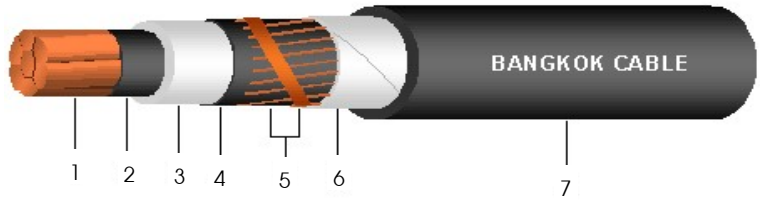
18/30(36) kV CV (CE optional)*

1 CORE - CROSSLINKED POLYETHYLENE POWER CABLE



Construction

1. Conductor : Circular compact stranded annealed copper
2. Conductor screen : Semi-conductive cross-linked polyethylene compound
3. Insulation : Cross-linked polyethylene (XLPE) compound
4. Insulation screen : Semi-conductive cross-linked polyethylene compound
5. Metallic screen : Copper wires with copper contact tape
6. Binding tape : Polyester tape
7. Sheath : Black Polyvinyl chloride (PVC), (Optional : PE)*

Reference Standard

IEC 60502-2

Classification

Maximum conductor temperature : 90°C
Maximum circuit voltage : 36 kV
AC test voltage : 63 kV

Application

For general purpose power distribution in dry or wet location. Exposed in aerial, direct burial, conduit, open tray and underground duct installation.

Conductor			Thickness of insulation	Diameter over insulation	Area of metallic screen	Thickness of sheath	Overall diameter	DC. Conductor resistance at 20°C	Insulation resistance at 20°C	Current rating		Cable weight	Standard length
Cross-sectional area	No. of wires	Diameter								in free air at 40°C ambient	direct burial in ground at 30°C		
mm^2	(Min.)	mm (Approx.)	mm (Nominal)	mm (Approx.)	mm^2	mm (Nominal)	mm (Approx.)	Ω/km (Max.)	MΩ.km (Min.)	A	A	kg/km (Approx.)	m/drum
50	6	8.33	8.0	25.9	10	2.0	34	0.387	4,030	260	220	1,370	500
70	12	9.73	8.0	27.3	10	2.0	35	0.268	3,690	320	260	1,610	500
95	15	11.43	8.0	29.0	10	2.1	37	0.193	3,350	390	320	1,930	500
120	18	12.95	8.0	30.6	10	2.1	39	0.153	3,100	450	360	2,210	500
150	18	14.27	8.0	31.9	16	2.2	40	0.124	2,910	510	400	2,590	500
185	30	15.98	8.0	33.6	16	2.2	42	0.0991	2,700	580	460	2,990	500
240	34	18.47	8.0	36.1	25	2.3	45	0.0754	2,440	690	530	3,710	500
300	34	20.68	8.0	38.3	25	2.4	47	0.0601	2,250	790	600	4,370	500
400	53	23.39	8.0	41.0	25	2.5	50	0.0470	2,060	920	690	5,260	300
500	53	26.67	8.0	44.8	25	2.6	54	0.0366	1,840	1,070	780	6,440	300
630	53	30.22	8.0	48.4	25	2.7	58	0.0283	1,670	1,250	890	7,930	300
800	53	34.00	8.0	52.2	25	2.8	62	0.0221	1,520	1,430	1,000	9,730	250

18/30(36) kV CV (CE optional)*

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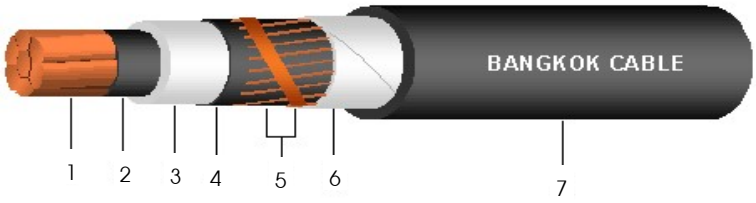

Construction

1. Conductor	:	Circular compact stranded annealed copper
2. Conductor screen	:	Semi-conductive cross-linked polyethylene compound
3. Insulation	:	Cross-linked polyethylene (XLPE) compound
4. Insulation screen	:	Semi-conductive cross-linked polyethylene compound
5. Metallic screen	:	Copper wires with copper contact tape
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Reference Standard

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Classification

Maximum conductor temperature	: 90°C
Maximum circuit voltage	: 36 kV
AC test voltage	: 63 kV

Application

For general purpose power distribution in dry or wet location. Exposed in aerial, direct burial, conduit, open tray and underground duct installation.

Conductor cross-sectional area mm^2	AC Resistance of conductor at 90 °C Ω/km (Approx.)	Inductance mH/km (Approx.)	Reactance Ω/km (Approx.)	Impedance Ω/km (Approx.)
50	0.494	0.655	0.206	0.535
70	0.342	0.629	0.198	0.395
95	0.246	0.608	0.191	0.312
120	0.196	0.594	0.187	0.270
150	0.159	0.580	0.182	0.242
185	0.127	0.567	0.178	0.219
240	0.0971	0.552	0.173	0.199
300	0.0779	0.538	0.169	0.186
400	0.0616	0.525	0.165	0.176
500	0.0488	0.515	0.162	0.169
630	0.0388	0.504	0.158	0.163
800	0.0315	0.494	0.155	0.158