

# BS6622 3 Core Aluminium Mains Cable 6.35/11kV - STR AL, XLPE, SWA, PVC - 95mm<sup>2</sup> to 300mm<sup>2</sup>



## Description

These 11kV 3 core cables have aluminium conductors with cross-linked polyethylene (XLPE) insulation various screen options, water blocking options, steel wire armour and PVC bedding and outer sheath.

BS6622 cables are suitable for Internal use in buildings, power stations, or switchboards and are often run in cable tray for industrial applications. They can also be used externally in cable duct and due to being armoured can be buried directly in free draining soil.

## Key Features



**Voltage Rating**  
6.35/11(12kV)  
Tested To Voltage And Duration of BS6622



**Minimum Bending Radius**  
12 x Overall Diameter



**Flame Retardancy**  
BS EN 60332-1-2



**Temperature Limits**  
Maximum operating temp: 90°C  
Initial temperature at S.C.C for screen: 80°C  
Maximum temp during short circuit: 250°C

## Core Colours

3 core - Brown Black Grey Tape

## Standards

- BS6622
- IEC 60502-2
- BS EN/IEC 60332-1-2
- BS EN/IEC 60228

## Construction

- **Conductor:** Class 2 Aluminium conductors according to EN 60228
- **Insulation:** Cross Linked polyethylene (XLPE)
- **Insulation Screen:** Strippable Extruded Semi Conductor
- **Metallic Screen:** Individual copper tape screen
- **Tape:** Semi-conducting tape insulated
- **Bedding:** Polyvinyl Chloride (PVC)
- **Armour:** Steel Wire Armour (SWA)
- **Outer Sheath:** Polyvinyl Chloride (PVC)

## 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

## BS6622 3 Core Aluminium Mains Cable 6.35/11kV - STR AL, XLPE, SWA, PVC - 95mm<sup>2</sup> to 300mm<sup>2</sup> - Dimensions

Reference	Conductor Size (mm <sup>2</sup> )	No Of Cores	Stranding(mm)	Overall Diameter(mm)	Weight(Kg/Km)	Nylon Cleat Size
10115RD	95	3	19/2.52	62.6	5800	TC10
10116RD	120	3	37/2.03	66.6	6400	TC11
10117RD	150	3	34/2.25	68.6	7000	TC11
10118RD	185	3	37/2.52	74.1	7800	TC12
10119RD	240	3	37/2.96	81.2	9800	TC14
10120RD	300	3	61/2.52	86.8	11000	TC15

11KV ALUMINIUM 3 CORE ELECTRICAL CHARACTERISTICS

CONDUCTOR SIZE	MAX DC RESISTANCE AT 20°C	CONDUCTOR AC RESISTANCE AT MAX OPERATING TEMPERATURE AND 50hz	CAPACITANCE	CHARGING CURRENT	DIELECTRIC LOSSES	RESISTANCE AT 50HZ	CONDUCTOR S.C.C FOR 1 SEC	SCREEN S.C.C FOR 1 SEC	CURRENT RATING		
									LAID IN GROUND	LAID IN DUCT	LAID IN FREE AIR
MM <sup>2</sup>	(Ω/km)	(Ω/km)	mF/km	(A/km)	(W/km)	(Ω/km)	(KA)	(KA)	AMPS	AMPS	AMPS
95	0.193	0.247	0.398	0.662	16.81	0.099	13.585	1	204	180	238
120	0.153	0.196	0.435	0.723	18.37	0.096	17.16	1.1	232	206	274
150	0.124	0.159	0.477	0.793	20.15	0.092	21.45	1.2	259	231	309
185	0.0991	0.128	0.516	0.859	21.81	0.089	26.455	1.2	293	262	354
240	0.0754	0.098	0.579	0.964	24.47	0.086	34.32	1.4	338	304	415
300	0.0601	0.078	0.642	1.068	27.13	0.084	42.9	1.5	380	343	472

**Electrical Data:**

Maximum conductor operating temperature: 90°C  
 Maximum screen operating temperature: 80°C  
 Maximum conductor temperature during S.C.: 250°C

**Laying conditions at trefoil formation are as below:**

Soil thermal resistivity: 120°C. Cm/Watt  
 Burial depth: 0.5m  
 Ground temperature: 15°C  
 Air temperature: 25°C  
 Frequency: 50Hz

THE INFORMATION CONTAINED WITHIN THIS DATASHEET IS FOR GUIDANCE ONLY AND IS SUBJECT TO CHANGE WITHOUT NOTICE OR LIABILITY. WE BELIEVE THE INFORMATION IS CORRECT AT THE TIME OF PUBLICATION. PLEASE NOTE WHEN SELECTING CABLE ACCESSORIES THAT ACTUAL CABLE DIMENSIONS MAY VARY DUE TO MANUFACTURING TOLERANCES.



GENELEC

