ZTT CABLE



ZTT is a leading and global manufacturer of cable systems, which provides package solutions for telecommunication and power applications around the world. With its rich heritage of highly advanced R&D results, ZTT owns the cutting-edge technology within the industry.

ZTT was established in 1992 and became a listed company in 2002. Up to now, ZTT has developed to be a Group Company with 33 subsidiaries in China. Our products are widely used in telecommunication industry, power transmission industry, mining cable industry, marine and submarine cable industry, railway industry, cable manufacturing and so on.

ZTT has always committed to be market-oriented, meeting various demands of our customers and providing economical & reliable solutions. With innovative product design, ZTT can also guarantee the high-end engineering capabilities and life cycle maintenance services.

Bare Overhead Conductors





Add: No.6 Zhongtian Road, Nantong Economic & Technological Development Zone, Nantong, Jiangsu, China P.C.: 226009
Tel: 86-513-83599669 / 83599671 Fax: 86-513-83599670
Http: //www.zttcable.com E-mail: International@zttcable.com

Company Profile



ZTT is specialized in research, development, production, marketing, service and support of conductors for electrical power lines.

ZTT has the first-class equipments and quality management system. Our typical references include up to 1000kV and span length reach to 2746m in China. "Customer First", "Quality", and "Innovation" drive us to be successful in the market.

With more than 70 years' experiences, ZTT can provide not only conventional conductor but also up-rating conductor. For conventional conductor, the products include: ACSR, AAAC, AAC and so on. And for up-rating conductor, the products include: GAP Type Conductor, INVAR Core Conductor, TACSR and ACSS. We have supplied each kind of conductors with 200 thousands tons for 500kV line as yet and have exported about 70 thousands tons to the world.

ZTT will consistently serve the telecommunication and power grid industry relying on its sales & services network all over the world.

Contents

- AAC ..... (3)
- AAAC ..... (5)
- ACSR ..... (6)
- ACSR/AW ..... (9)
- ACAR ..... (11)
- AACSR ..... (16)



Conductor Data Sheet

All Aluminum Conductors–AAC

Code Name	Cross Section	Copper Equivalent	Number of Wires	Diameter of Aluminum Wire	Nominal Weight	Rated Strength	Maximum DC Resistance at 20°C
	mm^2	AWG or MCM		mm	kg/km	kN	Ω/km
Pansy	42.37	3	7	2.78	116.6	7.30	0.6781
Iris	33.65	4	7	2.47	92.6	5.99	0.8540
Rose	21.14	6	7	1.96	58.2	3.91	1.3593
Poppy	53.49	2	7	3.12	147.2	8.84	0.5371
Aster	67.45	1	7	3.50	185.7	11.1	0.4262
Phlox	85.00	1/0	7	3.93	233.9	13.5	0.3379
Oxlip	107.26	2/0	7	4.42	295.2	17.0	0.2679
Valerian	126.66	157.2	19	2.91	348.6	20.7	0.2269
Sneezewort	126.70	157.2	7	4.80	348.8	20.1	0.2268
Laurel	135.19	3/0	19	3.01	372.2	22.1	0.2126
Daisy	135.29	3/0	7	4.96	372.3	21.4	0.2124
Peony	152.12	188.7	19	3.19	418.3	24.3	0.1889
Tulip	170.56	4/0	19	3.38	469.5	27.3	0.1685
Daffodil	177.28	220	19	3.45	487.9	28.4	0.1621
Canna	200.99	250	19	3.67	554.9	31.6	0.1426
Goldentuft	228.03	283	19	3.91	627.6	35.0	0.1260
Syringa	241.52	300	37	2.88	664.8	38.6	0.1190
Cosmos	241.56	300	19	4.02	664.8	37.0	0.1190
Hyacinth	253.15	314	37	2.95	696.8	40.5	0.1135
Zinnia	253.29	314	19	4.12	697.1	38.9	0.1135
Dahlia	281.85	350	19	4.35	775.7	43.3	0.1020
Mistletoe	282.88	350	37	3.12	775.8	44.3	0.1020
Meadowsweet	303.82	377	37	3.23	836.3	47.5	0.09459
Orchid	322.23	400	37	3.33	886.9	50.4	0.08917
Heuchera	329.65	409	37	3.37	907.4	51.7	0.08717
Flag	354.54	440	61	2.72	975.8	57.1	0.08104
Verbena	354.46	440	37	3.49	975.7	55.4	0.08107

Note: All the data set out in this catalogue is given for information and ZTT shall not be held responsible for its accuracy.

