

Application

For use in power circuits of 3.8/6.6kV earthed systems.
Suspended in air.

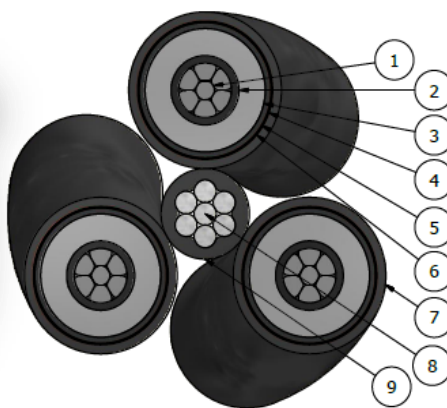
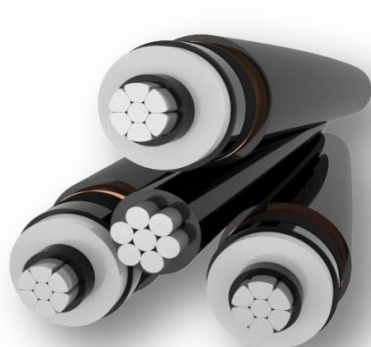
Voltage Rating: 3.8/6.6kV

Specification: SANS 1713

Construction

3 Core, circular Aluminium stranded conductor, XLPE insulated, individually Copper tape screened, flame retardant PVC sheathed + steel catenary, flame retardant PVC sheathed.

SIZE CODE	AS 3x(conductor size)+(catenary size)CAT 6.6kV							
Phase Core								
Conductor size	mm² nom	35	50	70	95	120	150	185
Conductor diameter	mm app.	7.15	8.25	9.95	11.80	13.10	14.80	15.95
Insulation diameter	mm app.	15.4	16.5	18.2	20.1	21.4	22.7	24.2
Core sheath diameter	mm app.	20.5	21.6	23.5	25.5	26.8	28.1	29.9
Catenary (Support Core)								
Conductor size	mm² nom	50	50	50	50	70	70	70
Conductor diameter	mm app.	9.00	9.00	9.00	9.00	10.80	10.80	10.80
Insulation diameter	mm app.	11.5	11.5	11.5	11.5	13.3	13.3	13.3
Maximum tensile strength and pulling force of catenary	kN	26	26	26	26	37	37	37
Cable								
Cable diameter	mm app.	44	47	51	55	58	61	65
Cable mass	kg/m app.	2.05	2.24	2.60	3.01	3.51	3.85	4.33
Gross mass (500m)	kg app.	915	973	1,079	1,204	1,354	1,454	1,599
Bending radius	mm min.	636	669	720	776	841	880	926
Current rating								
In air	Amps	150	185	230	280	325	370	430
Resistance								
dc @ 20°C	Ω/km max	0.868	0.641	0.443	0.320	0.253	0.206	0.164
ac @ 90°C	Ω /km max	1.113	0.822	0.568	0.411	0.325	0.265	0.211
Reactance	Ω /km	0.136	0.124	0.121	0.114	0.111	0.106	0.103
Impedance	Ω /km	1.121	0.832	0.581	0.426	0.342	0.284	0.233
Short circuit ratings								
Symmetrical	kA (1sec)	3.0	4.0	5.8	8.0	10.2	12.5	15.7
Earth fault	kA (1sec)	1.5	1.6	1.7	1.9	2.0	2.1	2.3



Item	Description
1	Aluminium conductor
2	Semi-conductive conductor ccreen
3	TR XLPE insulation
4	Semi-conductive core ccreen
5	Semi-conductive tape
6	Copper tape screen
7	Sheath
8	Steel catenary strand
9	Catenary insulation

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