

# UKPN 19/33 (36)kV Single Core Unarmoured Aluminium Conductors



#### **APPLICATION**

Medium voltage DNO aluminium power cable approved to UK Power Networks (UKPN) specification and manufactured by G81 suppliers for connections from existing grid to new sub-main developments.

#### **CHARACTERISTICS**

Voltage Rating (Uo/U) 19/33 (36)kV

**Temperature Rating** 

0°C to +90°C

## **CONSTRUCTION**

#### Conductor

Stranded or Solid Aluminium Conductor

### **Conductor Screen**

Fully bonded semi-conductive compound

#### Insulation

XLPE (Cross-Linked Polyethylene)

#### **Insulation Screen**

Semi-conductive compound

#### Screen

Aluminium Wires

#### Separator

Water Swellable Tape in Open Helix

#### Sheath

MDPE (Medium Density Polyethylene)

## **Sheath Colour**

Black

# **STANDARDS**

BS 7870-4.10



# 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 meets the requirements of 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 mm²	NOMINAL AREA OF METALLIC SCREEN mm²	NOMINAL OVERALL DIAMETER OF CABLE (OR TRIPLEX GROUP IF APPLICABLE) mm²	NOMINAL WEIGHT OF CABLE (OR TRIPLEX GROUP IF APPLICABLE) kg	MINIMUM BENDING RADIUS mm	MAXIMUM PULLING TENSION N
D120118BK000	1	300	82	46.5	2060	940	9000
D120120BK000	1	500	82	53.5	2820	1100	15000
D120121BK000	1	630	82	57.5	3610	1120	18900

# **ELECTRICAL CHARACTERISTICS**

NOMINAL CROSS SECTIONAL AREA mm²	MAXIMUM DC RESISTANCE OF CONDUCTOR AT 20°C ohms/km	MAXIMUM AC RESISTANCE OF CONDUCTOR AT 20°C ohms/km	REACTANCE AT 50HZ ohms/km	CAPACITANCE μf/km	1 SECOND SHORT CIRCUIT RATING OF CONDUCTOR kA	1 SECOND SHORT CIRCUIT RATING OF METALLIC SCREEN kA
300	0.1000	0.129	0.114	0.25	28.3	8.3
500	0.0605	0.0796	0.106	0.33	47.2	8.3
630	0.0469	0.0628	0.102	0.34	59.5	8.3

# **CURRENT CARRYING CAPACITY**

NOMINAL CROSS SECTIONAL AREA mm²	DIRECT BURIED Amps	IN DUCTS Amps	IN AIR Amps
300	475	380	580
500	610	488	790
630	690	552	920

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.