

## 3 Core

Copper, XLPE Insulated, MDPE (Type B) Non-armoured.  
Longitudinally water blocked cable.

SIZE CODE: XLUAWB 3x(conductor size)MDPE 33kV

### Application

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

### Construction

3 Core, Circular Copper Stranded Conductor, XLPE Insulated, Individually copper tape screened, medium density polyethylene sheathed.

**Specification: SANS 1339**

**Voltage Rating: 19/33kV**

### Physical properties and dimensions

### Electrical Properties

Conductor Size	Conductor diameter	Insulation diameter	Insulation thickness	Cable diameter	Cable mass	Gross mass (300m)	Bending radius	Maximum pulling force on combined conductors	Current rating			Resistance Ω/km max		Inductive Reactance Ω /km	Impedance Ω /km	Capacitance μF/km	Short circuit ratings - Symmetrical kA (1sec)
									Amps			dc @ 20°C	ac @ 90°C				
mm <sup>2</sup> Nom.	mm Nom.	mm Nom.	mm Nom.	mm Nom.	kg/m Nom.	kg Nom.	mm min.	kN	air	ground	ducts	@ 20°C	@ 90°C	Ω /km	Ω /km	μF/km	kA (1sec)
50	8.2	27.8	8.0	71.9	4.70	1,921	1079	353	215	200	180	0.387	0.494	0.143	0.514	0.141	6.4
70	9.9	29.5	8.0	75.8	5.62	2,237	1137	494	265	245	221	0.268	0.342	0.135	0.368	0.157	9.2
95	11.8	31.4	8.0	80.0	6.66	2,548	1200	670	330	285	257	0.193	0.247	0.128	0.278	0.173	12.8
120	13.1	32.7	8.0	83.2	7.55	2,864	1248	847	370	325	293	0.153	0.196	0.121	0.230	0.185	16.2
150	14.8	34.4	8.0	87.1	8.67	3,301	1306	1,058	420	365	329	0.124	0.159	0.116	0.197	0.200	20.0
185	16.3	35.9	8.0	90.6	10.03	3,775	1359	1,305	475	405	365	0.0991	0.128	0.112	0.170	0.214	25.0
240	18.9	38.5	8.0	96.5	12.12	4,487	1448	1,693	550	465	419	0.0754	0.098	0.107	0.145	0.236	32.8
300	21.2	40.8	8.0	101.7	14.14	5,143	1526	2,117	630	500	450	0.0601	0.079	0.103	0.130	0.256	41.2

#### Cable Identification:

FRPVC (red stripe), LHFRPVC (blue stripe),  
HFFR (white stripe), LLDPE & MDPE (no stripe).



Item	Description
1	Annealed Copper Conductor(Water blocked) or Aluminium Conductor(Water blocked)
2	Semi-Conductive Conductor Screen
3	XLPE Insulation (TR)
4	Semi-Conductive Core Screen
5	Semi-Conductive tape (Water blocked)
6	Individually Copper tape Screen
7	Semi-Conductive tape (Water blocked)
8	Filler (Water blocked)
9	Binding Tape (Water blocked)
10	PE, FRPVC, HFFR Sheath

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