

Sag Tension for 4 mm<sup>2</sup> Cable Single Core

## PVC/PVC Cable

Conductor UTS N	Conductor Weight kg/m	Equivalent Span m	Everyday tension at 32 °C N	Tension at wind + 150C N	Sag At Every day cond. m	Sag at wind + 15°C m	Sag At 65 °C m	Tension at 65 °C daN	T1 initial tension daN	F1Initial wind & Weight force daN/m	F2Final wind & Weight force daN/m
800	0.0427	30	144	144.2830	0.3336	0.3332	0.3349	143.451	14.4	0.427	0.4273
800	0.0427	27.5	144	144.3094	0.2803	0.2799	0.2815	143.399	14.4	0.427	0.4273
800	0.0427	25	144	144.3412	0.2317	0.2313	0.2327	143.338	14.4	0.427	0.4273
800	0.0427	22.5	144	144.3800	0.1876	0.1873	0.1886	143.262	14.4	0.427	0.4273
800	0.0427	20	144	144.4285	0.1483	0.1479	0.1491	143.168	14.4	0.427	0.4273
800	0.0427	17.5	144	144.4910	0.1135	0.1132	0.1143	143.047	14.4	0.427	0.4273
800	0.0427	15	144	144.5742	0.0834	0.0831	0.0840	142.885	14.4	0.427	0.4273
800	0.0427	10	144	144.8655	0.0371	0.0369	0.0375	142.320	14.4	0.427	0.4273
800	0.0427	7.5	144	145.1568	0.0208	0.0207	0.0212	141.754	14.4	0.427	0.4273

UTS				x -coefficient of linear thermal expansion	mm/deg C	0.0038	
Insulation	-N/mm <sup>2</sup>	12.5		A -conductor Area(overall)	-mm <sup>2</sup>	12.3	
conductor	-N/mm <sup>2</sup>	200		E- Youngs Modulus	-daN/mm <sup>2</sup>	11000	
overall for 4mm <sup>2</sup>	N	800		□1 - Initial temp	deg C	32	
				□2 - final temp	deg C	15	
				p- Air pressure	N/m <sup>2</sup>	5	0.0168

Sag Tension for 6 mm<sup>2</sup> Cable Single Core

## PVC/PVC Cable

Conductor UTS N	Conductor Weight kg/m	Equivalent Span m	Everyday tension at 32 °C N	Tension at wind + 15° N	Sag At Every day cond. m	Sag At wind + 15° m	Sag At 65 °C m	Tension at 65 °C daN	T1 initial tension daN	F1 Initial wind & Weight force daN/m	F2 Final wind & Weight force daN/m
1200	0.0704	30	216	216.2822	0.3667	0.3663	0.3676	215.45	21.6	0.704	0.7042
1200	0.0704	27.5	216	216.3086	0.3081	0.3077	0.3090	215.40	21.6	0.704	0.7042
1200	0.0704	25	216	216.3404	0.2546	0.2543	0.2554	215.34	21.6	0.704	0.7042
1200	0.0704	22.5	216	216.3792	0.2063	0.2059	0.2070	215.26	21.6	0.704	0.7042
1200	0.0704	20	216	216.4277	0.1630	0.1627	0.1636	215.17	21.6	0.704	0.7042
1200	0.0704	17.5	216	216.4901	0.1248	0.1245	0.1253	215.05	21.6	0.704	0.7042
1200	0.0704	15	216	216.5733	0.0917	0.0915	0.0921	214.89	21.6	0.704	0.7042
1200	0.0704	10	216	216.8646	0.0407	0.0406	0.0411	214.32	21.6	0.704	0.7042
1200	0.0704	7.5	216	217.1560	0.0229	0.0228	0.0232	213.76	21.6	0.704	0.7042

UTS				x -coefficient of linear thermal expansion	mm/deg C	0.0038	
Insulation	-N/mm <sup>2</sup>	12.5		A -conductor Area(overall)	-mm <sup>2</sup>	12.3	
conductor	-N/mm <sup>2</sup>	200		E- Youngs Modulus	-daN/mm <sup>2</sup>	11000	
overall for 4mm <sup>2</sup>	N	1200		□1 - Initial temp	deg C	32	
				□2 - final temp	deg C	15	
				p- Air pressure	N/m <sup>2</sup>	5	0.0252

Sag Tension for 10 mm<sup>2</sup> Cable Single Core

## PVC/PVC Cable

Conductor UTS N	Conductor Weight kg/m	Equivalent Span m	Everyday tension at 32 °C N	Tension at wind + 15° N	Sag At Every day cond. m	Sag At wind + 15° m	Sag At 65 °C m	Tension at 65 °C daN	T1 initial tension daN	F1 Initial wind & Weight force daN/m	F2 Final wind & Weight force daN/m
2000	0.117	30	360	360.2822	0.3656	0.3654	0.3662	359.452	36	1.17	1.1701
2000	0.117	27.5	360	360.3086	0.3072	0.3070	0.3077	359.401	36	1.17	1.1701
2000	0.117	25	360	360.3404	0.2539	0.2537	0.2544	359.339	36	1.17	1.1701
2000	0.117	22.5	360	360.3792	0.2057	0.2055	0.2061	359.264	36	1.17	1.1701
2000	0.117	20	360	360.4278	0.1625	0.1623	0.1629	359.17	36	1.17	1.1701
2000	0.117	17.5	360	360.4902	0.1244	0.1243	0.1247	359.049	36	1.17	1.1701
2000	0.117	15	360	360.5734	0.0914	0.0913	0.0917	358.887	36	1.17	1.1701
2000	0.117	10	360	360.8647	0.0406	0.0405	0.0408	358.322	36	1.17	1.1701
2000	0.117	7.5	360	361.1560	0.0229	0.0228	0.0230	357.756	36	1.17	1.1701

