

ULTREX® XL - XLTC Unshielded Multiconductor 14-10 AWG

ULTREX® XL- XLTC Unshielded Multiconductor Tray Cable 12 AWG

Part Number: ULTREX® XL - XLTC Unshielded Multiconductor Tray Cable 12 AWG

Type XHHW-2: UL Type TC / TC-ER, 600 V, 90°C dry / wet rated – LEAD FREE

Description

Applications

Nexans 600 V ULTREX® XL Tray Cables are listed as type TC / TC-ER under UL 1277 Electrical Power and Control 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 2008 and NEC 2011. Cables with 3 or more conductors are UL listed for exposed runs (ER) when installed in accordance with NEC 2008 and NEC 2011 Article 336.10(7).



Standards

National ICEA S-73-532; UL 1277;
UL 44

Construction

Conductor:

Bare, annealed copper conforming to ASTM B3 and Class B stranded in accordance with ASTM B8, from 14 AWG to 500 kcmil.

Insulation:

Flame-retardant cross-linked polyethylene meeting the requirements for XHHW-2 per UL 44 and the requirements of ICEA S-95-658 for XLPE insulation as standard. Sizes 14 AWG to 8 AWG are VW-1, and sizes 6 AWG and larger are non-VW-1.

Assembly:

Conductors are cabled in concentric layers with interstices filled with suitable fillers, as required. Ground wires, are sized as required by UL 1277 (refer to the applicable product tables for the standard provided). Sizes 14 AWG to 6 AWG have an insulated green ground wire. Sizes 4 AWG and larger have a bare ground wire. A binder tape of synthetic material assembles the core in a tight circular configuration.

Jacket:

UL listed sunlight and moisture resistant, sequentially length marked, black polyvinyl chloride (PVC) material meeting the requirements of UL 1277.

Sample Print Legend:

(mon/year) NEXANS ULTREX-XL 3/C 250 kcmil - 4 AWG GRD CU TYPE TC-ER XHHW-2 (UL) E64956
F SUN RES DIR BUR 600V

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Characteristics

Dimensional characteristics

Conductor cross-section (AWG)

12

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Multiconductor 12 AWG Type XHHW-2 Insulation Thickness: 30 mils / 0.76 mm								
Part Number	# of Cond.	Jacket Thickness		Nominal Diameter over Jacket		Approximate Net Cable Weight		Ampacity(1)
		mils	mm	inches	mm	lb/kft	kg/km	amps
620377	2	45	1.14	0.420	10.67	94	140	30.0
602847	3	45	1.14	0.445	11.30	126	188	30.0
603050	4	45	1.14	0.485	12.32	160	238	24.0/30.0(1)
603001	5	45	1.14	0.535	13.59	194	289	24.0
-----	6	60	1.52	0.610	15.49	246	366	24.0
602870	7	60	1.52	0.610	15.49	273	406	21.0
-----	8	60	1.52	0.660	16.76	290	432	21.0
603027	9	60	1.52	0.710	18.03	341	507	21.0
-----	10	60	1.52	0.755	19.18	356	530	15.0
-----	11	60	1.52	0.770	19.56	385	573	15.0
602896	12	60	1.52	0.795	20.19	416	619	15.0
-----	13	60	1.52	0.810	20.57	445	662	15.0
-----	14	60	1.52	0.835	21.21	476	708	15.0
620393	15	60	1.52	0.860	21.84	506	753	15.0
602938	19	80	2.03	0.955	24.26	655	975	15.0
-----	20	80	2.03	0.995	25.27	691	1028	15.0
603142	25	80	2.03	1.115	28.32	847	1260	13.5
-----	30	80	2.03	1.190	30.23	995	1481	13.5
-----	35	80	2.03	1.265	32.13	1142	1700	12.0
-----	37	80	2.03	1.265	32.13	1275	1897	12.0
-----	40	80	2.03	1.335	33.91	1289	1918	12.0
-----	45	80	2.03	1.410	35.81	1438	2140	10.5
-----	50	80	2.03	1.465	37.21	1582	2354	10.5

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

Notes:

- Dimensions and weights shown are nominal values, subject to standard industry tolerances.
- Cables with different conductor counts and bare or insulated green grounds are also available.
- Cables with 3 or more conductors are UL listed for exposed runs (ER) when installed in accordance with NEC 2008 and NEC 2011 Article 336.10(7).
- Ampacities are in accordance with NEC 2008 Table 310.16 or NEC 2011 Table 310.15(B)(16) for conductors in 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 2008 Table 310.15(B)(2)(a) or NEC 2011 Table 310.15(B)(3)(a).
- For load diversity of 50%, refer to NEC 2008 Table 310.11(B) or NEC 2011 Table 310.15(B)(2)(11).
- For correction factors for different ambient temperatures and ampacities at different conductor temperature ratings see NEC 2008 Table 310.16 or NEC 2011 Table 310.15(B)(16).
- NEC 2008 and NEC 2011 Article 240.4(D) requires that overcurrent protection not exceed 20 amperes for 12 AWG copper conductors after any correction factors for ambient temperature and number of conductors have been applied. Exceptions to this may be covered in NEC 2008 and NEC 2011 Article 240.4(E) through (G).

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

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Selling delivery information

OPTIONS

The following constructions can be provided on special orders:

- Cables sized 4 AWG and larger with an insulated ground conductor
- Aluminum alloy conductors in sizes 12 AWG to 1000 kcmil
- Insulated or bare ground wires
- Different conductor identification methods
- Different conductor counts
- Shields of aluminum/mylar tape (with or without a tinned copper drain wire)
- Oil Resistant I or Oil Resistant II jackets
- CPE jacket
- Composite constructions of different sized conductors.
- 2000 volt rated cables with RHH/RHW-2 insulated conductors.

* 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.