

**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 wire screened, flame retardant PVC bedded, Aluminium wire armoured, medium density Polyethylene sheathed.

**Specification: SANS 1339**

Voltage Rating: 6.35/11kV

**Physical properties and dimensions**

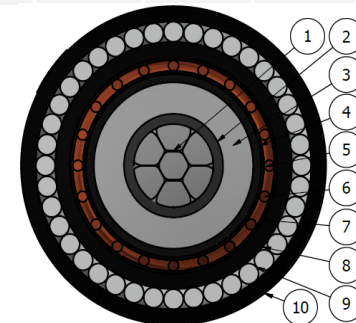
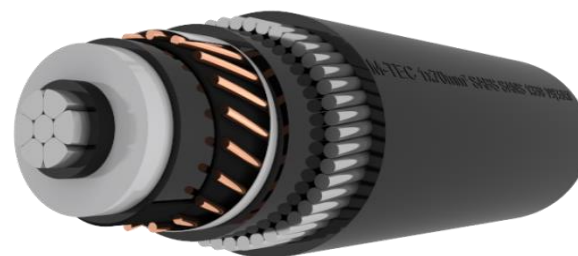
Conductor size	Conductor diameter	Insulation diameter	Insulation thickness	Bedding diameter	Armour			Cable diameter	Cable mass	Gross mass (300m)	Bending radius
					diameter	wire diameter	total area				
mm <sup>2</sup> Nom.	mm Nom.	mm Nom.	mm Nom.	mm Nom.	mm Nom.	mm Nom.	mm <sup>2</sup> Min.	mm Nom.	kg/m Nom.	kg Nom.	mm min.
50	8.2	18.4	3.4	25.7	29.5	1.60	106.6	34.4	1.71	863	687
70	9.9	20.1	3.4	27.4	31.2	1.60	112.6	36.3	1.95	1,035	725
95	11.8	21.9	3.4	29.2	33.0	1.60	120.6	38.1	2.15	1,096	762
120	13.1	23.2	3.4	30.5	34.3	1.60	124.7	39.6	2.31	1,244	792
150	14.8	24.9	3.4	32.2	36.8	2.00	166.5	42.3	2.79	1,387	847
185	16.3	26.5	3.4	33.8	38.4	2.00	172.8	43.9	3.00	1,451	878
240	18.9	29.0	3.4	36.3	40.9	2.00	185.4	46.6	3.37	1,462	933
300	21.2	31.3	3.4	38.6	43.2	2.00	197.9	48.9	3.72	1,666	979
400	23.9	34.0	3.4	41.3	45.9	2.00	210.5	52.0	4.19	1,707	1041
500	27.2	37.3	3.4	45.4	45.4	2.50	289.6	57.3	5.33	2,148	1146
630	31.2	41.3	3.4	49.0	54.6	2.50	314.2	61.2	6.05	2,266	1223

**Electrical Properties**

Current rating			Resistance Ω/km max		Reactance Ω /km	Impedance Ω /km	Capacitance μF/km	Short circuit ratings	
Amps			dc @ 20°C	ac @ 90°C				Symmetrical	Earth fault
air	ground	ducts					kA (1sec)		
190	160	125	0.641	0.822	0.167	0.839	0.141	4.0	7.1
235	195	155	0.443	0.568	0.158	0.590	0.157	5.8	7.6
285	230	180	0.320	0.411	0.148	0.436	0.173	8.0	8.1
325	260	205	0.253	0.325	0.143	0.355	0.185	10.2	8.4
370	290	230	0.206	0.265	0.127	0.293	0.200	12.5	11.9
420	325	260	0.164	0.211	0.122	0.244	0.214	15.7	12.4
485	370	290	0.125	0.162	0.127	0.206	0.200	20.6	13.3
550	415	330	0.100	0.133	0.114	0.175	0.358	25.7	14.2
630	460	360	0.078	0.108	0.109	0.154	0.503	33.1	15.1
715	515	410	0.061	0.087	0.107	0.139	0.554	42.5	13.3
810	570	450	0.047	0.071	0.103	0.125	0.616	55.0	14.4

**Cable Identification:**

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



Item	Description
1	Aluminium conductor
2	Semi-conductive conductor screen
3	TR XLPE Insulation
4	Semi-conductive core screen
5	Semi-conductive bedding tape
6	Copper wire screen
7	Binding tape
8	Bedding
9	Aluminium wire armour
10	Sheathing

Revision: R00 19/09/2017

