

LV Aerial Bundled Conductor (ABC) Cables

600/1000V ABC –Aerial Bundled Cables to IEC 60502 & TNB (AL/PE)

Application

The aerial bundled cables designed for overhead distribution lines have an insulated neutral messenger made of AAAC, which the insulation aluminium phase conductors are helically wound over it. Can be used for fixed installation as overhead power lines up to 1000 V incl.

Standard

TNB Specification

IEC 60502

Cable Construction

Phase Conductor	H68 condition aluminium conductor, round stranded compressed.
Neutral or Messenger Conductor	Alloy aluminium conductor, round stranded compressed.
Street Lighting Conductor	H68 condition aluminium conductor, round stranded compressed.
Insulation	PE.
Assembly	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) lay.

Electrical Properties

Rated Voltage	0.6/1kV
Test Voltage	4 Veff kV
Minimum Laying Temperature	-20°C
Operating Temperature	-40°C~ +90°C
Maximum Short-circuit Temperature	250°C
Maximum Conductor Temperature	80°C
Minimum Bending Radius	18×OD

Dimensions

Number of cores x nominal cross section	min. breaking load of conductor strand	Current rating in the air	Outer diameter	Total weight
mm ²	kN	A	mm	kg/km
1x16+1x 25 RM	6.4	61	15.3	160
3x16+1x 25 RM	6.4	61	19.0	290
3x25+1x 25 RM	6.4	84	23.2	400
3x35+1x 25 RM	6.4	104	25.6	500
3x50+1x 35 RM	8.9	129	30.0	680
3x70+1x 50 RM	12.1	167	34.9	920
3x95+1x 70 RM	18.0	209	40.6	1270
3x120+1x 70 RM	18.0	246	44.1	1510

3x150+1x 95 RM	24.2	283	49.2	1870
3x185+1x120 RM	30.8	332	54.9	2340
3x25+1x25+1x16 RM	6.4	84	23.2	470
3x35+1x25+1x16 RM	6.4	104	25.6	560
3x50+1x35+1x16 RM	8.9	129	30.0	740
3x70+1x50+1x16 RM	12.1	167	34.9	980
3x95+1x70+1x16 RM	18.0	209	40.6	1330
3x120+1x70+1x16 RM	18.0	246	44.1	1580
3x150+1x95+1x16 RM	24.2	283	49.2	1940
3x185+1x120+1x16 RM	30.8	332	54.9	2410

other cross-sections on request