

**Description:** Copper , Paper Insulated Lead Covered , 3 Core

**F1FC...Primary Code**

**Bedding/Armouring/Sheathing** FRPVC/ DSTA/ FRPVC (Red stripe)  
LHFRPVC/ DSTA/ LHFRPVC (Blue stripe)

**...39 191 Finish Code**  
**...39 292**

**Specification:** SANS 97, Table 19

Last updated: May 2006

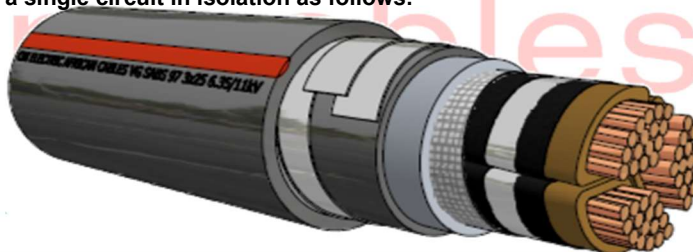
Size code	...n/a...	3025	3035	3050	3070	3095	3120	3150	3185	3240	3300
<b>PHYSICAL DIMENSIONS</b>											
Conductor size	mm <sup>2</sup> nom	25*	35*	50*	70	95	120	150	185	240	300
Conductor diam./depth	mm app.	6.1	7.2	8.3	8.3	9.8	11.0	12.2	13.7	15.7	17.6
Insulation diam./depth	mm app.	12.9	14.0	15.1	15.1	16.5	17.7	18.9	20.4	22.4	24.4
Diameter over lead	mm app.	33.0	35.5	38.0	37.5	41.0	43.5	46.0	49.5	54.0	58.5
Bedding diameter	mm app.	36.0	38.0	41.0	40.5	44.0	46.5	49.5	53.0	58.0	62.0
Thickness of DSTA	mm app.	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Cable diameter	mm app.	44.0	46.5	49.0	49.0	52.5	55.5	59.0	63.0	67.5	72.5
<b>TECHNICAL DATA</b>											
Normal drum length	m	500	500	300	300	300	300	300	300	300	300
Cable mass	kg/m	4.8	5.4	6.2	7.0	8.3	9.4	10.9	12.6	15.3	18.0
Gross mass	kg app.	2900	3200	2360	2600	2990	3320	3770	4280	5090	5900
Bending radius	mm min.	528	558	588	588	630	666	708	756	810	870
DC Resistance @ 20°C	Ω/km	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601
AC Resistance @ 70°C	Ω/km	0.870	0.627	0.463	0.321	0.232	0.184	0.150	0.1201	0.0923	0.0746
Reactance	Ω/km	0.115	0.109	0.105	0.086	0.081	0.078	0.076	0.073	0.070	0.068
Impedance	Ω/km	0.878	0.637	0.475	0.333	0.245	0.200	0.168	0.141	0.116	0.101
Capacitance	uF/km	0.334	0.372	0.414	0.413	0.465	0.509	0.552	0.606	0.678	0.748
<b>Zero Sequence</b>											
Resistance	Ω/km	5.212	4.671	3.984	3.704	3.164	2.934	2.596	2.281	1.887	1.659
Reactance	Ω/km	0.117	0.113	0.109	0.111	0.106	0.103	0.100	0.097	0.094	0.091
Impedance	Ω/km	5.213	4.672	3.985	3.706	3.166	2.936	2.598	2.283	1.889	1.661
<b>Current rating:</b>											
In ground	Amps	115	140	165	200	240	270	300	340	395	440
In ducts	Amps	96	115	135	165	200	225	250	285	330	370
In air in shade	Amps	120	145	175	210	255	295	330	380	445	510
<b>Short circuit ratings:</b>											
Symmetrical	kA (1sec)	3.7	5.1	6.9	9.9	13.8	17.4	21.5	26.9	35.3	44.3
Earth fault	kA (1sec)	4.0	4.3	4.9	5.1	5.9	6.3	7.1	8.0	9.7	11.0

When ordering please quote: primary + size + finish code e.g. F1FC 3025 19 191 **Pure Lead**  
Or F1FC 3025 39 191 **Lead Alloy E**

\*Circular Conductors

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



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