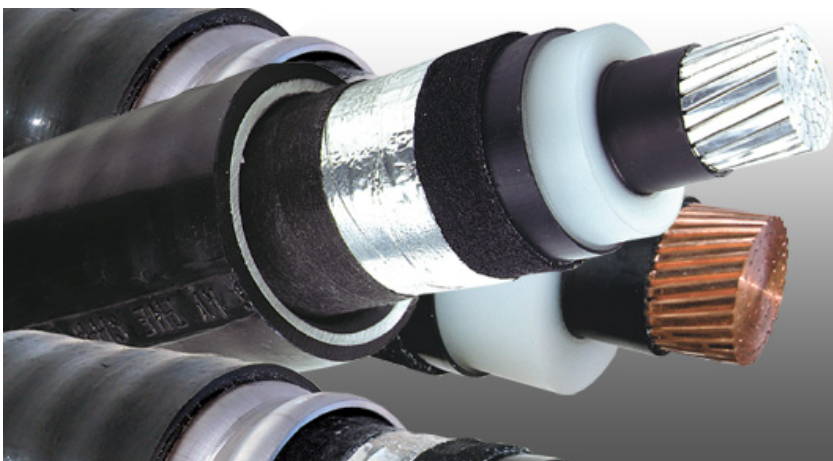


# LARGE CONDUCTOR HV XLPE ALUMINIUM MILIKEN

## Технические характеристики



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Ярославль (4852)69-52-93

**Description:** Aluminium Milliken conductor, XLPE, W/B, CSA, LLDPE,  
**Voltage & Specification:** HS 25.4/44kV, SANS IEC 60840/ NRS 077  
**Water blocking:** Core is standard, conductor on request

**PHYSICAL DIMENSIONS:**

Conductor size (Milliken construction)	mm	1200	1600	2000	2500
Conductor diameter	mm	43	51	56	63
Diameter over s/c conductor screen	mm	48	55	61	68
Diameter over XLPE insulation	mm	61	69	75	82
Diameter over s/c core screen	mm	64	72	78	85
Diameter over CSA metallic sheath	mm	87	95	101	107
Final diameter of cable (D)	mm	100	108	114	120
Cable mass (approximate)	kg/m	9.7	11.5	13.3	15.3
Gross mass (500 m) (approximate)	kg	6350	7250	8150	9150
Minimum installation bending radius	m	3.0	3.2	3.4	3.6

**RATINGS:**

		Trefoil	Flat (2D)	Trefoil	Flat (2D)	Trefoil	Flat (2D)	Trefoil	Flat (2D)
Current rating in ground @ 90°C	Amps	867	954	981	1099	1070	1220	1137	1315
Current rating in air @ 90°C	Amps	1335	1632	1555	1940	1732	2196	1878	2422
AC Resistance @ 90°C	Ω/km	0.0318	0.0318	0.0241	0.0241	0.0194	0.0194	0.0166	0.0166
Reactance	Ω/km	0.1123	0.1704	0.1071	0.1652	0.1045	0.1625	0.1006	0.1587
Impedance	Ω/km	0.1167	0.1733	0.1098	0.1669	0.1063	0.1637	0.1020	0.1595
Sheath standing voltage	V/km	50.2	96.8	55.8	110.4	60.1	121.6	63.1	130.3

**ELECTRICAL PARAMETERS:**

DC Resistance @ 20°C	Ω/km	0.0247	0.0186	0.0149	0.0127
Max Electric stress at conductor screen	kV/mm	8	8	8	8
Max Electric stress at insulation screen	kV/mm	4	4	4	4
Capacitance	μF/km	0.55	0.62	0.68	0.74
Zero Sequence Resistance	Ω/km	0.0785	0.0670	0.0595	0.0545
Zero Sequence Reactance	Ω/km	0.0543	0.0501	0.0483	0.0450
Symmetrical fault rating (@ 250°C limit)	kA (1s)	111.0	148.0	185.0	231.3
Earth fault rating (@ 150°C limit)	kA (1s)	51.7	56.1	60.1	63.6

**Ratings above are based on standard soil conditions for a single circuit in isolation as follows:**

Soil thermal resistance = 1.2Km/W

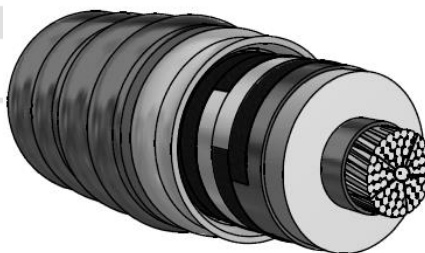
Soil temperature = 25°C

Depth of burial = 1.2m

Air temperature = 30°C

Earthing: Cross bonded or single point

bonded 5% tolerance on dimensions



**Description:** Aluminium Milliken conductor, XLPE, W/B, CSA, LLDPE,  
**Voltage & Specification:** HS 38.1/66kV, SANS IEC 60840/ NRS 077  
**Water blocking:** Core is standard, conductor on request

