

## 11kV XLPE – Copper Технические характеристики



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Ярославль (4852)69-52-93

<b>Description:</b>	<b>6350/11000V, Copper, 1 Core, Type A</b>	<b>F2FC...</b>
<b>Bedding/Armouring/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>	

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.	17.02	18.72	20.57	21.92	23.37	24.90	27.13	29.42	33.52	37.67	40.70	44.50	49.06
Bedding diameter	mm app.	21.87	23.57	25.42	26.77	28.22	29.75	31.98	34.27	38.37	42.73	45.96	49.76	54.53
Armour diameter	mm app.	25.07	26.77	28.62	29.97	32.22	33.75	35.98	38.27	42.37	47.73	50.96	54.76	59.53
Cable diameter	mm app.	29.54	31.45	33.30	34.85	37.31	38.84	41.27	43.56	48.07	53.63	57.07	61.08	66.25
<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	1.353	1.634	1.955	2.258	2.692	3.096	3.743	4.417	5.527	6.936	8.481	10.35	12.61
Gross mass ( 500 m )	kg app.	780.5	921	1160	1311	1552	1742	2208	2466	3096	3868	4869	5645	6886
Bending radius	mm min.	591	629	666	697	746	777	825	871	961	1073	1141	1222	1325
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	0.080	0.064	0.052	0.042	0.036	0.031
Reactance	Ω/km	0.143	0.135	0.128	0.122	0.119	0.115	0.111	0.107	0.103	0.102	0.099	0.096	0.093
Impedance	Ω/km	0.514	0.368	0.278	0.231	0.199	0.172	0.148	0.133	0.121	0.114	0.108	0.103	0.098
Capacitance	μF/km	0.264	0.298	0.336	0.363	0.392	0.423	0.468	0.514	0.596	0.679	0.739	0.815	0.906
Zero Sequence Resistance	Ω/km	0.793	0.621	0.506	0.442	0.349	0.308	0.266	0.236	0.203	0.152	0.135	0.120	0.108
Zero Sequence Reactance	Ω/km	0.085	0.078	0.072	0.065	0.062	0.059	0.055	0.052	0.049	0.048	0.045	0.043	0.040
<b>Current rating:</b>														
In ground	Amps	206	251	298	336	371	414	470	519	574	617	665	707	742
In air in shade	Amps	241	298	361	412	465	526	608	684	775	857	941	1023	1095
In air in direct sunlight	Amps	192	237	287	327	368	416	480	539	609	670	734	796	850
<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)	9.7	10.4	11.1	11.7	15.3	16.0	17.2	18.4	20.5	28.1	30.2	32.5	35.5

**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

<b>Description:</b>	<b>6350/11000V, Copper, 1 Core, Type B</b>	<b>F2FC...</b>
<b>Sheathing:</b>	<b>FRPVC (red stripe)</b>	<b>...081</b>
	<b>LHPVC (blue stripe)</b>	<b>...082</b>
<b>Specification:</b>	<b>SANS 1339</b>	

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.	17.00	18.50	20.50	22.00	23.50	25.00	27.50	30.00	34.00	38.00	42.00	46.00	50.00
Cable diameter	mm app.	24.00	25.00	27.00	29.00	30.00	32.00	35.00	37.00	41.00	45.00	50.00	54.00	58.00
<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	0.89	1.28	1.58	1.86	2.18	2.56	3.18	3.71	4.71	5.84	7.28	9.06	11.15
Gross mass ( 500 m )	kg app.	550	755	950	1080	1275	1470	1810	2070	2625	3325	4085	4975	6280
Bending radius	mm min.	480	500	540	580	600	640	700	740	820	900	1000	1080	1160
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	0.080	0.064	0.052	0.042	0.036	0.031
Reactance	Ω/km	0.129	0.121	0.115	0.109	0.104	0.102	0.099	0.094	0.093	0.091	0.089	0.087	0.085
Impedance	Ω/km	0.510	0.363	0.272	0.224	0.190	0.164	0.139	0.123	0.113	0.104	0.098	0.094	0.090
Capacitance	μF/km	0.355	0.394	0.445	0.483	0.521	0.559	0.622	0.686	0.602	0.632	0.706	0.727	0.797
<b>Current rating:</b>														
In ground	Amps	200	250	300	339	380	426	491	552	621	695	767	836	896
In air in shade	Amps	223	287	352	404	461	524	617	709	817	939	1059	1180	1293
In air in direct sunlight	Amps	179	231	282	323	368	418	490	562	645	739	831	923	1009
<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)	2.0	2.2	2.4	2.6	2.7	2.9	3.2	3.4	3.8	4.3	4.7	5.1	5.5

