

# Pt100 Sensors

for External Temperature Control



## The Benefits of Pt100 Sensors

- Ensure your application reaches the desired set point
- Control & monitor temperature accuracy across a wide range of temperatures
- Directly control & monitor the application's temperatures in the media or in-line with the application

### JULABO Pt100 Products

Many of JULABO's temperature control units, or TCUs, have external Pt100 sensor capabilities. JULABO offers Pt100 sensors in stainless steel and PTFE-coated options. PTFE coatings are used for corrosive conditions. Custom sizes and alternate materials, such as Hastelloy, are available upon request.

Pt100 Probes with 12' cable and Lemosa connector are included in the following options:

JULABO Part Number	Length	Diameter	PTFE
8891001	24"	1/4"	No
8891002	24"	1/4"	Yes
8891003	36"	1/4"	No
8891004	36"	1/4"	Yes
8891005	48"	1/4"	No
8891006	48"	1/4"	Yes
8891018	12"	1/4"	No
8891019	12"	1/4"	Yes
8891031	8"	1/4"	No
8891032	8"	1/4"	Yes

# Pt100 Sensors & Thermocouple Options



## ThermoCouple Converter Box

Certain applications require small temperature probes such as thermocouples. The ThermoCouple Converter Box (TCCB) allows you to integrate the thermocouple with the Pt100 sensor port, allowing you to use type J, K, or T mini-thermocouple connectors.

**Note: the TCCB requires a 115V power outlet.**



## In-Line Pt100 Sensors

For applications unable to accommodate a Pt100 probe or thermocouple, in-line Pt100 sensors installed in the fluid line at the application allow external control near the application. These sensors have male M (metric) threaded fittings to connect with JULABO insulated metal tubing. JULABO offers M16x1, M24x1.5, M30x1.5, or M38x1.5. All sensors have a 1.5m cable with Lemosa connector included.

### Need a Pt100 Extension Cable?

If your application exceeds the distance of the cable length of the Pt100 sensor to the TCU, JULABO offers a 3.5m extension cable (8981103). We can also make custom-length extension cables upon request.



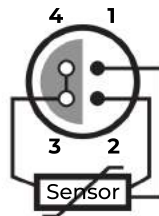
## Have Your Own Pt100 Sensor?

The wiring of a supplied 4-wire Pt100 sensor can integrate with JULABO TCUs using the External Pt100 connector (8980131). We recommend using only shielded wiring which connects to the plug housing.

To connect, follow the wiring diagrams:

### 3 Wire Pt100 Pin Assignment

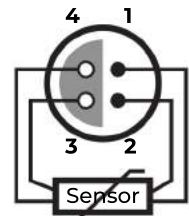
- 1 = +I, Red
- 2 = +U, Red/Blue
- 3 = -U, White/Blue



Shield electrically connected with tube & housing.

### 4 Wire Pt100 Pin Assignment

- 1 = +I, Red
- 2 = +U, Red/Blue
- 3 = -U, White/Blue
- 4 = -I, White



Shield electrically connected with tube & housing.

## Need help finding a Pt100 solution for your application?

Reach out to your local JULABO representative or contact [sales@julabo.us](mailto:sales@julabo.us) for any questions related to Pt100 sensors. You can also use the friendly chat option available at [JULABO.us](http://JULABO.us) or call us directly at 800-458-5226.