



Standard Power Cables BS5467 Low Voltage(600/1000V)

Cable Approvals: Cable approved to BS5467
Conductor: Plain annealed copper stranded (Class 2) conductor for ease of handling
Insulation: 90°C cross-linked XLPE insulation
Core Identification: blue-brown
 brown-black-grey
 blue-brown-black-grey
 blue-brown-black-grey-green/yellow
 7-48 cores white with printed numbers
Bedding: Extruded bedding compound
Outer Sheath: PVC Sheath
Armour: Single layer of galvanised steel wires/Aluminium wires on single core



Temperature Range
-15 to +90°C



Bending Range
Fixed r=4D
circular conductor r=6D
shaped conductor r=8D



Mechanical Impact
Very Good



Fire Performance
BS EN 60332-1-2



Flexibly Rigid

Standard current ratings from ERA 69-30pt V

Ambient temperature (air) 25°C
 Ground Temperature 15°C
 Depth of burial 0.5m
 Thermal resistance of soil 1.2°C m/w
 Armour bonded and earthed at both ends Yes

Nominal cross sectional area mm ²	Approx. overall diameter mm	Approximate cable weight Kg/Km	Nominal Dia. of armour wires mm	Approx cable weight Kg/km	Max. conductor resistance @20°C Oh ms/km	Conductor Short circuit rating (1 sec) KA	Current Rating			Three phase In air (trefoil formation) mV/A/m	Volt drop Single Phase AC touching mV/A/m	Volt Drop Three phase AC trefoil mV/A/m
							Single phase AC in air horizontal spaced Amps	Three phase In ground trefoil formation Amps	Three phase In Trefoil Duct Amps			
Single Core												
150	27.61	20.57	1.6	1924.88	0.1240	21.4	510	431	396	483	0.38	0.33
185	30.14	22.90	1.6	2347.25	0.0991	26.4	574	485	437	555	0.33	0.28
240	32.83	25.59	1.6	2933.39	0.0754	34.3	661	558	489	654	0.28	0.24
300	35.71	28.27	1.6	3579.69	0.0601	42.9	739	623	534	745	0.25	0.21
400	40.48	32.04	2.0	4628.84	0.0470	57.2	820	691	567	851	0.22	0.195
500	44.45	35.81	2.0	5791.77	0.0366	71.5	910	765	615	963	0.21	0.18
630	48.65	39.81	2.0	7210.86	0.0283	90.1	1001	841	664	1048	0.195	0.17
800	55.07	44.83	2.5	9227.03	0.0221	114	1055	888	692	1178	0.19	0.165
1000	58.54	48.10	2.5	11136.95	0.0176	143	1115	942	735	1278	0.18	0.155

Single phase AC Volt drop- If the cable spacing is larger than a cable diameter then the volt drop will be larger specified. If current rating in buildings is required reference should be made to BS7671(IEE Wiring Regs). Alternatively rating are as BS6724 cables.

