



## 11KV 3 Core SWA PVC Cable BS6622 IEC60502-2

<b>Specification:</b>	Insulated armoured cables to BS6622 stranded copper or aluminium conductors
<b>Conductor:</b>	Round stranded compacted Extruded semi-conductive conductor screen Circular Aluminium
<b>Insulation:</b>	XLPE Extruded semi-conductive insulation screen Copper tape over each core
<b>Inner sheath</b>	PVC
<b>Armour:</b>	Galvanised steel wires
<b>Outer sheath:</b>	PVC
<b>Core identification:</b>	Three core cables each phase is identified by a coloured strip laid longitudinally under the metallic screen.
<b>Bending radius:</b>	Single core cables: 20 x overall diameter Multi-core cables: 15 x overall diameter
<b>Voltage:</b>	6.35/11kV
<b>Standards:</b>	BS 6622

### Cables with copper conductors

Nominal Area of conductor mm <sup>2</sup>	Diameter approx.			Net weight approx. Kg/km	Continuous current rating in ground		Continuous current rating in ducts		Continuous current rating in air		BATT Part No
	Under armour mm	Over armour mm	Overall mm		Trefoil	Flat	Trefoil	Flat	Trefoil	Flat	
					A	A	A	A	A	A	
1 x 50	21.7	24.9	28.5	1200	220	230	220	220	250	300	-
1 x 70	23.0	26.2	30	1500	270	280	260	270	310	370	-
1 x 95	24.7	27.9	31.7	1600	320	335	305	325	375	460	-
1 x 120	26.7	29.9	33.9	2100	360	380	340	370	430	530	-
1 x 150	27.5	31.5	35.7	2500	410	430	375	410	490	600	-
1 x 185	29.3	33.3	37.5	2900	455	485	410	460	550	690	-
1 x 240	31.6	35.6	40.0	3600	520	560	470	540	650	820	-
1 x 300	34.6	38.6	43.0	4300	580	640	500	610	740	940	-
1 x 400	37.0	41.0	45.8	5200	650	730	530	690	840	1100	-
1 x 500	40.5	45.5	50.5	6500	710	830	570	780	930	1280	-
1 x 630	44.6	49*.6	54.8	8000	760	940	620	890	1040	1480	-
1 x 800	48.8	53.8	59.2	9850	810	1060	660	990	1140	1690	-
1 x 1000	53.5	58.5	64.3	12100	860	1170	690	1090	1230	1900	-
3 x 25	39.0	44.0	48.8	4300	140	140	125	125	145	145	-
3 x 35	41.6	46.6	51.6	4700	170	170	150	150	175	175	-
3 x 50	44.4	49.4	54.6	5300	210	210	180	180	220	220	-
3 x 70	48.1	53.1	58.5	6300	250	250	215	215	270	270	-
3 x 95	52.0	57.0	62.6	7300	300	300	255	255	330	330	-
3 x 120	55.6	60.6	66.6	8400	340	340	290	290	380	380	-
3 x 150	58.6	63.6	69.8	9600	380	380	330	330	430	430	-
3 x 185	62.7	67.7	74.1	11000	430	430	370	370	490	490	-
3 x 240	68.1	74.4	81.2	14000	500	500	430	430	570	570	-
3 x 300	73.5	79.8	87.0	16600	540	540	470	470	650	650	-



**Cables with aluminium conductors**

Nominal Area of conductor mm <sup>2</sup>	Diameter approx			Net weight approx Kg/km	Continuous current rating in ground		Continuous current rating in ducts		Continuous current rating in air		BATT Part No
	Under armour mm	Over armour mm	Overall mm		Trefoil	Flat	Trefoil	Flat	Trefoil	Flat	
					A	A	A	A	A	A	
1 x 50	30.9	34.9	39.3	1740	170	175	170	170	195	230	-
1 x 70	32.6	36.6	41.0	1850	210	215	210	210	240	290	-
1 x 95	34.3	38.3	42.9	2100	250	260	245	250	295	355	-
1 x 120	35.9	39.9	44.5	2250	280	295	275	285	355	410	-
1 x 150	37.5	42.5	47.3	2600	320	330	300	320	380	465	-
1 x 185	39.3	44.3	49.3	2850	360	375	335	360	435	530	-
1 x 240	41.7	46.7	51.7	3150	415	440	380	420	510	630	-
1 x 300	44.2	49.2	54.4	3600	475	495	420	470	580	730	-
1 x 400	47.3	52.3	57.7	4000	540	570	455	540	670	860	-
1 x 500	50.5	55.5	61.1	4500	610	650	500	620	770	1010	-
1 x 630	54.2	59.2	65.0	5250	680	750	550	700	880	1180	-
1 x 800	60.5	65.5	71.6	6150	770	860	5590	800	980	1370	-
1 x 1000	65.0	70.0	76.5	7200	859	960	640	890	1080	1560	-
3 x 50	65.1	71.4	78.2	8300	160	160	135	135	170	170	-
3 x 70	68.8	75.1	82.1	9050	195	195	165	165	210	210	-
3 x 95	72.6	78.9	86.1	9800	230	230	200	200	250	250	56507
3 x 120	76.3	82.6	90.0	10600	265	265	225	225	295	295	-
3 x 150	79.3	85.6	93.2	11350	300	300	255	255	330	330	-
3 x 185	83.4	89.7	97.5	12250	335	335	290	290	385	385	56059
3 x 240	88.8	95.1	103.3	13700	380	380	335	335	450	450	-
3 x 300	93.9	100.2	108.8	15500	435	435	375	375	510	510	56664

Note: The above ratings are given for 25°C ambient temperature, depth of laying 0.8m. ground temperature 15°C, thermal resistivity of soil 1.2km/W and maximum conductor temperature 90°C. Single core cables are laid either in trefoil formation touching or in flat formation spaced by one cable diameter. For other conditions the correction factors are given below:

<b>Ambient temp °C:</b>	25	30	35	40	45	50	55
<b>Correction factor</b>	1.0	0.96	0.92	0.88	0.83	0.78	0.73

<b>Ground temp °C:</b>	10	15	20	25	30	35	40
<b>Correction factor</b>	1.03	1.0	0.97	0.93	0.89	0.86	0.82

<b>Ground thermal resistivity:</b>	0.9	1.0	1.2	1.5	2.0	2.5	3.0
<b>Correction factor</b>	1.06	1.04	1.0	0.92	0.82	0.74	0.68

<b>Depth of laying m:</b>	0.8	1.0	1.25	1.5	1.75	2.0	2.5
<b>Correction factor</b>	1.0	0.97	0.95	0.94	0.93	0.91	0.90