

CABLE SENSORS

Cable/Bullet Type Temperature Sensors

FEATURES

- PVC HT or High Temperature Silicone Cable
- Available in 5' or 10' standard lengths
- IP 66 Star-Crimp for watertight applications
- AISI 304 tube
- NTC thermistors and RTD elements available
- Compatible with most major control systems
- CE & RoHS compliant
- 5 Year Limited Warranty
- Made in the USA



SPECIFICATIONS

| | |
|-----------------|--|
| Length: | 5' or 10' standard lengths Custom lengths available on request |
| Probe: | IP 66 Star-Crimp enclosure 6mm x 45mm AISI 304 stainless steel Filled with waterproof compound |
| Sensor Element: | Interchangeable NTC thermistor, 2-wire RTD Pt100, Pt1000, 2-wire RTD Ni1000-891, Ni1000-TC5, 2 wire |
| Sensor Value: | NTC 10K Ohm type 2 @ 25°C / 77°F NTC 10K Ohm type 3 @ 25°C / 77°F NTC 20K Ohm @ 25°C / 77°F NTC 3K Ohm @ 25°C / 77°F NTC 12K Ohm @ 25°C / 77°F RTD Pt1000 1000 Ohm @ 0°C / 32°F RTD Pt100 100 Ohm @ 0°C / 32°F RTD Ni1000-891 891 Ohm @ 0°C / 32°F RTD Ni1000-TC5 1000 Ohm @ 0°C / 32°F (Other elements on request) |
| Accuracy: | NTC thermistor 0...70°C ± 0.2°C / 32...158°F ± 0.36°F Pt100 / Pt1000 Class B IEC751, ± 0.3°C / ± 0.5°F @ 0°C / 32°F Ni1000 DIN 43760, ± 0.5°C / ± 0.9°F @ 0°C / 32°F |

SPECIFICATIONS CONT.

PVC HT Range: -20.....105°C /-4.....221°F

Silicone Ranges:NTC 10K Ohm type 2: -40.....125°C /-40.....257°F

NTC 10K Ohm type 3: -40.....125°C /-40.....257°F

NTC 20K Ohm: -40.....125°C /-40.....257°F

NTC 3K Ohm: -40.....125°C /-40.....257°F

NTC 12K Ohm: -40.....125°C /-40.....257°F

RTD Pt1000 1000 Ohm: -40.....180°C /-40.....356°F

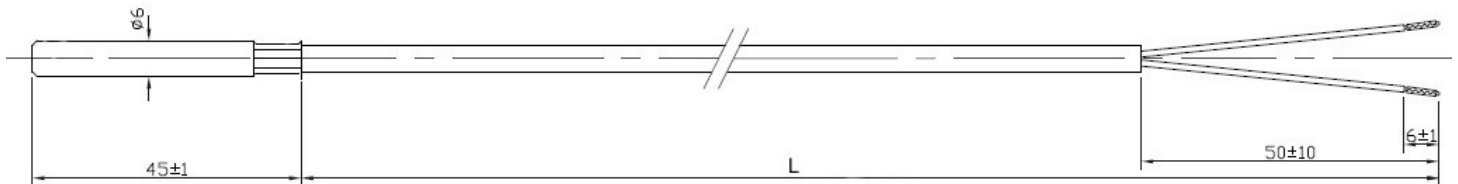
RTD Pt100 100 Ohm: -40.....180°C /-40.....356°F

RTD Ni1000-891 891 Ohm: -40.....180°C /-40.....356°F

RTD Ni1000-TC5 1000 Ohm: -40.....180°C /-40.....356°F

Approval: CE & RoHS compliant
Warranty: 5 year limited warranty

DIMENSIONS (in mm)



ORDERING INFORMATION

HOW TO BUILD A TASSERON CABLE SENSOR PART NUMBER

Sample Part Number (THTCPA05) —PVC HT cable sensor with 10k Type 2 element and 5' cable.

T H T C P A 05

| T | H | T | C | P | A | 05 |
|-----------------|-------------|-------------|--------------|------------------------|--|---|
| Tasseron | HVAC | Temp | Cable | Cable | Element | Details |
| | | | | P—PVC HT S—Silicone | A—10K -2 B—10K -3 C—20K D—3K E—Pt1000 F—Ni1000-891 G—10K-4 H— Pt100 K- Ni1000-TC5 L—12K | 05—5 feet 10—10 feet *Other lengths available with MOQ. Please contact sales department for more details. |
| | | | | | *Other elements available on request | |

