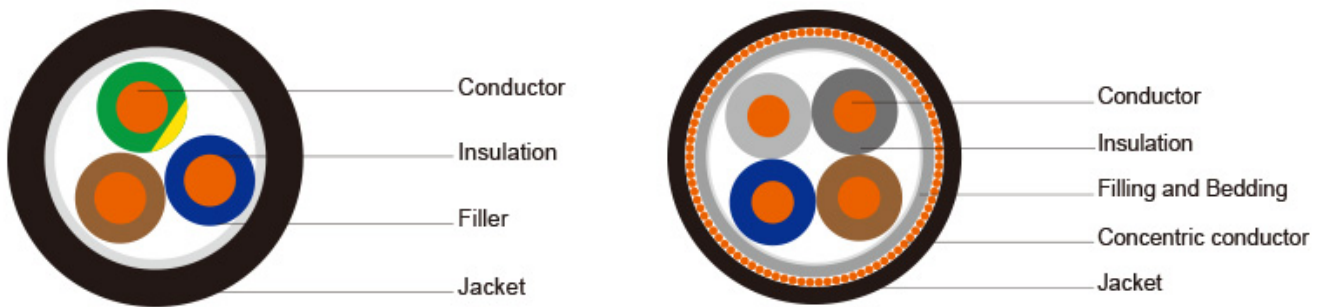


German Standard Industrial Cables N2XH/ N2XCH



Application and Description

N2XH power cables with enhanced resistance to fire are used mostly in areas where harm to human life or material must be prevented in case of fire such as industrial and public buildings, hotels, subway systems, hospitals etc. These cables are suitable for dry and wet environments as well as for outdoor application but are not suitable for direct burial into earth or water.

Standard and Approval

VDE 0276 part 604, VDE 0482-266-2, DIN EN 60332-3 / EN50266-2

Cable Construction

- 1- Solid or stranded plain copper conductor
 - to DIN VDE 0295 cl. 1, cl. 2, BS 6360 cl. 1, cl. 2 and IEC 60228 cl 1, cl. 2
- 2- XLPE insulation type 2X11, to HD 604 S1
 - Color coded to DIN VDE 0293-308
 - Green-yellow ground conductor (3 conductors and above)
 - Special LSOH filler
- For N2XCH version with concentric conductor:
 - 4-plain round copper wires and one or two transverse counter helix of copper tapes
 - 5-Thermoplastic polyolefin compound outer jacket type HM4, to HD 604 S1

Technical Characteristics

- Working voltage: 600/1000 volts
- Test voltage: 4000 volts
- Minimum bending radius: 12 x Ø
- Flexing temperature: +5° C to +50° C
- Fixed installation temperature: - 40° C to +90° C
- Short circuit temperature: +250° C
- Flame retardant: VDE 0482 part 266-2, DIN EN 50266-2 / IEC 60332-3
- Low corrosiveness of combustion gases to DIN VDE 0482 part 267/ EN 50267-2-2/IEC 60754-2
- Halogen-free to DIN VDE 0482 part 267 /EN 50267-2-1/IEC 60754-1
- Smoke density to DIN VDE 0482 part 268/HD 606/BS 7622 PT1,PT2/EN 50268-1,-2/IEC 61034-1,-2
- Insulation resistance: 20 MΩ x km

