

# NYY-J 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.



## Standards

VDE0276, VDE0271, CENELEC HD603

## Conductor

re conductor: Class 1 solid plain copper to BS EN 60228:2005 (previously BS6360), VDE0295, IEC 60228, CENELEC HD383  
rm conductor: Class 2 stranded, round plain copper conductor, multi wire to BS EN 60228:2005 (previously BS6360), VDE0295, IEC 60228, CENELEC HD383  
sm conductor: Class 2 stranded, sectorial plain copper conductor to BS EN 60228:2005 (previously BS6360), VDE0295, IEC 60228, CENELEC HD383

## Insulation

PVC (Polyvinyl Chloride) Type Y14 to VDE0276

## Filler

Unspecified material

## Sheath

FR/PVC (Flame Retardant / Polyvinyl Chloride) Type YM3 to VDE0276

## Sheath Colour

Black

## Voltage Rating

600/1000V

## Temperature Rating

Fixed: -40°C to +70°C  
Flexing: -5°C to +50°C

## Minimum Bending Radius

Single Core: 15 x overall diameter  
Multi-Core: 12 x overall diameter

## Core Identification

Up to and including 5 cores:  
colour coded or number coded  
7 cores and above: number coded



## Dimensions

### Resistance Values (ohms per kilometre)

Eland Part Numbers	No. of Cores x Nominal Cross Sectional Area # x mm <sup>2</sup>	Conductor Type	Nominal Thickness of Insulation mm	Nominal Thickness of Sheath mm	Nominal Overall Diameter mm	Nominal Weight kg/Km
A9N1400	1 x 400.0	rm	2.6	2.0	33.4	4095
A9N1500	1 x 500.0	rm	2.8	2.1	37.3	5175
A9N1600	1 x 630.0	rm	2.8	2.2	42.6	6615
A9N2015	2 x 1.5	re	0.8	1.8	12.2	215
A9N2025	2 x 2.5	re	0.8	1.8	13.0	250
A9N3015	3 x 1.5	re	0.8	1.8	12.7	235
A9N3025	3 x 2.5	re	0.8	1.8	13.5	285
A9N3040	3 x 4.0	re	1.0	1.8	15.5	390
A9N3060	3 x 6.0	re	1.0	1.8	16.6	480
A9N310	3 x 10.0	re	1.0	1.8	18.3	640
A9N316	3 x 16.0	re	1.0	1.8	20.2	856
A9N325	3 x 25.0	rm	1.2	1.8	25.5	1350
A9N4015	4 x 1.5	re	0.8	1.8	13.5	270
A9N4025	4 x 2.5	re	0.8	1.8	14.4	330
A9N4040	4 x 4.0	re	1.0	1.8	16.6	460
A9N4060	4 x 6.0	re	1.0	1.8	17.8	575
A9N416	4 x 16.0	re	1.0	1.8	23.4	1055
A9N425	4 x 25.0	rm	1.2	1.8	27.7	1675
A9N5015	5 x 1.5	re	0.8	1.8	14.3	315
A9N5025	5 x 2.5	re	0.8	1.8	15.3	380
A9N5040	5 x 4.0	re	1.0	1.8	17.8	545
A9N5060	5 x 6.0	re	1.0	1.8	19.2	685

re = round conductor, rm = stranded conductor, sm = sectional conductor

## Conductors

### Class 1 solid conductors for Single Core and Multi-Core cables

1	2
Nominal Cross Sectional Area mm <sup>2</sup>	Maximum Resistance of Conductor at 20°C
	Circular, Annealed Copper Conductors
	Plain ohms/Km
1.50	12.1000
2.50	7.4100
4.00	4.6100
6.00	3.0800
10.00	1.8300
16.00	1.1500

Table in accordance with BS EN 60228:2005 (previously BS6360)

## Class 2 stranded conductors for Single Core and Multi-Core cables

1	2	3	4	5	6	7	8
Nominal Cross Sectional Area mm <sup>2</sup>	Minimum Number of Wires in the 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
25.00	7	7	6	6	6	6	0.7270
35.00	7	7	6	6	6	6	0.5240
50.00	19	19	6	6	6	6	0.3870
70.00	19	19	12	12	12	12	0.2680
95.00	19	19	15	15	15	15	0.1930
120.00	37	37	18	15	18	15	0.1530
150.00	37	37	18	15	18	15	0.1240
185.00	37	37	30	30	30	30	0.0991
240.00	37	37	34	30	34	30	0.0754
300.00	61	61	34	30	34	30	0.0601
400.00	61	61	53	53	53	53	0.0470
500.00	61	61	53	53	53	53	0.0366
630.00	91	91	53	53	53	53	0.0283

Table in accordance with BS EN 60228:2005 (previously BS6360)