

M-TEC

Single Core, Aluminium, XLPE Insulated, FRPVC, AWA, MDPE. (Type A) armoured.
 Longitudinally water blocked cable.

SIZE CODE: XLAWB 1x(conductor size)MDPE 11kV

Application

For use in power circuits of 6.35/11kV systems. Installed in cable trays and ducts.

Construction

Single core, Circular Aluminium Stranded Conductor (water blocked), XLPE Insulated, copper tape screened, flame retardant PVC bedding, Aluminium wire armoured, medium density polyethylene sheathed, longitudinally water blocked.

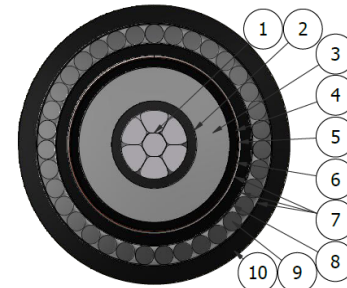
Specification: SANS 1339

Voltage Rating: 6.35/11kV

Physical properties and dimensions												Electrical Properties									
Conductor size	Conductor diameter	Insulation diameter	Insulation thickness	Bedding diameter	Armour			Cable diameter	Cable mass	Gross mass (500m)	Bending radius	Current rating			Resistance		Reactance	Impedance	Capacitance	Short circuit ratings	
					diameter	wire diameter	total area					Amps			$\Omega/\text{km max}$					Symmetrical	Earth fault
mm ² Nom.	mm Nom.	mm Nom.	mm Nom.	mm Nom.	mm Nom.	mm Nom.	mm Nom.	kg/m Nom.	kg Nom.	mm min.	air	ground	ducts	dc @ 20°C	ac @ 90°C	Ω/km	Ω/km	$\mu\text{F}/\text{km}$	kA (1sec)		
50	8.2	18.4	3.4	23.0	26.8	1.6	90.5	31.7	1.05	924	634	185	160	128	0.641	0.822	0.151	0.836	0.147	4.1	10.1
70	9.9	20.1	3.4	24.7	28.5	1.6	96.5	33.6	1.14	968	673	235	195	156	0.443	0.568	0.143	0.586	0.166	5.9	10.7
95	11.8	21.9	3.4	26.6	30.4	1.6	104.6	35.5	1.29	1,045	710	285	230	184	0.320	0.411	0.132	0.431	0.188	8.2	11.7
120	13.1	23.2	3.4	27.9	31.7	2.0	110.6	37.0	1.43	1,214	740	325	260	208	0.253	0.325	0.128	0.349	0.203	10.4	12.3
150	14.8	24.9	3.4	29.6	34.2	2.0	144.5	39.7	1.66	1,332	794	365	290	232	0.206	0.265	0.125	0.293	0.222	12.8	16.1
185	16.3	26.5	3.4	31.1	35.7	2.0	153.9	41.2	1.85	1,473	825	415	325	260	0.164	0.211	0.121	0.243	0.238	16.0	17.2
240	18.9	29.0	3.4	33.7	38.3	2.0	163.4	44.0	2.12	1,658	880	485	375	300	0.125	0.162	0.212	0.267	0.267	21.0	18.2
300	21.2	31.3	3.4	36.0	40.6	2.0	175.9	46.3	2.43	1,812	926	550	415	332	0.100	0.133	0.296	0.325	0.292	26.3	19.2
400	23.9	34.0	3.4	38.7	43.3	2.0	188.5	49.4	2.79	2,155	988	630	465	372	0.078	0.109	0.375	0.391	0.322	33.8	21.0
500	27.2	37.3	3.4	42.2	47.8	2.5	260.2	54.1	3.45	2,482	1082	720	520	416	0.061	0.091	0.452	0.461	0.358	43.4	29.0
630	31.2	41.3	3.4	46.4	52.0	2.5	279.8	58.5	4.07	2,864	1170	800	570	456	0.047	0.074	0.517	0.522	0.401	56.0	31.2

Cable Identification:

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



Item	Description
1	Aluminium conductor water blocked
2	Semi-conductive conductor screen
3	TR XLPE Insulation
4	Semi-conductive core screen
5	Semi-conductive water blocking bedding tape
6	Copper tape screen
7	Non-conductive water blocking tape
8	Bedding
9	Aluminium wire armouring
10	Sheath

Revision: R03 02/08/2022



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