

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

Last updated: April 2018

PHYSICAL DIMENSIONS:

Conductor size (Milliken construction)	mm ²	1200	1600	2000	2500
Conductor diameter	mm	43.4	51.0	56.1	62.9
Diameter over s/c conductor screen	mm	47.6	55.6	61.1	67.1
Diameter over XLPE insulation	mm	71.9	80.1	85.9	92.3
Diameter over s/c core screen	mm	75.1	83.1	89.0	95.4
Diameter over CSA metallic sheath	mm	98.2	106.5	112.7	120.3
Final diameter of cable (D)	mm	111.4	119.7	125.9	133.5
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	848	946	958	1091	1044	1210	1111	1309
Current rating in air @ 90°C	Amps	1312	1573	1531	1872	1704	2118	1855	2345
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	0.1196	0.1777	0.1140	0.1721	0.1111	0.1692	0.1077	0.1658
Impedance	Ω/km	0.1238	0.1805	0.1165	0.1738	0.1128	0.1703	0.1090	0.1666
Sheath standing voltage (flat - centre phase)	V/km	47.92	94.65	53.28	108.16	57.44	119.28	60.83	128.66

ELECTRICAL PARAMETERS:

DC Resistance @ 20°C	Ω/km	0.0247	0.0186	0.0149	0.0127
Max Electric stress at conductor screen	kV/mm	5.2	5.0	4.9	4.8
Max Electric stress at insulation screen	kV/mm	3.4	3.5	3.5	3.5
Capacitance	μF/km	0.3364	0.3798	0.4085	0.4360
Zero Sequence Resistance	Ω/km	0.0732	0.0622	0.0554	0.0503
Zero Sequence Reactance	Ω/km	0.0631	0.0584	0.0561	0.0529
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	63.3	66.9	71.5

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

Soil thermal resistance = 1.2Km/W

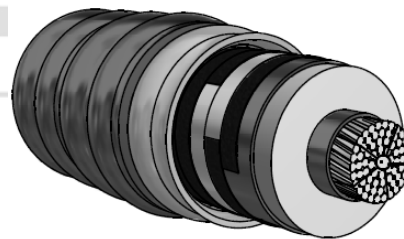
Soil temperature = 25°C

Depth of burial = 1.2m

Air temperature = 30°C

Earthing: Cross bonded or single point bonded

5% tolerance on dimensions



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