Conductor Data Sheet

All Aluminum Conductors –AAC

Code Name	Cross Section	Copper Equivalent	Number of Wires	Diameter of Aluminum Wire	Nominal Weight	Rated Strength	Maximum DC Resistance at 20°C
	mm^2	AWG or MCM		mm	kg/km	kN	Ω/km
Nasturtium	362.53	450	61	2.75	998.5	58.4	0.07927
Violet	362.76	450	37	3.53	998.5	56.7	0.07920
Cattail	380.15	472	61	2.82	1046	60.3	0.07559
Petunia	380.17	472	37	3.62	1046	58.6	0.07602
Lilac	403.11	500	61	2.90	1110	63.8	0.07129
Arbutus	402.93	500	37	3.72	1109	61.8	0.07133
Snapdragon	456.29	566	61	3.09	1256	70.8	0.06299
Cockscomb	456.26	566	37	3.96	1256	68.4	0.06299
Goldenrod	483.73	600	61	3.18	1331	75.0	0.05942
Magnolia	483.56	600	37	4.08	1331	72.6	0.05942
Camellia	506.42	629	61	3.25	1394	78.3	0.05676
Hawkweed	506.71	629	37	4.18	1395	76.2	0.05669
Larkspur	523.97	650	61	3.31	1442	81.3	0.05486
Bluebell	524.89	650	37	4.25	1441	78.8	0.05489
Marigold	564.16	700	61	3.43	1553	87.3	0.05095
Hawthorn	604.09	750	61	3.55	1662	93.5	0.04757
Narcissus	644.50	800	61	3.67	1774	98.1	0.04459
Columbine	684.37	850	61	3.78	1884	104	0.04199
Carnation	725.45	900	61	3.89	1997	108	0.03960
Gladiolus	765.77	950	61	4.00	2108	114	0.03753
Coreopsis	805.18	1000	61	4.10	2216	120	0.03570
Jessamine	886.98	1101	61	4.30	2442	132	0.03240
Cowslip	1015.82	1260	91	3.77	2787	153	0.02865
Sagebrush	1139.48	1370	91	3.99	3166	167	0.02547
Lupine	1266.03	1570	91	4.21	3519	186	0.02292
Bitteroot	1396.29	1680	91	4.42	3872	205	0.02083

Note: All the data set out in this catalogue is given for information and ZTT shall not be held responsible for its accuracy.

AAC

Conductor Data Sheet

All Aluminum Alloy Conductors–AAAC

Code Name	Cross Section	Copper Equivalent	Number of Wires	Diameter of Single Wire	Nominal Weight	Rated Strength	Maximum DC Resistance at 20°C
	mm^2	AWG or MCM		mm	kg/km	kN	Ω/km
Alton	24.67	4	7	2.12	67.8	7.83	1.356
Ames	39.25	2	7	2.67	107.5	12.4	0.8547
Azusa	62.46	1/0	7	3.37	171.3	18.9	0.5365
Anaheim	78.75	2/0	7	3.78	215.6	23.8	0.4264
Amherst	99.16	3/0	7	4.25	272.5	30.0	0.3373
Alliance	125.10	4/0	7	4.77	343.2	37.8	0.2678
Butte	158.48	266.8	19	3.26	435.1	46.5	0.2112
Canton	199.91	336.4	19	3.66	548.5	58.6	0.1676
Cairo	235.80	397.5	19	3.98	648.6	69.2	0.1417
Darien	283.50	477	19	4.36	778.3	83.1	0.1181
Elgin	330.57	556.5	19	4.71	908.3	97.0	0.1012
Flint	375.38	636	37	3.59	1028	107	0.08944
Greeley	469.81	795	37	4.02	1289	135	0.07133
/	545.93	954	61	3.38	1502	156	0.0612
/	590.34	1033.5	61	3.51	1620	167	0.05675
/	638.27	1113	61	3.65	1751	181	0.05248
/	683.46	1192.5	61	3.78	1878	194	0.04893
/	729.24	1272	61	3.90	1999	207	0.04597

Note: All the data set out in this catalogue is given for information and ZTT shall not be held responsible for its accuracy.