**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

african cables

Description:	6350/11000V, Copper, 3 Core, Type	F2FC...
Bedding/ Armouring/ Sheathing:	A FRPVC/ SWA/ FRPVC (red stripe)	...111
Specification:	LHPVC/ SWA/ LHPVC (blue stripe)	...212
	SANS 1339	

Size code	...n/a...	3016	3025	3035	3050	3070	3095	3120	3150	3185	3240	3300	3400
<b>PHYSICAL DIMENSIONS</b>													
Conductor size	mmI nom	16	25	35	50	70	95	120	150	185	240	300	400
Conductor diameter	mm app.	4.8	6.0	7.2	8.4	9.9	11.7	13.4	14.6	16.4	18.8	20.4	24.3
Insulation diameter	mm app.	13.5	14.7	15.9	17.1	18.6	20.4	22.1	23.3	25.1	27.5	29.1	33.8
Bedding diameter	mm app.	36.6	39.4	42.0	44.8	48.0	52.1	56.0	58.6	62.6	68.0	71.7	82.1
Armour diameter	mm app.	40.6	44.4	47.0	49.8	53.0	57.1	61.0	64.9	68.9	74.3	78.0	88.4
Cable diameter	mm app.	45.3	49.3	52.1	55.1	58.5	62.8	67.1	71.2	75.5	81.3	85.4	96.1
<b>TECHNICAL DATA</b>													
Normal drum length	m	300	300	300	300	300	300	300	300	300	300	300	300
Cable mass (approximate)	kg/m	3.67	4.51	5.02	5.67	6.65	7.88	8.95	11.0	12.47	14.76	17.23	21.36
Gross mass ( 300 m )	kg app.	1277	1527	1711	1908	2242	2617	3022	3645	4087	5056	5962	7152
Bending radius	mm min.	543	591	625	661	702	754	805	855	906	976	1025	1154
DC Resistance @ 20°C	Ω/km	1.150	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.099	0.075	0.060	0.047
AC Resistance @ 90°C	Ω/km	1.466	0.927	0.668	0.494	0.342	0.247	0.196	0.159	0.128	0.099	0.080	0.064
Reactance	Ω/km	0.137	0.125	0.117	0.112	0.106	0.100	0.096	0.094	0.091	0.088	0.086	0.084
Impedance	Ω/km	1.473	0.936	0.679	0.506	0.358	0.266	0.219	0.185	0.157	0.132	0.117	0.105
Capacitance	µF/km	0.191	0.215	0.240	0.265	0.295	0.332	0.366	0.390	0.426	0.475	0.507	0.601
Zero Sequence Resistance	Ω/km	2.935	2.109	1.777	1.535	1.313	1.143	1.031	0.839	0.764	0.685	0.636	0.550
Zero Sequence Reactance	Ω/km	0.154	0.149	0.142	0.137	0.130	0.124	0.120	0.119	0.115	0.110	0.108	0.103
<b>Current rating:</b>													
In ground	Amps	106	135	161	190	231	275	310	346	387	443	491	550
In air in shade	Amps	113	147	177	211	259	313	358	403	457	529	592	678
In air in direct sunlight	Amps	100	129	156	185	227	274	312	352	398	461	515	588
<b>Short circuit ratings:</b>													
Symmetrical (250°C)	kA (1sec)	2.2	3.4	4.7	6.4	9.2	12.8	16.2	20.0	25.0	32.8	41.2	52.7
Earth fault (200°C)	kA (1sec)	11.9	15.6	16.6	17.6	18.9	20.4	21.9	28.3	30.2	32.6	34.3	39.1

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

resistance = 1.2 Km/W

Soil temperature = 25 °C

Depth of burial = 800 mm

Air temperature = 30 °C

Single circuit in isolation

5% tolerance on dimensions

Description:	6350/11000V, Copper, 3 Core, Type	F2FC...
Sheathing:	B FRPVC (red stripe)	...001
	LHPVC (blue stripe)	...002
Specification:	SANS 1339	

