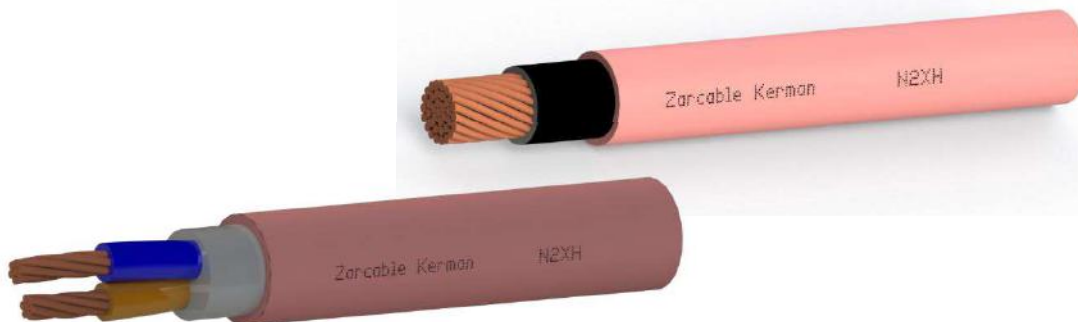


N2XH

CU /XLPE/Halogen free polyolefin



Halogen-free power and signal cable, with improved properties under fire

Construction

Conductor:	Cu, class 1 or 2 acc. to HRN HD 383 / IEC 60228 / DIN VDE 0295 class 1: solid, round(RE) class 2: multi wire stranded, round (RM) or sector (SM), multi wire exceeding 50 mm ² are compacted
Insulation:	XLPE-compound DIX 3 acc. to HRN HD 603 S1, concentrically stranded cores, colour marked acc. to HRN HD 308 S2 / VDE 0293-308
Filler:	filler applied in multi core cables, extruded halogen-free polymer or halogen-free tape
Sheath:	Halogen-free thermoplastic polyolefin in compliance with DIN VDE 0276-604 or IEC 60502
sheath colour:	Red Or By request



Abbreviations

2X Insulation of XLPE

H outer sheath of Halogen-free thermoplastic polyolefin

fl reduced flame propagation



APPLICATION

Power cable suitable for fixed installation in dry and damp environment, on or under plaster, on cable trays, same as in walls and concrete. Not intended for direct laying in ground or water. For outdoor application can be laid in tubes, but in that case should be taken all precautionary measures necessary to prevent water penetration into the tubes.

Suitable for supply systems in an emergency. Appropriate for application in all situations where people and material goods need to be protected in case of fire. Recommended for public buildings frequented by a lot of people, and for buildings of high material value, for industrial complexes, electric power plants, transformer stations, municipal facilities, hotels, shopping malls, hospitals, schools, airports, underground railways and similar.

Technical data

Temperature range:	
During installation :	-5 °C up to +50 °C
fixed installed:	-15 °C up to +90 °C
maximum operation temperature :	+90 °C
at short circuit of max.	5 s: up to 250 °C
ambient temperature at storage:	up to 40 °C
Nominal voltage:	Uo/U = 0.6/1 KV
Test voltage:	3.5 KV AC for 5 Min
Minimal inner bending radius:	single core :15D multi core : 12D
Behavior in fire:	IEC 60332-1
Flame propagation:	IEC 60332-3 cat.A
Halogen free	IEC 60754-1
Non-corrosive combustion gases:	IEC 60754-2
Low smoke density:	IEC 61034-2

DESIGN STANDARDS

IEC 60502-1
HRN HD 604 S1
DIN VDE 0276 part 604

Core Identification

- 1 core: ● Black
- 2 core: ● Blue ● Brown
- 3 core: ● Brown ● Black ● Grey
- 3 core including earth: ● Brown ● Blue ● Green/Yellow
- 4 core: ● Blue ● Brown ● Black ● Grey
- 4 core including earth: ● Green/Yellow ● Brown ● Black ● Grey
- 5 core: ● Blue ● Brown ● Black ● Grey ● Black
- 5 core including earth: ● Green/Yellow ● Blue ● Brown ● Black ● Grey