AAAC

Conductor Data Sheet

Aluminum Conductors Steel Reinforced–ACSR

Code Name	Cross Section	Stranding Design Aluminum/Steel	Diameter of Aluminum Wires	Diameter of Steel Wire	Nominal O.D. of Conductor	Nominal Weight	Rated Strength	Maximum DC Resistance at 20˚C
	mm^2		mm	mm	mm	kg/km	kN	Ω/km
Robin	49.47	6/1	3.00	3.00	8.99	171.1	15.8	0.6743
Sparrow	39.25	6/1	2.67	2.67	8.03	135.7	12.7	0.8499
Swan	24.67	6/1	2.12	2.12	6.35	85.3	8.3	1.3522
/	19.58	6/1	1.89	1.89	5.66	67.7	6.6	1.7037
Raven	62.46	6/1	3.37	3.37	10.11	216.1	19.5	0.5341
Quail	78.64	6/1	3.78	3.78	11.35	272.0	23.6	0.4242
Pigeon	99.16	6/1	4.25	4.25	12.75	343.0	29.4	0.3364
Penguin	125.10	6/1	4.77	4.77	14.30	432.7	37.1	0.2667
Waxwing	142.59	18/1	3.09	3.09	15.47	430.2	30.7	0.2127
Partridge	157.22	26/7	2.57	2.00	16.31	545.9	50.3	0.2136
Ostrich	176.69	26/7	2.73	2.12	17.27	613.4	56.5	0.1900
Merlin	179.91	18/1	3.47	3.47	17.37	542.8	38.7	0.1686
Linnet	198.03	26/7	2.89	2.25	18.29	687.5	62.7	0.1695
Oriole	210.26	30/7	2.69	2.69	18.82	783.3	77.0	0.1698
Chickadee	212.59	18/1	3.77	3.77	18.87	641.3	44.0	0.1427
Brant	227.54	24/7	3.27	2.18	19.61	761.0	64.9	0.1434
Ibis	234.02	26/7	3.14	2.44	19.89	812.4	72.5	0.1435
Lark	248.38	30/7	2.92	2.92	20.47	925.2	90.3	0.1437
Pelican	255.16	18/1	4.14	4.14	20.68	769.7	52.5	0.1189
Flicker	273.11	24/7	3.58	2.39	21.49	913.5	76.5	0.1194
Hawk	280.86	26/7	3.44	2.67	21.79	975.1	86.7	0.1196
Hen	298.12	30/7	3.20	3.20	22.43	1110.6	105.9	0.1198
Osprey	297.54	18/1	4.47	4.47	22.33	897.7	60.9	0.1019
Parakeet	318.62	24/7	3.87	2.58	23.22	1065.6	88.1	0.1024
Dove	327.92	26/7	3.72	2.89	23.55	1138.6	100.5	0.1024
Eagle	347.79	30/7	3.46	3.46	24.21	1295.6	123.7	0.1027

Note: All the data set out in this catalogue is given for information and ZTT shall not be held responsible for its accuracy.

ACSR

Conductor Data Sheet

Aluminum Conductors Steel Reinforced–ACSR

Code Name	Cross Section	Stranding Design Aluminum/Steel	Diameter of Aluminum Wires	Diameter of Steel Wire	Nominal O.D. of Conductor	Nominal Weight	Rated Strength	Maximum DC Resistance at 20˚C
	mm^2		mm	mm	mm	kg/km	kN	Ω/km
Peacock	346.45	24/7	4.03	2.69	24.21	1158.9	96.1	0.09416
Squab	356.28	26/7	3.87	3.01	24.54	1237.0	108.1	0.09425
Wood Duck	378.04	30/7	3.61	3.61	25.25	1408.4	128.6	0.09444
Teal	376.40	30/19	3.61	2.16	25.25	1396.6	133.4	0.09444
Kingbird	340.27	18/1	4.78	4.78	23.88	1026.6	69.8	0.08914
Swift	331.14	36/1	3.38	3.38	23.62	956.5	61.4	0.08919
Rook	364.07	24/7	4.14	2.76	24.82	1217.5	100.5	0.08959
Grosbeak	374.71	26/7	3.97	3.09	25.15	1300.8	112.1	0.08961
Scoter	397.45	30/7	3.70	3.70	25.88	1480.7	135.2	0.08982
Egret	395.80	30/19	3.70	2.22	25.88	1469.0	140.1	0.08982
Flamingo	381.72	24/7	4.23	2.82	25.40	1276.6	105.4	0.08545
Gannet	392.67	26/7	4.07	3.16	25.76	1363.3	117.4	0.08551
Stilt	409.70	24/7	4.39	2.92	26.31	1370.4	113.4	0.07961
Starling	421.62	26/7	4.21	3.28	26.70	1463.7	126.3	0.07964
Redwing	444.94	30/19	3.92	2.35	27.46	1650.6	153.9	0.07988
Coot	414.00	36/1	3.77	3.77	26.42	1195.8	74.7	0.07134
Cuckoo	455.01	24/7	4.62	3.08	27.74	1522.2	124.1	0.07169
Drake	468.61	26/7	4.44	3.45	28.14	1626.4	140.1	0.07165
Tern	430.58	45/7	3.38	2.25	27.00	1331.8	98.3	0.07170
Condor	454.79	54/7	3.08	3.08	27.74	1520.7	125.4	0.07172
Mallard	494.79	30/19	4.14	2.48	28.96	1836.0	170.8	0.07185
Ruddy	487.44	45/7	3.59	2.40	28.73	1507.3	108.5	0.06334
Canary	515.16	54/7	3.28	3.28	29.51	1723.1	141.9	0.06332
Catbird	496.90	36/1	4.14	4.14	28.96	1434.4	88.1	0.05944
Rail	516.83	45/7	3.70	2.47	29.59	1598.1	115.2	0.05974
Cardinal	545.93	54/7	3.38	3.38	30.38	1825.9	150.3	0.05975

Note: All the data set out in this catalogue is given for information and ZTT shall not be held responsible for its accuracy.

