

Low Voltage 4 Core XLPE Bells Cables

1kV Armoured ECC

Description: 4 Core Cu XLPE FRPVC SWA ECC FRPVC, 1000 V F2CC 4nnn ZZ 121 0K0S (Red Stripe)
 4 Core Cu XLPE LHFRPVC SWA ECC LHFRPVC, 1000 V F2CC 4nnn ZZ 222 0K0S (Blue Stripe)

Specification: SANS 1507

Last updated: January 2026

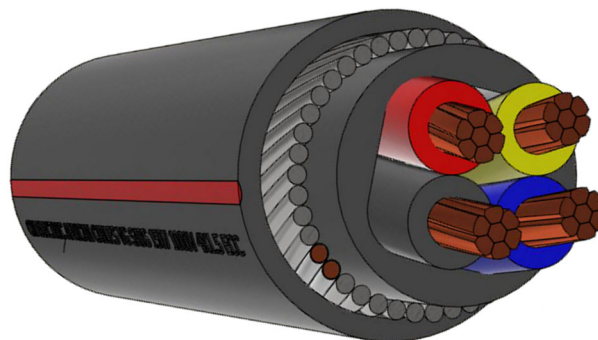
PHYSICAL	... naaa ...	4915	4925	4004	4006	4010	4016#
Conductor size	mm ² nom	1,5	2,5	4	6	10	16
Conductor diameter	mm app	1,6	2,0	2,6	3,1	3,9	4,5
Insulation diameter	mm app	3,0	3,4	4,0	4,5	5,3	5,9
Bedding diameter	mm app	9,0	10,0	11,4	12,7	14,6	15,4
Armour diameter	mm app	10,8	11,8	13,2	14,5	16,4	17,2
Cable diameter	mm app	14,0	15,1	16,4	17,7	19,9	20,6
Length of cable on a drum	m	500	500	500	500	500	500
Cable mass (approximate)	kg/m app	0,4	0,5	0,6	0,7	0,9	1,1
Gross mass on drum	kg app	216	251	308	384	497	600
Bending radius	mm min	140	151	164	177	199	206
ELECTRICAL							
DC Resistance @ 20 °C	Ω/km	12,100	7,410	4,610	3,080	1,830	1,150
AC Resistance @ 90 °C	Ω/km	15,429	9,449	5,878	3,927	2,334	1,467
Reactance X+	Ω/km	0,069	0,065	0,065	0,065	0,065	0,057
Impedance Z+	Ω/km	15,429	9,449	5,879	3,928	2,334	1,468
Capacitance C+	µF/km	0,144	0,159	0,177	0,193	0,215	0,318
Resistance Ro	Ω/km	33,683	24,352	18,316	12,858	9,161	6,329
Reactance Xo	Ω/km	0,419	0,382	0,361	0,342	0,327	0,309
CURRENT RATINGS							
Ground	Amps	30	39	51	64	85	112
Ducts in ground	Amps	24	32	41	51	68	90
Air in Shade	Amps	26	34	45	57	77	104
Air in sunlight	Amps	23	30	40	50	68	91
SHORT CIRCUIT RATING							
Symmetrical (250 °C)	kA (1 sec)	0,2	0,4	0,6	0,9	1,4	2,289
Earth fault (200 °C)	kA (1 sec)	0,5	0,6	0,7	1,0	1,3	1,7
Three Phase Volt drop	mV/A/m	26,7	16,4	10,2	6,8	4,0	2,5

* In practice the earth fault rating must be limited to symmetrical fault rating.

Shaped

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

- Conductor temperature = 90 °C
- Soil thermal resistivity = 1,2 K·m/W
- Soil temperature = 25 °C
- Air temperature = 30 °C
- Depth of burial = 500 mm
- 5% tolerance on dimensions



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