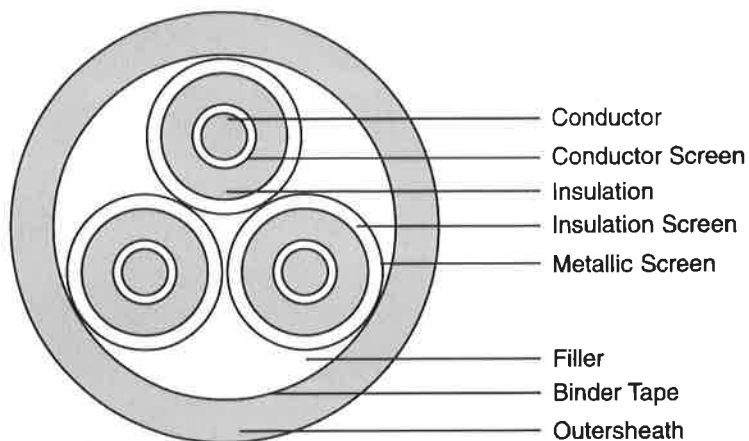
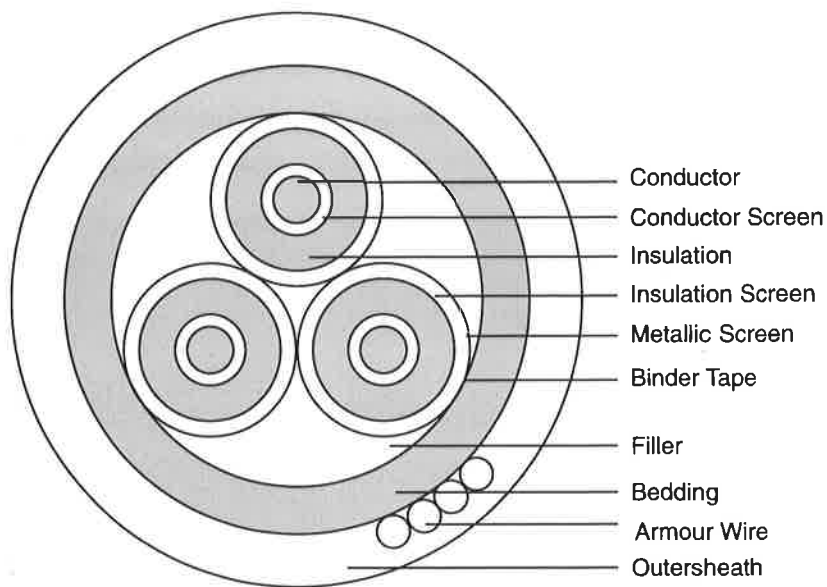


MEDIUM VOLTAGE THREE CORE XLPE INSULATED POWER CABLE

UNARMoured CABLES



ARMoured CABLES



BASIC CONSTRUCTION

CONDUCTOR	- COPPER OR ALUMINIUM
CONDUCTOR SHAPE	- COMPACTED CIRCULAR STRANDED
INSULATION	- XLPE
BEDDING	- PVC OR POLYETHYLENE
ARMOUR WIRE	- GALVANISED STEEL WIRE
SHEATH MATERIAL	- PVC OR POLYETHYLENE

BS 6622
IEC 60502-2

REFERENCE
GA-11-3-N

MEDIUM VOLTAGE XLPE INSULATED POWER CABLES

TABLE 9A **THREE-CORE 11kV UNARMoured CABLES (COPPER CONDUCTOR)**

Nominal Area of Conductors	Thickness of Insulation	Thickness of Outer Sheath	Overall Diameter	Approx. Weight	ELECTRICAL CHARACTERISTICS					
					Current Rating		Conductor Resistance		Reactance at 50Hz	Capacitance
					In Air at 40°C	In Ground at 25°C	dc at 20°C	50Hz at 90°C		
sq. mm	mm	mm	mm	kg/km	amp	amp	Ω/km	Ω/km	Ω/km	μF/km
16	3.4	2.2	38.7	1660	111	114	1.15	1.47	0.140	0.20
25	3.4	2.2	41.3	2040	123	126	0.727	0.927	0.124	0.22
35	3.4	2.3	43.7	2440	149	153	0.524	0.668	0.116	0.24
50	3.4	2.4	46.4	2910	187	189	0.387	0.493	0.111	0.27
70	3.4	2.5	50.1	3680	230	230	0.268	0.342	0.106	0.30
95	3.4	2.7	54.2	4650	281	270	0.193	0.247	0.100	0.34
120	3.4	2.8	57.6	5530	319	306	0.153	0.196	0.097	0.37
150	3.4	2.9	60.9	6490	366	342	0.124	0.159	0.094	0.40
185	3.4	3.0	64.7	7730	417	387	0.0991	0.128	0.092	0.43
240	3.4	3.1	70.0	9650	485	441	0.0754	0.0984	0.089	0.48
300	3.4	3.3	75.6	11710	553	486	0.0601	0.0797	0.086	0.53
400	3.4	3.5	81.8	14460	629	540	0.0470	0.0639	0.083	0.59

