

M-TEC

**Single Core, Aluminium, XLPE Insulated, MDPE. (Type B) Unarmoured.
Longitudinally water blocked cable.**

SIZE CODE: XLAUAWB 1x(conductor size)MDPE 22kV

Application

For use in power circuits of 12.7 / 22kV systems. Installed in cable trays and ducts.

Specification: SANS 1339

Voltage Rating: 12.7 / 22kV

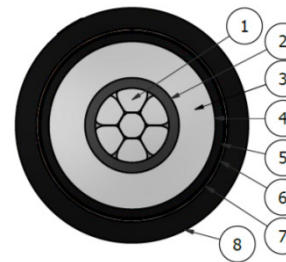
Construction

Single core, Circular Stranded Aluminium Conductor (water blocked), XLPE Insulated, copper tape screened, medium density polyethylene sheathed.

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 conductor	Current rating Trefoil			Resistance Ω /km max		Reactance Ω /km	Impedance Ω /km	Capacitance μ F/km	Short circuit ratings	
									air	ground	ducts	dc @ 20°C	ac @ 90°C				Symmetrical	Max. Earth fault
50	8.2	23.1	5.5	29.8	0.9	632	595	120	188	164	150	0.641	0.822	0.135	0.833	0.182	4.1	1.00
70	9.9	24.8	5.5	31.7	1.1	772	633	168	235	200	187	0.443	0.568	0.128	0.582	0.207	5.9	1.00
95	11.8	26.6	5.5	33.5	1.2	816	670	228	285	239	228	0.32	0.411	0.121	0.428	0.224	8.2	1.00
120	13.1	27.9	5.5	35.0	1.3	955	701	288	330	272	263	0.253	0.325	0.115	0.345	0.258	10.4	1.00
150	14.8	29.6	5.5	36.7	1.5	997	735	360	373	304	297	0.206	0.265	0.114	0.288	0.255	12.8	1.00
185	16.3	31.2	5.5	38.1	1.5	1 011	762	444	427	343	339	0.164	0.211	0.110	0.238	0.272	16.0	1.00
240	18.9	33.7	5.5	40.8	1.8	1 089	817	576	507	399	401	0.125	0.161	0.106	0.193	0.319	21.0	1.00
300	21.2	36.0	5.5	43.1	2.0	1 162	863	720	582	449	459	0.100	0.130	0.102	0.165	0.348	26.3	1.00
400	23.9	38.3	5.5	46.0	2.4	1 366	921	960	675	510	530	0.078	0.100	0.099	0.141	0.339	33.8	1.00
500	27.2	41.6	5.5	49.5	2.8	1 599	991	1 200	781	579	612	0.061	0.078	0.096	0.123	0.375	43.4	1.00
630	31.2	45.6	5.5	53.8	3.4	1 866	1075	1 512	904	654	707	0.047	0.063	0.093	0.112	0.419	56.0	1.00

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

Note: Under ground installation is only permitted if the cable is adequately protected against mechanical damage.



Item No:	Description
1	Aluminium conductor (water blocked)
2	Semi-conductive conductor Screen
3	TR XLPE Insulation
4	Semi-conductive core screen
5	Semi-conductive tape (water blocking)
6	Copper tape screen
7	Non-Conductive water blocking tape
8	Sheathing

The information contained within this document must not be copied, reprinted or reproduced in any form, either wholly or in part, without the written consent of M-TEC. The information is believed to be correct at the time of issue to the best of M-TEC's knowledge. M-TEC reserves the right to amend this specification without prior notification. This specification is not contractually valid unless specifically authorised by M-TEC. M-TEC shall not be liable for any damages whatsoever (including indirect, accidental, special, punitive or consequential damages and loss of profits, opportunities or information) arising from or result from the use of or reliance on information contained in this document, and/or any inaccuracy or omission in such information contained in this document.

Revision: R01 13/03/2019

