THHN/THWN PVC/Nylon Insulated PVC Sheathed Cables

THHN/THWN 600V PVC/Nylon Insulated & PVC Sheathed Control Cable

Application:

These cables are designed for use in power, control and lighting circuits in a broad range of commercial and industrial applications. Suitable for installation indoors or outdoors, aerially, in conduits, ducts, cable trays or direct burial in circuits not exceeding 600 volts. May be used in NEC Class I and II, Division 2 hazardous locations. Recognised for use in continuous rating at 75°C in wet locations, 90°C continuous ratings in dry locations, 130°C for emergency overload ratings, and 250°C for short circuit ratings. Not recommended in d.c. operation in wet locations.

Conductor:

Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8.

Insulation:

High dielectric strength flame-retardent PVC per UL 1581.

Insulation Jacket:

Clear nylon per UL 1581 for Type THHN or THWN wire.

Cabling:

Three or more conductors are assembled with fillers as needed. A Nylon rip cord is put under the jacket for ease of stripping.

Overall Jacket:

Sunlight-resistant gas/vaportight PVC per UL 1277.

Flame Tests:

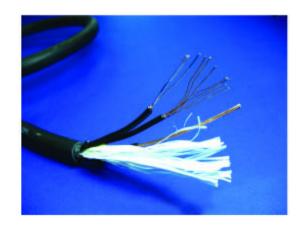
70,000 BTU/hr Cable Tray Propagation Test per ICEA 383

Color Code:

ICEA Method 1, Table E-2

Additional Standards:

- UL Type TC per Article 336 of the NEC
- Class 1 circuits per Article 725 of the NEC



Insulation Thickness:15 mils (0.38mm) PVC, 4 mils (0.1mm) Nylon on# 14 #12 20 mils (0.5 mm) PVC, 4 mils (0.1mm) Nylon on # 10

14 AWG (7 Strand)				12 AWG (7 Strand)			10 AWG (19 Strand)		
No. of Cores	Nominal Thickness of Jacket (mils/mm)	Nominal Overall Diameter (inches/mm)	Approx. Weight (lbs/1000ft)	Nominal Thickness of Jacket (mils/mm)	Nominal Overall Diameter (inches/mm)	Approx. Weight (lbs/1000ft)	Nominal Thickness of Jacket (mils/mm)	Nominal Overall Diameter (inches/mm)	Approx. Weight (lbs/1000 ft)
2	45/1.14	0.32/8.2	65	45/1.14	0.36/9.1	85	45/1.14	0.43/10.9	125
3	45/1.14	0.34/8.6	80	45/1.14	0.39/9.6	110	45/1.14	0.45/11.5	165
4	45/1.14	0.36/9.3	100	45/1.14	0.41/10.4	140	60/1.52	0.50/12.6	220
5	45/1.14	0.39/10	120	45/1.14	0.44/11.2	170	60/1.52	0.57/14.5	270
6	45/1.14	0.41/10.4	135	45/1.14	0.46/11.7	200	60/1.52	0.60/15.3	320
7	45/1.14	0.43/10.8	155	45/1.14	0.48/12.2	220	60/1.52	0.62/15.7	350
8	45/1.14	0.46/11.6	180	60/1.52	0.54/13.7	260	60/1.52	0.67/17.0	405
9	60/1.52	0.49/12.4	200	60/1.52	0.59/14.9	300	60/1.52	0.72/18.2	460
10	60/1.52	0.51/12.9	235	60/1.52	0.64/16.2	340	60/1.52	0.75/19.0	530
12	60/1.52	0.58/14.7	275	60/1.52	0.66/16.7	390	80/2.03	0.80/20.4	630
15	60/1.52	0.63/16.0	330	60/1.52	0.72/18.3	470	80/2.03	0.86/21.8	765
19	60/1.52	0.67/16.9	405	60/1.52	0.76/19.2	580	80/2.03	0.93/23.7	930
20	60/1.52	0.72/18.2	440	80/2.03	0.84/21.3	645	80/2.03	0.98/24.9	990
24	80/2.03	0.80/20.2	535	80/2.03	0.90/22.8	780	80/2.03	1.10/27.9	1210
30	80/2.03	0.85/21.5	655	80/2.03	0.95/24.1	930	80/2.03	1.17/29.8	1435
37	80/2.03	0.92/23.2	775	80/2.03	1.04/26.4	1115	80/2.03	0.27/32.3	1730