N2XCH

Cable Parameter

N2XH

AWG	NO. OF CORES X NOMINAL CROSS SECTIONAL AREA # X MM ²	CONDUCTOR TYPE	INSULATION THICKNESS MM	NOMINAL OVERALL DIAMETER MM	COPPER WEIGHT KG / KM	CABLE WEIGHT KG / KM
12	1x4	re	0.7	7.5	38	140
10	1x6	re	0.7	8.0	58	160
8	1x10	re	0.7	8.8	96	210
6	1x16	rm	0.7	9.7	154	270
4	1x25	rm	0.9	10.6	240	380
2	1x35	rm	0.9	12.7	336	490
1	1x50	rm	1.0	14.1	480	620
2/0	1x70	rm	1.1	16.0	672	830
3/0	1x95	rm	1.1	17.9	912	1200
4/0	1x120	rm	1.2	19.5	1152	1500
300mcm	1x150	rm	1.4	21.6	1440	1700
350mcm	1x185	rm	1.6	23.8	1776	2200
500mcm	1x240	rm	1.7	25.3	2304	2750
750mcm	1x300	rm	1.8	29.0	2880	3300
-	1x400	rm	2.0	37.0	3840	4420
-	1x500	rm	2.2	40.0	4800	5460
16	2x1.5	re	0.7	11.1	29	180
14	2x2.5	re	0.7	11.9	48	210
12	2x4	re	0.7	12.7	77	270
10	2x6	re	0.7	13.7	115	340
8	2x10	re	0.7	15.3	192	450
6	2x16	rm	0.7	17.3	307	600
4	2x25	rm	0.9	21.1	480	980
16	3x1.5	re	0.7	11.5	43	179
14	3x2.5	re	0.7	12.4	72	225
12	3x4	re	0.7	13.3	115	291
10	3x6	re	0.7	14.4	173	371
8	3x10	re	0.7	16.1	288	523
6	3x16	rm	0.7	18.2	461	773
4	3x25	rm	0.9	22.3	720	1200
2	3x35	rm	0.9	24.9	1008	1600

1	3x50	rm	1.0	26.0	1440	1800
16	4x1.5	re	0.7	12.2	58	208
14	4x2.5	re	0.7	13.2	96	265
12	4x4	re	0.7	14.2	154	352
10	4x6	re	0.7	15.4	230	454
8	4x10	re	0.7	17.5	384	647
6	4x16	rm	0.7	19.7	614	964
4	4x25	rm	0.9	24.5	960	1446
2	4x35	rm	0.9	27.1	1344	1906
1	4x50	sm	1.0	29.6	1920	2530
2/0	4x70	sm	1.1	32.9	2688	3418
3/0	4x95	sm	1.1	37.5	3648	4574
4/0	4x120	sm	1.2	41.5	4608	5300
300mcm	4x150	sm	1.4	46.3	5760	6350
350mcm	4x185	sm	1.6	49.0	7104	7800
500mcm	4x240	sm	1.7	54.0	9216	10300
16	5x1.5	re	0.7	13.1	72	243
14	5x2.5	re	0.7	14.2	120	310
12	5x4	re	0.7	15.3	192	413
10	5x6	re	0.7	16.6	288	536
8	5x10	re	0.7	19.0	480	776
6	5x16	rm	0.7	21.4	768	1165
4	5x25	rm	0.9	28.0	1200	1766
16	7x1.5	re	0.7	12.7	101	206
14	7x2.5	re	0.7	13.5	168	287
12	7x4	re	0.7	17.0	269	530
16	10x1.5	re	0.7	13.8	144	287
14	10x2.5	re	0.7	15.9	240	472
16	12x1.5	re	0.7	15.2	173	328
14	12x2.5	re	0.7	17.3	288	472
12	12x4	re	0.7	21.0	461	820
16	14x1.5	re	0.7	15.7	202	383
14	14x2.5	re	0.7	17.6	336	670
16	19x1.5	re	0.7	17.3	274	484
14	19x2.5	re	0.7	21.3	456	840
16	24x1.5	re	0.7	20.2	346	603
14	24x2.5	re	0.7	24.6	576	1050
16	30x1.5	re	0.7	22.6	432	730

