

# FRNC power cable N2XH-J/-O



**Application:** Zero-halogen, low-smoke power cable with improved flame-retardance. For fixed installation indoors, in air as well as in concrete, but not for direct burial in the ground or application in water.

## Construction and technical data:

<b>CPR-classification according to EN 50575:</b>	Cca/Dca/Eca (on request)
<b>Standard:</b>	VDE 0276-604
<b>Conductor material:</b>	copper, bare
<b>Conductor construction:</b>	class 1, from 25 sqmm class 2
<b>Insulation:</b>	XLPE 2X11
<b>Sheathing material:</b>	FRNC-compound HM4
<b>Colour of outer sheath:</b>	black
<b>Flame-retardant:</b>	DIN EN 50266-2-4/VDE 0482-266-2-4/IEC 60332-3-24 (cat. C)
<b>Smoke density:</b>	DIN EN 61034/IEC 61034
<b>Halogen-free:</b>	DIN EN 50267/IEC 60754
<b>Max. temperature at conductor, °C:</b>	90 °C
<b>Permitted outer cable temperature, fixed, °C:</b>	-30 - +70 °C
<b>Permitted outer cable temperature, moved, °C:</b>	-5 - +70 °C
<b>Bending radius, fixed installation:</b>	15 x Ø



*The products and information presented here are for technical calculation only. They are subject to technical progress and in no way represent the ability of shipment. Outer diameters are approximately.*

**N2XH-J**

**Nominal voltage U<sub>o</sub>:** 0.6 kV

**Nominal voltage U:** 1 kV

**Maximum permitted operating voltage in** 1.2 kV

**three-phase systems:**

**Nominal voltage DC (core-earth/core-core):** 1,9/1,9

**Test voltage:** 4 kV

**Protective conductor:** yes

**Core identification:** colours acc. to VDE 0293 (HD 308);  
more than 5 cores: gn-ye + numbers

part no.	part name		Rl [Ohm/km]	Wi [mm]	l <sub>bl</sub> [A]	Ik [kA]	R <sub>bv</sub> [mm]	Ø [mm]	F <sub>zv</sub> [N]	Cu	G [kg]
011070	03X1,5	RE	12.1	0.7	24	0.21	144	12	225	43	179
011071	03X2,5	RE	7.41	0.7	32	0.36	156	13	375	72	225
011073	03X4	RE	4.61	0.7	42	0.57	168	14	600	115	291
011074	03X6	RE	3.08	0.7	53	0.86	180	15	900	173	371
011075	03X10	RE	1.83	0.7	74	1.43	192	16	1500	288	523
011076	03X16	RE	1.15	0.7	98	2.29	240	20	2400	461	773
011077	03X25	RM	0.727	0.9	133	3.58	264	22	3750	720	1200
011078	03X35	SM	0.524	0.9	162	5.01	300	25	5250	1008	1600
011079	03X50	SMv	0.387	1	197	7.15	312	26	7500	1440	1800
011514	03X25/16	RM	0.727	0.9	133	3.58	288	24	4450	874	1200
011515	03X35/16	SM	0.524	0.9	162	5.01	312	26	6050	1162	1640
011080	03X50/25	SMv	0.387	1	197	7.15	384	32	8750	1680	2200
011081	03X70/35	SMv	0.268	1.1	250	10.01	444	37	12250	2352	2950
011082	03X95/50	SMv	0.193	1.1	308	13.59	492	41	16750	3216	3900
011083	03X120/70	SMv	0.153	1.2	359	17.16	540	45	18350	4128	4800
011084	03X150/70	SMv	0.124	1.4	412	21.45	588	49	22850	4992	5750
011085	03X185/95	SMv	0.0991	1.6	475	26.46	660	55	32800	6240	7200
011086	03X240/120	SMv	0.0754	1.7	564	34.32	744	62	42000	8064	9150
011087	04X1,5	RE	12.1	0.7	24	0.21	156	13	300	58	208
011088	04X2,5	RE	7.41	0.7	32	0.36	168	14	500	96	265
011089	04X4	RE	4.61	0.7	42	0.57	168	15	800	154	352
011090	04X6	RE	3.08	0.7	53	0.86	192	16	1200	230	454
011091	04X10	RE	1.83	0.7	74	1.43	216	18	2000	384	647
011092	04X16	RE	1.15	0.7	98	2.29	240	20	3200	614	964
011093	04X25	RM	0.727	0.9	133	3.58	312	26	5000	960	1446
011094	04X35	SM	0.524	0.9	162	5.01	348	29	7000	1344	1906
011095	04X50	SMv	0.387	1	197	7.15	384	32	10000	1920	2530
011096	04X70	SMv	0.268	1.1	250	10.01	444	37	14000	2688	3418
011097	04X95	SMv	0.193	1.1	308	13.59	492	41	19000	3648	4574
011098	04X120	SMv	0.153	1.2	359	17.16	576	48	24000	4608	5300
011099	04X150	SMv	0.124	1.4	412	21.45	600	50	30000	5760	6350
011100	04X185	SMv	0.0991	1.6	475	26.46	636	53	37000	7104	7800
011101	04X240	SMv	0.0754	1.7	564	34.32	696	58	48000	9216	10300
014441	04X300	SMv	0.0601	1.8	649	42.9	708	59		11520	12201
011102	05X1,5	RE	12.1	0.7	24	0.21	180	14	375	72	243
011103	05X2,5	RE	7.41	0.7	32	0.36	180	15	625	120	310
011104	05X4	RE	4.61	0.7	42	0.57	192	16	1000	192	413
011105	05X6	RE	3.08	0.7	53	0.86	204	17	1500	288	536
011106	05X10	RE	1.83	0.7	74	1.43	228	19	2500	480	776
011107	05X16	RE	1.15	0.7	98	2.29	264	22	4000	768	1165
011169	05X25	RM	0.727	0.9	133	3.58	300	25	6250	1200	1766

