

Nexans - 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.

Suitable for internal use in buildings, power stations or switchboards, these BS6622 cables 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. Supplied by Nexans.

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

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

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

Reference	Short circuit screen 1s [kA]	Short circuit conductor 1s [kA]	Perm. Current buried / direct 20°C [A]	Perm current rating in air 30°C [A]	Max. DC Resist. Cond. 20°C [Ohm/km]	Conductor Size (mm2)	No Of Cores	Overall Diameter(mm)	Weight(Kg/Km)
11KVXLPE3X7 0RD	1.74	10	220	253	0.268	70	3	57.0	6750
11KVXLPE3X9 5RD	1.74	13.6	263	307	0.193	95	3	61.0	8000
11KVXLPE3X1 20RD	1.74	17.2	298	352	0.153	120	3	65.0	9000
11KVXLPE3X1 50RD	2.31	21.4	332	397	0.124	150	3	68.0	10500
11KVXLPE3X1 85RD	2.31	26.5	374	453	0.099	185	3	74.0	13000
11KVXLPE3X2 40RD	2.31	34.3	431	529	0.075	240	3	80.0	15500
11KVXLPE3X4 00RD	2.89	57.2	541	683	0.047	400	3	92.0	21500



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.