

# YMz1K Flex Cable



Eland Product Group: B1C

## APPLICATION

These cables are suitable for dry humid areas. All type of factories, warehouses and depots where there is fire and explosion threat. Not suitable for underground. Used in fixed installations laying in conduit on and under plaster

## CHARACTERISTICS

**Voltage Rating** U<sub>0</sub>/U  
0.6/1kV

**Test Voltage**  
3.5kV

**Minimum Bending Radius**  
Fixed: 12 x overall diameter

## CONSTRUCTION

**Conductor**  
Class 5 Flexible Stranded Copper

**Insulation**  
XLPE (Cross-Linked Polyethylene)

**Bedding**  
HFFR (Halogen Free Flame Retardant)

**Sheath**  
HFFR (Halogen Free Flame Retardant)

**Core Identification**  
2 core: ● Blue ● Brown  
3 core: ● Brown ● Black ● Grey  
4 core: ● Brown ● Black ● Grey ● Blue  
5 core: ● Brown ● Black ● Grey ● Blue ● Black

**Outer Sheath Colour**  
● Black

## CABLE THIRD-PARTY ACCREDITATION



Cables are tested and accredited by KEMA Laboratories in The Netherlands to KEMA K42C-1-5

## STANDARDS

HD-604-5-C

Flame retardant according to IEC 60332-3-24, IEC 60332-1-2



## THE CABLE LAB<sup>®</sup>

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](http://www.elandcables.com/company/about-us/esg-sustainability)



SCIENCE  
BASED  
TARGETS

**BUSINESS  
AMBITION FOR 1.5°C**



## 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 2015/863/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab<sup>®</sup>.



## DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER OF CONDUCTOR mm	NOMINAL THICKNESS OF INSULATION mm	NOMINAL THICKNESS OF OUTER SHEATH mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
B1C010015BK	1	1.5	1.60	0.70	1.4	5.8	46
B1C010025BK	1	2.5	2	0.70	1.4	6.2	58
B1C010040BK	1	4	2.50	0.70	1.4	6.7	74
B1C010060BK	1	6	3.19	0.70	1.4	7.3	96
B1C01010BK	1	10	4.10	0.70	1.4	8.3	139
B1C01016BK	1	16	5.25	0.70	1.4	9.5	198
B1C01025BK	1	25	6.60	0.90	1.4	11.2	290
B1C01035BK	1	35	7.50	0.90	1.4	12.1	385
B1C01050BK	1	50	9.25	1	1.4	14.1	530
B1C01070BK	1	70	10.95	1.10	1.4	16	723
B1C01095BK	1	95	12.35	1.10	1.5	17.6	951
B1C01120BK	1	120	14	1.20	1.5	19.4	1178
B1C01150BK	1	150	15.80	1.40	1.6	21.8	1465
B1C01185BK	1	185	18.50	1.60	1.6	24.9	1809
B1C01240BK	1	240	20	1.70	1.7	26.8	2317
B1C020015BK	2	1.5	1.60	0.70	1.8	11	157
B1C020025BK	2	2.5	2	0.70	1.8	11.8	190
B1C020040BK	2	4	2.50	0.70	1.8	12.8	238
B1C020060BK	2	6	3.10	0.70	1.8	14	298
B1C02010BK	2	10	4.10	0.70	1.8	16.6	443
B1C02016BK	2	16	5.25	0.70	1.8	18.9	611
B1C02025BK	2	25	6.60	0.90	1.8	22.4	881
B1C02035BK	2	35	7.50	0.90	1.8	24.2	1122
B1C02050BK	2	50	9.25	1	1.8	28.1	1533
B1C02070BK	2	70	10.95	1.10	1.8	32.3	2087
B1C02095BK	2	95	12.35	1.10	1.9	35.3	2657
B1C02120BK	2	120	14	1.20	2.1	39.4	3315
B1C02150BK	2	150	15.80	1.40	2.2	44.6	4176
B1C02185BK	2	185	18.50	1.60	2.3	51	5250
B1C02240BK	2	240	20	1.70	2.5	54.8	6512
B1C02300BK	2	300	23.10	1.80	2.7	61.8	8112
B1C030015BK	3	1.5	1.60	0.70	1.8	11.5	175
B1C030025BK	3	2.5	2	0.70	1.8	12.4	219
B1C030040BK	3	4	2.50	0.70	1.8	13.5	280
B1C030060BK	3	6	3.10	0.70	1.8	14.8	358
B1C03010BK	3	10	4.10	0.70	1.8	16.9	511
B1C03016BK	3	16	5.25	0.70	1.8	20	753
B1C03025BK	3	25	6.60	0.90	1.8	23.8	1098
B1C03035BK	3	35	7.50	0.90	1.8	25.7	1421
B1C03050BK	3	50	9.25	1	1.8	30	1958
B1C03070BK	3	70	10.95	1.10	1.9	34.7	2698
B1C03095BK	3	95	12.35	1.10	2.0	37.9	3466
B1C03120BK	3	120	14	1.20	2.1	42.1	4306
B1C03150BK	3	150	15.80	1.40	2.3	47.8	5426
B1C03185BK	3	185	18.50	1.60	2.4	54.7	6784
B1C03240BK	3	240	20	1.70	2.6	58.8	8512
B1C03300BK	3	300	23.10	1.80	2.8	66.3	10569

