



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



## APPLICATION

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

## CHARACTERISTICS

**Voltage Rating** (U<sub>0</sub>/U)  
19/33 (36)kV

**Temperature Rating**  
0°C to +90°C

## CONSTRUCTION

### Conductor

Class 2 Stranded Aluminium Conductor

### Conductor Screen

Fully bonded semi-conductive compound

### Insulation

XLPE (Cross-Linked Polyethylene)

### Insulation Screen

Semi-conductive compound

### Screen

Copper Wires and Equalising Tape

### Separator

Binding tape

### Sheath

MDPE (Medium-Density Polyethylene)

### Sheath Colour

● Black

## STANDARDS

BS 7870-4.10, ES 02-0940



## 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 mm <sup>2</sup>	NOMINAL AREA OF METALLIC SCREEN mm <sup>2</sup>	NOMINAL OVERALL DIAMETER OF CABLE (OR TRIPLEX GROUP IF APPLICABLE) mm <sup>2</sup>	NOMINAL WEIGHT OF CABLE (OR TRIPLEX GROUP IF APPLICABLE) kg	MINIMUM BENDING RADIUS mm	MAXIMUM PULLING TENSION N
D520115BK000	1	150	50	43	1900	825	4500
D520117BK000	1	240	50	46	2290	880	7200
D520119BK000	1	400	50	52	2900	1000	12000

## ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	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
150	0.206	0.265	0.129	0.20	14.2	8.2
240	0.125	0.161	0.118	0.24	22.7	8.2
400	0.0778	0.101	0.108	0.29	37.8	8.2

## CURRENT CARRYING CAPACITY

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	DIRECT BURIED Amps	IN DUCTS Amps	IN AIR Amps
150	318	320	400
240	416	415	530
400	532	520	700

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.