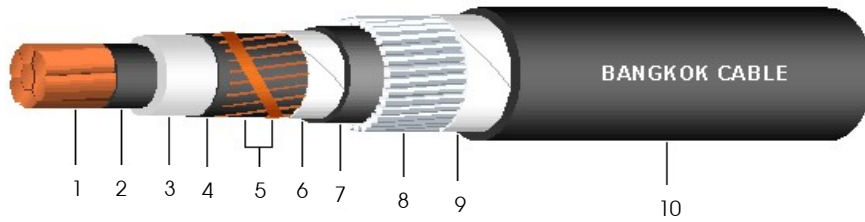


# 6/10(12) kV CV-AWA (CE-AWA optional)\*

1 CORE - CROSSLINKED POLYETHYLENE POWER CABLE WITH ARMOUR



## 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. Inner sheath : Black Polyvinyl chloride (PVC), (Optional : PE)\*
8. Armour : Aluminium wires
9. Binding tape : Polyester tape
10. Outer sheath : Black Polyvinyl chloride (PVC), (Optional : PE)\*

## Reference Standard

IEC 60502-2

## Classification

- Maximum conductor temperature : 90°C  
 Maximum circuit voltage : 12 kV  
 AC test voltage : 21 kV

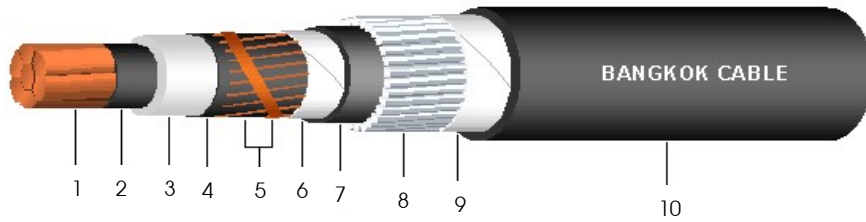
## Application

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 inner sheath	Diameter under armour	Diameter of wire armour	Thickness of outer sheath	Overall diameter	DC. Conductor 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 <sup>2</sup>	(Min.)	(Approx.)	(Nominal)	(Approx.)	mm <sup>2</sup>	(Nominal)	(Approx.)	(Nominal)	(Nominal)	(Approx.)	Ω/km (Max.)	A	A	kg/km (Approx.)	m/drum
16	6	4.69	3.4	13.1	10	1.2	19.5	1.6	1.7	27	1.15	140	120	960	500
25	6	5.90	3.4	14.3	10	1.2	20.5	1.6	1.8	28	0.727	180	155	1,100	500
35	6	6.95	3.4	15.4	10	1.2	21.5	1.6	1.8	29	0.524	220	190	1,240	500
50	6	8.33	3.4	16.7	10	1.2	23.0	1.6	1.9	31	0.387	260	220	1,420	500
70	12	9.73	3.4	18.1	10	1.2	24.5	1.6	1.9	32	0.268	330	270	1,660	500
95	15	11.43	3.4	19.8	10	1.2	26.0	1.6	2.0	34	0.193	400	320	1,990	500
120	18	12.95	3.4	21.4	10	1.2	27.5	2.0	2.0	36	0.153	460	370	2,370	500
150	18	14.27	3.4	22.7	16	1.2	29.0	2.0	2.1	38	0.124	530	410	2,750	500
185	30	15.98	3.4	24.4	16	1.2	30.5	2.0	2.1	40	0.0991	600	460	3,160	500
240	34	18.47	3.4	26.9	25	1.2	33.0	2.0	2.2	42	0.0754	715	540	3,900	500
300	34	20.68	3.4	29.1	25	1.2	35.5	2.0	2.3	45	0.0601	820	610	4,560	500
400	53	23.39	3.4	31.8	25	1.3	38.5	2.5	2.4	49	0.0470	960	700	5,650	300
500	53	26.67	3.4	35.6	25	1.3	42.0	2.5	2.5	53	0.0366	1,120	795	6,880	300
630	53	30.22	3.4	39.2	25	1.4	46.0	2.5	2.7	57	0.0283	1,290	900	8,450	250
800	53	34.00	3.4	43.0	25	1.5	50.0	2.5	2.8	61	0.0221	1,480	1020	10,330	200

# 6/10(12) kV CV-AWA (CE-AWA optional)\*

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## Reference Standard

IEC 60502-2

## Classification

- Maximum conductor temperature : 90°C
- Maximum circuit voltage : 12 kV
- AC test voltage : 21 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 <sup>2</sup>	AC Resistance of conductor at 90 °C Ω/km (Approx.)	Inductance mH/km (Approx.)	Reactance Ω/km (Approx.)	Impedance Ω/km (Approx.)
16	1.47	0.724	0.227	1.48
25	0.927	0.685	0.215	0.952
35	0.668	0.659	0.207	0.700
50	0.494	0.636	0.200	0.533
70	0.342	0.612	0.192	0.392
95	0.246	0.591	0.186	0.309
120	0.196	0.578	0.182	0.267
150	0.159	0.569	0.179	0.239
185	0.127	0.557	0.175	0.216
240	0.0972	0.538	0.169	0.195
300	0.0779	0.529	0.166	0.184
400	0.0616	0.521	0.164	0.175
500	0.0488	0.511	0.160	0.168
630	0.0388	0.500	0.157	0.162
800	0.0316	0.490	0.154	0.157