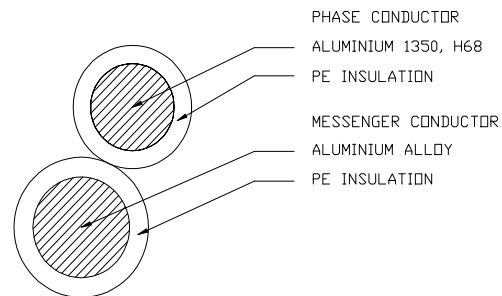
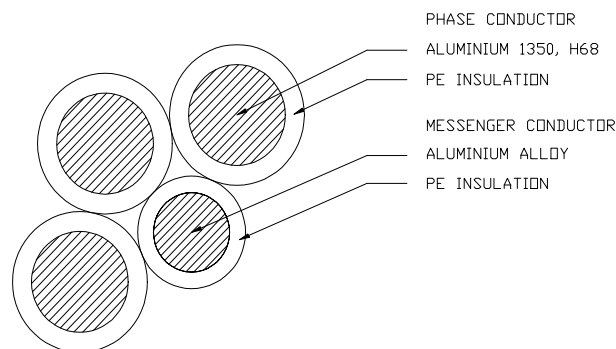


## 0.6 / 1 (1.2) KV LOW VOLTAGE, POLYETHYLENE ( PE ) INSULATED, AERIAL BUNDLE CABLES WITHOUT STREET LIGHTING CONDUCTOR

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1 Phase Conductor + 1 Messenger Conductor



3 Phase Conductors + 1 Messenger Conductor

### DESCRIPTION

The aerial bundle cables designed for overhead distribution lines have an insulated neutral messenger made of AAAC, which the insulated aluminium phase conductors are helically wound over it. Cables are rated at 0.6/1(1.2) kV and conform to IEC 60502

The main advantages of aerial bundle cables include :

1. Ease of erection and stringing
2. Practically no tree - trimming required
3. Less maintenance

### CONSTRUCTION

#### 1 Phase conductor :

The phase conductors shall be of H68 Condition aluminium conductor and compacted circular stranded.

#### 2 Messenger conductor :

The neutral messenger conductor shall be of aluminium alloy conductor and compacted circular stranded.

#### 3 Insulation :

The phase and messenger conductors shall be extruded with Polyethylene ( PE ) as insulation.

#### 4 The Completed Cable

The cable consists of insulated phase aluminium conductors, shall be held firmly onto the insulated neutral messenger aluminium alloy conductor in a right-hand ( Z ) direction of lay.

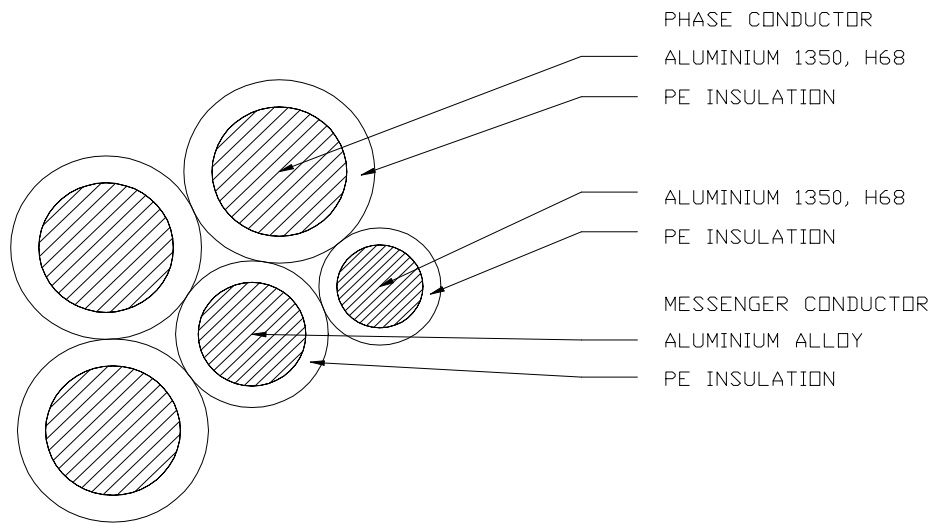
**0.6 / 1 (1.2) KV LOW VOLTAGE, POLYETHYLENE ( PE ) INSULATED,  
AERIAL BUNDLE CABLES WITHOUT STREET LIGHTING CONDUCTOR**

