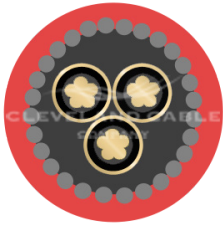


## BS7835 11KV LSZH 3 CORE COPPER SCREENED CABLE



### APPLICATION

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.

### CABLE STANDARDS

BS7835  
BS EN50268 (IEC 61034)  
Flame propagation to BS EN 50265  
BS EN 50266 (IEC 60332)

### CONSTRUCTION

**Conductor:** Stranded Plain Annealed Circular Compacted Copper Conductors

**Insulation:** Cross Link Polyethylene (XLPE)

**Metallic Screen:** Individual or overlapped copper tape screen

**Bedding:** Low Smoke Zero Halogen (LSZH)

**Separator:** Copper Binding Tape 10% Overlap

**Armouring:** Galvanised Steel Wire Armour

**Sheath:** Low Smoke Zero Halogen (LSZH)

**Sheath Colour:** **Red** **Black**

### CHARACTERISTICS

**Voltage Rating:** 6350/11000 Volts (12KV)  
Tested to Voltage and Duration of BS7835

**Temperature Rating:** -15°C to +90°C

**Minimum Bending Radius:** As per cable manufacturer datasheet

### CORE IDENTIFICATION

**3 Core:** **Brown** **Black** **Grey** Tapes

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

## BS7835 11KV LSZH 3 CORE COPPER SCREENED CABLE - DIMENSIONS

CCC CODE	CONDUCTOR SIZE (MM <sup>2</sup> )	STRANDING (MM)	NO OF CORES	WEIGHT (KG/KM)	OVERALL DIAMETER (MM)			NYLON CLEAT SIZE
					UNDER ARMOUR	OVER ARMOUR	OVERALL MM	
10302RD	35	19/1.53	3	4501	41.6	46.6	51.6	TC9
10304RD	50	19/1.78	3	5117	44.4	49.4	54.6	TC9
10306RD	70	19/2.14	3	6032	48.1	53.1	58.5	TC9
10308RD	95	19/2.52	3	7163	52	57	62.6	TC10
10310RD	120	37/2.03	3	3216	55.6	60.6	66.6	TC11
10312RD	150	37/2.25	3	9292	58.6	63.6	69.8	TC11
10314RD	185	37/2.52	3	10726	62.7	67.7	74.1	TC12
10316RD	240	61/2.25	3	13763	68.1	74.4	81.2	TC14
10318RD	300	61/2.52	3	16077	73.5	79.8	87	TC14
10320RD	400	70/3.15	3	19124	78.3	84.6	92.2	TC15

## BS7835 11KV LSZH 3 CORE COPPER SCREENED CABLE- ELECTRICAL CHARACTERISTICS

CONDUCTOR SIZE	MAXIMUM CONDUCTOR DC RESISTANCE AT (20°C Ω/Km)	CONDUCTOR AC RESISTANCE AT MAX OPERATING TEMPERATURE AND 50HZ (20°C Ω/KM)	CAPACITANCE mF/Km	CHARGING CURRENT (A/Km)	DIELECTRIC LOSSES (W/Km)	RESISTANCE AT 50HZ (Ω/KM)	CONDUCTOR S.C.C FOR 1 SEC (KA)	SCREEN S.C.C FOR 1 SEC (KA)	CURRENT RATING		
									LAID IN GROUND A	LAID IN DUCT A	LAID IN FREE AIR A
35	0.524	0.670	0.22	0.360	5.80	0.110	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	30.00	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.