

Low Voltage Mains 4 Core PVC Cables

1kV Al Unarmoured

Description 4 Core Al PVC FRPVC, 1000 V

F4CA 4nnn ZZ 001 0K0S

Description 4 Core Al PVC LHFRPVC, 1000 V

F4CA 4nnn ZZ 002 0K0S

Specification SANS 1507

Last updated: December 2025

PHYSICAL	... naaa ...	4025	4035	4050	4070	4095	4120	4150	4185	4240	4300	4400
Conductor size	mm ² nom	25	35	50	70	95	120	150	185	240	300	400
Conductor diameter	mm app	5,7	6,7	7,8	9,4	11,1	12,5	13,7	15,5	17,7	20,0	22,5
Insulation diameter	mm app	8,2	9,2	10,7	12,3	14,4	15,8	17,5	19,7	22,4	25,0	28,0
Layup diameter	mm app	19,2	21,5	24,9	28,6	33,8	37,0	40,7	46,0	52,0	58,1	65,0
Armour diameter	mm app	-	-	-	-	-	-	-	-	-	-	-
Cable diameter	mm app	23,1	25,8	29,2	33,0	38,6	41,8	45,9	51,6	58,1	64,7	72,4
Length of cable on a drum	m	300	300	300	300	300	300	300	300	300	300	300
Cable mass (approximate)	kg/m app	0,7	0,9	1,1	1,4	1,9	2,3	2,8	3,5	4,5	5,5	6,9
Gross mass on drum	kg app	249	308	407	531	681	867	1020	1264	1606	2067	2483
Bending radius	mm min	184	206	233	264	308	334	367	413	465	517	579

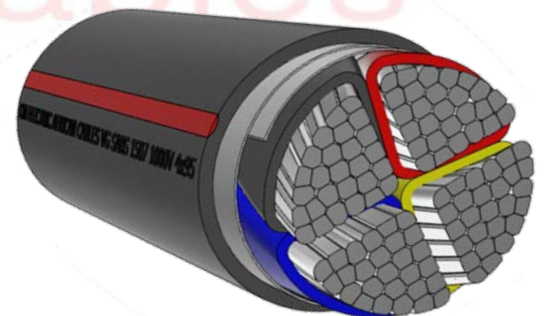
ELECTRICAL												
DC Resistance @ 20 °C	Ω/km	1,200	0,868	0,641	0,443	0,320	0,253	0,206	0,164	0,125	0,100	0,078
AC Resistance @ 70 °C	Ω/km	1,442	1,043	0,770	0,533	0,385	0,305	0,248	0,198	0,151	0,122	0,095
Reactance X+	Ω/km	0,054	0,057	0,056	0,056	0,055	0,053	0,056	0,057	0,056	0,056	0,054
Impedance Z+	Ω/km	1,443	1,045	0,772	0,536	0,389	0,309	0,254	0,206	0,161	0,134	0,110
Capacitance C+	µF/km	0,424	0,468	0,465	0,524	0,533	0,574	0,565	0,573	0,586	0,599	0,614
Resistance Ro	Ω/km	5,77	4,17	3,082	2,130	1,540	1,218	0,993	0,792	0,606	0,487	0,382
Reactance Xo	Ω/km	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

CURRENT RATINGS												
Ground	Amps	95	114	136	168	200	229	256	292	340	386	442
Ducts in ground	Amps	76	91	108	134	160	184	206	235	274	312	357
Air in Shade	Amps	85	104	127	162	199	233	266	310	369	428	501
Air in sunlight	Amps	67	81	99	124	151	176	200	231	274	316	367

SHORT CIRCUIT RATING												
Symmetrical (160 °C)	kA (1 sec)	1,9	2,7	3,8	5,3	7,2	9,1	11,4	14,1	18,2	22,8	30,4
Earth fault (160 °C)	kA (1 sec)	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Three Phase Volt Drop	mV/A/m	2,50	1,81	1,34	0,93	0,67	0,54	0,44	0,36	0,28	0,23	0,19

The ratings above are based on standard laying conditions for a single circuit in isolation, with the following parameters:

- Conductor temperature = 70 °C
- Soil thermal resistance = 1,2 Km/W
- Soil temperature = 25 °C
- Air temperature = 30 °C
- Depth of burial = 500 mm
- Single circuit in isolation
- 5% tolerance on dimensions



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