

Description: Copper Milliken conductor, XLPE, W/B, CSA, LLDPE, HS
Voltage & Specification: 76/132kV, 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	82.0	89.8	96.0	103.1
Diameter over s/c core screen	mm	84.9	92.7	98.9	106.0
Diameter over CSA metallic sheath	mm	108.4	118.0	125.0	130.0
Final diameter of cable (D)	mm	121.6	131.2	138.2	143.2
Cable mass (approximate)	kg/m	20.6	25.5	30.0	34.8
Gross mass (500 m) (approximate)	kg	11600	14100	16700	19100
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	984	1127	1079	1264	1144	1366	1198	1460
Current rating in air @ 90°C	Amps	1533	1851	1731	2137	1876	2357	2014	2582
AC Resistance @ 90°C	Ω/km	0.0213	0.0212	0.0171	0.0169	0.0146	0.0144	0.0128	0.0125
Reactance	Ω/km	0.1251	0.1832	0.1195	0.1775	0.1163	0.1744	0.1115	0.1696
Impedance	Ω/km	0.1269	0.1844	0.1207	0.1783	0.1173	0.1750	0.1123	0.1701
Sheath standing voltage (flat - centre phase)	V/km	54.55	111.54	59.30	124.56	62.40	134.01	64.52	142.13

ELECTRICAL PARAMETERS:

DC Resistance @ 20°C	Ω/km	0.0151	0.0113	0.009	0.0072
Max Electric stress at conductor screen	kV/mm	5.9	5.6	5.5	5.4
Max Electric stress at insulation screen	kV/mm	3.4	3.5	3.5	3.5
Capacitance	μF/km	0.2557	0.2825	0.3078	0.3311
Zero Sequence Resistance	Ω/km	0.0586	0.0512	0.0468	0.0436
Zero Sequence Reactance	Ω/km	0.0697	0.0645	0.0618	0.0577
Symmetrical fault rating (@ 250°C limit)	kA (1s)	172.3	229.7	287.1	358.9
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

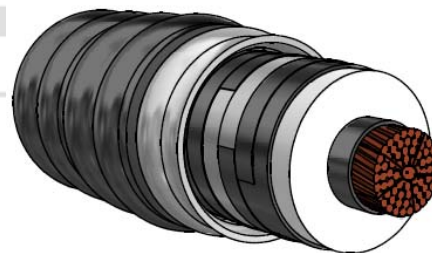
Soil temperature = 25°C

Depth of burial = 1.2m

Air temperature = 30°C

Earthing: Cross bonded or single point bonded

Tolerance on dimensions = +5%



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