

### IEC 60502-1 & TNB 0.6/1kV LV ABC Cable Application

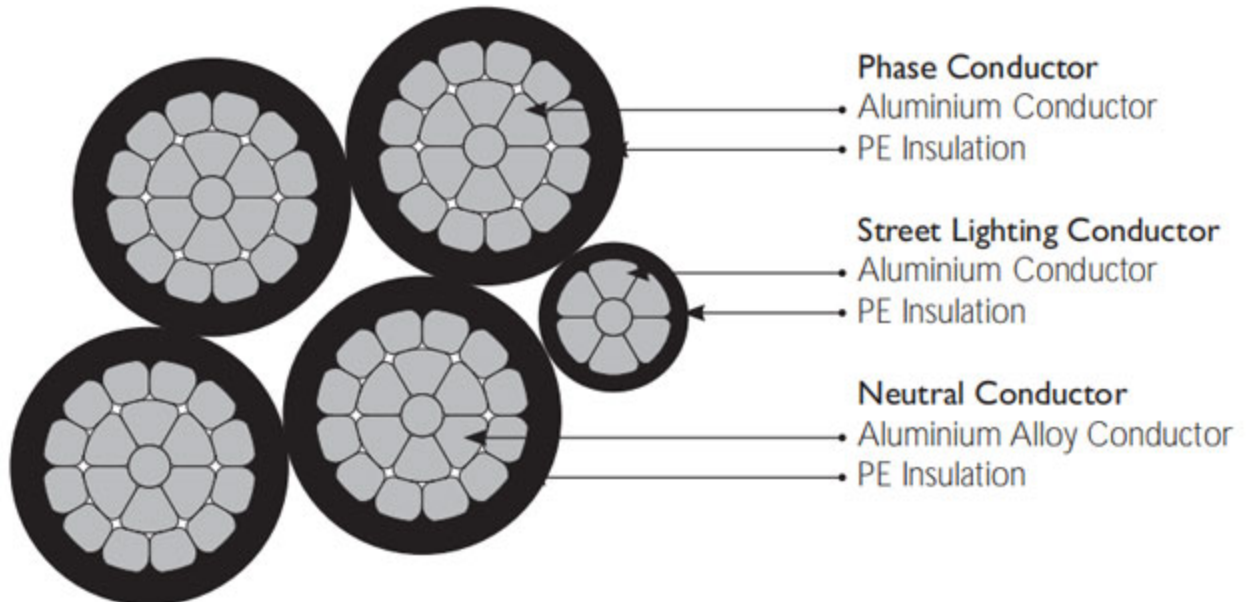
The IEC 60502-1 standard LV ABC Cable Aerial Bundle Conductor is overhead power lines and room entrance wires with a rated AC pressure of 1kv and below. ABC Cable has less installation, maintenance, and operating costs, which can achieve greater economic loss and provide higher security and reliability.

Aerial Bundle Cable (ABC cable) is a very innovative concept for overhead power distribution as compared to the conventional bare conductor overhead distribution system.

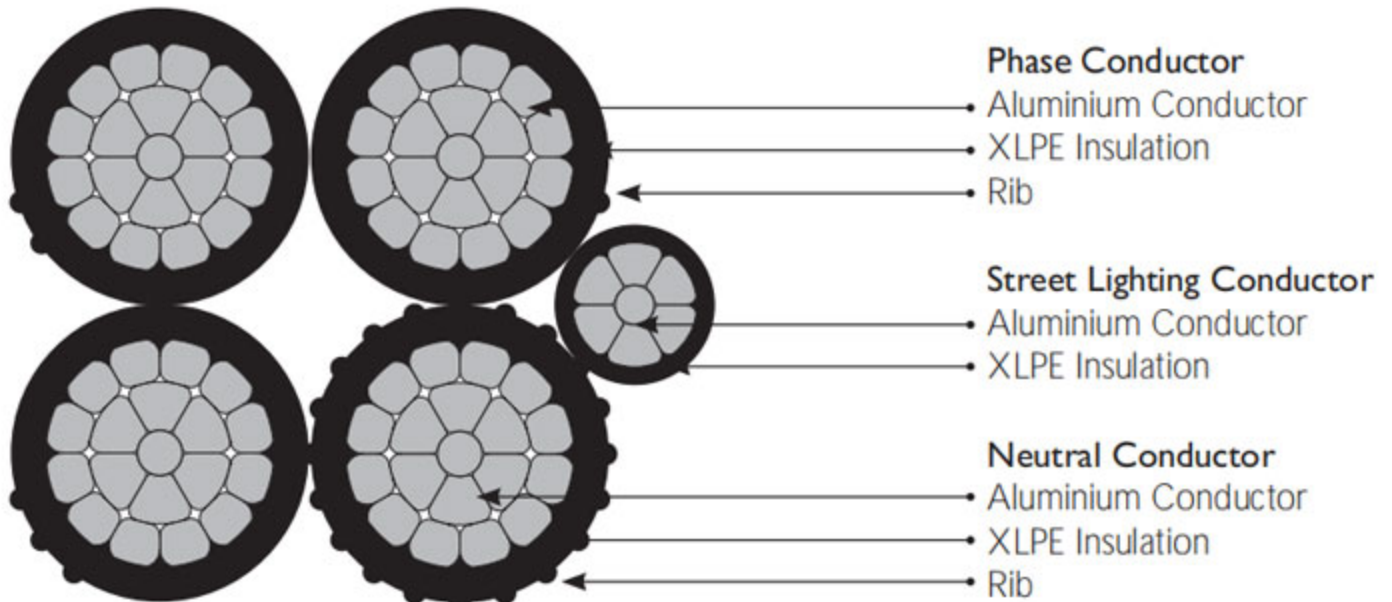
LV Aerial Bundle Cables are designed to supply 600/1000 volt aerial service for temporary service at construction sites, as a service drop (power pole to service entrance), as a secondary cable (pole to pole) or street lighting.

