NHXMH-J Domestic & Industrial Cable - BS EN60332-3-24, LSZH - 1.5mm² to 10mm²



Description

LZSH wiring cable, indoor and outdoor use, suitable for industrial or domestic applications and designed for dry, moist or wet areas i.e. under plaster and in concrete. Not suitable for exposure to direct sunlight.

Key Features

Voltage Rating
300/500Volts

Minimum Bending Radius
Fixed: 4 x overall diameter

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

Temperature Limits
Temperature Range: -5°C to +90°C

Core Colours

2 Core - Brown, Blue

3 Core - Brown, Blue, Green Yellow

4 Core - Brown, Black, Grey, Green Yellow

Alternate 1.5mm x 4 Core - Brown, Brown numbered 1 & 2, Blue, Green Yellow

or outer sheath Pink with Brown, Blue, White, Green Yellow cores

5 Core - Brown, Black, Grey, Blue, Green Yellow

7 Core and above - White with Black numbers

Standards

- IEC/EN 60754-1/2
- IEC 60332-1
- BS EN/IEC 61034-2
- BS EN/IEC 60228
- BS EN/IEC 60332-3-24
- Generally to VDE 0250-214

Construction

- **Conductor**: Class 1 solid copper
- **Insulation**: Cross Linked polyethylene (XLPE)
- **Filler**: Extruded Thermoplastic
- **Outer Sheath**: Low Smoke Zero Halogen (LSZH)
- **Sheath Colour**: Grey

Training & Testing Lab

AN ISO/IEC 17025 ACCREDITED FACILITY

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.

ISO/IEC 17025 Accredited Testing Laboratory
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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.

CLEVELAND CABLE COMPANY

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

ecovadis

NHXMH-J Domestic & Industrial Cable - BS EN60332-3-24, LSZH - 1.5mm² to 10mm² - Dimensions

Reference	Conductor Size (mm2)	No Of Cores	Stranding(mm)	Overall Diameter(mm)	Weight(Kg/Km)
NHXMHJ3X1/5	1.5	3	1/1.38	9.9	120
NHXMHJ4X1/5	1.5	4	1/1.38	10.7	140
NHXMHJ5X1/5	1.5	5	1/1.38	11.5	170
NHXMHJ7X1/5	1.5	7	1/1.38	12.6	210
NHXMHJ12X1/5	1.5	12	1/1.38	16.8	415
NHXMHJ3X2/5	2.5	3	1/1.78	11.4	165
NHXMHJ4X2/5	2.5	4	1/1.78	12.3	200
NHXMHJ5X2/5	2.5	5	1/1.78	13.3	245
NHXMHJ3X4R	4	3	1/2.25	13	240
NHXMHJ5X4R	4	5	1/2.25	16	370
NHXMHJ3X6R	6	3	1/2.76	14.7	330
NHXMHJ5X6R	6	5	1/2.76	17.5	406
NHXMHJ3X10	10	3	1/3.56	17.7	510
NHXMHJ5X10	10	5	1/3.56	21.3	770

Multicore 70°C thermoplastic insulated and thermoplastic sheathed cables, non-armoured (COPPER CONDUCTORS) Reproduced from *BS7671:2018 Wiring Regulations*

For cables having flexible conductors, see section 2.4 of this Appendix in regulations for adjustment factors for current-carrying capacity and voltage drop

TABLE 4D2A

Ambient temperature: 30 °C
Conductor operating temperature: 70 °C

CURRENT-CARRYING CAPACITY (amperes):

Conductor cross-sectional area	Reference Method A (enclosed in conduit in thermally insulating wall etc)		Reference Method B (enclosed in conduit on a wall or in trunking etc)		Reference Method C (clipped direct)		Reference Method E (in free air or on a perforated cable tray etc, horizontal or vertical)	
	1 two-core cable*, single phase AC or DC	1 three-core cable* or 1 four-core cable, three phase AC	1 two-core cable*, single-phase AC or DC	1 three-core cable* or 1 four-core cable, three phase AC	1 two-core cable*, single phase AC or DC	1 three-core cable* or 1 four-core cable, three phase AC	1 two-core cable*, single phase AC or DC	1 three-core cable* or 1 four-core cable, three phase AC
I	2	3	4	5	6	7	8	9
(mm2)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)
1	11	10	13	11.5	15	13.5	17	14.5
1.5	14	13	16.5	15	19.5	17.5	22	18.5
2.5	18.5	17.5	23	20	27	24	30	25
4	25	23	30	27	36	32	40	34
6	32	29	38	34	46	41	51	43
10	43	39	52	46	63	57	70	60
16	57	52	69	62	85	76	94	80
25	75	68	90	80	112	96	119	101
35	92	83	111	99	138	119	148	126
50	110	99	133	118	168	144	180	153
70	139	125	168	149	213	184	232	196
95	167	150	201	179	258	223	282	238
120	192	172	232	206	299	259	328	276
150	219	196	258	225	344	299	379	319
185	248	223	294	255	392	341	434	364
240	291	261	344	297	461	403	514	430
300	334	298	394	339	530	464	593	497
400			470	402	634	557	715	597

* with or without a protective conductor

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Multicore 70°C thermoplastic insulated and thermoplastic sheathed cables, non-armoured (COPPER CONDUCTORS) Reproduced from *BS7671:2018 Wiring Regulations*

TABLE 4D2B

VOLTAGE DROP (per ampere per metre):

Conductor operating temperature: 70°C

Conductor cross-sectional area	Two-core cable, DC	Two-core cable, single-phase AC			Three- or four-core cable, three-phase AC		
1	2	3			4		
(mm2)	(mV/A/m)	(mV/A/m)			(mV/A/m)		
1	44	44			38		
1.5	29	29			25		
2.5	18	18			15		
4	11	11			9.5		
6	7.3	7.3			6.4		
10	4.4	4.4			3.8		
16	2.8	2.8			2.4		
		r	X	z	r	X	z
25	1.75	1.75	0.170	1.75	1.50	0.145	1.50
35	1.25	1.25	0.165	1.25	1.10	0.145	1.10
50	0.93	0.93	0.165	0.94	0.80	0.140	0.81
70	0.63	0.63	0.160	0.65	0.55	0.140	0.57
95	0.46	0.47	0.155	0.50	0.41	0.135	0.43
120	0.36	0.38	0.155	0.41	0.33	0.135	0.35
150	0.29	0.30	0.155	0.34	0.26	0.130	0.29
185	0.23	0.25	0.150	0.29	0.21	0.130	0.25
240	0.180	0.190	0.150	0.24	0.165	0.130	0.21
300	0.145	0.155	0.145	0.21	0.135	0.130	0.185
400	0.105	0.115	0.145	0.185	0.100	0.125	0.160

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