

Control Cables, with Solid Copper Conductors, PVC Insulated, Steel Tape Armoured and PVC Sheathed

CONSTRUCTION

- Conductor** : Plain annealed solid copper conductor, as per Class 1 of IEC 60228.
- Insulation** : An extruded layer of Polyvinyl chloride (PVC) insulation, rated 70 °C at normal operation to IEC 60502-1.
- Bedding** : An extruded layer of Polyvinyl chloride (PVC).
- Armouring** : Double layer of galvanized steel tape.
- Outer sheath** : An extruded layer of Polyvinyl chloride (PVC) sheathing compound type ST1 to IEC 60502-1.



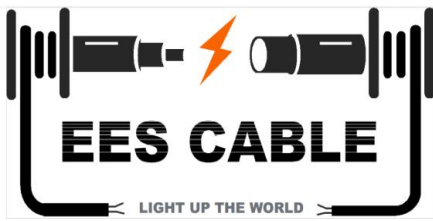
APPLICATION

For outdoor installations, for connecting signaling and control units in industries, railways, traffic signals, power stations, industrial plants and switchgears if mechanical protection is required, or in applications where mechanical damages are expected to occur.

TECHNICAL DATA

- Nominal voltage $U_0/U = 0.6/1$ kV
- Power frequency test voltage 3.5 kV for 5 minutes
- Max. admissible temperature of conductor at normal operation 70 °C
- Max. admissible temperature of conductor at short circuit 160 °C for 5 seconds

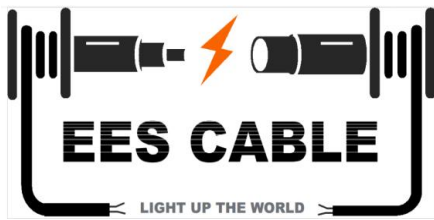
Number & Nominal cross sectional area	ELECTRICAL DATA					DIMENSIONS AND WEIGHTS		AES Code
	Max. Conductor Resistance		Current Rating			Approx. overall diameter	Approx. overall weight	
	DC at 20 °C	AC at 70 °C	Laid in ground	Laid in ducts	Laid in free air			
No. X mm ²	Ω / km	Ω / km	A	A	A	mm	Kg / km	
1.5 mm²								
5 X 1.5	12.1000	14.6000	18.0	15.5	13.5	15.0	355	C108PA1050GCBK21IMR
7 X 1.5	12.1000	14.6000	16.0	14.0	12.5	15.5	410	C108PA1070GCBK21IMR
10 X 1.5	12.1000	14.6000	14.0	12.5	11.5	18.5	540	C108PA1100GCBK21IMR
12 X 1.5	12.1000	14.6000	13.0	11.5	10.5	19.0	590	C108PA1120GCBK21IMR
14 X 1.5	12.1000	14.6000	12.0	10.5	9.5	20.6	670	C108PA1140GCBK21IMR
16 X 1.5	12.1000	14.6000	11.0	10.0	9.0	21.0	720	C108PA1160GCBK21IMR
19 X 1.5	12.1000	14.6000	10.0	9.0	8.0	21.5	800	C108PA1190GCBK21IMR
24 X 1.5	12.1000	14.6000	9.0	8.0	7.5	24.5	970	C108PA1240GCBK21IMF
30 X 1.5	12.1000	14.6000	8.0	7.5	6.5	25.8	1170	C108PA1300GCBK21IMF
37 X 1.5	12.1000	14.6000	7.5	6.5	6.0	27.5	1315	C108PA1370GCBK21IMF



