

3 Core

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

SIZE CODE:

XL 3x(conductor size)FR / LH 33kV

Application

For use in power circuits of 19/33kV earthed systems. Installed in cable trays, ducts and underground.

Construction

3 Core, Circular Copper Stranded Conductor, XLPE Insulated, Individually copper tape screened, flame retardant PVC bedded, galvanized steel wire armoured, flame retardant PVC or low halogenated flame retardant PVC sheathed.

Specification: SANS 1339

Voltage Rating: 19/33kV

Physical properties and dimensions

Electrical Properties

Conductor Size	Conductor diameter	Insulation diameter	Bedding diameter	Armour			Cable diameter	Cable mass	Gross mass (300m)	Bending radius	Current rating			Resistance Ω /km max		Reactance Ω /km	Impedance Ω /km	Capacitance μ F/km	Short circuit ratings	
				diameter	wire diameter	total area					Amps			dc @ 20°C	ac @ 90°C				Symmetrical	Earth fault
											air	ground	ducts							
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.	air	ground	ducts	@ 20°C	@ 90°C	Ω /km	Ω /km	μ F/km	kA (1sec)	
50	8.3	28.5	66.6	72.9	3.15	522.1	79.9	9.9	3 806	958	209	195	167	0.387	0.494	0.144	0.515	0.142	6.4	25.5
70	10.0	30.2	70.3	76.6	3.15	545.5	83.7	11.1	4 160	1 005	257	237	200	0.268	0.344	0.136	0.370	0.158	9.3	26.6
95	11.8	32.0	74.5	81.6	3.55	653.3	89.0	13.1	4 765	1 067	314	279	237	0.193	0.251	0.129	0.282	0.174	12.9	31.9
120	13.1	33.3	77.5	84.6	3.55	683.0	92.2	14.3	5 126	1 106	356	316	270	0.153	0.203	0.122	0.237	0.186	16.2	33.3
150	14.8	35.0	88.3	88.3	3.55	702.8	96.0	15.7	5 534	1 153	409	353	307	0.124	0.170	0.117	0.207	0.200	20.0	34.3
185	16.4	36.6	84.7	91.8	3.55	732.4	99.8	17.4	6 126	1 198	466	400	344	0.099	0.142	0.114	0.182	0.214	25.1	35.7
240	18.9	39.1	90.4	97.5	3.55	781.9	105.9	20.0	6 909	1 271	542	456	397	0.075	0.114	0.108	0.157	0.236	32.9	38.2
300	21.2	41.0	95.6	102.7	3.55	831.4	111.5	22.7	7 815	1 338	618	502	437	0.0601	0.095	0.103	0.141	0.211	25.1	40.6

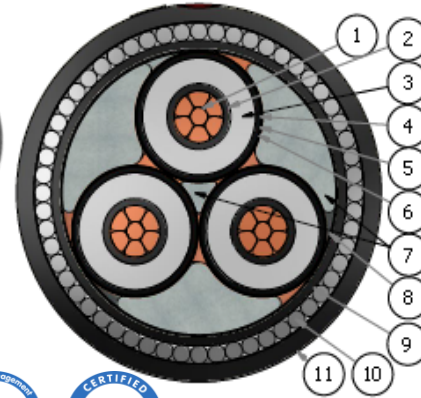
Cable Identification:

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 shaded.
- Soil thermal resistivity 1.2 K.m/W. • Ground temperature 25°C.

Revision: R01 15/11/2019



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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