**PHYSICAL DIMENSIONS:**

Conductor size (Milliken construction)	mm	1200	1600	2000	2500
Conductor diameter	mm	43	51	56	63
Diameter over s/c conductor screen	mm	48	55	61	68
Diameter over XLPE insulation	mm	67	74	81	87
Diameter over s/c core screen	mm	70	77	84	90
Diameter over CSA metallic sheath	mm	93	100	107	113
Final diameter of cable (D)	mm	106	113	120	126
Cable mass (approximate)	kg/m	10.6	12.4	14.3	16.3
Gross mass (500 m) (approximate)	kg	6800	7700	8650	9650
Minimum installation bending radius	m	3.2	3.4	3.6	3.8

**RATINGS:**

		Trefoil	Flat (2D)	Trefoil	Flat (2D)	Trefoil	Flat (2D)	Trefoil	Flat (2D)
Current rating in ground @ 90°C	Amps	865	951	978	1096	1067	1216	1135	1312
Current rating in air @ 90°C	Amps	1324	1602	1543	1905	1719	2155	1866	2379
AC Resistance @ 90°C	Ω/km	0.0318	0.0318	0.0241	0.0241	0.0194	0.0194	0.0166	0.0166
Reactance	Ω/km	0.1157	0.1738	0.1103	0.1684	0.1076	0.1657	0.1036	0.1617
Impedance	Ω/km	0.1200	0.1767	0.1129	0.1701	0.1093	0.1668	0.1049	0.1625
Sheath standing voltage	V/km	49.4	95.8	55.0	109.4	59.3	120.5	62.4	129.3

**ELECTRICAL PARAMETERS:**

DC Resistance @ 20°C	Ω/km	0.0247	0.0186	0.0149	0.0127
Max Electric stress at conductor screen	kV/mm	8	8	8	8
Max Electric stress at insulation screen	kV/mm	4	4	4	4
Capacitance	μF/km	0.41	0.46	0.50	0.55
Zero Sequence Resistance	Ω/km	0.0757	0.0646	0.0573	0.0525
Zero Sequence Reactance	Ω/km	0.0585	0.0540	0.0520	0.0486
Symmetrical fault rating (@ 250°C limit)	kA (1s)	111.0	148.0	185.0	231.3
Earth fault rating (@ 150°C limit)	kA (1s)	55.0	59.5	63.6	67.1

**Ratings above are based on standard soil conditions for a single circuit in isolation as follows:**

Soil thermal resistance = 1.2Km/W

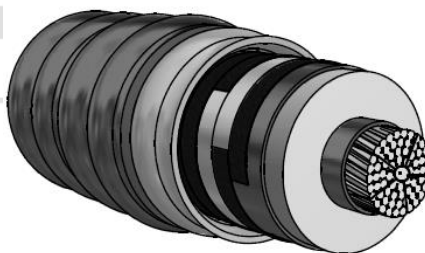
Soil temperature = 25°C

Depth of burial = 1.2m

Air temperature = 30°C

Earthing: Cross bonded or single point

bonded 5% tolerance on dimensions



**Description:** Aluminium Milliken conductor, XLPE, W/B, CSA, LLDPE,  
**Voltage & Specification:** HS 50.8/88kV, SANS IEC 60840/ NRS 077  
**Water blocking:** Core is standard, conductor on request

**PHYSICAL DIMENSIONS:**

Conductor size (Milliken construction)	mm	1200	1600	2000	2500
Conductor diameter	mm	43	51.0	56.1	62.8
Diameter over s/c conductor screen	mm	48	55.6	61.1	67.1
Diameter over XLPE insulation	mm	72	80.1	85.9	92.2
Diameter over s/c core screen	mm	75	83.1	89.0	95.4
Diameter over CSA metallic sheath	mm	98	106.5	112.7	120.3
Final diameter of cable (D)	mm	111	120	126	134
Cable mass (approximate)	kg/m	11.5	13.5	15.3	17.6
Gross mass (500 m) (approximate)	kg	7250	8250	9150	10300
Minimum installation bending radius	m	3.3	3.6	3.8	4.0

**RATINGS:**

		Trefoil	Flat (2D)	Trefoil	Flat (2D)	Trefoil	Flat (2D)	Trefoil	Flat (2D)
Current rating in ground @ 90°C	Amps	863	949	977	1093	1066	1214	1135	1312
Current rating in air @ 90°C	Amps	1314	1575	1532	1873	1707	2120	1854	2340
AC Resistance @ 90°C	Ω/km	0.0318	0.0318	0.0241	0.0241	0.0194	0.0194	0.0166	0.0166
Reactance	Ω/km	0.1190	0.1771	0.1134	0.1714	0.1106	0.1687	0.1071	0.1652
Impedance	Ω/km	0.1232	0.1799	0.1159	0.1731	0.1123	0.1698	0.1084	0.1660
Sheath standing voltage	V/km	48.8	94.9	54.4	108.5	58.6	119.6	62.2	128.9

