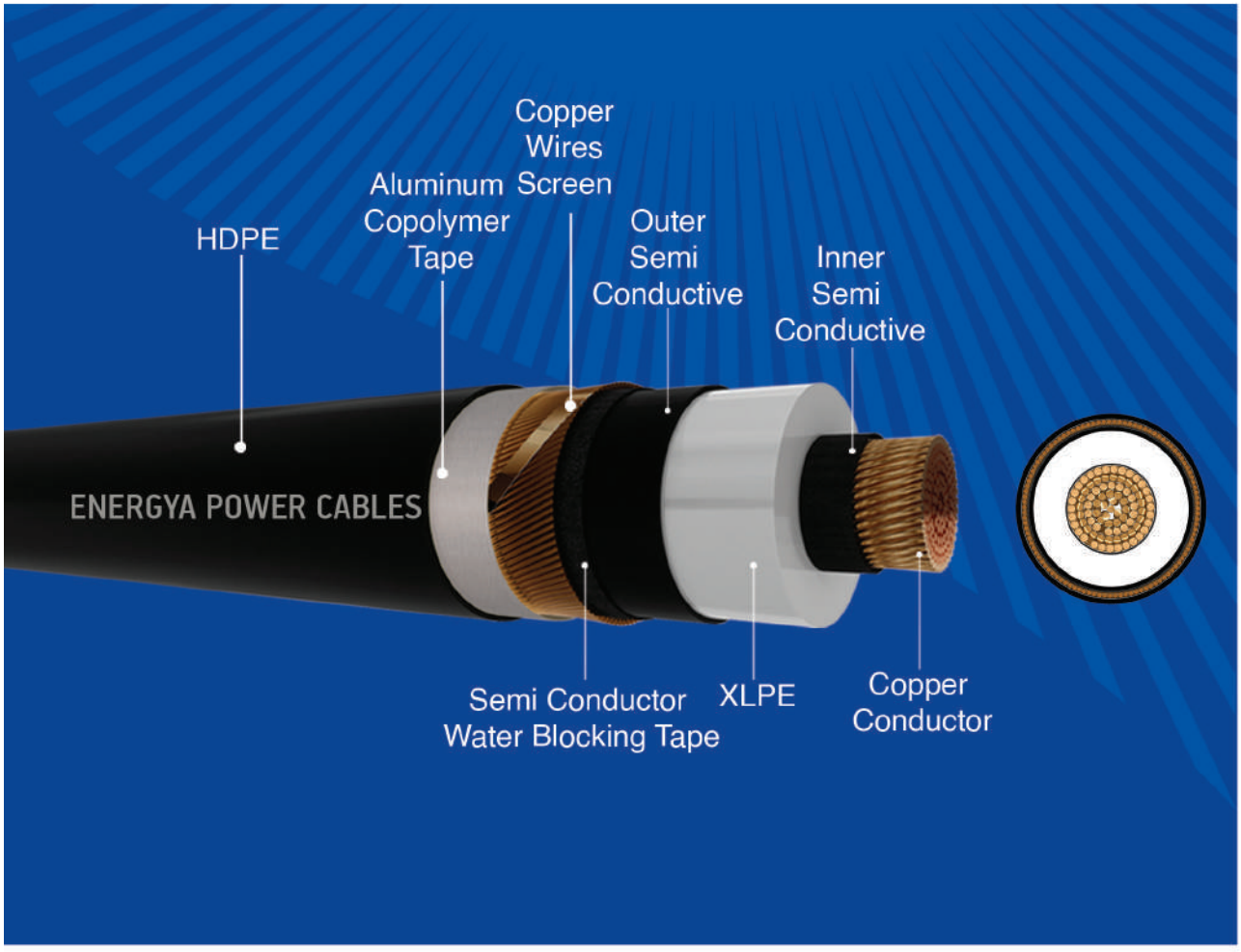
HIGH VOLTAGE CABLES

76 / 132 (145) kV



Single Core Copper Conductor, XLPE insulated, Copper Wires Screen and HDPE Sheathed

