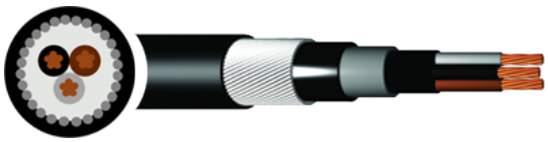
Nexans - BS6724 Mains Cable - SWA,LSZH,1kV - 25mm² to 400mm²



Description

Used in power networks, indoor, outdoor, underground and in cable ducting. Nexans cables are suitable 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

Temperature Limits
Maximum operating temperature: +90°C

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

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

Reference	Perm. Current buried / direct 20°C [A]	Perm current rating in air 30°C [A]	Max. DC Resist. Cond. 20°C [Ohm/km]	Conductor Size (mm2)	No Of Cores	Nominal Diameter	Weight(Kg/Km)
LSF2X25	194	149	0.268	25	2	22.3	1140
LSF3X25	161	127	0.727	25	3	24.5	1490
LSF4X25	161	127	0.727	25	4	26.5	1830
LSF5X25	161	127	0.727	25	5	28.8	2200
LSF2X35	233	185	0.524	35	2	25.2	1550
LSF3X35	194	158	0.524	35	3	26.8	1850
LSF4X35	194	158	0.524	35	4	29.1	2300
LSF5X35	194	158	0.524	35	5	31.7	2760
LSF2X50	275	225	0.387	50	2	24.1	1600
LSF2EX50	230	192	0.387	50	3	27.6	2140
LSF4X50	230	192	0.387	50	4	31.0	2720
LSF5X50	230	192	0.387	50	5	36.6	3840
LSF2X70	338	289	0.268	70	2	27.1	2120
LSF2EX70	282	246	0.268	70	3	31.3	2860
LSF4X70	282	246	0.268	70	4	36.2	3970
LSF5X70	282	246	0.268	70	5	42.2	5150
LSF2X95	405	352	0.193	95	2	31.0	2940
LSF3X95	339	298	0.193	95	3	26.0	3920
LSF4X95	339	298	0.193	95	4	40.9	5090
LSF3X120	386	346	0.153	120	3	39.4	4710
LSF4X120	386	346	0.153	120	4	45.8	6560
LSF3X150	431	399	0.124	150	3	44.7	6150
LSF4X150	431	399	0.124	150	4	50.3	7870
LSF3X185	486	456	0.0991	185	3	48.7	7420
LSF4X185	486	456	0.0991	185	4	54.9	9530
LSF3X240	563	538	0.0754	240	3	53.9	9340
LSF4X240	563	538	0.0754	240	4	60.9	12040
LSF3X300	629	621	0.0601	300	3	66.9	11220
LSF4X300	629	621	0.0601	300	4	67.2	14600
LSF3X400	696	721	0.047	400	3	66.9	14110
LSF4X400	696	721	0.047	400	4	77.4	18950

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

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