

Constructional and Electrical Performance Data
BS5467/BS6724 – 0.6/1.0kV – Single core
Copper conductors thermosetting insulated armoured cables



AEI Cables Limited

Nominal area of conductor	mm ²	50.00*	70.00*	95.00*	120.00*	150.00*	185.00*	240.00*	300.00*	400.00*	500.00*	630.00*	800.00*	1000.0*				
Insulation radial thickness	mm	1.00	1.10	1.10	1.20	1.40	1.60	1.70	1.80	2.00	2.20	2.40	2.60	2.80				
Inner sheath radial thickness	mm	0.80	0.80	0.80	0.80	1.00	1.00	1.00	1.00	1.20	1.20	1.20	1.40	1.40				
Aluminium armour wire diameter	mm	1.25	1.25	1.25	1.25	1.60	1.60	1.60	1.60	2.00	2.00	2.00	2.50	2.50				
Outer sheath radial thickness	mm	1.50	1.50	1.60	1.60	1.70	1.80	1.80	1.90	2.00	2.10	2.20	2.40	2.50				
Overall diameter (Nom)	mm	18.00	20.00	22.00	24.00	27.00	29.00	32.00	34.00	39.00	43.00	47.00	53.00	58.00				
Cable weight (Nom)	Kg/Km	700	1000	1300	1550	1950	2350	3000	3650	4700	5800	7250	9400	11600				
Internal bending radius (Min)	mm	108	120	132	144	162	174	192	204	234	258	282	318	348				
Armour resistance @ 20°C (Max)	Ω/Km	1.30	0.75	0.67	0.61	0.42	0.38	0.34	0.31	0.22	0.20	0.18	0.13	0.12				
Armour gross cross sectional area	mm ²	26	42	47	52	76	84	94	104	147	163	182	260	284				
Armour conductivity	%	30	36	29	25	30	26	22	19	21	18	16	17	15				
d.c. conductor resistance @ 20°C (Max)	Ω/Km	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283	0.0221	0.0176				
a.c. conductor resistance @ 90°C (Max)	Ω/Km	0.494	0.342	0.247	0.196	0.159	0.128	0.0985	0.0797	0.0637	0.0514	0.0421	0.0350	0.0302				
Inductance	mH/Km	0.331	0.324	0.310	0.292	0.301	0.287	0.280	0.275	0.277	0.273	0.264	0.270	0.267				
Reactance @ 50 Hz	Ω/Km	0.1040	0.1018	0.0974	0.0917	0.0946	0.0902	0.0880	0.0864	0.0870	0.0858	0.0829	0.0848	0.0839				
Impedance @ 90°C	Ω/Km	0.505	0.357	0.266	0.216	0.185	0.157	0.132	0.118	0.108	0.100	0.0930	0.0917	0.0892				
DC voltage drop	mV/A/M	0.98	0.67	0.49	0.39	0.31	0.25	0.195	0.155	0.115	0.093	0.073	0.056	0.045				
Single phase voltage drop	mV/A/M	1.00	0.71	0.55	0.45	0.38	0.33	0.28	0.25	0.22	0.21	0.195	0.190	0.180				
Three phase voltage drop	mV/A/M	0.87	0.62	0.47	0.39	0.33	0.28	0.24	0.21	0.195	0.180	0.170	0.165	0.155				
Continuous current carrying capacity (Laid direct)	A	231	284	340	386	431	485	558	623	691	765	840	888	942				
Continuous current carrying capacity (Ducts)	A	231	278	327	366	396	437	489	534	567	615	665	692	735				
Continuous current carrying capacity (Air)	A	231	295	362	420	483	555	654	745	851	963	1085	1178	1278				
Conductor short circuit symmetrical fault																		
90°C – 250°C for 1 sec	kA rms	7.15	10.00	13.60	17.20	21.50	26.50	34.30	42.90	57.20	71.50	90.10	>100	>100				
Armour short circuit asymmetrical earth fault																		
80°C – 200°C for 1 sec	kA rms	2.20	3.60	4.00	4.40	6.50	7.10	8.00	8.80	12.50	13.90	15.50	22.10	24.10				

Short circuit current rating for any other time (T) in the range 0.2 sec to 5 sec can be obtained by dividing the 1 sec value by \sqrt{T} . For short circuit durations of less than 0.2 sec, it is recommended that the 0.2 sec rating be used in order to prevent the possibility of cable damage by electromagnetic forces.