ACSR

Conductor Data Sheet

Aluminum Conductors Steel Reinforced–ACSR

Code Name	Cross Section	Stranding Design Aluminum/Steel	Diameter of Aluminum Wires	Diameter of Steel Wire	Nominal O.D. of Conductor	Nominal Weight	Rated Strength	Maximum DC Resistance at 20˚C
	mm^2		mm	mm	mm	kg/km	kN	Ω/km
Tanager	538.01	36/1	4.30	4.30	30.12	1553.5	95.2	0.05489
Ortolan	559.54	45/7	3.85	2.57	30.78	1730.5	123.2	0.05518
Curlew	591.20	54/7	3.51	3.51	31.62	1977.6	162.8	0.05518
Bluejay	603.22	45/7	4.00	2.66	31.98	1866.0	132.6	0.05118
Finch	635.77	54/19	3.65	2.19	32.84	2127.8	173.9	0.05143
Bunting	646.09	45/7	4.14	2.76	33.07	1996.9	142.3	0.04778
Grackle	680.81	54/19	3.77	2.27	33.99	2278.1	186.4	0.04802
Skylark	662.64	36/1	4.78	4.78	33.43	1913.6	117.4	0.04457
Bittern	688.90	45/7	4.27	2.85	34.16	2130.8	151.7	0.04482
Pheasant	726.38	54/19	3.90	2.34	35.10	2431.4	193.9	0.04501
Dipper	732.12	45/7	4.40	2.93	35.20	2263.2	161.0	0.04217
Martin	771.51	54/19	4.02	2.41	36.17	2581.7	206.0	0.04237
Bobolink	775.04	45/7	4.53	3.02	36.25	2397.2	170.4	0.03984
Plover	817.10	54/19	4.14	2.48	37.21	2734.9	218.4	0.04001
Nuthatch	818.16	45/7	4.65	3.10	37.24	2529.6	178.4	0.03773
Parrot	861.79	54/19	4.25	2.55	38.23	2883.7	230.0	0.03793
Lapwing	861.60	45/7	4.78	3.18	38.20	2663.5	187.7	0.03583
Falcon	907.86	54/19	4.36	2.62	39.24	3038.5	242.4	0.03601
Chukar	975.86	84/19	3.70	2.22	40.69	3083.1	226.9	0.03216
Bluebird	1181.26	84/19	4.07	2.44	44.75	3731.9	268.2	0.03656
Kiwi	1145.70	72/7	4.41	2.94	44.07	3423.9	221.5	0.02642
Thrasher	1235.08	76/19	4.43	2.07	45.77	3754.2	252.2	0.02477

Note: All the data set out in this catalogue is given for information and ZTT shall not be held responsible for its accuracy.

ACSR

Conductor Data Sheet

Aluminum Conductors Aluminum Clad Steel Reinforced-ACSR/AW

Code Name	Cross Section	Stranding Design Aluminum/ACS	Diameter of Aluminum Wires	Diameter of ACS Wire	Nominal Diameter of Conductor	Nominal Weight	Rated Strength	Maximum DC Resistance at 20˚C
	mm^2		mm	mm	mm	kg/km	kN	Ω/km
Robin	49.47	6/1	3.00	3.00	9.00	15.6	162	0.6385
Sparrow	39.25	6/1	2.67	2.67	8.02	12.5	129	0.8046
Swan	24.67	6/1	2.12	2.12	6.36	8.0	81	1.2803
Petrel	81.66	12/7	2.34	2.34	11.70	44.0	342	0.4472
Raven	62.46	6/1	3.37	3.37	10.11	19.1	205	0.5057
Quail	78.64	6/1	3.78	3.78	11.35	22.7	259	0.4016
Pigeon	99.16	6/1	4.25	4.25	12.74	28.0	326	0.3185
Penguin	125.10	6/1	4.77	4.77	14.31	34.3	412	0.2525
Minorca	88.91	12/7	2.44	2.44	12.20	48.0	372	0.4108
Leghorn	107.97	12/7	2.69	2.69	13.45	57.8	452	0.3383
Guinea	127.54	12/7	2.92	2.92	14.62	68.1	534	0.2863
Dotterel	141.89	12/7	3.08	3.08	15.42	75.2	594	0.2574
Dorking	153.09	12/7	3.20	3.20	16.01	81.4	641	0.2386
Cochin	169.53	12/7	3.37	3.37	16.85	88.1	710	0.2154
partridge	157.22	26/7	2.57	2.00	16.30	48.0	519	0.1996
Waxwing	142.59	18/1	3.09	3.09	15.46	30.2	421	0.2077
Ostrich	176.69	26/7	2.73	2.12	17.27	53.8	583	0.1775
Oriole	210.26	30/7	2.69	2.69	18.83	74.3	737	0.1542
Linnet	198.03	26/7	2.89	2.25	18.29	60.1	655	0.1584
Merlin	179.91	18/1	3.47	3.47	17.36	37.8	531	0.1647
Lark	248.38	30/7	2.92	2.92	20.46	87.2	869	0.1306
Ibis	234.02	26/7	3.14	2.44	19.88	70.3	774	0.1341
Brant	227.54	24/7	3.27	2.18	19.61	62.7	731	0.1358
Chickadee	212.59	18/1	3.77	3.77	18.87	43.6	628	0.1393
Flicker	273.11	24/7	3.58	2.39	21.49	74.3	877	0.1131
Pelican	255.16	18/1	4.14	4.14	20.68	51.2	755	0.1161
Hawk	280.86	26/7	3.44	2.67	21.78	84.1	929	0.1117
Hen	298.12	30/7	3.20	3.20	22.42	104.1	1043	0.1088
Osprey	297.54	18/1	4.47	4.47	22.33	58.7	880	0.09955
parakeet	318.62	24/7	3.87	2.58	23.21	85.9	1022	0.09695
Dove	327.92	26/7	3.72	2.89	23.54	97.4	1083	0.09567
Eagle	347.79	30/7	3.46	3.46	24.22	119.2	1217	0.09323
Wood duck	378.04	30/7	3.61	3.61	25.25	126.3	1323	0.08577
Teal	376.40	30/19	3.61	2.16	25.25	126.8	1314	0.08597

