

CU/XLPE/LSOH/SWA/LSOH

Multi-core Cable refer to BS 6724
0.6/1kV

Certificate

BASEC
BRITISH APPROVALS SERVICE FOR CABLES



Application

Armoured cables with low emissions of smoke and acid gas for power supply and distribution for office buildings, commercial complex, theatres, hotels, hospitals, airports, metro, tunnels and public facilities where to guarantee safety evacuation of people exposing to risk of fire hazards. Suitable for fixed installation both indoor and outdoor, on tray, in pipe or direct buried.

Construction

No.	Classification	Code	Construction detail
①	Conductor	CU	Annealed copper conductor BS EN60228(IEC60228) Class 2
②	Insulation	XLPE	XLPE according to BS 7655-1.3 GP8
③	Inner covering	LSOH	LSOH according to BS6724:2016 Bedding color: Black
④	Armor	SWA	Galvanized steel wire for multi-core cables
⑤	Outer sheath	LSOH	LSOH according to BS7655-6.1 LTS 1 Sheath color: Black

Cable marking

The outer sheath is marked in embossed or ink printed as follows:

2-5 cores:H DRAKA(S) BASEC BS6724 ELECTRIC CABLE 600/1000V CAT A SIZE YYYY XXXXm
Over 7 cores:DRAKA(S) BASEC BS6724 ELECTRIC CABLE 600/1000V AUX CAT A SIZE YYYY XXXXm

Core Identification

No. of cores	Detail
2core	Brown-Blue
3core	Brown-Black-Grey
4core	Blue-Brown-Black-Grey
5core	Green and Yellow-Blue-Brown-Black-Grey
->5core	Black or white with numbers
Other colours available as customer requirement	

Applicable Standards

Design guidelines	BS 6724
Halogen properties	IEC60754-1, IEC60754-2
Flame retardant properties	IEC60332-1, IEC60332-3-22, IEC60332-3-24
Smoke density	IEC 61034-2

Technical Data

Rated voltage	0.6/1 kV
Test voltage	3.5kV/5min
Temperature range	-15℃-90℃

Bending Radius

Item	Single core cable
Minimum bending radius	8D
Notes: D =overall diameter of cable	

Cable Type Coding

No. of cores	1	2	3	4	5
Standard cable code	6941B	6942B	6943B	6944B	6945B
No. of cores	**7**	**12**	**19**	**27**	**37**
Standard cable code	6947B	6940/12B	6940/19B	6940/27B	6940/37B

CU/XLPE/LOSH/SWA/LSOH Multi-core Cable BS6724 0.6/1kV

No. of cores	×	C.S.A	Shape of Conductor	Nominal thickness of insulation	Diameter under armour	Armor wire nominal Diameter	Nominal thickness of sheath	Approx. overall diameter	Approx. weight	DC resistance at max.20℃	Current rating-single cable in free air	Voltage drop-single cable in free air	Short circuit current (1s)
n		mm²		mm	mm	mm	mm	mm	Kg/km	Ω/km	A	mV/A/m	kA(1s)
2	×	1.5	circular	0.6	7.2	0.9	1.3	11.4	257	12.1	29	31.000	0.21
2	×	2.5	circular	0.7	8.4	0.9	1.4	13.0	322	7.41	39	19.000	0.36
2	×	4	circular	0.7	9.5	0.9	1.4	14.0	368	4.61	52	12.000	0.57
2	×	6	circular	0.7	10.6	0.9	1.4	15.1	443	3.08	66	7.900	0.86
2	×	10	circular	0.7	12.6	0.9	1.5	17.3	584	1.83	90	4.700	1.43
2	×	16	circular	0.7	14.8	1.25	1.5	20.2	878	1.15	115	2.900	2.29
2	×	25	circular	0.9	18.3	1.25	1.6	23.9	1204	0.727	152	1.900	3.58
2	×	35	circular	0.9	20.9	1.6	1.7	27.4	1673	0.524	188	1.350	5.01
2	×	50	circular*	1.0	22.3	1.6	1.9	30.2	2104	0.387	228	1.000	7.15
2	×	70	circular*	1.1	26.5	2.0	2.0	35.4	2695	0.268	291	0.690	10.01
2	×	95	circular*	1.1	29.8	2.0	2.1	38.8	3669	0.193	354	0.520	13.59
2	×	120	circular*	1.2	32.9	2.0	2.1	42.0	4371	0.153	410	0.420	17.16
3	×	1.5	circular	0.6	7.6	0.9	1.3	12.0	284	12.1	25	27.000	0.21
3	×	2.5	circular	0.7	9.0	0.9	1.4	13.5	362	7.41	33	16.000	0.36
3	×	4	circular	0.7	10.1	0.9	1.4	14.6	436	4.61	44	10.000	0.57
3	×	6	circular	0.7	11.3	0.9	1.4	15.8	525	3.08	56	6.800	0.86
3	×	10	circular	0.7	13.4	1.25	1.5	18.9	789	1.83	78	4.000	1.43
3	×	16	circular	0.7	15.8	1.25	1.6	21.4	1053	1.15	99	2.500	2.29
3	×	25	circular	0.9	19.9	1.6	1.7	26.5	1639	0.727	131	1.650	3.58
3	×	35	circular	0.9	22.4	1.6	1.8	28.9	2030	0.524	162	1.150	5.01
3	×	35	sector	0.9	19.2	1.6	1.8	26.1	1909	0.524	162	1.150	5.01
3	×	50	sector	1.0	26.1	1.6	1.8	29.8	2407	0.387	197	0.870	7.15
3	×	70	sector	1.1	25.4	1.6	1.9	33.3	3132	0.268	251	0.600	10.01
3	×	95	sector	1.1	28.9	2.0	2.1	38.0	4326	0.193	304	0.450	13.59
3	×	120	sector	1.2	32.0	2.0	2.2	41.3	5387	0.153	353	0.370	17.16
3	×	150	sector	1.4	36.2	2.5	2.3	46.7	6777	0.124	406	0.300	21.45
3	×	185	sector	1.6	40.1	2.5	2.4	50.7	8102	0.0991	463	0.260	26.46
3	×	240	sector	1.7	44.6	2.5	2.6	55.7	10017	0.0754	546	0.210	34.32
3	×	300	sector	1.8	49.5	2.5	2.7	60.7	12268	0.0601	628	0.185	42.90
3	×	400	sector	2.0	56.2	2.5	2.9	67.9	15681	0.0470	728	0.165	57.20