* Circular conductor.

General Note

AEI Cables reserves the right to amend the product information without notice or liability.
The information is considered accurate at the time of going to print.

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A subsidiary of TT electronics plc

Constructional and Electrical Performance Data
BS5467/BS6724 – 0.6/1.0kV – Two core
Copper conductors thermosetting insulated armoured cables



AEI Cables Limited

Nominal area of conductor	mm ²	1.50*	2.50*	4.00*	6.00*	10.00*	16.00*	25.00	35.00	50.00	70.00	95.00	120.00	150.00	185.00	240.00	300.00	
Insulation radial thickness	mm	0.60	0.70	0.70	0.70	0.70	0.70	0.90	0.90	1.00	1.10	1.10	1.20	1.40	1.60	1.70	1.80	
Inner sheath radial thickness	mm	0.80	0.80	0.80	0.80	0.80	0.80	0.80	1.00	1.00	1.00	1.20	1.20	1.20	1.40	1.40	1.60	
Galvanised steel armour wire diameter	mm	0.90	0.90	0.90	0.90	0.90	0.90	1.25	1.60	1.60	1.60	2.00	2.00	2.00	2.50	2.50	2.50	
Outer sheath radial thickness	mm	1.40	1.40	1.40	1.40	1.50	1.50	1.60	1.70	1.80	1.90	2.00	2.10	2.20	2.40	2.50	2.60	
Overall diameter (Nom)	mm	11.00	12.00	13.00	14.00	16.00	19.00	21.00	22.00	24.00	27.00	32.00	35.00	38.00	43.00	49.00	54.00	
Cable weight (Nom)	Kg/Km	300	350	420	490	630	900	1050	1450	1800	2300	3250	3950	4650	6050	7500	9050	
Internal bending radius (Min)	mm	66	72	78	84	96	114	168	176	192	216	256	280	304	344	392	432	
Armour resistance @ 20°C (Max)	Ω/Km	10.20	8.80	7.90	7.00	6.00	3.70	3.70	2.60	2.30	2.00	1.40	1.30	1.20	0.82	0.73	0.67	
Armour gross cross sectional area	mm ²	15	17	19	22	26	42	42	60	68	80	113	125	138	191	215	235	
Armour conductivity	%	119	84	58	44	31	31	20	20	17	13	14	12	10	12	10	9	
d.c. conductor resistance @ 20°C (Max)	Ω/Km	12.10	7.41	4.61	3.08	1.83	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	
a.c. conductor resistance @ 90°C (Max)	Ω/Km	15.43	9.45	5.88	3.93	2.33	1.47	0.927	0.669	0.494	0.342	0.247	0.196	0.160	0.128	0.0988	0.0799	
Inductance	mH/Km	0.322	0.316	0.298	0.284	0.271	0.258	0.252	0.244	0.243	0.239	0.230	0.230	0.231	0.232	0.229	0.228	
Reactance @ 50 Hz	Ω/Km	0.1012	0.0993	0.0936	0.0892	0.0851	0.0811	0.0792	0.0767	0.0763	0.0751	0.0723	0.0723	0.0726	0.0729	0.0719	0.0716	
Impedance @ 90°C	Ω/Km	15.43	9.45	5.88	3.93	2.33	1.47	0.930	0.673	0.500	0.350	0.257	0.209	0.176	0.147	0.122	0.107	
DC voltage drop	mV/A/M	31.00	19.00	12.00	7.90	4.70	2.90	1.85	1.35	0.98	0.67	0.49	0.39	0.31	0.25	0.195	0.155	
Single phase voltage drop	mV/A/M	31.00	19.00	12.00	7.90	4.70	2.90	1.90	1.35	1.00	0.69	0.52	0.42	0.35	0.29	0.24	0.21	
Three phase voltage drop	mV/A/M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Continuous current carrying capacity (Laid direct)	A	38	49	65	81	109	141	183	219	259	317	381	433	485	547	632	708	
Continuous current carrying capacity (Ducts)	A	31	41	53	67	89	115	148	178	211	260	313	357	401	455	527	592	
Continuous current carrying capacity (Air)	A	31	41	55	70	95	126	164	202	244	306	378	437	499	576	680	775	
Conductor short circuit symmetrical fault																		
90°C – 250°C for 1 sec	kA rms	0.22	0.36	0.57	0.86	1.43	2.29	3.58	5.01	7.15	10.00	13.60	17.20	21.50	26.50	34.30	42.90	
Armour short circuit asymmetrical earth fault																		
80°C – 200°C for 1 sec	kA rms	0.22+	0.36+	0.57+	0.86+	1.20	1.90	1.90	2.80	3.10	3.70	5.20	5.80	6.30	8.80	9.90	10.80	

