

FR-N1X6G3 0.6/1kV Cable



Eland Product Group: F6B

APPLICATION

These power cables are used for electricity supply in low voltage installation systems in distribution networks, power stations or industrial /commercial buildings. They are particularly for use in buildings with high human traffic or sensitive equipment, as they do not produce high levels of smoke or corrosive gases in the event of fire. Suitable for indoor and outdoor installation, these cables can be fixed on cable trays, within conduits or fixed to walls and are suitable for duct installation.

CHARACTERISTICS

Voltage Rating Uo/U 0.6/1kV

Temperature Rating Fixed:
-30°C to +90°C

Minimum Bending Radius

During Installation: 12 x overall diameter
Fixed: 6 x overall diameter

CONSTRUCTION

Conductor

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

Insulation

XLPE (Cross-Linked Polyethylene)

Sheath

LSZH (Low Smoke Zero Halogen)

Core Identification

- 1 core: ● Black
- 2 core: ● Blue ● Brown
- 3 core: ● Black ● Brown ● Grey
- 3 core including earth: ● Green/Yellow ● Blue ● Brown
- 3 core + reduced E: ● Blue ● Brown ● Black ● Grey
- 4 core: ● Blue ● Brown ● Black ● Grey
- 4 core including earth: ● Green/Yellow ● Brown ● Black ● Grey
- 5 core: ● Blue ● Brown ● Black ● Grey ● Black
- 5 core including earth: ● Green/Yellow ● Blue ● Brown ● Black ● Grey

Sheath Colour

- Blue

STANDARDS

IEC 60502-1, Generally to XP C 32-325, EN 60228, EN 62230,
Flame Retardant according to IEC 60332-3-24, IEC 60332-1-2
Low Smoke Density / Halogen free according to IEC 61034-1/2,
IEC 60754-1/2
UV Resistant ISO 4892-3
Abrasion Resistant - EN 60229-4.1
Water Resistant to AD7

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.



Cca, s2, d2, a2

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	CONDUCTOR TYPE	NOMINAL THICKNESS OF INSULATION mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
F6B010025	1	2.5	RE	0.7	8	75
F6B010040	1	4	RM	0.7	8.35	90
F6B010060	1	6	RM	0.7	8.90	115
F6B01010	1	10	RM	0.7	9.65	165
F6B01016	1	16	RM	0.7	10.50	230
F6B01025	1	25	RM	0.9	12.05	340
F6B01035	1	35	RM	0.9	13.10	440
F6B01050	1	50	RM	1	14.50	570
F6B01070	1	70	RM	1.1	16.30	795
F6B01095	1	95	RM	1.1	18.00	1055
F6B01120	1	120	RM	1.3	19.50	1315
F6B01150	1	150	RM	1.4	21.70	1600
F6B01185	1	185	RM	1.6	23.50	1975
F6B01240	1	240	RM	1.7	26.40	2525
F6B01300	1	300	RM	1.8	28.70	3030
F6B01400	1	400	RM	2.0	31.90	3820
F6B01500	1	500	RM	2.2	35.30	4825
F6B020015	2	1.5	RE	0.7	9.35	125
F6B020025	2	2.5	RE	0.7	10.10	155
F6B020040	2	4	RE	0.7	11.05	195
F6B020060	2	6	RE	0.7	12.05	295
F6B02010	2	10	RE	0.7	14.50	390
F6B02016	2	16	RE	0.7	16.40	560
F6B02025	2	25	RM	0.9	19.90	850
F6B02035	2	35	RM	0.9	22.20	1010
F6B030015	3	1.5	RE	0.7	9.8	145
F6B030025	3	2.5	RE	0.7	10.60	180
F6B030040	3	4	RE	0.7	11.65	235
F6B030060	3	6	RE	0.7	12.70	325
F6B03010	3	10	RE	0.7	15.35	485
F6B03016	3	16	RE	0.7	17.40	705
F6B03025	3	25	RM	0.9	21.15	1080
F6B03035	3	35	SM	0.9	23.60	1425
F6B03050	3	50	SM	1	26.65	1840
F6B03070	3	70	SM	1.1	30.70	2540
F6B03095	3	95	SM	1.1	35.00	3430
F6B03120	3	120	SM	1.3	38.65	4440
F6B03150	3	150	SM	1.4	44.00	5380