Description

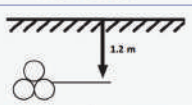
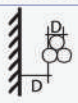
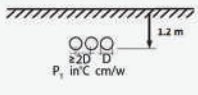
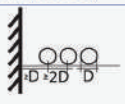
- Stranded circular or segmental compacted copper conductor, semi-conducting layer as a non conductor screen, XLPE insulated, semi-conducting layer as a non metallic insulation screen, Semi-conductive water blocking tape, copper wires as a metallic insulation screen to withstand the required earth fault current, non-conductive water blocking tape to protect the screen area from longitudinal water penetration, copolymer aluminum tape to protect the cable from radial water penetration and HDPE sheathed with graphite coating or extruded semi-conducting layer.
- Cables are designed and tested to comply with IEC 60228, IEC 60840, IEC 60811.

Cable Construction

Products Code	Conductor		Thickness of Conductor Screen	Thickness of Insulation	Thickness of Insulation Screen	Screen C.S.A	Thickness of Outer Sheath	Approx. Outer Diameter of Cable	Approx. Weight of Cable	Max. DC Conductor Resistance at 20°C	Capacitance
	Cross Sectional Area	Shape									
	mm2		mm	mm	mm	mm2	mm	mm	kg/km	Ω/km	pf/km
RT40B7018X	400 R	Compact Round(R) Stranded	1.2	17	1.1	110.0	3.5	78.0	8300	0.0470	0.172
RT50B7018X	500 R		1.2	17	1.1	110.0	3.5	81.0	9600	0.0366	0.188
RT60B7018X	630 R		1.2	17	1.1	110.0	3.5	85.0	11000	0.0283	0.204
RT70B7018X	800 R		1.2	17	1.1	110.0	3.5	89.0	13000	0.0221	0.220
RZ80B7018X	1000 S	Segmental Stranded(S) (Milliken)	1.2	17	1.2	110.0	3.5	97	15515	0.0176	0.245
RZ81B7018X	1200 S		1.2	17	1.2	110.0	3.5	101	17450	0.0151	0.260
RZ83B7018X	1600 S		1.5	17	1.5	110.0	3.5	109	21800	0.0113	0.300
RZ85B7018X	2000 S		1.5	17	1.5	110.0	4.0	116	26200	0.0090	0.320
RZ86B7018X	2500 S		1.5	17	1.5	110.0	4.0	124	31700	0.0072	0.350

Cables Current Carrying Capacity

Continous Current Ratings Load Factor = 100% for one circuit in operation (Amperes)

Laying conditions: trefoil formation						Laying condition: flat formation					
Type of Earthing Bonding System	Cross Sectional Area	Direct burial 		In air (shaded) 		Type of Earthing Bonding System	Cross Sectional Area	Direct burial 		In air (shaded) 	
	mm²	pT=120 T = 25 °C	pT=150 T = 35 °C	T = 30 °C	T = 40 °C		mm²	pT=120 T = 25 °C	pT=150 T = 35 °C	T = 30 °C	T = 40 °C
Bonded at both ends	400 R	641	515	875	790	Cross or Single point Bonding	400 R	640	540	979	886
	500 R	695	585	1012	915		500 R	731	615	1139	1031
	630 R	790	660	1169	1055		630 R	832	699	1320	1195
	800 R	872	731	1329	1200		800 R	938	788	1521	1376
	1000 S	940	720	1535	1370		1000 S	1015	835	1755	1575
	1200 S	1024	840	1875	1504		1200 S	1100	900	1930	1729
	1600 S	1170	970	1957	1750		1600 S	1299	1071	2400	2080
	2000 S	1302	1172	2200	1990		2000 S	1400	1150	2650	2320
	2500 S	1443	1210	2393	2159		2500 S	1500	1250	3000	2600

- The above data is approximate and subjected to manufacturing tolerance.

R: Round
S: Segmental