UTS				x -coefficient of linear thermal expansion	mm/deg C	0.0038	
Insulation	-N/mm <sup>2</sup>	12.5		A -conductor Area(overall)	-mm <sup>2</sup>	12.3	
conductor	-N/mm <sup>2</sup>	200		E- Youngs Modulus	-daN/mm <sup>2</sup>	11000	
overall for 4mm <sup>2</sup>	N	2000		□1 - Initial temp	deg C	32	
				□2 - final temp	deg C	15	
				p- Air pressure	N/m <sup>2</sup>	5	0.042

Sag Tension for 16 mm<sup>2</sup> Cable Single Core

PVC/PVC Cable

Conductor UTS N	Conductor Weight kg/m	Equivalent Span m	Everyday tension at 32 °C N	Tension at wind + 15° N	Sag At Every day cond. m	Sag At wind + 15° m	Sag At 65 °C m	Tension at 65 °C daN	T1 initial tension daN	F1 Initial wind & Weight force daN/m	F2 Final wind & Weight force daN/m
3200	0.189	30	576	576.2821	0.3691	0.3690	0.3695	575.452	57.6	1.89	1.8901
3200	0.189	27.5	576	576.3086	0.3102	0.3100	0.3105	575.401	57.6	1.89	1.8901
3200	0.189	25	576	576.3403	0.2563	0.2562	0.2566	575.339	57.6	1.89	1.8901
3200	0.189	22.5	576	576.3791	0.2076	0.2075	0.2079	575.264	57.6	1.89	1.8901
3200	0.189	20	576	576.4277	0.1641	0.1639	0.1643	575.17	57.6	1.89	1.8901
3200	0.189	17.5	576	576.4901	0.1256	0.1255	0.1258	575.049	57.6	1.89	1.8901
3200	0.189	15	576	576.5733	0.0923	0.0922	0.0925	574.887	57.6	1.89	1.8901
3200	0.189	10	576	576.8646	0.0410	0.0410	0.0411	574.322	57.6	1.89	1.8901
3200	0.189	7.5	576	577.1559	0.0231	0.0230	0.0232	573.756	57.6	1.89	1.8901

UTS				x -coefficient of linear thermal expansion	mm/deg C	0.0038	
Insulation	-N/mm <sup>2</sup>	12.5		A -conductor Area(overall)	-mm <sup>2</sup>	12.3	
conductor	-N/mm <sup>2</sup>	200		E- Youngs Modulus	-daN/mm <sup>2</sup>	11000	
overall for 16 mm <sup>2</sup>	N	3200		□1 - Initial temp	deg C	32	
				□2 - final temp	deg C	15	
				p- Air pressure	N/m <sup>2</sup>	5	0.067

Sag Tension for 25 mm<sup>2</sup> Cable Single Core

## PVC/PVC Cable

Conductor UTS N	Conductor Weight kg/m	Equivalent Span m	Everyday tension at 32 °C N	Tension at wind + 15° N	Sag At Every day cond. m	Sag At wind + 15° m	Sag At 65 °C m	Tension at 65 °C daN	T1 initial tension daN	F1 Initial wind & Weight force daN/m	F2 Final wind & Weight force daN/m
5000	0.295	30	900	900.2821	0.3688	0.3686	0.3690	899.452	90	2.95	2.9500
5000	0.295	27.5	900	900.3086	0.3099	0.3098	0.3101	899.401	90	2.95	2.9500
5000	0.295	25	900	900.3403	0.2561	0.2560	0.2563	899.339	90	2.95	2.9500
5000	0.295	22.5	900	900.3791	0.2074	0.2073	0.2076	899.264	90	2.95	2.9500
5000	0.295	20	900	900.4277	0.1639	0.1638	0.1640	899.17	90	2.95	2.9500
5000	0.295	17.5	900	900.4901	0.1255	0.1254	0.1256	899.049	90	2.95	2.9500
5000	0.295	15	900	900.5733	0.0922	0.0921	0.0923	898.887	90	2.95	2.9500
5000	0.295	10	900	900.8646	0.0410	0.0409	0.0410	898.322	90	2.95	2.9500
5000	0.295	7.5	900	901.1559	0.0230	0.0230	0.0231	897.756	90	2.95	2.9500

UTS				x -coefficient of linear thermal expansion	mm/deg C	0.0038	
Insulation	-N/mm <sup>2</sup>	12.5		A -conductor Area(overall)	-mm <sup>2</sup>	12.3	
conductor	-N/mm <sup>2</sup>	200		E- Youngs Modulus	-daN/mm <sup>2</sup>	11000	
overall for 16 mm <sup>2</sup>	N	5000		□1 - Initial temp	deg C	32	
				□2 - final temp	deg C	15	
				p- Air pressure	N/m <sup>2</sup>	5	0.1

