

Application

For use in power circuits of 19/33kV 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, sheathed.

Specification: SANS 1339

Voltage Rating: 19/33kV

Physical properties and dimensions

Electrical Properties

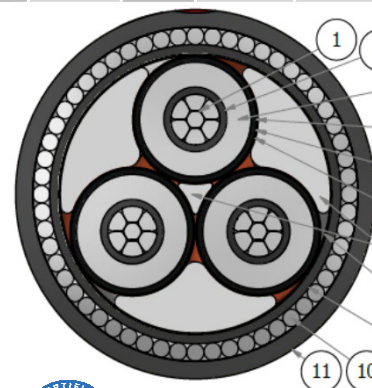
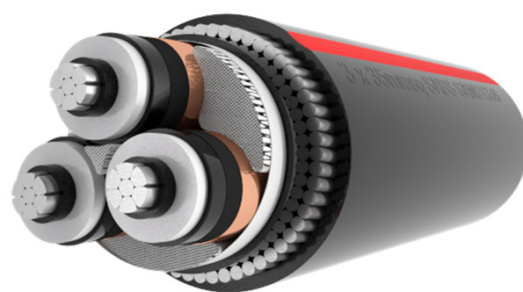
Conductor Size	Conductor diameter	Insulation diameter	Bedding diameter	Armour			Cable diameter	Cable mass	Gross mass (300m)	Bending radius	Maximum pulling force on combined conductors	Current rating			Resistance		Reactance	Impedance	Capacitance	Short circuit ratings		
				diameter	wire diameter	total area						air	ground	ducts	dc @ 20°C	ac @ 90°C				Ω /km	Ω /km	μF/km
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	dc @ 20°C	ac @ 90°C	Ω /km	Ω /km	μF/km	kA (1sec)		
50	8.2	28.5	66.6	72.9	3.15	522.1	79.9	9.1	3,526	958	353	162	149	126	0.641	0.822	0.144	0.834	0.119	4.1	25.5	
70	10.0	30.2	70.3	76.6	3.15	545.5	83.7	9.9	3,762	1005	494	200	181	153	0.443	0.568	0.133	0.584	0.133	5.9	26.6	
95	11.8	32.0	74.5	81.6	3.55	653.3	89.0	11.4	4,217	1067	670	238	214	186	0.320	0.411	0.126	0.430	0.148	8.2	31.9	
120	13.1	33.3	77.5	84.6	3.55	683.0	92.2	12.1	4,437	1106	847	280	246	209	0.253	0.325	0.122	0.347	0.158	10.3	33.3	
150	14.8	35.0	81.2	88.3	3.55	702.8	96.0	12.9	4,684	1153	1,058	314	274	237	0.206	0.265	0.117	0.290	0.172	12.7	34.3	
185	16.4	36.6	84.7	91.8	3.55	732.5	99.8	14.0	4,988	1198	1,305	366	312	270	0.164	0.211	0.114	0.240	0.185	15.9	35.7	
240	18.9	39.1	90.4	97.5	3.55	781.9	105.9	15.5	5,436	1271	1,693	428	353	312	0.125	0.161	0.109	0.195	0.204	20.9	38.2	
300	21.2	44.4	95.6	102.7	3.55	831.4	111.5	16.9	5,864	1338	2,117	485	405	349	0.100	0.130	0.105	0.167	0.222	26.2	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 (shaded)
- Soil thermal resistivity 1.2 K.m/W. • Ground temperature 25 °C.



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