Application

TW (Thermoplastic-Insulated Wires) and THW (Thermoplastic Heat and Water-resistant Wires) are versatile solutions suitable for general-purpose wiring for power and lighting applications. They are designed for installation in various environments, including air, conduit, duct, or other recognized raceways, whether in wet or dry locations. With a maximum voltage rating of 600V, they offer reliability and flexibility for a wide range of electrical installations.

Performance

Electrical Performance: Rated for 600V, ensuring reliable power distribution in various electrical systems.
Chemical Performance: Resistant to chemicals and oils, enhancing durability and longevity in harsh environments.
Mechanical Performance: Minimum bending radius of 4 times the cable diameter ensures ease of installation and flexibility.
Terminal Performance:
Maximum Service Temperature: 90℃
Maximum Short-Circuit Temperature: 250℃ (max. 5s)
Minimum Service Temperature: -40℃
Fire Performance: Flame retardant properties ensure enhanced safety in the event of a fire.

Construction

Conductor: Available in solid or stranded bare copper conductor options, providing flexibility and conductivity.
Insulation: Insulated with Polyvinyl Chloride (PVC), offering excellent electrical insulation properties and protection against environmental factors.
Color Identification: Color-coded options include black, red, blue, white, green, brown, orange, yellow, yellow/green, gray, and others, facilitating easy identification and installation.

Specification

-UL 83, UL 1581 Standard

Eastful Cable Lab

We have CNAS Accredited Facility to assure conformity assessment services with a focus on quality, expertise, and customer satisfaction.
CNAS has international mutual recognition among IAF, ILAC, APLAC and PAC.

Accreditation

We meet the requirements of ISO9001, ISO14001, ISO45001 and ISO50001 and our cables have certificate of CCC, RoHS, CASC, UL, cUL, TÜV Rhineland and CCS.

National Green Factory

Our facility has been awarded of National Green Factory by Ministry of Industry and Information Technology of China.
We are committed to the development of high-end, intelligent and green manufacturing industry.

*The overall energy consumption level of green factories is better than the energy efficiency benchmark level.

Technical Parameters

Size	Construction		Conductor Dia.	Insulation Thickness	Approx. Overall Dia.	Approx.Weight	
	No. of Wires	Dia.of Wires				TW	THW
AWG or kcmil	No.	mm	mm	mm	mm	kg/km	kg/km
14	1	1.63	1.63	0.77	3.17	26.8	26.8
12	1	2.06	2.06	0.77	3.60	38.7	38.7
10	1	2.59	2.59	0.77	4.13	58.1	58.1
8	1	3.27	3.27	1.15	5.57	96.8	96.8
14	7	0.62	1.86	0.77	3.40	28.3	28.3
12	7	0.78	2.34	0.77	3.88	41.7	41.7
10	7	0.98	2.94	0.77	4.48	62.5	62.5
8	7	1.24	3.72	1.15	6.02	102.7	102.7
6	7	1.56	4.68	1.53	7.74	165.2	166.7
4	7	1.96	5.88	1.53	8.94	247.1	248.6
2	7	2.48	7.44	1.53	10.50	375.1	376.6
1/0	19	1.89	9.20	2.04	13.28	589.4	592.3
2/0	19	2.13	10.34	2.04	14.42	732.2	735.2
3/0	19	2.39	11.61	2.04	15.69	904.9	909.3
4/0	19	2.68	13.01	2.04	17.09	1120.7	1123.6
250	37	2.09	14.20	2.42	19.04	1334.9	1339.4
300	37	2.29	15.55	2.42	20.39	1583.5	1587.9
350	37	2.47	16.79	2.42	21.63	1824.6	1830.5
400	37	2.64	17.96	2.42	22.80	2068.6	2074.6
500	37	2.95	20.05	2.42	24.89	2553.8	2559.7
600	61	2.52	22.00	2.80	27.60	3016.4	3021.0
750	61	2.82	24.64	2.80	30.24	3817.3	3824.7
1000	61	3.25	28.40	2.80	34.00	5007.8	5018.2