

SPEN Approved Power Cable - 11kV, XLPE, MDPE - 95mm² to 300mm²



Description

SPEN approved medium voltage aluminium power cable for connections from electrical grid to sub-main developments. Suitable for power networks, underground, outdoors and installation in cable ducting.

Key Features



Voltage Rating
6.35kV / 11kV (12kV)



Minimum Bending Radius
20x Overall Diameter



Temperature Limits
Temperature Range: 0°C to +90°C

Standards

- DNO Cable approved for SPEN use
- BS 7870 4.20
- BS EN/IEC 60228
- SPEN SAP numbers: 30980092, 30980093, 30980094

Construction

- **Conductor:** Class 1 solid aluminium conductor
- **Conductor Screen:** Bonded semi conductive material
- **Insulation:** Cross Linked polyethylene (XLPE)
- **Insulation Screen:** Strippable Extruded Semi Conductor
- **Water Blocking:** Semi conducting tape, helically applied
- **Screen:** Copper Wires & Helical Equalising Copper Tape
- **Tape:** Polyester tape wrapping
- **Outer Sheath:** Medium Density Polyethylene (MDPE)
- **Sheath Colour:** Red: UV Stabilised

QA Lab

Cleveland Cable Test & Training Lab

Our state-of-the-art cable testing facility ensures that every cable meets the highest standards of quality and compliance through continuous, rigorous testing. Where applicable, cables are independently tested and certified by BASEC to ensure full compliance.



CPR

Cleveland Cable Company is committed to compliance with the Construction Products Regulation (CPR). Where applicable, all cables manufactured after 1st July 2017 have been assessed in accordance with CPR requirements, with full supporting documentation available.



Our Sustainability Commitment

We are committed to the journey to Net Zero as a business partner, an employer and a community member.

By thinking and acting sustainably, we deliver excellent customer service while reducing carbon emissions in collaboration with our customers and suppliers.



ecovadis

Cleveland Cable Company has been independently assessed by EcoVadis, a globally recognised provider of business sustainability ratings. Our score places us among the top 35% of companies evaluated worldwide, reflecting our strong commitment to environmental, social, and ethical performance

ecovadis

SPEN Approved Power Cable - 11kV, XLPE, MDPE - 95mm² to 300mm² - Dimensions

| Reference | Conductor Size (mm ²) | No Of Cores | Weight(Kg/Km) |
|--------------------|-----------------------------------|-------------|---------------|
| SPEN11KVMDE1X95 | 95 | 1 | 980 |
| SPEN11KVMDE3X95AL | 95 | 3 | 3250 |
| SPEN11KVMDE1X185 | 185 | 1 | 1330 |
| SPEN11KVMDE3X185AL | 185 | 3 | 4880 |
| SPEN11KVMDE1X300 | 300 | 1 | 1760 |
| SPEN11KVMDE3X300AL | 300 | 3 | 6580 |



SPEN BS7870 11KV SAC MDPE ELECTRIC CHARACTERISTICS

| MAX VOLTAGE RATING | NOMINAL CROSS SECTIONAL AREA (MM ²) | IN GROUND AMPS | IN DUCTS AMPS | IN AIR AMPS |
|--------------------|---|----------------|---------------|-------------|
| 11kV | 95 | 228 | 197 | 245 |
| 11kV | 185 | 330 | 289 | 369 |
| 11kv | 300 | 431 | 381 | 494 |

Electrical Data:

Maximum conductor operating temperature:90°C
 Maximum screen operating temperature:80°C
 Maximum conductor temperature during S.C:250°C
 Bending Radius: 15 x Diameter Fixed.
 Bending Radius: 20 X Diameter Installation

Laying conditions at trefoil formation are as below:

Soil thermal resistivity:112°K. m/W
 Burial depth:0.6m
 Ground temperature:15°C
 Air temperature:25°C
 Frequency:50Hz



SPEN BS7870 11KV SAC MDPE ELECTRIC CHARACTERISTICS

| CONDUCTOR SIZE | MAXIMUM DC RESISTANCE OF CONDUCTOR AT 20°C | MAXIMUM AC RESISTANCE OF CONDUCTOR AT 90°C | REACTANCE AT 50HZ | CAPACITANCE | 1 SECOND SHORT CIRCUIT RATING OF CONDUCTOR | 1 SECOND SHORT CIRCUIT RATING OF METALLIC SCREEN |
|--------------------|--|--|-------------------|-------------|--|--|
| (MM ²) | Ω/KM | Ω/KM | Ω/KM | (μF/KM) | kA | kA |
| 95 | 0.32 | 0.411 | 0.12 | 0.32 | 8.9 | 9.3 |
| 185 | 0.164 | 0.211 | 0.103 | 0.4 | 17.4 | 12.8 |
| 300 | 0.1 | 0.13 | 0.13 | 0.5 | 28.3 | 12.8 |

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