### IEC 60502-1 & TNB 0.6/1kV LV ABC Cable Construction

IEC 60502 & TNB Specification 0.6/1(1.2)kv



IEC 60502 & DES/LV/ABC 0.6/1 (1.2)kV



Concentric strands or compact aluminum conductor, polyethylene or crosslinked polyethylene insulation.

Phase conductor: circular stranded, rounded, compact aluminum conductor

Phase Core identification: colour strip, rib or number

Neutral/Messenger conductor: aluminum conductor AAC or all aluminum alloy conduct Or AAAC

Insulation: black polyethylene(PE) or crosslinked polyethylene(XLPE)

## Aerial Bundled Cables to IEC 60502 & TNB Specification (AL/PE)

### IEC 60502-1 Standard Aerial Bundle Conductor LV ABC Cable Size Parameters

Section Area	Phase Core				Neutral Core				Complete Cable	
	Section Area	No. of Wires	Conductor Diameter	Insulation Thickness	Section Area	No. of Wire	Conductor Diameter	Insulation Thickness	Approx. Diameter	Approx. Weight
mm <sup>2</sup>	mm <sup>2</sup>	No.	mm	mm	mm <sup>2</sup>	No.	mm	mm	mm	kg/km
1x10	1x10	7	4.05	1.0	-	-	-	-	6.1	43
1x16	1x16	7	4.8	1.2	-	-	-	-	7.2	64
1x25	1x25	7	6	1.2	-	-	-	-	8.4	92
1x35	1x35	7	7	1.4	-	-	-	-	9.8	127
1x50	1x50	7	8.1	1.4	-	-	-	-	11.1	165
1x70	1x70	19	10	1.4	-	-	-	-	12.8	230
1x95	1x95	19	11.6	1.6	-	-	-	-	14.8	315
1x120	1x120	19	13	1.6	-	-	-	-	16.2	390
1x150	1x150	19	14.6	1.8	-	-	-	-	18.2	476
1x185	1x185	37	16.2	2	-	-	-	-	20.2	609
2x10	2x10	7	4	1	-	-	-	-	12.2	85
2x16	2x16	7	4.8	1.2	-	-	-	-	14.4	128
2x25	2x25	7	6	1.2	-	-	-	-	16.8	184
2x35	2x35	7	7	1.4	-	-	-	-	19.6	255
2x50	2x50	7	8.1	1.4	-	-	-	-	22.2	329
2x70	2x70	19	10	1.4	-	-	-	-	25.6	459
3x10	3x10	7	4	1	-	-	-	-	13.1	128
3x16	3x16	7	4.8	1.2	-	-	-	-	17.4	192
3x25	3x25	7	6	1.2	-	-	-	-	20.3	276
3x35	3x35	7	7	1.4	-	-	-	-	21.1	382
3x50	3x50	7	8.1	1.4	-	-	-	-	23.9	494
3x70	3x70	19	10	1.4	-	-	-	-	27.6	688
3x95	3x95	19	11.6	1.6	-	-	-	-	31.9	943
3x120	3x120	19	13	1.6	-	-	-	-	34.9	1170
4x10	4x10	7	4	1	-	-	-	-	14.6	171
4x16	4x16	7	4.8	1.2	-	-	-	-	17.4	256
4x25	4x25	7	6	1.2	-	-	-	-	20.3	368
4x35	4x35	7	7	1.4	-	-	-	-	23.7	509
4x50	4x50	7	8.1	1.4	-	-	-	-	26.8	659
4x70	4x70	19	10	1.4	-	-	-	-	30.9	917
4x95	4x95	19	11.6	1.6	-	-	-	-	35.8	1258
4x120	4x120	19	13	1.6	-	-	-	-	39.1	1559
1x16+16	1x16	7	4.8	1.2	1x16	7	5.1	-	12.3	108
1x25+25	1x25	7	6	1.2	1x25	7	6.3	-	14.7	158
1x35+35	1x35	7	7	1.4	1x35	7	7.5	-	17.3	221
1x50+50	1x50	7	8.4	1.4	1x50	7	9	-	20.1	300
2x16+16	2x16	7	4.8	1.2	1x16	7	5.1	-	15.5	172
2x25+25	2x25	7	6	1.2	1x25	7	6.3	-	18.1	250
2x35+35	2x35	7	7	1.4	1x35	7	7.5	-	21.1	348

