



• Application

SANS 1418 LV Aerial Bundled Cable (ABC) is developed in accordance with the South African National Standard (SANS) for low-voltage aerial bundled cables. This standard ensures the cables well-suited for local electrical distribution networks with below applications:

Local Electrical Distribution: Primarily used in low-voltage overhead electrical distribution networks across South Africa.
Rural Electrification: Ideal for extending electricity supply to rural and remote areas, facilitating socio-economic development.
Urban Infrastructure: Suitable for urban areas, providing reliable electricity distribution in residential, commercial, and industrial settings.

• Advantage

Local Compliance: SANS 1418 ABC cables are designed to comply with South African national standards, ensuring compatibility with local regulations and practices.
Robustness: Resistant to UV radiation, chemicals, and mechanical wear, ensuring durability and longevity in South Africa's challenging environmental conditions.
Versatility: Suitable for both urban and rural applications, providing reliable electricity distribution across diverse settings.
Safety: Designed to minimize electrical hazards and ensure safe operation in compliance with South African standards.
Socio-Economic Impact: Facilitates rural electrification efforts, contributing to socio-economic development and improved quality of life in underserved communities.

• Performance

Electrical performance: 0.6/1kV
Chemical performance: chemical, UV & oil resistance
Mechanical performance: minimum bending radius: 10 x cable diameter
Terminal performance : maximum service temperature: 90°C; maximum short-circuit temperature: 250°C(max.5s); minimum service temperature: -40°C

• Construction

Conductors:

Phase Conductor: Circular stranded, compact aluminum conductor optimized for efficient power transmission and mechanical strength.

Neutral/Messenger Conductor: Stranded or compacted aluminum alloy conductor (AAAC), designed to withstand mechanical stresses and ensure electrical reliability.

Street Lighting Conductor: Optional, providing additional functionality for street lighting applications in urban and rural areas.

Insulation: Black polyethylene (PE) or crosslinked polyethylene (XLPE), meeting SANS standards for electrical insulation and protection against environmental factors.

• Specification

-SANS 1418 Standard low voltage aerial bundled cable

• Eastful Cable Lab



We have CNAS Accredited Facility to assure conformity assessment services with a focus on quality, expertise, and customer satisfaction.

CNAS has international mutual recognition among IAF, ILAC, APLAC and PAC.

• Accreditation

We meet the requirements of ISO9001, ISO14001, ISO45001 and ISO50001 and our cables have certificate of CCC, RoHS, CASC, UL, cUL, TÜV Rheinland and CCS.



• National Green Factory



Our facility has been awarded of National Green Factory by Ministry of Industry and Information Technology of China. We are committed to the development of high-end, intelligent and green manufacturing industry.

*The overall energy consumption level of green factories is better than the energy efficiency benchmark level.

● Technical Parameters

Type 1: Self-supporting							
Nominal Cross Section Area	Phase(AAC+UV-XLPE)					Approx. Overall Dia.	Max. D.C. Resistance of Conductor at 20°C
	Compact Conductor		UV-XLPE Insulation				
	No.of Individual Wires	Nominal Overall Dia.	Nominal Thickness	Min. Thickness	Nominal Diameter		
No. x mm ²	-	mm	mm	mm	mm	mm	Ω/km
4 × 16	7	4.8	1.2	0.98	7.2	17.42	1.91
4 × 25	7	6.0	1.4	1.16	8.8	21.3	1.2
4 × 35	7	7.0	1.6	1.34	10.2	24.68	0.868
4 × 50	7	8.3	1.6	1.34	11.5	27.83	0.641
4 × 70	19	10.0	1.8	1.52	13.6	32.91	0.443
4 × 95	19	11.6	1.8	1.52	15.2	36.78	0.32
4 × 120	19	13.0	1.8	1.52	16.6	40.17	0.253
4 × 150	19	14.6	1.8	1.52	18.2	44.04	0.206
3 × 16	7	4.8	1.2	0.98	7.2	15.55	1.91
3 × 25	7	6.0	1.4	1.16	8.8	19.01	1.2
3 × 35	7	7.0	1.6	1.34	10.2	22.03	0.868
3 × 50	7	8.3	1.6	1.34	11.5	24.84	0.641
3 × 70	19	10.0	1.8	1.52	13.6	29.38	0.443
3 × 95	19	11.6	1.8	1.52	15.2	32.83	0.32
3 × 120	19	13.0	1.8	1.52	16.6	35.86	0.253
3 × 150	19	14.6	1.8	1.52	18.2	39.31	0.206
2 × 16	7	4.8	1.2	0.98	7.2	14.4	1.91
2 × 25	7	6.0	1.4	1.16	8.8	17.6	1.2
2 × 35	7	7.0	1.6	1.34	10.2	20.4	0.868
2 × 50	7	8.3	1.6	1.34	11.5	23	0.641
2 × 70	19	10.0	1.8	1.52	13.6	27.2	0.443
2 × 95	19	11.6	1.8	1.52	15.2	30.4	0.32
2 × 120	19	13.0	1.8	1.52	16.6	33.2	0.253
2 × 150	19	14.6	1.8	1.52	18.2	36.4	0.206
1 × 16	7	4.8	1.2	0.98	7.2	7.2	1.91
1 × 25	7	6.0	1.4	1.16	8.8	8.8	1.2
1 × 35	7	7.0	1.6	1.34	10.2	10.2	0.868
1 × 50	7	8.3	1.6	1.34	11.5	11.5	0.641
1 × 70	19	10.0	1.8	1.52	13.6	13.6	0.443
1 × 95	19	11.6	1.8	1.52	15.2	15.2	0.32
1 × 120	19	13.01	1.8	1.52	16.6	16.6	0.253
1 × 150	19	14.6	1.8	1.52	18.2	18.2	0.206

