

Amka Cable Application

Aerial bundled power cable with aluminum conductor.

Amka Cable Standard

SFS 2200 Aerial bundled cable AMKA

HD 626 S1 Overhead distribution cables

IEC 60228 Conductor standard

Amka Cable Construction

Cable Shape: Insulated conductors are laid up around the the messenger.

Conductors: 16 mm²: round and solid aluminium conductor; 25-120 mm²: round, stranded and compacted aluminium conductor

Conductor Insulation: Black UV and weather resistant PE compound

Marking of cores: Phase conductors: 2,3 or 4 longitudinal ridges

Optional conductor: no ridges

Example of marking on sheath: AMKA 3x16+35 1 kV DRAKA "Production number", "Date and time", metre marked

Temperature: Maximum operating Temperature 70°C

Temperatures at installation [°C] Lowest cable temperature during installation: -20 °C , below 0 °C special precaution is recommended.

Amka Cable Features

UV resistance Good

Min. Bending radius at final installation 14 x D

Min. Bending radius at during installation 20 x D

Amka Cable Electrical

Max. short circuit temperature [°C] 135°C (5s)

Product Name	Diameter over bare conductor [mm]	Diameter over messenger [mm]	Effective diameter in wind [mm]*	Conductor weight [kg/km]	Cable weight [kg/km]
AMKA 1x16+25	4,4	5,8	11	100	135
AMKA 3x16+25	4,4	5,8	20	185	270
AMKA 3x25+35	5,8	6,8	23	285	390
AMKA 3x35+50	6,8	8	27	390	530
AMKA 3x50+70	8,0	9,6	31	540	700
AMKA 3x70+95	9,6	11,3	36	775	1000
AMKA 3x120+95	12,7	11,3	42	1185	1500

*Circumference divided by π (Pi).

AMKA-T

AMKA-T CONSTRUCTION

Phase conductor: Round, stranded and compacted aluminium conductor

Street lighting conductor: Maximum two optional conductors

16 mm : Round and solid or round, stranded and compacted aluminium conductor

25 mm :Round, stranded and compacted aluminium conductor

Messenger: Bare, round, stranded and compacted aluminium alloy conductor Or Insulated, round, stranded and uncompact aluminium alloy conductor(U/)

Insulation: Extruded black weather-resistant HDPE

Design: The cable consists of one, two or three insulated phase conductors and one or two optional insulated street lighting conductors stranded around the bare or insulated messenger

-direction of lay: right handed Z

Marking: Core identification with longitudinal ridges

Marks of origin: Embossed on the phase core insulation:manufacturer, year of manufacturing, insulation material.

Advantage: Hardness of HDPE insulation gives excellent protection against mechanical damages

Technical Data For Typical Amka-T Constructions	1x16+16	3x16+25	3x25+25	3x35+25	3x50+35	3x70+50	3x95+70	3x120+70	3x150+70
Diameter for phase conductor, approx., mm	4,7	4,7	5,8	6,8	8,0	9,6	11,3	12,7	14,1
Diameter for insulated phase conductor, approx., mm	6,7	6,7	7,8	8,8	10,4	12,4	14,1	15,9	17,7
Diameter for messenger, approx., mm	4,7/5,1	5,8/6,3	5,8/6,3	5,8/6,3	6,8/7,5	8,0/8,7	9,6/10,4	9,6/10,4	9,6/10,4
Diameter for insulated messenger, approx., mm	- /7,1	- /8,3	- /8,3	- /8,3	- /9,5	- /11,1	- /13,2	- /13,2	- /13,2
Overall diameter for complete cable, approx., mm	12/15	20/23	23/25	25/27	29/31	34/37	39/43	43/46	46/50
Weight for complete cable, approx., kg/km	105/130	250/275	340/370	430/455	590/625	840/890	1150/1250	1400/1500	1700/1750
Breaking load for messenger, min., kN	4,7	7,4	7,4	7,4	10,3	14,2	20,6	20,6	20,6
DC-resistance of conductor at +20°C, ohm/km	1,91	1,91	1,20	0,868	0,641	0,443	0,320	0,253	0,206
DC-resistance of messenger at +20°C, ohm/km	2,20	1,38	1,38	1,38	0,986	0,720	0,493	0,493	0,493
Thermal short-circuit current capacity for 1 s, kA	1,1	1,1	1,7	1,7	2,3	3,4	4,7	4,7	4,7

AMKA-X

AMKA-X Cable CONSTRUCTION

Phase conductor: Round, stranded and compacted aluminium conductor

Street lighting conductor: Maximum two optional conductors

16 mm²: Round and solid or round, stranded and compacted aluminium conductor

25 mm²: Round, stranded and compacted aluminium conductor

Messenger: Bare, round, stranded and compacted aluminium alloy conductor or Insulated, round, stranded and uncompact aluminium alloy conductor (U/I)

Insulation: Extruded black weather-resistant XLPE

Design: The cable consists of one, two or three insulated phase conductors and one or two optional insulated street lighting conductors stranded around the bare or insulated messenger

- direction of lay: right handed Z

Marking: Core identification with longitudinal ridges

Marks of origin: Embossed on the phase core insulation: manufacturer, year of manufacturing, insulation material.