CONTROL CABLES / IEC 60502-1

CU / PVC / STA / PVC 0.6 / 1 kV

Number & Nominal cross sectional area	ELECTRICAL DATA					DIMENSIONS AND WEIGHTS		AES Code
	Max. Conductor Resistance		Current Rating			Approx. overall diameter	Approx. overall weight	
	DC at 20 °C	AC at 70 °C	Laid in ground	Laid in ducts	Laid in free air			
No. X mm ²	Ω / km	Ω / km	A	A	A	mm	Kg / km	
2.5 mm²								
5 X 2.5	7.4100	8.8700	24.0	20.5	18.0	15.5	340	C110PA1050GCBK21IMR
7 X 2.5	7.4100	8.8700	22.0	18.5	16.0	16.6	495	C110PA1070GCBK21IMR
10 X 2.5	7.4100	8.8700	20.0	16.5	14.5	20.0	650	C110PA1100GCBK21IMR
12 X 2.5	7.4100	8.8700	18.0	15.5	13.5	20.5	760	C110PA1120GCBK21IMR
14 X 2.5	7.4100	8.8700	16.0	14.0	12.0	21.4	820	C110PA1140GCBK21IMR
16 X 2.5	7.4100	8.8700	15.0	13.0	11.0	22.4	920	C110PA1160GCBK21IMR
19 X 2.5	7.4100	8.8700	14.0	12.0	10.5	23.4	1030	C110PA1190GCBK21IMR
24 X 2.5	7.4100	8.8700	13.0	11.0	9.5	27.0	1260	C110PA1240GCBK21IMF
30 X 2.5	7.4100	8.8700	11.5	10.0	8.5	28.2	1520	C110PA1300GCBK21IMF
37 X 2.5	7.4100	8.8700	10.0	9.0	7.5	30.5	1830	C110PA1370GCBK21IMF
4.0 mm²								
5 X 4.0	4.6100	5.5100	31.0	25.5	24.0	18.9	610	C112PA1050GCBK21IMR
7 X 4.0	4.6100	5.5100	28.0	23.0	21.5	20.3	710	C112PA1070GCBK21IMR
10 X 4.0	4.6100	5.5100	25.0	21.0	19.5	23.6	890	C112PA1100GCBK21IMR
12 X 4.0	4.6100	5.5100	23.0	19.5	18.0	24.1	1140	C112PA1120GCBK21IMR
14 X 4.0	4.6100	5.5100	20.5	17.0	16.0	25.4	1180	C112PA1140GCBK21IMR
16 X 4.0	4.6100	5.5100	19.5	16.0	15.0	26.6	1300	C112PA1160GCBK21IMR
19 X 4.0	4.6100	5.5100	18.0	15.0	14.0	28.1	1500	C112PA1190GCBK21IMR
24 X 4.0	4.6100	5.5100	16.0	13.5	12.5	32.6	1890	C112PA1240GCBK21IMF
30 X 4.0	4.6100	5.5100	14.5	12.0	11.0	34.4	2480	C112PA1300GCBK21IMF
37 X 4.0	4.6100	5.5100	13.0	11.0	10.0	37.3	3030	C112PA1370GCBK21IMF



Control Cables, with Stranded Copper Conductors, PVC Insulated, Steel Tape Armoured and PVC Sheathed

CONSTRUCTION

- Conductor** : Plain annealed stranded circular copper conductor, as per Class 2 of IEC 60228.
- Insulation** : An extruded layer of Polyvinyl chloride (PVC) insulation, rated 70 °C at normal operation to IEC 60502-1.
- Bedding** : An extruded layer of Polyvinyl chloride (PVC).
- Armouring** : Double layer of galvanized steel tape.
- Outer sheath** : An extruded layer of Polyvinyl chloride (PVC) sheathing compound type ST1 to IEC 60502-1.



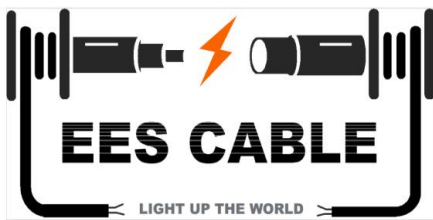
APPLICATION

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TECHNICAL DATA

- Nominal voltage $U_0/U = 0.6/1$ kV
- Power frequency test voltage 3.5 kV for 5 minutes
- Max. admissible temperature of conductor at normal operation 70 °C
- Max. admissible temperature of conductor at short circuit 160 °C for 5 seconds

