

Multiplex Green

Multiplex-Neutracen Green Aluminum Wire



GENERAL INFORMATION

The Neutracen Multiplex Green are aluminum AAC, ACSR and AAAC type conductors; with a part of the insulation being pure thermoplastic PE and the other part being thermoplastic PE extracted from the sugarcane. The AAC, ACSR or AAAC are helically twisted in different counts over a messenger core either bare or insulated to form a duplex, triplex or tetraplex conductors.

FEATURES

- The cables with thermoplastic UV Polyethylene (PE) are designed for 75°C max.
- The Multiplex Neutracen cables are designed with UV resistance thermoset cross-linked polyethylene (XLPE) insulation capable to operate at 90°C max temperature.
- The Neutracen is design for aerial circuits where the load is mainly carried by the messenger core cable, the core tensile capability depends on the type of conductor: AAC lower tensile and ACSR/AAAC higher tensile for longer spans.
- The ACSR cores are limited by the severe environmental corrosion conditions of high salinity, acidity and humidity. The AAAC is the recommended core option for severe conditions.
- The Neutracen multiplex have several permutations among cables types, insulation, cores and cables flexibility. They are identified with the cable code name.

CERTIFICATIONS AND DESIGN STANDARDS

Certifications: CIDER #03533.

Standards: ASTM B230, B231, B232, B398, B399 and B498. ANSI/ICEA S-76-474 and S-95-658.

CABLE DESIGN

Conductor material	Aluminium
Core insulation material	Polyethylene (PE)

INSTALLATION DETAILS

Application	Power Distribution
Outdoor installation	Yes
Underground installation	No
Suitable as installation cable	Yes

PHYSICAL & CHEMICAL PROPERTIES

Flame retardant	No
Oil resistant	No
Moisture resistance	Yes

SPECIFIC APPLICATIONS

- The Neutracen multiplex conductors are designed to connect aerial power distribution networks to final users, from the secondary network to the single user service meter.
- To connect secondary aerial power distribution circuits in long distance networks the supports distance will depend on the messenger core used.
- The AAAC or ACSR cables can be used to support additional circuit conductors.
- The Neutracen cables are design for external aerial applications, NOT allowed in breaker boxes. Aerial to duct transition join must be installed with correct fixtures.

DUPLEX AAC

The conductor operating amperage is defined by the installation condition and operating temperatures identified. See Table 9 on Ampacities for Aluminum & ACSR Overhead Electrical Conductors issued by the Aluminum Association. Note: The values given may vary according to the manufacturing tolerances.

Code	1350 Al Conductor						1350 Al Messenger or Neutral				Full Conductor		Carbon footprint
	Gauge	Wires	Diameter		Insulation Thickness		Gauge	Wires	Diameter		Insulation Thickness	Weight	kg CO ₂ eq avoided in the atmosphere
	AWG/kcmil	#	in	mm	in	mm	AWG/kcmil	#	in	mm	mm	kg/km	For 1 km of cable
Collie	6	7	0,183	4,66	0,045	1,143	6	7	0,183	4,66	13,40	98	21,70
Spaniel	4	7	0,231	5,88	0,045	1,143	4	7	0,231	5,88	15,74	148	27,16
Doberman	2	7	0,292	7,42	0,045	1,143	2	7	0,292	7,42	18,68	255	34,52
Basset	1/0	7	0,369	9,36	0,060	1,524	1/0	7	0,369	9,36	23,89	362	58,66

DUPLEX AAAC

Code	1350 Al Conductor						6201 Al Messenger or Neutral				Full Conductor		Carbon footprint
	Gauge	Wires	Diameter		Insulation Thickness		Gauge	Wires	Diameter		Insulation Thickness	Weight	kg CO ₂ eq avoided in the atmosphere
	AWG/kcmil	#	in	mm	in	mm	AWG/kcmil	#	in	mm	mm	kg/km	For 1 km of cable
Vizla	6	7	0,183	4,66	0,045	1,143	30,58	7	0,198	5,04	13,40	104	21,70
Whippet	4	7	0,231	5,88	0,045	1,143	48,69	7	0,250	6,36	15,74	157	27,16
Schnauzer	2	7	0,292	7,42	0,045	1,143	77,47	7	0,316	8,02	18,68	241	34,52
Afghan	1/0	7	0,369	9,36	0,060	1,524	123,3	7	0,398	10,11	23,89	386	58,66