Nominal cross sectional area mm ²	Approx. overall diameter mm	Approximate cable weight Kg/Km	Nominal Dia. of armour wires mm	Approx cable weight Kg/km	Max. conductor resistance @20°C Oh ms/km	Conductor Short circuit rating (1 sec) KA	Armour Short circuit rating (1 sec) kA	Current Rating			Volt drop Single Phase AC touching mV/A/m
								Direct in ground Amps	In duct Amps	In air mV/A/m	
Three Core											
1.5	13.25	8.41	0.9	338.80	12.1	0.20	0.74	32	26	26	27
2.5	14.92	9.88	0.9	426.31	7.41	0.35	0.88	42	34	35	16
4	16.02	10.98	0.9	506.72	4.61	0.57	0.97	55	45	47	10
6	17.25	12.21	0.9	605.14	3.08	0.86	1.0	69	56	59	6.8
10	20.08	14.14	1.25	897.14	1.83	1.4	1.8	92	75	82	4
16	22.48	16.34	1.25	1165.22	1.15	2.2	2.0	119	96	107	2.5
25	27.29	20.25	1.6	1778.24	0.727	3.6	2.8	152	124	140	1.65
35	29.96	22.72	1.6	2199.87	0.524	5.0	3.0	182	149	172	1.15
50*	29.19	21.95	1.6	2459.38	0.387	7.1	3.6	217	177	209	0.87
70*	32.35	24.91	1.6	3174.68	0.268	10.0	4.1	266	218	263	0.6
95*	38.91	30.27	2	4464.85	0.193	13.6	5.9	319	263	324	0.45
120*	41.01	32.17	2	5239.32	0.153	17.2	6.5	363	300	376	0.37
150*	47.25	37.21	2.5	6836.59	0.124	21.4	9.3	406	338	430	0.3
185*	50.41	40.17	2.5	8079.16	0.00991	26.5	10.2	458	382	495	0.26
240*	55.87	45.23	2.5	10063.75	0.0754	34.3	11.6	529	442	584	0.21
300*	60.69	49.85	2.5	12137.85	0.0001	42.9	12.4	592	496	666	0.185
400*	77.01	65.77	2.5	15930.05	0.047	57.2	14.1	667	570	766	0.165
Four Core											
1.5	13.99	9.15	0.9	382.19	12.1	0.20	0.78	32	26	26	27
2.5	15.83	10.79	0.9	484.03	7.41	0.35	0.92	42	34	35	16
4	17.06	12.02	0.9	580.93	4.61	0.57	1.0	55	45	47	10
6	19.34	13.40	1.25	821.53	3.08	0.86	1.6	69	56	59	6.8
10	21.50	15.56	1.25	1057.39	1.83	1.4	1.9	92	75	82	4
16	24.17	18.03	1.25	1384.45	1.15	2.2	2.2	119	96	107	2.5
25	29.43	22.39	1.6	2124.98	0.727	3.6	3.2	152	124	140	1.65
35	32.40	25.16	1.6	2662.35	0.524	5.0	3.7	182	149	172	1.15
50*	33.79	26.35	1.6	3144.06	0.387	7.1	4.1	217	177	209	0.87
70*	40.00	31.36	2	4485.00	0.268	10.0	6.1	266	218	263	0.6
95*	44.91	36.07	2	5733.55	0.193	13.6	6.8	319	263	324	0.45
120*	49.24	39.20	2.5	7239.62	0.153	17.2	9.5	363	300	376	0.37
150*	54.15	43.91	2.5	8659.25	0.124	21.4	10.6	406	338	430	0.3
185*	60.75	50.11	2.5	10508.97	0.0991	26.5	11.8	458	382	495	0.26
240*	67.80	56.96	2.5	13239.32	0.0754	34.3	13.4	529	442	584	0.21
300*	74.65	63.41	2.5	15992.69	0.0601	42.9	14.8	592	496	666	0.185
400*	84.14	71.00	3.15	21005.69	0.047	57.2	20.9	667	570	766	0.165
Five Core											
1.5	14.99	9.95	0.9	427.10	12.1	0.20	0.88	32	26	26	27
2.5	16.83	11.79	1.1	546.00	7.41	0.35	1.0	42	34	35	16
4	18.41	13.17	1.2	667.68	4.61	0.57	1.1	55	45	47	10
6	20.65	14.71	1.4	940.71	3.08	0.86	1.8	69	56	59	6.8
10	23.27	17.13	1.7	1216.10	1.83	1.4	2.1	92	75	82	4
16	27.12	20.08	2.0	1790.58	1.15	2.2	3.3	119	96	107	2.5
25	31.98	24.74	2.4	2496.32	0.727	3.6	4.0	152	124	140	1.65
35	35.20	27.04	2.7	3132.36	0.524	5.0	4.6	182	149	172	1.15

*Shaped conductors, all others are Circular conductors
Resistance & Area of Armour

Nominal cross sectional area mm ²	Approx. overall diameter mm	Approximate cable weight Kg/Km	Nominal Dia. of armour wires mm	Approx cable weight Kg/km	Max. conductor resistance @20°C Oh ms/km	Conductor Short circuit rating (1 sec) KA	Armour Short circuit rating (1 sec) kA	Current Rating			Volt drop Single Phase AC touching mV/A/m
								Direct in ground Amps	In duct Amps	In air mV/A/m	
Two Core											
1.5	12.82	7.98	0.9	311.02	12.1	0.20	0.65	38	31	31	31
2.5	14.38	9.34	0.9	381.01	7.41	0.35	0.75	49	41	41	19
4	15.40	10.36	0.9	446.43	4.61	0.57	0.85	65	53	55	12
6	16.54	11.50	0.9	524.90	3.08	0.86	1.0	81	67	70	7.9
10	18.54	13.30	0.9	664.95	1.83	1.4	1.2	109	89	95	4.7
16	21.28	15.34	1.25	964.11	1.15	2.2	1.9	141	115	126	2.9
25*	24.92	18.78	1.25	1304.20	0.727	3.6	1.9	183	148	164	1.9
35*	28.32	21.28	1.6	1790.21	0.524	5.0	2.8	219	178	202	1.35
50*	25.58	18.34	1.6	1872.13	0.387	7.1	3.1	259	211	244	1
70*	28.58	21.14	1.6	2397.06	0.268	10.0	3.7	317	260	306	0.69
95*	31.98	23.54	2	3245.71	0.193	13.6	5.2	381	313	378	0.52
120*	34.78	26.14	2	3862.61	0.153	17.2	5.8	433	357	437	0.42
150*	40.78	31.94	2	4817.96	0.124	21.4	6.4	485	401	499	0.35
185*	44.28	34.04	2.5	6052.73	0.0991	26.5	8.8	547	455	576	0.29
240*	46.28	35.84	2.5	7260.00	0.0754	34.3	9.9	632	527	680	0.24
300*	54.28	43.64	2.5	9103.37	0.0601	42.9	10.9	708	592	775	0.21
400*	63.88	52.84	2.5	11659.84	0.047	57.2	12.2	799	699	892	0.19
Seven Core											
1.5	15.84	10.80	0.9	490.47	12.1	0.20	1.0	38	31	31	31
2.5	17.88	12.84	0.9	634.98	7.41	0.35	1.1	49	41	41	19
4	20.31	14.37	1.25	914.06	4.61	0.57	1.8	65	53	55	12
Twelve Core											
1.5	19.99	14.05	1.25	808.15	12.1	0.20	1.8	38	31	31	31
2.5	23.02	16.88	1.25	1067.09	7.41	0.35	0.2	49	41	41	19
4	26.04	19.20	1.6	1488.60	4.61	0.57	3.1	65	53	-	12
Nineteen Core											
1.5	22.58	16.44	1.25	1031.18	12.1	0.20	2.1	38	31	31	31
2.5	27.08	20.04	1.6	1564.85	7.41	0.35	3.2	49	41	41	19
4	29.63	22.59	1.6	1976.68	4.61	0.57	3.7	65	53	55	12
Twenty-Seven Core											
1.5	26.93	19.89	1.6	1493.51	12.1	0.20	3.8	38	31	31	31
2.5	31.52	24.28	1.6	2021.66	7.41	0.35	3.8	49	41	41	19
4	34.66	27.22	1.6	2568.34	4.61	0.57	4.4	65	53	55	12
Thirty Seven Core											
1.5	29.32	22.28	1.6	1778.52	12.1	0.20	3.8	38	31	31	31
2.5	34.48	27.24	1.6	2448.64	7.41	0.35	3.8	49	41	41	19
4	39.35	30.91	2	3511.89	4.61	0.57	6.4	65	53	55	12
Forty Eight Core											
1.5	32.77	25.53	1.6	2142.77	12.1	0.20	4.1	38	31	31	31
2.5	39.82	31.38	2	3287.70	7.41	0.35	6.4	49	41	41	19
4	44.18	35.54	2	4277.44	4.61	0.57	7.2	65	53	55	-

