



## OHLS **SAFFIRE**<sup>®</sup> BS6724

### Saffire BS6724 - Armoured Zero Halogen, Low Smoke (OHLS<sup>®</sup>)

Saffire BS6724 is the OHLS<sup>®</sup> armoured power cable for industrial wiring and mains distribution where thick black smoke and acid gas emission would pose a major hazard during a fire. Designed for use in public areas these cables can be installed with in ducts, clipped directly to a surface, on trays, in basket or in free air. They may also be laid direct in ground in free draining soil and embedded in concrete. LU approved cable (LU Approval ref 268, only on 2/3/4 core).



#### Construction

<b>Conductors:</b>	Stranded plain annealed copper wire (class 2) to BS EN 60228.
<b>Insulation:</b>	XLPE
<b>Binder:</b>	Polyester tape
<b>Bedding:</b>	Zero Halogen, Low Smoke (OHLS <sup>®</sup> )
<b>Armour:</b>	Galvanised Steel Wire Armour (Aluminium Wire Armour for single core)
<b>Sheath:</b>	Zero Halogen, Low Smoke (OHLS <sup>®</sup> )
<b>Core colours:</b>	Single core: Brown or Blue Two core: Brown and Blue Three core: Brown, Black and Grey Four core: Brown, Black, Grey and Blue Five core: Brown, Black, Grey, Blue and Green/Yellow
<b>Sheath colour:</b>	Black

#### Physical Characteristics

<b>Voltage rating (U<sub>0</sub>/U):</b>	600/1000V
<b>Max, conductor temp:</b>	90°C Note: Where a conductor operates at a temperature exceeding 70°C it shall be ascertained that the equipment connected to the conductor is suitable for the conductor operating temperature (see regulation 512-1-5 of BS7671, the 17th Edition of IEE Wiring Regulations)
<b>Min, bending radius:</b>	6D circular conductors 8D shaped conductors
<b>Curent rating:</b>	Refer to tables 4E4A & 4E4B in BS7671 or ERA 69-30 Part V

#### Performance Characteristics

<b>Smoke emission:</b>	BS EN 61034-2
<b>Acid gas emission:</b>	BS EN 50267-2-1
<b>Flame propagation:</b>	BS EN 60332-3-24

Other colours available on request

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## Single Core 694AWLSH

Nominal area of conductor mm <sup>2</sup>	Armour wire diameter mm	Approx. diameter under armour mm	Approx. overall diameter mm	Approx. cable weight kg/km	Maximum conductor resistance		Nominal area of armour mm <sup>2</sup>	Maximum armour resistance at 20°C Ω/km
					DC at 20°C Ω/km	AC at 90°C Ω/km		
120*	1.25	17.7	24.2	1540	0.1530	0.1962	52	0.61
150*	1.6	19.5	26.2	1840	0.1240	0.1594	76	0.42
185*	1.6	21.6	28.4	2230	0.0991	0.1280	84	0.38
240*	1.6	23.8	30.6	2800	0.0754	0.0985	94	0.34
300*	1.6	26.4	33.4	3435	0.0601	0.0797	104	0.31
400*	2.0	30.1	38.1	4385	0.0470	0.0635	147	0.22
500*	2.0	33.9	42.1	5535	0.0366	0.0513	163	0.20
630*	2.0	38.2	46.6	6990	0.0283	0.0419	182	0.18
800*	2.5	43.4	53.2	9170	0.0221	0.0349	260	0.13
1000*	2.5	48.3	58.2	11355	0.0176	0.0303	284	0.12

## Two Core 6942LSH

Nominal area of conductor mm <sup>2</sup>	Armour wire diameter mm	Approx. diameter under armour mm	Approx. overall diameter mm	Approx. cable weight kg/km	Maximum conductor resistance		Nominal area of armour mm <sup>2</sup>	Maximum armour resistance at 20°C Ω/km
					DC at 20°C Ω/km	AC at 90°C Ω/km		
1.5*	0.9	6.9	10.8	240	12.1	15.428	15	10.2
2.5*	0.9	8.2	12.2	305	7.41	9.448	17	8.8
4*	0.9	9.3	13.3	370	4.61	5.878	19	7.9
6*	0.9	10.4	14.4	445	3.08	3.927	22	7
10*	0.9	12.0	16.2	580	1.83	2.333	26	6
16*	1.25	14.1	19.0	870	1.15	1.466	42	3.7
25	1.25	15.1	20.7	1090	0.727	0.926	42	3.7
35	1.6	16.7	23.2	1470	0.524	0.6685	60	2.6
50	1.6	19.2	25.9	1845	0.387	0.494	68	2.3
70	1.6	22.2	29.0	2385	0.268	0.3412	80	2
95	2.0	23.8	31.3	3025	0.193	0.2471	113	1.4
120	2.0	27.2	34.8	3675	0.153	0.1964	125	1.3
150	2.0	29.7	37.5	4330	0.124	0.1597	138	1.2
185	2.5	33.1	42.3	5635	0.0991	0.1284	191	0.82
240	2.5	37.8	47.2	7000	0.0754	0.0989	215	0.73
300	2.5	42.1	51.7	8480	0.0601	0.0801	235	0.67
400	2.5	46.9	56.8	10390	0.047	0.0641	265	0.59

