

Application

For use in power circuits of 12.7/22kV earthed systems.

Suspended in air.

Voltage Rating: 12.7/22kV

Specification: SANS 1713

Construction

3 Core, circular Aluminium stranded conductor, TR 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 22kV Type B

Phase Core

Conductor size	mm ² nom	35	50	70	95	120	150	185
Conductor diameter	mm app.	7.15	8.25	9.95	11.80	13.10	14.80	16.35
Insulation diameter	mm app.	21.6	22.7	24.4	26.2	27.5	29.2	30.8
Core Sheath diameter	mm app.	27.0	28.1	30.0	31.9	33.4	35.1	36.8

Catenary (Support Core)

Conductor size	mm ² 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.	58	61	65	69	72	76	80
Cable mass	kg/m app.	2.96	3.19	3.61	4.05	4.63	5.06	5.61
Gross mass (500m)	kg app.	1 188	1 257	1 383	1 514	1 690	1 819	1 984
Bending radius	mm min.	821	854	905	960	1025	1076	1123

Current rating

In air	Amps	150	185	230	280	325	370	430
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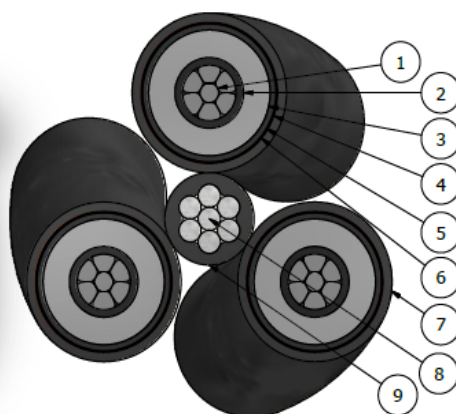
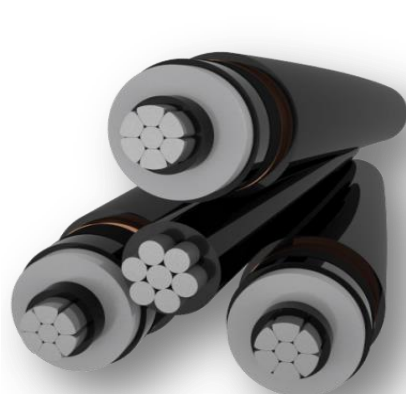
Resistance

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 cscreen
3	TR XLPE insulation
4	Semi-conductive core cscreen
5	Semi-conductive tape
6	Copper tape screen
7	Sheath
8	Steel catenary strand
9	Catenary insulation

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