Sag Tension for 35 mm<sup>2</sup> Cable Single Core

## PVC/PVC Cable

Conductor UTS N	Conductor Weight kg/m	Equivalent Span m	Everyday tension at 32 °C N	Tension at wind + 15° N	Sag At Every day cond. m	Sag At wind + 15° m	Sag At 65 °C m	Tension at 65 °C daN	T1 initial tension daN	F1 Initial wind & Weight force daN/m	F2 Final wind & Weight force daN/m
7000	0.413	30	1260	1260.282	0.3688	0.3687	0.3689	1259.45	126	4.13	4.1300
7000	0.413	27.5	1260	1260.309	0.3099	0.3098	0.3100	1259.4	126	4.13	4.1300
7000	0.413	25	1260	1260.340	0.2561	0.2560	0.2562	1259.34	126	4.13	4.1300
7000	0.413	22.5	1260	1260.379	0.2074	0.2074	0.2075	1259.26	126	4.13	4.1300
7000	0.413	20	1260	1260.428	0.1639	0.1638	0.1640	1259.17	126	4.13	4.1300
7000	0.413	17.5	1260	1260.490	0.1255	0.1254	0.1256	1259.05	126	4.13	4.1300
7000	0.413	15	1260	1260.573	0.0922	0.0921	0.0923	1258.89	126	4.13	4.1300
7000	0.413	10	1260	1260.865	0.0410	0.0409	0.0410	1258.32	126	4.13	4.1300
7000	0.413	7.5	1260	1261.156	0.0230	0.0230	0.0231	1257.76	126	4.13	4.1300

UTS				x -coefficient of linear thermal expansion	mm/deg C	0.0038	
Insulation	-N/mm <sup>2</sup>	12.5		A -conductor Area(overall)	-mm <sup>2</sup>	12.3	
conductor overall for 16 mm <sup>2</sup>	-N/mm <sup>2</sup>	200		E- Youngs Modulus	-daN/mm <sup>2</sup>	11000	
	N	7000		□1 - Initial temp	deg C	32	
				□2 - final temp	deg C	15	
				p- Air pressure	N/m <sup>2</sup>	5	0.14

Sag Tension for 4 mm<sup>2</sup> Cable 2 Core

## PVC/PVC Cable

Conductor UTS N	Conductor Weight kg/m	Equivalent Span m	Everyday tension at 32 °C N	Tension at wind + 15 <sup>0</sup> N	Sag At Every day cond. m	Sag At wind + 15 <sup>0</sup> m	Sag At 65 °C m	Tension at 65 °C daN	T1 initial tension daN	F1Initial wind & Weight force daN/m	F2Final wind & Weight force daN/m
1600	0.0854	30	288	288.283	0.3336	0.3333	0.3342	287.451	28.8	0.854	0.8542
1600	0.0854	27.5	288	288.309	0.2803	0.2801	0.2809	287.399	28.8	0.854	0.8542
1600	0.0854	25	288	288.341	0.2317	0.2314	0.2322	287.338	28.8	0.854	0.8542
1600	0.0854	22.5	288	288.380	0.1876	0.1874	0.1881	287.262	28.8	0.854	0.8542
1600	0.0854	20	288	288.429	0.1483	0.1481	0.1487	287.168	28.8	0.854	0.8542
1600	0.0854	17.5	288	288.491	0.1135	0.1133	0.1139	287.047	28.8	0.854	0.8542
1600	0.0854	15	288	288.574	0.0834	0.0832	0.0837	286.885	28.8	0.854	0.8542
1600	0.0854	10	288	288.865	0.0371	0.0370	0.0373	286.32	28.8	0.854	0.8542
1600	0.0854	7.5	288	289.157	0.0208	0.0208	0.0210	285.754	28.8	0.854	0.8542

UTS				x -coefficient of linear thermal expansion	mm/deg C	0.0038	
Insulation	-N/mm <sup>2</sup>	12.5		A -conductor Area(overall)	-mm <sup>2</sup>	12.3	
conductor	-N/mm <sup>2</sup>	200		E- Youngs Modulus	-daN/mm <sup>2</sup>	11000	
overall for 16 mm <sup>2</sup>	N	1600		□1 - Initial temp	deg C	32	
				□2 - final temp	deg C	15	
				p- Air pressure	N/m <sup>2</sup>	5	0.032

Sag Tension for 6 mm<sup>2</sup> Cable 2 Core

## PVC/PVC Cable

Conductor UTS N	Conductor Weight kg/m	Equivalent Span m	Everyday tension at 32 °C N	Tension at wind + 15° N	Sag At Every day cond. m	Sag At wind + 15° m	Sag At 65 °C m	Tension at 65 °C daN	T1 initial tension daN	F1 Initial wind & Weight force daN/m	F2 Final wind & Weight force daN/m
2400	0.148	30	432	432.282	0.3854	0.3852	0.3859	431.453	43.2	1.48	1.4801
2400	0.148	27.5	432	432.308	0.3239	0.3236	0.3243	431.402	43.2	1.48	1.4801
2400	0.148	25	432	432.340	0.2677	0.2675	0.2681	431.34	43.2	1.48	1.4801
2400	0.148	22.5	432	432.379	0.2168	0.2166	0.2172	431.265	43.2	1.48	1.4801
2400	0.148	20	432	432.427	0.1713	0.1711	0.1716	431.171	43.2	1.48	1.4801
2400	0.148	17.5	432	432.490	0.1311	0.1310	0.1314	431.049	43.2	1.48	1.4801
2400	0.148	15	432	432.573	0.0964	0.0962	0.0966	430.888	43.2	1.48	1.4801
2400	0.148	10	432	432.864	0.0428	0.0427	0.0430	430.322	43.2	1.48	1.4801
2400	0.148	7.5	432	433.155	0.0241	0.0240	0.0242	429.757	43.2	1.48	1.4801

UTS				x -coefficient of linear thermal expansion	mm/deg C	0.0038	
Insulation	-N/mm <sup>2</sup>	12.5		A -conductor Area(overall)	-mm <sup>2</sup>	12.3	
conductor	-N/mm <sup>2</sup>	200		E- Youngs Modulus	-daN/mm <sup>2</sup>	11000	
overall for 16 mm <sup>2</sup>	N	2400		□1 - Initial temp	deg C	32	
				□2 - final temp	deg C	15	
				p- Air pressure	N/m <sup>2</sup>	5	0.0504

