

BS7835 3 Core Armoured Mains Cable 11kV - XLPE, SWA, LSZH - 35mm to 400mm



The 11KV Medium Voltage British Standard cable is suitable for installation in power networks, underground and in cable ducting. Its low smoke zero halogen sheath makes it suitable for installations where fire, smoke emissions and toxic fumes create a potential threat.

Please note: Due to poor UV resistant qualities, red outer sheath cables are not recommended for outdoor installation.

Key Features



Installation Guidelines

Should not be installed at temperatures below 0°C or above +60°C



Voltage Rating

6350/11000 Volts
Tested To Voltage And Duration of BS7835



Minimum Bending Radius

As Per Manufacturers Datasheet



Temperature Limits

Ambient Temperature: -15°C to + 90°C

Construction

- **Conductor:** Stranded Plain Annealed Compacted Circular Copper Conductor
 - **Insulation:** Cross Linked polyethylene (XLPE)
 - **Bedding:** LSZH (Low smoke Zero Halogen)
 - **Metallic Screen:** Individual or overlapped copper tape screen
 - **Sheath:** Low Smoke Zero Halogen (LSZH)
 - **Separator:** Copper Tape with 10% overlap
 - **Armour:** Galvanised Steel Wire Armour (SWA)
 - **Sheath Colour:** Red or Black
- BS7835, BS EN50268 (IEC 61034), Flame propagation to BS EN 50265, BS EN 50266 (IEC 60332)

Standards

Core Colours

Brown

Black

Grey

Tapes

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

BS7835 3 Core Armoured Mains Cable 11kV - XLPE, SWA, LSZH - 35mm to 400mm - Dimensions

Reference	Conductor Size (mm2)	No Of Cores	Stranding(mm)	Overall Diameter(mm)	Weight(Kg/Km)	Nylon Cleat Size
10302RD	35	3	19/1.53	50.5	4501	TC9
10304RD	50	3	19/1.78	53.3	5117	TC9
10306RD	70	3	19/2.14	56.9	6032	TC9
10308RD	95	3	19/2.52	61	7163	TC10
10310RD	120	3	37/2.03	64.6	8216	TC11
10312RD	150	3	37/2.25	67.8	9292	TC11
10314RD	185	3	37/2.52	71.9	10726	TC12
10316RD	240	3	61/2.25	78.8	13763	TC14
10318RD	300	3	61/2.52	84.1	16077	TC14
10320RD	400	3	70/3.15	90.3	19124	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
MM²	(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	1.29	178	162	173
50	0.387	0.494	0.316	0.525	13.33	0.109	7.15	0.8	214	170	228
70	0.268	0.342	0.363	0.605	15.35	0.102	10.01	0.9	263	211	285
95	0.193	0.247	0.398	0.662	16.81	0.099	13.585	1	313	253	342
120	0.153	0.196	0.435	0.723	18.37	0.096	17.16	1.1	354	286	392
150	0.124	0.159	0.477	0.793	20.15	0.092	21.45	1.2	397	321	444
185	0.0991	0.128	0.516	0.859	21.81	0.089	26.455	1.2	446	365	504
240	0.0754	0.098	0.579	0.964	24.47	0.086	34.32	1.4	511	421	589
300	0.0601	0.078	0.642	1.068	27.13	0.084	42.9	1.5	569	474	667
400	0.047	0.062	0.71	1.181	30	0.081	57.2	1.6	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.

For more information contact: 01642 241 133

