M-TEC

Concentric service connection
XLPE, Concentric with communication cores, PE UV stable.

Construction:
Centre phase core, hard drawn Cu stranded, red XLPE insulated UV stable phase core, concentric layer annealed bare neutral/earth wires, 2 x solid Cu wire communication cores PE insulated, PE outer sheath UV stable.

Voltage Rating: 600V

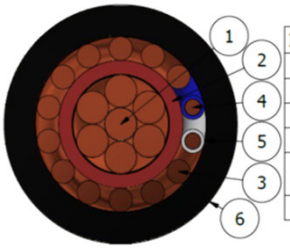
Specification: SANS 1507-6

Application:
For use in electricity supply to houses, 600V.
Strung in air from pole top distribution box to houses main circuit breaker.

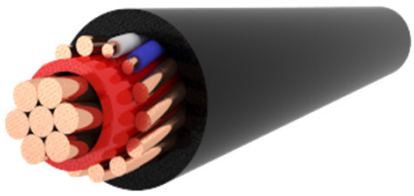
SIZE CODE	LVCNE (conductor size) 0.5 Coms					
Phase conductor size	mm² nom	4	6	10	16
Phase conductor diameter	mm nom	2.5	3.0	3.8	4.8
Phase insulation diameter	mm nom	3.9	4.4	5.7	6.5
Concentric layer diameter	mm nom	6.0	7.2	8.2	9.4
Neutral area	mm²	4.0	6.0	10.0	16.0
Cable diameter	mm nom.	9.5	10.3	11.3	12.6
Cable mass	kg/m nom	0.13	0.17	0.25	0.36
Gross mass (500m)	kg nom	163	186	223	279
Bending radius	mm Min.	95	103	113	126
Maximum pulling force on Phase conductor	N	137	206	343	549
Current rating					
In air	Amps	30	45	50	70
In Ground	Amps	61	90	101	130
Resistance: dc @ 20°C					
Phase core:	Ω/km max	4.75	3.18	1.89	1.19
Neutral:	Ω/km max	4.61	3.08	1.83	1.15
Communication cores.	Ω /km max	Solid wire 0.5mm²: 35 Ω /km			
Resistance: ac @ 90°C					
Phase core:	Ω /km max	5.88	3.93	2.34	1.49
Insulation Resistance	MΩ /km min	100			
Reactance	Ω /km	0.112	0.111	0.108	0.105
Impedance	Ω /km	5.880	3.934	2.344	1.497
Capacitance	µF/km	0.315	0.353	0.451	0.474
Short circuit ratings					
Symmetrical	kA (1sec)	0.54	0.81	1.36	2.16
Earth fault	kA (1sec)	0.69	1.14	1.75	2.74
(Single Phase) Volt Drop	mV/A/m	11.76	7.86	4.68	2.99

Standard Installation conditions

Ambient air temperature: 30°C
Maximum conductor temperature: 90°C
Soil temperature: 30°C, depth: 0.5m
Soil thermal resistivity: 1.2K.m/Ω



Item	Description
1	Hard drawn Copper conductor
2	XLPE Insulation red UV stable
3	Annealed bare Copper concentric wires
4	Annealed Copper communication conductor
5	Communication cores PE insulated white and blue
6	PE sheath UV stable



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