

M-TEC

Single Core, Aluminium, XLPE Insulated, MDPE. (Type B) Unarmoured.

Longitudinally water blocked cable.

SIZE CODE: XLAUAWB 1x(conductor size)MDPE 33kV

Application

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

Construction

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

Specification: SANS 1339

Voltage Rating: 19/33kV

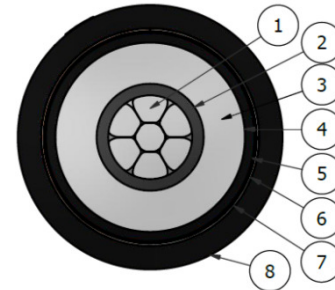
Physical properties and dimensions									Electrical Properties								
Conductor size	Conductor diameter	Insulation diameter	Insulation thickness	Cable diameter	Cable mass	Gross mass (300m)	Bending radius	Maximum pulling force on conductor	Current rating			Resistance		Reactance	Impedance	Capacitance	Short circuit ratings - Symmetrical
									air	ground	ducts	Ω/km max					
mm ² Nom.	mm Nom.	mm Nom.	mm Nom.	mm Nom.	kg/m Nom.	kg Nom.	mm min.	kN				dc @ 20°C	ac @ 90°C	Ω /km	Ω /km	μF/km	kA (1sec)
50	8.2	27.8	8.0	34.9	1.22	566	698	118	190	160	125	0.641	0.822	0.157	0.837	0.141	4.1
70	9.9	29.5	8.0	35.7	1.23	568	714	165	235	195	155	0.443	0.568	0.147	0.587	0.157	5.9
95	11.8	31.4	8.0	37.7	1.39	617	755	223	280	230	180	0.320	0.411	0.137	0.433	0.173	8.2
120	13.1	32.7	8.0	39.0	1.52	655	781	282	325	260	205	0.253	0.325	0.132	0.351	0.185	10.4
150	14.8	34.4	8.0	40.9	1.68	703	819	353	370	290	230	0.206	0.265	0.127	0.294	0.200	12.8
185	16.3	35.9	8.0	42.5	1.85	755	850	435	420	325	260	0.164	0.211	0.122	0.244	0.214	16.0
240	18.9	38.5	8.0	45.2	2.13	839	905	564	485	370	290	0.125	0.162	0.118	0.201	0.236	21.0
300	21.2	40.8	8.0	47.8	2.42	975	955	706	550	415	330	0.100	0.131	0.114	0.174	0.256	26.3
400	23.9	43.5	8.0	50.7	2.79	1 086	1013	941	630	460	360	0.078	0.103	0.109	0.150	0.279	33.8
500	27.2	46.8	8.0	54.2	3.26	1 397	1083	1 176	715	515	410	0.061	0.082	0.105	0.134	0.308	43.4
630	31.2	50.8	8.0	58.4	3.84	1 663	1167	1 482	810	570	450	0.047	0.066	0.101	0.121	0.342	56.0

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.

Revision: R01 29/03/2018



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. This 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.

