



NYY-J PVC 0.6/1kV Power Cable



Eland Product Group: A9N

APPLICATION

Power and control cable for fixed installation. Can be used indoors, outdoors, underground, in concrete and in water.

CHARACTERISTICS

Voltage Rating U_o/U
0.6/1kV

Temperature Rating
Fixed: -15°C to +70°C
Flexed: -5°C to +50°C

Minimum Bending Radius
Fixed: 12 x overall diameter

CONSTRUCTION

Conductor

RE: Class 1 solid copper conductor
RM: Class 2 stranded copper conductor

Insulation

PVC (Polyvinyl Chloride)

Filler

PVC (Polyvinyl Chloride)

Sheath

PVC (Polyvinyl Chloride)

Core Identification

3 core: ● Green/Yellow ● Blue ● Brown
4 core: ● Green/Yellow ● Brown ● Black ● Grey
5 core: ● Green/Yellow ● Brown ● Black ● Grey ● Blue
7 core and above: ● Black with ○ White numbers

Sheath Colour

● Black

Note

NYY-O (without Green/Yellow earth conductor) also available

STANDARDS

IEC 60502-1

Flame retardant according to IEC/EN 60332-1-2

ISO/IEC 17025 LABORATORY TESTED

This product is subject to the Quality Assurance protocols of The Cable Lab®, an ISO/IEC 17025 accredited cable testing laboratory. Testing includes vertical flame, conductor resistance, tensile & elongation, and dimensional consistency, verified to published standards and approved product drawings.



REGULATORY COMPLIANCE

This cable is compliant with European Regulation EN 50575, the Construction Products Regulation.



This cable meets the requirements of the Low Voltage Directive 2014/35/EU and the RoHS Directive 2011/65/EU. RoHS compliance has been tested and confirmed by The Cable Lab® as meeting the requirements of the BSI RoHS Trusted Kitemark™.





DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	CONDUCTOR TYPE	NOMINAL THICKNESS OF INSULATION mm	NOMINAL THICKNESS OF SHEATH mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A9N1025	1	2.5	RE	0.8	1.4	6.15	62
A9N1040	1	4	RE	1	1.4	7.5	85
A9N1060	1	6	RE	1	1.4	7.5	108
A9N110	1	10	RM	1	1.4	8.6	155
A9N116	1	16	RM	1	1.4	9.6	218
A9N125	1	25	RM	1.2	1.4	11.1	318
A9N135	1	35	RM	1.2	1.4	12.1	414
A9N150	1	50	RM	1.4	1.4	13.7	552
A9N170	1	70	RM	1.4	1.4	15.5	750
A9N195	1	95	RM	1.6	1.5	17.6	1020
A9N1120	1	120	RM	1.6	1.6	19.3	1259
A9N1150	1	150	RM	1.8	1.6	21	1546
A9N1185	1	185	RM	2	1.7	23.2	1913
A9N1240	1	240	RM	2.2	1.8	26.2	2471
A9N1300	1	300	RM	2.4	2	29.2	3097
A9N2015	2	1.5	RE	0.8	1.8	10	147
A9N2025	2	2.5	RE	0.8	1.8	10.7	179
A9N2040	2	4	RM	1	1.8	13	268
A9N2060	2	6	RM	1	1.8	14.2	337
A9N210	2	10	RM	1	1.8	16.2	472
A9N216	2	16	RM	1	1.8	18.2	644
A9N3015	3	1.5	RE	0.8	1.8	10.4	166
A9N3025	3	2.5	RE	0.8	1.8	11.3	212
A9N3040	3	4	RE	1	1.8	13.1	299
A9N3060	3	6	RM	1	1.8	15	402
A9N310	3	10	RM	1	1.8	17.1	570
A9N316	3	16	RM	1	1.8	19.2	789
A9N325	3	25	RM	1.2	1.8	22.1	1141
A9N335	3	35	RM	1.2	1.8	24.1	1462
A9N350	3	50	RM	1.4	1.8	27.6	1964
A9N370	3	70	RM	1.6	2.1	36.3	3635
A9N395	3	95	RM	1.6	2.2	40	4488
A9N4015	4	1.5	RE	0.8	1.8	11.6	198
A9N4025	4	2.5	RE	0.8	1.8	12.1	252
A9N4040	4	4	RM	1	1.8	15.1	391
A9N4060	4	6	RM	1	1.8	16.5	465
A9N410	4	10	RM	1	1.8	18.6	702
A9N416	4	16	RM	1	1.8	21.1	992
A9N425	4	25	RM	1.2	1.8	24.2	1431
A9N435	4	35	RM	1.2	1.8	26.6	1861
A9N450	4	50	RM	1.4	1.9	30.9	2535
A9N470	4	70	RM	1.4	2.1	35.1	3441
A9N495	4	95	RM	1.6	2.2	40.4	4691
A9N4120	4	120	RM	1.6	2.4	44.2	5757
A9N4150	4	150	RM	1.8	2.5	48.5	7095
A9N4185	4	185	RM	2	2.7	53.9	8810
A9N4240	4	240	RM	2.2	2.9	61.1	11400