Sag Tension for 10 mm<sup>2</sup> Cable 2 Core

## PVC/PVC Cable

Conductor UTS N	Conductor Weight kg/m	Equivalent Span m	Everyday tension at 32 °C N	Tension at wind + 15° N	Sag At Every day cond. m	Sag At wind + 15° m	Sag At 65 °C m	Tension at 65 °C daN	T1 initial tension daN	F1 Initial wind & Weight force daN/m	F2 Final wind & Weight force daN/m
4000	0.234	30	720	720.2822	0.3656	0.3655	0.3659	719.452	72	2.34	2.3401
4000	0.234	27.5	720	720.3086	0.3072	0.3071	0.3075	719.401	72	2.34	2.3401
4000	0.234	25	720	720.3404	0.2539	0.2538	0.2541	719.339	72	2.34	2.3401
4000	0.234	22.5	720	720.3792	0.2057	0.2056	0.2059	719.264	72	2.34	2.3401
4000	0.234	20	720	720.4278	0.1625	0.1624	0.1627	719.17	72	2.34	2.3401
4000	0.234	17.5	720	720.4902	0.1244	0.1243	0.1246	719.049	72	2.34	2.3401
4000	0.234	15	720	720.5734	0.0914	0.0913	0.0915	718.887	72	2.34	2.3401
4000	0.234	10	720	720.8647	0.0406	0.0406	0.0407	718.322	72	2.34	2.3401
4000	0.234	7.5	720	721.1560	0.0229	0.0228	0.0229	717.756	72	2.34	2.3401

UTS				x -coefficient of linear thermal expansion	mm/deg C	0.0038	
Insulation	-N/mm <sup>2</sup>	12.5		A -conductor Area(overall)	-mm <sup>2</sup>	12.3	
conductor	-N/mm <sup>2</sup>	200		E- Youngs Modulus	-daN/mm <sup>2</sup>	11000	
overall for 4mm <sup>2</sup>	N	4000		□1 - Initial temp	deg C	32	
				□2 - final temp	deg C	15	
				p- Air pressure	N/m <sup>2</sup>	5	0.084

Sag Tension for 16 mm<sup>2</sup> Cable 2Core

## PVC/PVC Cable

Conductor UTS N	Conductor Weight kg/m	Equivalent Span m	Everyday tension at 32 °C N	Tension at wind + 15 <sup>0</sup> N	Sag At Every day cond. m	Sag At wind + 15 <sup>0</sup> m	Sag At 65 °C m	Tension at 65 °C daN	T1 initial tension daN	F1 Initial wind Weight force daN/m	F2 Final wind Weight force & Weight force daN/m
6400	0.378	30	1152	1152.282	0.3691	0.3691	0.3693	1151.45	115.2	3.78	3.7800
6400	0.378	27.5	1152	1152.309	0.3102	0.3101	0.3103	1151.4	115.2	3.78	3.7800
6400	0.378	25	1152	1152.340	0.2563	0.2563	0.2565	1151.34	115.2	3.78	3.7800
6400	0.378	22.5	1152	1152.379	0.2076	0.2076	0.2078	1151.26	115.2	3.78	3.7800
6400	0.378	20	1152	1152.428	0.1641	0.1640	0.1642	1151.17	115.2	3.78	3.7800
6400	0.378	17.5	1152	1152.490	0.1256	0.1256	0.1257	1151.05	115.2	3.78	3.7800
6400	0.378	15	1152	1152.573	0.0923	0.0922	0.0924	1150.89	115.2	3.78	3.7800
6400	0.378	10	1152	1152.865	0.0410	0.0410	0.0411	1150.32	115.2	3.78	3.7800
6400	0.378	7.5	1152	1153.156	0.0231	0.0230	0.0231	1149.76	115.2	3.78	3.7800

UTS				x -coefficient of linear thermal expansion	mm/deg C	0.0038	
Insulation	-N/mm <sup>2</sup>	12.5		A -conductor Area(overall)	-mm <sup>2</sup>	12.3	
conductor	-N/mm <sup>2</sup>	200		E- Youngs Modulus	-daN/mm <sup>2</sup>	11000	
overall for 16 mm <sup>2</sup>	N	6400		□1 - Initial temp	deg C	32	
				□2 - final temp	deg C	15	
				p- Air pressure	N/m <sup>2</sup>	5	0.134

Sag Tension for 25 mm<sup>2</sup> Cable 2 Core

## PVC/PVC Cable

Conductor UTS N	Conductor Weight kg/m	Equivalent Span m	Everyday tension at 32 °C N	Tension at wind + 15° N	Sag At Every day cond. m	Sag At wind + 15° m	Sag At 65 °C m	Tension at 65 °C daN	T1 initial tension daN	F1 Initial wind & Weight force daN/m	F2 Final wind & Weight force daN/m
10000	0.59	30	1800	1800.282	0.3688	0.3687	0.3689	1799.45	180	5.9	5.9000
10000	0.59	27.5	1800	1800.309	0.3099	0.3098	0.3100	1799.4	180	5.9	5.9000
10000	0.59	25	1800	1800.340	0.2561	0.2560	0.2562	1799.34	180	5.9	5.9000
10000	0.59	22.5	1800	1800.379	0.2074	0.2074	0.2075	1799.26	180	5.9	5.9000
10000	0.59	20	1800	1800.428	0.1639	0.1639	0.1640	1799.17	180	5.9	5.9000
10000	0.59	17.5	1800	1800.490	0.1255	0.1254	0.1255	1799.05	180	5.9	5.9000
10000	0.59	15	1800	1800.573	0.0922	0.0922	0.0922	1798.89	180	5.9	5.9000
10000	0.59	10	1800	1800.865	0.0410	0.0410	0.0410	1798.32	180	5.9	5.9000
10000	0.59	7.5	1800	1801.156	0.0230	0.0230	0.0231	1797.76	180	5.9	5.9000

