



SPEN 6.35/11 (12)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 (U₀/U)
6.35/11 (12)kV

Temperature Rating
0°C to +90°C

CONSTRUCTION

Conductor

Class 1 Solid Aluminium Conductor

Conductor Screen

Fully bonded semi-conductive compound

Insulation

XLPE (Cross-Linked Polyethylene)

Insulation Screen

Semi-conductive compound

Screen

Copper Wires and Equalising Copper Tape

Separator

Binding tape

Sheath

MDPE (Medium-Density Polyethylene)

Sheath Colour

● Red

STANDARDS

BS 7870-4.10, SP-PS-076



SP ENERGY
NETWORKS

THE CABLE LAB[®]

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



SCIENCE
BASED
TARGETS

BUSINESS
AMBITION FOR 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

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL AREA OF METALLIC SCREEN mm ²	NOMINAL OVERALL DIAMETER OF CABLE (OR TRIPLEX GROUP IF APPLICABLE) mm ²	NOMINAL WEIGHT OF CABLE (OR TRIPLEX GROUP IF APPLICABLE) kg	MINIMUM BENDING RADIUS mm	MAXIMUM PULLING TENSION N
D510113RD000	1	95	35	27	980	510	2850
D510116RD000	1	185	35	32	1320	605	5550
D510118RD000	1	300	35	37	1750	700	9000

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm ²	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
95	0.320	0.411	0.119	0.31	8.9	5.0
185	0.164	0.211	0.107	0.40	17.5	5.0
300	0.100	0.130	0.100	0.49	28.3	5.0

CURRENT CARRYING CAPACITY

NOMINAL CROSS SECTIONAL AREA mm ²	DIRECT BURIED Amps	IN DUCTS Amps	IN AIR Amps
95	255	226	296
185	368	326	446
300	481	425	605

Based on the following assumed installation conditions:

Trefoil formation

Ground Temperature: 15° C;

Soil thermal resistivity: 1.2K.m/W

Depth: 0.6m

Air temperature 25° C

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.