BS 6622
IEC 60502-2

REFERENCE
GC-11-3-S

MEDIUM VOLTAGE XLPE INSULATED POWER CABLES

TABLE 9B **THREE-CORE 11kV ARMoured CABLES (COPPER CONDUCTOR)**

Nominal Area of Conductors	Thickness of Insulation	Thickness of Extruded Bedding	Nominal of Armour Diameter	Thickness of Outer Sheath	Overall Diameter	Approx. Weight	ELECTRICAL CHARACTERISTICS					
							Current Rating		Conductor Resistance		Reactance at 50Hz	Capacitance
							In Air at 40°C	In Ground at 25°C	dc at 20°C	50Hz at 90°C		
sq. mm	mm	mm	mm	mm	mm	kg/km	amp	amp	Ω/km	Ω/km	Ω/km	μF/km
16	3.4	1.2	2.0	2.3	47.2	3750	111	114	1.15	1.47	0.140	0.20
25	3.4	1.3	2.5	2.4	50.8	4750	123	126	0.727	0.927	0.124	0.22
35	3.4	1.3	2.5	2.5	53.0	5270	149	153	0.524	0.668	0.116	0.24
50	3.4	1.4	2.5	2.6	55.5	5870	187	189	0.387	0.493	0.111	0.27
70	3.4	1.4	2.5	2.7	59.0	6830	230	230	0.268	0.342	0.106	0.30
95	3.4	1.5	2.5	2.8	62.9	7990	281	270	0.193	0.247	0.100	0.34
120	3.4	1.6	2.5	3.0	66.4	9080	319	306	0.153	0.196	0.097	0.37
150	3.4	1.6	2.5	3.1	69.7	10220	366	342	0.124	0.159	0.094	0.40
185	3.4	1.7	2.5	3.2	73.5	11690	417	387	0.0991	0.128	0.092	0.43
240	3.4	1.8	3.15	3.4	80.2	14990	485	441	0.0754	0.0984	0.089	0.48
300	3.4	1.9	3.15	3.6	85.7	17320	553	486	0.0601	0.0797	0.086	0.53
400	3.4	2.0	3.15	3.8	90.9	20500	629	540	0.0470	0.0639	0.083	0.59

BS 6622
IEC 60502-2

REFERENCE
GA-11-3-N

MEDIUM VOLTAGE XLPE INSULATED POWER CABLES

TABLE 10A **THREE-CORE 11kV UNARMoured CABLES (ALUMINIUM CONDUCTOR)**

Nominal Area of Conductors	Thickness of Insulation	Thickness of Outer Sheath	Overall Diameter	Approx. Weight	ELECTRICAL CHARACTERISTICS					
					Current Rating		Conductor Resistance		Reactance at 50Hz	Capacitance
					In Air at 40°C	In Ground at 25°C	dc at 20°C	50Hz at 90°C		
sq. mm	mm	mm	mm	kg/km	amp	amp	Ω/km	Ω/km	Ω/km	μF/km
16	3.4	2.2	38.7	1360	80	87	1.91	2.44	0.130	0.20
25	3.4	2.2	41.3	1570	98	104	1.20	1.54	0.124	0.22
35	3.4	2.3	43.8	1780	119	122	0.868	1.11	0.116	0.24
50	3.4	2.4	46.5	2020	145	144	0.641	0.822	0.111	0.27
70	3.4	2.5	50.2	2400	179	176	0.443	0.568	0.106	0.30
95	3.4	2.7	54.2	2860	213	207	0.320	0.410	0.100	0.34
120	3.4	2.8	57.6	3270	251	239	0.253	0.325	0.097	0.37
150	3.4	2.9	60.9	3690	281	270	0.206	0.265	0.094	0.40
185	3.4	3.0	64.7	4240	327	302	0.164	0.211	0.092	0.43
240	3.4	3.1	70.0	5060	383	342	0.125	0.161	0.089	0.48
300	3.4	3.3	75.2	5910	434	392	0.100	0.130	0.086	0.53
400	3.4	3.5	81.4	7070	502	441	0.0778	0.102	0.083	0.59