part no.	part name		RI [Ohm/km]	Wi [mm]	Ibl [A]	Ik [kA]	Rbv [mm]	Ø [mm]	Fzv [N]	Cu	G [kg]
012993	05X35	RM	0.524	0.9	162	5.01	346	29	8750	1680	2155
013738	05X50	RMv	0.387	1	197	7.15	396	33	12500	2400	2569
013714	05X95 SM (with reference to)	SMv	0.193	1.1	308	13.59	446	37	23750	4560	4874
014763	05X120	RMv	0.153	1.2	359	17.16	576	48	30000	5760	6774
013740	05X120 SM (with reference to)	SMv	0.153	1.2	359	17.16	552	46	30000	5760	6217
013741	05X150 SM (with reference to)	SMv	0.124	1.4	412	21.45	612	51	37500	7200	7707
013742	05X185 SM (with reference to)	SMv	0.0991	1.6	475	26.46	672	56	42000	8880	9467
011108	07X1.5	RE	12.1	0.7	24	0.21	168	14	525	101	206
012199	07X6	RE	3.08	0.7	53	0.86	191	16	2100	403.2	569
012200	07X10	RE	1.83	0.7	74	1.43	219	18	3500	672	859
011109	10X1.5	RE	12.1	0.7	24	0.21	204	17	750	144	287
011110	12X1.5	RE	12.1	0.7	24	0.21	204	17	900	173	328
011111	14X1.5	RE	12.1	0.7	24	0.21	204	17	1050	202	383
011112	19X1.5	RE	12.1	0.7	24	0.21	228	19	1425	274	484
011113	24X1.5	RE	12.1	0.7	24	0.21	264	22	1800	346	603
011114	30X1.5	RE	12.1	0.7	24	0.21	276	23	2250	432	730
011170	40X1.5	RE	12.1	0.7	24	0.21	312	26	3000	576	1200
011115	07X2.5	RE	7.41	0.7	32	0.36	180	15	875	168	287
011116	10X2.5	RE	7.41	0.7	32	0.36	216	18	1250	240	472
011117	12X2.5	RE	7.41	0.7	32	0.36	216	18	1500	288	472
011118	14X2.5	RE	7.41	0.7	32	0.36	228	19	1750	336	670
011119	19X2.5	RE	7.41	0.7	32	0.36	252	21	2375	456	840
011120	24X2.5	RE	7.41	0.7	32	0.36	300	25	3000	576	1050
011121	30X2.5	RE	7.41	0.7	32	0.36	312	26	3750	720	1230
011122	07X4	RE	4.61	0.7	42	0.57	180	15	1400	269	530
011123	12X4	RE	4.61	0.7	42	0.57	234	21	2400	461	820
012201	14X4	RE	4.61	0.7	42	0.57	12	20	2800	538	765
013177	17X4	RE	4.61	0.7	42		262	22	3400	653	947
013986	01X4	RE	4.61	0.7		0.57	98	9		38	140
013987	01X6	RE	3.08	0.7		0.86	102	10		58	160
013988	01X10	RE	1.83	0.7		1.43	165	11	500	96	210
012570	01X16	RE	1.15	0.7		2.29	144	12	800	154	270
013674	01X25	RM	0.727	0.9		3.58	210	14	1250	240	380
013989	01X35	RMv	0.524	0.9		5.01	225	15	1750	336	490
013977	01X50	RMv	0.387	1		7.15	240	16	2500	480	620
013978	01X70	RMv	0.268	1.1		10.01	270	18	3500	672	830
011544	01X95	RMv	0.193	1.1		13.59	300	20	4750	912	1200
012460	01X120	RMv	0.153	1.2		17.16	330	22	6000	1152	1250
013883	01X150	RMv	0.124	1.4		21.45	360	24	7500	1440	1700
012259	01X185	RMv	0.0991	1.6		26.46	390	26	9250	1776	2200
012230	01X240	RMv	0.0754	1.7		34.32	435	29	12000	2304	2750
013238	04X25/16	RM	0.727	0.9	133	3.58	314	26.1	5800	1114	1539
013239	04X35/16	SMv	0.524	0.9	162	5.01	353	29.4	7800	1498	1965
013240	04X50/25	SMv	0.387	1	197	7.15	370	30.8	11250	2160	2445
013241	04X70/35	SMv	0.268	1.1	250	10.01	416	34.6	15570	3024	3342
013242	04X185/95	SMv	0.0991	1.6	475	26.46	634	52.8	41750	8016	8508

