



PREFORMED LINE PRODUCTS
The connection you can count on.

Section 9 - Cables

Table of Contents	Section/Page
Conductors	
Type AAC 1350.....	9-2
Type AAAC/1120.....	9-2
Type AAAC 6201A.....	9-3
Type ACSR/GZ/1350.....	9-3
OPGW	
Central Tube OPGW.....	9-5
OPGW with Standard Layers, Single Tube & Multitube.....	9-5
Central Al-Clad Stainless Steel Tube OPGW.....	9-6
Aluminium Tube OPGW.....	9-6
Stainless Steel Tube OPGW.....	9-6

Conductors

Type AAC 1350 – All Aluminium Conductor

AS 1531-1991

Part Number	Conductor Code	Stranding and Wire Diameter (No/mm)	Nominal Overall Diameter (mm)	Cross Sectional Area (mm ²)	Approx. Mass (kg/km)	Breaking Load (kN)	Modulus of Elasticity (GPa)	Coefficient of Linear Expansion (x10 ⁻⁶ /oC)	DC Resistance (Ω/km)
AAC-7/2.50	Leo	7/2.50	7.5	34.36	94.3	5.71	65	23	0.833
AAC-7/2.75	Leonids	7/2.75	8.25	41.58	113	6.72	65	23	0.689
AAC-7/3.00	Libra	7/3.00	9	49.48	135	7.98	65	23	0.579
AAC-7/3.75	Mars	7/3.75	11.3	77.28	211	11.8	65	23	0.37
AAC-7/4.50	Mercury	7/4.50	13.5	111.3	304	16.9	65	23	0.258
AAC-7/4.75	Moon	7/4.75	14.3	124	339	18.9	65	23	0.232
AAC-19/3.25	Neptune	19/3.25	16.3	157.6	433	24.7	65	23	0.183
AAC-19/3.50	Orion	19/3.50	17.5	182.8	503	28.7	65	23	0.157
AAC-19/3.75	Pluto	19/3.75	18.8	209.8	576	31.9	65	23	0.137
AAC-37/3.00	Saturn	37/3.00	21	261.6	721	42.2	64	23	0.11
AAC-37/3.25	Sirius	37/3.25	22.8	307	845	48.2	64	23	0.094
AAC-19/4.75	Taurus	19/4.75	23.8	336.7	924	51.3	65	23	0.0857
AAC-37/3.75	Triton	37/3.75	26.3	408.5	1120	62.2	64	23	0.0706
AAC-61/3.25	Uranus	61/3.25	29.3	506.1	1400	75.2	64	23	0.0573
AAC-61/3.50	Ursula	61/3.50	31.5	586.9	1620	87.3	64	23	0.0493
AAC-61/3.75	Venus	61/3.75	33.8	673.4	1860	97.2	64	23	0.0429

Type AAAC 1120 – All Aluminium Alloy Conductor

AS 1531-1991

Part Number	Conductor Code	Stranding and Wire Diameter (No/mm)	Nominal Overall Diameter (mm)	Cross Sectional Area (mm ²)	Approx. Mass (kg/km)	Breaking Load (kN)	Modulus of Elasticity (GPa)	Coefficient of Linear Expansion (x10 ⁻⁶ /oC)	DC Resistance (Ω/km)
AAAC/1120 - 7/2.50	Chlorine	7/2.50	7.5	34.36	94.3	8.18	65	23	0.864
AAAC/1120 - 7/2.75	Chromium	7/2.75	8.25	41.58	113	9.91	65	23	0.713
AAAC/1120 - 7/3.00	Fluorine	7/3.00	9	49.48	135	11.8	65	23	0.599
AAAC/1120 - 7/3.75	Helium	7/3.75	11.3	77.28	211	17.6	65	23	0.383
AAAC/1120 - 7/4.50	Hydrogen	7/4.50	13.5	111.3	304	24.3	65	23	0.266
AAAC/1120 - 7/4.75	Iodine	7/4.75	14.3	124	339	27.1	65	23	0.239
AAAC/1120 - 19/3.25	Krypton	19/3.25	16.3	157.6	433	37.4	65	23	0.189
AAAC/1120 - 19/3.50	Lutetium	19/3.50	17.5	182.8	503	41.7	65	23	0.163
AAAC/1120 - 19/3.75	Neon	19/3.75	18.8	209.8	576	47.8	65	23	0.142
AAAC/1120 - 37/3.00	Nitrogen	37/3.00	21	261.6	721	62.2	64	23	0.114
AAAC/1120 - 37/3.25	Nobelium	37/3.25	22.8	307	845	72.8	64	23	0.0973
AAAC/1120 - 19/4.75	Oxygen	19/4.75	23.8	336.7	924	73.6	65	23	0.0884
AAAC/1120 - 37/3.75	Phosphorus	37/3.75	26.3	408.5	1120	93.1	64	23	0.0731
AAAC/1120 - 61/3.25	Selenium	61/3.25	29.3	506.1	1400	114	64	23	0.0592
AAAC/1120 - 61/3.50	Silicon	61/3.50	31.5	586.9	1620	127	64	23	0.0511
AAAC/1120 - 61/3.75	Sulphur	61/3.75	33.8	673.4	1860	145	64	23	0.0444

