



**XLP/CPE INSTRUMENT CABLE #16AWG (SPOS & STOS)  
SINGLE SHIELDED PAIR/TRIAD AND MULTIPLE SHIELDED PAIRS  
& TRIADS WITH OVERALL SHIELD TYPE TC-ER 90DEG C 600VOLTS**

**CONSTRUCTION:**

**CONDUCTOR** 7 STRANDED TINNED COPPER.

**INSULATION** THERMOSETTING FLAME RETARDANT CROSSLINKED POLYETHYLENE (XLP).

**CONDUCTOR IDENTIFICATION** **SINGLE PAIR/TRIAD:** PAIR IS CODED BLACK-WHITE AND TRIAD IS COLOR CODED BLACK-WHITE-RED.

**MULTIPAIRS/TRIADS:** PAIRS ARE CODED BLACK-WHITE AND TRIADS ARE CODED BLACK-WHITE-RED. ONE CONDUCTOR IN EACH PAIR OR TRIAD IS ALSO NUMBERED.

**PAIRS/TRIADS** INSULATED CONDUCTORS TWISTED INTO PAIRS OR TRIADS AND SHIELDED WITH ALUMINUM/MYLAR TAPE SHIELD AND STRANDED TINNED COPPER DRAIN WIRE.

**OVERALL SHIELD** MULTIPLE SHIELDED PAIRS/TRIADS CABLED TOGETHER WITH OVERALL ALUMINUM/MYLAR TAPE SHIELD AND STRANDED TINNED DRAIN.

**JACKET** SUNLIGHT RESISTANT, FLAME RETARDANT BLACK CPE.

Charlotte Wire Part# *	Size AWG	Number of Pairs	Number of Triads	Insulation Thickness (in.)	Jacket Thickness (in.)	Overall Diameter (in.)	Approx. Net Wt. (Lbs/Mft)
CW05381	16	1		.025"	.045"	.35"	55
CW05382	16	2		.025"	.045"	.56"	109
CW05383	16	3		.025"	.060"	.61"	160
CW05384	16	4		.025"	.060"	.68"	200
CW05385	16	6		.025"	.060"	.78"	274
CW05386	16	7		.025"	.060"	.82"	320
CW05387	16	8		.025"	.060"	.87"	365
CW05388	16	12		.025"	.080"	1.06"	535
CW05389	16	16		.025"	.080"	1.21"	673
CW05390	16	20		.025"	.080"	1.29"	794
CW05391	16	24		.025"	.080"	1.44"	948
CW05392	16	36		.025"	.080"	1.68"	1377
CW05393	16		1	.025"	.045"	.37"	70
CW05394	16		2	.025"	.045"	.62"	175
CW05395	16		4	.025"	.060"	.77"	272
CW05396	16		8	.025"	.080"	1.02"	544
CW05397	16		12	.025"	.080"	1.23"	740

\* 2/c is TC only. TC-ER rating applies to 3 conductors or more.

**APPLICATION:**

Suitable for control or instrumentation circuits rated 600Volts in power plants and heavy industrial locations where flame-resistance, stability in heat, physical durability, and excellent reliability is needed. May be used as sunlight resistant, directly buried, and wet or dry locations. Per NEC Articles 336 and 392, approved for installation in

- 1) raceways and cable tray systems including ladders, troughs, channels, solid bottom trays, and other similar structures,
- 2) lighting, control, and signal circuits,
- 3) aerial locations where supported by a messenger wire,
- 4) hazardous locations per NEC Article 501 Class 1 Division 2, and
- 5) Class 1 circuits as permitted in NEC Article 725.

**STANDARDS:**

UL 1277 for Type TC Cables.  
Passes UL & IEEE383 70,000BTU Flame Test.  
ICEA S-95-658/NEMA WC70 for Nonshielded 0 - 2KV Cables.  
NEC Articles 336 and 392 for Tray Cable Uses and Constructions.  
TC-ER rated cables comply with crush and impact requirements of MC cable.