

# Low Voltage XLPE Cables

XLPE	F2CC...Primary group code	Copper 3 Core
FRPVC SWA FRPVC (red stripe)	...111 Finish code	600/1000V
LHPVC SWA LHPVC (blue stripe)	...212	SANS 1507
Size code	...naaa...	3025 3035 3050 3070 3095 3120 3150 3185 3240 3300
Conductor size	mm <sup>2</sup> nom	25 35 50 70 95 120 150 185 240 300
Conductor diameter	mm app.	6.0 6.0 7.0 8.5 10.0 11.0 12.5 14.0 16.0 18.0
Insulation diameter	mm app.	7.5 8.0 9.0 11.0 12.0 13.5 15.0 17.0 19.5 21.5
Bedding diameter	mm app.	20.5 19.5 22.0 25.5 29.0 32.0 35.5 40.0 44.5 49.0
Armour diameter	mm app.	23.5 22.0 24.0 29.5 33.0 36.0 39.5 45.0 49.5 54.0
Cable diameter	mm app.	27.0 25.5 28.0 33.5 37.0 41.0 44.0 50.0 54.5 59.5
Cable mass	kg/m app.	1.91 1.72 2.16 3.28 4.22 5.09 6.06 7.80 9.66 11.67
Gross mass ( 300 m )	kg app.	603 547 678 1023 1307 1588 1877 2399 2957 3562
Bending radius	mm min.	270 255 280 335 370 410 440 500 545 595
Current rating		
In ground	Amps	140 170 200 245 300 340 375 420 485 550
In ducts	Amps	115 140 165 205 245 280 310 355 405 460
In air	Amps	135 165 200 255 310 360 405 465 550 620
Resistance		
dc @ 20°C	Ω/km max	0.727 0.524 0.387 0.268 0.193 0.153 0.124 0.099 0.075 0.060
ac @ 90°C	Ω/km max	0.927 0.669 0.494 0.343 0.248 0.197 0.161 0.129 0.100 0.082
Zero Sequence		
Resistance	Ω/km	8.690 7.448 6.512 3.458 3.021 2.745 2.471 1.758 1.578 1.433
Reactance	Ω/km	0.063 0.062 0.063 0.057 0.056 0.058 0.060 0.059 0.059 0.060
Reactance	Ω/km	0.070 0.069 0.067 0.063 0.061 0.060 0.061 0.062 0.061 0.061
Impedance	Ω/km	0.930 0.672 0.499 0.349 0.255 0.206 0.193 0.144 0.118 0.102
Capacitance	μF/km	0.442 0.510 0.529 0.576 0.665 0.683 0.654 0.644 0.689 0.729
Short circuit ratings		
Symmetrical	kA (1sec)	3.4 4.7 6.4 9.2 12.8 16.2 20.0 25.0 32.8 41.2
Earth fault	kA (1sec)	2.6 2.9 3.3 6.4 7.2 7.9 8.7 12.3 13.5 14.8
(Three Phase) Volt Drop	mV/A/m	1.61 1.16 0.86 0.60 0.44 0.36 0.33 0.25 0.20 0.18

Last updated May 2006

When ordering please quote: primary + size + finish code

e.g. F2CC 3025 111



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