

HT aerial bunch cable generally conforming to IS 7098-2. These cables are recommended as overhead distribution feeder in rural or residential area and hill area where underground installation is not possible. These cables are available as three phase or single-phase system with or without street light conductor for HT cable with continuous operation temperature 90°C.

HT aerial bunch cable Conductor:

Phase conductor: High conductivity annealed stranded aluminium conductor produced in-house from state-of-the art machine

Messenger conductor: Stranded circular or compacted heat-treated aluminium magnesium alloy wire

Screen: Conductor screened by semi-conducting compound for HT phase conductor

Insulation: Phase conductor: in-house developed compounded XLPE; Messenger conductor: in-house developed compounded XLPE (optional)

Screen: Insulation screened by semi-conducting compound followed by copper tape for HT phase conductor

Sheath: Extruded sheathing over insulation screen for HT phase conductor.

Aerial Bunched Cable (ABC) Overhead Power Distribution Cable, 6.35/11KV(E) AC

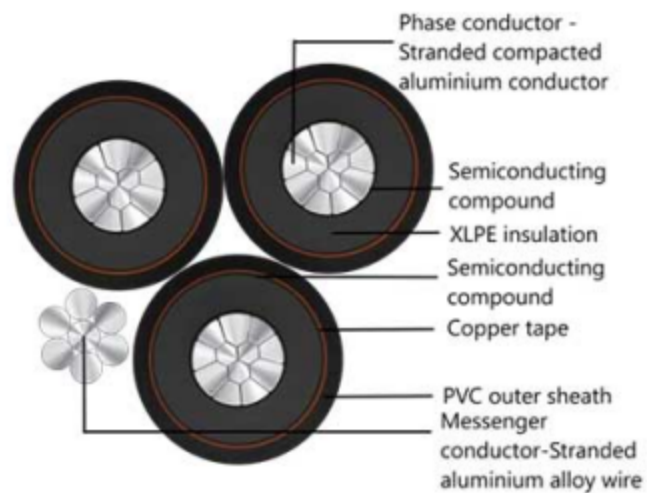
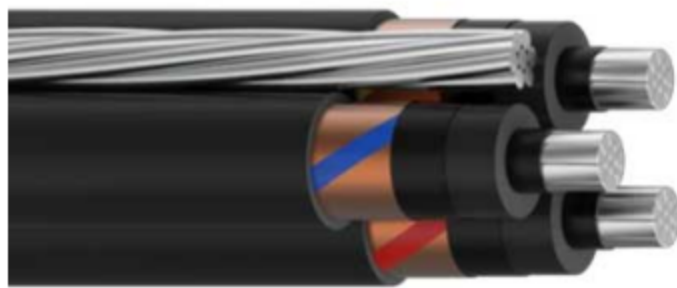
6.35/11 KV Aerial Bunched Cable Application

Aerial Bunched Cable (ABC) is recommended as overhead distribution feeder in rural or residential areas and hill area where underground installation is not possible.

Voltage Rating: 6.35/11 KV(E)

Operation Temperature: Max.: 90°C

Configuration: Three phase system cable with insulated messenger or with bare messenger



6.35/11 KV Aerial Bunched Cable Construction

• Phase conductor

Stranded compacted aluminium conductor to IS 8130, Class 2

Screened by semiconducting compound

Insulated with XLPE (Cross linked polyethylene)

Screened by semiconducting compound

Wrapped with copper tape

Sheathed with PVC sheath

• Messenger conductor

Stranded circular or compacted heat-treated aluminium-magnesium alloy wire to IS 398 (part 4)

Insulated with in-house developed compounded XLPE (if required)

6.35/11 KV Aerial Bunched Cable Core Identification

Phase conductor: one, two or three ridges

Neutral conductor: four ridges

Messenger (if insulated): No identification mark

6.35/11 KV Aerial Bunched Cable Standard and References

IS 8130:2013/IS 398 (Part 4)/IS 5831/IS 7098-2/IS 14255:1995

Overhead Power Distribution Cable, 6.35/11KV(E) AC

Phase Conductor +Messenger(Bare)

Construction n x mm ²	Insulation thickness mm	Phase conductor Overall diameter mm	messenger Overall diameter mm	Weight (Approx.)	Minimum Breaking load of messenger KN
3x25+1x50	3.60	20.10	9.11	1487	15.5
3x35+1x50	3.60	21.24	9.11	1660	15.5
3x50+1x70	3.60	22.83	10.77	1969	21.6
3x 70+1x70	3.60	24.48	10.77	2266	21.6
3x95+1x80	3.60	26.28	11.49	2647	24.7
3x120+1x95	3.60	27.89	12.55	3027	29.4
3x150+1x125	3.60	29.97	14.36	3585	38.5
3x185+1x125	3.60	31.72	14.36	4020	38.5
3x240+1x150	3.60	34.17	15.75	4750	46.3
3x300+1x185	3.60	36.58	17.49	5547	57.1

Phase Conductor+Messenger(Insulated)

Construction nx mm ²	Insulation thickness mm		Phase conductor Overall diameter mm	messenger Overall diameter mm	Weight (Approx.)	Minimum Breaking load of messenger KN
	Phase mm	Messenger mm				
3x25+1x50	3.60	3.60	20.10	16.3	1643	15.5
3x35+1x50	3.60	3.60	21.24	16.3	1816	15.5
3x50+1x70	3.60	3.60	22.83	18.0	2145	21.6
3x70+1x70	3.60	3.60	24.48	18.0	2442	21.6
3x95+1x80	3.60	3.60	26.28	18.7	2832	24.7
3x120+1x95	3.60	3.60	27.89	19.7	3225	29.4
3x150+1x125	3.60	3.60	29.97	21.6	3804	38.5
3x185+1x125	3.60	3.60	31.72	21.6	4240	38.5
3x240+1x150	3.60	3.60	34.17	23.0	4987	46.3
3x300+1x185	3.60	3.60	36.58	24.7	5805	57.1

