

# SANS Type 622 / 622-ECC 12.7/22 kV



Eland Product Group: B6F

#### **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 Uo/U 12.7/22 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)

Nylon /Tinned copper wires

#### **Pilot Cores**

Insulated with EPM (Ethylene Propylene Monomer)

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®

#### 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





BUSINESS 1.5°C







#### 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®.









# **DIMENSIONS**

	POWER CORES				PILOT CORES CORES					
ELAND PART NO.	CONDUCTOR SIZE mm <sup>2</sup>	MAXIMUM WIRE DIAMETER mm	CONDUCTOR DIAMETER mm	MAXIMUM SCREEN WIRE DIAMETER	CONDUCTOR SIZE mm <sup>2</sup>	MAXIMUM WIRE DIAMETER	CONDUCTOR DIAMETER mm	MAXIMUM TENSION kN	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
B6F3025/3025	25	0.41	6.8	0.31	10	0.41	4.2	1.1	60.6	550
B6F3035/3025	35	0.41	8.5	0.31	10	0.41	4.2	1.6	64.9	640
B6F3050/3025	50	0.41	10.3	0.31	10	0.41	4.2	2.3	68.5	720
B6F3070/3025	70	0.51	11.9	0.31	16	0.41	4.2	3.2	72.4	830
B6F3095/3025	95	0.51	13.5	0.31	16	0.41	4.2	4.3	77.1	960
B6F3120/3025	120	0.51	15.5	0.31	16	0.41	4.2	5.4	81.4	1100
B6F3150/3025	150	0.51	17.3	0.31	25	0.41	6.8	6.8	85.6	1260

# ECC DIMENSIONS (IF APPLICABLE)

POWER CORES	PILOT COR	NOMINAL		
CONDUCTOR SIZE mm <sup>2</sup>	ECC SIZE mm <sup>2</sup>	ECC MAXIMUM WIRE DIAMETER	WEIGHT kg/km	
25	16	0.41	550	
35	25	0.41	640	
50	25	0.41	730	
70	35	0.41	840	
95	50	0.41	980	
120	70	0.51	1130	
150	95	0.51	1300	

# **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)	Earth fault current (ECC + screens)
25	0.795	1.05	0.145	1.6	0.7	105	3.1	1.6	3.6
35	0.565	0.749	0.135	1.2	0.5	130	4.3	2.1	5.0
50	0.393	0.521	0.127	0.8	0.5	160	6.1	3.1	5.0
70	0.277	0.368	0.122	0.7	0.4	195	8.5	3.5	7.5
95	0.210	0.279	0.117	0.6	0.3	230	11.6	4.1	9.0
120	0.164	0.218	0.111	0.6	0.23	260	14.6	4.1	11.5
150	0.132	0.176	0.106	0.6	0.18	300	18.3	4.1	14.0

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.