**ELECTRICAL PARAMETERS:**

DC Resistance @ 20°C	Ω/km	0.0247	0.0186	0.0149	0.0127
Max Electric stress at conductor screen	kV/mm	8	8	8	8
Max Electric stress at insulation screen	kV/mm	4	4	4	4
Capacitance	μF/km	0.34	0.38	0.40	0.44
Zero Sequence Resistance	Ω/km	0.0732	0.0624	0.0553	0.0504
Zero Sequence Reactance	Ω/km	0.0625	0.0577	0.0556	0.0523
Symmetrical fault rating (@ 250°C limit)	kA (1s)	111.0	148.0	185.0	231.3
Earth fault rating (@ 150°C limit)	kA (1s)	58.3	62.9	67.1	71.4

**Ratings above are based on standard soil conditions for a single circuit in isolation as follows:**

Soil thermal resistance = 1.2Km/W

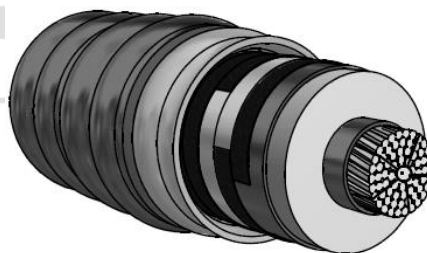
Soil temperature = 25°C

Depth of burial = 1.2m

Air temperature = 30°C

Earthing: Cross bonded or single point

bonded 5% tolerance on dimensions



**Description:** Aluminium Milliken conductor, XLPE, W/B, CSA, LLDPE,  
**Voltage & Specification:** HS 76/132kV, SANS IEC 60840/ NRS 077  
**Water blocking:** Core is standard, conductor on request

**PHYSICAL DIMENSIONS:**

Conductor size (Milliken construction)	mm	1200	1600	2000	2500
Conductor diameter	mm	43	51	56	63
Diameter over s/c conductor screen	mm	48	55	61	68
Diameter over XLPE insulation	mm	82	90	96	103
Diameter over s/c core screen	mm	85	93	99	106
Diameter over CSA metallic sheath	mm	108	118	125	130
Final diameter of cable (D)	mm	122	131	138	143
Cable mass (approximate)	kg/m	13.2	15.3	17.5	19.5
Gross mass (500 m) (approximate)	kg	8300	9350	10450	11450
Minimum installation bending radius	m	3.6	3.9	4.1	4.3

**RATINGS:**

		Trefoil	Flat (2D)	Trefoil	Flat (2D)	Trefoil	Flat (2D)	Trefoil	Flat (2D)
Current rating in ground @ 90°C	Amps	861	944	976	1090	1067	1212	1134	1306
Current rating in air @ 90°C	Amps	1298	1534	1513	1821	1689	2066	1836	2281
AC Resistance @ 90°C	Ω/km	0.0318	0.0318	0.0241	0.0241	0.0194	0.0194	0.0166	0.0166
Reactance	Ω/km	0.1245	0.1826	0.1195	0.1776	0.1163	0.1744	0.1115	0.1696
Impedance	Ω/km	0.1285	0.1853	0.1219	0.1792	0.1179	0.1755	0.1128	0.1704
Sheath standing voltage	V/km	47.7	93.4	53.7	107.4	58.2	118.9	61.0	127.2

**ELECTRICAL PARAMETERS:**

DC Resistance @ 20°C	Ω/km	0.0247	0.0186	0.0149	0.0127
Max Electric stress at conductor screen	kV/mm	8	8	8	8
Max Electric stress at insulation screen	kV/mm	4	4	4	4
Capacitance	μF/km	0.26	0.28	0.31	0.33
Zero Sequence Resistance	Ω/km	0.0693	0.0585	0.0518	0.0478
Zero Sequence Reactance	Ω/km	0.0690	0.0645	0.0618	0.0577
Symmetrical fault rating (@ 250°C limit)	kA (1s)	111.0	148.0	185.0	231.3
Earth fault rating (@ 150°C limit)	kA (1s)	64.4	70.1	74.3	77.2

**Ratings above are based on standard soil conditions for a single circuit in isolation as follows:**

Soil thermal resistance = 1.2Km/W

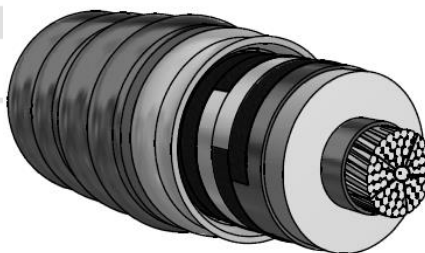
Soil temperature = 25°C

Depth of burial = 1.2m

Air temperature = 30°C

Earthing: Cross bonded or single point

bonded Tolerance on dimensions = +5%



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<b>Казань</b> (843)206-01-48	<b>Новокузнецк</b> (3843)20-46-81	<b>Смоленск</b> (4812)29-41-54	

Единый адрес для всех регионов: [ccr@nt-rt.ru](mailto:ccr@nt-rt.ru) || [www.cbi-electric.nt-rt.ru](http://www.cbi-electric.nt-rt.ru)