



• Application

ACAR conductors find extensive use in various applications, primarily in long-distance power transmission for overhead lines and power grid reconstruction projects. Their robust construction and advantageous characteristics make them indispensable in modern electrical infrastructure projects.

• Characteristics

Enhanced Conductivity: ACAR conductors exhibit excellent conductivity, making them highly efficient in transmitting electrical power over long distances. In comparison to traditional ACSR conductors, ACAR's aluminum alloy core significantly reduces DC resistance, thereby enhancing conductivity under similar cross-sectional application conditions.

Superior Performance: The simplicity, safety, and reliability of ACAR conductor structures are noteworthy. When compared to conventional ACSR conductors, ACAR offers several advantages, including reduced energy loss, increased transmission capacity, superior corrosion resistance, prolonged lifespan, and decreased annual operational costs.

• Construction

ACAR conductors feature a straightforward yet robust construction. The inner layer comprises high-strength aluminum alloy wires, ensuring durability and conductivity. Surrounding this core is an outer layer crafted from duralumin, intricately stranded in a concentric configuration. This construction design optimizes the conductor's performance and longevity, making it an ideal choice for demanding electrical transmission applications.

• Specifications

-IEC 61089 Concentric-lay-stranded Aluminum Conductors, Aluminum-alloy Reinforced

• 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	A1/A2 Conductor Type									
	Diameter		Number of Wires		Calculated Cross Section Area			Nominal Weight	Rated Strength	Max.D.C. Resistance at 20°C
	Wire	Cond.	Al.	Alloy	Al.	Alloy	Total			
mm ²	mm	mm	-	-	mm ²	mm ²	mm ²	kg/km	kN	Ω/km
16	1.76	5.28	4	3	9.73	7.30	17.0	46.6	3.85	1.7896
25	2.20	6.6	4	3	15.2	11.4	26.6	72.8	5.93	1.1453
40	2.78	8.35	4	3	24.3	18.3	42.6	116.5	9.25	0.7158
63	3.49	10.5	4	3	38.3	28.7	67.1	183.5	14.38	0.4545
100	4.40	13.2	4	3	60.8	45.6	106	291.2	22.52	0.2863
125	2.97	14.9	12	7	83.3	48.6	132	362.7	27.79	0.2302
160	3.36	16.8	12	7	107	62.2	169	464.2	35.04	0.1798
200	3.76	18.8	12	7	133	77.8	211	580.3	43.13	0.1439
250	4.21	21.0	12	7	167	97.2	264	725.3	53.92	0.1151
250	3.04	21.3	18	19	131	138	269	742.2	60.39	0.1154
315	3.34	23.4	30	7	263	61.3	324	892.6	60.52	0.0916
315	3.42	23.9	18	19	165	174	339	835.1	76.09	0.0916
400	3.76	26.3	30	7	334	77.8	411	1133.5	75.19	0.0721
400	3.85	27.0	18	19	210	221	431	1187.5	95.58	0.0721
450	3.99	27.9	30	7	375	87.6	463	1275.2	84.59	0.0641
450	4.08	28.6	18	19	236	249	485	1335.9	107.52	0.0641
500	4.21	29.4	30	7	417	97.3	514	1416.9	93.98	0.0577
500	4.31	30.1	18	19	262	277	539	1484.3	119.47	0.0577
560	4.45	31.2	30	7	467	109	576	1586.9	105.26	0.0515
560	3.45	31.0	54	7	504	65.4	570	1571.9	101.54	0.0516
630	3.71	33.4	42	19	454	205	660	1820.0	130.25	0.0458
630	3.79	34.1	24	37	271	417	688	1897.5	160.19	0.0458
710	3.94	35.5	42	19	512	232	743	2051.2	146.78	0.0407
710	4.02	36.2	24	37	305	470	775	2138.4	180.53	0.0407
800	4.18	37.6	42	19	577	261	828	2311.2	165.39	0.0361
800	4.27	38.4	24	37	344	530	873	2409.5	203.41	0.0361
900	4.43	39.9	42	19	649	294	942	2600.1	186.06	0.0321
900	3.66	40.2	54	37	567	388	955	2638.4	199.54	0.0321
1000	3.80	41.8	72	19	816	215	1032	2849.1	190.94	0.0289
1000	3.85	42.4	54	37	630	432	1061	2931.6	221.71	0.0289
1120	4.02	44.2	72	19	914	241	1155	3191.0	213.85	0.0258
1120	4.08	44.9	54	37	705	483	1189	3284.4	248.32	0.0258
1250	4.25	46.7	72	19	1020	269	1289	3561.4	238.68	0.0231
1250	4.31	47.4	54	37	787	539	1327	3664.5	277.14	0.0231
1400	4.50	49.4	72	19	1143	302	1444	3988.8	267.32	0.0207