BS 6622
IEC 60502-2

REFERENCE
GA-11-3-S

MEDIUM VOLTAGE XLPE INSULATED POWER CABLES

TABLE 10B **THREE-CORE 11kV ARMoured CABLES (ALUMINIUM CONDUCTOR)**

Nominal Area of Conductors	Thickness of Insulation	Thickness of Extruded Bedding	Nominal of Armour Diameter	Thickness of Outer Sheath	Overall Diameter	Approx. Weight	ELECTRICAL CHARACTERISTICS					
							Current Rating		Conductor Resistance		Reactance at 50Hz	Capacitance
							In Air at 40°C	In Ground at 25°C	dc at 20°C	50Hz at 90°C		
sq. mm	mm	mm	mm	mm	mm	kg/km	amp	amp	Ω/km	Ω/km	Ω/km	μF/km
16	3.4	1.2	2.0	2.3	47.2	3780	80	87	1.91	2.44	0.130	0.20
25	3.4	1.3	2.5	2.4	50.8	4280	98	104	1.20	1.54	0.124	0.22
35	3.4	1.3	2.5	2.5	53.1	4610	119	122	0.868	1.11	0.116	0.24
50	3.4	1.4	2.5	2.6	55.6	4990	145	144	0.641	0.822	0.111	0.27
70	3.4	1.4	2.5	2.7	59.1	5550	179	176	0.443	0.568	0.106	0.30
95	3.4	1.5	2.5	2.8	62.9	6200	213	207	0.320	0.410	0.100	0.34
120	3.4	1.6	2.5	3.0	66.4	6820	251	239	0.253	0.325	0.097	0.37
150	3.4	1.6	2.5	3.1	69.7	7420	281	270	0.206	0.265	0.094	0.40
185	3.4	1.7	2.5	3.2	73.5	8200	327	302	0.164	0.211	0.092	0.43
240	3.4	1.8	3.15	3.4	80.2	10300	383	342	0.125	0.161	0.089	0.48
300	3.4	1.9	3.15	3.6	85.3	11490	434	392	0.100	0.130	0.086	0.53
400	3.4	2.0	3.15	3.8	95.5	13070	502	441	0.0778	0.102	0.083	0.59

**TNB
SPECIFICATION**

**REFERENCE
TA-11-3-S**

MEDIUM VOLTAGE XLPE INSULATED POWER CABLES

TABLE 11 THREE-CORE 11KV ARMoured CABLES (ALUMINIUM CONDUCTOR)

Nominal Area of Conductors	Thickness of Insulation	Thickness of Extruded Bedding	Nominal of Armour Diameter	Thickness of Outer Sheath	Overall Diameter	Approx. Weight	ELECTRICAL CHARACTERISTICS					
							Current Rating		Conductor Resistance		Reactance at 50Hz	Capacitance
							In Air at 40°C	In Ground at 25°C	dc at 20°C	50Hz at 90°C		
sq. mm	mm	mm	mm	mm	mm	kg/km	amp	amp	Ω/km	Ω/km	Ω/km	μF/km
95	3.4	1.5	2.5	2.8	63.8	5790	213	207	0.320	0.410	0.100	0.34
150	3.4	1.6	2.5	3.1	70.5	6940	281	270	0.206	0.265	0.094	0.40
240	3.4	1.8	3.15	3.4	81.1	9650	383	342	0.125	0.161	0.089	0.48

**BS 6622
IEC 60502-2**

**REFERENCE
GA-22-3-S**

MEDIUM VOLTAGE XLPE INSULATED POWER CABLES

TABLE 12 THREE-CORE 22KV ARMoured CABLES (ALUMINIUM CONDUCTOR)

Nominal Area of Conductors	Thickness of Insulation	Thickness of Extruded Bedding	Nominal of Armour Diameter	Thickness of Outer Sheath	Overall Diameter	Approx. Weight	ELECTRICAL CHARACTERISTICS					
							Current Rating		Conductor Resistance		Reactance at 50Hz	Capacitance
							In Air at 40°C	In Ground at 25°C	dc at 20°C	50Hz at 90°C		
sq. mm	mm	mm	mm	mm	mm	kg/km	amp	amp	Ω/km	Ω/km	Ω/km	μF/km
35	5.5	1.5	2.5	2.8	62.8	5870	123	122	0.868	1.11	0.133	0.178
50	5.5	1.5	2.5	2.9	65.5	6310	149	144	0.641	0.821	0.127	0.194
70	5.5	1.6	2.5	3.0	69.1	6930	183	176	0.443	0.569	0.119	0.216
95	5.5	1.7	2.5	3.2	73.1	7670	221	207	0.320	0.409	0.113	0.240
120	5.5	1.7	3.2	3.3	77.9	9270	255	234	0.253	0.324	0.109	0.261
150	5.5	1.8	3.2	3.4	81.1	9950	285	261	0.206	0.265	0.105	0.280
185	5.5	1.9	3.2	3.6	85.0	10850	332	297	0.164	0.211	0.102	0.303
240	5.5	1.9	3.2	3.7	90.2	12080	391	342	0.125	0.160	0.098	0.334
300	5.5	2.0	3.2	3.9	95.4	13360	442	383	0.100	0.129	0.094	0.367

**TNB
SPECIFICATION**

**REFERENCE
TA-22-1-N**

MEDIUM VOLTAGE XLPE INSULATED POWER CABLES

TABLE 13 SINGLE-CORE 22KV UNARMoured CABLES (ALUMINIUM CONDUCTOR)

Nominal Area of Conductors	Thickness of Insulation	Thickness of Outer Sheath	Overall Diameter	Approx. Weight	ELECTRICAL CHARACTERISTICS					
					Current Rating		Conductor Resistance		Reactance at 50Hz	Capacitance
					In Air at 40°C	In Ground at 25°C	dc at 20°C	50Hz at 90°C		
sq. mm	mm	mm	mm	kg/km	amp	amp	Ω/km	Ω/km	Ω/km	μF/km
500	5.5	4.0	51.3	3080	672	549	0.0605	0.0790	0.096	0.44