



Application

Designed for fixed indoor installations in dry or damp environments, N2XH cable is suitable for installation in walls, on mounting boards, in cable ducts, or embedded in plaster. It is commonly used in power and lighting circuits within residential, commercial, and industrial buildings. With a halogen-free, low-smoke, and low-corrosive gas-emission sheath, this cable is particularly well-suited for areas with high fire safety requirements such as hospitals, schools, airports, data centres, and other public spaces. Please note: Not suitable for direct burial in the ground or for continuous immersion in water.

Characteristics

Voltage Rating 0.6/1kV
Min. bending radius 12 x D
Temperature rating -20/+90 °C
Short circuit temperature 250°C

Standards

IEC 60502-1, VDE 0276-604, IEC 60754-1, IEC 60754-2,
IEC 61034, IEC 60332-1-2

Construction

Conductor Copper class 2
Insulation XLPE (Cross-Linked Polyethylene)
Outer sheath LSZH (Low Smoke Zero Halogen)

Regulatory Compliance



Core Identification

1-core: Black OR Green/Yellow
2-core: Blue + Brown
3G-core: Blue + Brown + Green/Yellow
3-core: Brown + Black + Grey
4G-core: Brown + Black + Grey + Green/Yellow
4-core: Brown + Black + Grey + Blue
5G-core: Brown + Black + Grey + Blue + Green/Yellow



Sheath Colour

Black ●



- The Copper Mark Partnership
- IEWC promotes sustainable practices by our suppliers
 - Copper Mark promotes seven of 17 UN Global Sustainability Goals
 - Copper Mark recipients cover 20% of global copper production

Nominal Cross-section (mm ²)	Nominal Thickness of Insulation (mm)	Approx. Diameter Under Sheath (mm)	Approx. Overall Diameter (mm)	Max. Conductor DC Resistance at 20°C (ohm/km)	Approximate net Weight (kg/km)	GLAND	Cable Cleats
1x1,5	0,7	3,1	5,9	12,1	47	20S	MS3
1x2,5	0,7	3,5	6,3	7,41	59	20S	MS3
1x4	0,7	4,0	7,4	3,08	98	20S	MS3
1x6	0,7	4,6	8,0	1,83	139	20S	MS4
1x10	0,7	5,2	8,0	1,83	139	20S	MS4
1x16	0,7	6,2	9,0	1,15	197	20S	MS4
1x25	0,9	7,8	10,6	0,727	295	20S	MS5
1x35	0,9	8,8	11,6	0,524	387	20S	MS5
1x50	1	10,2	13,0	0,387	513	20S	MS5
1x70	1,1	12,0	14,8	0,268	711	20	MS6
1x95	1,1	13,7	16,7	0,193	964	20	MS7
1x120	1,2	15,4	18,4	0,153	1201	25	MS8
1x150	1,4	17,2	20,2	0,124	1462	25	MS8
1x185	1,6	19,1	22,3	0,0991	1825	25	MS9
1x240	1,7	22,1	25,3	0,0754	2368	32	MS10
1x300	1,8	24,1	27,5	0,0601	2957	32	MS11
1x400	2	27,3	30,7	0,0470	3753	40	MS14
2x1,5	0,7	7,1	9,9	12,1	134	20S	MS4
2x2,5	0,7	7,9	10,7	7,41	168	20S	MS5
2x4	0,7	9,0	11,8	4,61	216	20S	MS5
2x6	0,7	10,1	12,9	3,08	275	20S	MS6
2x10	0,7	11,4	14,2	1,83	378	20S	MS6
2x16	0,7	13,3	16,3	1,15	537	20	MS7
2x25	0,9	16,5	19,5	0,727	802	25	MS8
2x50	1	21,7	24,9	0,387	1112	32	MS10
2x70	1,1	25,3	28,7	0,268	1538	32	MS12
2x95	1,1	28,6	32,3	0,193	2068	40	MS14
2x120	1,2	32,3	36,0	0,153	2581	50S	MS16
2x150	1,4	35,9	39,8	0,124	3145	50S	MS16
2x185	1,6	39,6	43,7	0,0991	389,4	50	MS18
2x240	1,7	45,7	50,1	0,0754	5055	63S	MS20
2x95	1,1	28,6	32,3	0,193	2068	40	MS14
2x120	1,2	32,3	36,0	0,153	2581	50S	MS16
2x150	1,4	35,9	39,8	0,124	3145	50S	MS16
2x185	1,6	39,6	43,7	0,0991	389,4	50	MS18
2x240	1,7	45,7	50,1	0,0754	5055	63S	MS20
2x185	1,6	39,6	43,7	0,0991	389,4	50	MS18
2x240	1,7	45,7	50,1	0,0754	5055	63S	MS20

