

**3 Core, Aluminium, TRXLPE Insulated, FRPVC, SWA, MDPE (Type A) Armoured.
Longitudinally water blocked cable.**

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

Application

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

Construction

3 Core, compacted circular Aluminium stranded conductor (stranding process), TRXLPE Insulated (CCV extrusion), individually copper tape screened (taping process), flame retardant PVC (extrusion process) . galvanized steel wire armoured (armouring process). medium density Polyethylene sheathed (extrusion

Specification: SANS 1339

Voltage Rating: 19/33kV

Physical properties and dimensions													Electrical Properties										
Conductor size	Conductor diameter	Insulation diameter	Insulation thickness	Bedding diameter	Armour			Cable diameter	Cable mass	Gross mass (300m)	Bending radius	Maximum pulling force	Current rating (SANS 10198-4)			Resistance Ω /km max		Reactance	Inductance	Inductive reactance	Capacitance	Short circuit ratings	
					diameter	wire diameter	total area						Amps			dc @ 20°C	ac @ 90°C					(X)	(L)
mm ² Nom.	mm 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	Ω /km	Ω /km	Ω /km	mH/km	Ω /km	μ F/km	kA (1sec) 200°C Max.	
50	8.3	27.8	8.0	68.9	76.4	3.15	522.1	83.3	8.9	3 012	1000	353	162	149	126	0.641	0.822	0.149	0.476	0.149	0.143	4.1	27.6
70	10.0	29.5	8.0	72.5	80.0	3.15	545.5	87.2	9.7	3 347	1047	494	200	181	153	0.443	0.568	0.141	0.4483217	0.141	0.159	5.9	30.5
95	11.8	31.4	8.0	76.7	85.0	3.55	653.3	92.4	11.0	3 745	1109	670	238	214	186	0.320	0.411	0.131	0.4159609	0.131	0.175	8.2	34.5
120	13.1	32.7	8.0	79.8	88.1	3.55	683.0	95.6	11.9	4 120	1148	847	280	246	209	0.253	0.325	0.119	0.3772842	0.119	0.187	10.4	36.1
150	14.8	34.4	8.0	83.4	91.7	3.55	702.8	99.5	12.7	4 358	1194	1 058	314	274	237	0.206	0.265	0.115	0.3664169	0.115	0.202	12.8	37.1
185	16.4	35.9	8.0	87.0	95.3	3.55	732.4	103.3	13.5	4 587	1239	1 305	366	312	270	0.164	0.211	0.117	0.3720685	0.117	0.215	16.0	38.7
240	18.9	38.5	8.0	92.7	101.0	3.55	781.9	109.4	15.0	5 045	1313	1 693	428	353	312	0.125	0.161	0.112	0.3579905	0.112	0.238	21.0	41.3
300	21.2	40.8	8.0	97.9	106.2	3.55	831.4	115.0	16.2	5 424	1380	2 117	485	405	349	0.100	0.130	0.105	0.3345633	0.105	0.258	26.3	43.9

Standard installation conditions

- Soil thermal resistivity: 1.2K.m/W
- Ambient air temperature: 30°C
- Soil temperature: 25°C
- Burial depth: 800mm
- Solid bonded earth system



Item No:	Description
1	Stranded Aluminium conductor, water blocked.
2	Semi-conductive conductor screen
3	XLPE insulation (TR)
4	Semi-conductive core screen
5	Semi-conductive water blocking tape.
6	Individually Copper tape screened
7	Non hygroscopic PP Filler water blocking
8	Binding tape water blocking
9	Bedding
10	Galvanized steel wire armouring, water blocked.
11	PE sheathing UV stabilized black
12	Asset management tape(s).

Customer acceptance signature: _____

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