

## FREP/CPE TRAY CABLE - #10AWG TYPE TC-ER SUNLIGHT RESISTANT, DIRECT BURIAL XHHW-2 CONDUCTORS, CPE JACKET, 600VOLTS

### CONSTRUCTION:

**CONDUCTOR** 7 STRANDED TINNED COPPER.

**INSULATION** THERMOSETTING FLAME-RETARDANT ETHYLENE PROPYLENE RUBBER TYPE XHHW-2 PER UL 44. INSULATED CONDUCTORS RATED 90DEGREES C WET OR DRY.

**CONDUCTOR IDENTIFICATION** INSULATED CONDUCTORS ARE COLOR CODED PER ICEA METHOD 1 TABLE E-2\*.

**ASSEMBLY** CONDUCTORS ARE CABLED TOGETHER WITH SUITABLE TAPE SEPARATOR AS NEEDED.

**OVERALL JACKET** SUNLIGHT RESISTANT, FLAME RESISTANT BLACK CPE PER UL 1277, WHICH PROTECTS AGAINST HEAT, FLAME CHEMICALS, MOISTURE, AND MECHANICAL DAMAGE.

Charlotte Wire Part#	Size AWG	Number of Conductors	Insulation Thickness (in.)	Jacket Thickness (in.)	Overall Diameter (in.)	Approx. Net Wt. (Lbs/Mft.)
CW02640**	10	2	.030"	.045"	.29" x .47"	115
CW02641	10	3	.030"	.045"	.49"	170
CW02642	10	4	.030"	.060"	.57"	235
CW02643	10	5	.030"	.060"	.62"	283
CW02644	10	7	.030"	.060"	.67"	378
CW02645	10	9	.030"	.060"	.80"	460
CW02646	10	10	.030"	.080"	.90"	570
CW02647	10	12	.030"	.080"	.94"	650
CW02648	10	15	.030"	.080"	1.02"	790
CW02649	10	19	.030"	.080"	1.08"	975
CW02650	10	25	.030"	.080"	1.26"	1240
CW02651	10	37	.030"	.080"	1.44"	1770

\*To specify ICEA Method 1 Table E-1, add suffix "M1" to Charlotte Wire part number.

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

### APPLICATION:

Suitable for control, signal, or lighting 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 and IEEE383 70,000 BTU and ICEA 210,000BTU flame test.

UL Standard 44 for Rubber Insulated Wire & Cable (XHHW2).

ICEA S-95-658/NEMA WC70 for Nonshielded 0-2kv Cables.

NEC Articles 336 & 392 for Tray Cable uses and constructions.

TC-ER rated cables comply with crush and impact requirements of MC cable.