

3 Core

Aluminium, XLPE Insulated, FRPVC/ LHFRPVC, SWA, FRPVC/ LHFRPVC (Type A) Armoured

SIZE CODE: XLA3x(conductor size) FR / LH 22kV

Application

For use in power circuits of 12.7 / 22kV earthed systems. Installed in cable trays, ducts and underground.

Construction

3 Core, Circular Aluminium Stranded Conductor, XLPE Insulated, Individually copper tape screened, PVC bedding, galvanized steel wire armoured, flame retardant or low halogen flame retardant sheathed.

Specification: SANS 1339

Voltage Rating: 12.7 / 22kV

Physical properties and dimensions												Electrical Properties									
Conductor Size	Conductor diameter	Insulation diameter	Bedding diameter	Armour			Cable diameter	Cable mass	Gross mass (300m)	Bending radius	Maximum pulling force on combined conductors	Current rating			Resistance Ω/km max		Reactance	Impedance	Capacitance	Short circuit ratings	
				diameter	wire diameter	total area														Symmetrical	Earth fault
mm ² Nom.	mm Nom.	mm Nom.	mm Nom.	mm Nom.	mm Nom.	mm ² Min.	mm Nom.	kg/m Nom.	kg Nom.	mm min.	kN	Amps			dc @ 20 °C	ac @ 90 °C	Ω /km	Ω /km	μF/km	kA (1sec)	
25	6.0	20.5	50.2	55.2	2.5	314.2	60.7	5.4	2,125	728	180	109	107	88	1.200	1.539	0.147	1.545	0.121	2.2	15.3
35	7.1	21.6	52.5	57.5	2.5	328.9	63.3	5.8	2,252	759	252	133	126	107	0.868	1.113	0.139	1.122	0.134	3.0	16.0
50	8.2	22.7	54.9	59.9	2.5	343.6	65.9	6.2	2,368	790	360	162	149	126	0.641	0.822	0.133	0.833	0.147	4.1	16.8
70	10.0	24.4	58.8	65.1	3.15	459.8	71.3	7.7	2,901	855	504	200	181	153	0.443	0.568	0.125	0.582	0.168	5.9	22.4
95	11.8	26.3	63.0	69.3	3.15	491.0	75.9	8.5	3,162	910	684	238	214	186	0.320	0.411	0.117	0.427	0.188	8.2	24.0
120	13.1	27.8	65.8	72.1	3.15	514.3	78.9	9.1	3,341	946	864	280	246	209	0.253	0.325	0.113	0.344	0.200	10.3	25.1
150	14.8	29.2	69.7	76.0	3.15	537.7	82.9	10.0	3,590	995	1,080	314	274	237	0.206	0.264	0.109	0.286	0.222	12.7	26.2
185	16.4	30.8	73.2	79.5	3.15	568.9	86.9	11.0	4,091	1043	1,332	366	312	270	0.164	0.210	0.110	0.237	0.208	15.9	27.8
240	18.9	33.5	78.9	85.2	3.15	607.9	92.8	12.3	4,475	1114	1,728	428	353	312	0.125	0.160	0.098	0.188	0.265	20.9	29.7
300	21.2	35.7	83.9	90.2	3.15	646.8	98.2	13.6	4,876	1178	2,160	485	405	349	0.100	0.128	0.094	0.159	0.293	26.2	31.6

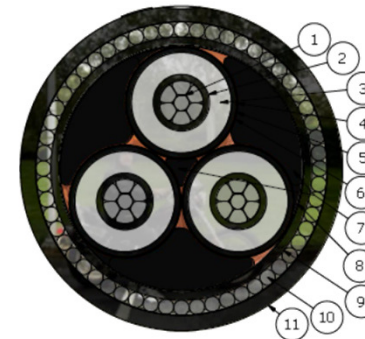
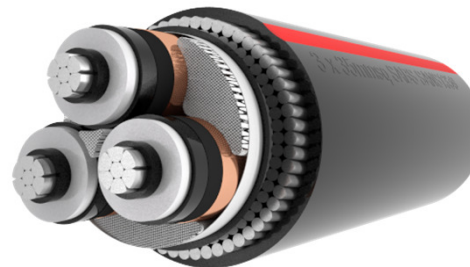
Cable Identification:

FRPVC (red stripe), LHFRPVC (blue stripe), HFFR (white stripe), PE (no stripe).

Installation conditions:

- Conductor temperature maximum 90 °C
- Depth of laying 800 mm
- Ambient temperature 30 °C in free air (shaded)
- Soil thermal resistivity 1.2 K.m/W. • Ground temperature 25 °C.

Revision: R00 22/02/2016



Item No:	Description
1	Annealed Stranded Aluminium Conductor
2	Inner Semi-conductive XLPE
3	XLPE insulation (TR)
4	Outer Semi-conductive XLPE
5	Semi-conductive tape
6	Individually Copper tape Screened
7	Filler
8	Binding Tape
9	Bedding
10	Galvanized Steel Wire Armouring
11	Sheathing