Short circuit current rating for any other time (T) in the range 0.2 sec to 5 sec can be obtained by dividing the 1 sec value by \sqrt{T} . For short circuit durations of less than 0.2 sec, it is recommended that the 0.2 sec rating be used in order to prevent the possibility of cable damage by electromagnetic forces.

* Circular conductor.

+ Limited by the short circuit capacity of the conductor.

General Note

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A subsidiary of TT electronics plc

Constructional and Electrical Performance Data
BS5467/BS6724 – 0.6/1.0kV – Three core
Copper conductors thermosetting insulated armoured cables



AEI Cables Limited

Nominal area of conductor	mm ²	1.50*	2.50*	4.00*	6.00*	10.00*	16.00*	25.00	35.00	50.00	70.00	95.00	120.00	150.00	185.00	240.00	300.00	400.00
Insulation radial thickness	mm	0.60	0.70	0.70	0.70	0.70	0.70	0.90	0.90	1.00	1.10	1.10	1.20	1.40	1.60	1.70	1.80	2.00
Inner sheath radial thickness	mm	0.80	0.80	0.80	0.80	0.80	0.80	1.00	1.00	1.00	1.00	1.20	1.20	1.40	1.40	1.40	1.60	1.60
Galvanised steel armour wire diameter	mm	0.90	0.90	0.90	0.90	1.25	1.25	1.60	1.60	1.60	1.60	2.00	2.00	2.50	2.50	2.50	2.50	2.50
Outer sheath radial thickness	mm	1.40	1.40	1.40	1.40	1.50	1.60	1.70	1.80	1.80	1.90	2.10	2.20	2.30	2.40	2.60	2.70	2.90
Overall diameter (Nom)	mm	11.00	13.00	14.00	15.00	18.00	20.00	24.00	27.00	28.00	32.00	36.00	40.00	44.00	49.00	56.00	62.00	68.00
Cable weight (Nom)	Kg/Km	330	395	475	575	890	1100	1750	2000	2450	3250	4500	5350	6900	8200	10350	12600	15450
Internal bending radius (Min)	mm	66	78	84	90	108	120	192	216	224	256	288	320	352	392	448	496	544
Armour resistance @ 20°C (Max)	Ω/Km	9.50	8.20	7.50	6.70	4.00	3.50	2.50	2.30	2.00	1.80	1.30	1.20	0.78	0.71	0.63	0.58	0.52
Armour gross cross sectional area	mm ²	16	19	20	23	39	45	62	68	78	90	128	141	201	220	250	269	304
Armour conductivity	%	127	90	61	46	46	33	29	23	19	15	15	13	16	14	12	10	9
d.c. conductor resistance @ 20°C (Max)	Ω/Km	12.10	7.41	4.61	3.08	1.83	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
a.c. conductor resistance @ 90°C (Max)	Ω/Km	15.43	9.45	5.88	3.93	2.33	1.47	0.927	0.669	0.494	0.342	0.247	0.196	0.160	0.128	0.0988	0.0799	0.0641
Inductance	mH/Km	0.322	0.316	0.298	0.284	0.271	0.258	0.259	0.244	0.243	0.239	0.230	0.229	0.231	0.232	0.229	0.228	0.227
Reactance @ 50 Hz	Ω/Km	0.1012	0.0993	0.0936	0.0892	0.0851	0.0811	0.0814	0.0767	0.0763	0.0751	0.0723	0.0719	0.0726	0.0729	0.0719	0.0716	0.0713
Impedance @ 90°C	Ω/Km	15.430	9.451	5.881	3.931	2.332	1.472	0.931	0.673	0.500	0.350	0.257	0.209	0.176	0.147	0.122	0.107	0.096
DC voltage drop	mV/A/M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Single phase voltage drop	mV/A/M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Three phase voltage drop	mV/A/M	27.00	16.00	10.00	6.80	4.00	2.50	1.65	1.15	0.87	0.60	0.45	0.37	0.30	0.26	0.21	0.185	0.165
Continuous current carrying capacity (Laid direct)	A	32	42	55	69	92	119	152	182	217	266	319	363	406	458	529	592	667
Continuous current carrying capacity (Ducts)	A	26	34	45	56	75	96	124	149	177	218	263	300	338	382	442	496	570
Continuous current carrying capacity (Air)	A	26	35	47	59	82	107	140	172	209	263	324	376	430	495	584	672	766
Conductor short circuit symmetrical fault																		
90°C – 250°C for 1 sec	kA rms	0.22	0.36	0.57	0.86	1.43	2.29	3.58	5.01	7.15	10.00	13.60	17.20	21.50	26.50	34.30	42.90	57.20
Armour short circuit asymmetrical earth fault																		
80°C – 200°C for 1 sec	kA rms	0.22+	0.36+	0.57+	0.86+	1.43+	2.10	2.90	3.10	3.60	4.10	5.90	6.50	9.20	10.10	11.50	12.40	14.00