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Nominal cross-section (mm ²)	Nominal Thickness of Insulation (mm)	Approx. Diameter under armour	Approx. overall diameter (mm)	Max. Conductor DC resistance at 20°C	Approx. net weight (kg/km)	GLAND	Cable Cleats
3x1,5	0,7	7,6	10,4	12,1	152	20S	MS3
3x2,5	0,7	8,5	11,3	7,41	194	20S	MS5
3x4	0,7	9,6	12,4	4,61	255	20S	MS5
3x6	0,7	10,8	13,6	3,08	331	20S	MS6
3x10	0,7	12,3	15,1	1,83	468	20	MS6
3x16	0,7	14,3	17,3	1,15	676	25	MS7
3x25	0,9	17,7	20,9	0,727	1030	25	MS9
3x35	0,9	19,9	23,1	0,524	1344	32	MS10
3x50	1	23,3	26,7	0,387	1581	32	MS11
3x70	1,1	27,2	30,6	0,268	2187	40	MS14
3x95	1,1	30,8	34,5	0,193	2958	40	MS14
3x120	1,2	34,8	38,7	0,153	3720	50S	MS16
3x150	1,4	38,7	42,8	0,124	4542	50	MS18
3x185	1,6	42,6	47,0	0,0991	5653	50	MS20
3x240	1,7	49,2	53,8	0,0754	7339	63S	MT9
3x300	1,8	53,8	58,6	0,0601	9157	63	MT10
3x400	2	60,6	65,6	0,0470	11623	75S	MT11
4x1,5	0,7	8,4	11,2	12,1	176	20S	MS3
4x2,5	0,7	9,4	12,2	7,41	228	20S	MS5
4x4	0,7	10,6	13,4	4,61	306	20S	MS5
4x6	0,7	12,0	14,8	3,08	401	20	MS6
4x10	0,7	13,6	16,6	1,83	584	20	MS6
4x16	0,7	15,8	18,8	1,15	838	25	MS7
4x25	0,9	19,7	22,9	0,727	1285	25	MS9
4x35	0,9	22,1	25,3	0,524	1686	32	MS10
4x50	1	25,9	29,3	0,387	2050	32	MS11
4x70	1,1	30,2	33,9	0,268	2882	40	MS14
4x95	1,1	34,4	38,3	0,193	3914	50S	MS14
4x120	1,2	38,6	42,7	0,153	4901	50	MS16
4x150	1,4	43,0	47,4	0,124	5997	50	MS18
4x185	1,6	47,4	51,8	0,0991	7425	63S	MS20
4x240	1,7	55,0	59,8	0,0754	9714	63	MT9
4x300	1,8	59,8	64,8	0,0601	12086	75S	MT10
4x400	2	67,4	72,7	0,0470	15372	75	MT11

CONDUCTORS

Class 2 Stranded Conductors for Single Core and Multi-Core Cables

The above table is in accordance with BS EN 60228

Nominal cross-sectional area (mm ²)	Minimum number of wires in the conductor						Maximum resistance of conductor at 20°C		
	Circular		Circular Compacted		Shaped		Annealed Copper Conductor		Aluminium or Aluminium Alloy Conductor
	Cu	Al	Cu	Al	Cu	Al	Plain Wires	Metal-coated Wires	
1,5	7	-	6	-	-	-	12,1	12,2	
2,5	7	-	6	-	-	-	7,41	7,56	
4	7	-	6	-	-	-	4,61	4,7	
6	7	-	6	-	-	-	3,08	3,11	
10	7	7	6	6	1	1	1,83	1,84	3,08
16	7	7	6	6	6	6	0,727	0,734	1,91
25	7	7	6	6	6	6	0,524	0,529	1,2
35	7	7	6	6	6	6	0,524	0,529	0,868
50	19	19	6	6	6	6	0,387	0,391	0,641
70	19	19	12	12	12	12	0,268	0,27	0,443
95	19	19	15	15	15	15	0,193	0,195	0,32
120	37	37	8	15	18	15	0,153	0,154	0,253
150	37	37	18	15	18	15	0,124	0,126	0,206
185	37	37	30	30	30	30	0,0991	0,1	0,164
240	37	37	34	34	34	34	0,0754	0,0762	,125
300	61	61	34	34	34	34	0,0601	0,0607	0,1
400	61	61	53	53	53	53	0,047	0,0475	0,0778

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The above table is in accordance with BS 7671:2018

Current Rating						
Conductor cross-sectional area	Reference Method A		Reference C		Reference E	
	Enclosed in Conduit in thermally insulating wall etc.		Clipped Direct		In free air or on perforated cable tray etc, horizontal or vertical	
	1 two core cable, single-phase AC or DC (A)	Three or four core cable, three-phase AC (A)	1 two core cable, single-phase AC or DC (A)	Three or four core cable, three-phase AC (A)	1 two core cable single-phase AC or DC (A)	Three or four core cable, three-phase AC (A)
1,5	18,5	16,5	24	22	26	23
2,5	25	22	33	30	36	32
4	33	30	45	40	49	42
6	42	38	58	52	63	54
10	57	51	80	71	86	75
16	76	68	107	96	115	100
25	99	89	138	119	149	127
35	121	109	171	147	185	158
50	145	130	209	179	225	192
70	183	164	269	229	289	246
95	220	197	328	278	352	298
120	253	227	382	322	410	346
150	290	259	441	371	473	399
185	329	295	506	424	542	456
240	386	346	599	500	641	538
300	442	396	693	576	741	621
400	-	-	803	667	865	741

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Conductor cross- sectional area	Voltage Drop						
	Two core cable DC	Two core cable, single phase AC			Three or four core cable, three phase AC		
	mV/A/m	mV/A/m			mV/A/m		
1,5	31	31			27		
2,5	19	19			16		
4	12	12			16		
6	7,9	7,9			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	0,43	0,130	0,45
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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