

# M-TEC

## 3 Core

Copper, XLPE Insulated, FRPVC / LHFRPVC, SWA, FRPVC / LHFRPVC (Type A) Armoured

SIZE CODE: XL 3x(conductor size)FR / LH 22kV

## Application

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

## Construction

3 Core, circular Copper stranded conductor, XLPE insulated, individually Copper tape screened, flame retardant PVC or low halogen FRPVC bedded, galvanized steel wire armoured, flame retardant PVC sheathed.

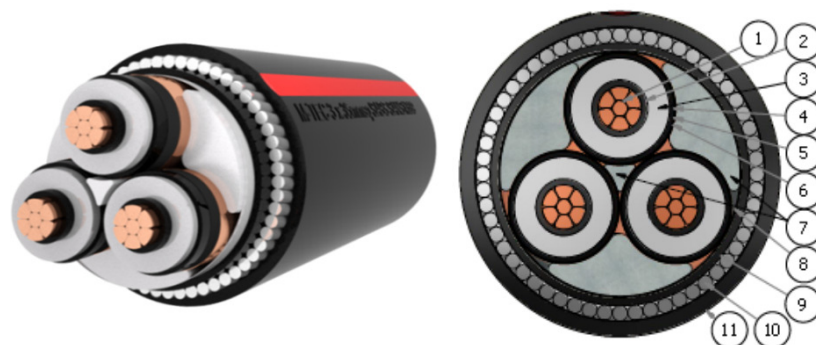
**Specification:** SANS 1339

**Voltage Rating:** 12.7 / 22kV

Physical properties and dimensions											Electrical Properties									
Conductor Size	Conductor diameter	Insulation diameter	Bedding diameter	Armour			Cable diameter	Cable mass	Gross mass (300m)	Bending radius	Current rating			Resistance $\Omega$ /km max		Reactance $\Omega$ /km	Impedance $\Omega$ /km	Capacitance $\mu$ F/km	Short circuit ratings	
				diameter	wire diameter	total area					Amps			dc @ 20°C	ac @ 90°C				Symmetrical	Earth fault
											air	ground	ducts							
mm <sup>2</sup> Nom.	mm Nom.	mm Nom.	mm Nom.	mm Nom.	mm Nom.	mm <sup>2</sup> Min.	mm Nom.	kg/m Nom.	kg Nom.	mm min.	air	ground	ducts	@ 20°C	@ 90°C	$\Omega$ /km	$\Omega$ /km	$\mu$ F/km	kA (1sec)	
25	6.05	20.5	50.5	55.5	2.50	314.2	61.1	5.9	2,329	733	138	130	116	0.727	0.927	0.133	0.937	0.153	3.4	15.3
35	7.15	21.6	52.9	57.9	2.50	328.9	63.7	6.5	2,493	764	166	158	140	0.524	0.668	0.126	0.680	0.167	4.7	16.0
50	8.25	22.7	55.3	60.3	2.50	456.5	66.2	8.0	2,964	795	209	195	167	0.387	0.493	0.121	0.508	0.181	6.4	22.3
70	9.95	24.5	59.2	65.5	3.15	459.8	71.6	9.0	3,250	859	257	237	200	0.268	0.342	0.114	0.360	0.203	9.3	22.4
95	11.80	26.5	63.4	69.7	3.15	491.0	76.2	10.4	3,664	915	314	279	237	0.193	0.246	0.108	0.269	0.227	12.9	24.0
120	13.10	27.6	66.2	72.5	3.15	514.3	79.2	11.4	3,984	951	356	316	270	0.153	0.195	0.102	0.220	0.243	16.2	25.1
150	14.80	29.5	69.7	76.0	3.15	537.7	83.0	12.8	4,378	995	409	353	307	0.193	0.004	0.108	0.108	0.265	20.0	26.2
185	16.35	30.8	73.2	79.5	3.15	568.9	86.9	14.5	4,891	1043	466	400	344	0.153	0.004	0.104	0.104	0.284	25.1	27.8
240	18.90	33.5	78.9	85.2	3.15	607.9	92.8	16.9	5,610	1114	542	456	395	0.193	0.024	0.099	0.102	0.316	32.9	29.7

## Cable Identification:

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



Item No:	Description
1	Annealed Copper Stranded Conductor
2	Conductor screen Semi-conductive XLPE
3	XLPE insulation (TR)
4	Core screen Semi-conductive XLPE
5	Semi-conductive tape
6	Individually Copper tape Screened
7	Filler
8	Binding Tape
9	Bedding
10	Galvanized Steel Wire Armouring
11	Sheathing

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