

## 3 Core

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

SIZE CODE: XLA 3X (conductor size) FR / LH 6.6kV

## Application

For use in power circuits of 3.8 / 6.6kV earthed systems. Installed in cable trays, ducts and underground.

## Construction

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

**Specification:** SANS 1339

**Voltage Rating:** 3.8 / 6.6kV

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		Reactance	Impedance	Capacitance	Short circuit ratings		Recommended Gland size
				diameter	wire diameter	total area						air	ground	ducts	Ω/km max					μF/km	Symmetrical	
mm <sup>2</sup> Nom.	mm Nom.	mm Nom.	mm Nom.	mm Nom.	mm Nom.	mm <sup>2</sup> Min.	mm Nom.	kg/m Nom.	kg Nom.	mm min.	kN	air	ground	ducts	dc @ 20 °C	ac @ 90 °C	Ω /km	Ω /km	μF/km	ka (1sec)	CCG	
25	6.0	14.8	37.2	41.2	2.0	185.4	45.7	3.3	1,376	549	180	109	107	88	1.200	1.539	0.126	1.544	0.276	2.1	9.0	5-50
35	7.1	15.9	39.6	43.6	2.0	197.9	48.3	3.6	1,466	580	252	133	126	107	0.868	1.113	0.139	1.122	0.172	3.0	9.7	5-50
50	8.2	17.0	42.2	47.2	2.5	270.0	52.3	4.5	1,793	628	360	162	149	126	0.641	0.822	0.115	0.830	0.337	4.0	13.2	6-63
70	9.9	18.7	45.9	50.9	2.5	284.7	56.2	5.0	1,985	674	504	200	181	153	0.443	0.568	0.108	0.578	0.384	5.8	13.9	6-63
95	11.7	20.5	50.1	55.1	2.5	309.3	60.6	5.7	2,216	727	684	238	214	186	0.320	0.411	0.101	0.423	0.434	8.0	15.1	6-63
120	13.3	21.8	53.1	58.1	2.5	333.8	63.8	6.3	2,454	766	864	280	246	209	0.253	0.325	0.096	0.339	0.470	10.2	16.3	6-63
150	14.6	23.5	56.7	61.7	2.5	343.6	67.7	6.9	2,632	812	1,080	314	274	237	0.206	0.265	0.095	0.281	0.516	12.5	16.8	7-75
185	16.3	25.1	60.5	66.8	3.15	475.4	73.0	8.6	3,134	876	1,332	366	312	270	0.164	0.211	0.091	0.230	0.558	15.7	23.2	7-75
240	18.6	27.8	66.5	72.8	3.15	522.1	79.3	9.9	3,556	952	1,728	428	353	312	0.125	0.162	0.089	0.184	0.606	20.6	25.5	8-80
300	21.2	30.5	72.5	78.8	3.15	561.1	86.0	11.4	4,220	1032	2,160	485	405	349	0.100	0.130	0.087	0.157	0.623	25.7	27.4	9-90

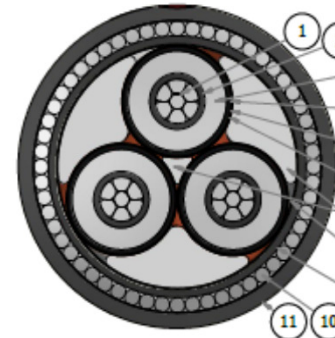
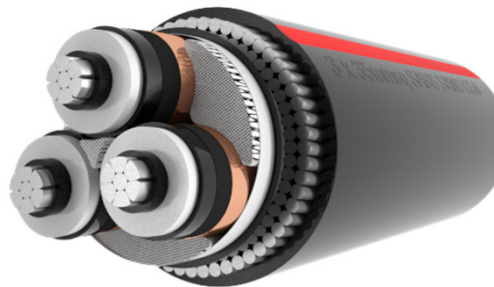
### Cable Identification:

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

### Installation conditions:

- Maximum 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	Aluminium stranded conductor
2	Conductor screen semi-conductive XLPE
3	XLPE insulation (TR)
4	Core screen semi-conductive XLPE
5	Semi-conductive bedding tape
6	Individually copper tape screened
7	Filler
8	Binding tape
9	Bedding
10	Galvanized steel wire armouring
11	Sheathing

