

**XLPE-insulated 1 kV power cable**
**AXMK 0,6/1 kV**

**APPLICATION**

For fixed installations indoors, outdoors and underground.

The conductor insulations are UV-protected

Current carrying capacities according to **HD 384.5.523** (or **IEC 60364-5-52**): "Electrical installation of buildings" section 523: Current carrying capacities.

**PROPERTIES**
**RATED VOLTAGE**

$U_0/U = 0,6/1$  kV

Self-extinguishing IEC 60332-1

Maximum permissible temperature of conductor

- in continuous use +90°C  
- in a short circuit (max. 5 s) +250°C

Lowest recommended handling temperature -15°C

Minimum recommended bending radius

- during installation 12xD  
- in a final installation bent into final position 8xD

Maximum permissible tensile stress during installation Ax30 N/mm<sup>2</sup>

A = Total sum of cross-sections of aluminium conductors

D = cable diameter

**CONSTRUCTION**

**Conductor** Annealed aluminium conductor  
16 - 25 mm<sup>2</sup> stranded round  
35 mm<sup>2</sup> stranded round or sector  
50 - 300 mm<sup>2</sup> stranded sector

**Insulation** Cross-linked polyethylene (XLPE); core identification by colours

**Inner covering** Lapped tape

**Sheath** Black lead-free polyvinyl chloride (PVC)  
Metre marking

**CORE IDENTIFICATION**

**Inner conductors**

4 cores

GN/YE-BN-BK-GY

**STANDARDS**

SFS 4879  
HD 603-5D S1  
IEC 60228  
IEC 60332-1  
IEC 60502-1

**CERTIFICATES**

FIMKO (FI), GOST-R (PG)  
CE



Number of conductors and cross-section n x mm <sup>2</sup>	SSTL-code	Nominal overall diameter mm	Total weight kg/km	Standard delivery length m	Packing drum type
AXMK 4x16 RM S 1 kV *)	0622501	18	350	1000	K12
AXMK 4x25 RM S 1 kV *)	0622525	24	550	500	K11
AXMK 4x25 RM S 1 kV *)	0622502	24	550	1000	K14
AXMK 4x35 S AN 1 kV	0622503	24	670	1000	K16
AXMK 4x50 S AN 1 kV	0622505	27	830	1000	K16
AXMK 4x70 S AN 1 kV	0622507	30	1200	1000	K20
AXMK 4x95 S AN 1 kV	0622509	34	1600	1000	K20
AXMK 4x120 S AN 1 kV	0622512	38	1900	500	K18
AXMK 4x150 S AN 1 kV	0622515	42	2400	500	K20
AXMK 4x185 S AN 1 kV	0622518	47	2900	500	K20
AXMK 4x240 S AN 1 kV	0622524	53	3800	500	K22
AXMK 4x300 S AN 1 kV	0622527	58	4600	500	K24

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\*) Round stranded conductor

**PROPERTIES**

Number of conductors and cross-section  n x mm <sup>2</sup>	Max. resistance of conductors			Nominal inductance  mH/km	Operating capacitance 1)  μF/km
	Inner phase conductors		PE-/PEN- conductor		
	20°C, DC ohm/km	70°C, AC ohm/km	20°C, DC ohm/km		
AXMK 4x16 RM S 1 kV	1,91	2,3	1,91	0,29	0,30
AXMK 4x25 RM S 1 kV	1,20	1,5	1,20	0,28	0,29
AXMK 4x35 S AN 1 kV	0,868	1,0	0,868	0,28	0,29
AXMK 4x50 S AN 1 kV	0,641	0,77	0,641	0,28	0,29
AXMK 4x70 S AN 1 kV	0,443	0,53	0,443	0,27	0,29
AXMK 4x95 S AN 1 kV	0,320	0,39	0,320	0,27	0,29
AXMK 4x120 S AN 1 kV	0,253	0,31	0,253	0,26	0,28
AXMK 4x150 S AN 1 kV	0,206	0,25	0,206	0,26	0,28
AXMK 4x185 S AN 1 kV	0,164	0,20	0,164	0,26	0,28
AXMK 4x240 S AN 1 kV	0,125	0,16	0,125	0,25	0,27
AXMK 4x300 S AN 1 kV	0,100	0,13	0,100	0,25	0,26

Number of conductors and cross-section  n x mm <sup>2</sup>	Minimum permissible bending radius		Maximum permissible pulling force	
	during installation  m	during final bending 2)  m	by pulling with a stocking kN	by pulling direct from conductors kN
AXMK 4x16 RM S 1 kV	0,22	0,15	1,6	1,9
AXMK 4x25 RM S 1 kV	0,29	0,20	2,8	3,0
AXMK 4x35 S AN 1 kV	0,29	0,20	2,8	4,2
AXMK 4x50 S AN 1 kV	0,33	0,22	3,6	6,0
AXMK 4x70 S AN 1 kV	0,36	0,24	4,5	8,4
AXMK 4x95 S AN 1 kV	0,41	0,28	5,7	11,4
AXMK 4x120 S AN 1 kV	0,46	0,31	7,2	14,4
AXMK 4x150 S AN 1 kV	0,51	0,34	8,5	18,0
AXMK 4x185 S AN 1 kV	0,57	0,38	8,5	20,0
AXMK 4x240 S AN 1 kV	0,64	0,43	8,5	20,0
AXMK 4x300 S AN 1 kV	0,70	0,47	8,5	20,0

**NOTES:**

1) The operating capacitance is an average value at the temperature of +20 °C measured on a cable rack.

2) The minimum permissible bending radius has been given for the final bending allowed to be done as a single bend to the final position without any opposite bending.

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Number of conductors and cross-section  n x mm <sup>2</sup>	Max. current rating			Max. permissible 1 s short circuit current	
	In ground 3)	In free air 4)		Phase conductor  kA	PEN-conductor  kA
	conductor +65 °C A	conductor +70 °C A	conductor +90 °C A		
AXMK 4x16 RM S 1 kV	78	65	80	1,5	1,5
AXMK 4x25 RM S 1 kV	100	83	101	2,4	2,4
AXMK 4x35 S AN 1 kV	125	102	125	3,3	3,3
AXMK 4x50 S AN 1 kV	150	124	152	4,7	4,7
AXMK 4x70 S AN 1 kV	185	159	194	6,6	6,6
AXMK 4x95 S AN 1 kV	220	194	236	9,0	9,0
AXMK 4x120 S AN 1 kV	255	225	274	11,4	11,4
AXMK 4x150 S AN 1 kV	280	260	316	14,2	14,2
AXMK 4x185 S AN 1 kV	330	297	361	17,5	17,5
AXMK 4x240 S AN 1 kV	375	350	425	22,6	22,6
AXMK 4x300 S AN 1 kV	430	404	490	28,3	28,3

**NOTES:**

See IEC 60364-5-52 Sub-Clause 523, and SFS Handbook 600 Appendix 52A (in Finnish) for correction factors and allowable current ratings for cables.

3) Ground installation according to SFS 6000-5-52, reference installation type D, Table 52-C2, column 5.  
Basic assumptions according to the above standard, conductor +65 °C, ground temperature 15 °C.

4) Installation in free air, according to SFS 6000-5-52, reference installation type E, Table 52-C6, column 2.  
Basic assumptions according to the above standard, conductor +90 °C, air temperature 25 °C. For the values while conductor being +70 °C: see the respective values for PVC-insulated cables, SFS 6000-5-52, Table 52-C4, column 2.