

3 Core

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

SIZE CODE: XL3 x(conductor size) FR / LH / ZH 6.6kV

Application

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

Specification: SANS 1339

Voltage Rating: 3.8 / 6.6kV

Construction

3 Core, Circular Copper Stranded Conductor, XLPE Insulated, Individually copper tape screened, flame retardant PVC / low halogen flame retardant PVC / No halogen flame retardant bedded, galvanized steel wire armoured, flame retardant / low halogen flame retardant PVC / No halogen flame retardant sheathed.

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 $\Omega/\text{km max}$		Reactance Ω/km	Impedance Ω/km	Capacitance $\mu\text{F}/\text{km}$	Short circuit ratings		Recommended gland size
				diameter	wire diameter	total area						air	ground	ducts	dc @ 20°C	ac @ 90°C				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	air	ground	ducts	@ 20°C	@ 90°C	Ω/km	Ω/km	$\mu\text{F}/\text{km}$	kA (1sec)	CCG	
25	6.0	16.2	36.4	40.4	2.00	185.4	44.9	3.5	1,405	539	294	138	130	116	0.727	0.927	0.124	0.935	0.184	3.4	9.0	5-50
35	7.1	17.3	38.8	42.8	2.00	197.9	47.5	4.4	1,656	570	412	166	158	140	0.524	0.668	0.118	0.679	0.202	4.7	9.7	5-50
50	8.2	18.4	41.3	46.3	2.50	265.1	51.5	5.5	1,987	618	588	209	195	167	0.387	0.494	0.113	0.506	0.221	6.4	12.9	5-50
70	9.9	20.1	45.0	50.0	2.50	284.7	55.3	6.5	2,387	664	823	257	237	200	0.268	0.342	0.107	0.358	0.249	9.3	13.9	6-63
95	11.8	22.0	49.2	54.2	2.50	309.3	59.7	7.7	2,762	717	1,117	314	279	237	0.193	0.247	0.102	0.267	0.278	12.9	15.1	6-63
120	13.1	23.2	52.2	57.2	2.50	328.9	63.0	8.8	3,198	756	1,411	356	316	270	0.153	0.196	0.096	0.218	0.302	16.2	16.1	6-63
150	14.8	25.0	55.9	60.9	2.50	343.6	66.8	10.0	3,548	802	1,764	409	353	307	0.124	0.159	0.093	0.184	0.327	20.0	16.8	7-75
185	16.3	26.5	59.4	65.7	3.15	467.6	71.9	12.3	4,231	863	2,176	466	400	344	0.099	0.128	0.091	0.157	0.354	25.1	22.8	7-75

Cable Identification:

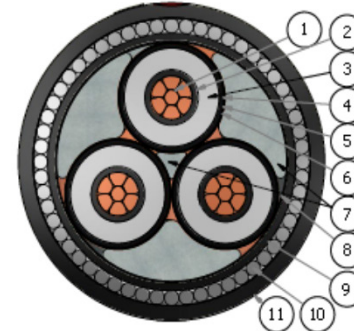
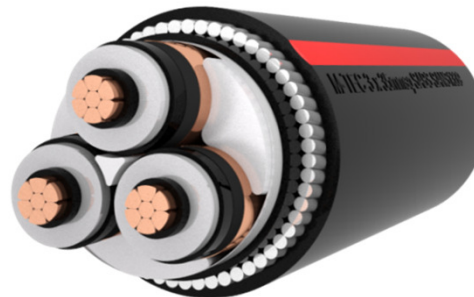
FRPVC (red stripe), LHFRPVC (blue stripe), HFFR (white stripe), PE (no stripe).

Installation conditions:

- Conductor temperature maximum 90°C
- Ambient temperature 30°C in free air (shaded)

Customer acceptance signature: _____

Revision: R00 22/02/2016



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

