

Charlotte™ Wire & Cable Company Inc.

toll free: 800-929-9473

## VNTC TRAY CABLE - #12AWG NONSHIELDED 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** INSULATED CONDUCTORS ARE COLOR CODED PER ICEA METHOD 1 TABLE E-2\*.

IDENTIFICATION

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

OVERALL JACKET SUNLIGHT RESISTANT, FLAME RETARDANT, BLACK PVC PER UL 1277, WHICH PROTECTS AGAINST HEAT, FLAME, CHEMICALS,

MOISTURE, AND MECHANICAL DAMAGE.

| Charlotte<br>Wire | Size | Number<br>of | Insulation<br>Thickness | Nylon<br>Thickness | Jacket<br>Thickness | Overall<br>Diameter | Approx.<br>Net Wt. |
|-------------------|------|--------------|-------------------------|--------------------|---------------------|---------------------|--------------------|
| Part#             | AWG  | Conductors   | (in.)                   | (in.)              | (in.)               | (in.)               | (Lbs/Mft)          |
| CW02300**         | 12   | 2            | .015"                   | .004"              | .045"               | .23X.36"            | 79                 |
| CW02301           | 12   | 3            | .015"                   | .004"              | .045"               | .38"                | 108                |
| CW02302           | 12   | 4            | .015"                   | .004"              | .045"               | .42"                | 137                |
| CW02303           | 12   | 5            | .015"                   | .004"              | .045"               | .45"                | 166                |
| CW02304           | 12   | 6            | .015"                   | .004"              | .045"               | .49"                | 196                |
| CW02305           | 12   | 7            | .015"                   | .004"              | .045"               | .49"                | 223                |
| CW02306           | 12   | 9            | .015"                   | .004"              | .060"               | .61"                | 290                |
| CW02307           | 12   | 10           | .015"                   | .004"              | .060"               | .65"                | 330                |
| CW02308           | 12   | 12           | .015"                   | .004"              | .060"               | .67"                | 386                |
| CW02309           | 12   | 15           | .015"                   | .004"              | .060"               | .73"                | 470                |
| CW02310           | 12   | 16           | .015"                   | .004"              | .060"               | .76"                | 485                |
| CW02311           | 12   | 19           | .015"                   | .004"              | .060"               | .79"                | 584                |
| CW02312           | 12   | 20           | .015"                   | .004"              | .060"               | .81"                | 613                |
| CW02313           | 12   | 25           | .015"                   | .004"              | .080"               | .92"                | 760                |
| CW02314           | 12   | 30           | .015"                   | .004"              | .080"               | 1.02"               | 930                |
| CW02315           | 12   | 37           | .015"                   | .004"              | .080"               | 1.10"               | 1130               |

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

## **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.

To specify ICEA Method 4 (black with printed numbers), add suffix "M4" to Charlotte Wire part number.

<sup>\*\*2/</sup>c is flat construction and TC only. TC-ER rating applies to 3 conductors or more.