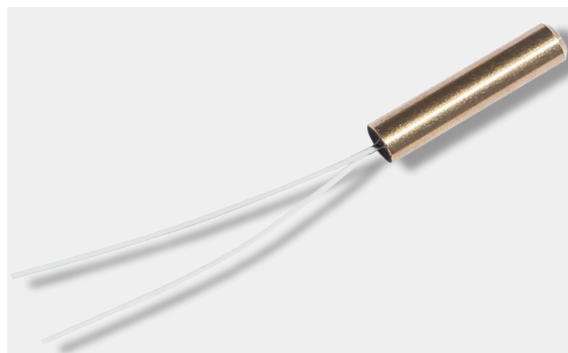




- Temperature range -40 to +125°C
- Miniature design with 5 mm OD
- General instrumentation temperature probe In brass housing
- Resistance values from 2.2 - 100 kΩ
- Custom designs available
- Higher temperature range available

## Applications:

Heating / cooling systems  
HVAC

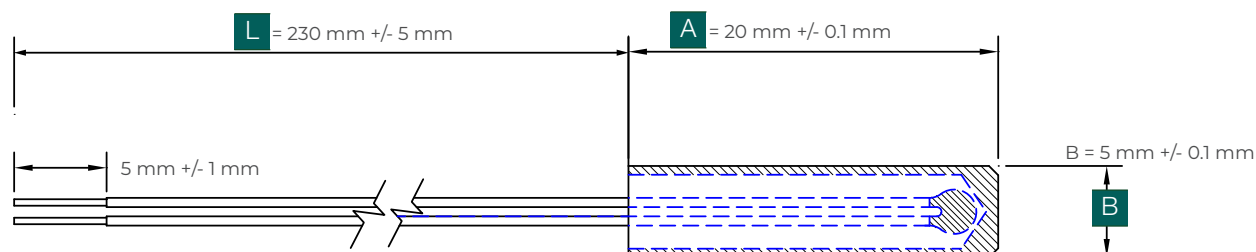
Laboratory  
Drilling

Industrial process Energy

## Specifications

|                                   | Unit                                                               | Value    |
|-----------------------------------|--------------------------------------------------------------------|----------|
| Nominal resistance at +25°C       | Ohms                                                               | 10,000   |
| Resistance tolerance from 0..70°C | °C                                                                 | +/- 0.2  |
| Beta value 25/85                  | K                                                                  | 3977     |
| Tolerance on Beta value 25/85     | %                                                                  | +/- 0.5  |
| Dissipation constant in still air | mW/°C                                                              | 2        |
| Working temperature               | °C                                                                 | -40..125 |
| Epoxy thermal conductivity        | W/(m.K)                                                            | 1.7      |
| Material                          |                                                                    |          |
| Leads and insulation              | 28AWG Solid silver plated copper leads with white Kynar insulation |          |
| Probe material                    | Brass                                                              |          |
| Wiring Thermistor                 |                                                                    |          |
| Red + Blue                        | Thermistor                                                         |          |
| Green + Yellow                    | No connect                                                         |          |

## Dimensions



# TEMPERATURE SENSOR

## LTP-TP-B



### Ordering information

(Please use the characters in the chart below to construct your product code)

A

B

L

Example Code

LTP - TP - B - 2 - 5 - 23 - EB-10k3977-02

Probe Housing Length

2

20 mm

x

Custom length

Probe Housing Diameter

5

5,0 mm

x

Custom diameter

Probe cable length

5

50 mm

10

100 mm

15

150 mm

20

200 mm

23

230 mm

25

250 mm

30

300 mm

35

350 mm

40

400 mm

45

450 mm

x

Custon length

Thermistor Type

All thermistor types available: Insert details are required

If you require a customized solution for your program contact our sales team.

