



Eland Product Group: B3J

APPLICATION

Power distribution cable for fixed or flexible wiring in industrial equipment including motors and cranes in open, closed, dry or humid areas and under stress of high mechanical-chemical effects. Provides good resistance to oils, acids, chemical agents, ozone and flame. Copper braid for electromagnetic screening.

CHARACTERISTICS

Voltage Rating Uo/U
450/750V

Test Voltage - AC
2.5kV

Temperature Rating
-35°C to +80°C

Minimum Bending Radius
Fixed: 7.5 x overall diameter
Flexed: 15 x overall diameter

CONSTRUCTION

Conductor
Class 5 Fine Stranded Annealed Flexible Copper

Insulation
Rubber Compound

Inner Sheath
Rubber Compound

Screen
Tinned Copper Bradi - 70% coverage

Sheath
Rubber Compound

Core Identification
 2 cores: ● Blue ● Brown
 3 cores: ● Green/Yellow ● Blue ● Brown
 4 cores: ● Green/Yellow ● Brown ● Black ● Grey
 5 cores: ● Green/Yellow ● Blue ● Brown ● Black ● Grey
 6 cores and above: ● Black with numbers

Sheath Colour
● Black

STANDARDS

EN 50363-1, EN 50363-2-1, EN 60228

Flame Retardant according to IEC/EN 60332-1-2

ISO/IEC 17025 LABORATORY TESTED

This product is subject to the Quality Assurance protocols of The Cable Lab®, an ISO/IEC 17025 accredited cable testing laboratory. Testing includes vertical flame, conductor resistance, tensile & elongation, and dimensional consistency, verified to published standards and approved product drawings.



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 and the RoHS Directive 2011/65/EU. RoHS compliance has been tested and confirmed by The Cable Lab® as meeting the requirements of the BSI RoHS Trusted Kitemark™.





DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
B3J020015BK	2	1.5	10.9	180
B3J020025BK	2	2.5	12.8	260
B3J020040BK	2	4	14.5	350
B3J020060BK	2	6	16.0	420
B3J02010BK	2	10	19.6	640
B3J02016BK	2	16	22.9	910
B3J030015BK	3	1.5	11.8	220
B3J030025BK	3	2.5	13.8	300
B3J030040BK	3	4	15.6	410
B3J030060BK	3	6	17.8	530
B3J03010BK	3	10	21.6	810
B3J03016BK	3	16	24.7	1100
B3J040015BK	4	1.5	13.2	270
B3J040025BK	4	2.5	14.8	350
B3J040040BK	4	4	17.1	480
B3J040060BK	4	6	19.3	630
B3J04010BK	4	10	23.4	980
B3J04016BK	4	16	26.7	1320
B3J050015BK	5	1.5	14.6	330
B3J050025BK	5	2.5	16.0	420
B3J070015BK	7	1.5	18.2	520
B3J070025BK	7	2.5	18.6	600
B3J120015BK	12	1.5	19.3	570
B3J120025BK	12	2.5	22.3	820

CONDUCTORS

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

NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM DIAMETER OF WIRES IN CONDUCTOR mm	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C Ohms/km
		Plain Wires
0.5	0.21	39
0.75	0.21	26
1	0.21	19.5
1.5	0.26	13.3
2.5	0.26	7.98
4	0.31	4.95
6	0.31	3.3
10	0.41	1.91
16	0.41	1.21

CURRENT CARRYING CAPACITY AT 30°C

Ambient Temperature

NOMINAL CROSS SECTIONAL AREA mm ²	1 CORE	2 CORE	3 CORE	4 CORE	5 CORE
1.5	19	19	15.5	16	16
2.5	26	26	21	22	22
4	34	34	29	30	30
6	43	43	36	37	37
10	60	60	51	52	54
16	79	79	67	69	71

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.