● Technical Parameters

A1/A3 Conductor Type										
Nominal Cross Section Area	Diameter		Number of Wires		Calculated Cross Section Area			Nominal Weight	Rated Strength	Max.D.C. Resistance at 20°C
	Wire	Cond.	Al.	Alloy	Al.	Alloy	Total			
mm ²	mm	mm	-	-	mm ²	mm ²	mm ²	kg/km	kN	Ω/km
16	1.76	5.29	4	3	9.78	7.33	17.1	46.8	4.07	1.7896
25	2.21	6.62	4	3	15.3	11.5	26.7	73.1	6.29	1.1453
40	2.79	8.37	4	3	24.4	18.3	42.8	117.0	9.82	0.7158
63	3.50	10.5	4	3	38.5	28.9	67.4	184.3	14.80	0.4545
100	4.41	13.2	4	3	61.1	45.8	107	292.5	23.49	0.2863
125	2.98	14.9	12	7	83.7	48.8	132	364.1	29.29	0.2302
160	3.37	16.9	12	7	107	62.5	170	466.0	36.95	0.1798
200	3.77	18.8	12	7	134	78.1	212	582.5	44.78	0.1439
250	4.21	21.1	12	7	167	97.6	265	728.1	55.98	0.1151
250	3.05	21.4	18	19	132	139	271	746.0	64.67	0.1154
315	3.34	23.4	30	7	263	61.4	325	894.4	62.40	0.0916
315	3.43	24.0	18	19	166	175	341	940.0	81.48	0.0916
400	3.77	26.4	30	7	334	78.0	412	1135.8	76.82	0.0721
400	3.86	27.0	18	19	211	222	433	1193.7	100.30	0.0721
450	3.99	28.0	30	7	376	87.7	464	1277.8	86.42	0.0641
450	4.10	28.7	18	19	237	250	487	1342.9	112.84	0.0641
500	4.21	29.5	30	7	418	97.5	515	1419.8	96.03	0.0577
500	4.32	30.2	18	19	263	278	542	1492.1	125.38	0.0577
560	4.46	31.2	30	7	468	109	577	1590.1	107.55	0.0515
560	3.45	31.1	54	7	505	65.5	570	1573.9	103.53	0.0516
630	3.72	33.4	42	19	456	206	662	1826.0	134.59	0.0458
630	3.80	34.2	24	37	272	420	692	1909.0	169.14	0.0458
710	3.95	35.5	42	19	514	232	746	2057.8	151.68	0.0407
710	4.03	36.3	24	37	307	473	780	2151.4	190.61	0.0407
800	4.19	37.7	42	19	579	262	840	2318.7	170.90	0.0361
800	4.28	38.5	24	37	346	533	879	2424.2	214.78	0.0361
900	4.44	40.0	42	19	651	294	945	2608.5	192.27	0.0321
900	3.66	40.3	54	37	569	390	959	2649.5	207.79	0.0321
1000	3.80	41.8	72	19	818	216	1034	2855.4	195.47	0.0289
1000	3.86	42.5	54	37	632	433	1066	2943.9	230.88	0.0289
1120	4.02	44.3	72	19	916	242	1158	3198.1	218.92	0.0258
1120	4.09	45.0	54	37	708	485	1194	3297.2	258.58	0.0258
1250	4.25	46.8	72	19	1022	270	1292	3569.3	244.33	0.0231
1250	4.32	47.5	54	37	791	542	1332	3679.9	288.60	0.0231
1400	4.50	49.5	72	19	1145	302	1447	3997.6	273.65	0.0207