Note: All the data set out in this catalogue is given for information and ZTT shall not be held responsible for its accuracy.

ACSR/AW

Conductor Data Sheet

Aluminum Conductors Aluminum Clad Steel Reinforced-ACSR/AW

Code Name	Cross Section	Stranding Design Aluminum/ACS	Diameter of Aluminum Wires	Diameter of ACS Wire	Nominal Diameter of Conductor	Nominal Weight	Rated Strength	Maximum DC Resistance at 20˚C
	mm^2		mm	mm	mm	kg/km	kN	Ω/km
Kingbird	340.27	18/1	4.78	4.78	23.88	66.7	1006	0.08705
Rook	364.07	24/7	4.14	2.76	24.81	97.9	1168	0.08484
Grosbeak	374.71	26/7	3.97	3.09	25.16	110.3	1238	0.08372
Scoter	397.45	30/7	3.70	3.70	25.89	130.3	1391	0.08158
Egret	395.80	30/19	3.70	2.22	25.89	133.0	1381	0.08176
Flamingo	381.72	24/7	4.23	2.82	25.40	102.8	1225	0.08092
Gannet	392.67	26/7	4.07	3.16	25.75	115.7	1298	0.07989
Starling	421.62	26/7	4.21	3.28	26.69	122.3	1393	0.07441
Redwing	444.94	30/19	3.92	2.35	27.45	148.6	1552	0.07272
Cuckoo	455.01	24/7	4.62	3.08	27.73	122.3	1460	0.06789
Drake	468.61	26/7	4.44	3.45	28.13	135.7	1549	0.06695
Tern	430.58	45/7	3.38	2.25	27.01	95.6	1298	0.06962
Condor	454.79	54/7	3.08	3.08	27.73	123.7	1458	0.06792
Mallary	494.79	30/19	4.14	2.48	28.95	165.0	1726	0.0654
Ruddy	487.44	45/7	3.59	2.40	28.74	106.8	1470	0.0615
Canary	515.16	54/7	3.28	3.28	29.51	137.9	1653	0.05996
Rail	516.83	45/7	3.70	2.47	29.59	113.0	1558	0.058
Cardinal	545.93	54/7	3.38	3.38	30.38	146.3	1752	0.05658
Ortolan	559.54	45/7	3.85	2.57	30.78	120.5	1688	0.05358
Curlew	591.20	54/7	3.51	3.51	31.62	158.4	1896	0.05225
Bluejay	603.22	45/7	4.00	2.66	31.97	130.3	1819	0.0497
Finch	635.77	54/19	3.65	2.19	32.83	166.8	2043	0.04875
Bunting	646.09	45/7	4.14	2.76	33.08	139.2	1948	0.0464
Grackle	680.81	54/19	3.77	2.27	33.98	178.8	2188	0.04553
Bittern	688.90	45/7	4.27	2.85	34.16	148.6	2078	0.04352
Pheasant	726.38	54/19	3.90	2.34	35.09	188.6	2333	0.04267
Dipper	732.12	45/7	4.40	2.93	35.21	157.9	2207	0.04095
Martin	771.51	54/19	4.02	2.41	36.16	200.6	2478	0.04017
Bobolink	775.04	45/7	4.53	3.02	36.23	167.3	2336	0.03868
Plover	817.10	54/19	4.14	2.48	37.22	212.2	2625	0.03793
Nuthatch	818.16	45/7	4.65	3.10	37.22	176.6	2467	0.03664
Parrot	861.79	54/19	4.25	2.55	38.22	223.7	2768	0.03596
Lapwing	861.60	45/7	4.78	3.18	38.20	185.9	2598	0.03479
Falcon	907.86	54/19	4.36	2.62	39.23	235.8	2917	0.03414

Note: All the data set out in this catalogue is given for information and ZTT shall not be held responsible for its accuracy.