**SCHEDULE OF TECHNICAL PARTICULARS**

<b>Phase conductor</b>											
Nominal cross-sectional area	mm <sup>2</sup>	16	16	25	35	50	70	95	120	150	185
Number of cores		1	3	3	3	3	3	3	3	3	3
Minimum number of wires		6	6	6	6	6	12	15	15	30	30
Nominal insulation thickness	mm	1.0	1.0	1.2	1.2	1.4	1.4	1.6	1.6	1.8	2.0
Diameter of insulated core	mm	6.8	6.8	8.5	9.5	11.2	13.0	15.1	16.6	18.4	20.6
Max. dc resistance at 20°C	ohm/km	1.91	1.91	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164
Current rating at still wind <i>ambient temperature = 30°C</i> <i>Conductor temperature = 75°C</i>	A	61	61	84	104	129	167	209	246	283	332
<b>Messenger conductor</b>											
Nominal cross-sectional area	mm <sup>2</sup>	25	25	25	25	35	50	70	70	95	120
Minimum number of wires		6	6	6	6	6	6	12	12	15	15
Nominal insulation thickness	mm	1.2	1.2	1.2	1.2	1.2	1.4	1.4	1.4	1.6	1.6
Diameter of insulated core	mm	8.5	8.5	8.5	8.5	9.5	11.2	13.1	13.1	15.1	16.6
Max. dc resistance at 20°C	ohm/km	1.312	1.312	1.312	1.312	0.943	0.693	0.469	0.469	0.349	0.273
Calculated breaking load	kN	6.4	6.4	6.4	6.4	8.9	12.1	18.0	18.0	24.2	30.8
<b>Completed cable</b>											
Approx. overall diameter	mm	15.3	19.0	23.2	25.6	30.0	34.9	40.6	44.1	49.2	54.9
Approx. weight of cable	kg/km	160	290	400	500	680	920	1,270	1,510	1,870	2,340
Packing length	m/drum	1,000	1,000	1,000	1,000	1,000	1,000	500	500	500	500

## 0.6 / 1 (1.2) KV LOW VOLTAGE, POLYETHYLENE ( PE ) INSULATED, AERIAL BUNDLE CABLES WITH STREET LIGHTING CONDUCTOR

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3 Phase Conductors + 1 Messenger Conductor + 1 Street Lighting Conductor

### DESCRIPTION

The aerial bundle cables designed for overhead distribution lines have an insulated neutral messenger made of AAAC, which the insulated aluminium phase conductors are helically wound over it. Cables are rated at 0.6/1(1.2) kV and conform to IEC 60502

The main advantages of aerial bundle cables include :

1. Ease of erection and stringing
2. Practically no tree - trimming required
3. Less maintenance

### CONSTRUCTION

#### 1 Phase conductor :

The phase conductors shall be of H68 Condition aluminium conductor and compacted circular stranded.

#### 2 Messenger conductor :

The neutral messenger conductor shall be of aluminium alloy conductor and compacted circular stranded.

#### 3 Street Lighting conductor :

The street lighting conductors shall be of H68 Condition aluminium conductor and compacted circular stranded.

#### 4 Insulation :

The phase, messenger and street lighting conductors shall be extruded with Polyethylene ( PE ) as insulation.

#### 5 The Completed Cable

The cable consists of insulated phase and street lighting aluminium conductors, shall be held firmly onto the insulated neutral messenger aluminium alloy conductor in a right-hand ( Z ) direction of lay.

**0.6 / 1 (1.2) KV LOW VOLTAGE, POLYETHYLENE ( PE ) INSULATED,  
AERIAL BUNDLE CABLES WITH STREET LIGHTING CONDUCTOR**

**SCHEDULE OF TECHNICAL PARTICULARS**

<b>Phase conductor</b>									
Nominal cross-sectional area	mm <sup>2</sup>	25	35	50	70	95	120	150	185
Number of cores		3	3	3	3	3	3	3	3
Minimum number of wires		6	6	6	12	15	15	30	30
Nominal insulation thickness	mm	1.2	1.2	1.4	1.4	1.6	1.6	1.8	2.0
Diameter of insulated core	mm	8.5	9.5	11.2	13.0	15.1	16.6	18.4	20.6
Max. dc resistance at 20°C	ohm/km	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164
Current rating at still wind <i>ambient temperature = 30°C</i> <i>Conductor temperature = 75°C</i>	A	84	104	129	167	209	246	283	332
<b>Messenger conductor</b>									
Nominal cross-sectional area	mm <sup>2</sup>	25	25	35	50	70	70	95	120
Minimum number of wires		6	6	6	6	12	12	15	15
Nominal insulation thickness	mm	1.2	1.2	1.2	1.4	1.4	1.4	1.6	1.6
Diameter of insulated core	mm	8.5	8.5	9.5	11.2	13.1	13.1	15.1	16.6
Max. dc resistance at 20°C	ohm/km	1.312	1.312	0.943	0.693	0.469	0.469	0.349	0.273
Calculated breaking load	kN	6.4	6.4	8.9	12.1	18.0	18.0	24.2	30.8
<b>Street lighting conductor</b>									
Nominal cross-sectional area	mm <sup>2</sup>	16	16	16	16	16	16	16	16
Minimum number of wires		6	6	6	6	6	6	6	6
Nominal insulation thickness	mm	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Diameter of insulated core	mm	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
Max. dc resistance at 20°C	ohm/km	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91
<b>Completed cable</b>									
Approx. overall diameter	mm	23.2	25.6	30.0	34.9	40.6	44.1	49.2	54.9
Approx. weight of cable	kg/km	470	560	740	980	1,330	1,580	1,940	2,410
Packing length	m/drum	1,000	1,000	1,000	1,000	500	500	500	500