

<b>Description:</b>	<b>3800/6600V, Aluminium, 1 Core, Type A</b>	<b>F2EA...</b>
<b>Bedding/ Sheathing:</b>	<b>FRPVC/AWA/FRPVC (red stripe)</b>	<b>...141</b>
	<b>LHPVC/AWA/LHPVC (blue stripe)</b>	<b>...242</b>
<b>Specification:</b>	<b>SANS 1339</b>	

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.	8.50	10.00	12.00	13.50	15.00	16.50	19.00	21.50	24.00	27.50	31.50	35.00	39.00
Insulation diameter	mm app.	15.00	17.00	18.50	20.00	21.50	23.00	26.00	28.50	33.50	37.50	41.50	45.50	50.00
Bedding diameter	mm app.	20.00	21.50	23.50	24.50	26.00	28.00	30.50	33.50	38.00	42.50	46.50	51.00	55.00
Armour diameter	mm app.	23.00	24.50	26.50	28.00	29.50	32.00	34.50	37.50	42.00	47.50	51.50	56.00	60.00
Cable diameter	mm app.	27.00	29.00	31.00	32.00	34.00	37.00	40.00	42.00	47.00	53.00	58.00	62.00	67.00
<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	0.96	1.09	1.26	1.38	1.53	1.79	2.09	2.41	2.99	3.69	4.36	5.08	6.0
Gross mass ( 500 m )	kg app.	655	715	850	910	990	1120	1390	1550	1855	2335	2670	3295	3825
Bending radius	mm min.	540	580	620	640	680	740	800	840	940	1060	1160	1240	1340
DC Resistance @ 20°C	Ω/km	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.078	0.061	0.047	0.037	0.029
AC Resistance @ 90°C	Ω/km	0.822	0.568	0.411	0.325	0.265	0.211	0.162	0.130	0.102	0.081	0.064	0.052	0.044
Reactance	Ω/km	0.136	0.128	0.121	0.115	0.112	0.111	0.107	0.102	0.102	0.101	0.098	0.096	0.094
Impedance	Ω/km	0.833	0.582	0.428	0.345	0.288	0.239	0.194	0.166	0.144	0.129	0.117	0.109	0.103
Capacitance	μF/km	0.523	0.518	0.662	0.722	0.782	0.841	0.831	0.918	0.644	0.672	0.752	0.771	0.797
Zero Sequence Resistance	Ω/km	1.141	0.863	0.683	0.530	0.458	0.383	0.319	0.274	0.229	0.174	0.149	0.129	0.113
Zero Sequence Reactance	Ω/km	0.079	0.070	0.064	0.059	0.056	0.054	0.050	0.048	0.048	0.047	0.044	0.043	0.041
<b>Current rating:</b>														
In ground	Amps	161	195	233	264	294	328	376	421	472	519	570	621	664
In air in shade	Amps	186	230	280	324	365	415	485	555	636	719	805	897	976
In air in direct sunlight	Amps	149	184	223	258	290	329	383	438	500	562	628	698	757
<b>Short circuit ratings:</b>														
Symmetrical (250°C)	kA (1sec)	4.0	5.8	8.1	10.2	12.6	15.8	20.7	25.9	33.3	42.8	55.2	70.6	89.0
Earth fault (200°C)	kA (1sec)	9.8	10.5	11.4	12.0	12.7	16.5	18.0	19.6	22.2	30.1	32.8	35.9	38.6

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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