Conductors

Type AAAC 6201A – All Aluminium Alloy Conductor

AS 1531-1991

Part Number	Conductor Code	Stranding and Wire Diameter (No/mm)	Nominal Overall Diameter (mm)	Cross Sectional Area (mm ²)	Approx. Mass (kg/km)	Breaking Load (kN)	Modulus of Elasticity (GPa)	Coefficient of Linear Expansion (x10 ⁻⁶ /oC)	DC Resistance (Ω/km)
AAAC/6201 - 7/2.50	Diamond	7/2.50	7.5	34.36	94.3	9.64	65	23	0.967
AAAC/6201 - 7/2.75	Dolomite	7/2.75	8.25	41.58	113	11.6	65	23	0.799
AAAC/6201 - 7/3.00	Emerald	7/3.00	9	49.48	135	13.9	65	23	0.671
AAAC/6201 - 7/3.75	Garnet	7/3.75	11.3	77.28	211	21.7	65	23	0.43
AAAC/6201 - 7/4.50	Jade	7/4.50	13.5	111.3	304	31.2	65	23	0.298
AAAC/6201 - 7/4.75	Jasper	7/4.75	14.3	124	339	34.8	65	23	0.268
AAAC/6201 - 19/3.25	Opal	19/3.25	16.3	157.6	433	44.2	65	23	0.212
AAAC/6201 - 19/3.50	Patronite	19/3.50	17.5	182.8	503	51.3	65	23	0.183
AAAC/6201 - 19/3.75	Pearl	19/3.75	18.8	209.8	576	58.8	65	23	0.159
AAAC/6201 - 37/3.00	Ruby	37/3.00	21	261.6	721	73.5	64	23	0.128
AAAC/6201 - 37/3.25	Ruthenium	37/3.25	22.8	307	845	86.1	64	23	0.109
AAAC/6201 - 19/4.75	Rutile	19/4.75	23.8	336.7	924	94.4	65	23	0.0991
AAAC/6201 - 37/3.75	Sapphire	37/3.75	26.3	408.5	1120	115	64	23	0.0819
AAAC/6201 - 61/3.25	Spinel	61/3.25	29.3	506.1	1400	135	64	23	0.0662
AAAC/6201 - 61/3.50	Tantalum	61/3.50	31.5	586.9	1620	156	64	23	0.0572
AAAC/6201 - 61/3.75	Topaz	61/3.75	33.8	673.4	1860	179	64	23	0.0498

Type ACSR-GZ 1350

AS 1531-1991

Part Number	Conductor Code	Stranding and Wire Diameter (No/mm)		Nominal Overall Diameter (mm)	Cross Sectional Area (mm ²)	Approx. Mass (kg/km)	Breaking Load (kN)	Modulus of Elasticity (GPa)	Coefficient of Linear Expansion (x10 ⁻⁶ /oC)	DC Resistance (Ω/km)
		Aluminium (No/mm)	Steel (No/mm)							
ACSR - 61/2.50	Almond	6/2.50	1/2.50	7.5	34.36	119	10.5	83	19.3	0.975
ACSR - 61/2.75	Apricot	6/2.75	1/2.75	8.3	41.58	144	12.6	83	19.3	0.805
ACSR - 61/3.00	Apple	6/3.00	1/3.00	9	49.48	171	14.9	83	19.3	0.677
ACSR - 61/3.75	Banana	6/3.75	1/3.75	11.3	77.31	268	22.7	83	19.3	0.433
ACSR - 6/4.75 /7/1.60	Cherry	6/4.75	7/1.60	14.3	120.4	402	33.4	80	19.9	0.271
ACSR - 30/7/2.50	Grape	30/2.50	7/2.50	17.5	181.6	677	63.5	88	18.4	0.196
ACSR - 30/7/3.00	Lemon	30/3.00	7/3.00	21	261.5	973	90.4	88	18.4	0.136
ACSR - 30/7/3.25	Lychee	30/3.25	7/3.25	22.8	306.9	1140	105	88	18.4	0.116
ACSR - 30/7/3.50	Lime	30/3.50	7/3.50	24.5	356	1320	122	88	18.4	0.1
ACSR - 54/7/3.00	Mango	54/3.00	7/3.00	27	431.2	1440	119	78	19.9	0.0758
ACSR - 54/7/3.25	Orange	54/3.25	7/3.25	29.3	506	1690	137	78	19.9	0.0646
ACSR - 54/7/3.50	Olive	54/3.50	7/3.50	31.5	586.9	1960	159	78	19.9	0.0557
ACSR - 54/3.719/2.25	Pawpaw	54/3.75	19/2.25	33.8	672	2240	178	77	20	0.0485
ACSR - 3/4/2.50	Rasin	3/2.50	4/2.50	7.5	34.36	195	24.4	136	13.9	1.59
ACSR - 4/3/3.00	Sultana	4/3.00	3/3.00	9	49.48	243	28.3	119	15.2	0.897
ACSR - 4/3/3.75	Walnut	4/3.75	3/3.75	11.3	77.31	380	43.9	119	15.2	0.573