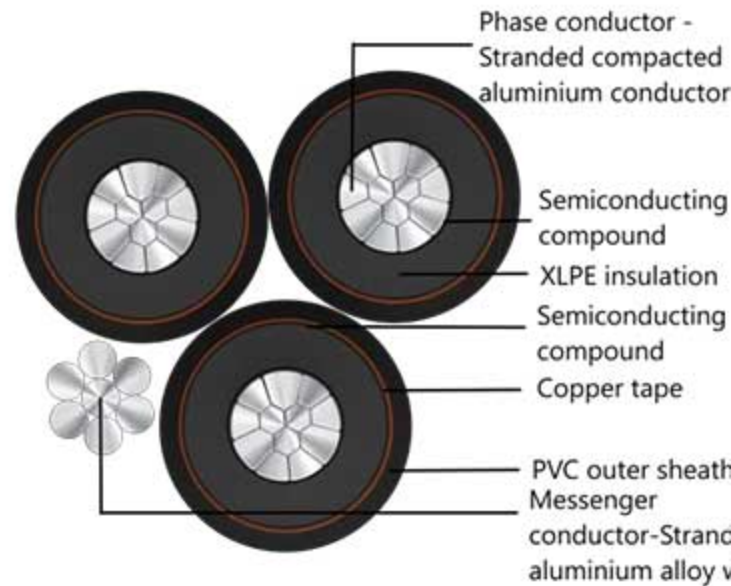
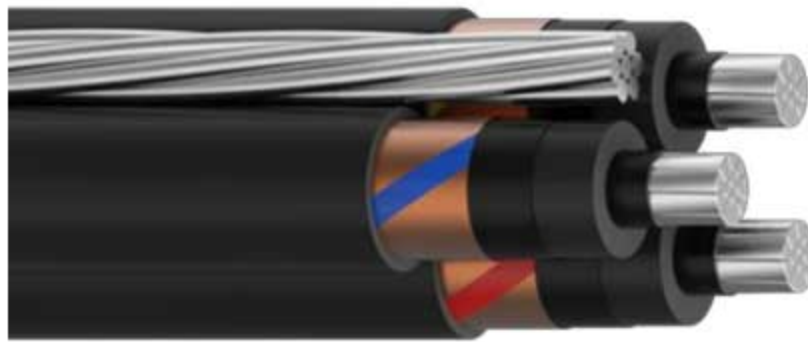
Aerial Bunched Cable (ABC) Overhead Power Distribution Cable, 19/33KV(E) AC

19/33kv ABC Cable Application

Aerial Bunched Cable (ABC) is recommended as overhead distribution feeder in rural or residential areas and hill areas where underground installation is not possible.

19/33kv ABC Cable Configuration

Three phase system cable with insulated messenger or with bare messenger



19/33kV ABC Cable Construction

- Phase conductor

Stranded compacted aluminium conductor to IS 8130, Class 2

Screened by semiconducting compound

Insulated with XLPE (Cross linked polyethylene)

Screened by semiconducting compound

Wrapped with copper tape

Sheathed with PVC sheath

- Messenger conductor

Stranded circular or compacted heat-treated aluminium magnesium alloy wire to IS 398 (part 4)

Insulated with in-house developed compounded XLPE (if required)

19/33kV ABC Cable Core Identification

Phase conductor: one, two or three ridges

Neutral conductor: four ridges

Messenger (if insulated): No identification mark

Aerial Bunched Cable (ABC) Overhead Power Distribution Cable, 19/33KV(E) AC

Phase Conductor+Messenger (Bare)

Construction n x mm ²	Insulation thickness mm	Phase conductor Overall diameter mm	messenger Overall diameter mm	Weight (Approx.)	Minimum Breaking load of messenger KN
3x25+1x95	8.80	30.90	12.55	3100	29.39
3x35+1x100	8.80	32.04	12.85	3345	30.82
3x50+1x125	8.80	33.63	14.36	3749	38.50
3x70+1x125	8.80	35.28	14.36	4131	38.50
3x95+1x150	8.80	37.08	15.75	4648	46.32
3x120+1x150	8.80	38.69	15.75	5068	46.32
3x150+1x185	8.80	40.77	17.49	5760	57.12
3x185+1x185	8.80	42.52	17.49	6286	57.12
3x240+1x240	8.80	45.37	19.93	7362	74.12
3x300+1x240	8.80	47.78	19.93	8194	74.12

Phase Conductor +Messenger (Insulated)

Construction n x mm ²	Insulation thickness mm		Phase conductor Overall diameter mm	messenger Overall diameter mm	Weight (Approx.)	Minimum Breaking load of messenger KN
	Phase mm	Messenger mm				
3x25+1x95	8.80	8.80	30.90	30.1	3738	29.39
3x35+1x100	8.80	8.80	32.04	30.4	3992	30.82
3x50+1x125	8.80	8.80	33.63	32.0	4442	38.50
3x70+1x125	8.80	8.80	35.28	32.0	4823	38.50
3x95+1x150	8.80	8.80	37.08	33.4	5382	46.32
3x120+1x150	8.80	8.80	38.69	33.4	5802	46.32
3x150+1x185	8.80	8.80	40.77	35.1	6546	57.12
3x185+1x185	8.80	8.80	42.52	35.1	7072	57.12
3x240+1x240	8.80	8.80	45.37	37.5	8221	74.12
3x300+1x240	8.80	8.80	47.78	37.5	9053	74.12