

**Description:** 19000/33000V, Copper, 1 Core, Type A F2JC...  
**Bedding/Armouring/Sheathing:** FRPVC/AWA/FRPVC (red stripe) ...141  
 LHPVC/AWA/LHPVC (blue stripe) ...242  
**Specification:** SANS 1339

Last updated: October 2016

Size code	...n/a...	1050	1070	1095	1120	1150	1185	1240	1300	1400	1500	1630	1800	1999
<b>PHYSICAL DIMENSIONS</b>														
Conductor size	mm <sup>2</sup> nom	50	70	95	120	150	185	240	300	400	500	630	800	1000
Conductor diameter	mm app.	8.35	10.05	11.90	13.25	14.70	16.23	18.46	20.75	24.05	27.42	30.45	34.25	38.81
Insulation diameter	mm app.	26.45	28.15	30.00	31.35	32.80	34.33	36.56	38.85	42.95	41.98	50.13	53.93	58.49
Bedding diameter	mm app.	31.30	33.00	34.85	36.20	37.86	39.39	41.62	44.11	48.21	47.24	55.60	59.60	64.37
Armour diameter	mm app.	36.30	37.00	38.85	40.20	42.86	44.39	46.62	49.11	53.21	52.24	60.60	65.90	70.67
Cable diameter	mm app.	40.59	42.29	44.35	45.70	48.56	50.29	52.52	55.22	59.53	58.35	67.32	73.04	78.01
<b>TECHNICAL DATA</b>														
Normal drum length	m	500	500	500	500	500	500	500	500	500	500	500	500	500
Cable mass (approximate)	kg/m	2.15	2.45	2.81	3.11	3.65	4.11	4.82	5.59	6.59	7.94	9.44	11.71	13.98
Gross mass ( 500 m )	kg app.	1565	1700	1900	2050	2320	2550	3090	3475	3975	4650	5405	6550	8250
Bending radius	mm min.	812	846	887	914	971	1006	1050	1104	1191	1167	1346	1461	1560
DC Resistance @ 20°C	Ω/km	0.387	0.268	0.193	0.153	0.124	0.099	0.075	0.060	0.047	0.037	0.028	0.022	0.018
AC Resistance @ 90°C	Ω/km	0.494	0.342	0.247	0.196	0.159	0.128	0.098	0.079	0.063	0.051	0.041	0.034	0.030
Reactance	Ω/km	0.163	0.154	0.146	0.139	0.135	0.131	0.126	0.122	0.117	0.107	0.110	0.107	0.104
Impedance	Ω/km	0.520	0.375	0.287	0.240	0.209	0.183	0.159	0.145	0.133	0.119	0.117	0.113	0.108
Capacitance	µF/km	0.144	0.159	0.176	0.188	0.200	0.214	0.233	0.253	0.289	0.444	0.351	0.383	0.422
Zero Sequence Resistance	Ω/km	0.609	0.506	0.402	0.345	0.275	0.239	0.203	0.178	0.154	0.143	0.119	0.091	0.082
Zero Sequence Reactance	Ω/km	0.107	0.099	0.091	0.084	0.080	0.076	0.071	0.067	0.063	0.054	0.057	0.054	0.051
<b>Current rating:</b>														
In ground	Amps	205	250	296	333	368	409	463	511	565	618	670	703	742
In air in shade	Amps	246	304	367	418	470	529	610	684	774	863	955	1028	1108
In air in direct sunlight	Amps	193	239	288	328	367	413	476	533	601	672	739	794	853
<b>Short circuit ratings:</b>														
Symmetrical (250°C)	kA (1sec)	6.4	9.2	12.8	16.2	20.0	25.0	32.8	41.2	52.7	67.6	87.5	112.0	140.6
Earth fault (200°C)	kA (1sec)	16.8	17.7	18.7	19.4	25.1	26.0	27.4	29.0	31.6	31.0	36.2	31.6	34.1

Ratings above are based on standard laying conditions for a single circuit in isolation as follows:

Soil thermal resistance = 1.2Km/W

Soil temperature = 25°C

Depth of burial = 800mm

Air temperature = 30°C

5% tolerance on dimensions

Ratings for solid bonded, Trefoil formation

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