

**IEC60502-1 , UL854 , ASTM , BS 7870**

## **Application**

The concentric cable 600/1000V is used as electric service from the power distribution ,to transmit the power to the business center ,residential and rural areas.

## **Cable construction**

**Popular size:** 8AWG ~ 4AWG , 6 ~ 25mm<sup>2</sup>

**Core number:** 1+1C

Concentric Layer , XLPE/PE/PVC Jacket

**Conductor :** Cu/Al/Al 8000/CCA

**Insulation :** XLPE/PVC/PE

**Bedding (applicable for 2cores and above) :** PVC /PE

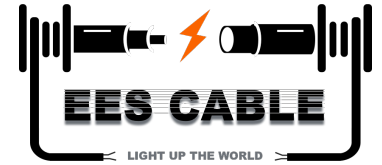
**Neutral conductor :** Same material as phase conductor, concentric stranded with coverage  $\geq 50\%$

**Jacket :** PVC /PE/ , Weather resistant

**Cable shape :** Round or Flat

# ASTM Standard

## Concentric Cable Low Voltage

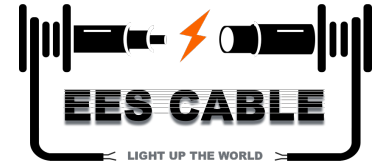


### ASTM Standard

No. of cores Nominal cross section	Conductor		Thickness of Insulation	Concentric Neutral conductor		Thickness of Sheath	Approx. overall Dia. mm	Max. DC resistance of conductor at 20°C	
	AWG	No.	Dia. mm	No.	Dia. mm	mm		Ω/km (Phase)	Ω/km (Neutral)
<b>Copper Conductor (ASTM Standard)</b>									
2X #12	7	0.78	1.14	39	0.321	1.14	7.74	5.43	5.5
2X #10	7	0.98	1.14	25	0.511	1.14	8.72	3.41	3.5
2X #8	7	1.23	1.14	25	0.643	1.14	9.74	2.14	2.2
2X #6	7	1.55	1.14	25	0.813	1.14	11.04	1.35	1.4
2X #4	7	1.96	1.14	26	1.02	1.14	12.68	0.848	0.85
3X #8	7	1.23	1.14	65	0.405	1.14	11.3X17.3	2.14	2.2
3X #6	7	1.55	1.14	65	0.511	1.52	13.2X20.2	1.35	1.4
3X #4	7	1.96	1.14	65	0.643	1.52	14.7X22.9	0.848	0.85
3X #2	7	2.47	1.14	65	0.823	1.52	16.6X26.3	0.524	0.53
<b>8000 Aluminum Alloy Conductor (ASTM Standard)</b>									
2X #12	7	0.78	1.14	39	0.321	1.14	7.74	8.88	8.9
2X #10	7	0.98	1.14	25	0.511	1.14	8.72	5.59	5.6
2X #8	7	1.23	1.14	25	0.643	1.14	9.74	3.52	3.6
2X #6	7	1.55	1.14	25	0.813	1.14	11.04	2.21	2.3
2X #4	7	1.96	1.14	26	1.02	1.14	12.68	1.39	1.4
3X #8	7	1.23	1.14	65	0.405	1.14	11.3X17.3	3.52	3.6
3X #6	7	1.55	1.14	65	0.511	1.52	13.2X20.2	2.21	2.3
3X #4	7	1.96	1.14	65	0.643	1.52	14.7X22.9	1.39	1.4
3X #2	7	2.47	1.14	65	0.823	1.52	16.6X26.3	0.88	0.89

# IEC Standard

## Concentric Cable Low Voltage



### IEC Standard

No. of cores Nominal cross section	Conductor		Thickness of Insulation	Concentric Neutral conductor		Thickness of Sheath	Approx. overall Dia.	Max. DC resistance of conductor at 20°C	
	No.	Dia.		mm	No.			Dia.	mm
<b>Copper Conductor (IEC Standard)</b>									
2X10	7	1.35	1.55	20	0.85	1.4	11.8	1.83	1.9
2X16	7	1.7	1.55	32	0.85	1.4	12.84	1.15	1.2
2X25	7	2.14	1.6	29	1.13	1.5	15.02	0.727	0.76
2X35	19	1.53	1.65	27	1.35	1.6	17	0.524	0.55
<b>8000 Aluminum Alloy Conductor (IEC Standard)</b>									
2X10	7	1.35	1.55	23	1.13	1.4	12.41	3.08	1.335
2X16	7	1.7	1.55	26	1.13	1.4	13.46	1.91	1.808
2X25	7	2.14	1.6	29	1.13	1.5	15.08	1.2	1.0586
2X35	19	1.53	1.65	27	1.35	1.6	17.05	0.868	0.7966

### IEC Standard

Cable Size	Conductor size (AAC)	Insulation thickness (XLPE)	Concentric conductor (AAAC 8000)	Outer sheath thickness (PVC)	Overall Diameter	Cable Mass
mm <sup>2</sup>	N/mm	mm	N/mm	mm	mm	kg/km
3*10/10	7/1.35	0.7	51/0.50	1.6	18.7	355.4
3*16/16	7/1.70	0.7	56/0.60	1.6	21.2	465.7