

Description: Copper Milliken conductor, XLPE, W/B, CSA, LLDPE, HS
Voltage & Specification: 38.1/66kV, 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	50.7	56.1	62.8
Diameter over s/c conductor screen	mm	47.6	54.9	61.1	67.8
Diameter over XLPE insulation	mm	66.7	74.0	80.7	87.3
Diameter over s/c core screen	mm	69.7	76.9	83.6	90.2
Diameter over CSA metallic sheath	mm	92.6	100.2	107.1	112.9
Final diameter of cable (D)	mm	105.8	113.4	120.3	126.1
Cable mass (approximate)	kg/m	18.0	22.5	26.8	32.3
Gross mass (500 m) (approximate)	kg	10500	12750	14900	17650
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	996	1136	1089	1271	1151	1371	1206	1465
Current rating in air @ 90°C	Amps	1562	1932	1762	2233	1904	2456	2039	2688
AC Resistance @ 90°C	Ω/km	0.0214	0.0212	0.0171	0.0169	0.0147	0.0144	0.0129	0.0125
Reactance	Ω/km	0.1163	0.1744	0.1110	0.1690	0.1083	0.1663	0.1042	0.1623
Impedance	Ω/km	0.1183	0.1757	0.1123	0.1699	0.1093	0.1670	0.1050	0.1628
Sheath standing voltage (flat - centre phase)	V/km	56.95	114.43	61.26	126.88	63.95	135.82	66.36	144.34

ELECTRICAL PARAMETERS:

DC Resistance @ 20°C	Ω/km	0.0151	0.0113	0.009	0.0072
Max Electric stress at conductor screen	kV/mm	4.7	4.6	4.5	4.4
Max Electric stress at insulation screen	kV/mm	3.4	3.4	3.4	3.4
Capacitance	μF/km	0.4111	0.4644	0.5004	0.5479
Zero Sequence Resistance	Ω/km	0.0650	0.0574	0.0522	0.0483
Zero Sequence Reactance	Ω/km	0.0591	0.0547	0.0527	0.0492
Symmetrical fault rating (@ 250°C limit)	kA (1s)	172.3	229.7	287.1	358.9
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

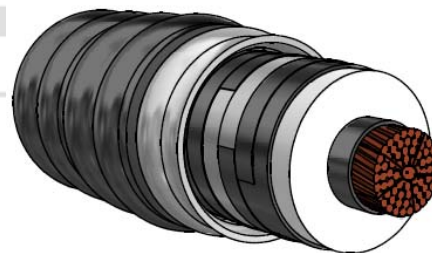
Soil temperature = 25°C

Depth of burial = 1.2m

Air temperature = 30°C

Earthing: Cross bonded or single point bonded

Tolerance on dimensions = +5%



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PO Box 172, Vereeniging 1930 - Steel Road, Peacehaven, Vereeniging 1939, South Africa

Tel: +27 16 430 6000 - Fax: +27 16 430 6235 - www.cbi-electric.com

Directors: AE Dickson, PJ Banda, GW Eddey, TA Pooe, Z Mjali

Alternate Director: PW de Villiers

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