BS6622 3 Core Mains Cable 6.35/11kV - CU, XLPE, SWA, PVC - 25mm² to 400mm²



Description

BS6622 cables are armoured power cables designed for medium voltage fixed installations, such as power networks and industrial installations, including those in power supply stations, indoors, outdoors, underground, and in cable ducts. These 3 core cables have copper 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 stranded copper conductor
- **Insulation**: Cross Linked polyethylene (XLPE)
- **Insulation Screen**: Strippable Extruded Semi Conductor
- **Metallic Screen**: Individual copper tape screen
- **Bedding**: Polyvinyl Chloride (PVC)
- **Armour**: Steel Wire Armour (SWA)
- **Outer Sheath**: Polyvinyl Chloride (PVC)

Training & Testing Lab

AN ISO/IEC 17025 ACCREDITED FACILITY

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.

ISO/IEC 17025 Accredited Testing Laboratory
31196

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.

CLEVELAND CABLE COMPANY

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 Mains Cable 6.35/11kV - CU, XLPE, SWA, PVC - 25mm² to 400mm² - Dimensions

Reference	Conductor Size (mm2)	No Of Cores	Stranding(mm)	Overall Diameter(mm)	Weight(Kg/Km)	Nylon Cleat Size
11KVXLPE3X35RD	35	3	19/1.53	50.5	4491	2.0
11KVXLPE3X50RD	50	3	19/1.78	53.3	5105	TC9
11KVXLPE3X70RD	70	3	19/2.14	56.9	6019	TC9
11KVXLPE3X95RD	95	3	19/2.52	61	7148	TC10
11KVXLPE3X120RD	120	3	37/2.03	64.6	8199	TC11
11KVXLPE3X150RD	150	3	37/2.25	67.8	9274	TC11
11KVXLPE3X185RD	185	3	37/2.52	71.9	10706	TC12
11KVXLPE3X240RD	240	3	61/2/25	78.8	13740	TC14
11KVXLPE3X300RD	300	3	61/2.52	84.1	16051	TC14
11KVXLPE3X400RD	400	3	61/2.85	90.3	19095	TC15

11KV 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^2	(Ω/km)	(Ω/km)	mf/km	(A/Km)	(W/Km)	(Ω/km)	(KA)	(KA)	AMPS	AMPS	AMPS
35	0.524	0.67	0.22	0.36	5.8	0.11	5.01	1.45	178	162	173
50	0.387	0.494	0.316	0.525	13.33	0.109	7.15	1.50	214	170	228
70	0.268	0.342	0.363	0.605	15.35	0.102	10.01	1.66	263	211	285
95	0.193	0.247	0.398	0.662	16.81	0.099	13.585	1.80	313	253	342
120	0.153	0.196	0.435	0.723	18.37	0.096	17.16	2.00	354	286	392
150	0.124	0.159	0.477	0.793	20.15	0.092	21.45	2.10	397	321	444
185	0.0991	0.128	0.516	0.859	21.81	0.089	26.455	2.59	446	365	504
240	0.0754	0.098	0.579	0.964	24.47	0.086	34.32	2.70	511	421	589
300	0.0601	0.078	0.642	1.068	27.13	0.084	42.9	2.83	569	474	667
400	0.047	0.062	0.71	1.181	30	0.081	57.2	2.95	634	532	754

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.