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER OF CONDUCTOR mm	NOMINAL THICKNESS OF INSULATION mm	NOMINAL THICKNESS OF OUTER SHEATH mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
B1C030035/25BK	3	35/25	7.50	0.90	1.8	28.1	1702
B1C030050/25BK	3	50/25	9.25	1	1.8	31.7	2163
B1C03070/35BK	3	70/35	10.95	1.10	1.9	36.5	2968
B1C03095/50BK	3	95/50	12.35	1.10	2.0	40.4	3905
B1C03120/70BK	3	120/70	14	1.20	2.2	45.3	4962
B1C03150/70BK	3	150/70	15.80	1.40	2.3	49.9	5904
B1C03185/95BK	3	185/95	18.50	1.60	2.5	56.8	7362
B1C03240/120BK	3	240/120	20	1.70	2.6	61.3	9299
B1C040015BK	4	1.5	1.60	0.70	1.8	12.3	205
B1C040025BK	4	2.5	2	0.70	1.8	13.3	258
B1C040040BK	4	4	2.50	0.70	1.8	14.5	334
B1C040060BK	4	6	3.10	0.70	1.8	15.9	430
B1C04010BK	4	10	4.10	0.70	1.8	19	657
B1C04016BK	4	16	5.25	0.70	1.8	18.1	790
B1C04025BK	4	25	6.60	0.90	1.8	26.4	1394
B1C04035BK	4	35	7.50	0.90	1.8	28.6	1820
B1C04050BK	4	50	9.25	1	1.9	33.5	2518
B1C04070BK	4	70	10.95	1.10	2	38.9	3487
B1C04095BK	4	95	12.35	1.10	2.1	42.5	4490
B1C04120BK	4	120	14	1.20	2.3	47.3	5590
B1C04150BK	4	150	15.80	1.40	2.4	53.3	6988
B1C04185BK	4	185	18.50	1.60	2.6	61.2	8753
B1C04240BK	4	240	20	1.70	2.8	65.7	10997
B1C04300BK	4	300	23.10	1.80	3	74.1	13648
B1C04035/25BK	4	35/25	7.50	0.90	1.8	30.7	2096
B1C04050/25BK	4	50/25	9.25	1	1.9	35.1	2731
B1C04070/35BK	4	70/35	10.95	1.10	2.1	40.7	3778
B1C04095/50BK	4	95/50	12.35	1.10	2.2	45	4961
B1C050015BK	5	1.5	1.60	0.70	1.8	13.2	239
B1C050025BK	5	2.4	2	0.70	1.8	14.2	300
B1C050040BK	5	4	2.50	0.70	1.8	15.6	395
B1C050060BK	5	6	3.10	0.70	1.8	17.2	513
B1C05010BK	5	10	4.10	0.70	1.8	20.5	784
B1C05016BK	5	16	5.25	0.70	1.8	23.6	1124
B1C05025BK	5	25	6.60	0.90	1.8	28.7	1686
B1C05035BK	5	35	7.50	0.90	1.8	31.2	2216
B1C05050BK	5	50	9.25	1	2.0	36.8	3089
B1C05070BK	5	70	10.95	1.10	2.1	42.8	4287
B1C05095BK	5	95	12.35	1.10	2.3	46.9	5543
B1C05120BK	5	120	14	1.20	2.4	52.1	6889
B1C05150BK	5	150	15.80	1.40	2.6	58.9	8636
B1C05185BK	5	185	18.50	1.60	2.8	67.6	10807
B1C05240BK	5	240	20	0.70	3.0	67.2	12895
B1C05300BK	5	300	23.10	1.80	3.2	81.9	16873

## ELECTRICAL CHARACTERISTICS

## Single Core

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	CURRENT CARRYING CAPACITY A				MAXIMUM CONDUCTOR RESISTANCE AT 20°C Ω/km
	IN CONDUIT		IN AIR		
	Flat Formation	Trefoil Formation	Flat Formation	Trefoil Formation	
1.5	24	22	-	-	12.10
2.5	32	29	-	-	7.41
4	63	52	53	42	4.61
6	78	65	67	54	3.08
10	104	86	91	73	1.83
16	132	109	122	97	1.15
25	174	145	168	135	0.727
35	207	173	206	165	0.524
50	243	205	250	202	0.387
70	298	251	318	257	0.268
95	355	301	392	319	0.193
120	404	341	457	370	0.153
150	451	384	525	425	0.124
185	510	436	607	492	0.0991
240	592	505	727	588	0.0754

## Multi Core

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	CURRENT CARRYING CAPACITY A		MAXIMUM CONDUCTOR RESISTANCE AT 20°C Ω/km
	Ground	Air	
1.5	29	23	1.83
2.5	42	30	1.15
4	49	40	0.727
6	61	50	0.524
10	82	69	3.30
16	105	91	12.10
25	139	126	7.41
35	168	155	4.61
50	199	189	0.387
70	244	240	0.268
95	294	296	0.193
120	336	344	0.153
150	378	395	0.124
185	428	455	0.0991
240	496	534	0.0754
300	563	619	0.0601

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.