UTS				x -coefficient of linear thermal expansion	mm/deg C	0.0038	
Insulation	-N/mm <sup>2</sup>	12.5		A -conductor Area(overall)	-mm <sup>2</sup>	12.3	
conductor	-N/mm <sup>2</sup>	200		E- Youngs Modulus	-daN/mm <sup>2</sup>	11000	
overall for 16 mm <sup>2</sup>	N	10000		□1 - Initial temp	deg C	32	
				□2 - final temp	deg C	15	
				p- Air pressure	N/m <sup>2</sup>	5	0.2

Sag Tension for 35 mm<sup>2</sup> Cable 2 Core

## PVC/PVC Cable

Conductor UTS N	Conductor Weight kg/m	Equivalent Span m	Everyday tension at 32 °C N	Tension at wind + 15° N	Sag At Every day cond. m	Sag At wind + 15° m	Sag At 65 °C m	Tension at 65 °C daN	T1 initial tension daN	F1 Initial wind & Weight force daN/m	F2 Final wind & Weight force daN/m
14000	0.826	30	2520	2520.282	0.3688	0.3687	0.3688	2519.45	252	8.26	8.2600
14000	0.826	27.5	2520	2520.309	0.3099	0.3098	0.3099	2519.4	252	8.26	8.2600
14000	0.826	25	2520	2520.340	0.2561	0.2560	0.2561	2519.34	252	8.26	8.2600
14000	0.826	22.5	2520	2520.379	0.2074	0.2074	0.2075	2519.26	252	8.26	8.2600
14000	0.826	20	2520	2520.428	0.1639	0.1639	0.1639	2519.17	252	8.26	8.2600
14000	0.826	17.5	2520	2520.490	0.1255	0.1255	0.1255	2519.05	252	8.26	8.2600
14000	0.826	15	2520	2520.573	0.0922	0.0922	0.0922	2518.89	252	8.26	8.2600
14000	0.826	10	2520	2520.865	0.0410	0.0410	0.0410	2518.32	252	8.26	8.2600
14000	0.826	7.5	2520	2521.156	0.0230	0.0230	0.0231	2517.76	252	8.26	8.2600

UTS				x -coefficient of linear thermal expansion	mm/deg C	0.0038	
Insulation	-N/mm <sup>2</sup>	12.5		A -conductor Area(overall)	-mm <sup>2</sup>	12.3	
conductor	-N/mm <sup>2</sup>	200		E- Youngs Modulus	-daN/mm <sup>2</sup>	11000	
overall for 16 mm <sup>2</sup>	N	14000		□1 - Initial temp	deg C	32	
				□2 - final temp	deg C	15	
				p- Air pressure	N/m <sup>2</sup>	5	0.28

Sag Tension for 16 mm<sup>2</sup> Cable 3Core and 10mm<sup>2</sup>as Neutral

## PVC/PVC Cable

Conductor UTS N	Conductor Weight kg/m	Equivalent Span m	Everyday tension at 32 °C N	Tension at wind + 15° N	Sag At Every day cond. m	Sag At wind + 15° m	Sag At 65 °C m	Tension at 65 °C daN	T1 initial tension daN	F1Initial wind & Weight force daN/m	F2Final wind & Weight force daN/m
10500	1.25	30	1890	1890.273	0.7440	0.7439	0.7443	1889.47	1680	12.5	12.5000
10500	1.25	27.5	1890	1890.300	0.6252	0.6251	0.6254	1889.42	1680	12.5	12.5000
10500	1.25	25	1890	1890.331	0.5167	0.5166	0.5169	1889.36	1680	12.5	12.5000
10500	1.25	22.5	1890	1890.370	0.4185	0.4184	0.4187	1889.28	1680	12.5	12.5000
10500	1.25	20	1890	1890.419	0.3307	0.3306	0.3308	1889.19	1680	12.5	12.5000
10500	1.25	17.5	1890	1890.481	0.2532	0.2531	0.2533	1889.07	1680	12.5	12.5000
10500	1.25	15	1890	1890.564	0.1860	0.1860	0.1861	1888.91	1680	12.5	12.5000
10500	1.25	10	1890	1890.855	0.0827	0.0826	0.0827	1888.34	1680	12.5	12.5000
10500	1.25	7.5	1890	1891.146	0.0465	0.0465	0.0466	1887.77	1680	12.5	12.5000

UTS				x -coefficient of linear thermal expansion	mm/deg C	0.0038	
Insulation	-N/mm <sup>2</sup>	12.5		A -conductor Area(overall)	-mm <sup>2</sup>	12.3	
conductor	-N/mm <sup>2</sup>	200		E- Youngs Modulus	-daN/mm <sup>2</sup>	11000	
overall for 16 mm <sup>2</sup>	N	10500		□1 - Initial temp	deg C	32	
				□2 - final temp	deg C	15	
				p- Air pressure	N/m <sup>2</sup>	5	0.6968