N2XH 1x(1.5-300)mm²

CU/XLPE/Halogen free polyolefin

Dimensions – number of cores x conductor cross-section	Construction of individual conductor	External diameter	Conductor diameter	Fire load	Conductor resistance at 20 °C	Cable weight	Packing*
N x mm ²	nominal n x mm	approx. mm	nominal mm	kwh/m	max. Ω/km	approx. kg/km	
1 x 1,5 RE	1 x 1,36	5,4	1,38	0,15	12,10	43	CUT
1 x 2,5 RE	1 x 1,74	5,8	1,78	0,17	7,41	56	CUT
1 x 4 RE	1 x 2,20	6,4	2,25	0,20	4,61	75	CUT
1 x 6 RE	1 x 2,7	6,9	2,76	0,22	3,08	97	CUT
1 x 10 RE	1 x 3,49	7,7	3,57	0,26	1,83	140	CUT
1 x 16 RM	7 x 1,70	9,1	5,00	0,36	1,15	202	CUT
1 x 25 RM	7 x 2,13	11	6,10	0,48	0,727	302	CUT
1 x 35 RM	7 x 2,52	12	7,20	0,55	0,524	397	CUT
1 x 50 RM	19 x 1,83	13	8,30	0,65	0,387	523	CUT
1 x 70 RM	19 x 2,17	15	10,10	0,84	0,268	745	CUT
1 x 95 RM	19 x 2,52	17	11,90	0,97	0,193	986	CUT
1 x 120 RM	37 x 2,03	18	13,00	1,10	0,153	1214	CUT
1 x 150 RM	37 x 2,27	21	14,60	1,43	0,124	1536	CUT
1 x 185 RM	37 x 2,52	23	16,20	1,72	0,0991	1888	CUT
1 x 240 RM	61 x 2,24	26	18,80	2,02	0,0754	2472	CUT
1 x 300 RM	61 x 2,50	28	20,60	2,34	0,0601	2945	CUT

N2XH 2x(1.5-300)mm²

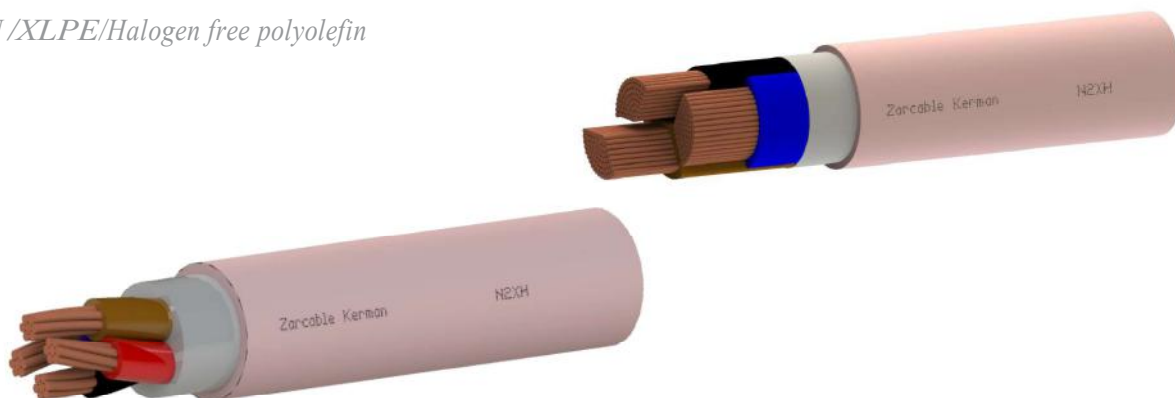
CU/XLPE/Halogen free polyolefin

Dimensions – number of cores x conductor cross-section	Construction	Construction of individual conductor	External diameter	Conductor diameter	Fire load	Conductor resistance at 20 °C	Cable weight	Packing*
N x mm ²		nominal n x mm	approx. mm	nominal mm	kwh/m	max. Ω/km	approx. kg/km	
2 x 1,5 RE	RE	1 x 1,38	9	1,38	0,38	12,10	120	CUT
2 x 2,5 RE	RE	1 x 1,78	10	1,78	0,45	7,41	154	CUT
2 x 4 RE	RE	1 x 2,25	11	2,25	0,53	4,61	204	CUT
2 x 6 RE	RE	1 x 2,76	12	2,76	0,60	3,08	263	CUT
2 x 10 RE	RE	1 x 3,56	13	3,57	0,73	1,83	374	CUT
2 x 16 RM	RM	7 x 1,70	16	5,00	1,06	1,15	563	CUT
2 x 25 RM	RM	7 x 2,13	20	6,10	1,52	0,727	840	CUT
2 x 35 RM	RM	7 x 2,52	22	7,20	1,79	0,524	1106	CUT
2 x 50 RM	RM	19 x 1,83	25	8,30	2,18	0,387	1444	CUT
2 x 70 RM	RM	19 x 2,17	29	10,10	2,89	0,268	2029	CUT
2 x 95 RM	RM	19 x 2,52	33	11,90	3,61	0,193	2737	CUT
2 x 120 RM	RM	37 x 2,03	36	13,00	4,23	0,153	3343	CUT
2 x 150 RM	RM	37 x 2,27	40	14,60	5,30	0,124	4192	CUT
2 x 185 RM	RM	37 x 2,52	44	16,20	6,48	0,0991	5167	CUT
2 x 240 RM	RM	61 x 2,24	50	18,80	8,09	0,0754	6807	CUT
2 x 300 RM	RM	61 x 2,50	55	20,60	9,39	0,0601	8072	CUT