Short circuit current rating for any other time (T) in the range 0.2 sec to 5 sec can be obtained by dividing the 1 sec value by \sqrt{T} . For short circuit durations of less than 0.2 sec, it is recommended that the 0.2 sec rating be used in order to prevent the possibility of cable damage by electromagnetic forces.

* Circular conductor.

+ Limited by the short circuit capacity of the conductor.

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A subsidiary of TT electronics plc

Constructional and Electrical Performance Data
BS5467/BS6724 – 0.6/1.0kV – Four core
Copper conductors thermosetting insulated armoured cables



AEI Cables Limited

Nominal area of conductor	mm ²	1.50*	2.50*	4.00*	6.00*	10.00*	16.00*	25.00	35.00	50.00	70.00	95.00	120.00	150.00	185.00	240.00	300.00	400.00
Insulation radial thickness	mm	0.60	0.70	0.70	0.70	0.70	0.70	0.90	0.90	1.00	1.10	1.10	1.20	1.40	1.60	1.70	1.80	2.00
Inner sheath radial thickness	mm	0.80	0.80	0.80	0.80	0.80	0.80	1.00	1.00	1.00	1.20	1.20	1.40	1.40	1.40	1.60	1.60	1.80
Galvanised steel armour wire diameter	mm	0.90	0.90	0.90	1.25	1.25	1.25	1.60	1.60	1.60	2.00	2.00	2.50	2.50	2.50	2.50	2.50	3.15
Outer sheath radial thickness	mm	1.40	1.40	1.40	1.50	1.50	1.60	1.70	1.80	1.90	2.10	2.20	2.30	2.40	2.60	2.70	2.90	3.20
Overall diameter (Nom)	mm	12.00	14.00	15.00	17.00	19.00	22.00	27.00	29.00	32.00	37.00	41.00	46.00	51.00	55.00	63.00	68.00	78.00
Cable weight (Nom)	Kg/Km	370	445	550	785	1010	1350	2100	2450	3100	4400	5650	7300	8700	10450	13250	16100	21000
Internal bending radius (Min)	mm	72	84	90	102	114	132	216	232	256	296	328	368	408	440	504	544	624
Armour resistance @ 20°C (Max)	Ω/Km	8.80	7.70	6.80	4.30	3.70	3.10	2.30	2.00	1.80	1.20	1.10	0.76	0.68	0.61	0.54	0.49	0.35
Armour gross cross sectional area	mm ²	17	20	22	36	42	50	70	78	90	131	147	206	230	255	289	319	452
Armour conductivity	%	138	96	68	72	49	37	32	26	22	22	18	20	18	16	14	12	13
d.c. conductor resistance @ 20°C (Max)	Ω/Km	12.10	7.41	4.61	3.08	1.83	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
a.c. conductor resistance @ 90°C (Max)	Ω/Km	15.43	9.45	5.88	3.93	2.33	1.47	0.927	0.669	0.494	0.342	0.247	0.196	0.160	0.128	0.0988	0.0799	0.0641
Inductance	mH/Km	0.322	0.316	0.298	0.284	0.271	0.258	0.259	0.244	0.243	0.239	0.230	0.229	0.231	0.232	0.229	0.228	0.227
Reactance @ 50 Hz	Ω/Km	0.1012	0.0993	0.0936	0.0892	0.0851	0.0811	0.0814	0.0767	0.0763	0.0751	0.0723	0.0719	0.0726	0.0729	0.0719	0.0716	0.0713
Impedance @ 90°C	Ω/Km	15.43	9.451	5.881	3.931	2.332	1.472	0.931	0.673	0.500	0.350	0.257	0.209	0.176	0.147	0.122	0.107	0.096
DC voltage drop	mV/A/m	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Single phase voltage drop	mV/A/m	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Three phase voltage drop	mV/A/m	27.00	16.00	10.00	6.80	4.00	2.50	1.65	1.15	0.87	0.60	0.45	0.37	0.30	0.26	0.21	0.185	0.165
Continuous current carrying capacity (Laid direct)	A	32	42	55	69	92	119	152	182	217	266	319	363	406	458	529	592	667
Continuous current carrying capacity (Ducts)	A	26	34	45	56	75	96	124	149	177	218	263	300	338	382	442	496	570
Continuous current carrying capacity (Air)	A	26	35	47	59	82	107	140	172	209	263	324	376	430	495	584	666	766
Conductor short circuit symmetrical fault																		
90°C – 250°C for 1 sec	kA rms	0.22	0.36	0.57	0.86	1.43	2.29	3.58	5.01	7.15	10.00	13.60	17.20	21.50	26.50	34.30	42.90	57.20
Armour short circuit asymmetrical earth fault																		
80°C – 200°C for 1 sec	kA rms	0.22+	0.36+	0.57+	0.86+	1.43+	2.29+	3.20	3.60	4.10	6.00	6.80	9.50	10.60	11.70	13.30	14.70	20.80

