

# Low Voltage 4 Core Zerotox Bells

## 1kV Armoured

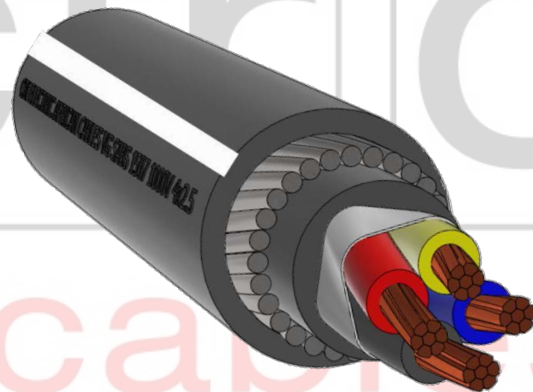
**Description:** 4 Core Cu XLPE NHLFR SWA NHLFR (Zerotox), 1000 V **F6CC 4nnn ZZ 3130K0S (White Stripe)**  
**Specification:** SANS 1507 *Last updated: January 2026*

PHYSICAL	... naaa ...	4915	4925	4004	4006	4010	4016#
Conductor size	mm <sup>2</sup> 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	215	250	307	382	494	595
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	43,032	34,827	28,785	24,794	20,380	19,447
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 (150 °C)	kA (1 sec)	0,9*	0,9*	1,0*	1,1*	1,3	1,3
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 conductor

**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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