*) Packing: CUT = cable in different lengths on drum or reel, possible cutting at required length

N2XH

CU /XLPE/Halogen free polyolefin



Halogen-free power and signal cable, with improved properties under fire

Construction

Conductor: Cu, class 1 or 2 acc. to HRN HD 383 / IEC 60228 / DIN VDE 0295
 class 1: solid, round(RE)
 class 2: multi wire stranded, round (RM) or sector (SM), multi wire exceeding 50 mm² are compacted

Insulation: XLPE-compound DIX 3 acc. to HRN HD 603 S1, concentrically stranded cores, colour marked acc. to HRN HD 308 S2 / VDE 0293-308

Filler: filler applied in multi core cables, extruded halogen-free polymer or halogen-free tape

Sheath: Halogen-free thermoplastic polyolefin in compliance with DIN VDE 0276-604 or IEC 60502

sheath colour: Red Or By request

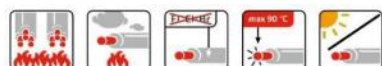


Abbreviations

2X Insulation of XLPE

H outer sheath of Halogen-free thermoplastic polyolefin

fl reduced flame propagation



APPLICATION

Power cable suitable for fixed installation in dry and damp environment, on or under plaster, on cable trays, same as in walls and concrete. Not intended for direct laying in ground or water. For outdoor application can be laid in tubes, but in that case should be taken all precautionary measures necessary to prevent water penetration into the tubes. Suitable for supply systems in an emergency. Appropriate for application in all situations where people and material goods need to be protected in case of fire. Recommended for public buildings frequented by a lot of people, and for buildings of high material value, for industrial complexes, electric power plants, transformer stations, municipal facilities, hotels, shopping malls, hospitals, schools, airports, underground railways and similar.

Technical data

Temperature range:

During installation :	-5 °C up to +50 °C
fixed installed:	-15 °C up to +90 °C
maximum operation temperature :	+90 °C
at short circuit of max.	5 s: up to 250 °C
ambient temperature at storage:	up to 40 °C

Nominal voltage:	U ₀ /U = 0.6/1 KV
Test voltage:	3.5 KV AC for 5 Min

Minimal inner bending radius:	single core :15D
	multi core : 12D

Behavior in fire:	IEC 60332-1
Flame propagation:	IEC 60332-3 cat.A
Halogen free	IEC 60754-1
Non-corrosive combustion gases:	IEC 60754-2
Low smoke density:	IEC 61034-2

DESIGN STANDARDS

IEC 60502-1
 HRN HD 604 S1
 DIN VDE 0276 part 604

Core Identification

- 1 core: ● Black
- 2 core: ● Blue ● Brown
- 3 core: ● Brown ● Black ● Grey
- 3 core including earth: ● Brown ● Blue ● Green/Yellow
- 4 core: ● Blue ● Brown ● Black ● Grey
- 4 core including earth: ● Green/Yellow ● Brown ● Black ● Grey
- 5 core: ● Blue ● Brown ● Black ● Grey ● Black
- 5 core including earth: ● Green/Yellow ● Blue ● Brown ● Black ● Grey

