

ULTREX® VN Unshielded Tray Cable

ULTREX® VN Unshielded Tray Cable 10 AWG

Part Number: ULTREX® VN Unshielded Tray Cable 10 AWG

Type THHN/THWN-2: UL Type TC, 600 V, rated 90°C wet and dry - LEAD FREE - Exposed Run (ER) Rated**

Description

Applications

Nexans 600 V Ultrex VN Tray Cables are listed as type TC under UL 1277 Electrical Power and Control Cables. THHN/THWN-2 cables #14 and larger meet UL 83 Thermoplastic-Insulated Wires and Cables. These cables may be installed in wet or dry locations; in cable trays, raceways and open air; and are suitable for exposure to weather, direct burial and for Class I, Div. 2 (also Zone 2) and Class II, Div. 2 hazardous locations per NEC.

**Cables with three or more conductors are UL listed for exposed runs (ER) when installed in accordance with NEC Article 336.10(7).

Construction

Conductor:

Bare, annealed copper conforming to ASTM B3 and B8, from #14 AWG to 500 kcmil. Compressed copper for #14 AWG through 500 kcmil.

Insulation:

Flame-retardant PVC/Nylon type THHN/THWN-2 per UL 83 for sizes #14 AWG to 500 kcmil.

Assembly:

Insulated conductors in non-shielded cables with 3 or more conductors are cabled into concentric layers. Fillers are inserted into interstices and a binder tape of synthetic material is used to assemble the core in a tight circular configuration. Two-conductor cables are supplied in a flat/parallel configuration.

Jacket:

UL listed sunlight and moisture resistant, black, flame retardant polyvinyl chloride (PVC) material meeting the requirements of UL 1277. A nylon ripcord is included for ease of jacket removal. Jacket surface is printed with required UL / NEC code information and sequential footgauge markings.

Conductor Identification:

#14 AWG to #10 AWG: color coded per Method #1-E2 per ICEA S-73-532

See details in Conductor Identification Charts.



Standards

National ICEA S-73-532; UL 1277; UL 83

Characteristics

Dimensional characteristics

Conductor cross-section (AWG)

10

ULTREX® VN Unshielded Tray Cable

ULTREX® VN Unshielded Tray Cable 10 AWG

Part Number: ULTREX® VN Unshielded Tray Cable 10 AWG

Unshielded Ultrex VN Tray Cable - UL Type TC, 600 V, 90°C dry and wet rated - LEAD FREE

Multiconductor 10 AWG Type THHN/THWN-2 - Insulation Thickness: 20 mils / .51mm PVC, 4 mils / .10mm Nylon

Part Number	# of Cond.	Jacket Thickness		Nominal Diameter over Jacket		Approximate Net Cable Weight		Ampacity (1, 3, 4) amps
		mils	mm	inches	mm	lb/kft	kg/km	
696922	2 Flat	45	1.14	.260 x .428	6.60 x 10.87	112	166	40
696930	3	45	1.14	0.448	11.37	159	237	40
697284	4	45	1.14	0.490	12.45	191	284	32/40(2)
688309	5	60	1.52	0.568	14.41	263	391	32
-----	6	60	1.52	0.617	15.67	324	482	32
696948	7	60	1.52	0.617	15.67	346	515	28
-----	8	60	1.52	0.668	16.97	397	591	28
627646	9	60	1.52	0.721	18.31	459	683	28
-----	10	60	1.52	0.770	19.57	488	726	20
-----	11	60	1.52	0.782	19.86	530	789	20
627257	12	60	1.52	0.807	20.49	572	852	20
-----	13	80	2.03	0.862	21.88	646	961	20
-----	14	80	2.03	0.890	22.60	735	1094	20
-----	15	80	2.03	0.913	23.18	780	1161	20
-----	16	80	2.03	0.938	23.81	795	1183	20
-----	19	80	2.03	0.987	25.07	914	1360	20
-----	20	80	2.03	1.017	25.82	954	1420	20
-----	25	80	2.03	1.140	28.97	1178	1753	18
-----	30	80	2.03	1.220	30.98	1394	2075	18
-----	37	80	2.03	1.317	33.45	1693	2520	16
-----	40	80	2.03	1.368	34.75	1824	2714	16
-----	45	80	2.03	1.451	36.85	2040	3036	14
-----	50	80	2.03	1.507	38.27	2253	3353	14

Bend Radius: 5 x overall diameter installed / 8 x overall diameter during installation pull-in.

Notes:

Dimensions and weights shown are nominal values. They are subject to standard industry tolerances.

Cables with different conductor counts are also available.

(1) Ampacities are in accordance with NEC Table 310.16 for conductors in a raceway or direct buried at 30°C ambient temperature and 90°C rated conductors. Ampacities for cables having more than three conductors have been derated per NEC Table 310.15 (B)(2)(a).

(2) Where the 4th conductor is the neutral of a balanced 3 phase system.

(3) For load diversity of 50%, refer to NEC Table B.310.11.

(4) For correction factors to different ambient temperatures and ampacities for different conductor temperature ratings see NEC Table 310.16.

NEC Article 240.4(D) requires that overcurrent protection not exceed 30 amperes for 10 AWG copper conductors. Exceptions to this may be covered in NEC 240.4(E) through (G).

Selling delivery information

OPTIONS

The following constructions can be provided on special orders:

- * Dow Construction
- * DuPont Construction
- * Composite Cable Construction
- * Insulated Green Ground
- * Different conductor identification methods

Contact

Industrial Cables
Phone: 866-663-9267
USA.IndustrialCable@nexans.com

ULTREX® VN Unshielded Tray Cable

ULTREX® VN Unshielded Tray Cable 10 AWG

* Use in Hazardous locations:

Please note that no investigation of these cables has been performed regarding the transmission of gases or vapors through the core. When these cables are used in hazardous locations they should be sealed properly as required by the NEC.