# TEMPERATURE SENSOR

## LTP-TP-B



### Resistance v. temperature table for EB-10k3977-02 Thermistor

R(25) = 10000 Ohm      B(25/85) = 3977K ± 0.5%

| Temp. °C | KΩ      | Temp. °C | KΩ     | Temp. °C | KΩ    | Temp. °C | KΩ    | Temp. °C | KΩ    |
|----------|---------|----------|--------|----------|-------|----------|-------|----------|-------|
| -30      | 176.976 | 11       | 18.970 | 51       | 3.468 | 92       | 0.861 | 133      | 0.279 |
| -29      | 166.354 | 12       | 18.091 | 52       | 3.340 | 93       | 0.835 | 134      | 0.272 |
| -28      | 156.443 | 13       | 17.256 | 53       | 3.217 | 94       | 0.810 | 135      | 0.266 |
| -27      | 147.176 | 14       | 16.461 | 54       | 3.099 | 95       | 0.786 | 136      | 0.259 |
| -26      | 138.517 | 15       | 15.710 | 55       | 2.986 | 96       | 0.763 | 137      | 0.253 |
| -25      | 130.422 | 16       | 15.000 | 56       | 2.878 | 97       | 0.741 | 138      | 0.247 |
| -24      | 122.846 | 17       | 14.325 | 57       | 2.774 | 98       | 0.720 | 139      | 0.241 |
| -23      | 115.759 | 18       | 13.681 | 58       | 2.675 | 99       | 0.698 | 140      | 0.235 |
| -22      | 109.121 | 19       | 13.073 | 59       | 2.579 | 100      | 0.679 | 141      | 0.230 |
| -21      | 102.904 | 20       | 12.491 | 60       |       | 101      | 0.659 | 142      | 0.224 |
| -20      | 97.083  | 21       | 11.940 | 61       | 2.400 | 102      | 0.640 | 143      | 0.219 |
| -19      | 91.621  | 22       | 11.421 | 62       | 2.316 | 103      | 0.622 | 144      | 0.214 |
| -18      | 86.501  | 23       | 10.924 | 63       | 2.235 | 104      | 0.605 | 145      | 0.209 |
| -17      | 81.696  | 24       | 10.448 | 64       | 2.157 | 105      | 0.587 | 146      | 0.204 |
| -16      | 77.189  | 25       | 10.000 | 65       | 2.083 | 106      | 0.571 | 147      | 0.199 |
| -15      | 72.957  | 26       | 9.574  | 66       | 2.011 | 107      | 0.556 | 148      | 0.195 |
| -14      | 68.983  | 27       | 9.165  | 67       | 1.942 | 108      | 0.540 | 149      | 0.190 |
| -13      | 65.244  | 28       | 8.779  | 68       | 1.876 | 109      | 0.525 | 150      | 0.186 |
| -12      | 61.736  | 29       | 8.406  | 69       | 1.813 | 110      | 0.511 |          |       |
| -11      | 58.433  | 30       | 8.055  | 70       | 1.752 | 111      | 0.497 |          |       |
| -10      | 55.329  | 31       | 7.722  | 71       | 1.693 | 112      | 0.483 |          |       |
| -9       | 52.407  | 32       | 7.402  | 72       | 1.637 | 113      | 0.470 |          |       |
| -8       | 49.658  | 33       | 7.096  | 73       | 1.582 | 114      | 0.457 |          |       |
| -7       | 47.065  | 34       | 6.807  | 74       | 1.530 | 115      | 0.445 |          |       |
| -6       | 44.627  | 35       | 6.532  | 75       | 1.480 | 116      | 0.433 |          |       |
| -5       | 42.327  | 36       | 6.266  | 76       | 1.432 | 117      | 0.422 |          |       |
| -4       | 40.160  | 37       | 6.017  | 77       | 1.385 | 118      | 0.411 |          |       |
| -3       | 38.113  | 38       | 5.777  | 78       | 1.340 | 119      | 0.400 |          |       |
| -2       | 36.186  | 39       | 5.549  | 79       | 1.297 | 120      | 0.390 |          |       |
| -1       | 34.369  | 40       | 5.324  | 80       | 1.255 | 121      | 0.379 |          |       |
| 0        | 32.650  | 41       | 5.115  | 81       | 1.215 | 122      | 0.370 |          |       |
| 1        | 31.030  | 42       | 4.916  | 82       | 1.177 | 123      | 0.360 |          |       |
| 2        | 29.498  | 43       | 4.725  | 83       | 1.140 | 124      | 0.351 |          |       |
| 3        | 28.051  | 44       | 4.543  | 84       | 1.104 | 125      | 0.342 |          |       |
| 4        | 26.683  | 45       | 4.368  | 85       | 1.070 | 126      | 0.333 |          |       |
| 5        | 25.391  | 46       | 4.201  | 86       | 1.037 | 127      | 0.325 |          |       |
| 6        | 24.170  | 47       | 4.041  | 87       | 1.005 | 128      | 0.317 |          |       |
| 7        | 23.015  | 48       | 3.888  | 88       | 0.974 | 129      | 0.309 |          |       |
| 8        | 21.918  | 49       | 3.742  | 89       | 0.944 | 130      | 0.301 |          |       |
| 9        | 20.884  | 50       | 3.602  | 90       | 0.916 | 131      | 0.294 |          |       |
| 10       | 19.902  | 51       | 3.468  | 91       | 0.888 | 132      | 0.286 |          |       |