N2XH 3x(1.5-300)mm²

CU/XLPE/Halogen free polyolefin

Dimensions – number of cores x conductor cross-section	Construction	Construction of individual conductor	External diameter	Conductor diameter	Fire load	Conductor resistance at 20 °C	Cable weight	Packing*
		nominal n x mm	approx. mm	nominal mm		max. Ω/km	approx. kg/km	
3 x 1,5	RE	1 x 1,38	9	1,38	0,44	12,10	135	CUT
3 x 2,5	RE	1 x 1,78	10	1,78	0,51	7,41	181	CUT
3 x 4	RE	1 x 2,25	11	2,25	0,60	4,61	242	CUT
3 x 6	RE	1 x 2,76	13	2,76	0,69	3,08	319	CUT
3 x 10	RE	1 x 3,56	14	3,57	0,83	1,83	464	CUT
3 x 16	RM	7 x 1,70	17	5,00	1,22	1,15	697	CUT
3 x 25	RM	7 x 2,13	20	6,01	1,52	0,727	950	CUT
3 x 35	RM	7 x 2,52	23	7,20	2,08	0,524	1393	CUT
3 x 50	RM	19 x 1,83	26	8,30	2,56	0,387	1847	CUT
3 x 70	RM	19 x 2,17	31	10,10	3,43	0,268	2666	CUT
3 x 95	RM	19 x 2,52	36	11,90	4,17	0,193	3535	CUT
3 x 120	RM	37 x 2,03	38	13,00	4,74	0,153	4322	CUT
3 x 150	RM	37 x 2,27	43	14,60	6,03	0,124	5442	CUT
3 x 185	RM	37 x 2,52	48	16,20	7,40	0,0991	6742	CUT
3 x 240	RM	61 x 2,24	54	18,80	9,23	0,0754	8864	CUT
3 x 300	RM	61 x 2,50	59	20,60	10,79	0,0601	10522	CUT

N2XH 4x(1.5-300)mm²

CU/XLPE/Halogen free polyolefin

Dimensions – number of cores x conductor cross-section	Construction	Construction of individual conductor	External diameter	Conductor diameter	Fire load	Conductor resistance at 20 °C	Cable weight	Packing*
		nominal n x mm	approx. mm	nominal mm		max. Ω/km	approx. kg/km	
4 x 1,5	RE	1 x 1,38	10	1,38	0,52	12,10	163	CUT
4 x 2,5	RE	1 x 1,78	11	1,78	0,60	7,41	214	CUT
4 x 4	RE	1 x 2,25	12	2,25	0,72	4,61	294	CUT
4 x 6	RE	1 x 2,76	14	2,76	0,83	3,08	390	CUT
4 x 10	RE	1 x 3,56	16	3,57	1,03	1,83	586	CUT
4 x 16	RM	7 x 1,70	19	5,00	1,50	1,15	874	CUT
4 x 25	RM	7 x 2,13	23	6,10	2,14	0,727	1332	CUT
4 x 35	RM	7 x 2,52	26	7,20	2,57	0,524	1777	CUT
4 x 50	RM	19 x 1,83	29	8,30	3,15	0,387	2343	CUT
4 x 70	RM	19 x 2,17	35	10,10	4,17	0,268	3384	CUT
4 x 95	RM	19 x 2,52	39	11,90	5,16	0,193	4490	CUT
4 x 120	RM	37 x 2,03	43	13,00	5,98	0,153	5558	CUT
4 x 150	RM	37 x 2,27	48	14,60	7,55	0,124	6998	CUT
4 x 185	RM	37 x 2,52	53	16,20	9,35	0,0991	8657	CUT
4 x 240	RM	61 x 2,24	60	18,80	11,54	0,0754	11385	CUT
4 x 300	RM	61 x 2,50	65	20,60	13,44	0,0601	13539	CUT

*) Packing: CUT = cable in different lengths on drum or reel, possible cutting at required length

N2XH

CU /XLPE/Halogen free polyolefin



Halogen-free power and signal cable, with improved properties under fire

Construction

Conductor:	Cu, class 1 or 2 acc. to HRN HD 383 / IEC 60228 / DIN VDE 0295 class 1: solid, round(RE) class 2: multi wire stranded, round (RM) or sector (SM), multi wire exceeding 50 mm ² are compacted
Insulation:	XLPE-compound DIX 3 acc. to HRN HD 603 S1, concentrically stranded cores, colour marked acc. to HRN HD 308 S2 / VDE 0293-308
Filler:	filler applied in multi core cables, extruded halogen-free polymer or halogen-free tape
Sheath:	Halogen-free thermoplastic polyolefin in compliance with DIN VDE 0276-604 or IEC 60502
sheath colour:	Red Or By request

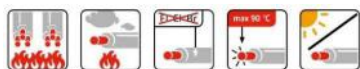


Abbreviations

2X Insulation of XLPE

H outer sheath of Halogen-free thermoplastic polyolefin

fl reduced flame propagation



APPLICATION

Power cable suitable for fixed installation in dry and damp environment, on or under plaster, on cable trays, same as in walls and concrete. Not intended for direct laying in ground or water. For outdoor application can be laid in tubes, but in that case should be taken all precautionary measures necessary to prevent water penetration into the tubes. Suitable for supply systems in an emergency. Appropriate for application in all situations where people and material goods need to be protected in case of fire. Recommended for public buildings frequented by a lot of people, and for buildings of high material value, for industrial complexes, electric power plants, transformer stations, municipal facilities, hotels, shopping malls, hospitals, schools, airports, underground railways and similar.