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ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	CONDUCTOR TYPE	NOMINAL THICKNESS OF INSULATION mm	NOMINAL THICKNESS OF SHEATH mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A9N5015	5	1.5	RE	10.8	1.8	12	232
A9N5025	5	2.5	RE	0.8	1.8	13.1	302
A9N5040	5	4	RM	1	1.8	16.6	477
A9N5060	5	6	RM	1	1.8	18.2	618
A9N510	5	10	RM	1	1.8	20.3	853
A9N516	5	16	RM	1	1.8	23.1	1212
A9N525	5	25	RM	0.8	1.8	26.6	280
A9N7015	7	1.5	RE	1	1.8	16.6	477
A9N7025	7	2.5	RE	0.8	1.8	14.1	368
A9N1215	12	1.5	RE	0.8	1.8	16.6	475
A9N1225	12	2.5	RE	0.8	1.8	18.2	628
A9N1415	14	1.5	RE	0.8	1.8	17.1	515
A9N1915	19	1.5	RE	0.8	1.8	18.9	648
A9N1925	19	2.5	RE	0.8	1.8	20.3	843
A9N2715	27	1.5	RE	0.8	1.8	22.6	895

CONDUCTORS

Class 1 Solid Conductors for Single Core and Multi-Core Cables

NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km	
	Circular, Annealed Copper Conductor	
	Plain Wires	
1.5	12.1	
2.5	7.41	
4	4.61	
6	3.08	
10	1.83	
16	1.15	
25	0.727	
35	0.524	
50	0.387	
70	0.268	
95	0.193	
120	0.153	
150	0.124	
185	0.101	
240	0.0775	
300	0.062	

**Class 2 Stranded Conductors for Single Core and Multi-Core Cables**

NOMINAL CROSS SECTIONAL AREA mm ²	MINIMUM NO. OF WIRES IN CONDUCTOR						MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C
	Circular		Circular Compacted		Shaped		Annealed Copper Conductor
	Cu	Al	Cu	Al	Cu	Al	Plain wires ohms/km
1.5	7	-	6	-	-	-	12.1
2.5	7	-	6	-	-	-	7.41
4	7	-	6	-	-	-	4.61
6	7	-	6	-	-	-	3.08
10	7	7	6	6	-	-	1.83
16	7	7	6	6	-	-	1.15
25	7	7	6	6	6	6	0.727
35	7	7	6	6	6	6	0.524
50	19	19	6	6	6	6	0.387
70	19	19	12	12	12	12	0.268
95	19	19	15	15	15	15	0.193
120	37	37	18	15	18	15	0.153
150	37	37	18	15	18	15	0.124
185	37	37	30	30	30	30	0.0991
240	37	37	34	30	34	30	0.0754
300	61	61	34	30	34	30	0.0601

The above table is in accordance with EN 60228

ELECTRICAL CHARACTERISTICS**Current Carrying Capacity**

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	CONDUCTOR TYPE	CURRENT CARRYING CAPACITY Amps	
			In Duct	In Air
1	2.5	RE	-	26
1	4	RE	-	57
1	6	RE	-	57
1	10	RM	-	78
1	16	RM	127	103
1	25	RM	163	137
1	35	RM	195	169
1	50	RM	230	206
1	70	RM	282	261
1	95	RM	336	321
1	120	RM	382	374
1	150	RM	428	428
1	185	RM	483	414
1	240	RM	561	590
1	300	RM	632	678
2	1.5	RE	32	20
2	2.5	RE	42	27
2	4	RM	54	37
2	6	RM	68	48
2	10	RM	90	66
2	16	RM	116	89
3	1.5	RE	26	18



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ELECTRICAL CHARACTERISTICS

Current Carrying Capacity

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	CONDUCTOR TYPE	CURRENT CARRYING CAPACITY Amps	
			In Duct	In Air
3	2.5	RE	34	25
3	4	RE	44	34
3	4	RM	44	34
3	6	RE	56	43
3	6	RM	56	43
3	10	RM	75	60
3	16	RM	98	80
3	25	RM	128	106
3	35	RM	157	131
3	50	RM	185	159
3	95	RM	275	244
3	120	RM	313	282
4	1.5	RE	26	18
4	2.5	RE	34	25
4	4	RE	44	34
4	4	RM	44	34
4	6	RE	56	43
4	6	RM	56	43
4	10	RM	75	60
4	16	RM	98	80
4	25	RM	128	106
4	35	RM	157	131
4	50	RM	185	159
4	70	RM	252	247
4	95	RM	303	305
4	120	RM	313	282
4	150	RM	390	407
4	185	RM	399	371
4	240	RM	464	436
5	1.5	RE	24	18
5	2.5	RE	34	25
5	4	RE	44	34
5	4	RM	44	34
5	6	RE	56	43
5	6	RM	56	43
5	10	RM	75	60
5	16	RM	98	80
5	25	RM	128	106
7	1.5	RE	15	12
7	2.5	RE	20	16
12	1.5	RE	12	9
12	2.5	RE	16	13
14	1.5	RE	12	9
19	1.5	RE	10	8
19	2.5	RE	13.6	11.3
27	1.5	RE	12	9



Ambient Temperature: 30°C
Depth of Laying: 0.5m
Ground Temperature: 15°C
Thermal Resistivity of Soil: 12km/w

DE-RATING FACTORS

For Air Temperature other than 30°C

AIR TEMPERATURE	20°C	25°C	30°C	35°C	40°C	45°C	50°C
DE-RATING FACTOR	1.12	1.07	1.00	0.94	0.87	0.79	0.71

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.