



APPLICATION

THHN/THWN-2 cables are used in Class 1, Division 2 Hazardous locations such as those encountered in the oil, gas and petrochemical industry. They can be installed in trays, wire ways, ducts, conduit and aerially when properly supported by a messenger. They are approved for direct burial, for use in wet or dry locations, and outdoors in cable trays where a sunlight resistant rating is required. Cable designation: THHN references the Nylon-coated conductor wire, THWN-2 the 90°C PVC insulation layer.

CHARACTERISTICS

Voltage Rating

600V

Temperature Rating

+90°C

CONSTRUCTION

Conductor

Bare Annealed Copper

Insulation

PVC-FR/Nylon (Polyvinyl Chloride - Flame Retardant / Nylon)

Ripcord

Nylon

Outer Sheath

Special PVC (Polyvinyl Chloride)

Sheath Colour

Black

Core Identification

Color coded as E2 per ICEA S-73-532

STANDARDS

ICEA S-73-532, UL 1277, UL 83, ASTM B3/B8

DIMENSIONS

NO OF CORES	AWG SIZE	NOMINAL THICKNESS INSULATION PVC mm	NOMINAL THICKNESS NYLON mm	NOMINAL THICKNESS SHEATH mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km	NOMINAL AMPACITY AMPS
2 Flat	10	0.51	0.10	1.14	6.37x10.58	166	40
2 Flat	12	0.38	0.10	1.14	5.72x9.12	115	30.0
2 Flat	14	0.38	0.10	1.14	5.21x8.00	86	40
3	10	0.51	0.10	1.14	11.37	237	30.0
3	12	0.38	0.10	1.14	9.56	156	25.0
3	14	0.38	0.10	1.14	8.52	114	25.0
4	10	0.51	0.10	1.14	12.45	298	32/40
4	12	0.38	0.10	1.14	10.36	188	24.0/30.0

4	14	0.38	0.10	1.14	9.25	135	20.0/25.0
5	10	0.51	0.10	1.14	14.41	391	32
5	12	0.38	0.10	1.14	11.39	247	24.0
5	14	0.38	0.10	1.14	10.09	174	20.0
6	10	0.51	0.10	1.14	15.67	482	32
6	12	0.38	0.10	1.14	12.40	292	24.0
6	14	0.38	0.10	1.14	10.95	204	20.0
7	10	0.51	0.10	1.14	15.67	515	28
7	12	0.38	0.10	1.14	12.40	320	21.0
7	14	0.38	0.10	1.14	10.95	226	17.5
8	10	0.51	0.10	1.14	16.97	591	28
8	12	0.38	0.10	1.14	14.20	377	21.0
8	14	0.38	0.10	1.14	11.84	260	17.5
9	10	0.51	0.10	1.14	18.31	672	28
9	12	0.38	0.10	1.52	15.27	440	21.0
9	14	0.38	0.10	1.14	12.76	290	17.5
10	10	0.51	0.10	1.52	19.57	726	20
10	12	0.38	0.10	1.52	16.28	488	21.0
10	14	0.38	0.10	1.52	14.38	345	12.5
11	10	0.51	0.10	1.52	19.86	789	20
11	12	0.38	0.10	1.52	16.51	531	15.0
11	14	0.38	0.10	1.52	14.58	372	12.5
12	10	0.51	0.10	1.52	20.49	852	20
12	12	0.38	0.10	1.52	17.02	560	15.0
12	14	0.38	0.10	1.52	15.01	396	12.5
13	10	0.51	0.10	2.03	21.88	961	20
13	12	0.38	0.10	1.52	17.31	616	15.0
13	14	0.38	0.10	1.52	15.27	427	12.5
14	10	0.51	0.10	2.03	22.60	1094	20
14	12	0.38	0.10	1.52	17.88	659	15.0
14	14	0.38	0.10	1.52	15.76	457	12.5
15	10	0.51	0.10	2.03	23.18	1161	20
15	12	0.38	0.10	1.52	18.35	700	15.0
15	14	0.38	0.10	1.52	16.16	485	12.5
16	10	0.51	0.10	2.03	23.81	1183	20
16	12	0.38	0.10	1.52	18.86	729	15.0
16	14	0.38	0.10	1.52	16.59	510	12.5
19	10	0.51	0.10	2.03	25.07	1360	20
19	12	0.38	0.10	1.52	19.86	853	15.0
19	14	0.38	0.10	1.52	17.45	589	12.5
20	10	0.51	0.10	2.03	25.82	1420	20
20	12	0.38	0.10	1.52	20.47	866	15.0
20	14	0.38	0.10	1.52	17.97	620	12.5
25	10	0.51	0.10	2.03	28.97	1753	18

25	12	0.38	0.10	2.03	24.00	1158	13.5
25	14	0.38	0.10	1.52	20.12	771	11.3
30	10	0.51	0.10	2.03	30.98	2075	18
30	12	0.38	0.10	2.03	25.61	1362	13.5
30	14	0.38	0.10	2.03	22.51	949	11.3
37	10	0.51	0.10	2.03	33.45	2520	16
37	12	0.38	0.10	2.03	27.58	1647	12.0
37	14	0.38	0.10	2.03	24.21	1152	10.0
40	10	0.51	0.10	2.03	34.75	2714	16
40	12	0.38	0.10	2.03	28.62	1810	12.0
40	14	0.38	0.10	2.03	25.10	1240	10.0
45	10	0.51	0.10	2.03	36.85	3036	14
45	12	0.38	0.10	2.03	30.3	2021	10.5
45	14	0.38	0.10	2.03	26.54	1381	8.8
50	10	0.51	0.10	2.03	38.27	3353	14
50	12	0.38	0.10	2.03	31.44	2228	10.5
50	14	0.38	0.10	2.03	27.51	1446	8.8