



## SANS Type 633 / 633-ECC 19/33 kV



Eland Product Group: B6G

### APPLICATION

Electrically driven machines, movable electric apparatus in hazardous areas, portable electric apparatus. Section feeders. Open cast mining, medium sized draglines, shovels and drills. Suitable for reeling purposes. Other industrial applications.

### CHARACTERISTICS

**Voltage Rating** U<sub>0</sub>/U  
19/33 kV

**Temperature Rating**  
-25°C to +90°C

**Minimum Bending Radius**  
9 x Overall Diameter

### CONSTRUCTION

**Conductor**  
Class 5 flexible stranded tinned annealed Copper

**Insulation**  
EPR (Ethylene Propylene Rubber) thermosetting compound and a strippable semi-conducting core screen (triple extruded)

**Braid**  
Nylon /Tinned copper wires

**Pilot Cores**  
Insulated with EPM (Ethylene Propylene Monomer)

**Lay**  
Each power core individually screened with tinned copper/textile braid, laid up three insulated pilot cores

**ECC Variant**  
One pilot core replaced with tinned conductor

**Inner Sheath**  
CR (Polychloroprene Rubber)

**Reinforcement braid**  
Open nylon braid - minimum 16 strings

**Outer Sheath**  
CR (Polychloroprene Rubber)

**Sheath Colour**  
● Black

### STANDARDS

SANS 1520-2, SANS 1411-1, SANS 1411-3

UV resistant  
Sunlight resistant  
Oil resistant

### THE CABLE LAB<sup>®</sup>

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



### REGULATORY COMPLIANCE

This cable meets the requirements of the RoHS Directive 2015/65/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab<sup>®</sup>.



## DIMENSIONS

ELAND PART NO.	POWER CORES				PILOT CORES CORES			MAXIMUM TENSION kN	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
	CONDUCTOR SIZE mm <sup>2</sup>	MAXIMUM WIRE DIAMETER mm	CONDUCTOR DIAMETER mm	MAXIMUM SCREEN WIRE DIAMETER mm	CONDUCTOR SIZE mm <sup>2</sup>	MAXIMUM WIRE DIAMETER mm	CONDUCTOR DIAMETER mm			
B6G3025/3025	25	0.41	6.8	0.31	16	0.41	4.2	1.1	71.3	720
B6G3035/3025	35	0.41	8.5	0.31	16	0.41	4.2	1.6	73.5	780
B6G3050/3025	50	0.41	10.3	0.31	16	0.41	4.2	2.3	77.8	890
B6G3070/3025	70	0.51	11.9	0.31	16	0.41	4.2	3.2	83.0	1030
B6G3095/3025	95	0.51	13.5	0.31	16	0.41	4.2	4.3	87.8	1170
B6G3120/3025	120	0.51	15.5	0.31	16	0.41	4.2	5.4	90.0	1270

## ECC DIMENSIONS (IF APPLICABLE)

POWER CORES		PILOT CORES CORES		NOMINAL WEIGHT kg/km
CONDUCTOR SIZE mm <sup>2</sup>	ECC SIZE mm <sup>2</sup>	ECC MAXIMUM WIRE DIAMETER mm		
25	16	0.41		720
35	25	0.41		780
50	25	0.41		880
70	35	0.41		1040
95	50	0.41		1190
120	70	0.51		1310

## ELECTRICAL CHARACTERISTICS

POWER CORES						CURRENT RATING AT 30°C AMBIENT A	SHORT CIRCUIT RATING kA for 1s		
CONDUCTOR SIZE mm <sup>2</sup>	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C Ω/km	MAXIMUM CONDUCTOR DC RESISTANCE AT 90°C Ω/km	REACTANCE Ω/km	MINIMUM COMBINED SCREEN RESISTANCE AT 23°C Ω/km	MINIMUM COMBINED SCREEN & ECC RESISTANCE Ω/km		Laid out straight	Symmetrical fault current	Earth fault current (screens)
25	0.795	1.05	0.155	1.6	0.7	105	3.1	1.6	3.6
35	0.565	0.749	0.144	1.2	0.5	130	4.3	2.1	5.0
50	0.393	0.521	0.136	0.8	0.5	160	6.1	3.1	5.0
70	0.277	0.368	0.131	0.7	0.4	195	8.5	3.5	7.5
95	0.210	0.279	0.125	0.6	0.3	230	11.6	4.1	9.0
120	0.164	0.218	0.119	0.6	0.23	260	14.6	4.1	11.5

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.