Sag Tension for 25 mm<sup>2</sup> Cable 3 Core and neutral of 10mm<sup>2</sup>

## PVC/PVC Cable

Conductor UTS N	Conductor Weight kg/m	Equivalent Span m	Everyday tension at 32 °C N	Tension at wind + 15° N	Sag At Every day cond. m	Sag At wind + 15° m	Sag At 65 °C m	Tension at 65 °C daN	T1 initial tension daN	F1 Initial wind & Weight force daN/m	F2 Final wind & Weight force daN/m
16500	1.93	30	2970	2970.274	0.7311	0.7310	0.7312	2969.47	1650	19.3	19.3000
16500	1.93	27.5	2970	2970.300	0.6143	0.6142	0.6144	2969.42	1650	19.3	19.3000
16500	1.93	25	2970	2970.332	0.5077	0.5076	0.5078	2969.36	1650	19.3	19.3000
16500	1.93	22.5	2970	2970.370	0.4112	0.4112	0.4113	2969.28	1650	19.3	19.3000
16500	1.93	20	2970	2970.419	0.3249	0.3249	0.3250	2969.19	1650	19.3	19.3000
16500	1.93	17.5	2970	2970.481	0.2488	0.2487	0.2488	2969.07	1650	19.3	19.3000
16500	1.93	15	2970	2970.564	0.1828	0.1827	0.1828	2968.9	1650	19.3	19.3000
16500	1.93	10	2970	2970.856	0.0812	0.0812	0.0813	2968.34	1650	19.3	19.3000
16500	1.93	7.5	2970	2971.147	0.0457	0.0457	0.0457	2967.77	1650	19.3	19.3000

UTS				x -coefficient of linear thermal expansion	mm/deg C	0.0038	
Insulation	-N/mm <sup>2</sup>	12.5		A -conductor Area(overall)	-mm <sup>2</sup>	12.3	
conductor	-N/mm <sup>2</sup>	200		E- Youngs Modulus	-daN/mm <sup>2</sup>	11000	
overall for 16 mm <sup>2</sup>	N	16500		□1 - Initial temp	deg C	32	
				□2 - final temp	deg C	15	
				p- Air pressure	N/m <sup>2</sup>	5	0.8

**Bundled Cables**

Sag Tension for 16 mm<sup>2</sup> Cable 4Core and 10mm<sup>2</sup>as Neutral Bundled Cables

XLPE Insulated

Conductor UTS N	Conductor Weight kg/m	Equivalent Span m	Everyday tension at 32 °C N	Tension at wind + 15° N	Sag At Every day cond. m	Sag At wind + 15° m	Sag At 65 °C m	Tension at 65 °C daN	T1 initial tension daN	F1Initial wind & Weight force daN/m	F2Final wind & Weight force daN/m
8800	0.28	30	1584	1584.286	0.1989	0.1988	0.1989	1583.44	158.4	2.8	2.8001
8800	0.28	27.5	1584	1584.313	0.1671	0.1671	0.1672	1583.39	158.4	2.8	2.8001
8800	0.28	25	1584	1584.345	0.1381	0.1381	0.1382	1583.33	158.4	2.8	2.8001
8800	0.28	22.5	1584	1584.383	0.1119	0.1118	0.1119	1583.26	158.4	2.8	2.8001
8800	0.28	20	1584	1584.432	0.0884	0.0884	0.0884	1583.16	158.4	2.8	2.8001
8800	0.28	17.5	1584	1584.494	0.0677	0.0676	0.0677	1583.04	158.4	2.8	2.8001
8800	0.28	15	1584	1584.578	0.0497	0.0497	0.0498	1582.88	158.4	2.8	2.8001
8800	0.28	10	1584	1584.869	0.0221	0.0221	0.0221	1582.31	158.4	2.8	2.8001
8800	0.28	7.5	1584	1585.160	0.0124	0.0124	0.0124	1581.75	158.4	2.8	2.8001

UTS				x -coefficient of linear thermal expansion	mm/deg C	0.0038	
Insulation	-N/mm <sup>2</sup>	18		A -conductor Area(overall)	-mm <sup>2</sup>	12.3	
conductor	-N/mm <sup>2</sup>	200		E- Youngs Modulus	-daN/mm <sup>2</sup>	11000	
overall for 16 mm <sup>2</sup>	N	8800		□1 - Initial temp	deg C	32	
				□2 - final temp	deg C	15	
				p- Air pressure	N/m <sup>2</sup>	5	0.6968

**Bundled Cables**Sag Tension for 25 mm<sup>2</sup> Cable 3 Core and neutral of 16mm<sup>2</sup>

XLPE Insulated

Conductor UTS N	Conductor Weight kg/m	Equivalent Span m	Everyday tension at 32 °C N	Tension at wind + 15° N	Sag At Every day cond. m	Sag At wind + 15° m	Sag At 65 °C m	Tension at 65 °C daN	T1 initial tension daN	F1Initial wind Weight force daN/m	F2Final wind Weight force daN/m
14000	0.4	30	2520	2520.287	0.1786	0.1786	0.1786	2519.44	252	4	4.0000
14000	0.4	27.5	2520	2520.313	0.1500	0.1500	0.1501	2519.39	252	4	4.0000
14000	0.4	25	2520	2520.345	0.1240	0.1240	0.1240	2519.33	252	4	4.0000
14000	0.4	22.5	2520	2520.384	0.1004	0.1004	0.1005	2519.25	252	4	4.0000
14000	0.4	20	2520	2520.432	0.0794	0.0794	0.0794	2519.16	252	4	4.0000
14000	0.4	17.5	2520	2520.495	0.0608	0.0608	0.0608	2519.04	252	4	4.0000
14000	0.4	15	2520	2520.578	0.0446	0.0446	0.0447	2518.88	252	4	4.0000
14000	0.4	10	2520	2520.869	0.0198	0.0198	0.0199	2518.31	252	4	4.0000
14000	0.4	7.5	2520	2521.161	0.0112	0.0112	0.0112	2517.75	252	4	4.0000