Note *: compacted conductor
Current ratings at ambient temprature 30℃

CU/XLPE/LOSH/SWA/LSOH Multi-core Cable BS6724 0.6/1kV

No. of cores	×	C.S.A	Shape of Conductor	Nominal thickness of insulation	Diameter under armour	Armor wire nominal Diameter	Nominal thickness of sheath	Approx. overall diameter	Approx. weight	DC resistance at max.20℃	Current rating-single cable in free air	Voltage drop-single cable in free air	Short circuit current (1s)
n		mm^2		mm	mm	mm	mm	mm	Kg/km	Ω/km	A	mV/A/m	kA(1s)
4	×	1.5	circular	0.6	8.4	0.9	1.3	12.7	319	12.1	25	27.000	0.21
4	×	2.5	circular	0.7	9.8	0.9	1.4	14.4	412	7.41	33	16.000	0.36
4	×	4	circular	0.7	11.1	0.9	1.4	15.7	502	4.61	44	10.000	0.57
4	×	6	circular	0.7	12.5	1.25	1.5	17.9	721	3.08	56	6.800	0.86
4	×	10	circular	0.7	14.9	1.25	1.5	20.3	951	1.83	78	4.000	1.43
4	×	16	circular	0.7	17.5	1.25	1.6	23.2	1247	1.15	99	2.500	2.29
4	×	25	circular	0.9	22.1	1.6	1.7	28.7	2009	0.727	131	1.650	3.58
4	×	35	circular	0.9	24.8	1.6	1.8	31.4	2531	0.524	162	1.150	5.01
4	×	35	sector	0.9	21.9	1.6	1.8	28.8	2340	0.524	162	1.150	5.01
4	×	50	sector	1.0	25.3	1.6	1.9	33.2	3100	0.387	197	0.870	7.15
4	×	70	sector	1.1	29.7	2.0	2.1	38.8	4496	0.268	251	0.600	10.01
4	×	95	sector	1.1	33.3	2.0	2.2	42.6	5621	0.193	304	0.450	13.59
4	×	120	sector	1.2	37.3	2.5	2.3	47.8	7288	0.153	353	0.370	17.16
4	×	150	sector	1.4	41.7	2.5	2.4	52.3	8576	0.124	406	0.300	21.45
4	×	185	sector	1.6	46.1	2.5	2.6	57.2	10339	0.0991	463	0.260	26.46
4	×	240	sector	1.7	51.9	2.5	2.7	63.2	12937	0.0754	546	0.210	34.32
4	×	300	sector	1.8	57.2	2.5	2.9	68.9	15835	0.0601	628	0.185	42.90
4	×	400	sector	2.0	65.5	3.15	3.2	79.1	20704	0.0470	728	0.165	57.20
5	×	1.5	circular	0.6	9.1	0.9	1.4	13.7	369	12.1	20.88	—	0.21
5	×	2.5	circular	0.7	10.8	0.9	1.4	15.3	470	7.41	28.08	—	0.36
5	×	4	circular	0.7	12.3	0.9	1.5	17.0	591	4.61	37.44	—	0.57
5	×	6	circular	0.7	13.7	1.25	1.5	19.2	823	3.08	56	—	0.86
5	×	10	circular	0.7	16.5	1.25	1.6	22.1	1127	1.83	78	—	1.43
5	×	16	circular	0.7	19.8	1.6	1.7	26.4	1709	1.15	99	—	2.29
5	×	25	circular	0.9	24.5	1.6	1.8	31.2	2411	0.727	131	—	3.58
5	×	35	circular	0.9	27.5	1.6	1.9	34.3	3012	0.524	162	—	5.01
5	×	50	circular*	1.0	29.9	2.0	2.0	38.8	4117	0.387	197	—	7.15
5	×	70	circular*	1.1	35.1	2.0	2.2	44.4	5471	0.268	251	—	10.01