THHN/THWN PVC/Nylon Insulated PVC Sheathed Cables

THHN/THWN 600V, PVC/Nylon Insulated & PVC Sheathed Power Cable

Application:

These cables are designed for use in power, control and lighting circuits in a broad range of commercial and industrial applications. Suitable for installation indoors or outdoors, aerially, in conduits, ducts, cable trays or direct burial in circuits not exceeding 600 volts. May be used in NEC Class I and II, Division 2 hazardous locations. Recognised for use in continuous rating at 75°C in wet locations, 90°C continuous rating in dry locations, 130°C for emergency overload ratings, and 250°C for short circuit ratings.

Conductors:

Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8.

Insulation:

High dielectric strength flame-retardant PVC per UL 1581.

Insulation Jacket:

Clear nylon per UL 1581 for Type THHN or THWN wire.

Grounding Conductor:

Soft bare annealed copper per ASTM B-3, Class B stranding per ASTM B-8 sized in accordance with UL 1277.

Cabling:

Three or more conductors are assembled with fillers as needed. A Nylon rip cord is put under the jacket for ease of stripping.

Overall Jacket:

Sunlight-resistant gas/vaportight PVC per UL 1277.

Flame Tests:

• 70,000 BTU/hr Cable Tray Propagation Test per ICEA 383

Color Code:

ICEA Method 4

Additional Standards:

UL Type TC per Article 336 of the NEC.



Three Cores

Size AWG or kcmil	Stranding	Ampacity	Nominal Thickness of Insulation (mils/mm)	Grounding Conductors Three Per Cable(awg)	Nominal Thickness of Jacket (mils/mm)	Nominal Overall Diameter (inches/mm)	Approx. Weight (lbs/1000ft)
8	19	59	30/0.76	14	60/1.52	0.63/16	320
6	19	59 79	30/0.76	12	80/2.03	0.72/18.3	420
4	19	104	40/1.01	12	80/2.03	0.84/21.4	690
2	19	136	40/1.01	10	80/2.03	0.97/24.7	980
1	19	161	50/1.27	10	80/2.03	1.11/28.2	1230
1/0	19	186	50/1.27	10	80/2.03	1.20/30.5	1450
2/0	19	215	50/1.27	10	80/2.03	1.29/32.8	1820
3/0	19	249	50/1.27	7	80/2.03	1.40/35.6	2180
4/0	19	287	50/1.27	7	80/2.03	1.52/38.6	2750
250	37	320	60/1.52	7	110/2.78	1.72/43.9	3290
350	37	394	60/1.52	7	110/2.78	1.96/49.8	4500
500	37	489	60/1.52	5	110/2.78	2.23/56.7	6300

Four Cores

Size AWG or kemil	Stranding	Ampacity	Nominal Thickness of Insulation (mils/mm)	Grounding Conductors Three Per Cable(awg)	Nominal Thickness of Jacket (mils/mm)	Nominal Overall Diameter (inches/mm)	Approx. Weight (lbs/1000ft)
8	19	47	30/0.76	12	60/1.52	0.69/17.5	380
6	19	63	30/0.76	10	60/1.52	0.77/19.6	540
4	19	83	40/1.01	10	80/2.03	0.93/23.6	825
2	19	110	40/1.01	8	80/2.03	1.07/27.2	1225
1	19	129	50/1.27	8	80/2.03	1.23/31.2	1525
1/0	19	149	50/1.27	6	80/2.03	1.27/33.0	1800
2/0	19	172	50/1.27	8	80/2.03	1.43/36.3	2440
3/0	19	199	50/1.27	6	80/2.03	1.55/39.4	2630
4/0	19	230	50/1.27	6	110/2.78	1.74/44.2	3490
250	37	256	60/1.52	6	110/2.78	1.92/48.8	4100
350	37	315	60/1.52	6	110/2.78	2.17/55.1	5660
500	37	391	60/1.52	4	110/2.78	2.48/63.1	8150