UTS				x -coefficient of linear thermal expansion	mm/deg C	0.0038	
Insulation	-N/mm <sup>2</sup>	18		A -conductor Area(overall)	-mm <sup>2</sup>	12.3	
conductor	-N/mm <sup>2</sup>	200		E- Youngs Modulus	-daN/mm <sup>2</sup>	11000	
overall for 16 mm <sup>2</sup>	N	14000		□1 - Initial temp	deg C	32	
				□2 - final temp	deg C	15	
				p- Air pressure	N/m <sup>2</sup>	5	0.8

**Bundled Cables**Sag Tension for 35 mm<sup>2</sup> Cable 3 Core and neutral of 16mm<sup>2</sup>

XLPE Insulated

Conductor UTS N	Conductor Weight kg/m	Equivalent Span m	Everyday tension at 32 °C N	Tension at wind + 15 <sup>0</sup> N	Sag At Every day cond. m	Sag At wind + 15 <sup>0</sup> m	Sag At 65 °C m	Tension at 65 °C daN	T1 initial tension daN	F1Initial wind & Weight force daN/m	F2Final wind & Weight force daN/m
19600	1.93	30	3528	3528.276	0.6154	0.6154	0.6155	3527.46	352.8	19.3	19.3000
19600	1.93	27.5	3528	3528.303	0.5171	0.5171	0.5172	3527.41	352.8	19.3	19.3000
19600	1.93	25	3528	3528.334	0.4274	0.4273	0.4275	3527.35	352.8	19.3	19.3000
19600	1.93	22.5	3528	3528.373	0.3462	0.3461	0.3463	3527.28	352.8	19.3	19.3000
19600	1.93	20	3528	3528.422	0.2735	0.2735	0.2736	3527.18	352.8	19.3	19.3000
19600	1.93	17.5	3528	3528.484	0.2094	0.2094	0.2095	3527.06	352.8	19.3	19.3000
19600	1.93	15	3528	3528.567	0.1539	0.1538	0.1539	3526.9	352.8	19.3	19.3000
19600	1.93	10	3528	3528.858	0.0684	0.0684	0.0684	3526.33	352.8	19.3	19.3000
19600	1.93	7.5	3528	3529.150	0.0385	0.0385	0.0385	3525.77	352.8	19.3	19.3000

UTS				x -coefficient of linear thermal expansion	mm/deg C	0.0038	
Insulation	-N/mm <sup>2</sup>	18		A -conductor Area(overall)	-mm <sup>2</sup>	12.3	
conductor	-N/mm <sup>2</sup>	200		E- Youngs Modulus	-daN/mm <sup>2</sup>	11000	
overall for 16 mm <sup>2</sup>	N	19600		□1 - Initial temp	deg C	32	
				□2 - final temp	deg C	15	
				p- Air pressure	N/m <sup>2</sup>	5	0.8

**Bundled Cables**Sag Tension for 50 mm<sup>2</sup> Cable 3 Core and neutral of 16mm<sup>2</sup>

XLPE Insulated

Conductor UTS N	Conductor Weight kg/m	Equivalent Span m	Everyday tension at 32 °C N	Tension at wind + 15° N	Sag At Every day cond. m	Sag At wind + 15° m	Sag At 65 °C m	Tension at 65 °C daN	T1 initial tension daN	F1 Initial wind & Weight force daN/m	F2 Final wind & Weight force daN/m
16500	1.93	30	2970	2970.274	0.7311	0.7310	0.7312	2969.47	1650	19.3	19.3000
16500	1.93	27.5	2970	2970.300	0.6143	0.6142	0.6144	2969.42	1650	19.3	19.3000
16500	1.93	25	2970	2970.332	0.5077	0.5076	0.5078	2969.36	1650	19.3	19.3000
16500	1.93	22.5	2970	2970.370	0.4112	0.4112	0.4113	2969.28	1650	19.3	19.3000
16500	1.93	20	2970	2970.419	0.3249	0.3249	0.3250	2969.19	1650	19.3	19.3000
16500	1.93	17.5	2970	2970.481	0.2488	0.2487	0.2488	2969.07	1650	19.3	19.3000
16500	1.93	15	2970	2970.564	0.1828	0.1827	0.1828	2968.9	1650	19.3	19.3000
16500	1.93	10	2970	2970.856	0.0812	0.0812	0.0813	2968.34	1650	19.3	19.3000
16500	1.93	7.5	2970	2971.147	0.0457	0.0457	0.0457	2967.77	1650	19.3	19.3000

UTS				x -coefficient of linear thermal expansion	mm/deg C	0.0038	
Insulation	-N/mm <sup>2</sup>	18		A -conductor Area(overall)	-mm <sup>2</sup>	12.3	
conductor	-N/mm <sup>2</sup>	200		E- Youngs Modulus	-daN/mm <sup>2</sup>	11000	
overall for 16 mm <sup>2</sup>	N	16500		□1 - Initial temp	deg C	32	
				□2 - final temp	deg C	15	
				p- Air pressure	N/m <sup>2</sup>	5	0.8

