

# Medium Voltage Paper Insulated Lead Alloy Covered (PILAC)

PILAC	F1HA...	Primary group code	Aluminium 1 Core
FRPVC AWA FRPVC (red stripe)	...31 141	Table + Finish code	12700/22000V
LHPVC AWA LHPVC (blue stripe)	...31 242		Table 11
			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 diameter	mm app.	14,4	15,9	18,4	20,5	23,1	26,4	29,70	34,2	38,9
Insulated diameter	mm app.	27,4	28,9	31,4	33,5	36,1	39,4	42,8	47,2	52,0
Diameter over lead sheath	mm app.	32,5	34,0	36,5	39,0	42,0	45,0	48,5	53,5	58,5
Bedding diameter	mm app.	35,0	37,0	39,5	42,0	45,0	48,0	52,0	57,0	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
Overall diameter	mm app.	43,5	46,5	49,5	52,00	55,0	58,5	64,5	69,5	75,0
Normal drum length	m	500	500	500	500	500	500	500	500	500
Cable mass	kg/m app.	4,2	4,7	5,3	6,0	6,8	7,6	9,1	10,5	12,4
Gross mass (drum length)	kg app.	2600	2850	3150	3500	3900	4300	5050	5750	6700
Bending radius	mm min.	1088	1163	1238	1300	1375	1463	1613	1738	1875
<b>Current rating</b>										
In ground	Amps	242	270	309	343	384	428	467	512	566
In ducts	Amps	221	246	281	311	347	386	418	455	500
In air	Amps	286	324	379	429	490	559	627	704	801
<b>Positive sequence</b>										
Resistance dc @ 20°C	Ω/km max	0,206	0,164	0,125	0,100	0,078	0,061	0,047	0,037	0,029
ac @ 70°C	Ω/km	0,248	0,198	0,151	0,121	0,095	0,074	0,059	0,047	0,036
Reactance	Ω/km	0,133	0,131	0,126	0,119	0,115	0,111	0,108	0,104	0,101
Impedance	Ω/km	0,281	0,237	0,197	0,170	0,149	0,134	0,123	0,114	0,107
<b>Zero sequence</b>										
Resistance	Ω/km	0,400	0,315	0,260	0,223	0,190	0,163	0,124	0,106	0,090
Reactance	Ω/km	0,067	0,064	0,060	0,054	0,051	0,048	0,045	0,042	0,040
Impedance	Ω/km	0,406	0,321	0,266	0,230	0,197	0,170	0,132	0,114	0,099
<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)	21,5	27,4	29,7	31,7	34,2	36,7	48,8	53,5	59,3

Last updated January 2026

When ordering please quote: primary + size + table + finish code  
e.g. F1HA 1500 31 141 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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