



• Application

The ABNT NBR 11873 Medium Voltage Ecological Cable, known as "cable ecologico media tension" in Spanish, serves as a versatile solution for transmission and distribution lines in both wooded and industrial areas. With variants compatible for service voltages of 15 kV and 25 kV, this cable type finds widespread application across various sectors. It is extensively used in transmission lines for efficient power transfer over medium distances, distribution networks to ensure reliable electricity supply to consumers, industrial installations for connecting machinery and equipment, commercial buildings for powering diverse facilities, residential developments for supplying electricity to homes, renewable energy projects to connect power generation sources to the grid, and construction sites for temporary power supply during construction activities.

• Performance

Maximum Operating Voltage: Ranges from 15 kV to 35 kV, making it suitable for a wide range of applications.

Maximum Operating Temperature: Rated for either 75°C or 90°C, ensuring reliable performance even under demanding conditions.

• Construction

This cable type AAC and ACSR are constructed with 1350-H19 alloy wires, arranged concentrically. Initially, a layer of semiconductor material is applied to the metallic conductor for enhanced electrical performance. Subsequently, it is insulated with a uniform layer of cross-linked polyethylene (XLPE), providing excellent protection against environmental factors. The cables are supplied in reels of varying lengths, tailored to meet the specific requirements of the customer.

• Specification

-ASTM B230: Aluminum wires, alloy 1350-H19 for electrical purposes.

-ASTM B400: Standard Specification for Compact Round Concentric-Lay-Stranded Aluminum 1350 Conductors

-ASTM B231: Type 1350-H19 aluminum stranded conductors in concentric layers.

-ASTM B232: Aluminum Stranded Conductor Steel Reinforced (ACSR)

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-ICEA S-121-733: Tree Wire and Messenger Supported Spacer Cable

-ABNT EB-2173: Conductors covered with XLPE cross-linked polyethylene, for use in 15 and 25 kV wooded areas.

-ABNT/NBR 11873: Cables covered with XLPE polymeric material for compacted aerial distribution networks in voltages from 13.8 kV to 34.5 kV.

• 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 Rheinland 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	Nominal Cross Section Area	Phase Conductor No. of Threads	Wire Dia.	Conductor Dia.	Semiconductor Thickness	Sheath Thickness	Cable Dia.	Approx. Total Weight	Breaking Load	Current Capacity
AWG or kcmil	mm ²	No.	mm	mm	mm	mm	mm	kg/km	kgf	A
Ecological Cable AAC 25 kV										
2	33.62	7	2.474	7.42	0.7	4.1	17.02	274.46	612	175
1/0	53.49	19	1.892	9.46	0.7	4.1	19.06	357.82	980	235
2/0	67.44	19	2.126	10.63	0.7	4.1	20.23	415.17	1212	270
3/0	85.02	19	2.388	11.94	0.7	4.1	21.54	485.06	1500	310
4/0	107.2	19	2.680	13.4	0.7	4.1	23	570.5	1822	355
266.8	135.2	19	3.010	15.05	0.7	4.1	24.65	675.63	2254	410
336.4	170.5	19	3.381	16.91	0.7	4.1	26.51	796.82	2789	485
477	241.7	37	2.884	20.19	0.7	4.1	29.79	1047.85	3941	585
500	253.3	37	2.951	20.66	0.7	4.1	30.26	1087.77	4133	605
Ecological Cable AAC 15 kV										
2	33.62	7	2.474	7.42	0.7	3.1	15.02	228.01	612	175
1/0	53.49	19	1.892	9.46	0.7	3.1	17.06	305.46	980	235
2/0	67.44	19	2.126	10.63	0.7	3.1	18.23	359.41	1212	270
3/0	85.02	19	2.388	11.94	0.7	3.1	19.54	425.5	1500	310
4/0	107.2	19	2.680	13.4	0.7	3.1	21	506.71	1822	355
266.8	135.2	19	3.010	15.05	0.7	3.1	22.65	607.05	2254	410
336.4	170.5	19	3.381	16.91	0.7	3.1	24.51	722.86	2789	485
477	241.7	37	2.884	20.19	0.7	3.1	27.79	964.38	3941	585
500	253.3	37	2.951	20.66	0.7	3.1	28.26	1002.93	4133	605

