

# Thermocouple Wire PVC Insulation & Jacket

221°F 105°C Continuous



Image not to scale. See Table 1 for dimensions.

## CONSTRUCTION:

1. **Conductor:** Thermocouple wire per ANSI MC 96.1 & ASTM E230 (Solid or stranded available)
2. **Insulation:** Extruded PVC
3. **Overall Jacket:** Extruded PVC

## APPLICATIONS AND FEATURES:

Widely used in all industry for extension grade applications and temperature sensors. Good flame retardance and chemical resistance. Good resistance to acids, moisture and abrasion. Excellent flexibility.

Stainless Steel, Inconel metal, or Tin Plated Copper overbraid is available on request. Type Ex, Jx, Kx, Tx and other Types available on request. Available with PLTC rating in single pair and multi pair constructions

## SPECIFICATIONS:

- ASTM E230 Temperature-Electromotive Force (emf) Tables for Standardized Thermocouples
- ANSI MC 96.1 Temperature Measurement Thermocouples



Southwire Company, LLC | One Southwire Drive, Carrollton, GA 30119 | [www.southwire.com](http://www.southwire.com)

Copyright © 2024 Southwire Company, LLC. All Rights Reserved



**Southwire**

**CABLETECH  
SUPPORT™**

Services

UPDATED: Dec. 11, 2023, 9:29 p.m. UTC REVISION: 1.000.000

**Table 1 – Weights and Measurements**

| Stock Number | Cond. Size | Cond. Number | Insul. Thickness | Jacket Thickness | Approx. OD    | Approx. Weight | Temp. Rating | Standard (UL or other) |
|--------------|------------|--------------|------------------|------------------|---------------|----------------|--------------|------------------------|
|              | AWG/Kcmil  | No.          | mil              | mil              | inch          | lb/1000ft      | °C           | Style/Type             |
| C4V_00       | 24         | 2            | 15               | 15               | 0.080 x 0.130 | 7              | 105          | Type Ex, Jx, Kx, Tx    |
| C4V_10       | 22         | 2            | 15               | 15               | 0.085 x 0.140 | 9              | 105          | Type Ex, Jx, Kx, Tx    |
| C4V_20       | 20         | 2            | 15               | 15               | 0.092 x 0.154 | 12             | 105          | Type Ex, Jx, Kx, Tx    |
| C4V_30       | 18         | 2            | 15               | 15               | 0.100 x 0.170 | 16             | 105          | Type Ex, Jx, Kx, Tx    |
| C4V_40       | 16         | 2            | 15               | 15               | 0.111 x 0.192 | 23             | 105          | Type Ex, Jx, Kx, Tx    |
| C4V_05       | 24(7)      | 2            | 15               | 15               | 0.084 x 0.138 | 8              | 105          | Type Ex, Jx, Kx, Tx    |
| C4V_25       | 20(7)      | 2            | 15               | 15               | 0.096 x 0.162 | 13             | 105          | Type Ex, Jx, Kx, Tx    |
| C4V_45       | 16(7)      | 2            | 15               | 15               | 0.118 x 0.206 | 24             | 105          | Type Ex, Jx, Kx, Tx    |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

0=Type Ex // 1=Type Jx // 2=Type Kx // 3=Type Tx

Conductor insulation and overall jacket are color coded per ANSI MC 96.1 and ASTM E230.

International color codes available on request.

Available in standard and special limits of error per ANSI MC 96.1, ASTM E230 and IEC 584.

**Table 2 – Weights and Measurements (Metric)**

| Stock Number | Cond. Size | Cond. Number | Insul. Thickness | Jacket Thickness | Approx. OD  | Approx. Weight | Temp. Rating | Standard (UL or other) |
|--------------|------------|--------------|------------------|------------------|-------------|----------------|--------------|------------------------|
|              | AWG/Kcmil  | No.          | mm               | mm               | mm          | kg/km          | °C           | Style/Type             |
| C4V_00       | 24         | 2            | 0.38             | 0.38             | 2.03 x 3.30 | 10             | 105          | Type Ex, Jx, Kx, Tx    |
| C4V_10       | 22         | 2            | 0.38             | 0.38             | 2.16 x 3.56 | 13             | 105          | Type Ex, Jx, Kx, Tx    |
| C4V_20       | 20         | 2            | 0.38             | 0.38             | 2.34 x 3.91 | 18             | 105          | Type Ex, Jx, Kx, Tx    |
| C4V_30       | 18         | 2            | 0.38             | 0.38             | 2.54 x 4.32 | 24             | 105          | Type Ex, Jx, Kx, Tx    |
| C4V_40       | 16         | 2            | 0.38             | 0.38             | 2.82 x 4.88 | 34             | 105          | Type Ex, Jx, Kx, Tx    |
| C4V_05       | 24(7)      | 2            | 0.38             | 0.38             | 2.13 x 3.51 | 12             | 105          | Type Ex, Jx, Kx, Tx    |
| C4V_25       | 20(7)      | 2            | 0.38             | 0.38             | 2.44 x 4.11 | 19             | 105          | Type Ex, Jx, Kx, Tx    |
| C4V_45       | 16(7)      | 2            | 0.38             | 0.38             | 3.00 x 5.23 | 36             | 105          | Type Ex, Jx, Kx, Tx    |

