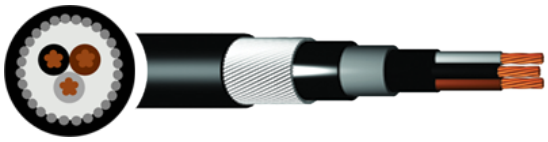
BS6724 Mains & Control Cable 1kV - XLPE, SWA, LSZH - 1.5mm² to 16mm²



Description

Used in power networks, indoor, outdoor, underground and in cable ducting. For installation where fire, smoke emissions and toxic fumes create a potential threat to life and equipment.

They are ideal for public buildings like airports and railway stations, computer rooms, datacentres, where escape is limited and fire safety is critical.

Key Features

Voltage Rating
600/1000 Volts

Minimum Bending Radius
Fixed: 6 x overall diameter

Flame Retardancy
BS EN/IEC 60332-1-2
BS EN/IEC 60332-3-24

Temperature Limits
Fixed -20°C to +90°C

Core Colours

2 core - Brown, Blue

3 core - Brown, Black, Grey

3 core (up to 70mm^2) - Brown, Blue, Green Yellow

4 core - Brown, Black, Grey, Blue

5 core and above (up to 6mm^2) - White with Black numbers

2, 3, 4 or 5 core (1.5mm^2 & 2.5mm^2) - White

Also available as

Brown, Black, Grey, Blue, Green Yellow

Standards

- BS EN/IEC 60332-3-24 (cat C)
- BS6724
- BS EN/IEC 60332-1-2
- BS EN/IEC 61034-2
- Acid Gas Emission to BS EN/IEC 60754-1/2
- BS EN/IEC 60228

Construction

- **Conductor**: Class 2 stranded copper conductor
- **Insulation**: Cross Linked polyethylene (XLPE)
- **Bedding**: Low Smoke Zero Halogen (LSZH)
- **Armour**: Steel Wire Armour (SWA)
- **Outer Sheath**: Low Smoke Zero Halogen (LSZH)
- **Sheath Colour**: Black

QA Lab

Cleveland Cable Test & Training Lab
Our state-of-the-art cable testing facility ensures that every cable meets the highest standards of quality and compliance through continuous, rigorous testing. Where applicable, cables are independently tested and certified by BASEC to ensure full compliance.

CPR
Cleveland Cable Company is committed to compliance with the Construction Products Regulation (CPR). Where applicable, all cables manufactured after 1st July 2017 have been assessed in accordance with CPR requirements, with full supporting documentation available.

Our Sustainability Commitment

We are committed to the journey to Net Zero as a business partner, an employer and a community member.

By thinking and acting sustainably, we deliver excellent customer service while reducing carbon emissions in collaboration with our customers and suppliers.

ecovadis
Cleveland Cable Company has been independently assessed by EcoVadis, a globally recognised provider of business sustainability ratings. Our score places us among the top 35% of companies evaluated worldwide, reflecting our strong commitment to environmental, social, and ethical performance

BS6724 Mains & Control Cable 1kV - XLPE, SWA, LSZH - 1.5mm² to 16mm² - Dimensions

Reference	Conductor Size (mm2)	No Of Cores	Stranding(mm)	Overall Diameter(mm)	Weight(Kg/Km)	Nylon Cleat Size	Gland Size
LSF2X1/5	1.5	2	7/0.53	11	260	0.5	20/16
LSF3X1/5	1.5	3	7/0.53	11.2	295	0.5	20/16
LSF2EX1/5	1.5	3	7/0.53	11.2	268	0.5	20/16
LSF4X1/5	1.5	4	7/0.53	12.5	350	0.5	20S
LSF5X1/5	1.5	5	7/0.53	12.9	362	0.6	20S
LSF7X1/5	1.5	7	7/0.53	13.7	398	0.6	20S
LSF10X1/5	1.5	10	7/0.53	18	650	0.8	20
LSF12X1/5	1.5	12	7/0.53	18	680	0.8	20
LSF19X1/5	1.5	19	7/0.53	20.6	885	0.9	25
LSF27X1/5	1.5	27	7/0.53	25.1	1310	1	32
LSF37X1/5	1.5	37	7/0.53	27.5	1590	1.1	32
LSF48X1/5	1.5	48	7/0.53	31	1958	1.4	32
LSF2X2/5	2.5	2	7/0.67	12.2	270	0.5	20S
LSF3X2/5	2.5	3	7/0.67	12.8	360	0.5	20S
LSF2EX2/5	2.5	3	7/0.67	12.8	340	0.5	20S
LSF4X2/5	2.5	4	7/0.67	13.5	410	0.6	20S
LSF5X2/5	2.5	5	7/0.67	14.7	435	0.6	20
LSF7X2/5	2.5	7	7/0.67	15.6	520	0.7	20
LSF10X2/5	2.5	10	7/0.67	20	250	0.8	25
LSF12X2/5	2.5	12	7/0.67	21	905	0.9	25
LSF19X2/5	2.5	19	7/0.67	25	1360	1	32
LSF27X2/5	2.5	27	7/0.67	30	1760	1.2	32
LSF37X2/5	2.5	37	7/0.67	33	2185	1.4	40
LSF48X2/5	2.5	48	7/0.67	37.3	3003	1.6	40
LSF2X4	4	2	7/0.85	13.1	381	0.6	20S
LSF3X4	4	3	7/0.85	13.7	435	0.6	20S
LSF2EX4	4	3	7/0.85	13.7	460	0.6	20S
LSF4X4	4	4	7/0.85	14.8	495	0.6	20
LSF5X4	4	5	7/0.85	16.4	583	0.7	20
LSF7X4	4	7	7/0.85	18.2	760	0.8	20
LSF12X4	4	12	7/0.85	24.2	1266	1	25
LSF19X4	4	19	7/0.85	27.6	1701	1.2	32
LSF27X4	4	27	7/0.85	32.3	2347	1.4	40
LSF2X6	6	2	7/1.04	14.1	405	0.6	20
LSF3X6	6	3	7/1.04	14.8	490	0.6	20
LSF2EX6	6	3	7/1.04	14.8	639	0.6	20
LSF4X6	6	4	7/1.04	17.3	670	0.7	20