HVAC temperature measuring elements

R/T TABLES

| Temp | | NTC thermistors | | | | | RTD elements | | | |
|------|-----|-----------------|----------------|----------------|------------|-----------|--------------|------------|---------|------------|
| | | curve A | curve B | curve G | curve C | curve D | curve E | curve F | curve H | curve K |
| | | NTC 10K type 2 | NTC 10K type 3 | NTC 10K type 4 | NTC 20KOhm | NTC 3KOhm | Pt1000/B | Ni1000-891 | Pt100/B | Ni1000-TC5 |
| °C | °F | R (kOhm) | R (kOhm) | R (kOhm) | R (kOhm) | R (kOhm) | R (Ohm) | R (Ohm) | R (Ohm) | R (Ohm) |
| -40 | -40 | 341.4 | 242.1 | 191.9 | 784.6 | 97.40 | 843 | 697 | 84.3 | 831 |
| -35 | -31 | 246.2 | 181.0 | 146.6 | 558.8 | 71.53 | 862 | 719 | 86.2 | 851 |
| -30 | -22 | 179.5 | 136.6 | 112.9 | 402.7 | 52.80 | 882 | 743 | 88.2 | 872 |
| -25 | -13 | 132.2 | 103.9 | 87.59 | 293.6 | 39.16 | 902 | 766 | 90.2 | 893 |
| -20 | -4 | 98.34 | 79.64 | 68.47 | 216.3 | 29.24 | 922 | 790 | 92.2 | 914 |
| -15 | 5 | 73.73 | 61.54 | 53.91 | 160.7 | 22.04 | 941 | 815 | 94.1 | 935 |
| -10 | 14 | 55.78 | 47.91 | 42.74 | 120.5 | 16.74 | 961 | 839 | 96.1 | 956 |
| -5 | 23 | 42.59 | 37.57 | 34.11 | 91.07 | 12.79 | 980 | 864 | 98.0 | 978 |
| 0 | 32 | 32.82 | 29.66 | 27.40 | 69.40 | 9.856 | 1000 | 891 | 100.0 | 1000 |
| 5 | 41 | 25.52 | 23.57 | 22.14 | 53.33 | 7.663 | 1020 | 916 | 102.0 | 1022 |
| 10 | 50 | 19.97 | 18.85 | 17.99 | 41.28 | 5.999 | 1039 | 942 | 103.9 | 1045 |
| 15 | 59 | 15.75 | 15.17 | 14.72 | 32.18 | 4.729 | 1058 | 968 | 105.8 | 1068 |
| 20 | 68 | 12.51 | 12.28 | 12.09 | 25.28 | 3.754 | 1078 | 994 | 107.8 | 1091 |
| 25 | 77 | 10.00 | 10.00 | 10.00 | 20.00 | 3.000 | 1097 | 1021 | 109.7 | 1114 |
| 30 | 86 | 8.048 | 8.184 | 8.308 | 15.92 | 2.416 | 1117 | 1048 | 111.7 | 1138 |
| 35 | 95 | 6.516 | 6.735 | 6.936 | 12.75 | 1.957 | 1136 | 1075 | 113.6 | 1162 |
| 40 | 104 | 5.306 | 5.577 | 5.819 | 10.27 | 1.595 | 1155 | 1102 | 115.5 | 1186 |
| 45 | 113 | 4.345 | 4.641 | 4.904 | 8.320 | 1.307 | 1175 | 1130 | 117.5 | 1210 |
| 50 | 122 | 3.578 | 3.877 | 4.151 | 6.779 | 1.076 | 1194 | 1158 | 119.4 | 1235 |
| 55 | 131 | 2.962 | 3.261 | 3.529 | 5.556 | 0.888 | 1213 | 1187 | 121.3 | 1260 |
| 60 | 140 | 2.464 | 2.756 | 3.012 | 4.577 | 0.737 | 1232 | 1216 | 123.2 | 1285 |
| 65 | 149 | 2.060 | 2.340 | 2.582 | 3.788 | 0.616 | 1252 | 1245 | 125.2 | 1311 |
| 70 | 158 | 1.730 | 1.996 | 2.221 | 3.150 | 0.518 | 1271 | 1274 | 127.1 | 1337 |
| 75 | 167 | 1.460 | 1.707 | 1.918 | 2.630 | 0.441 | 1290 | 1304 | 129.0 | 1364 |
| 80 | 176 | 1.236 | 1.466 | 1.663 | 2.206 | 0.377 | 1309 | 1334 | 130.9 | 1390 |
| 85 | 185 | 1.051 | 1.264 | 1.446 | 1.857 | 0.324 | 1328 | 1365 | 132.8 | 1417 |
| 90 | 194 | 0.896 | 1.095 | 1.262 | 1.570 | 0.278 | 1347 | 1396 | 134.7 | 1444 |
| 95 | 203 | 0.767 | 0.952 | 1.105 | 1.333 | 0.239 | 1366 | 1427 | 136.6 | 1472 |
| 100 | 212 | 0.659 | 0.831 | 0.970 | 1.136 | 0.206 | 1385 | 1459 | 138.5 | 1500 |
| 105 | 221 | 0.569 | 0.728 | 0.855 | 0.972 | 0.179 | 1404 | 1491 | 140.4 | 1528 |
| 110 | 230 | 0.493 | 0.640 | 0.755 | 0.834 | 0.156 | 1423 | 1524 | 142.3 | 1557 |
| 115 | 239 | 0.428 | 0.564 | 0.669 | 0.719 | 0.136 | 1442 | 1556 | 144.2 | 1586 |
| 120 | 248 | 0.374 | 0.499 | 0.594 | 0.621 | 0.119 | 1461 | 1590 | 146.1 | 1615 |
| 125 | 257 | 0.327 | 0.443 | 0.529 | 0.539 | 0.105 | 1479 | 1623 | 147.9 | 1645 |

* Other elements on request

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