

Thermocouple Wire PVC/PVC Multi Pair

Flexible Thermocouple Extension Cable, PLTC 300V 105°C



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. **Twisted Pair:** Conductors twisted together with a drain wire and alum/mylar shield
4. **Overall Shielded:** Aluminum / mylar shield and drain wire is applied over the core
5. **Overall Jacket:** Extruded PVC

APPLICATIONS AND FEATURES:

For use as a 300 volt, multi pair thermocouple cable where flame retardance, moisture/chemical resistance, and sunlight resistance are critical. Cable can be installed in free air, in raceways or direct burial. The cable is also approved for damp or dry locations as well as Class 1 Division II industrial hazardous locations per NEC Article 725. Per ASTM E20 & ANSI MC 96.1. Positive conductor is numbered.

UL Listed subject 13 PLTC. Excellent physical properties and electrical properties. Resistance to flame, crush, compression and cuts. Good chemical resistance and mechanical strength. Flexible.

SPECIFICATIONS:

- ASTM E230 Temperature-Electromotive Force (emf) Tables for Standardized Thermocouples
- UL 1277 Vertical Cable Tray Flame Tests (70,000 BTU/Hr)
- IEEE 383 Flame Test (70,000 btu)
- IEEE 1202/FT4 Flame Test (70,000 BTU/hr) 350kcmil and Larger
- ANSI MC 96.1 Temperature Measurement Thermocouples



Southwire Company, LLC | One Southwire Drive, Carrollton, GA 30119 | www.southwire.com

Copyright © 2023 Southwire Company, LLC. All Rights Reserved



Southwire

**CABLETECH
SUPPORT™**

Services

SPEC 42350 DATE: 06/03/2023 4:02 UTC Rev: 3.0.00M

Table 1 – Weights and Measurements

Stock Number	Cond. Size	Number of Pairs	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_20	20	1	16	35	0.205	40	105	Type PLTC
C4V_22	20	2	16	45	0.310	45	105	Type PLTC
C4V_24	20	4	16	45	0.355	80	105	Type PLTC
C4V_28	20	8	16	55	0.487	165	105	Type PLTC
C4V_30	20	12	16	55	0.570	225	105	Type PLTC
C4V_32	20	16	16	65	0.660	300	105	Type PLTC
C4V_34	20	24	16	65	0.775	430	105	Type PLTC
C4V_36	20	36	16	75	0.920	615	105	Type PLTC
C4V_40	16	1	16	35	0.240	47	105	Type PLTC
C4V_42	16	2	16	45	0.435	100	105	Type PLTC
C4V_44	16	4	16	55	0.495	160	105	Type PLTC
C4V_48	16	8	16	55	0.620	225	105	Type PLTC
C4V_50	16	12	16	65	0.730	390	105	Type PLTC
C4V_52	16	16	16	65	0.820	500	105	Type PLTC
C4V_54	16	24	16	75	0.970	720	105	Type PLTC
C4V_56	16	36	16	75	1.160	1050	105	Type PLTC

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

0=Type E // 1=Type J // 2=Type K // 3=Type T

Table 2 – Weights and Measurements (Metric)

Stock Number	Cond. Size	Number of Pairs	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_20	20	1	0.41	0.89	5.21	60	105	Type PLTC
C4V_22	20	2	0.41	1.14	7.87	67	105	Type PLTC
C4V_24	20	4	0.41	1.14	9.02	119	105	Type PLTC
C4V_28	20	8	0.41	1.40	12.37	246	105	Type PLTC
C4V_30	20	12	0.41	1.40	14.48	335	105	Type PLTC
C4V_32	20	16	0.41	1.65	16.76	446	105	Type PLTC
C4V_34	20	24	0.41	1.65	19.69	640	105	Type PLTC
C4V_36	20	36	0.41	1.91	23.37	915	105	Type PLTC
C4V_40	16	1	0.41	0.89	6.10	70	105	Type PLTC
C4V_42	16	2	0.41	1.14	11.05	149	105	Type PLTC
C4V_44	16	4	0.41	1.40	12.57	238	105	Type PLTC
C4V_48	16	8	0.41	1.40	15.75	335	105	Type PLTC
C4V_50	16	12	0.41	1.65	18.54	580	105	Type PLTC
C4V_52	16	16	0.41	1.65	20.83	744	105	Type PLTC
C4V_54	16	24	0.41	1.91	24.64	1071	105	Type PLTC
C4V_56	16	36	0.41	1.91	29.46	1563	105	Type PLTC

