



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)

Screen

Aluminum Tape

Drain Wire

Tinned Copper (16AWG 7 strand)

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	10	0.51	0.10	1.14	10.87	189	40
2	12	0.38	0.10	1.14	9.35	132	30.0
3	10	0.51	0.10	1.14	11.52	251	40
3	12	0.38	0.10	1.14	9.87	174	30.0
3	14	0.38	0.10	1.14	8.67	129	25.0

3	14	0.38	0.10	1.14	8.67	129	25.0
4	10	0.51	0.10	1.14	12.61	290	32/40
4	12	0.38	0.10	1.14	10.74	219	24.0/30.0
4	14	0.38	0.10	1.14	9.42	159	20.0/25.0
5	10	0.51	0.10	1.52	14.57	414	32
5	12	0.38	0.10	1.14	11.69	272	24.0
5	14	0.38	0.10	1.14	10.24	190	20.0
6	10	0.51	0.10	1.52	15.82	479	32
6	12	0.38	0.10	1.14	12.70	310	24.0
6	14	0.38	0.10	1.14	11.10	220	20.0
7	10	0.51	0.10	1.52	15.82	540	28
7	12	0.38	0.10	1.14	12.70	338	21.0
7	14	0.38	0.10	1.14	11.10	243	17.5
8	10	0.51	0.10	1.52	17.35	609	28
8	12	0.38	0.10	1.52	14.53	394	21.0
8	14	0.38	0.10	1.14	12.14	277	17.5
9	10	0.51	0.10	1.52	18.69	679	28
9	12	0.38	0.10	1.52	15.60	470	21.0
9	14	0.38	0.10	1.52	13.06	307	17.5
10	10	0.51	0.10	1.52	19.95	748	20
10	12	0.38	0.10	1.52	16.61	513	21.0
10	14	0.38	0.10	1.52	14.68	362	12.5
11	10	0.51	0.10	1.52	20.24	811	20
11	12	0.38	0.10	1.52	16.84	549	15.0
11	14	0.38	0.10	1.52	14.68	388	12.5
12	10	0.51	0.10	2.03	21.89	930	20
12	12	0.38	0.10	1.52	17.34	595	15.0
12	14	0.38	0.10	1.52	15.31	421	12.5
13	10	0.51	0.10	2.03	22.27	984	20
13	12	0.38	0.10	1.52	17.64	634	15.0
13	14	0.38	0.10	1.52	15.57	443	12.5
14	10	0.51	0.10	2.03	22.98	1116	20
14	12	0.38	0.10	1.52	18.21	677	15.0
14	14	0.38	0.10	1.52	16.06	473	12.5
15	10	0.51	0.10	2.03	23.56	1173	20
15	12	0.38	0.10	1.52	18.68	717	15.0
15	14	0.38	0.10	1.52	16.46	501	12.5
16	10	0.51	0.10	2.03	24.19	1262	20
16	12	0.38	0.10	1.52	19.19	747	15.0
16	14	0.38	0.10	1.52	16.89	533	12.5
19	10	0.51	0.10	2.03	25.45	1376	20
19	12	0.38	0.10	1.52	20.19	870	15.0
19	14	0.38	0.10	1.52	17.75	615	12.5
20	10	0.51	0.10	2.03	26.21	1443	20

20	12	0.38	0.10	1.52	20.80	933	15.0
20	14	0.38	0.10	1.52	18.27	643	12.5
25	10	0.51	0.10	2.03	29.35	1771	18
25	12	0.38	0.10	2.03	24.33	1176	13.5
25	14	0.38	0.10	1.52	20.42	787	11.3
30	10	0.51	0.10	2.03	31.36	2098	18
30	12	0.38	0.10	2.03	25.94	1379	13.5
30	14	0.38	0.10	2.03	22.82	972	11.3
37	10	0.51	0.10	2.03	33.83	2544	16
37	12	0.38	0.10	2.03	27.91	1665	12.0
37	14	0.38	0.10	2.03	24.51	1174	10.0
40	10	0.51	0.10	2.03	35.13	2738	16
40	12	0.38	0.10	2.03	28.95	1827	12.0
40	14	0.38	0.10	2.03	25.40	1262	10.0
45	10	0.51	0.10	2.03	37.23	3056	14
45	12	0.38	0.10	2.03	30.63	2039	10.5
45	14	0.38	0.10	2.03	26.84	1403	8.8
50	10	0.51	0.10	2.03	38.65	3378	14
50	12	0.38	0.10	2.03	31.77	2245	10.5
50	14	0.38	0.10	2.03	27.81	1537	8.8