ACSR\AW

Conductor Data Sheet

All Aluminum Conductor Alloy Reinforced–ACAR

Conductor Size AWG or kcmil	Cross Section	Stranding Design		Diameter of Single Wire	Nominal O.D. of Conductor	Nominal Weight	Rated Strength	Maximum DC Resistance at 20˚C
	mm^2	Aluminum	Aluminum-alloy	mm	mm	kg/km	kN	Ω/km
250	127	12	7	2.91	14.58	348	27.6	0.2394
300	152	12	7	3.19	15.95	418	32.8	0.1993
350	177	12	7	3.45	17.22	487	37.4	0.1710
400	203	12	7	3.69	18.44	556	42.4	0.1496
450	228	12	7	3.91	19.56	626	47.2	0.1330
500	253	18	19	2.95	20.65	695	58.8	0.1225
500	253	24	13	2.95	20.65	696	52.9	0.1195
500	253	30	7	2.95	20.65	696	48.0	0.1167
500	253	12	7	4.12	20.60	696	52.4	0.1197
503.6	255	15	4	4.14	20.68	703	46.5	0.1161
550	279	18	19	3.10	21.67	765	64.3	0.1113
550	279	24	13	3.10	21.67	765	57.6	0.1086
550	279	30	7	3.10	21.67	766	52.1	0.1060
550	279	12	7	4.32	21.59	764	57.6	0.1089
600	304	18	19	3.23	22.63	833	70.1	0.1020
600	304	24	13	3.23	22.63	834	62.8	0.09955
600	304	30	7	3.23	22.63	836	56.8	0.09719
600	304	12	7	4.51	22.56	835	62.9	0.09975
650	329	18	19	3.37	23.56	903	73.8	0.09418
650	329	18	19	3.37	23.57	903	73.8	0.09418
650	329	24	13	3.37	23.57	905	66.6	0.09189
650	329	30	7	3.37	23.57	906	60.8	0.08972
653.1	331	12	7	4.71	23.55	911	68.5	0.09163
700	354	18	19	3.49	24.43	973	79.5	0.08745
700	354	24	13	3.49	24.43	973	71.8	0.08533

Note: All the data set out in this catalogue is given for information and ZTT shall not be held responsible for its accuracy.

ACAR

Conductor Data Sheet

All Aluminum Conductor Alloy Reinforced–ACAR

Conductor Size AWG or kcmil	Cross Section	Stranding Design		Diameter of Single Wire	Nominal O.D. of Conductor	Nominal Weight	Rated Strength	Maximum DC Resistance at 20˚C
	mm^2	Aluminum	Aluminum-alloy	mm	mm	kg/km	kN	Ω/km
700	354	30	7	3.49	24.43	975	65.5	0.08331
739.8	375	18	19	3.59	25.14	1031	83.5	0.08270
750	380	18	19	3.62	25.32	1043	84.7	0.08154
750	380	24	13	3.62	25.32	1045	76.2	0.07956
750	380	30	7	3.62	25.32	1045	69.2	0.07767
800	405	18	19	3.73	26.14	1113	90.3	0.07651
800	405	24	13	3.73	26.14	1113	81.2	0.07466
800	405	30	7	3.73	26.14	1114	73.8	0.07289
850	431	18	19	3.85	26.95	1183	95.3	0.07194
850	431	24	13	3.85	26.95	1184	85.4	0.07020
850	431	30	7	3.85	26.95	1185	77.3	0.06853
853.7	433	24	13	3.86	27.01	1191	85.8	0.06992
853.7	433	30	7	3.86	27.01	1192	77.6	0.06826
900	456	18	19	3.96	27.74	1253	101.0	0.06794
900	456	24	13	3.96	27.74	1253	90.5	0.06629
900	456	30	7	3.96	27.74	1254	81.9	0.06472
927.2	470	24	13	4.02	28.15	1294	93.2	0.06438
950	481	24	13	4.07	28.47	1321	95.4	0.06286
950	481	30	7	4.07	28.47	1323	86.4	0.06137
1000	506	48	13	3.25	29.26	1393	94.1	0.05852
1000	506	54	7	3.25	29.26	1393	87.9	0.05768
1000	507	18	19	4.18	29.24	1391	112.0	0.06118
1000	507	24	13	4.18	29.24	1393	101.0	0.05969
1000	507	30	7	4.18	29.24	1393	91.0	0.05828
1024.5	519	24	13	4.23	29.59	1430	103.0	0.05826

Note: All the data set out in this catalogue is given for information and ZTT shall not be held responsible for its accuracy.

