

# Medium Voltage PILC Cables

Aluminium 3 Core  
6350/11000V  
Table 19  
SANS 97

PILC/PILAC  
FRPVC SWA FRPCV (red stripe)  
LHPVC SWA LHPVC (blue stripe)

FIFA...  
...19111  
...19212

Primary group code  
Table + Finish code

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.	5.9	7.0	8.3	8.3	9.8	11.0	12.2	13.7	15.7	17.6
Insulated depth	mm app.	12.7	13.7	15.1	15.1	16.5	17.7	18.9	20.4	22.4	24.4
Diameter over lead sheath	mm app.	32.5	35.0	38.0	37.5	41.0	43.5	46.0	49.5	54.0	58.5
Bedding diameter	mm app.	35.5	37.5	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.	44.0	47.5	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.	4.8	5.6	6.4	6.8	7.7	8.4	10.2	11.4	13.3	16.2
Gross mass (drum length)	kg app.	2900	3300	2420	2540	2810	3020	3560	3920	4490	5360
Bending radius	mm min.	528	570	612	612	654	684	744	786	846	906
<b>Current rating</b>											
In ground	Amps	90	110	130	155	185	210	235	270	310	345
In ducts	Amps	75	90	105	130	155	175	200	225	260	295
In air	Amps	95	115	135	165	200	230	265	300	355	400
<b>Positive sequence</b>											
Resistance dc @ 20°C	Ω/km max	1.200	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100
ac @ 70°C	Ω/km max	1.442	1.043	0.770	0.533	0.385	0.305	0.248	0.198	0.152	0.122
Reactance	Ω/km	0.116	0.109	0.105	0.086	0.081	0.078	0.076	0.073	0.070	0.068
Impedance	Ω/km	1.447	1.049	0.777	0.540	0.393	0.314	0.260	0.211	0.167	0.139
<b>Zero sequence</b>											
Resistance	Ω/km	3.048	2.331	1.935	1.685	1.430	1.291	1.022	0.910	0.785	0.701
Reactance	Ω/km	0.119	0.113	0.109	0.111	0.106	0.103	0.100	0.097	0.094	0.091
Impedance	Ω/km	3.050	2.334	1.938	1.689	1.434	1.295	1.027	0.915	0.791	0.707
<b>Short circuit ratings</b>											
Symmetrical	kA (1sec)	2.3	3.2	4.4	6.4	8.8	11.1	13.7	17.2	22.5	28.2
Earth fault (Symmetrical limit)	kA (1sec)	12.7	16	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. FIFA 3120 19 111



POWER BY INNOVATION... INNOVATION THROUGH PARTNERSHIPS

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