

# Medium Voltage Paper Insulated Lead Alloy Covered (PILAC)

PILC/PILAC	F1JA...	Primary group code	Aluminium 1 Core
FRPVC (red stripe)	...32 001	Table + Finish code	19000/33000V
LHPVC (blue stripe)	...32 002		Table 12
PE	...32 008		SANS 97

Size code	...naaa...	1150	1185	1240	1300	1400	1500	1630	1800	1999
Conductor size	mm <sup>2</sup> nom	150	185	240	300	400	500	630	800	1000
Conductor depth	Mm app.	14.4	15.9	18.4	20.5	23.1	26.4	29.7	34.2	38.9
Insulated depth	mm app.	29.4	30.9	33.4	35.5	38.1	41.4	44.8	49.2	54.0
Diameter over lead sheath	mm app.	35.0	36.5	39.5	41.5	44.5	48.0	51.5	56.5	61.5
Overall diameter	mm app.	38.5	40.0	43.0	45.5	48.5	52.0	56.0	61.0	66.0
Normal drum length	m	500	500	500	500	500	500	500	500	500
Cable mass	kg/m app.	3.7	3.9	4.5	5.0	5.7	6.6	7.6	9.0	10.5
Gross mass (drum length)	kg app.	2350	2450	2750	3000	3350	3800	4300	5000	5750
Bending radius	mm min.	963	1000	1075	1138	1213	1300	1400	1525	1650
<b>Current rating</b>										
In ground	Amps	245	280	325	365	415	475	540	605	700
In ducts	Amps	225	255	295	330	380	430	485	540	620
In air	Amps	285	325	385	445	515	600	700	805	950
<b>Positive sequence</b>										
Resistance dc @ 20°C	Ω/km max	0.206	0.164	0.125	0.100	0.0778	0.0605	0.0469	0.0367	0.029
ac @ 70°C	Ω/km	0.248	0.198	0.151	0.121	0.0949	0.0747	0.0590	0.0474	0.036
Reactance	Ω/km	0.125	0.122	0.117	0.111	0.107	0.103	0.099	0.096	0.093
Impedance	Ω/km	0.278	0.232	0.191	0.164	0.143	0.127	0.116	0.107	0.100
<b>Zero sequence</b>										
Resistance	Ω/km	1.452	1.350	1.163	1.079	0.943	0.819	0.717	0.621	0.540
Reactance	Ω/km	0.073	0.069	0.065	0.059	0.055	0.052	0.048	0.045	0.042
Impedance	Ω/km	1.453	1.352	1.165	1.080	0.945	0.821	0.719	0.623	0.542
<b>Short circuit ratings</b>										
Symmetrical	kA (1sec)	13.7	17.2	22.5	28.2	36.2	46.5	60.0	76.7	96.8
Earth fault(Symmetrical limit)	kA (1sec)	5.2	5.4	6.2	6.5	7.4	8.4	9.5	10.9	12.4

*Last updated January 2026*

When ordering please quote: primary + size + table + finish code  
e.g. F1JA 1500 32 001 0K0S



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

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