. For measuring respiration rates, by monitoring airflow, place the TSD202A next to the mouth or nose so that inspired or exhaled air will intercept the tip of the TSD202A transducer.

**RX202A** Replacement Fast-response Temperature Sensor for TSD202A (MP Research systems), SS6L (BSL Education systems), or SS6 (wireless/telemetry systems) transducers. The sensor snaps onto the transducer connector for connection to a BIOPAC data acquisition system.



**Note:** RX202A Sensor (white) shown on right with transducer connector (black); *ships as sensor only.*

**TSD202A-MRI** The TSD202A-MRI fast response thermistor offers the same functionality as TSD202A but is specifically designed for MRI applications. Made with MR Conditional cables and connectors and does not have a patient clip attached to the cable.

**RX202A-MRI** Replacement temperature sensor for the TSD202A-MRI. The sensor snaps onto the transducer connector. *Ships as sensor only.*

**MRI Use:** **MR Conditional to 7T** (TSD202A-MRI and RX202A-MRI)

**Condition:** The TSD202A-MRI is a thermistor transducer that can be taped to the surface of a subject's skin. Apply the thermistor so that just the sensor portion is in contact with the skin. The insulated, conductive wire portion is typically routed away from the skin by sliding a piece of gauze or cloth between wire and the skin surface, prior to taping the transducer to the skin.

**Components:** Silicon semi-conductor, copper wire, Polyvinyl Chloride (PVC) plastic

**TSD202B** The TSD202B is a “Banjo” style surface probe useful for measuring surface temperature. The “Banjo” design allows efficient skin temperature measurements on a variety of body locations. The TSD202B is not designed for liquid immersion. For measuring skin (surface) temperature, simply tape the TSD202B to the location of interest.

**IMPORTANT:** The copper wire used in the TSD202B probe is **FRAGILE**. Do not bend or pull the cable when attaching/removing the probe. It's important not to torque the cable where it connects to the transducer element. COBAN wrap (rather than tape) is recommended for attaching the probe to the participant. This wrap is easy to remove and helps eliminate the risk of breakage.

- TSD202C** The TSD202C encases the internal thermistor in a stainless steel, waterproof housing, and is designed for liquid immersion and other temperature measurement applications where ruggedness is required and fast response is not critical.
- TSD202D** The TSD202D is a modified TSD202B, with a housing that conforms to curved skin surfaces and includes a stretchy Velcro® strap for easy attachment to the fingers or toes. The “Banjo” design allows efficient skin temperature measurements. The TSD202D is not designed for liquid immersion. For measuring skin (surface) temperature, simply tape the TSD202D to the location of interest. Insert the red lead and white lead transducer pin plugs into the two SKT100C inputs labeled XDCR. Either lead can be connected to either XDCR input.
- TSD202E** The TSD202E is a general-purpose waterproof thermistor. Trace conductive parts (metallic parts) do not make contact to the subject.
- TSD202F** The TSD202F is a small, flexible waterproof thermistor.

### TSD202 SERIES SPECIFICATIONS

#### Response Time (in stirred oil bath)

TSD202A/TSD202A-MRI:	0.6 sec
TSD202B:	1.1 sec
TSD202C:	3.6 sec
TSD202D:	1.1 sec
TSD202E:	0.9 sec
TSD202F:	1.1 sec

#### Size with housing

TSD202A/TSD202A-MRI:	1.7 mm (diameter) x 5 mm (long)
TSD202B:	9.8 mm (diameter) x 3.3 mm (high)
TSD202C:	4 mm (diameter) x 115 mm (long)
TSD202D:	16 mm (long) x 17 mm (wide) x 8 mm (high)
(TSD202D – sensor only):	10 mm sensing diameter, 1.4 mm sensor thickness)
TSD202E:	9.8 mm (long) x 3.3 mm (diameter)
TSD202F:	9.8 mm (long) x 3.3 mm (diameter)

Sensor only: 10 mm sensing diameter, 1.4 mm sensor thickness

Interface: SKT100C

Nominal Resistance: 2252 Ω at 25° C

Maximum operating temperature: 60° C (when used with SKT100C)

Accuracy and Interchangability: 0.2° C

Cable length: 3 meters

Compatibility: YSI® series 400 temperature probes

Sterilizable: No

TEL100 Compatibility: SS6