

N1VC7V-K Cable



Eland Product Group: B5G

APPLICATION

Power cables, indoor use also in wet environments, outdoor installation, fixed laying on bare walls or steel structures, in pipes or in underground. UV resistant, suitable for permanent external use. Cables suitable for electrical power systems in constructions and other civil engineering buildings. CPR compliant. Also used for control and signalling applications.

CHARACTERISTICS

Voltage Rating
0.6/1kV

Temperature Rating
Operating: -15°C to +70°C
Maximum temperature of short circuit: +160°C

Minimum Bending Radius
UNEL 35756: 4 x overall diameter
UNEL 35755: 6 x overall diameter

Maximum Tensile Strength:
50N/mm²

CONSTRUCTION

Conductor
Class 5 flexible copper conductor

Insulation
PVC (Polyvinyl Chloride)

Screen
Copper Tape

Sheath
PVC (Polyvinyl Chloride)

Core Identification
2 core: ● Blue ● Brown
3 core: ● Green/Yellow ● Blue ● Brown
4 core: ● Green/Yellow ● Brown ● Black ● Grey
5 core: ● Green/Yellow ● Brown ● Black ● Grey ● Blue
7 cores and above: ● Black with Numbers plus ● Green/Yellow

Also available as colour cores without Green/Yellow on request.

Sheath Colour
● Blue

STANDARDS

CEI 20-13, IEC 60502-1, CEI EN 60228, EN 50575
Flame Retardant according to EN 60332-1-2

THE CABLE LAB®

AN ISO/IEC 17025 AND IECEE CBTL ACCREDITED FACILITY

Our world-class testing facility assures the quality and compliance of this cable through a continuous and rigorous testing regime.



SUSTAINABILITY COMMITMENT

We are on a journey to Net Zero.

We've committed to near-term emissions reductions and a net-zero target with the Science Based Targets initiative and we're a signatory to the United Nations Global Compact Sustainable Development Goals.

Learn more about embodied carbon and our carbon emissions reduction actions, our comprehensive recycling services, and wider ESG activities for sustainable operations at: www.elandcables.com/company/about-us/esg-sustainability



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, the RoHS Directive 2015/853/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab®.





DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
B3V020015BL	2	1.5	13,2	240
B3V020025BL	2	2.5	14,2	280
B3V020040BL	2	4	16,3	380
B3V020060BL	2	6	17,8	480
B3V02010BL	2	10	19,7	640
B3V02016BL	2	16	21,8	810
B3V02025BL	2	25	25,4	1130
B3V02035BL	2	35	28,1	1430
B3V02050BL	2	50	32,4	1980
B3V02070BL	2	70	36,0	2660
B3V02095BL	2	95	42,0	3350
B3V030015BL	3	1.5	13,8	260
B3V030025BL	3	2.5	14,8	320
B3V030040BL	3	4	17,4	430
B3V030060BL	3	6	18,7	550
B3V03010BL	3	10	20,8	740
B3V03016BL	3	16	23,1	970
B3V03025BL	3	25	27,0	1340
B3V03035BL	3	35	30,1	1750
B3V03050BL	3	50	34,5	2400
B3V03070BL	3	70	38,6	3270
B3V03095BL	3	95	44,2	4170
B3V030120BL	3	120	53,0	4670
B3V030185BL	3	185	60,0	5700
B3V030240BL	3	240	69,0	6300
B3V0335/25BL	3+1	35+25	32,1	2000
B3V03050/25BL	3+1	50+25	36,1	2620
B3V03070/35BL	3+1	70+35	40,1	3560
B3V03095/50BL	3+1	95+50	46,4	4600
B3V040015BL	4	1.5	14,7	300
B3V040025BL	4	2.5	15,9	370
B3V040040BL	4	4	18,7	530
B3V040060BL	4	6	20,2	650
B3V04010BL	4	10	22,5	910
B3V04016BL	4	16	25,1	990
B3V04025BL	4	25	29,7	1350
B3V050015BL	5	1.5	15,7	350
B3V050025BL	5	2.5	17,0	410
B3V050040BL	5	4	20,2	590
B3V050060BL	5	6	21,8	740
B3V05010BL	5	10	24,4	1060
B3V05016BL	5	16	27,3	1390
B3V05025BL	5	25	32,4	2030
B3V070015BL	7	1.5	16,8	400
B3V070025BL	7	2.5	18,5	530
B3V0100015BL	10	1.5	20,6	530
B3V0100025BL	10	2.5	22,6	670

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
B3V0120015BL	12	1.5	21,2	590
B3V0120025BL	12	2.5	23,2	760
B3V0160025BL	16	2.5	25,4	950
B3V0190015BL	19	1.5	23,1	820
B3V0270015BL	27	1.5	27,1	1070
B3V0370015BL	37	1.5	31,0	1360

