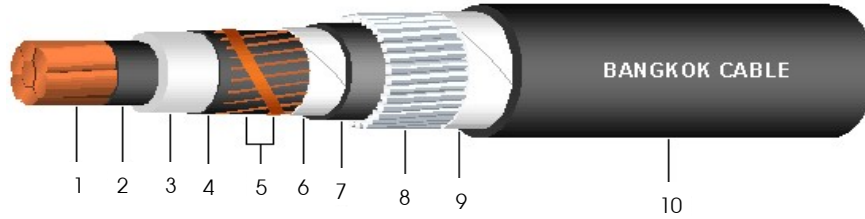


# 12/20(24) kV CV-AWA (CE-AWA optional)\*

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 : 24 kV  
 AC test voltage : 42 kV

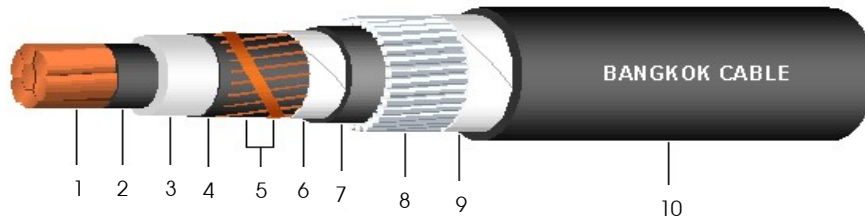
## Application

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
35	6	6.95	5.5	19.6	10	1.2	26.0	1.6	2.0	34	0.524	220	180	1,500	500
50	6	8.33	5.5	20.9	10	1.2	27.0	2.0	2.0	36	0.387	260	220	1,770	500
70	12	9.73	5.5	22.3	10	1.2	28.5	2.0	2.1	38	0.268	330	270	2,050	500
95	15	11.43	5.5	24.0	10	1.2	30.5	2.0	2.1	39	0.193	400	320	2,370	500
120	18	12.95	5.5	25.6	10	1.2	32.0	2.0	2.2	41	0.153	460	360	2,700	500
150	18	14.27	5.5	26.9	16	1.2	33.0	2.0	2.2	42	0.124	520	410	3,070	500
185	30	15.98	5.5	28.6	16	1.2	35.0	2.0	2.3	44	0.0991	600	460	3,500	500
240	34	18.47	5.5	31.1	25	1.3	37.5	2.5	2.4	48	0.0754	710	540	4,440	500
300	34	20.68	5.5	33.3	25	1.3	39.5	2.5	2.5	51	0.0601	810	610	5,140	300
400	53	23.39	5.5	36.0	25	1.4	42.5	2.5	2.6	54	0.0470	940	690	6,100	300
500	53	26.67	5.5	39.8	25	1.4	46.5	2.5	2.7	58	0.0366	1,100	790	7,360	300
630	53	30.22	5.5	43.4	25	1.5	50.5	2.5	2.8	62	0.0283	1,270	900	8,940	250
800	53	34.00	5.5	47.2	25	1.5	54.0	2.5	2.9	66	0.0221	1,460	1015	10,820	200

# 12/20(24) 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 : 24 kV  
 AC test voltage : 42 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.)
35	0.668	0.691	0.217	0.703
50	0.494	0.666	0.209	0.536
70	0.342	0.646	0.203	0.398
95	0.246	0.619	0.194	0.314
120	0.196	0.604	0.190	0.272
150	0.159	0.589	0.185	0.244
185	0.127	0.576	0.181	0.221
240	0.0971	0.564	0.177	0.202
300	0.0779	0.554	0.174	0.191
400	0.0615	0.541	0.170	0.181
500	0.0487	0.529	0.166	0.173
630	0.0387	0.517	0.162	0.167
800	0.0315	0.506	0.159	0.162