Technical data

Temperature range:	
During installation :	-5 °C up to +50 °C
fixed installed:	-15 °C up to +90 °C
maximum operation temperature :	+90 °C
at short circuit of max.	5 s: up to 250 °C
ambient temperature at storage:	up to 40 °C
Nominal voltage:	U ₀ /U = 0.6/1 KV
Test voltage:	3.5 KV AC for 5 Min
Minimal inner bending radius:	single core :15D multi core : 12D
Behavior in fire:	IEC 60332-1
Flame propagation:	IEC 60332-3 cat.A
Halogen free	IEC 60754-1
Non-corrosive combustion gases:	IEC 60754-2
Low smoke density:	IEC 61034-2

DESIGN STANDARDS

IEC 60502-1
HRN HD 604 S1
DIN VDE 0276 part 604

Core Identification

- 1 core: ● Black
- 2 core: ● Blue ● Brown
- 3 core: ● Brown ● Black ● Grey
- 3 core including earth: ● Brown ● Blue ● Green/Yellow
- 4 core: ● Blue ● Brown ● Black ● Grey
- 4 core including earth: ● Green/Yellow ● Brown ● Black ● Grey
- 5 core: ● Blue ● Brown ● Black ● Grey ● Black
- 5 core including earth: ● Green/Yellow ● Blue ● Brown ● Black ● Grey

N2XH 5x(1.5-300)mm²

CU/XLPE/Halogen free polyolefin

Dimensions – number of cores x conductor cross-section	Construction	Construction of individual conductor	External diameter	Conductor diameter	Fire load	Conductor resistance at 20 °C	Cable weight	Packing*
N x mm ²		nominal n x mm	approx. mm	nominal mm	kwh/m	max. Ω/km	approx. kg/km	
5 x 1,5	RE	1 x 1,38	11	1,38	0,62	12,10	193	CUT
5 x 2,5	RE	1 x 1,78	12	1,78	0,71	7,41	256	CUT
5 x 4	RE	1 x 2,25	13	2,25	0,85	4,61	352	CUT
5 x 6	RE	1 x 2,76	15	2,76	0,99	3,08	475	CUT
5 x 10	RE	1 x 3,56	17	3,57	1,22	1,83	708	CUT
5 x 16	RM	7 x 1,70	21	5,00	1,87	1,15	1081	CUT
5 x 25	RM	7 x 2,13	26	6,10	2,61	0,727	1631	CUT
5 x 35	RM	7 x 2,52	29	7,20	3,11	0,524	2163	CUT
5 x 50	RM	19 x 1,83	33	8,30	3,89	0,387	2915	CUT

*) Packing: CUT = cable in different lengths on drum or reel, possible cutting at required length

ELECTRICAL CHARACTERISTICS

Current Carrying Capacity at 30°C

NOMINAL CROSS SECTIONAL AREA mm ²	NO. OF CORES										
	1		2		3 AND 4		7	10	12 AND 14	19	24
	In Ground Amps	In Air Amps	In Ground Amps	In Air Amps	In Ground Amps	In Air Amps	In Air Amps	In Air Amps	In Air Amps	In Air Amps	In Air Amps
1.5	31	24	37	26	31	23	18	16	14	13	12
2.5	41	33	48	36	41	31	23	22	20	18	16
4	59	45	63	49	53	42	-	-	-	-	-
6	101	58	80	63	66	54	-	-	-	-	-
10	128	80	104	86	87	75	-	-	-	-	-
16	144	107	136	115	113	100	-	-	-	-	-
25	174	138	173	149	144	127	-	-	-	-	-
35	206	169	-	-	174	158	-	-	-	-	-
50	254	207	-	-	206	192	-	-	-	-	-
70	301	268	-	-	254	246	-	-	-	-	-
95	343	328	-	-	301	298	-	-	-	-	-
120	387	382	-	-	343	346	-	-	-	-	-
150	434	441	-	-	387	395	-	-	-	-	-
185	501	506	-	-	434	450	-	-	-	-	-
240	565	599	-	-	501	538	-	-	-	-	-
300	565	693	-	-	-	-	-	-	-	-	-
400	749	811	-	-	-	-	-	-	-	-	-
500	843	940	-	-	-	-	-	-	-	-	-