● Technical Parameters

Type 2: Phase +Supporting							
Nominal Cross Section Area		Phase(AAC+UV-XLPE)			Supporting(AAAC+UV-XLPE)		Approx. Overall Dia.
Phase (AAC+UV-XLPE)	Supporting (AAAC+UV-XLPE)	Compact Conductor		UV-XLPE Insulation	Conductor	UV-XLPE Insulation	
		No.of Individual Wires	Nominal Dia.	Nominal Thickness	No./Dia.of Wires	Nominal Thickness	
No. x mm ²	No. x mm ²	-	mm	mm	No./mm	mm	mm
3 × 16	1 × 54.6	7	4.8	1.2	7/3.15	1.6	20.72
3 × 25	1 × 54.6	7	6	1.4	7/3.15	1.6	23.63
3 × 35	1 × 54.6	7	7	1.6	7/3.15	1.6	26.17
3 × 50	1 × 54.6	7	8.3	1.6	7/3.15	1.6	28.53
3 × 70	1 × 54.6	19	10	1.8	7/3.15	1.6	32.34
3 × 95	1 × 54.6	19	11.6	1.8	7/3.15	1.6	35.24
3 × 120	1 × 54.6	19	13	1.8	7/3.15	1.6	37.78
3 × 150	1 × 54.6	19	14.6	1.8	7/3.15	1.6	40.69
3 × 16	1 × 70	7	4.8	1.2	7/3.5	1.6	21.36
3 × 25	1 × 70	7	6	1.4	7/3.5	1.6	24.26
3 × 35	1 × 70	7	7	1.6	7/3.5	1.6	26.8
3 × 50	1 × 70	7	8.3	1.6	7/3.5	1.6	29.16
3 × 70	1 × 70	19	10	1.8	7/3.5	1.6	32.97
3 × 95	1 × 70	19	11.6	1.8	7/3.5	1.6	35.88
3 × 120	1 × 70	19	13	1.8	7/3.5	1.6	38.42
3 × 150	1 × 70	19	14.6	1.8	7/3.5	1.6	41.32