CONDUCTORS

Class 5 Flexible Copper Conductors for Single Core and Multi-Core Cables

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM DIAMETER OF WIRES IN CONDUCTOR mm	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km
2	1.5	0,26	13,3
2	2.5	0,26	7,98
2	4	0,31	4,95
2	6	0,31	3,30
2	10	0,41	1,91
2	16	0,41	1,21
2	25	0,41	0,780
2	35	0,41	0,554
2	50	0,41	0,386
2	70	0,51	0,272
2	95	0,51	0,206
3	1.5	0,26	13,3
3	2.5	0,26	7,98
3	4	0,31	4,95
3	6	0,31	3,30
3	10	0,41	1,91
3	16	0,41	1,21
3	25	0,41	0,780
3	35	0,41	0,554
3	50	0,41	0,386
3	70	0,51	0,272
3	95	0,51	0,206
3	120	0,51	0,161
3	185	0,51	0,106
3	240	0,51	0,0801
4	1.5	0,26	13,3
4	2.5	0,26	7,98
4	4	0,31	4,95
4	6	0,31	3,30
4	10	0,41	1,91
4	16	0,41	1,21
4	25	0,41	0,780



NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM DIAMETER OF WIRES IN CONDUCTOR mm	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km
3+1	35+25	0,41	0.554/0.780
3+1	50+25	0,41	0.386/0.780
3+1	70+35	0,51	0.272/0.554
3+1	95+50	0,51	0.206/0.386
5	1.5	0,26	13.3
5	2.5	0,26	7.98
5	4	0,31	4.95
5	6	0,31	3.30
5	10	0,41	1.91
5	16	0,41	1.21
5	25	0,41	0.780
7	1.5	0,26	13.3
10	1.5	0,26	13.3
12	1.5	0,26	13.3
19	1.5	0,26	13.3
27	1.5	0,26	13.3
37	1.5	0,26	13.3
7	2.5	0,26	7.98
10	2.5	0,26	8.06
12	2.5	0,26	8.06
16	2.5	0,26	8.06

ELECTRICAL CHARACTERISTICS

Class 5 Flexible Copper Conductors for Single Core and Multi-Core Cables

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	CURRENT CARRYING CAPACITY AT 30°C Amp		CURRENT CARRYING CAPACITY AT 20°C Amp			
		In Free Air	In Conduit	In Ground K=1	In Ground K=1.5	In Ducts K=1	In Ducts K=1.5
2	1.5	22	17	29	26	20	19
2	2.5	30	24	39	35	26	25
2	4	40	32	51	45	35	33
2	6	51	41	64	56	44	41
2	10	70	56	87	75	60	56
2	16	94	72	113	97	78	74
2	25	120	100	144	124	103	97
2	35	148	120	174	126	126	118
2	50	180	135	212	182	157	147
2	70	230	180	257	221	195	181
2	95	291	269	300	270	257	243
3	1.5	18,5	15,5	25	22	17	16
3	2.5	25	20	33	29	22	21
3	4	34	28	43	38	29	28
3	6	43	34	55	47	37	35
3	10	60	46	73	63	56	51
3	16	80	65	93	81	73	65
3	25	101	85	111	104	95	85
3	35	125	105	145	125	109	102
3	50	151	125	173	148	127	120
3	70	195	175	211	181	157	148



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ELAND
CABLES

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	CURRENT CARRYING CAPACITY AT 30°C Amp		CURRENT CARRYING CAPACITY AT 20°C Amp			
		In Free Air	In Conduit	In Ground K=1	In Ground K=1.5	In Ducts K=1	In Ducts K=1.5
3	95	238	200	253	217	190	179
3	120	290	267	-	-	-	-
3	185	378	348	-	-	-	-
3	240	445	409	-	-	-	-
4	1.5	18,5	15,5	25	22	17	16
4	2.5	25	20	33	29	22	21
4	4	34	28	43	38	29	28
4	6	43	34	55	47	37	35
4	10	60	46	73	63	56	51
4	16	80	65	93	81	73	65
4	25	101	85	111	104	95	85
3+1	35+25	125	105	145	125	109	102
3+1	50+25	151	125	173	148	127	120
3+1	70+35	195	175	211	181	157	148
3+1	95+50	238	200	253	217	190	179
5	1.5	18,5	15,5	25	22	17	16
5	2.5	25	20	33	29	22	21
5	4	34	28	43	38	29	28
5	6	43	34	55	47	37	35
5	10	60	46	73	63	56	51
5	16	80	65	93	81	73	65
5	25	101	85	111	104	95	85
7	1.5	10	8	15	13	10	9,5
10	1.5	10	8	15	13	10	9,5
12	1.5	8,5	7	12	10,5	8	7,5
19	1.5	7	5,5	9,5	8	6,5	6
27	1.5	7	5,5	9,5	8	6,5	6
37	1.5	7	5,5	9,5	8	6,5	6
7	2.5	14	11	19	16,5	12,5	12
10	2.5	14	11	19	16,5	12,5	12
12	2.5	11	9	15	13	10	9,5
16	2.5	11	9	15	13	10	9,5

K1 = Thermal soil resistivity 1.0 Km/W
K1.5 = Thermal soil resistivity 1.5 Km/W
Depth of laying 0.8m