

# Medium Voltage PILC Cables

PILC/PILAC FIFC... Primary group code  
 FRPVC SWA FRPVC (red stripe) ...19111 Table + Finish code  
 LHPVC SWA LHPVC (blue stripe) ...19212

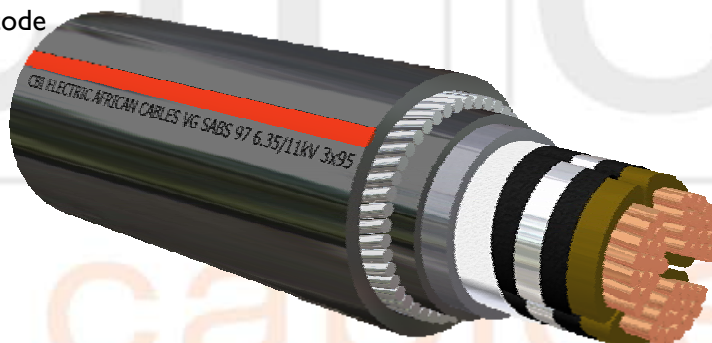
Copper 3 Core  
 6350/11000V  
 Table 19  
 SANS 97

Size code	...naaa...	3025	3035	3050	3070	3095	3120	3150	3185	3240	3300
Conductor size	mm <sup>2</sup> nom	25*	35*	50*	70	95	120	150	185	240	300
Conductor depth	mm app.	6.1	7.2	8.3	8.3	9.8	11.0	12.2	13.7	15.7	17.6
Insulated depth	mm app.	12.8	14.0	15.1	15.1	16.5	17.7	18.9	20.4	22.4	24.4
Diameter over lead sheath	Mm app.	33.0	35.5	38.0	37.5	41.0	43.5	46.0	49.5	54.0	58.5
Bedding diameter	mm app.	36.0	38.0	41.0	40.5	44.0	46.5	49.5	53.0	58.0	62.0
Size of armour wires	mm	2.00	2.50	2.50	2.50	2.50	2.50	3.15	3.15	3.15	3.15
Overall diameter	mm app.	44.5	48.0	51.0	51.0	54.5	57.0	62.0	65.5	70.5	75.5
Normal drum length	m	500	500	300	300	300	300	300	300	300	300
Cable mass	kg/m app.	5.3	6.4	7.9	8.0	9.5	10.6	12.9	14.8	17.6	20.5
Gross mass (drum length)	kg app.	3150	3700	2870	2900	3350	3680	4370	4940	5780	6650
Bending radius	mm min.	534	576	612	612	654	684	744	786	846	906
<b>Current rating</b>											
In ground	Amps	115	140	165	200	240	270	305	345	395	445
In ducts	Amps	97	115	135	165	200	225	255	285	330	375
In air	Amps	120	145	175	210	260	295	335	385	455	520
<b>Positive sequence</b>											
Resistance dc @ 20°C	Ω/km max	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601
ac @ 70°C	Ω/km max	0.870	0.627	0.463	0.321	0.232	0.184	0.150	0.1201	0.0923	0.0746
Reactance	Ω/km	0.115	0.109	0.105	0.086	0.081	0.078	0.076	0.073	0.070	0.068
Impedance	Ω/km	0.878	0.637	0.475	0.333	0.245	0.200	0.168	0.141	0.116	0.101
<b>Zero sequence</b>											
Resistance	Ω/km	2.454	1.900	1.628	1.474	1.277	1.171	0.923	0.832	0.726	0.653
Reactance	Ω/km	0.117	0.113	0.109	0.111	0.106	0.103	0.100	0.097	0.094	0.091
Impedance	Ω/km	2.457	1.903	1.632	1.478	1.281	1.176	0.928	0.838	0.732	0.659
<b>Short circuit ratings</b>											
Symmetrical	kA (1sec)	3.7	5.0	6.9	9.9	13.8	17.4	21.5	26.9	35.3	44.3
Earth fault(Symmetrical limit)	kA (1sec)	12.9	16.2	17.6	17.8	19.5	20.7	26.6	28.8	32.2	35.1

Last updated May 2006

\* Circular Conductor

When ordering please quote: primary + size + table + finish code  
 e.g. FIFC 3120 19 111



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