● Technical Parameters

Size	Nominal Cross Section Area	No. of Threads		Wire Dia.		Conductor Dia.	Semiconductor Thickness	Sheath Thickness	Approx. Cable Dia.	Approx. Total Weight	Breaking Load	Current Capacity
		Al.	Steel	Al.	Steel							
AWG or kcmil	mm ²	No.	No.	mm	mm	mm	mm	mm	mm	kg/km	kgf	A
Ecological Cable ACSR 15 kV												
4	21.15	6	1	2.118	2.118	6.36	0.7	3.1	13.96	206.66	843	135
2	33.62	6	1	2.672	2.672	8.02	0.7	3.1	15.62	280.02	1292	175
1/0	53.49	6	1	3.370	3.370	10.11	0.7	3.1	17.71	390.56	1986	230
2/0	67.43	6	1	3.782	3.782	11.35	0.7	3.1	18.95	465.38	2404	260
3/0	85.01	6	1	4.247	4.247	12.74	0.7	3.1	20.34	557.98	3002	295
4/0	107.2	6	1	4.770	4.770	14.31	0.7	3.1	21.91	672.75	3786	330
266.8	135.19	18	1	3.092	3.092	15.46	0.7	3.1	23.06	671.95	3120	415
266.8	135.19	26	7	2.573	2.000	16.3	0.7	3.1	23.9	798.34	5125	425
336.4	170.45	18	1	3.472	3.472	17.36	0.7	3.1	24.96	812.02	3936	480
336.4	170.45	26	7	2.888	2.250	18.29	0.7	3.1	25.89	970.69	6393	490
397.5	201.41	18	1	3.774	3.774	18.87	0.7	3.1	26.47	933.17	4508	535
397.5	201.41	26	7	3.140	2.440	19.88	0.7	3.1	27.48	1118.43	7393	545
477	241.7	18	1	4.135	4.135	20.68	0.7	3.1	28.28	1089.06	5352	595
477	241.7	26	7	3.439	2.674	21.8	0.7	3.1	29.4	1310.68	8845	610
Ecological Cable ACSR 25 kV												
4	21.15	6	1	2.118	2.118	6.36	0.7	4.1	15.96	250.02	843	135
2	33.62	6	1	2.672	2.672	8.02	0.7	4.1	17.62	328.2	1292	175
1/0	53.49	6	1	3.370	3.370	10.11	0.7	4.1	19.71	444.81	1986	230
2/0	67.43	6	1	3.782	3.782	11.35	0.7	4.1	20.95	523.21	2404	260
3/0	85.01	6	1	4.247	4.247	12.74	0.7	4.1	22.34	619.86	3002	295
4/0	107.2	6	1	4.77	4.770	14.31	0.7	4.1	23.91	739.18	3786	330
266.8	135.19	18	1	3.092	3.092	15.46	0.7	4.1	25.06	741.72	3120	415
266.8	135.19	26	7	2.573	2.000	16.3	0.7	4.1	25.9	870.54	5125	425
336.4	170.45	18	1	3.472	3.472	17.36	0.7	4.1	26.96	887.29	3936	480
336.4	170.45	26	7	2.888	2.250	18.29	0.7	4.1	27.89	1048.66	6393	490
397.5	201.41	18	1	3.774	3.774	18.87	0.7	4.1	28.47	1012.83	4508	535
397.5	201.41	26	7	3.140	2.440	19.88	0.7	4.1	29.48	1201.01	7393	545
477	241.7	18	1	4.135	4.135	20.68	0.7	4.1	30.28	1173.95	5352	595
477	241.7	26	7	3.439	2.674	21.8	0.7	4.1	31.4	1398.83	8845	610