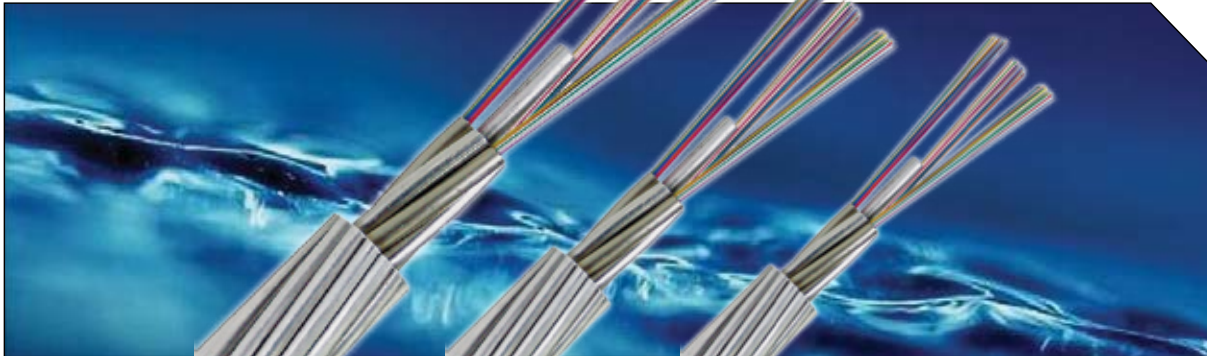
Conductors

Type ACSR/AC/1350

AS 3607-1989

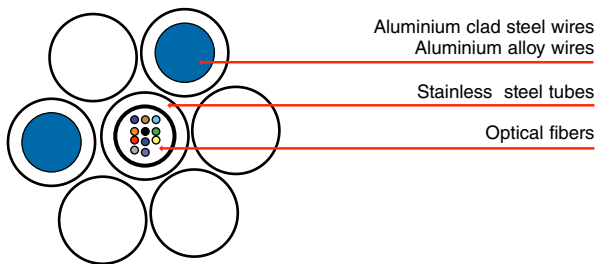
Part Number	Conductor Code	Stranding and Wire Diameter (No/mm)		Nominal Overall Diameter (mm)	Cross Sectional Area (mm ²)	Approx. Mass (kg/km)	Breaking Load (kN)	Modulus of Elasticity (GPa)	Coefficient of Linear Expansion (x10 ⁻⁶ /oC)	DC Resistance (Ω/km)
		Aluminium (No/mm)	Steel (No/mm)							
ACSRAC - 6/1/2.50	Angling	6/2.50	1/2.50	7.5	34.36	113	10.6	79	20.1	0.923
ACSRAC - 6/1/2.75	Aquatics	6/2.75	1/2.75	8.3	41.58	137	12.7	79	20.1	0.763
ACSRAC - 6/1/3.00	Archery	6/3.00	1/3.00	9	49.48	163	15.1	79	20.1	0.641
ACSRAC - 6/1/3.75	Baseball	6/3.75	1/3.75	11.3	77.31	254	22.3	79	20.1	0.41
ACSRAC - 6/7/1.60	Bowls	6/4.75	7/1.60	14.3	120.4	385	32.7	76	20.6	0.259
ACSRAC - 30/7/2.50	Cricket	30/2.50	7/2.50	17.5	181.6	636	64.4	82	19.4	0.182
ACSRAC - 30/7/3.00	Darts	30/3.00	7/3.00	21	261.5	913	91.6	82	19.4	0.126
ACSRAC - 30/7/3.25	Dice	30/3.25	7/3.25	22.8	306.9	1070	106	82	19.4	0.108
ACSRAC - 30/7/3.50	Diving	30/3.50	7/3.50	24.5	356	1240	122	82	19.4	0.0928
ACSRAC - 54/7/3.00	Golf	54/3.00	7/3.00	27	431.2	1380	120	75	20.6	0.0726
ACSRAC - 54/7/3.25	Gymnastics	54/3.25	7/3.25	29.3	506	1620	139	75	20.6	0.0619
ACSRAC - 54/7/3.50	Hurdles	54/3.50	7/3.50	31.5	586.9	1880	159	75	20.6	0.0533
ACSRAC - 54/19/2.25	Lacrosse	54/3.75	19/2.25	33.8	672	2150	180	74	20.7	0.0465
ACSRAC - 3/4/2.50	Soccer	3/2.50	4/2.50	7.5	34.36	171	24.9	119	15.3	1.34
ACSRAC - 4/3/3.00	Swimming	4/3.00	3/3.00	9	49.48	218	28.9	106	16.5	0.807
ACSRAC - 4/3/3.75	Tennis	4/3.75	3/3.75	11.3	77.31	340	42.6	106	16.5	0.517