## Three Core 6943LSH

Nominal area of conductor mm <sup>2</sup>	Armour wire diameter mm	Approx. diameter under armour mm	Approx. overall diameter mm	Approx. cable weight kg/km	Maximum conductor resistance		Nominal area of armour mm <sup>2</sup>	Maximum armour resistance at 20°C Ω/km
					DC at 20°C Ω/km	AC at 90°C Ω/km		
1.5*	0.9	7.4	11.2	265	12.1	15.428	16	9.5
2.5*	0.9	8.7	12.7	340	7.41	9.448	19	8.2
4*	0.9	9.9	13.9	420	4.61	5.878	20	7.5
6*	0.9	11.1	15.1	510	3.08	3.927	23	6.7
10*	1.25	12.8	17.7	780	1.83	2.333	39	4
16*	1.25	15.1	20.1	1035	1.15	1.466	45	3.5
25*	1.6	18.9	25.2	1715	0.727	0.926	62	2.5
35*	1.6	21.2	27.7	2120	0.524	0.6685	68	2.3
50	1.6	22.1	28.8	2410	0.387	0.494	78	2
70	1.6	25.3	32.1	3160	0.268	0.3412	90	1.8
95	2.0	28.3	36.0	4100	0.193	0.2471	128	1.3
120	2.0	31.4	39.3	4980	0.153	0.1964	141	1.2
150	2.5	35.3	44.3	6340	0.124	0.1597	201	0.78
185	2.5	39.1	48.3	7590	0.0991	0.1284	220	0.71
240	2.5	43.9	53.5	9575	0.0754	0.0989	250	0.63
300	2.5	48.7	58.4	11585	0.0601	0.0801	269	0.58
400	2.5	54.4	64.5	14345	0.047	0.0641	304	0.52

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## Four Core 6944LSH

Nominal area of conductor mm <sup>2</sup>	Armour wire diameter mm	Approx. diameter under armour mm	Approx. overall diameter mm	Approx. cable weight kg/km	Maximum conductor resistance		Nominal area of armour mm <sup>2</sup>	Maximum armour resistance at 20°C Ω/km
					DC at 20°C Ω/km	AC at 90°C Ω/km		
1.5*	0.9	8.4	11.9	300	12.1	15.428	17	8.8
2.5*	0.9	9.6	13.6	385	7.41	9.448	20	7.7
4*	0.9	10.9	14.9	480	4.61	5.878	22	6.8
6*	1.25	12.3	17.2	690	3.08	3.927	36	4.3
10*	1.25	14.2	19.0	920	1.83	2.333	42	3.7
16*	1.25	16.7	21.8	1240	1.15	1.466	50	3.1
25*	1.6	21.1	27.4	1990	0.727	0.926	70	2.3
35*	1.6	23.6	30.1	2475	0.524	0.6685	78	2
50	1.6	24.3	31.1	2965	0.387	0.494	90	1.8
70	2.0	28.5	36.2	4040	0.268	0.3412	131	1.2
95	2.0	32.0	39.9	5170	0.193	0.2471	147	1.1
120	2.5	35.9	44.9	6675	0.153	0.1964	206	0.76
150	2.5	39.9	49.1	7965	0.124	0.1597	230	0.68
185	2.5	44.4	53.9	9655	0.0991	0.1284	255	0.61
240	2.5	49.7	59.4	12195	0.0754	0.0989	289	0.54
300	2.5	55.2	65.3	14820	0.0601	0.0801	319	0.49
400	3.15	62.1	74.0	19200	0.047	0.0641	452	0.35

## Five Core 6945LSH

Nominal area of conductor mm <sup>2</sup>	Armour wire diameter mm	Approx. diameter under armour mm	Approx. overall diameter mm	Approx. cable weight kg/km	Maximum conductor resistance		Nominal area of armour mm <sup>2</sup>	Maximum armour resistance at 20°C Ω/km
					DC at 20°C Ω/km	AC at 90°C Ω/km		
1.5*	0.9	8.9	12.9	345	12.1	15.428	19	8.2
2.5*	0.9	10.6	14.6	440	7.41	9.448	22	6.8
4*	0.9	12.0	16.3	565	4.61	5.878	25	6.2
6*	1.25	13.6	18.5	795	3.08	3.927	40	3.9
10*	1.25	15.6	20.8	1080	1.83	2.333	46	3.4
16*	1.6	18.9	24.8	1610	1.15	1.466	72	2.2
25*	1.6	22.8	29.2	2310	0.727	0.926	88	1.8
35*	1.6	25.6	32.3	2915	0.524	0.6685	100	1.6



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\*Circular conductor, all others are shaped conductor