Short circuit current rating for any other time (T) in the range 0.2 sec to 5 sec can be obtained by dividing the 1 sec value by \sqrt{T} . For short circuit durations of less than 0.2 sec, it is recommended that the 0.2 sec rating be used in order to prevent the possibility of cable damage by electromagnetic forces.

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A subsidiary of TT electronics plc

Constructional and Electrical Performance Data
BS5467/BS6724 – 0.6/1.0kV – Four core with reduced neutral
Copper conductors thermosetting insulated armoured cables



AEI Cables Limited

Nominal area of conductor	mm ²	25.00	35.00	50.00	70.00	95.00	120.00	150.00	185.00	240.00	300.00	300.00	400.00					
Nominal area of neutral	mm ²	16.00*	16.00*	25.00*	35.00*	50.00*	70.00*	70.00*	95.00*	120.00*	150.00*	185.00*	185.00*					
Insulation radial thickness (phase)	mm	0.90	0.90	1.00	1.10	1.10	1.20	1.40	1.60	1.70	1.80	1.80	2.00					
Insulation radial thickness (neutral)	mm	0.70	0.70	0.90	0.90	1.00	1.10	1.10	1.10	1.20	1.40	1.60	1.60					
Inner sheath radial thickness	mm	1.00	1.00	1.00	1.20	1.20	1.20	1.40	1.40	1.60	1.60	1.60	1.60					
Galvanised steel armour wire diameter	mm	1.60	1.60	1.60	2.00	2.00	2.00	2.50	2.50	2.50	2.50	2.50	2.50					
Outer sheath radial thickness	mm	1.70	1.80	1.90	2.00	2.10	2.20	2.40	2.50	2.60	2.80	2.80	3.00					
Overall diameter (Nom)	mm	27.00	28.00	31.00	35.00	40.00	43.00	49.00	53.00	60.00	65.00	66.00	73.00					
Cable weight (Nom)	Kg/Km	1900	2250	2850	4000	5100	6250	7800	9450	11900	14400	14800	17750					
Internal bending radius (Min)	mm	216	224	248	280	320	344	392	424	480	520	528	584					
Armour resistance @ 20°C (Max)	Ω/Km	2.30	2.10	1.90	1.30	1.10	0.96	0.71	0.63	0.56	0.52	0.49	0.56					
Armour gross cross sectional area	mm ²	70	76	86	128	144	163	220	250	279	304	304	343					
Armour conductivity	%	32	25	20	21	18	16	17	16	13	12	12	8					
d.c. conductor resistance @ 20°C (Max)	Ω/Km	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0601	0.0470					
a.c. conductor resistance @ 90°C (Max)	Ω/Km	0.927	0.669	0.494	0.343	0.247	0.196	0.160	0.128	0.0988	0.0800	0.0800	0.0641					
Inductance	mH/Km	0.259	0.244	0.243	0.239	0.230	0.229	0.231	0.232	0.229	0.228	0.228	0.227					
Reactance @ 50 Hz	Ω/Km	0.0814	0.0767	0.0763	0.0751	0.0723	0.0719	0.0726	0.0729	0.0719	0.0716	0.0716	0.0713					
Impedance @ 90°C	Ω/Km	0.931	0.673	0.500	0.351	0.257	0.209	0.176	0.147	0.122	0.107	0.107	0.096					
DC voltage drop	mV/A/M	-	-	-	-	-	-	-	-	-	-	-	-					
Single phase voltage drop	mV/A/M	-	-	-	-	-	-	-	-	-	-	-	-					
Three phase voltage drop	mV/A/M	1.65	1.15	0.87	0.60	0.45	0.37	0.30	0.26	0.21	0.185	0.165	0.165					
Continuous current carrying capacity (Laid direct)	A	152	182	217	266	319	363	406	458	529	592	667	667					
Continuous current carrying capacity (Ducts)	A	124	149	177	218	263	300	338	382	442	496	570	570					
Continuous current carrying capacity (Air)	A	140	172	209	263	324	376	430	495	584	666	766	766					
Conductor short circuit symmetrical fault																		
90°C – 250°C for 1 sec	kA rms	3.58	5.01	7.15	10.00	13.60	17.20	21.50	26.50	34.30	42.90	42.90	57.20					
Armour short circuit asymmetrical earth fault																		
80°C – 200°C for 1 sec	kA rms	3.20	3.50	4.00	5.90	6.60	7.50	10.10	11.50	12.80	14.00	14.00	15.80					