**All Aluminium Conductors**

Sag Tension for AAC Gnat Conductor 7/2.21

All Aluminium Conductors

Conductor UTS N	Conductor Weight kg/m	Equivelant Span m	Everyday tension at 32 °C N	Tension at wind + 15° N	Sag At Every day cond. m	Sag At wind + 15° m	Sag At 65 °C m	Tension at 65 °C daN	T1 initial tension daN	F1Initial wind & Weight force daN/m	F2Final wind & Weight force daN/m
4900	0.063	30	882	882.289	0.0804	0.0804	0.0804	881.438	88.2	0.63	0.6302
4900	0.063	27.5	882	882.316	0.0675	0.0675	0.0676	881.387	88.2	0.63	0.6302
4900	0.063	25	882	882.348	0.0558	0.0558	0.0558	881.325	88.2	0.63	0.6302
4900	0.063	22.5	882	882.386	0.0452	0.0452	0.0452	881.25	88.2	0.63	0.6302
4900	0.063	20	882	882.435	0.0357	0.0357	0.0357	881.156	88.2	0.63	0.6302
4900	0.063	17.5	882	882.497	0.0273	0.0273	0.0274	881.035	88.2	0.63	0.6302
4900	0.063	15	882	882.581	0.0201	0.0201	0.0201	880.873	88.2	0.63	0.6302
4900	0.063	10	882	882.872	0.0089	0.0089	0.0089	880.307	88.2	0.63	0.6302
4900	0.063	7.5	882	883.163	0.0050	0.0050	0.0050	879.742	88.2	0.63	0.6302

UTS				x -coefficient of linear thermal expansion	mm/deg C	0.0038	
				A -conductor Area(overall)	-mm <sup>2</sup>	5.6	
conductor	-N/mm <sup>2</sup>	165		E- Youngs Modulus	-daN/mm <sup>2</sup>	11000	
overall for 16 mm <sup>2</sup>	N	4900		□1 - Initial temp	deg C	32	
				□2 - final temp	deg C	15	
				p- Air pressure	N/m <sup>2</sup>	5	0.028

## Sag Tension for AAC Lady Bird Conductor 7/2.79

## All Aluminium Conductors

Conductor UTS N	Conductor Weight kg/m	Equivalent Span m	Everyday tension at 32 °C N	Tension at wind + 15° N	Sag At Every day cond. m	Sag At wind + 15° m	Sag At 65 °C m	Tension at 65 °C daN	T1 initial tension daN	F1Initial wind & Weight force daN/m	F2Final wind & Weight force daN/m
7400	0.117	30	1332	1332.289	0.0988	0.0988	0.0989	1331.44	133.2	1.17	1.1701
7400	0.117	27.5	1332	1332.315	0.0830	0.0830	0.0831	1331.39	133.2	1.17	1.1701
7400	0.117	25	1332	1332.347	0.0686	0.0686	0.0687	1331.33	133.2	1.17	1.1701
7400	0.117	22.5	1332	1332.386	0.0556	0.0556	0.0556	1331.25	133.2	1.17	1.1701
7400	0.117	20	1332	1332.434	0.0439	0.0439	0.0439	1331.16	133.2	1.17	1.1701
7400	0.117	17.5	1332	1332.497	0.0336	0.0336	0.0336	1331.04	133.2	1.17	1.1701
7400	0.117	15	1332	1332.580	0.0247	0.0247	0.0247	1330.87	133.2	1.17	1.1701
7400	0.117	10	1332	1332.871	0.0110	0.0110	0.0110	1330.31	133.2	1.17	1.1701
7400	0.117	7.5	1332	1333.163	0.0062	0.0062	0.0062	1329.74	133.2	1.17	1.1701

UTS				x -coefficient of linear thermal expansion	mm/deg C	0.0038	
				A -conductor Area(overall)	-mm <sup>2</sup>	6.4	
conductor overall for 16 mm <sup>2</sup>	-N/mm <sup>2</sup>		165	E- Youngs Modulus	-daN/mm <sup>2</sup>	11000	
	N		7400	□1 - Initial temp	deg C	32	
				□2 - final temp	deg C	15	
				p- Air pressure	N/m <sup>2</sup>	5	0.032

## Sag Tension for AAC Fly 7/2.79

## All Aluminium Conductors

Conductor UTS N	Conductor Weight kg/m	Equivalent Span m	Everyday tension at 32 °C N	Tension at wind + 15° N	Sag At Every day cond. m	Sag At wind + 15° m	Sag At 65 °C m	Tension at 65 °C daN	T1 initial tension daN	F1 Initial wind & Weight force daN/m	F2 Final wind & Weight force daN/m
10500	0.174	30	1890	1890.289	0.1036	0.1036	0.1036	1889.44	189	1.74	1.7401
10500	0.174	27.5	1890	1890.315	0.0870	0.0870	0.0871	1889.39	189	1.74	1.7401
10500	0.174	25	1890	1890.347	0.0719	0.0719	0.0720	1889.33	189	1.74	1.7401
10500	0.174	22.5	1890	1890.386	0.0583	0.0582	0.0583	1889.25	189	1.74	1.7401
10500	0.174	20	1890	1890.434	0.0460	0.0460	0.0461	1889.16	189	1.74	1.7401
10500	0.174	17.5	1890	1890.497	0.0352	0.0352	0.0353	1889.04	189	1.74	1.7401
10500	0.174	15	1890	1890.580	0.0259	0.0259	0.0259	1888.87	189	1.74	1.7401
10500	0.174	10	1890	1890.871	0.0115	0.0115	0.0115	1888.31	189	1.74	1.7401
10500	0.174	7.5	1890	1891.163	0.0065	0.0065	0.0065	1887.74	189	1.74	1.7401

UTS				x -coefficient of linear thermal expansion	mm/deg C	0.0038	
				A -conductor Area(overall)	-mm <sup>2</sup>	9	
conductor overall for 16 mm <sup>2</sup>	-N/mm <sup>2</sup>		200	E- Youngs Modulus	-daN/mm <sup>2</sup>	11000	
	N		10500	□1 - Initial temp	deg C	32	
				□2 - final temp	deg C	15	
				p- Air pressure	N/m <sup>2</sup>	5	0.045