



TRAY CABLE 600V

Control, Unshielded, E-1 or E-2 Color Code

UL 44, UL 1277, ICEA-S-95-658/NEMA WC70

Control cable

APPLICATIONS

- In free air, cable trays, raceways or direct burial
- In wet or dry locations
- Permitted for Exposed Run - TC-ER
- Other industrial applications



CONSTRUCTION

Conductors	Tinned copper conductor in accordance with ASTM B-3 or ASTM B-33 , class B in accordance with ASTM B- 8.
Insulation	EPR type EPCV compound fulfilling type XHHW-2 (rating VW-1)
Colour code	Per ICEA Method 1 Table E-1* or Method 1Table E-2 *) For more than 21 conductors the color sequence be repeated as necessary.
Core arrangement	Insulated conductors are assembled round together. If needed rubber fillers can be used in interstices for selected constructions.
Separator	Synthetic tape over core of cable .
Outer jacket	CPE-Heavy duty flame retardant thermosetting chlorinated polyethylene.
Colour of outerjacket	Black.
Test voltage	According to tab 14.1-UL 1277.

Features

Excellent flame resistant: FT4 UL 1685	Excellent resistance to crush, compression cuts and heat deformation
Maximum conductor temperature: 90°C	Moisture, water, weather, sunlight resistant
Excellent physical, thermal and electrical properties	Minimum bending radius: D- overall diameter of cable
Excellent resistant to a low temperature: - 40°C	D < 1 in. 4 x D
Meets cold bend test at -25°C	1 in. < D < 2 in. 5 x D
Oil resistant: UL 1277	D > 2 in. 6 x D
Ozone resistant: EN 60811-403, method A	All materials comply with ROHS and REACH declarations

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Approvals

UL: E310468

Example of marking
Ink jet printed

TF CABLE (UL) E310468 FLEXTREME TC TYPE TC-ER EPR/CPE XHHW-2 cdrs 600V 3/C 14AWG 90°C (194F)
wet or dry Sun Res Oil Res I & II FT4 -40°C dir bur + footage marking

14AWG

Number of conductors	Conductor Size	Conductor stranding	Nominal insulation thickness	Nominal jacket thickness	Approx. O.D.	Approx. weight	Ampacity at 30°C ambient temp.1)
N	AWG	N	mils	mils	inch	LBS/1000ft	A
2	14	7	30	55	0,4	90	15
3	14	7	30	55	0,4	109	15
4	14	7	30	55	0,4	134	15
5	14	7	30	55	0,5	161	15
7	14	7	30	70	0,6	236	15
9	14	7	30	70	0,7	306	15
12	14	7	30	70	0,7	343	12
19	14	7	30	90	0,9	557	12
25	14	7	30	90	1	687	11
30	14	7	30	90	1	789	11
37	14	7	30	90	1,2	969	10

TRAY CABLE 600V

12AWG

Number of conductors	Conductor Size	Conductor stranding	Nominal insulation thickness	Nominal jacket thickness	Approx. O.D.	Approx. weight	Ampacity at 30°C ambient temp.1)
N	AWG	N	mils	mils	inch	LBS/1000ft	A
2	12	7	30	55	0,42	115	20
3	12	7	30	55	0,44	141	20
4	12	7	30	55	0,48	175	20
5	12	7	30	55	0,52	212	20
7	12	7	30	70	0,64	310	20
9	12	7	30	70	0,74	403	15
12	12	7	30	70	0,77	458	15
19	12	7	30	90	0,99	741	13
25	12	7	30	90	1,12	921	13
30	12	7	30	90	1,15	1064	12

10AWG

Number of conductors	Conductor Size	Conductor stranding	Nominal insulation thickness	Nominal jacket thickness	Approx. O.D.	Approx. weight	Ampacity at 30°C ambient temp.1)
N	AWG	N	mils	mils	inch	LBS/1000ft	A
2	10	7	30	55	0,47	156	30
3	10	7	30	55	0,49	194	30
4	10	7	30	70	0,57	258	30
5	10	7	30	70	0,62	313	30
7	10	7	30	70	0,72	431	28
9	10	7	30	70	0,83	563	28
12	10	7	30	90	0,91	682	20

(*) without "dir bur" approval

1) Ampacities based on Table 310.16 of the National Electrical Code ed. 2020 for 90°C rated conductors, 30°C ambient temperature. Adjustment Factors for More Than Three Current-Carrying Conductors as per NEC Section 310.15(C)(1). Acc. to Section 240.4(D) of the NEC Current is limited to 15, 20 and 30 amps for #14, #12 and #10 AWG, respectively.

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Method 1 Table E-1

Conductor Number	Base Color	Tracer Color
1	Black	–
2	White	–
3	Red	–
4	Green	–
5	Orange	–
6	Blue	–
7	White	Black
8	Red	Black
9	Green	Black
10	Orange	Black
11	Blue	Black
12	Black	White
13	Red	White
14	Green	White
15	Blue	White
16	Black	Red
17	White	Red
18	Orange	Red
19	Blue	Red
20	Red	Green
21	Orange	Green

Method 1 Table E-2

Conductor Number	Base Color	Tracer Color
1	Black	–
2	Red	–
3	Blue	–
4	Orange	–
5	Yellow	–
6	Brown	–
7	Red	Black
8	Blue	Black
9	Orange	Black
10	Yellow	Black
11	Brown	Black
12	Black	Red
13	Blue	Red
14	Orange	Red
15	Yellow	Red
16	Brown	Red
17	Black	Blue
18	Red	Blue
19	Orange	Blue
20	Yellow	Blue
21	Brown	Blue

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