Number & Nominal cross sectional area	ELECTRICAL DATA					DIMENSIONS AND WEIGHTS		AES Code
	Max. Conductor Resistance		Current Rating			Approx. overall diameter	Approx. overall weight	
	DC at 20 °C	AC at 70 °C	Laid in ground	Laid in ducts	Laid in free air			
No. X mm ²	Ω / km	Ω / km	A	A	A	mm	Kg / km	
1.5 mm²								
5 X 1.5	12.1000	14.6000	18.0	15.5	13.5	15.3	350	C208PA1050GCBK21IMR
7 X 1.5	12.1000	14.6000	16.0	14.0	12.5	17.0	430	C208PA1070GCBK21IMR
10 X 1.5	12.1000	14.6000	14.0	12.5	11.5	19.3	570	C208PA1100GCBK21IMR
12 X 1.5	12.1000	14.6000	13.0	11.5	10.5	19.8	625	C208PA1120GCBK21IMR
14 X 1.5	12.1000	14.6000	12.0	10.5	9.5	21.0	690	C208PA1140GCBK21IMR
16 X 1.5	12.1000	14.6000	11.0	10.0	9.0	21.9	800	C208PA1160GCBK21IMR
19 X 1.5	12.1000	14.6000	10.0	9.0	8.0	22.5	850	C208PA1190GCBK21IMR
24 X 1.5	12.1000	14.6000	9.0	8.0	7.5	25.7	1030	C208PA1240GCBK21IMF
30 X 1.5	12.1000	14.6000	8.0	7.5	6.5	27.3	1185	C208PA1300GCBK21IMF
37 X 1.5	12.1000	14.6000	7.5	6.5	6.0	28.9	1400	C208PA1370GCBK21IMF



CONTROL CABLES / IEC 60502-1

CU / PVC / STA / PVC 0.6 / 1 kV

Number & Nominal cross sectional area	ELECTRICAL DATA					DIMENSIONS AND WEIGHTS		AES Code
	Max. Conductor Resistance		Current Rating			Approx. overall diameter	Approx. overall weight	
	DC at 20 °C	AC at 70 °C	Laid in ground	Laid in ducts	Laid in free air			
No. X mm ²	Ω / km	Ω / km	A	A	A	mm	Kg / km	
2.5 mm²								
5 X 2.5	7.4100	8.8700	24.0	20.5	18.0	16.2	440	C210PA1050GCBK21IMR
7 X 2.5	7.4100	8.8700	22.0	18.5	16.0	17.3	530	C210PA1070GCBK21IMR
10 X 2.5	7.4100	8.8700	20.0	16.5	14.5	20.9	710	C210PA1100GCBK21IMR
12 X 2.5	7.4100	8.8700	18.0	15.5	13.5	21.5	790	C210PA1120GCBK21IMR
14 X 2.5	7.4100	8.8700	16.0	14.0	12.0	22.4	880	C210PA1140GCBK21IMR
16 X 2.5	7.4100	8.8700	15.0	13.0	11.0	23.4	970	C210PA1160GCBK21IMR
19 X 2.5	7.4100	8.8700	14.0	12.0	10.5	24.5	1090	C210PA1190GCBK21IMR
24 X 2.5	7.4100	8.8700	13.0	11.0	9.5	28.1	1340	C210PA1240GCBK21IMF
30 X 2.5	7.4100	8.8700	11.5	10.0	8.5	30.3	1630	C210PA1300GCBK21IMF
37 X 2.5	7.4100	8.8700	10.0	9.0	7.5	31.9	1875	C210PA1370GCBK21IMF
4.0 mm²								
5 X 4.0	4.6100	5.5100	31.0	25.5	24.0	19.1	660	C212PA1050GCBK21IMR
7 X 4.0	4.6100	5.5100	28.0	23.0	21.5	20.4	740	C212PA1070GCBK21IMR
10 X 4.0	4.6100	5.5100	25.0	21.0	19.5	24.9	960	C212PA1100GCBK21IMR
12 X 4.0	4.6100	5.5100	23.0	19.5	18.0	25.6	1120	C212PA1120GCBK21IMR
14 X 4.0	4.6100	5.5100	20.5	17.0	16.0	26.7	1270	C212PA1140GCBK21IMR
16 X 4.0	4.6100	5.5100	19.5	16.0	15.0	28.0	1390	C212PA1160GCBK21IMR
19 X 4.0	4.6100	5.5100	18.0	15.0	14.0	29.4	1610	C212PA1190GCBK21IMR
24 X 4.0	4.6100	5.5100	16.0	13.5	12.5	34.4	2030	C212PA1240GCBK21IMF
30 X 4.0	4.6100	5.5100	14.5	12.0	11.0	36.5	2660	C212PA1300GCBK21IMF
37 X 4.0	4.6100	5.5100	13.0	11.0	10.0	39.4	3250	C212PA1370GCBK21IMF