

Medium Voltage Paper Insulated Lead Alloy Covered Cables (PILAC)

Copper 3 Core
6350/11000V
Table 19
SANS 97

PILAC F1FC... Primary group code
FRPVC SWA FRPVC (red stripe) ...39 111 Table + Finish code
LHPVC SWA LHPVC (blue stripe) ...39 212

Size code	...naaa...	3016	3025	3035	3050	3070	3095	3120	3150	3185	3240	3300
Conductor size	mm ² nom	16*	25*	35*	50*	70	95	120	150	185	240	300
Conductor depth	mm app.	5.2	6.1	7.2	8.3	8.3	9.8	11.0	12.2	13.7	15.7	17.6
Insulated depth	mm app.	11.9	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.	31.0	33.0	35.5	38.0	37.5	41.0	43.5	46.0	49.5	54.0	58.5
Bedding diameter	mm app.	33.5	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	2.00	2.50	2.50	2.50	2.50	2.50	3.15	3.15	3.15	3.15
Overall diameter	mm app.	42.5	44.5	48.0	51.0	51.0	54.5	57.0	62.0	65.5	70.5	75.5
Normal drum length	m	300	500	500	300	300	300	300	300	300	300	300
Cable mass	kg/m app.	4.9	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.	1470	3150	3700	2870	2900	3350	3680	4370	4940	5780	6650
Bending radius	mm min.	510	534	576	612	612	654	684	744	786	846	906
Current rating												
In ground	Amps	91	115	140	165	200	240	270	305	345	395	445
In ducts	Amps	75	97	115	135	165	200	225	255	285	330	375
In air	Amps	93	120	145	175	210	260	295	335	385	455	520
Positive sequence												
Resistance dc @ 20°C	Ω/km max	1.15	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	1.376	0.870	0.627	0.463	0.321	0.232	0.184	0.150	0.1201	0.0923	0.0746
Reactance	Ω/km	0.121	0.115	0.109	0.105	0.086	0.081	0.078	0.076	0.073	0.070	0.068
Impedance	Ω/km	1.381	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	3.061	2.454	1.900	1.628	1.474	1.277	1.171	0.923	0.832	0.726	0.653
Reactance	Ω/km	0.123	0.117	0.113	0.109	0.111	0.106	0.103	0.100	0.097	0.094	0.091
Impedance	Ω/km	3.064	2.457	1.903	1.632	1.478	1.281	1.176	0.928	0.838	0.732	0.659
Short circuit ratings												
Symmetrical	kA (1sec)	2.3	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)	12.1	12.9	16.2	17.6	17.8	19.5	20.7	26.6	28.8	32.2	35.1

* Circular Conductor

When ordering please quote: primary + size + table + finish code
e.g. F1FC 3120 39 111 0K0S



Soil thermal resistance = 1,2Km/W
Soil temperature = 25°C
Depth of burial = 800mm
Air temperature = 30°C
+5% tolerance on dimensions

POWER BY INNOVATION... INNOVATION THROUGH PARTNERSHIPS