Short circuit current rating for any other time (T) in the range 0.2 sec to 5 sec can be obtained by dividing the 1 sec value by \sqrt{T} . For short circuit durations of less than 0.2 sec, it is recommended that the 0.2 sec rating be used in order to prevent the possibility of cable damage by electromagnetic forces.
 * Circular conductor.

General Note

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A subsidiary of TT electronics plc

Constructional and Electrical Performance Data
BS5467/BS6724 – 0.6/1.0kV – Five core
Copper conductors thermosetting insulated armoured cables



AEI Cables Limited

Nominal area of conductor	mm ²	1.50*	2.50*	4.00*	6.00*	10.00*	16.00*	25.00*	35.00*	50.00*	70.00*						
Insulation radial thickness	mm	0.60	0.70	0.70	0.70	0.70	0.70	0.90	0.90	1.00	1.10						
Inner sheath radial thickness	mm	0.80	0.80	0.80	0.80	0.80	1.00	1.00	1.00	1.20	1.20						
Galvanised steel armour wire diameter	mm	0.90	0.90	0.90	1.25	1.25	1.60	1.60	1.60	2.00	2.00						
Outer sheath radial thickness	mm	1.40	1.40	1.50	1.50	1.60	1.70	1.80	1.90	2.00	2.20						
Overall diameter (Nom)	mm	13.10	14.60	17.00	18.50	20.70	24.30	31.00	34.00	39.00	45.00						
Cable weight (Nom)	Kg/Km	370	470	680	810	1090	1640	2450	3050	4650	5450						
Internal bending radius (Min)	mm	79	88	102	111	124	146	186	204	234	270						
Armour resistance @ 20°C (Max)	Ω/Km	8.20	6.80	6.20	3.90	3.40	2.20	1.80	1.60	1.10	0.94						
Armour gross cross sectional area	mm ²	19	22	25	40	46	72	88	100	144	166						
Armour conductivity	%	509	269	148	62	32	13	7	4	2	1						
d.c. conductor resistance @ 20°C (Max)	Ω/Km	12.10	7.41	4.61	3.08	1.83	1.15	0.727	0.524	0.387	0.268						
a.c. conductor resistance @ 90°C (Max)	Ω/Km	15.43	9.45	5.88	3.93	2.33	1.47	0.927	0.669	0.494	0.343						
Inductance	mH/Km	0.322	0.316	0.298	0.284	0.271	0.258	0.259	0.244	0.243	0.239						
Reactance @ 50 Hz	Ω/Km	0.1012	0.0993	0.0936	0.0892	0.0851	0.0811	0.0814	0.0767	0.0763	0.0751						
Impedance @ 90°C	Ω/Km	15.430	9.451	5.881	3.931	2.332	1.472	0.931	0.673	0.500	0.351						
DC voltage drop	mV/A/M	-	-	-	-	-	-	-	-	-	-						
Single phase voltage drop	mV/A/M	-	-	-	-	-	-	-	-	-	-						
Three phase voltage drop	mV/A/M	27.00	16.00	10.00	6.80	4.00	2.50	1.65	1.15	0.87	0.60						
Continuous current carrying capacity (Laid direct)	A	32	42	55	69	92	119	152	182	217	266						
Continuous current carrying capacity (Ducts)	A	26	34	45	56	75	96	124	149	177	218						
Continuous current carrying capacity (Air)	A	26	35	47	59	82	107	140	172	209	263						
Conductor short circuit symmetrical fault																	
90°C – 250°C for 1 sec	kA rms	0.22	0.36	0.57	0.86	1.43	2.30	3.58	5.01	7.15	10.00						
Armour short circuit asymmetrical earth fault																	
80°C – 200°C for 1 sec	kA rms	0.22+	0.36+	0.57+	0.86+	1.43+	3.30	4.00	4.60	6.60	7.60						

