Application

BS 7870-5 standard aerial bundled cables (ABC) are designed for overhead distribution lines and electrical installations. They are suitable for use in alternating current (AC) power networks with a nominal voltage of U0/U 0.6/1 kV and in direct current (DC) power networks with a maximum voltage of 0.9 kV.

Advantage

Tensile strength: High tensile strength to withstand mechanical stresses during installation and service.
Flexibility: Adequate flexibility for ease of installation in various overhead configurations.
Abrasion resistance: Designed to resist abrasion and mechanical wear, ensuring long service life in outdoor environments.

Performance

Electrical performance: Rated voltage of 0.6/1 kV.
Chemical performance: Resistant to chemicals, UV radiation, and oil.
Thermal performance:
Maximum service temperature: 90°C
Maximum short-circuit temperature: 250°C (for a maximum of 5 seconds)
Minimum service temperature: -40°C

Construction

Conductors:
Phase conductor: Circular stranded, rounded, compact aluminum conductor.
Neutral/Messenger conductor: Circular stranded, rounded, compact aluminum conductor.
Insulation: Black polyethylene (PE) or crosslinked polyethylene (XLPE).

Specification

-BS 7870-5 Standard low voltage aerial bundled cable

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

Nominal Cross Section Area	No. of Individual Wires for Phase and Neutral Core	Nominal Dia. of Conductor	Nominal Thickness of Insulation	Nominal Dia. of Insulation	Nominal Dia. Over Laid-up Cores	Nominal Weight
mm^2	-	mm	mm	mm	mm	kg/km
1 core						
25	7	6	1.3	8.6	-	96
35	7	7	1.3	9.6	-	126
50	19	8.4	1.5	11.4	-	183
70	19	10	1.5	13	-	236
95	19	11.6	1.7	15	-	323
120	19	13	1.7	16.4	-	399
2 cores						
25	7	6	1.3	8.6	17.2	192
35	7	7	1.3	9.6	19.2	252
50	19	8.4	1.5	11.4	22.8	365
70	19	10	1.5	13	26	472
95	19	11.6	1.7	15	30	645
120	19	13	1.7	16.4	32.8	798
3 cores						
25	7	6	1.3	8.6	18.5	288
35	7	7	1.3	9.6	20.6	378
50	19	8.4	1.5	11.4	24.5	548
70	19	10	1.5	13	28	708
95	19	11.6	1.7	15	32.3	968
120	19	13	1.7	16.4	35.3	1196
4 cores						
25	7	6	1.3	8.6	20.7	384
35	7	7	1.3	9.6	23.1	504
50	19	8.4	1.5	11.4	27.5	731
70	19	10	1.5	13	31.4	943
95	19	11.6	1.7	15	36.2	1290
120	19	13	1.7	16.4	39.6	1595
5 cores						
25	7	6	1.3	8.6	23.2	480
35	7	7	1.3	9.6	25.9	630
50	19	8.4	1.5	11.4	30.8	914
70	19	10	1.5	13	35.1	1179
95	19	11.6	1.7	15	40.5	1613
120	19	13	1.7	16.4	44.3	1993

Technical Parameters

Nominal Cross Section Area	Min.Bending Radius		Rec. Tension		Min.Breaking Load of Cable	Modulus of Elasticity	Coeff. of Linear Expansion
	Single Core	Complete Cable	Highest Tension Everyday	Max. Working Tension			
mm^2	mm	mm	kN	kN	kN	GPa	$\times10^{-6}/°C$
1 core							
25	35	35	0.74	1.15	4.1	59	23.0
35	58	58	1.01	1.57	5.6	59	23.0
50	68	68	1.37	2.13	7.6	59	23.0
70	78	78	1.98	3.08	11.0	56	23.0
95	90	90	2.75	4.28	15.3	56	23.0
120	99	99	4.13	6.43	23.0	56	23.0
2 cores							
25	35	104	1.48	2.3	8.2	59	23.0
35	58	116	2.02	3.14	11.2	59	23.0
50	68	136	2.73	4.25	15.2	59	23.0
70	78	156	3.95	6.15	22	56	23.0
95	90	270	5.5	8.56	30.6	56	23.0
120	99	296	8.26	12.86	46	56	23.0
3 cores							
25	35	108	2.21	3.44	12.3	59	23.0
35	58	120	3.02	4.7	16.8	59	23.0
50	68	142	4.1	6.38	22.8	59	23.0
70	78	163	5.93	9.23	33.0	56	23.0
95	90	300	8.24	12.83	45.9	56	23.0
120	99	328	12.39	19.29	69.0	56	23.0
4 cores							
25	35	121	2.95	4.59	16.4	59	23.0
35	58	135	4.03	6.27	22.4	59	23.0
50	68	159	5.46	8.5	30.4	59	23.0
70	78	182	7.9	12.3	44.0	56	23.0
95	90	330	10.99	17.11	61.2	56	23.0
120	99	361	16.52	25.72	92.0	56	23.0
5 cores							
25	138	138	3.68	5.73	20.5	59	23.0
35	154	154	5.03	7.83	28.0	59	23.0
50	181	181	6.83	10.63	38.0	59	23.0
70	208	208	9.88	15.38	55.0	59	23.0
95	375	375	13.74	21.39	76.5	56	23.0
120	410	410	20.65	32.15	115.0	56	23.0