



## VNTC TRAY CABLE-#12 & #10AWG SHIELDED TYPE TC-ER SUNLIGHT RESISTANT, DIRECT BURIAL THHN CONDUCTORS, PVC JACKET, 600VOLTS, UL 1277

### CONSTRUCTION:

**CONDUCTOR** SOFT DRAWN STRANDED BARE COPPER PER ASTM B-3.

**INSULATION** POLYVINYLCHLORIDE WITH NYLON JACKET TYPE THHN PER UL 83 (GASOLINE AND OIL RESISTANT).

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

**ASSEMBLY** CONDUCTORS ARE TWISTED TOGETHER WITH ALUMINUM/MYLAR TAPE SHIELD AND STRANDED TINNED COPPER DRAIN WIRE TO PROVIDE 100% SHIELDING COVERAGE.

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

Charlotte Wire Part#	Size AWG	Number of Conductors	Insulation Thickness (in.)	Nylon Thickness (in.)	Jacket Thickness (in.)	Overall Diameter (in.)	Approx. Net Wt. (Lbs/Mft)
CW02351**	12	2	.015"	.004"	.045"	.36"	81
CW02352	12	3	.015"	.004"	.045"	.38"	110
CW02353	12	4	.015"	.004"	.045"	.42"	139
CW02354	12	5	.015"	.004"	.045"	.45"	169
CW02355	12	7	.015"	.004"	.045"	.49"	225
CW02356	12	9	.015"	.004"	.060"	.61"	292
CW02357	12	12	.015"	.004"	.060"	.67"	389
CW02358	12	19	.015"	.004"	.060"	.79"	587
CW02359	12	37	.015"	.004"	.080"	1.10"	1135
CW02360**	10	2	.020"	.004"	.045"	.43"	115
CW02361	10	3	.020"	.004"	.045"	.46"	157
CW02362	10	4	.020"	.004"	.045"	.50"	201
CW02363	10	5	.020"	.004"	.045"	.58"	267
CW02365	10	7	.020"	.004"	.045"	.63"	360
CW02368	10	12	.020"	.004"	.080"	.88"	590
CW02369	10	19	.020"	.004"	.080"	1.03"	930

\*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:

Control, Instrumentation, Signal or Lighting circuits rated 600Volts or less where circuit protection from ambient electrical Interference 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 Art.501 Class 1 Division 2, and
- 5) Class 1 circuits as permitted in NEC Article 725.

### STANDARDS:

UL Standard 1277 for Type TC Cables.

Passes UL and IEEE383 70,000BTU Flame Test.

UL Standard 83 for THHN Conductors.

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

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