OPGW



Central Tube OPGW

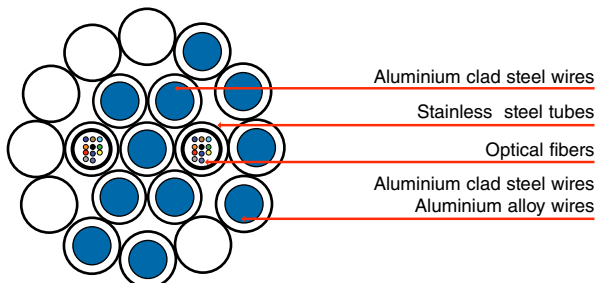
Single/Double Armour Layers



The central stainless steel tube is surrounded by single or double layers of aluminium clad steel wires (ACS) or mix ACS wires and aluminium alloy wires.

OPGW With Standard Layers, Single Tube & Multitube

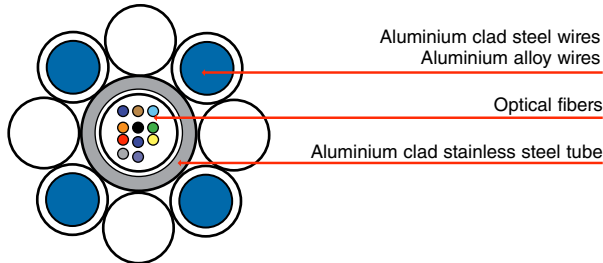
Double/Three Armour Layers



The stainless steel tube is stranded by double or three layers of aluminium clad steel wires (ACS) or mix ACS wires and aluminium alloy wires.

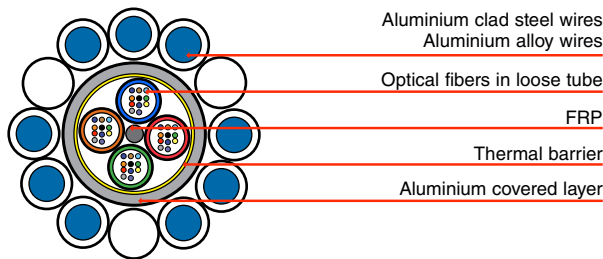
OPGW

Central Al-Clad Stainless Steel Tube OPGW Single/Double Armour Layers



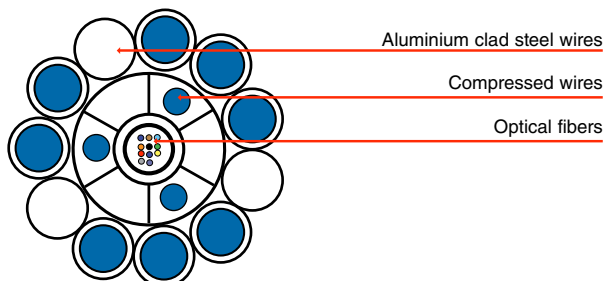
The central Al-clad steel tube is surrounded by single or double layers of aluminium clad steel wires (ACS) or mix ACS wires and aluminium alloy wires.

Aluminium Tube OPGW Single/Double Armour Layers



The Aluminium tube is surrounded by single or double layers of aluminium clad steel wires (ACS) or mix ACS wires and aluminium alloy wires.

Stainless Steel Tube OPGW Double Armour Layers



The central stainless steel tube is surrounded by double layer of aluminium clad steel wires (ACS). The inner layer aluminium clad steel wires are compressed, the outer layer aluminium clad steel wires are all compressed or all round.