*Shaped conductors, all others are Circular conductors

7,12,19,27,37&48 core current ratings: The tabulated rating is as a two core and may be used where the number of cores carrying current does not exceed the square root of the total number of cores.

Nominal cross sectional area mm ²	Approx. overall diameter mm	Nominal Area of Armour and Maximum Armour Resistance at 20°C									
		Single Core*		Two Core		Three Core		Four Core		Five Core	
		mm ²	Ohms/km	mm ²	Ohms/km	mm ²	Ohms/km	mm ²	Ohms/km	mm ²	Ohms/km
1.5	12.1	-	-	15	10.2	16	9.5	17	8.8	19	8.2
2.5	7.41	-	-	17	8.8	19	8.2	20	7.7	22	6.8
4	4.61	-	-	19	7.9	20	7.5	22	6.8	25	6.2
6	3.08	-	-	22	7.0	23	6.7	36	4.3	40	3.9
10	1.83	-	-	26	6.0	39	4.0	42	3.7	46	3.4
16	1.15	-	-	42	3.7	45	3.5	50	3.1	72	2.2
25	0.727	-	-	42	3.7	62	2.5	70	2.3	88	1.8
35	0.524	-	-	60	2.6	68	2.3	78	2.0	100	1.6
50	0.387	-	-	68	2.3	78	2.0	90	1.8	-	-
70	0.268	-	-	80	2.0	90	1.8	131	1.2	-	-
95	0.193	-	-	113	1.4	128	1.3	147	1.1	-	-
120	0.153	-	-	125	1.3	141	1.2	206	0.76	-	-
150	0.124	76	0.42	138	1.2	201	0.78	230	0.68	-	-
185	0.0991	84	0.38	191	0.82	220	0.71	255	0.61	-	-
240	0.0754	94	0.34	215	0.73	250	0.63	289	0.54	-	-
300	0.0601	104	0.31	235	0.67	269	0.58	319	0.49	-	-
400	0.0470	147	0.22	265	0.59	304	0.52	452	0.35	-	-
500	0.0366	163	0.20	-	-	-	-	-	-	-	-
630	0.0283	182	0.18	-	-	-	-	-	-	-	-
800	0.0221	260	0.13	-	-	-	-	-	-	-	-
1000	0.0176	284	0.12	-	-	-	-	-	-	-	-

*Armour wires for single core cables are aluminum

No. of Cores	Nominal Area of Armour and Maximum Armour Resistance at 20°C					
	1.5mm ²		2.5mm ²		4.0mm ²	
	mm ²	Ohms/km	mm ²	Ohms/km	mm ²	Ohms/km
7	20	7.5	24	6.3	39	4.0
12	39	4.0	45	3.5	68	2.3
19	45	3.5	70	2.3	80	2.0
27	70	2.3	84	1.9	96	1.7
37	78	2.0	94	1.7	138	1.2
48	90	1.8	136	1.2	157	1.0