Advantage: XLPE insulation allows high current carrying capacity

Technical Data For Typical	1x16+16	3x16+25	3x25+25	3x35+25	3x50+35	3x70+50	3x95+70	3x120+70	3x150+70
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Amka-X Constructions									
Diameter for phase conductor, approx., mm	4,7	4,7	5,8	6,8	8,0	9,6	11,3	12,7	14,1
Diameter for insulated phase conductor, approx., mm	7,3	7,3	8,4	9,4	11,0	12,6	14,7	16,1	17,5
Diameter for messenger, approx., mm	4,7/5,1	5,8/6,3	5,8/6,3	5,8/6,3	6,8/7,5	8,0/8,7	9,6/10,4	9,6/10,4	9,6/10,4
Diameter for insulated messenger, approx., mm	- /7,7	- /8,9	- /8,9	- /8,9	- /10,1	- /11,7	- /13,4	- /13,4	- /13,4
Overall diameter for complete cable, approx., mm	13/16	22/25	24/27	26/29	30/33	34/38	40/44	43/47	46/50
Weight for complete cable, approx., kg/km	110/140	265/300	360/395	450/485	620/660	850/910	1200/1250	1450/1500	1700/1750
Breaking load for messenger, min., kN	4,7	7,4	7,4	7,4	10,3	14,2	20,6	20,6	20,6
DC-resistance of conductor at +20°C, ohm/km	1,91	1,91	1,20	0,868	0,641	0,443	0,320	0,253	0,206
DC-resistance of messenger at +20°C, ohm/km	2,20	1,38	1,38	1,38	0,986	0,720	0,493	0,493	0,493
Thermal short-circuit current capacity for 1 s, kA	1,3	1,5	2,0	2,0	2,8	4,0	5,6	5,6	5,6

AMK-T

AMK-T Cable CONSTRUCTION

Conductor: Round, stranded and compacted aluminium conductor

Insulation: Extruded black weather-resistant HDPE

Design: The cable consists of insulated conductors stranded together

- direction of lay: right handed Z

Marking: Core identification with longitudinal ridges

Marks of origin: Embossed on the phase core insulation: manufacturer, year of manufacturing, insulation material.

Advantage: Hardness of HDPE insulation gives excellent protection against mechanical damages.

Technical Data For Typical Amk-T Constructions	2x16	4x16	4x25	4x35	4x50	4x70	4x95	4x120	4x150
Diameter for conductor, approx., mm	4,7	4,7	6,1	6,8	8,2	9,6	11,9	12,7	14,1
Diameter for insulated conductor, approx., mm	6,7	6,7	8,1	8,8	10,6	12,4	14,6	15,9	17,7
Overall diameter for complete cable,	15	18	21	23	27	31	37	40	44

approx., mm									
Weight for complete cable, approx., kg/km	125	250	380	480	675	945	1300	1650	2050
Breaking load of single core, min., kN	2,6	2,6	4,2	5,6	7,4	10,3	14,0	17,6	22,0
Breaking load of complete cable, min., kN	5,2	10,4	16,8	22,4	29,6	41,2	56,0	70,4	88,0
DC-resistance of conductor at +20°C, ohm/km	1,91	1,91	1,20	0,868	0,641	0,443	0,320	0,253	0,206
Thermal short-circuit current capacity for 1 s, kA	1,1	1,1	1,8	2,5	3,6	5,0	6,8	8,5	10,7

AMK-X

AMK-X Cable CONSTRUCTION

Conductor: Round, stranded and compacted aluminium conductor

Insulation: Extruded black weather-resistant XLPE

Design: The cable consists of insulated conductors stranded together

- direction of lay: right handed Z

Marking: Core identification with longitudinal ridges

Marks of origin: Embossed on the phase core insulation: manufacturer, year of manufacturing, insulation material.

Advantage: XLPE insulation allows high current carrying capacity

Technical Data For Typical Amk-X Constructions	2x16	4x16	4x25	4x35	4x50	4x70	4x95	4x120	4x150
Diameter for conductor, approx., mm	4,7	4,7	6,1	6,8	8,2	9,6	11,9	12,7	14,1
Diameter for insulated conductor, approx., mm	7,3	7,3	8,7	9,4	11,2	12,6	15,3	16,1	17,5
Overall diameter for complete cable, approx., mm	16	19	22	24	28	32	38	40	44
Weight for complete cable, approx., kg/km	140	275	405	510	715	960	1350	1650	2000
Breaking load of single core, min., kN	2,6	2,6	4,2	5,6	7,4	10,3	14,0	17,6	22,0
Breaking load of complete cable, min., kN	5,2	10,4	16,8	22,4	29,6	41,2	56,0	70,4	88,0
DC-resistance of conductor at +20°C, ohm/km	1,91	1,91	1,20	0,868	0,641	0,443	0,320	0,253	0,206
Thermal short-circuit									

current capacity for 1 s, kA	1,1	1,1	1,8	2,5	3,6	5,0	6,8	8,5	10,7
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