Note *: compacted conductor
Current ratings at ambient temprature 30℃

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No. of cores	×	C.S.A	Shape of Conductor	Nominal thickness of insulation	Diameter under armour	Armor wire nominal Diameter	Nominal thickness of sheath	Approx. overall diameter	Approx. weight	DC resistance at max.20°C	Current rating-single cable in free air	Voltage drop-single cable in free air	Short circuit current (1s)
n		mm^2		mm	mm	mm	mm	mm	Kg/km	Ω/km	A	mV/A/m	kA(1s)
7	×	1.5	circular	0.6	10.0	0.9	1.4	14.5	422	12.1	15.75	—	0.21
7	×	2.5	circular	0.7	11.9	0.9	1.4	16.4	547	7.41	20.79	—	0.36
7	×	4	circular	0.7	13.4	1.25	1.5	18.8	794	4.61	27.72	—	0.57
12	×	1.5	circular	0.6	13.2	1.25	1.5	18.6	697	12.1	15.37	—	0.21
12	×	2.5	circular	0.7	15.8	1.25	1.6	21.4	930	7.41	20.67	—	0.36
12	×	4	circular	0.7	18.3	1.6	1.6	24.7	1331	4.61	27.56	—	0.57
19	×	1.5	circular	0.6	15.5	1.25	1.6	21.2	907	12.1	13.05	—	0.21
19	×	2.5	circular	0.7	19.0	1.6	1.7	25.6	1395	7.41	17.55	—	0.36
19	×	4	circular	0.7	21.6	1.6	1.7	28.2	1760	4.61	23.4	—	0.57
27	×	1.5	circular	0.6	19.1	1.6	1.7	25.6	1332	12.1	11.6	—	0.21
27	×	2.5	circular	0.7	22.9	1.6	1.8	29.6	1784	7.41	15.6	—	0.36
27	×	4	circular	0.7	26.2	1.6	1.9	33.0	2301	4.61	20.8	—	0.57
37	×	1.5	circular	0.6	21.4	1.6	1.7	28.0	1625	12.1	10.44	—	0.21
37	×	2.5	circular	0.7	25.8	1.6	1.8	32.4	2185	7.41	14.04	—	0.36
37	×	4	circular	0.7	29.9	2.0	2.0	37.7	3157	4.61	18.72	—	0.57

Note Current ratings at ambient temprature 30°C

BASEC
BRITISH APPROVALS SERVICE FOR CABLES

Certificate No:
225/001/009
Issue No: 6

Certificate of Product Approval

Licensee:
Suzhou Draka Cable Co., Ltd.
No. 88 Kangyuan Road, Xiangcheng Economic Development District, Suzhou, 215131, China

Factory:
No. 88 Kangyuan Road, Xiangcheng Economic Development District, Suzhou, 215131, China

Standard:
BS 6724:2016 Incorporating Corrigenda Nos. 1 and 2

Description:
Armoured power cables with LSHF sheathing

Details:
Any core colour sequence meeting regulatory requirements permitted. These cables conform to BS 6724 and, by reference, conform to appropriate requirements of BS EN 60228, BS EN 60332-1-2, BS EN 60332-3-24, BS EN 61034-2 and BS EN 60754-1. These cables have been additionally tested to BS EN 60332-3-22 (IEC 60332-3-22). These cables have a rated voltage of 600/1000 V.

Materials:
Insulation GP 8, Sheath LTS 1

Brand Name:
N/A
Origin Mark:
PRYSMIAN (S) or DRAKA (S)

Permissible Approval Marks:

BASEC name | BASEC roundel

Signed for and on behalf of
BASEC Group Ltd

Date: 14/02/2024

Date of original issue: 10/09/2021

Check BASEC website to verify validity.

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BSF079 Issue 5 (20-03-2023)

UKAS PRODUCT CERTIFICATION 0004

Expiry date:
01/06/2027

BASEC
BRITISH APPROVALS SERVICE FOR CABLES

Certificate No:
225/001/009
Issue No: 6

Type(s) and Range(s) of Approval

Table / Clause	Code Designation	Conductor Class	Range of Cores	Min Nominal Size -sqmm	Max Nominal Size - sqmm
4	6941B	Class 2	1	70	1000
5	6942B	Class 2	2	1.5	120
6	6943B	Class 2	3	1.5	400
7	6944B	Class 2	4	1.5	400
8	6945B	Class 2	5	1.5	70
9	6947B	Class 2	7	1.5	4
9	6940/12B	Class 2	12	1.5	4
9	6940/19B	Class 2	19	1.5	4
9	6940/27B	Class 2	27	1.5	4
9	6940/37B	Class 2	37	1.5	4

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