14	30x2.5	re	0.7	24.5	720	1230
16	40x1.5	re	0.7	26.2	576	1200

N2XCH

AWG	NO. OF CORES X NOMINAL CROSS SECTIONAL AREA # X MM ²	CONDUCTOR TYPE	CONCENTRIC CONDUCTOR CROSS SECTION MM ²	NOMINAL OVERALL DIAMETER MM	COPPER WEIGHT KG / KM	CABLE WEIGHT KG / KM
16	1x1.5	re	1.5	7.9	27	98
14	1x2.5	re	2.5	8.5	47	122
12	1x4.0	re	4	9.4	74	163
10	1x6.0	re	6	9.9	108	203
8	1x10	re	10	11.3	182	286
6	1x16	re	16	12.8	297	410
4	1x25	rm	25	12.9	465	606
2	1x35	rm	35	16.4	654	807
16	2x1.5	re	1.5	13	45	230
14	2x2.5	re	2.5	13.7	68	273
12	2x4.0	re	4	15.9	110	375
10	2x6.0	re	6	17.1	164	458
8	2x10	re	10	19.1	274	619
6	2x16	re	16	21	435	841
4	2x25	rm	25	25.1	703	1276
2	2x35	rm	35	27.8	980	1642
1	2x50	rm	50	31.5	1343	2193
16	3x1.5	re	1.5	13.5	56	252
14	3x2.5	re	2.5	14.3	90	305
12	3x4.0	re	4	16.6	147	425
10	3x6.0	re	6	17.7	243	528
8	3x10	re	10	20	365	724
6	3x16	re	16	22.1	580	999
4	3x25	rm	16	27.8	855	1440
4	3x25	rm	25	26.6	938	1524
2	3x35	rm	16	29.1	1127	1813
2	3x35	rm	35	29.4	1317	1987
1	3x50	rm	25	32.7	1581	2415
2	3x35	sm	35	27.1	1339	1644
2	3x35	sm	16	26.6	1161	1627
1	3x50	sm	25	29.6	1593	2174

1	3x50	sm	50	30.6	1819	2260
2/0	3x70	sm	35	33.6	2265	2932
2/0	3x70	sm	70	34.1	2584	3097
3/0	3x95	sm	50	38.2	3151	4004
3/0	3x95	sm	95	39.4	3692	4336
4/0	3x120	sm	70	38.3	4038	4925
4/0	3x120	sm	120	41.6	4443	5124
300	3x150	sm	70	44.7	4827	5890
300	3x150	sm	150	45.8	5543	6352
350	3x185	sm	95	49	6051	7329
400	3x240	sm	120	54.5	7881	9399
16	4x1.5	re	1.5	14.3	70	284
14	4x2.5	re	2.5	16.3	136	382
12	4x4.0	re	4	17.8	183	494
10	4x6.0	re	6	19	297	620
8	4x10	re	10	21.5	457	860
6	4x16	re	16	23.8	725	1196
4	4x25	rm	16	29	1090	1764
2	4x35	rm	16	32	1456	2246
1	4x50	rm	25	36.4	1998	3024
2	4x35	sm	16	29.8	1495	2060
1	4x50	sm	25	33.1	2044	2730
2/0	4x70	sm	35	38.4	2911	3758
3/0	4x95	sm	50	42.6	4041	5054
4/0	4x120	sm	70	43.1	5162	6246
300	4x150	sm	70	50.7	6214	7548
350	4x185	sm	95	55.3	7826	9374
400	4x240	sm	120	62.3	10150	12124
16	7X1.5	re	2.5	14.5	132.0	320.0
14	7X2.5	re	2.5	15.1	200.0	400.0
12	7X4	re	4	18.1	316.0	580.0
16	10X1.5	re	2.5	17.2	177.0	420.0
14	10X2.5	re	4	18.9	287.0	550.0
16	12X1.5	re	2.5	18.4	204.0	460.0
14	12X2.5	re	4	19.2	335.0	610.0
12	12X4	re	6	22.6	528.0	910.0
16	16X1.5	re	4	20.0	275.0	686.0
14	16X2.5	re	6	20.9	450.0	805.0

16	21X1.5	re	6	22.6	370.0	766.0
14	21X2.5	re	6	25.2	572.0	1015.0
16	24X1.5	re	6	23.2	412.0	800.0
14	24X2.5	re	10	26.1	695.0	1100.0
16	30X1.5	re	6	24.3	500.0	930.0
14	30X2.5	re	10	28.0	842.0	1290.0