Conductor Data Sheet

All Aluminum Conductor Alloy Reinforced–ACAR

Conductor Size AWG or kcmil	Cross Section	Stranding Design		Diameter of Single Wire	Nominal O.D. of Conductor	Nominal Weight	Rated Strength	Maximum DC Resistance at 20˚C
	mm^2	Aluminum	Aluminum-alloy	mm	mm	kg/km	kN	Ω/km
1024.5	519	30	7	4.23	29.59	1506	93.2	0.05688
1080.6	548	18	19	4.34	30.39	1506	121.0	0.05661
1080.6	548	24	13	4.34	30.39	1508	109.0	0.05524
1100	557	42	19	3.41	30.71	1531	110	0.05393
1100	557	48	13	3.41	30.71	1533	102	0.05315
1100	557	54	7	3.41	30.71	1534	95.9	0.05240
1100	557	18	19	4.38	30.66	1530	123	0.05563
1100	557	24	13	4.38	30.66	1531	111	0.05428
1100	557	30	7	4.38	30.66	1533	101	0.05299
1109	562	24	13	4.40	30.78	1547	111	0.05384
1109	562	30	7	4.40	30.78	1549	101	0.05257
1172	594	18	19	4.52	31.64	1634	131	0.05218
1172	594	30	7	4.52	31.64	1637	107	0.04971
1198	607	24	13	4.57	31.99	1672	120	0.04985
1198	607	30	7	4.57	31.99	1673	109	0.04867
1200	608	54	7	3.56	32.02	608	104	0.04734
1200	608	18	19	4.57	32.03	1669	135	0.05097
1200	608	24	13	4.57	32.02	1671	121	0.04973
1200	608	30	7	4.57	32.03	1672	109	0.04856
1250	633	42	19	3.63	32.72	1739	124	0.04750
1250	633	48	13	3.63	32.72	1740	114	0.04682
1250	633	54	7	3.63	32.72	1741	107	0.04615
1250	633	18	19	4.67	32.68	1738	140	0.04894
1250	633	24	13	4.67	32.68	1741	126	0.04776

Note: All the data set out in this catalogue is given for information and ZTT shall not be held responsible for its accuracy.

Conductor Data Sheet

All Aluminum Conductor Alloy Reinforced–ACAR

Conductor Size AWG or kcmil	Cross Section	Stranding Design		Diameter of Single Wire	Nominal O.D. of Conductor	Nominal Weight	Rated Strength	Maximum DC Resistance at 20°C
	mm^2	Aluminum	Aluminum-alloy	mm	mm	kg/km	kN	Ω/km
1250	633	30	7	4.67	32.68	1741	114	0.04662
1277	647	42	19	3.68	33.08	1782	126	0.04646
1277	647	54	7	3.68	33.08	1784	110	0.04514
1300	659	42	19	3.71	33.38	1811	129	0.04563
1300	659	48	13	3.71	33.38	1811	119	0.04498
1300	659	54	7	3.71	33.38	1812	112	0.04434
1300	658	18	19	4.76	33.32	1808	146	0.04708
1300	658	24	13	4.76	33.32	1809	131	0.04594
1300	658	30	7	4.76	33.32	1810	118	0.04485
1361.5	690	54	7	3.79	34.15	1902	117	0.04234
1400	709	42	19	3.85	34.65	1311	137	0.04238
1400	709	48	13	3.85	34.65	1952	126	0.04177
1400	709	54	7	3.85	34.65	1952	118	0.04118
1500	760	42	19	3.98	35.84	2089	147	0.03956
1500	760	48	13	3.98	35.84	2090	135	0.03899
1500	760	54	7	3.98	35.84	2090	127	0.03844
1534.4	777	42	19	4.03	36.26	2141	150	0.03867
1600	811	33	28	4.11	37.03	2228	160	0.03790
1600	811	42	19	4.11	37.03	2229	157	0.03707
1600	811	48	13	4.11	37.03	2231	145	0.03653
1600	811	54	7	4.11	37.03	2231	135	0.03601
1700	861	42	19	4.24	38.15	2367	166	0.03492
1700	861	48	13	4.24	38.15	2369	153	0.03442
1700	861	54	7	4.24	38.15	2369	143	0.03393
1750	887	42	19	4.30	38.74	2438	171	0.03390
1750	887	48	13	4.30	38.74	2439	158	0.03341

Note: All the data set out in this catalogue is given for information and ZTT shall not be held responsible for its accuracy.

Conductor Data Sheet

All Aluminum Conductor Alloy Reinforced–ACAR

Conductor Size AWG or kcmil	Cross Section	Stranding Design		Diameter of Single Wire	Nominal O.D. of Conductor	Nominal Weight	Rated Strength	Maximum DC Resistance at 20°C
	mm^2	Aluminum	Aluminum-alloy	mm	mm	kg/km	kN	Ω/km
1750	887	54	7	4.30	38.74	2439	148	0.03293
1798	911	42	19	4.36	39.25	2509	176	0.03300
1800	912	42	19	4.36	39.27	2507	176	0.03296
1800	912	48	13	4.36	39.27	2508	163	0.03248
1800	912	54	7	4.36	39.27	2510	152	0.03202
1900	963	42	19	4.48	40.34	2646	186	0.03123
1900	963	48	13	4.48	40.34	2648	172	0.03078
1900	963	54	7	4.48	40.34	2649	160	0.03034
1933	979	42	19	4.52	40.69	2698	189	0.03070
2000	1013	54	37	3.76	41.40	2784	207	0.03011
2000	1013	72	19	3.76	41.40	2785	182	0.02924
2338	1185	42	19	4.97	44.75	3295	229	0.02537
2338	1185	48	13	4.97	44.75	3297	211	0.02501
2493	1263	54	37	4.20	46.25	3512	256	0.02415
2493	1263	72	19	4.20	46.25	3515	223	0.02345
2500	1266	54	37	4.21	46.30	3508	257	0.02409
2500	1266	72	19	4.21	46.30	3515	225	0.02339
2750	1393	54	37	4.41	48.56	3867	282	0.02190
2750	1393	72	19	4.41	48.56	3871	247	0.02126
3000	1521	54	37	4.61	50.75	4218	308	0.02006
3000	1521	72	19	4.61	50.75	4221	270	0.01947

