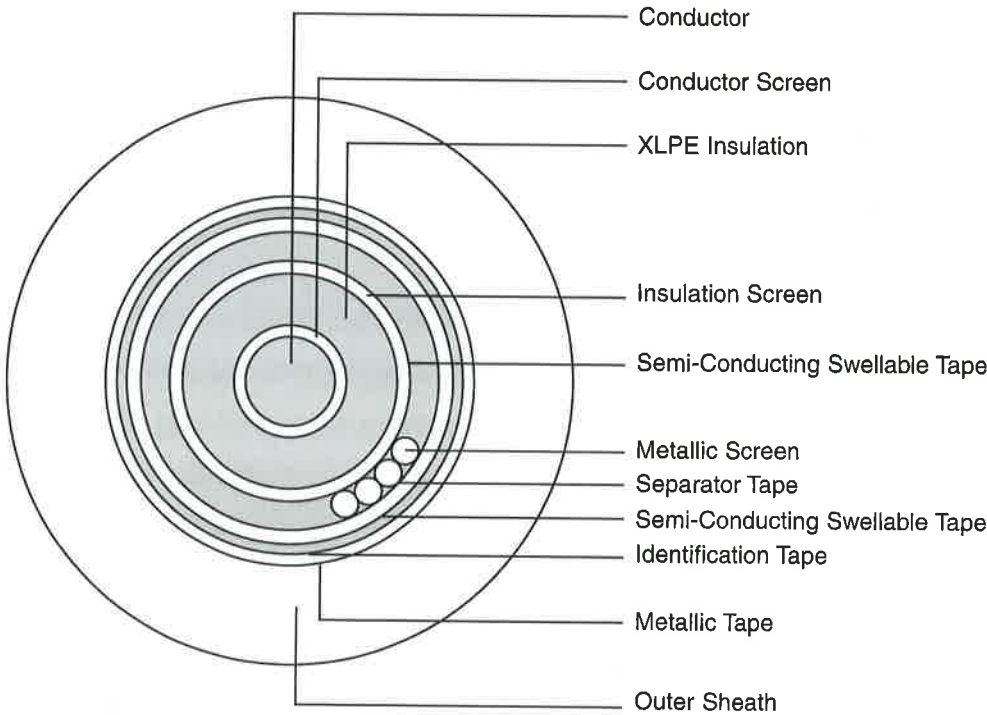


TNB/KLIA SPECIFICATION MEDIUM VOLTAGE XLPE INSULATED POWER CABLE

SINGLE CORE COPPER WIRE SCREEN CABLE



BASIC CONSTRUCTION

- | | |
|-----------------|-------------------------------|
| CONDUCTOR | - COPPER OR ALUMINIUM |
| CONDUCTOR SHAPE | - COMPACTED CIRCULAR STRANDED |
| INSULATION | - XLPE |
| METALLIC SCREEN | - COPPER WIRE SCREEN |
| METALLIC TAPE | - LAMINATED ALUMINIUM TAPE |
| SHEATH MATERIAL | - POLYETHYLENE |

**TNB SPECIFICATION
KLIA/D/UT06/058/95**

**REFERENCE
TA-33-1-W**

MEDIUM VOLTAGE XLPE INSULATED POWER CABLES

TABLE 15 SINGLE-CORE 33KV COPPER WIRE SCREEN CABLES (ALUMINIUM CONDUCTOR)

Nominal Area of Conductors	Thickness of Insulation	Nominal of PACW 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	kg/km	amp	amp	Ω/km	Ω/km	Ω/km	μF/km
630	9.0	2.52	5.0	71.4	7220	782	621	0.0469	0.0630	0.099	0.35

**TNB SPECIFICATION
KLIA/D/UT06/058/95**

**REFERENCE
TC-33-1-W**

MEDIUM VOLTAGE XLPE INSULATED POWER CABLES

TABLE 16 SINGLE-CORE 33KV COPPER WIRE SCREEN CABLES (COPPER CONDUCTOR)

Nominal Area of Conductors	Thickness of Insulation	Nominal of PACW 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	kg/km	amp	amp	Ω/km	Ω/km	Ω/km	μF/km
300	9.0	2.65	5.0	62.6	7680	629	540	0.0601	0.0785	0.112	0.27
630	9.0	2.52	5.0	72.1	11320	961	765	0.0283	0.0405	0.099	0.35

**TNB SPECIFICATION
KLIA/D/UT06/058/95**

**REFERENCE
TC-11-1-W**

MEDIUM VOLTAGE XLPE INSULATED POWER CABLES

TABLE 17 SINGLE-CORE 11KV COPPER WIRE SCREEN CABLES (COPPER CONDUCTOR)

Nominal Area of Conductors	Thickness of Insulation	Nominal of PACW 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	kg/km	amp	amp	Ω/km	Ω/km	Ω/km	μF/km
500	3.4	2.52	4.0	54.4	8100	799	675	0.0366	0.0511	0.090	0.66

**TNB SPECIFICATION
KLIA/D/UT06/058/95**

**REFERENCE
TA-11-1-W**

MEDIUM VOLTAGE XLPE INSULATED POWER CABLES

TABLE 18 SINGLE-CORE 11KV COPPER WIRE SCREEN CABLES (ALUMINIUM CONDUCTOR)

Nominal Area of Conductors	Thickness of Insulation	Nominal of PACW 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	kg/km	amp	amp	Ω/km	Ω/km	Ω/km	μF/km
300	3.4	3.00	4.0	49.4	4250	493	428	0.100	0.130	0.096	0.54
500	3.4	2.52	4.0	54.2	4970	672	549	0.0605	0.0816	0.090	0.66