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* Circular conductor.

+ Limited by the short circuit capacity of the conductor.

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Constructional and Electrical Performance Data

BS5467/BS6724 – 0.6/1.0kV – Auxiliary

Copper conductors thermosetting insulated armoured cables

AEI Cables Limited

Nominal area of conductor	mm ²	1.50*	1.50*	1.50*	1.50*	1.50*	1.50*	2.50*	2.50*	2.50*	2.50*	2.50*	4.00*	4.00*	4.00*	4.00*	4.00*
Number of cores		7	12	19	27	37	48	7	12	19	27	37	7	12	19	27	37
Insulation radial thickness	mm	0.60	0.60	0.60	0.60	0.60	0.60	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Inner sheath radial thickness	mm	0.80	0.80	0.80	1.00	1.00	1.00	0.80	0.80	1.00	1.00	1.00	0.80	1.00	1.00	1.00	1.20
Galvanised steel armour wire diameter	mm	0.90	1.25	1.25	1.60	1.60	1.60	0.90	1.25	1.60	1.60	1.60	1.25	1.60	1.60	1.60	2.00
Outer sheath radial thickness	mm	1.40	1.50	1.60	1.70	1.70	1.80	1.40	1.60	1.70	1.80	1.80	1.50	1.60	1.70	1.90	2.00
Overall diameter (Nom)	mm	16.00	20.00	23.00	27.00	30.00	33.00	17.00	23.00	27.00	31.00	34.00	20.00	26.00	30.00	35.00	40.00
Cable weight (Nom)	Kg/Km	470	790	1025	1510	1835	1970	570	965	1470	1880	2290	780	1330	1760	2340	-
Internal bending radius (Min)	mm	96	120	138	162	180	198	102	138	162	186	204	120	156	180	210	240
Armour resistance @ 20°C (Max)	Ω/Km	7.50	4.00	3.50	2.30	2.00	1.80	6.30	3.50	2.30	1.90	1.70	4.00	2.30	2.00	1.70	1.20
Armour gross cross sectional area	mm ²	20	39	45	70	78	90	24	45	70	84	94	39	68	80	96	138
Armour conductivity	%	161	303	346	526	605	672	118	212	322	390	436	115	200	231	271	384
d.c. conductor resistance @ 20°C (Max)	Ω/Km	12.10						7.41					4.61				
a.c. conductor resistance @ 90°C (Max)	Ω/Km	15.43						9.45					9.45				
Inductance	mH/Km	0.322						0.316					0.298				
Reactance @ 50 Hz	Ω/Km	0.1012						0.0993					0.0936				
Impedance @ 90°C	Ω/Km	15.43						9.45					9.45				
DC voltage drop	mV/A/M	31.00						19.00					12.00				
Single phase voltage drop	mV/A/M	31.00						19.00					12.00				
Three phase voltage drop	mV/A/M	-						-					-				
Continuous current carrying capacity (Laid direct)	A	38						49					65				
Continuous current carrying capacity (Ducts)	A	31						41					53				
Continuous current carrying capacity (Air)	A	31						41					55				
Conductor short circuit symmetrical fault																	
90°C – 250°C for 1 sec	kA rms	0.215						0.358					0.572				
Armour short circuit asymmetrical earth fault																	
80°C – 200°C for 1 sec	kA rms	0.215+						0.358+					0.572+				

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