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ELAND
CABLES

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	CONDUCTOR TYPE	NOMINAL THICKNESS OF INSULATION mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
F6B03185	3	185	SM	1.6	48.30	6920
F6B040015	4	1.5	RE	0.7	10.50	170
F6B040025	4	2.5	RE	0.7	11.40	215
F6B040040	4	4	RE	0.7	12.60	290
F6B040060	4	6	RE	0.7	13.75	390
F6B04010	4	10	RE	0.7	17.00	600
F6B04016	4	16	RE	0.7	19.00	870
F6B04025	4	25	RM	0.9	23.35	1365
F6B04035	4	35	SM	0.9	25.85	1875
F6B04050	4	50	SM	1	29.45	2550
F6B04070	4	70	SM	1.1	34.00	3010
F6B04095	4	95	SM	1.1	38.75	3960
F6B04120	4	120	SM	1.3	42.55	5160
F6B04150	4	150	SM	1.4	48.70	6150
F6B04185	4	185	SM	1.6	53.45	7780
F6B04240	4	240	SM	1.7	60.90	9550
F6B050015	5	1.5	RE	0.7	11.45	195
F6B050025	5	2.5	RE	0.7	12.45	255
F6B050040	5	4	RE	0.7	13.80	345
F6B050060	5	6	RE	0.7	15.10	475
F6B05010	5	10	RE	0.7	18.60	735
F6B05016	5	16	RE	0.7	21.00	1070
F6B05025	5	25	RM	0.9	25.70	1605



ELECTRICAL CHARACTERISTICS

Single core

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	CURRENT CARRYING CAPACITY A				MAXIMUM CONDUCTOR DC RESISTANCE AT 20 °C Ω/Km	PULLING FORCE kN	
		In Conduit Flat	In Conduit Trefoil	In Air Flat	In Air Trefoil		(# *S*70)/1000	(# *S*50)/1000
1	4	66	55	56	44	4.61	0.28	0.20
1	6	82	68	71	57	3.08	0.42	0.30
1	10	109	90	96	77	1.83	0.70	0.50
1	16	139	115	128	102	1.15	1.12	0.80
1	25	179	149	173	139	0.727	1.75	1.25
1	35	213	178	212	170	0.524	2.45	1.75
1	50	251	211	258	208	0.387	3.50	2.50
1	70	307	259	328	265	0.268	4.90	3.50
1	95	366	310	404	329	0.193	6.65	4.75
1	120	416	352	471	381	0.153	8.40	6.00
1	150	465	396	541	438	0.124	10.50	7.50
1	185	526	449	626	507	0.0991	12.95	9.25
1	240	610	521	749	606	0.0754	16.80	12.00
1	300	689	587	864	697	0.0601	21.00	15.00
1	400	788	669	1018	816	0.047	28.00	20.00
1	500	889	748	1173	993	0.0366	35.00	25.00

Multi core

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	CURRENT CARRYING CAPACITY A		MAXIMUM CONDUCTOR DC RESISTANCE AT 20 °C Ω/Km	PULLING FORCE kN	
		In Conduit	In Air		(# *S*70)/1000	(# *S*50)/1000
2	1.5	30	24	12.1	0.21	0.15
2	2.5	40	32	7.41	0.35	0.25
2	4	52	42	4.61	0.56	0.40
2	6	64	53	3.08	0.84	0.60
2	10	86	73	1.83	1.40	1.00
2	16	111	96	1.15	2.24	1.60
2	25	143	130	0.727	3.50	2.50
2	35	173	160	0.524	4.90	3.50



NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	CURRENT CARRYING CAPACITY A		MAXIMUM CONDUCTOR DC RESISTANCE AT 20 °C Ω/Km	PULLING FORCE kN	
		In Conduit	In Air		(# *S*70)/1000	(# *S*50)/1000
3	1.5	30	24	12.1000	0.32	0.23
3	2.5	40	32	7.41	0.53	0.38
3	4	52	42	4.6100	0.84	0.60
3	6	64	53	3.08	1.26	0.90
3	10	86	73	1.8300	2.10	1.50
3	16	111	96	1.15	3.36	2.40
3	25	143	130	0.7270	5.25	3.75
3	35	173	160	0.524	7.35	5.25
3	50	205	195	0.3870	10.50	7.50
3	70	252	247	0.268	14.70	10.50
3	95	303	305	0.1930	19.95	14.25
3	120	346	355	0.153	25.20	18.00
3	150	390	407	0.1240	31.50	22.50
3	185	441	469	0.0991	38.85	27.75
4	1.5	30	24	12.1	0.42	0.30
4	2.5	40	32	7.41	0.7	0.50
4	4	52	42	4.61	1.12	0.80
4	6	64	53	3.08	1.68	1.20
4	10	86	73	1.83	2.8	2.00
4	16	111	96	1.15	4.48	3.20
4	25	143	130	0.727	7	5.00
4	35	173	160	0.524	9.8	7.00
4	50	205	195	0.387	14	10.00
4	70	252	247	0.268	19.6	14.00
4	95	303	305	0.193	26.6	19.00
4	120	346	355	0.153	33.6	24.00
4	150	390	407	0.124	42	30.00
4	185	441	469	0.0991	51.8	37.00
4	240	511	551	0.0754	67.2	48.00
5	1.5	30	24	12.1	0.53	0.38
5	2.5	40	32	7.41	0.88	0.63
5	4	52	42	4.61	1.4	1.00
5	6	64	53	3.08	2.1	1.50
5	10	86	73	1.83	3.5	2.50
5	16	111	96	1.15	5.6	4.00
5	25	143	130	0.727	8.75	6.25

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.