

## FREP/CPE TRAY CABLE - #12AWG

### TYPE TC-ER SUNLIGHT RESISTANT, DIRECT BURIAL

### XHHW-2 CONDUCTORS, CPE JACKET, 600VOLTS

#### CONSTRUCTION:

**CONDUCTOR** 7 STRANDED TINNED COPPER.

**INSULATION** THERMOSETTING FLAME-RESISTANT 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)
CW02620**	12	2	.030"	.045"	.26" x .42"	85
CW02621	12	3	.030"	.045"	.44"	123
CW02622	12	4	.030"	.045"	.48"	156
CW02623	12	5	.030"	.045"	.54"	192
CW02624	12	7	.030"	.060"	.61"	270
CW02625	12	9	.030"	.060"	.71"	348
CW02626	12	10	.030"	.060"	.77"	380
CW02627	12	12	.030"	.060"	.80"	440
CW02628	12	15	.030"	.080"	.89"	558
CW02629	12	19	.030"	.080"	.96"	680
CW02630	12	20	.030"	.080"	1.01"	710
CW02631	12	25	.030"	.080"	1.12"	890
CW02632	12	30	.030"	.080"	1.20"	1040
CW02633	12	37	.030"	.080"	1.29"	1310

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

\*\*2/c is flat construction and 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 insulation 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 725-21(B).

#### STANDARDS:

UL Standard 1277 for Type TC Cables.

Passes UL and IEEE383 70,000 BTU and ICEA 210,000BTU flame test.

UL Standard 44: Rubber Insulated Wire and 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.