



## AHXAMK-WM Cable



Eland Product Group: C9P

### APPLICATION

Medium-voltage cable for fixed installations outdoors. May be buried directly in soil, also by ploughing. Cable is longitudinally and radially watertight and therefore it is suitable where wet soil and / or fresh water permanently occurs. The cable is halogen-free, but without fire protection. The cable is not CPR-classified.

### CHARACTERISTICS

#### Voltage

12/20 (24)kV

#### Temperature Rating

-50°C to +90°C

Max. conductor temperature during short circuit max. 5s: +250°C

Minimum temperature during handling: -20°C

Minimum temperature during transport: -40°C

### CONSTRUCTION

#### Conductor

Class 2 watertight, circular, stranded aluminium

#### Conductor Screen

Semi conducting XLPE (Cross-Linked Polyethylene)

#### Insulation

XLPE (Cross-Linked Polyethylene)

#### Insulation Screen

Semi conducting XLPE (Cross-Linked Polyethylene)

#### Metallic Screen

Aluminium/plastic laminate (Acts as a radial water barrier)

#### Outer Sheath

PE (Polyethylene)

#### Phase Support

Waterproof round multi-threaded galvanised steel rope with weatherproof black PE plastic

#### Outer Sheath Colour

● Black

### STANDARDS

HD 620 10 F, SFS 5636, SGS Fimko FI 40519, EN/IEC 60228

### ISO/IEC 17025 LABORATORY TESTED

This product is subject to the Quality Assurance protocols of The Cable Lab®, an ISO/IEC 17025 accredited cable testing laboratory. Testing includes vertical flame, conductor resistance, tensile & elongation, and dimensional consistency, verified to published standards and approved product drawings.



8578



FS 672069



EMS 672067



OHS 672066

### REGULATORY COMPLIANCE

This cable meets the requirements of the RoHS Directive 2011/65/EU. RoHS compliance has been tested and confirmed by The Cable Lab® as meeting the requirements of the BSI RoHS Trusted Kitemark™.



KM 634267





## DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL CONDUCTOR DIAMETER mm	NOMINAL AREA SIZE PHASE SUPPORT mm <sup>2</sup>	NOMINAL DIAMETER OVER INSULATION WITHOUT SCREEN mm	NOMINAL INSULATION THICKNESS mm	NOMINAL THICKNESS OF ALUMINIUM LAMINATED FOIL mm	NOMINAL SHEATH THICKNESS mm	NOMINAL OUTER DIAMETER OF COMPLETE CABLE mm	NOMINAL WEIGHT kg/km
C9P20KV103050BK	3	50	8.0	62	19.3	5.5	0.2	1.8	65	2257
C9P20KV103070BK	3	70	9.6	62	20.7	5.5	0.2	1.9	69	2552
C9P20KV103095BK	3	95	11.1	62	22.4	5.5	0.2	1.9	72	2882
C9P20KV103120BK	3	120	12.6	62	23.8	5.5	0.2	2.0	75	3254
C9P20KV103150BK	3	150	13.9	62	25.3	5.5	0.2	2.0	78	3568
C9P20KV103185BK	3	185	15.6	62	26.8	5.5	0.2	2.1	80	4100
C9P20KV103240BK	3	240	18.0	62	29.2	5.5	0.2	2.2	86	4815

## MECHANICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	MAX. PULLING FORCE BY PULLING-EYE kN	MAX. PULLING FORCE BY PULLING-STOCKING kN	MINIMUM BENDING RADIUS m			
			During handling and installation. phase conductor	During handling and installation. cable	In final installation. phase conductor	In final installation. cable
50+62	7.5	2.3	0.41	0.78	0.28	0.55
70+62	10.5	3.2	0.42	0.83	0.29	0.58
95+62	14.3	4.3	0.45	0.86	0.32	0.61
120+62	18.0	5.4	0.48	0.90	0.34	0.63
150+62	20.0	6.8	0.50	0.94	0.35	0.66
185+62	20.0	8.3	0.54	0.96	0.38	0.67
240+62	20.0	8.5	0.57	1.03	0.40	0.72

## ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	MAX. DC RESISTANCE OF CONDUCTOR AT 20°C Ω/km	NOMINAL DC RESISTANCE OF ALUMINIUM LAMINATED FOIL AT 20°C Ω/km	INDUCTANCE PER PHASE. IN TREFOIL FORMATION. CABLES TOUCHING EACH OTHER mH/km	CALCULATED OPERATION CAPACITANCE μF/km
50+62	0.641	2.0	0.42	0.17
70+62	0.443	1.9	0.40	0.18
95+62	0.320	1.8	0.37	0.20
120+62	0.253	1.7	0.38	0.22
150+62	0.206	1.6	0.35	0.24
185+62	0.164	1.5	0.35	0.25
240+62	0.125	0.9	0.33	0.29



## CURRENT RATING

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	CABLES IN AIR (25 °C) A				CABLES IN THE GROUND (15°C AND 1.0 K.M/W). INSTALLATION DEPTH 0.7M A				MAXIMUM THERMAL SHORT CIRCUIT CURRENT DURING 1S kA			
	In flat formation. conductor temperature 90°C		In trefoil formation. conductor temperature 90°C		In trefoil formation. conductor temperature 65°C		In trefoil formation. conductor temperature 90°C		Phase (initial 90°C. final 250°C)	Metal screen		
	Open screen A	Closed screen A	Open screen A	Closed screen A	Open screen A	Closed screen A	Open screen A	Closed screen A		Initial 35°C. final 250°C	Initial 60°C. final 250°C	Initial 85°C. final 250°C
50+62	210	205	195	195	155	155	185	185	4.7	2.9	2.7	2.4
70+62	265	255	235	235	205	200	240	235	6.6	3.0	2.8	2.5
95+62	320	310	285	285	240	235	280	275	8.9	3.2	2.9	2.7
120+62	370	350	330	330	270	265	320	310	11.3	3.4	3.1	2.9
150+62	425	395	380	380	305	300	360	355	14.1	3.6	3.3	3.0
185+62	485	440	430	430	345	330	405	390	17.4	3.8	3.5	3.2
240+62	570	515	505	505	395	385	465	455	22.6	5.3	4.9	4.4

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.