Note: All the data set out in this catalogue is given for information and ZTT shall not be held responsible for its accuracy.

Conductor Data Sheet

Aluminum Alloy Conductors Steel Reinforced–AACSR

Cross Section	Nominal Area, mm²		Stranding Design Aluminum-alloy/Steel	Diameter of Alloy	Diameter of Steel	Nominal O.D. of Conductor	Nominal Weight	Rated Strength	Maximum DC Resistance at 20℃
mm²	Alloy	Steel		mm	mm	mm	kg/km	kN	Ω/km
163	140	23	26/7	2.62	2.04	16.6	565	75	0.2401
173	140	33	30/7	2.44	2.44	17.1	643	87.4	0.2406
186	160	26	26/7	2.8	2.18	17.7	646	85.6	0.2103
198	160	38	30/7	2.61	2.61	18.3	736	106	0.2102
209	180	29	26/7	2.97	2.31	18.8	731	95.1	0.1869
222	180	42	30/7	2.76	2.76	19.3	823	112	0.188
232	200	32	26/7	3.13	2.43	19.8	805	106	0.1683
247	200	47	30/7	2.91	2.91	20.4	915	124	0.1691
260	224	36	26/7	3.31	2.57	21	901	118	0.1505
276	224	52	30/7	3.08	3.08	21.6	1025	139	0.151
291	250	41	26/7	3.5	2.72	22.2	1008	129	0.1346
308	250	58	30/7	3.26	3.26	22.8	1149	156	0.1348
326	280	46	26/7	3.7	2.88	23.4	1127	144	0.1204
345	280	65	30/7	3.45	3.45	24.2	1286	171	0.1203
367	315	52	26/7	3.93	3.06	24.9	1272	163	0.1067
387	315	72	30/19	3.66	2.2	25.6	1438	190	0.1069
413	355	58	26/7	4.17	3.24	26.4	1430	183	0.0948
436	355	81	30/19	3.88	2.33	27.2	1614	211	0.09513
465	400	65	26/7	4.43	3.45	28.1	1616	207	0.084
491	400	91	30/19	4.12	2.47	28.8	1818	237	0.08437
509	450	59	54/19	3.26	1.98	29.5	1706	215	0.07505
563	500	63	54/19	3.43	2.06	30.9	1878	229	0.06779
631	560	71	54/19	3.63	2.18	32.7	2104	257	0.06053
710	630	80	54/19	3.85	2.31	34.6	2365	286	0.05381
800	710	90	54/19	4.09	2.45	36.8	2664	322	0.04768
901	800	101	54/19	4.34	2.6	39	3003	363	0.04234
973	900	73	84/19	3.69	2.21	40.6	3060	355	0.03766
1081	1000	81	84/19	3.89	2.33	42.8	3400	391	0.03388
1211	1120	91	84/19	4.12	2.47	45.3	3816	439	0.03021
1352	1250	102	84/19	4.35	2.61	47.8	4255	490	0.02710

Note: All the data set out in this catalogue is given for information and ZTT shall not be held responsible for its accuracy.

AACSR

References

Overseas References

Country	Total Length
USA	2000 km
Finland	2130 km
Chile	5300 km
Peru	4500 km
Thailand	5200 km
Malaysia	8200 km
Kenya	1700 km
Nigeria	6000 km
Saudi Arabia	2100 km
Indonesia	6200 km

Outstanding Projects

High voltage

China 1000kV

Southeast Shanxi Province Nanyang to Jingmen AC UHV test example project

China ±800kV

Xiangjiaba to Shanghai DC UHV power transmission example project

China ±800kV

Jinping to Sunan DC UHV power transmission project

China ±800kV

Yunnan to Guangdong DC UHV power transmission project

Large span

China ±660kV

Ningdong to Shandong DC power transmission project (Yellow River large span)

China ±500kV

Baoji converter station to Deyang converter station DC power transmission project (Pei River large span)

China 220kV

Shenzhen Qianwan Power Plant Project (Cross sea)

China

Shuicheng transformer substation to Liupanshui Weining transformer substation power transmission project (Cross gorge)