● Technical Parameters

Type 3: Phase+Supporting+ Street Lighting											
Nominal Cross Section Area			Phase		Supporting		Service Connection				Approx. Overall Dia.
Phase (AAC+XLPE)	Supporting (AAAC+XLPE)	Service Connection (AAC+XLPE)	Compact Conductor	UV-XLPE	Conductor	UV-XLPE	Compact Conductor	UV-XLPE	Compact Conductor	UV-XLPE	
No. x mm ²	No. x mm ²	No. x mm ²	No. of Al. Wires	Overall Dia.	Normal Thickness	No./Dia. of Alloy Wires	Normal Thickness	No. of Al. Wires	Overall Dia.	Nominal Thickness	
			-	mm	mm	No./mm	mm	-	mm	mm	mm
3 × 16	1 × 54.6	1 × 25	7	4.8	1.2	7/3.15	1.6	7	6.0	1.4	27.05
3 × 25	1 × 54.6	1 × 25	7	6.0	1.4	7/3.15	1.6	7	6.0	1.4	30.25
3 × 35	1 × 54.6	1 × 25	7	7.0	1.6	7/3.15	1.6	7	6.0	1.4	33.05
3 × 50	1 × 54.6	1 × 25	7	8.3	1.6	7/3.15	1.6	7	6.0	1.4	35.65
3 × 70	1 × 54.6	1 × 25	19	10.0	1.8	7/3.15	1.6	7	6.0	1.4	39.85
3 × 95	1 × 54.6	1 × 25	19	11.6	1.8	7/3.15	1.6	7	6.0	1.4	43.05
3 × 120	1 × 54.6	1 × 25	19	13.0	1.8	7/3.15	1.6	7	6.0	1.4	45.85
3 × 150	1 × 54.6	1 × 25	19	14.6	1.8	7/3.15	1.6	7	6.0	1.4	49.05
3 × 16	1 × 54.6	2 × 25	7	4.8	1.2	7/3.15	1.6	7	6.0	1.4	27.05
3 × 25	1 × 54.6	2 × 25	7	6.0	1.4	7/3.15	1.6	7	6.0	1.4	30.25
3 × 35	1 × 54.6	2 × 25	7	7.0	1.6	7/3.15	1.6	7	6.0	1.4	33.05
3 × 50	1 × 54.6	2 × 25	7	8.3	1.6	7/3.15	1.6	7	6.0	1.4	35.65
3 × 70	1 × 54.6	2 × 25	19	10.0	1.8	7/3.15	1.6	7	6.0	1.4	39.85
3 × 95	1 × 54.6	2 × 25	19	11.6	1.8	7/3.15	1.6	7	6.0	1.4	43.05
3 × 120	1 × 54.6	2 × 25	19	13.0	1.8	7/3.15	1.6	7	6.0	1.4	45.85
3 × 150	1 × 54.6	2 × 25	19	14.6	1.8	7/3.15	1.6	7	6.0	1.4	49.05
3 × 16	1 × 70	1 × 25	7	4.8	1.2	7/3.15	1.6	7	6	1.4	28.1
3 × 25	1 × 70	1 × 25	7	6.0	1.4	7/3.15	1.6	7	6	1.4	31.3
3 × 35	1 × 70	1 × 25	7	7.0	1.6	7/3.15	1.6	7	6	1.4	34.1
3 × 50	1 × 70	1 × 25	7	8.3	1.6	7/3.15	1.6	7	6	1.4	36.7
3 × 70	1 × 70	1 × 25	19	10.0	1.8	7/3.15	1.6	7	6	1.4	40.9
3 × 95	1 × 70	1 × 25	19	11.6	1.8	7/3.15	1.6	7	6	1.4	44.1
3 × 120	1 × 70	1 × 25	19	13.0	1.8	7/3.15	1.6	7	6	1.4	46.9
3 × 150	1 × 70	1 × 25	19	14.6	1.8	7/3.15	1.6	7	6	1.4	50.1
3 × 16	1 × 70	2 × 25	7	4.8	1.2	7/3.15	1.6	7	6	1.4	28.1
3 × 25	1 × 70	2 × 25	7	6.0	1.4	7/3.15	1.6	7	6	1.4	31.3
3 × 35	1 × 70	2 × 25	7	7.0	1.6	7/3.15	1.6	7	6	1.4	34.1
3 × 50	1 × 70	2 × 25	7	8.3	1.6	7/3.15	1.6	7	6	1.4	36.7
3 × 70	1 × 70	2 × 25	19	10.0	1.8	7/3.15	1.6	7	6	1.4	40.9
3 × 95	1 × 70	2 × 25	19	11.6	1.8	7/3.15	1.6	7	6	1.4	44.1
3 × 120	1 × 70	2 × 25	19	13.0	1.8	7/3.15	1.6	7	6	1.4	46.9
3 × 150	1 × 70	2 × 25	19	14.6	1.8	7/3.15	1.6	7	6	1.4	50.1

