



### 3 Core

Copper, XLPE Insulated, FRPVC, SWA, FRPVC / LHFRPVC (Type A) armoured.

#### SIZE CODE:

XL 3x(conductor size)FR / LH 11kV

#### Application

For use in power circuits of 6.35/11kV earthed systems. Installed in cable trays, ducts and underground.

#### Construction

3 Core, Circular Copper Stranded Conductor, XLPE Insulated, Individually copper tape screened, FRPVC or LHFR PVC bedded, galvanized steel wire armoured, FRPVC or LHFR PVC sheathed.

**Specification: SANS 1339**

**Voltage Rating: 6.35/11kV**

#### 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 $\Omega$ /km max		Reactance $\Omega$ /km	Impedance $\Omega$ /km	Capacitance $\mu$ F/km	Short circuit ratings	
				diameter	wire diameter	total area						Amps			dc @ 20°C	ac @ 90°C				Symmetrical	Earth fault
												air	ground	ducts							
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.	N										
25	6.0	16.7	40.5	45.5	2.50	255.3	50.4	4.5	1 749	604	294	138	130	116	0.727	0.927	0.131	0.936	0.185	3.4	12.5
35	7.2	17.8	42.8	47.8	2.50	270.0	53.0	5.1	1 944	635	412	166	158	140	0.524	0.668	0.125	0.680	0.203	4.7	13.2
50	8.3	18.9	45.4	50.4	2.50	289.6	55.7	5.7	2 140	669	588	209	195	167	0.387	0.494	0.119	0.508	0.221	6.4	14.1
70	10.0	20.6	49.1	54.1	2.50	309.3	59.6	6.7	2 524	715	823	257	240	200	0.268	0.342	0.113	0.360	0.248	9.3	15.1
95	11.8	22.5	53.3	58.3	2.50	328.9	64.0	7.9	2 876	768	1 117	314	279	237	0.193	0.247	0.107	0.269	0.278	12.9	16.0
120	13.1	23.8	56.3	61.3	2.50	353.4	67.4	9.1	3 225	809	1 411	356	325	270	0.153	0.196	0.101	0.221	0.299	16.2	17.2
150	14.8	25.5	60.0	66.3	3.15	467.6	72.6	11.0	3 906	871	1 764	409	360	307	0.124	0.159	0.098	0.187	0.327	20.0	22.8
185	16.4	27.0	63.5	69.8	3.15	498.8	76.4	12.6	4 376	917	2 176	466	405	344	0.099	0.128	0.095	0.160	0.351	25.1	24.3
240	18.9	29.6	69.2	75.5	3.15	537.7	82.5	14.9	5 237	990	2 822	542	456	397	0.075	0.099	0.081	0.128	0.327	30.9	26.2
300	21.2	31.9	74.4	88.1	3.15	584.5	88.1	17.4	6 051	1 057	3 528	618	520	437	0.060	0.080	0.078	0.112	0.351	41.3	28.5

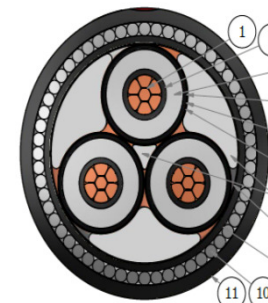
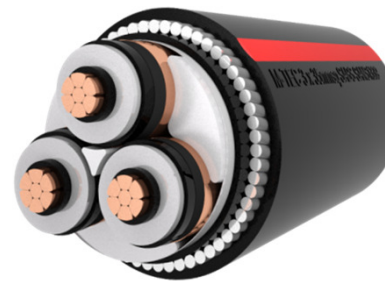
#### Cable Identification:

FRPVC (red stripe), LHFRPVC (blue stripe),  
LSZH / 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 and in shade.
- Soil thermal resistivity 1.2 K.m/W. • Soil temperature 25°C.

Revision: R00 22/02/2018



Item No:	Description
1	Annealed copper stranded conductor
2	Conductor screen semi-conductive XLPE
3	XLPE insulation (TR)
4	Core screen 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

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