

Description: 44 kV Aluminium, XLPE, Corrugated Seamless Aluminium (CSA), LLDPE Graphite

Specification: SANS/IEC 60840/ NRS 077, Core Water Blocked Only

Last updated: December 2025

PHYSICAL									
Conductor size	mm ²	1200	1600	2000	2500				
Conductor diameter	mm	43,4	51,0	56,1	62,9				
Diameter over s/c conductor screen	mm	48,1	54,9	60,8	67,9				
Diameter over XLPE insulation	mm	61,6	68,6	74,6	81,8				
Diameter over s/c core screen	mm	64,8	71,8	77,7	84,9				
Diameter over CSA sheath	mm	84,4	91,8	97,9	105,4				
Final diameter of cable (D)	mm	96,4	103,6	109,9	117,4				
Cable mass (approximate)	kg/m	9,6	11,1	12,6	15,2				
Gross mass (500 m) (approximate)	kg	6180	6960	7670	8970				
Minimum installation bending radius	m	2,89	3,11	3,30	3,52				
DC Resistance @ 20°C									
DC Resistance @ 20°C	Ω/km	0,0247	0,0186	0,0149	0,0119				
Max Electric stress at conductor screen	kV/mm	4,26	4,15	4,10	4,01				
Min Electric stress at insulation screen	kV/mm	3,33	3,32	3,35	3,33				
Capacitance	μF/km	0,561	0,622	0,683	0,744				
Zero Sequence Resistance @ 90 °C	Ω/km	0,0989	0,0847	0,0760	0,0680				
Zero Sequence Reactance @ 90 °C	Ω/km	0,0522	0,0477	0,0460	0,0438				
ELECTRICAL RATINGS (FORMATION BASED)									
		Tref	*Flat	Tref	*Flat	Tref	*Flat	Tref	*Flat
Current rating in ground	Amps	865	971	980	1129	1068	1262	1157	1410
Current rating in air in shade	Amps	1338	1665	1564	2001	1741	2276	1934	2602
AC Resistance @ 90 °C	Ω/km	0,0319	0,0318	0,0241	0,0241	0,0195	0,0194	0,0157	0,0156
Reactance	Ω/km	0,110	0,168	0,104	0,162	0,102	0,160	0,099	0,157
Impedance	Ω/km	0,114	0,171	0,107	0,164	0,104	0,161	0,100	0,158
Sheath standing voltage outer phases	V/km	49,9	125,0	55,5	144,0	59,7	160,0	63,8	178,0
SHORT CIRCUIT RATINGS									
Symmetrical fault rating (250 °C)	kA (1 s)	113,0		151,0		189,0		236,0	
Earth fault rating (150 °C)	kA (1 s)	39,6		43,1		46,1		49,7	

The current ratings above are based on standard laying conditions for a single circuit in isolation as follows:

- Conductor temperature = 90 °C
- Soil thermal resistance = 1,2 K·m/W
- Soil temperature = 25 °C
- Air temperature = 30 °C
- Depth of burial = 1200 mm
- * Flat spacing 2D
- ±5% tolerance on dimensions



DISCLAIMER: CBI reserves the right to change product specifications from time to time to effect improvements and /or enhancements and accepts no liability arising from any difference between the published parameters of this data sheet and the finished product, unless by prior written agreement.