2x50+50	2x50	7	8.3	1.4	1x50	7	9	-	22.4	464
3x16+16	3x16	7	4.8	1.2	1x16	7	5.1	-	17.4	235
3x25+25	3x25	7	6	1.2	1x25	7	6.3	-	20.3	342
3x35+35	3x35	7	7	1.4	1x35	7	7.5	-	23.7	475
3x50+50	3x50	7	8.1	1.4	1x50	7	9	-	26.8	629
3x70+70	3x70	19	10	1.4	1x70	19	10.5	-	30.9	869
3x95+95	3x95	19	11.6	1.6	1x95	19	12.5	-	35.7	1200
3x35+16	3x35	7	7	1.4	1x16	7	4.8	-	22.2	445
3x50+25	3x50	7	8.1	1.4	1x25	7	6	-	24.8	585
3x70+35	3x70	19	10	1.4	1x35	7	7	-	30.9	815
3x95+50	3x95	19	11.6	1.6	1x50	7	8.1	-	35.7	1108
4x95+35	4x95	19	11.6	1.6	1x35	7	7	-	39.9	1385
3x120+70	3x120	19	13	1.6	1x70	19	10	-	39.1	1399

**TNB SPECIFICATION(IEC 60502) ABC Cable**

NUMBER OF CORES X NOMINAL CROSS SECTION	OVERAL DIAMETER	WEIGHT	MAXIMUM RESISTANCE	CONDUCTOR	MINIMUM BREAKING LOAD	CURRENT RATING
NO.xMM <sup>2</sup>	MM	KG/KM	Ω/KM		KN	A
1x16+1x25 RM	15.3	160	1.910		2.5	72
3x16+1x25 RM	19.0	290	1.200		4.0	107
3x25+1x25 RM	23.2	400	0.868		5.5	132
3x35+1x25 RM	25.6	500	0.641		8.0	165
3x50+1x35 RM	30.0	680	0.443		10.7	205
3x70+1x50 RM	34.9	920	0.320		13.7	240
3x95+1x70 RM	40.6	1270	0.253		18.6	290
3x120+1x70 RM	44.1	1510	0.206		23.2	334
3x150+1x95 RM	49.2	1870	0.164		28.7	389
3x185+1x120 RM	54.9	2340	0.125		37.2	467
3x25+1x25+1x16 RM	23.2	470	1.910		2.5	72
3x35+1x25+1x16 RM	25.6	560	1.200		4.0	107
3x50+1x35+1x16 RM	30.0	740	0.868		5.5	132
3x70+1x50+1x16 RM	34.9	980	0.641		8.0	165
3x95+1x70+1x16 RM	40.6	1330	0.443		10.7	205
3x120+1x70+1x16 RM	44.1	1580	0.320		13.7	240
3x150+1x95+1x16 RM	49.2	1940	0.206		23.2	334
3x185+1x120+1x16 RM	54.9	2410	1.910		2.5	72

Other cross-sections can be offered upon request.

**Aerial Bundled Cables to DES/LVC/ABC Specification & IEC 60502 (AL/XLPE)**

Number of cores x nominal cross section	min. breaking load of conductor strand	Current rating in the air	Outer diameter	Total weight
mm <sup>2</sup>	kN	A	mm	kg/km
4x25 RM	3.5	84	21.5	420
4x35 RM	4.9	104	23.9	550
4x120+1x25 RM	16.8	246	43.8	1800
4x185+1x25 RM	25.9	332	50.7	2700

other cross-sections on request