

# Industrial Process Thermocouples

## THERMOCOUPLE TECHNICAL DATA - WIRE CODE STANDARDS

Color-codes have been adopted by various national and international standard agencies for identification of thermocouple wire and thermocouple products. In the United States, thermocouple grade wire normally has a brown overall jacket. For Types B, R, and S the color-codes relate to the compensating cable normally used.

| Type     | United States<br>ANSI 96.1  | United Kingdom<br>BS 1843   | Germany<br>43714          | France<br>NF C42-323           | Japan<br>JIS C1610-1981    |
|----------|-----------------------------|-----------------------------|---------------------------|--------------------------------|----------------------------|
| <b>E</b> | Purple<br>+ Purple<br>- Red | Brown<br>+ Brown<br>- Blue  | Black<br>+ Red<br>- Black |                                | Purple<br>+ Red<br>- White |
| <b>J</b> | Black<br>+ White<br>- Red   | Black<br>+ Yellow<br>- Blue | Blue<br>+ Red<br>- Blue   | Black<br>+ Yellow<br>- Black   | Yellow<br>+ Red<br>- White |
| <b>K</b> | Yellow<br>+ Yellow<br>- Red | Red<br>+ Brown<br>- Blue    | Green<br>+ Red<br>- Green | Yellow<br>+ Yellow<br>- Purple | Blue<br>+ Red<br>- White   |
| <b>N</b> | Orange<br>+ Orange<br>- Red |                             |                           |                                |                            |
| <b>B</b> | Grey<br>+ Grey<br>- Red     |                             | Grey<br>+ Red<br>- Grey   |                                | Grey<br>+ Red<br>- White   |
| <b>R</b> | Green<br>+ Black<br>- Red   | Green<br>+ White<br>- Blue  |                           |                                | Black<br>+ Red<br>- White  |
| <b>S</b> | Green<br>+ Black<br>- Red   | Green<br>+ White<br>- Blue  | White<br>+ Red<br>- White | Green<br>+ Yellow<br>- Green   | Black<br>+ Red<br>- White  |
| <b>T</b> | Blue<br>+ Blue<br>- Red     | Blue<br>+ White<br>- Blue   | Brown<br>+ Red<br>- Brown | Blue<br>+ Yellow<br>- Blue     | Brown<br>+ Red<br>- White  |