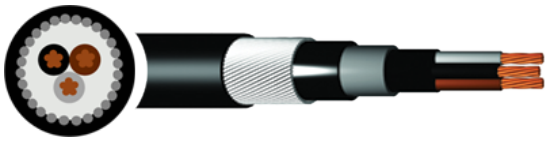
BS6724 Mains Cable - SWA,LSZH,1kV - 25mm² to 400mm²



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: 8 x overall diameter

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

Core Colours

2 core - Brown, Blue

3 core - Brown, Black, Grey

3 core (up to 35mm^2) - Brown, Blue, Green Yellow

4 core - Brown, Black, Grey, Blue

5 core and above (up to 6mm^2) - White with numbered cores

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

Also available as: Brown, Black, Grey, Blue, Green Yellow

The following cables are manufactured to IEC 60502-1 and are not covered by

BASEC - 5 Core 95mm, 120mm, 150mm, 185mm, 240mm

Standards

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

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 Cable - SWA,LSZH,1kV - 25mm² to 400mm² - Dimensions

Reference	Conductor Size (mm2)	No Of Cores	Stranding(mm)	Overall Diameter(mm)	Weight(Kg/Km)	Nylon Cleat Size	Gland Size
LSF2X25	25	2	7/2.14	20	1050	0.8	25
LSF3X25	25	3	7/2.14	23	1500	1	25
LSF2EX25	25	3	7/2.14	22	1500	1	25
LSF4X25	25	4	7/2.14	25	1800	1	32
LSF5X25	25	5	7/2.14	29	2200	1.2	32
LSF2X35	35	2	7/2.52	22	1400	0.9	25
LSF3X35	35	3	7/2.52	26	1800	1.1	32
LSF2EX35	35	3	7/2.52	24	1800	1.1	32
LSF4X35	35	4	7/2.52	28	2200	1.2	32
LSF5X35	35	5	7/2.52	33	2800	1.4	40
LSF2X50	50	2	19/1.78	25	1750	1	32
LSF2EX50	50	3	19/1.78	28	2195	1.2	32
LSF3X50	50	3	19/1.78	28	2250	1.2	32
LSF4X50	50	4	19/1.78	31	2850	1.4	32
LSF5X50	50	5	19/1.78	38	3850	1.6	40
LSF2X70	70	2	19/2.14	28	2200	1.2	32
LSF3X70	70	3	19/2.14	32	3000	1.4	32
LSF2EX70	70	3	19/2.14	31.5	2940	1.4	32
LSF4X70	70	4	19/2.14	37	4100	1.6	40
LSF5X70	70	5	19/2.14	43	5100	1.8	50S
LSF2X95	95	2	19/2.52	32	3000	1.4	32
LSF3X95	95	3	19/2.52	37	4150	1.6	40
LSF4X95	95	4	19/2.52	40	5200	1.6	50S
LSF5X95	95	5	19/2.52	52	7700	TC9	50
LSF2X120	120	2	37/2.03	35	3600	1.4	40
LSF3X120	120	3	37/2.03	40	4950	1.6	50S
LSF4X120	120	4	37/2.03	46	6700	2	50
LSF5X120	120	5	37/2.03	56.7	9030	TC9	63S
LSF2X150	150	2	37/2.25	37	4250	1.6	40
LSF3X150	150	3	37/2.25	45	6300	1.8	50S
LSF4X150	150	4	37/2.25	49	7900	2	50
LSF5X150	150	5	37/2.25	64.3	10752	TC11	63
LSF2X185	185	2	37/2.52	43	5500	1.8	50S
LSF3X185	185	3	37/2.52	49	7650	2	50
LSF4X185	185	4	37/2.52	55	9650	TC9	63S
LSF5X185	185	5	37/2.52	64.6	11765	TC11	75S
LSF2X240	240	2	61/2.25	48	6900	2	50

Reference	Conductor Size (mm2)	No Of Cores	Stranding(mm)	Overall Diameter(mm)	Weight(Kg/Km)	Nylon Cleat Size	Gland Size
LSF3X240	240	3	61/2.25	56	9650	TC9	63S
LSF4X240	240	4	61/2.25	62	12400	TC10	63
LSF5X240	240	5	61/2.25	72.5	16140	TC11	75S
LSF2X300	300	2	61/2.52	50	8200	2	50
LSF3X300	300	3	61/2.52	59	11550	TC10	63
LSF4X300	300	4	61/2.52	66	14800	TC11	75S
LSF3X400	400	3	61/2.85	65	14350	TC11	75S
LSF4X400	400	4	61/2.85	75	19300	TC12	75

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