DUPLEX ACSR

Code	1350 Al Conductor						ACSR Al Messenger or Neutral				Full Conductor		Carbon footprint
	Gauge	Wires	Diameter		Insulation Thickness		Gauge	Wires	Diameter		Insulation Thickness	Weight	kg CO ₂ eq avoided in the atmosphere
	AWG/kcmil	#	in	mm	in	mm	AWG/kcmil	#	in	mm	mm	kg/km	For 1 km of cable
Shepherd	6	7	0,183	4,66	0,045	1,143	6	6/1	0,198	5,03	12,1	115	21,70
Terrier	4	7	0,231	5,88	0,045	1,143	4	6/1	0,250	6,35	14,63	175	27,16
Chow	2	7	0,292	7,42	0,045	1,143	2	6/1	0,316	8,01	17,85	268	34,52
Bloodhound	1/0	7	0,369	9,36	0,060	1,524	1/0	6/1	0,398	10,11	22,67	430	58,66

TRIPLEX AAC

Code	1350 Al Conductor						1350 Al Messenger or Neutral				Full Conductor		Carbon Footprint
	Gauge	Wires	Diameter		Insulation Thickness		Gauge	Wires	Diameter		Insulation Thickness	Weight	kg CO ₂ eq avoided in the atmosphere
	AWG/kcmil	#	in	mm	in	mm	AWG/kcmil	#	in	mm	mm	kg/km	For 1 km of cable
Patella	6	7	0,183	4,66	0,045	1,143	6	7	0,183	4,66	15,27	159	43,39
Oyster	4	7	0,231	5,88	0,045	1,143	4	7	0,231	5,88	17,88	237	54,33
Clam	2	7	0,292	7,42	0,045	1,143	2	7	0,292	7,42	21,21	358	69,04
Murex	1/0	7	0,369	9,36	0,060	1,524	1/0	7	0,369	9,36	27,11	576	120,95
Nassa	2/0	7	0,414	10,51	0,060	1,524	2/0	7	0,414	10,51	29,64	710	132,74
Quahog	3/0	7	0,465	11,80	0,080	2,032	3/0	7	0,465	11,80	33,64	906	150,78
Coquina	4/0	7	0,522	13,25	0,060	1,524	4/0	7	0,522	13,25	35,55	1089	177,27
Purpura	1/0	19	0,372	9,46	0,060	1,524	1/0	7	0,369	9,36	27,37	570	115,02
Trophon	2/0	19	0,419	10,63	0,060	1,524	2/0	7	0,414	10,51	29,89	702	125,36
Ione	3/0	19	0,470	11,94	0,060	1,524	3/0	7	0,465	11,80	31,97	896	141,33
Apus	4/0	19	0,528	13,40	0,060	1,524	4/0	7	0,522	13,25	31,14	1105	159,87
Chiton	266,8	19	0,593	15,05	0,080	2,032	266,8	19	0,593	15,05	40,74	1364	181,42
Nannynose	336,4	19	0,665	16,90	0,080	2,032	336,4	19	0,665	16,90	44,76	1694	258,20

TRIPLEX AAAC

Code	1350 Al Conductor						6210 Al Messenger or Neutral				Full Conductor		Carbon Footprint
	Gauge	Wires	Diameter		Insulation Thickness		Gauge	Wires	Diameter		Insulation Thickness	Weight	kg CO ₂ eq avoided in the atmosphere
	AWG/kcmil	#	in	mm	in	mm	AWG/kcmil	#	in	mm	mm	kg/km	For 1 km of cable
Barnacles	4	7	0,231	5,88	0,045	1,143	48,69	7	0,250	6,36	17,88	247	54,33

TRIPLEX ACSR

Code	1350 Al Conductor						ACSR Al Messenger or Neutral				Full Conductor		Carbon footprint
	Gauge	Wires	Diameter		Insulation Thickness		Gauge	Wires	Diameter		Insulation Thickness	Weight	kg CO2 eq avoided in the atmosphere
	AWG/kcmil	#	in	mm	in	mm	AWG/kcmil	#	in	mm	mm	kg/km	For 1 km of cable
Voluta	6	7	0,183	4,66	0,045	1,143	6	6/1	0,198	5,03	15,27	170	43,39
Periwinkle	4	7	0,231	5,88	0,045	1,143	4	6/1	0,250	6,35	17,88	264	54,33
Cockle	2	7	0,292	7,42	0,045	1,143	4	6/1	0,250	6,35	21,21	351	69,04
Conch	2	7	0,292	7,42	0,045	1,143	2	6/1	0,316	8,01	21,21	401	69,04
Janthina	1/0	7	0,369	9,36	0,060	1,524	2	6/1	0,316	8,01	27,11	564	120,95
Neritina	1/0	7	0,369	9,36	0,060	1,524	1/0	6/1	0,398	10,11	27,11	644	120,95
Cenia	1/0	19	0,372	9,46	0,060	1,524	1/0	6/1	0,398	10,11	27,37	638	115,02
Clio	2/0	19	0,419	10,63	0,060	1,524	1	6/1	0,354	9,00	29,89	688	125,36
Mursia	3/0	19	0,470	11,94	0,060	1,524	1/0	6/1	0,398	10,11	32,70	978	141,33
Cerapus	4/0	19	0,528	13,40	0,060	1,524	2/0	6/1	0,447	11,35	35,88	1082	159,87