● Technical Parameters

Type 3: Phase+Supporting+ Street Lighting											
Nominal Cross Section Area			Phase			Supporting		Service Connection			Approx. Overall Dia.
Phase (AAC+XLPE)	Supporting (AAAC+XLPE)	Service Connection (AAC+XLPE)	Compact Conductor	UV-XLPE	Conductor	UV-XLPE	Compact Conductor	UV-XLPE	Service Connection	UV-XLPE	
No. x mm ²	No. x mm ²	No. x mm ²	No. of Al. Wires	Overall Dia.	Normal Thickness	No./Dia. of Alloy Wires	Normal Thickness	No. of Al. Wires	Overall Dia.	Nominal Thickness	
			-	mm	mm	No./mm	mm	-	mm	mm	mm
3 × 16	1 × 54.6	1 × 16	7	4.8	1.2	7/3.15	1.6	7	4.8	1.2	27.05
3 × 25	1 × 54.6	1 × 16	7	6.0	1.4	7/3.15	1.6	7	4.8	1.2	30.25
3 × 35	1 × 54.6	1 × 16	7	7.0	1.6	7/3.15	1.6	7	4.8	1.2	33.05
3 × 50	1 × 54.6	1 × 16	7	8.3	1.6	7/3.15	1.6	7	4.8	1.2	35.65
3 × 70	1 × 54.6	1 × 16	19	10.0	1.8	7/3.15	1.6	7	4.8	1.2	39.85
3 × 95	1 × 54.6	1 × 16	19	11.6	1.8	7/3.15	1.6	7	4.8	1.2	43.05
3 × 120	1 × 54.6	1 × 16	19	13.0	1.8	7/3.15	1.6	7	4.8	1.2	45.85
3 × 150	1 × 54.6	1 × 16	19	14.6	1.8	7/3.15	1.6	7	4.8	1.2	49.05
3 × 16	1 × 54.6	2 × 16	7	4.8	1.2	7/3.15	1.6	7	4.8	1.2	27.05
3 × 25	1 × 54.6	2 × 16	7	6.0	1.4	7/3.15	1.6	7	4.8	1.2	30.25
3 × 35	1 × 54.6	2 × 16	7	7.0	1.6	7/3.15	1.6	7	4.8	1.2	33.05
3 × 50	1 × 54.6	2 × 16	7	8.3	1.6	7/3.15	1.6	7	4.8	1.2	35.65
3 × 70	1 × 54.6	2 × 16	19	10.0	1.8	7/3.15	1.6	7	4.8	1.2	39.85
3 × 95	1 × 54.6	2 × 16	19	11.6	1.8	7/3.15	1.6	7	4.8	1.2	43.05
3 × 120	1 × 54.6	2 × 16	19	13.0	1.8	7/3.15	1.6	7	4.8	1.2	45.85
3 × 150	1 × 54.6	2 × 16	19	14.6	1.8	7/3.15	1.6	7	4.8	1.2	49.05
3 × 16	1 × 54.6	1 × 16	7	4.8	1.2	7/3.15	1.5	7	4.8	1.2	27.9
3 × 25	1 × 70	1 × 16	7	6.0	1.4	7/3.15	1.5	7	4.8	1.2	31.1
3 × 35	1 × 70	1 × 16	7	7.0	1.6	7/3.15	1.5	7	4.8	1.2	33.9
3 × 50	1 × 70	1 × 16	7	8.3	1.6	7/3.15	1.5	7	4.8	1.2	36.5
3 × 70	1 × 70	1 × 16	19	10.0	1.8	7/3.15	1.5	7	4.8	1.2	40.7
3 × 95	1 × 70	1 × 16	19	11.6	1.8	7/3.15	1.5	7	4.8	1.2	43.9
3 × 120	1 × 70	1 × 16	19	13.0	1.8	7/3.15	1.5	7	4.8	1.2	46.7
3 × 150	1 × 70	1 × 16	19	14.6	1.8	7/3.15	1.5	7	4.8	1.2	49.9
3 × 16	1 × 70	2 × 16	7	4.8	1.2	7/3.15	1.5	7	4.8	1.2	27.9
3 × 25	1 × 70	2 × 16	7	6.0	1.4	7/3.15	1.5	7	4.8	1.2	31.1
3 × 35	1 × 70	2 × 16	7	7.0	1.6	7/3.15	1.5	7	4.8	1.2	33.9
3 × 50	1 × 70	2 × 16	7	8.3	1.6	7/3.15	1.5	7	4.8	1.2	36.5
3 × 70	1 × 70	2 × 16	19	10.0	1.8	7/3.15	1.5	7	4.8	1.2	40.7
3 × 95	1 × 70	2 × 16	19	11.6	1.8	7/3.15	1.5	7	4.8	1.2	43.9
3 × 120	1 × 70	2 × 16	19	13.0	1.8	7/3.15	1.5	7	4.8	1.2	46.7
3 × 150	1 × 70	2 × 16	19	14.6	1.8	7/3.15	1.5	7	4.8	1.2	49.9