Reference	Conductor Size (mm2)	No Of Cores	Stranding(mm)	Overall Diameter(mm)	Weight(Kg/Km)	Nylon Cleat Size	Gland Size
LSF5X6	6	5	7/1.04	18.4	823	0.8	20
LSF7X6	6	7	7/1.04	21.9	1100	0.9	25
LSF2X10	10	2	7/1.35	16.1	600	0.7	20
LSF	10	3	7/1.35	17.9	750	0.8	20
LSF4X10	10	4	7/1.35	19.3	885	0.8	25
LSF5X10	10	5	7/1.35	20.9	1106	0.9	25
LSF7X10	10	7	7/1.35	25	1500	1	25
LSF2X16	16	2	7/1.70	19	905	0.8	25
LSF	16	3	7/1.70	20	990	0.8	25
LSF4X16	16	4	7/1.70	22	1195	0.9	25
LSF5X16	16	5	7/1.70	25.2	1695	1	25
LSF7X16	16	7	7/1.70	28.1	2150	1.2	32

Multicore armoured 90 °C thermosetting insulated cables. Reproduced from *BS7671:2018 Wiring Regulations*

TABLE 4E4A

CURRENT-CARRYING CAPACITY (amps)

Ambient temperature: 30°C
Ground ambient temperature: 20°C
Conductor operating temperature: 90°C

Conductor cross- sectional area	Reference Method C (clipped direct)		Reference Method E (in free air or on a perforated cable tray etc, horizontal or vertical)		Reference Method D (direct in ground or in ducting in ground, in or around buildings)	
	1 two-core cable single-phase AC or DC	1 three- or 1 four- core cable, three- phase AC	1 two-core cable single-phase AC or DC	1 three- or 1 four- core cable, three- phase AC	1 two-core cable single-phase AC or DC	1 three- or 1 four- core cable, three- phase AC
mm2	(A)	(A)	(A)	(A)	(A)	(A)
1.5	27	23	29	25	25	21
2.5	36	31	39	33	33	28
4	49	42	52	44	43	36
6	62	53	66	56	53	44
10	85	73	90	78	71	58
16	110	94	115	99	91	75
25	146	124	152	131	116	96
35	180	154	188	162	139	115
50	219	187	228	197	164	135
70	279	238	291	251	203	167
95	338	289	354	304	239	197
120	392	335	410	353	271	223
150	451	386	472	406	306	251
185	515	441	539	463	343	281
240	607	520	636	546	395	324
300	698	599	732	628	446	365
400	787	673	847	728		

1.Where it is intended to connect the cables in this table to equipment or accessories designed to operate at a temperature lower than the maximum operating temperature of the cable, the cables should be rated at the maximum operating temperature of the equipment or accessory (see Regulation 512.1.5).
2.Where it is intended to group a cable in this tablewith other cables, the cable should be rated at the lowest of the maximum operating temperatures of any of the cables in the group (see Regulation 512.1.5).

TABLE 4E4B

VOLTAGE DROP (per ampere per metre)

Conductor operating temperature:90°C

Conductor cross sectional area	Two-core cable DC	Two-core cable, single-phase AC			Three- or four-core cable, three-phase AC		
(mm2)	(mV/Nm)	(mV/Nm)			(mV/Nm)		
1.5	31	31			27		
2.5	19	19			16		
4	12	12			10		
6	7.9	7.9			6.8		
10	4.7	4.7			4.0		
16	2.9	2.9			2.5		
		R	X	Z	R	X	Z
25	1.85	1.85	0.160	1.90	1.60	0.140	1.65
35	1.35	1.35	0.155	1.35	1.15	0.135	1.15
50	0.98	0.99	0.155	1.00	0.86	0.135	0.87
70	0.67	0.67	0.150	0.69	0.59	0.130	0.60
95	0.49	0.50	0.150	0.52	0.43	0.130	0.45
120	0.39	0.40	0.145	0.42	0.34	0.130	0.37
150	0.31	0.32	0.145	0.35	0.28	0.125	0.30
185	0.25	0.26	0.145	0.29	0.22	0.125	0.26
240	0.195	0.20	0.140	0.24	0.175	0.125	0.21
300	0.155	0.16	0.140	0.21	0.140	0.120	0.185
400	0.120	0.13	0.140	0.190	0.115	0.120	0.165