CUADRUPLEX AAC

Code	1350 Al Conductor						1350 Al Messenger or Neutral				Full Conductor		Carbon footprint
	Gauge	Wires	Diameter		Insulation Thickness		Gauge	Wires	Diameter		Insulation Thickness	Weight	kg CO2 eq avoided in the atmosphere
	AWG/kcmil	#	in	mm	in	mm	AWG/kcmil	#	in	mm	mm	kg/km	For 1 km of cable
Pinto	4	7	0,231	5,88	0,045	1,143	4	7	0,231	5,88	19,95	326	81,49
Mustang	2	7	0,292	7,42	0,045	1,143	2	7	0,292	7,42	23,67	491	103,56
Libyan	1/0	7	0,369	9,36	0,060	1,524	1/0	7	0,369	9,36	30,25	790	175,97
Mongolian	3/0	7	0,414	10,51	0,060	1,524	2/0	7	0,414	10,51	33,07	927	194,97
		7	0,465	11,80	0,060	1,524	3/0	7	0,465	11,80	36,13	1201	226,17

CUADRUPLEX AAAC

Code	1350 Al Conductor						6201 Al Messenger or Neutral				Full Conductor		Carbon footprint
	Gauge	Wires	Diameter		Insulation Thickness		Gauge	Wires	Diameter		Insulation Thickness	Weight	kg CO ₂ eq avoided in the atmosphere
	AWG/kcmil	#	in	mm	in	mm	AWG/kcmil	#	in	mm	mm	kg/km	For 1 km of cable
Fench-Coach	6	7	0,183	4,66	0,045	1,143	30,58	7	0,198	5,04	17,04	226	65,09
Arabian	4	7	0,231	5,88	0,045	1,143	48,69	7	0,250	6,36	19,95	336	81,49
Belgian	2	7	0,292	7,42	0,045	1,143	77,47	7	0,316	8,02	23,67	506	103,56
Shetland	1/0	19	0,372	9,46	0,060	1,524	123,3	7	0,398	10,11	30,53	809	172,53
Thoroughbred	2/0	19	0,419	10,63	0,060	1,524	155,4	7	0,447	11,35	33,35	992	188,04
Trotter	3/0	19	0,470	11,94	0,060	1,524	195,7	7	0,502	12,74	36,49	1224	211,99
Walking	4/0	19	0,528	13,40	0,060	1,524	246,9	7	0,563	14,31	40,03	1514	239,81

CUADRUPLEX ACSR

Code	1350 Al Conductor						ACSR Al Messenger or Neutral				Full Conductor		Carbon Footprint
	Gauge	Wires	Diameter		Insulation Thickness		Gauge	Wires	Diameter		Insulation Thickness	Weight	kg CO ₂ eq avoided in the atmosphere
	AWG/kcmil	#	in	mm	in	mm	AWG/kcmil	#	in	mm	mm	kg/km	Para 1 km de cable
Chola	6	7	0,183	4,66	0,045	1,143	6	6/1	0,198	5,03	17,04	237	65,09
Hackney	4	7	0,231	5,88	0,045	1,143	4	6/1	0,250	6,35	19,95	353	81,49
Palomino	2	7	0,292	7,42	0,045	1,143	2	6/1	0,316	8,01	23,67	534	103,56
Costena	1/0	19	0,372	9,46	0,060	1,524	1/0	6/1	0,398	10,11	30,53	849	172,53
Grullo	2/0	19	0,419	10,63	0,060	1,524	2/0	6/1	0,447	11,35	33,35	1047	188,04
Suffolk	3/0	19	0,470	11,94	0,060	1,524	3/0	6/1	0,502	12,75	36,49	1295	211,99