

Medium Voltage PILC Cables

PILC/PILAC 6.35/11kV copper FIFC... Primary group code
 FRPVC DTA FRPVC (red stripe) ...19191 Table + Finish code
 LHPVC DTA LHPVC (blue stripe) ...19292

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 ² 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.	12.9	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
Thickness of DSTA	mm	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Overall diameter	mm app.	44.0	46.5	49.0	49.0	52.5	55.5	59.0	63.0	67.5	72.5
Normal drum length	m	500	500	300	300	300	300	300	300	300	300
Cable mass	kg/m app.	4.8	5.4	6.2	7.0	8.3	9.4	10.9	12.6	15.3	18.0
Gross mass (drum length)	kg app.	2900	3200	2360	2600	2990	3320	3770	4280	5090	5900
Bending radius	mm min.	528	558	588	588	630	666	708	756	810	870
Current rating											
In ground	Amps	115	140	165	200	240	270	300	340	395	440
In ducts	Amps	96	115	135	165	200	225	250	285	330	370
In air	Amps	120	145	175	210	255	295	330	380	445	510
Positive sequence											
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
Zero sequence											
Resistance	Ω/km	5.212	4.671	3.984	3.704	3.164	2.934	2.596	2.281	1.887	1.659
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	5.213	4.672	3.985	3.706	3.166	2.936	2.598	2.283	1.889	1.661
Short circuit ratings											
Symmetrical	kA (1sec)	3.7	5.1	6.9	9.9	13.8	17.4	21.5	26.9	35.3	44.3
Earth fault (Symmetrical limit)	kA (1sec)	4.0	4.3	4.9	5.1	5.9	6.3	7.1	8.0	9.7	11.0

Last updated May 2006

* Circular Conductor

When ordering please quote: primary + size + table + finish code
 e.g. FIFC 3120 19 191



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