

THHN / THWN-2 Aluminum Electric Wire



APPLICATION

Low voltage electrical energy distribution; for use in electrical wiring of buildings, feeder circuits, branches and secondary industrial, commercial and residential indoor networks. Special for installations in abrasive sites or sites contaminated with oil, grease, gasoline, and other chemical substances. They are suitable for installation in ducts, pipes, boards, and cable trays according to RETIE article 20.3 literal J, from 12 AWG gauge and larger.

CHARACTERISTICS

Voltage Rating U_0/U (Um)

600V

Temperature Rating

90°C dry and wet places

STANDARDS

ASTM B800; ASTM B 801; UL 83

THE CABLE TEST

We have world-class testing facility, and made rigorous testing regime, every meter of cable before leaving the factory must go through strict testing, testing qualified products will be shipped to customers, effectively ensure product quality and meet customer requirements.

SUSTAINABILITY COMMITMENT

Guowang Cable actively implements the "carbon reduction" goal, strives to promote the green's low-carbon transformation, strengthens energy-saving and emission reduction technology innovation, and promotes the company's healthy and sustainable development.

CONSTRUCTION

Conductor

Aluminum alloy conductor, Class B (Compact).

Insulation

Heat and moisture resistant PVC insulation in various colors

Sheath

External cover in polyamide (nylon)

Sheath Colour

● Red/Black/White/Blue/Green/Pink etc.

DIMENSIONS

Cond. Size	Strand Count	Diameter Over Conductor	Insul. Thickness	Insulation Color	Jacket Thickness	Approx. OD	Approx. Weight	DC Resistance @ 20°C	Allowable Ampacity At 75°C	Allowable Ampacity At 90°C
AWG/Kcmil	Minimum Number of Strands	mm	mm		mm	mm	KG/KM	Ω/KM	Amp	Amp
14	7	1.86	0.38	BK	0.1	2.82	10.21	8.45	16	21
12	7	2.23	0.38	BK	0.1	3.3	14.12	5.31	20	25
10	7	2.94	0.51	BK	0.1	4.16	25.04	3.36	30	35
8	7	3.69	0.76	BK	0.13	5.47	41.29	2.48	40	45
6	7	4.29	0.76	BK	0.13	6.2	58.09	2.21	50	55
4	7	5.41	1.02	BK	0.15	7.9	93.84	1.39	65	75
2	7	6.81	1.02	BK	0.15	9.3	137.03	0.875	90	100
1	7	7.59	1.27	BK	0.18	10.6	175.76	0.693	100	115
1/0	18	8.53	1.27	BK	0.18	11.6	213.00	0.550	120	135
2/0	18	9.55	1.27	BK	0.18	12.6	259.17	0.436	135	150
3/0	18	10.7	1.27	BK	0.18	13.8	317.26	0.346	155	175
3/0	18	10.7	1.27	PK	0.18	13.8	317.26	0.346	155	175
4/0	18	12.1	1.27	BK	0.18	15.1	388.76	0.274	180	205
250	35	13.2	1.52	PK	0.20	16.8	467.70	0.232	205	230
300	35	15.5	1.52	BK	0.20	18.1	554.09	0.194	230	260
350	35	15.7	1.52	BK	0.20	19.3	628.57	0.166	250	280
400	35	16.7	1.52	PK	0.20	20.4	709.00	0.145	270	305
500	35	18.7	1.52	BK	0.20	22.4	865.40	0.116	310	350
500	35	18.7	1.52	TN	0.20	22.4	866.89	0.116	310	350
600	58	20.7	1.78	BK	0.23	24.6	1048.61	0.0967	340	385
700	58	23.1	1.78	PE	0.23	26.5	1207.99	0.0829	375	425
750	58	23.1	1.78	BK	0.23	24.3	1291.40	0.0774	385	435
900	58	25.4	1.78	BK	0.23	29.5	1540.14	0.0645	425	480
1000	58	26.9	1.78	BK	0.23	31.1	1647.20	0.0580	445	500

Derating factor (ground): 1 (Soil thermal resistivity: 1km/W, Depth 0.8m, Flat formation - touching)

Derating factor (air): 1 (Flat formation - touching)

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.