

FR-N1 X1G1 Cable



Eland Product Group: B3B

APPLICATION

The FR-N1 X1G1 is a low voltage fire resistant cable suitable for hotels, hospitals, underground railways, airports etc. to protect people and technical building equipment in the event of a fire if circuit integrity is not required. Not suitable for installations underground or in water.

CHARACTERISTICS

Voltage Rating Uo/U
0.6/1kV

Temperature Rating

Minimum laying temperature: -15°C
Operating temperature: -20°C to +60°C
Maximum Conductor temperature: +90°C

Short Circuit Temperature
250°C

Minimum Bending Radius

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

CONSTRUCTION

Conductor

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

Insulation

XLPE (Cross-Linked Polyethylene)

Inner Sheath

Halogen free tape or halogen free polymer compound

Outer Sheath

Halogen-free flame retardant

Core Identification

2 core: ● Brown ● Blue
3 core: ● Brown ● Black ● Grey
4 core: ● Brown ● Black ● Grey ● Blue
5 core: ● Brown ● Black ● Grey ● Blue ● Black

Outer Sheath Colour

● Green

STANDARDS

NF C 32-323, IEC 60228, HD 308 s2, IEC 60754-1,
IEC 61034, IEC 60754-2

Flame retardant according to IEC 60332-1

THE CABLE LAB[®]

AN ISO/IEC 17025 AND IECCE 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 2015/65/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
B3B01025GN	1	25	10.4	300
B3B01035GN	1	35	11.3	390
B3B01050GN	1	50	12.7	510
B3B01070GN	1	70	14.5	720
B3B01095GN	1	95	16.5	975
B3B01120GN	1	120	18.1	1210
B3B01150GN	1	150	20	1485
B3B01185GN	1	185	22.1	1845
B3B01240GN	1	240	24.7	2385
B3B01300GN	1	300	27.5	3005
B3B020040GN	2	4	11	205
B3B020060GN	2	6	12.4	270
B3B02010GN	2	10	14.1	385
B3B02016GN	2	16	16.2	545
B3B02025GN	2	25	19.1	805
B3B02035GN	2	35	21	1035
B3B030040GN	3	4	11.6	245
B3B030060GN	3	6	13.1	325
B3B03010GN	3	10	14.9	475
B3B03016GN	3	16	17.1	685
B3B03025GN	3	25	20.3	1020
B3B03035GN	3	35	22.4	1335
B3B03050GN	3	50	28	1905
B3B0350/35GN	3	50/35	29.7	2203
B3B03070GN	3	70	32.1	2650
B3B0370/50GN	3	70/50	34.2	3105
B3B03095GN	3	95	36.2	3545
B3B03095/50GN	3	95/50	37.7	3950
B3B03120GN	3	120	39.8	4380
B3B03120/70GN	3	120/70	41.9	4995
B3B03150GN	3	150	45.2	5905
B3B03150/70GN	3	150/70	45.2	5905
B3B03185GN	3	185	48.6	6660
B3B03185/70GN	3	185/70	49.4	7150
B3B03240GN	3	240	54.2	8555
B3B03240/95GN	3	240/95	55.2	9250
B3B03300GN	3	300	59.9	10700
B3B040040GN	4	4	12.6	290
B3B040060GN	4	6	14.2	390
B3B04010GN	4	10	16.3	585
B3B04016GN	4	16	18.5	845
B3B04025GN	4	25	22.3	1285
B3B04035GN	4	35	24.8	1700
B3B04050GN	4	50	30.8	2405
B3B04070GN	4	70	35.3	3365
B3B04095GN	4	95	39.9	4505



DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
B3B04120GN	4	120	44.1	5605
B3B04150GN	4	150	48.5	6845
B3B04185GN	4	185	53.9	8530
B3B04240GN	4	240	60.1	10970
B3B04300GN	4	300	66.7	13770
B3B050040GN	5	4	13.6	355
B3B050060GN	5	6	15.5	475
B3B05010GN	5	10	17.8	715
B3B05016GN	5	16	20.3	1035
B3B05025GN	5	25	24.5	1580

ELECTRICAL CHARACTERISTICS

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	CURRENT CARRYING CAPACITY A		MAXIMUM CONDUCTOR RESISTANCE AT 20°C Ω/km
		IN GROUND	IN AIR	
1	25	128	116	0.727
1	35	155	144	0.524
1	50	183	175	0.387
1	70	224	224	0.268
1	95	265	271	0.193
1	120	302	314	0.153
1	150	342	363	0.124
1	185	320	391	0.099
1	240	442	490	0.075
1	300	500	563	0.060
2	4	46	45	4.61
2	6	58	57	3.08
2	10	77	79	1.83
2	16	100	105	1.15
2	25	128	123	0.727
2	35	154	154	0.524
3	4	38	36	4.61
3	6	48	46	3.08
3	10	64	65	1.83
3	16	82	87	1.15
3	25	106	110	0.727
3	35	129	137	0.524
3	50	152	167	0.387
3	50/35	152	167	0.387
3	70	187	214	0.268
3	70/50	187	214	0.268
3	95	222	259	0.193
3	95/50	222	259	0.193
3	120	253	301	0.153
3	120/70	253	301	0.153



ELECTRICAL CHARACTERISTICS

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	CURRENT CARRYING CAPACITY A		MAXIMUM CONDUCTOR RESISTANCE AT 20°C Ω/km
		IN GROUND	IN AIR	
3	150	286	353	0.124
3	150/70	286	353	0.124
3	185	320	391	0.099
3	185/70	320	391	0.099
3	240	370	468	0.075
3	240/95	370	468	0.075
3	300	418	538	0.060
4	4	38	36	4.61
4	6	48	46	3.08
4	10	64	65	1.83
4	16	82	87	1.15
4	25	106	110	0.727
4	35	129	137	0.524
4	50	152	167	0.387
4	70	187	214	0.268
4	95	222	259	0.193
4	120	253	301	0.153
4	150	286	353	0.124
4	185	320	391	0.099
4	240	370	468	0.075
4	300	418	538	0.060
5	4	38	36	4.61
5	6	48	46	3.08
5	10	64	65	1.83
5	16	82	87	1.15
5	25	106	110	0.727

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.