Size code	...n/a...	3016	3025	3035	3050	3070	3095	3120	3150	3185	3240	3300	3400
<b>PHYSICAL DIMENSIONS</b>													
Conductor size	mmI nom	16	25	35	50	70	95	120	150	185	240	300	400
Conductor diameter	mm app.	4.8	6.0	7.2	8.4	9.9	11.7	13.4	14.6	16.4	18.8	20.4	20.4
Insulation diameter	mm app.	13.5	14.7	15.9	17.1	18.6	20.4	22.1	23.3	25.1	27.5	29.1	29.1
Bedding diameter	mm app.	34.5	37.1	39.7	42.3	45.6	49.0	52.7	55.3	59.2	64.3	67.8	67.8
Cable diameter	mm app.	39.1	41.6	44.4	47.2	50.7	54.5	58.4	61.2	65.3	70.7	74.6	74.6
<b>TECHNICAL DATA</b>													
Normal drum length	m	300	300	300	300	300	300	300	300	300	300	300	300
Cable mass (approximate)	kg/m	1.74	2.133	2.61	3.11	3.86	4.60	5.43	6.43	7.61	9.46	11.50	14.16
Gross mass ( 300 m )	kg app.	626.9	814.9	964.1	1115	1363	1717	1923	2259	2614	3237	4079	4940
Bending radius	mm min.	586	625	667	709	760	818	876	918	980	1061	1119	1119
DC Resistance @ 20°C	Ω/km	1.150	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.099	0.075	0.060	0.047
AC Resistance @ 90°C	Ω/km	1.466	0.927	0.668	0.494	0.342	0.247	0.196	0.159	0.128	0.099	0.080	0.064
Reactance	Ω/km	0.138	0.126	0.118	0.112	0.106	0.100	0.096	0.094	0.091	0.088	0.086	0.086
Impedance	Ω/km	1.473	0.936	0.679	0.506	0.358	0.266	0.219	0.185	0.157	0.132	0.117	0.107
Capacitance	μF/km	0.191	0.215	0.240	0.265	0.295	0.332	0.366	0.390	0.426	0.475	0.507	0.507
<b>Current rating:</b>													
In ground	Amps	108	140	167	197	240	285	323	362	408	472	528	590
In air in shade	Amps	115	152	184	220	272	325	375	423	484	569	644	719
In air in direct sunlight	Amps	102	134	162	194	239	286	329	371	424	497	562	628
<b>Short circuit ratings:</b>													
Symmetrical (250°C)	kA (1sec)	2.2	3.4	4.7	6.4	9.2	12.8	16.2	20.0	25.0	32.8	41.2	52.7
Earth fault (200°C)	kA (1sec)	3.9	4.2	4.5	4.8	5.2	2.8	3.0	3.2	3.4	3.7	3.9	3.9

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

resistance = 1.2 Km/W

Soil temperature = 25 °C

Depth of burial = 800 mm

Air temperature = 30 °C

5% tolerance on dimensions

african cables

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<b>Вологда</b> (8172)26-41-59	<b>Магнитогорск</b> (3519)55-03-13	<b>Самара</b> (846)206-03-16	<b>Уфа</b> (347)22948 -12
<b>Воронеж</b> (473)204-51-73	<b>Москва</b> (495)268-04-70	<b>Санкт-Петербург</b> (812)309-46-40	<b>Хабаровск</b> (4212)92-98-04
<b>Екатеринбург</b> (343)384-55-89	<b>Мурманск</b> (8152)59-64-93	<b>Саратов</b> (845)249-38-78	<b>Челябинск</b> (351)202-03-61
<b>Иваново</b> (4932)77-34-06	<b>Набережные Челны</b> (8552)20-53-41	<b>Севастополь</b> (8692)22-31-93	<b>Череповец</b> (8202)49-02-64
<b>Ижевск</b> (3412)26-03-58	<b>Нижний Новгород</b> (831)429-08-12	<b>Симферополь</b> (3652)67-13-56	<b>Ярославль</b> (4852)69-52-93
<b>Казань</b> (843)206-01-48	<b>Новокузнецк</b> (3843)20-46-81	<b>Смоленск</b> (4812)29-41-54	

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