**N2XH-O****Nominal voltage U<sub>o</sub>:** 0.6 kV**Nominal voltage U:** 1 kV**Maximum permitted operating voltage in** 1.2 kV**three-phase systems:****Nominal voltage DC (core-earth/core-core):** 1,9/1,9**Test voltage:** 4 kV**Protective conductor:** no**Core identification:** colours acc. to HD 308;  
more than 5 cores: numbers

part no.	part name		RI [Ohm/km]	Wi [mm]	Ibl [A]	Ik [kA]	Rbv [mm]	Ø [mm]	Fzv [N]	Cu	G [kg]
011049	01X4	RE	4.61	0.7	44	0.57	135	9	200	38	140
011072	01X6	RE	3.08	0.7	56	0.86	150	10	300	58	160
011051	01X10	RE	1.83	0.7	77	1.43	165	11	500	96	210
011052	01X16	RE	1.15	0.7	102	2.29	180	12	800	154	270
011053	01X25	RM	0.727	0.9	138	3.58	210	14	1250	240	380
011054	01X35	RM	0.524	0.9	170	5.01	225	15	1750	336	490
011055	01X50	RMv	0.387	1	207	7.15	240	16	2500	480	620
011056	01X70	RMv	0.268	1.1	263	10.01	270	18	3500	672	830
011057	01X95	RMv	0.193	1.1	325	13.59	300	20	4750	912	1200
011058	01X120	RMv	0.153	1.2	380	17.16	330	22	6000	1152	1250
011059	01X150	RMv	0.124	1.4	437	21.45	360	24	7500	1440	1700
011060	01X185	RMv	0.0991	1.6	507	26.46	390	26	9250	1776	2200
011061	01X240	RMv	0.0754	1.7	604	34.32	435	29	12000	2304	2750
011062	01X300	RMv	0.0601	1.8	697	42.9	450	30	15000	2880	3300
011864	01X400	RMv	0.047	2	811	57.2	480	32	20000	3840	4420
011543	01X500	RMv	0.0366	2.2	940	71.5	555	37	25000	4800	4866
011063	02X1,5	RE	12.1	0.7	24	0.21	144	12	150	29	180
011997	03X1,5	RE	12.1	0.7	24	0.21	144	12	225	43	179
011064	02X2,5	RE	7.41	0.7	32	0.36	146	12.1	250	48	210
012622	03X2,5	RE	7.41	0.7	32	0.36	156	13	375	72	225
011065	02X4	RE	4.61	0.7	42	0.57	156	13	400	77	270
011066	02X6	RE	3.08	0.7	53	0.86	168	14	600	115	340
011067	02X10	RE	1.83	0.7	74	1.43	192	16	1000	192	450
011068	02X16	RE	1.15	0.7	98	2.29	216	18	1600	307	600
011069	02X25	RM	0.727	0.9	133	3.58	276	23	2500	480	980
012057	04X4	RE	4.61	0.7	42	0.57	180	15	800	154	352
012456	04X6	RE	3.08	0.7	53	0.86	192	16	1200	230	454
011382	04X10	RE	1.83	0.7	74	1.43	216	18	2000	384	647
011547	04X16	RE	1.15	0.7	98	2.29	240	20	3200	614	964
012040	04X25	RM	0.727	0.9	133	3.58	312	26	5000	960	1446
012211	04X35	SM	0.524	0.9	162	5.01	348	29	7000	1344	1906
012041	04X50	SMv	0.387	1	197	7.15	384	32	10000	1920	2530
012212	04X70	SMv	0.268	1.1	250	10.01	444	37	14000	2688	3418
012036	04X95	SMv	0.193	1.1	308	13.59	492	41	19000	3648	4574
011381	04X120	SMv	0.153	1.2	359	17.16	576	48	24000	4608	5300
014013	04X150	SMv	0.124	1.4	412	21.45	600	50	30000	5760	6350
014133	04X185	SMv	0.0991	1.6	475	26.46	636	53	37000	7104	7800
014134	04X240	SMv	0.0754	1.7	604	34.32	696	58		9216	10300
012051	10X1,5	RE	12.1	0.7	24	0.21	204	17	750	144	287

RI	Conductor resistance
Wi	Insulation wall thickness
Ibl	Ampacity in air (30 °C)
Ik	Short-circuit current (1 s)
Rbv	Bending radius, fixed installation
Ø	outer diameter approx.
Fzv	Tensile strength (during installation)
Cu	Copper weight (GER)
G	net weight per 1000