

# Power cable

## NYY-J/-O



**Application:** For fixed installation indoors, outdoors, in the ground, in water and in concrete.

### Construction and technical data:

<b>CPR-classification according to EN 50575:</b>	Eca
<b>Standard:</b>	VDE 0276-603
<b>Conductor material:</b>	copper, bare
<b>Conductor construction:</b>	class 1, from 25 sqmm class 2
<b>Insulation:</b>	PVC DIV 4
<b>Sheathing material:</b>	PVC DMV5
<b>Colour of outer sheath:</b>	black
<b>Flame-retardant:</b>	VDE 0482-332-1-2/IEC 60332-1-2
<b>UV-resistant:</b>	yes
<b>For outdoor use:</b>	yes
<b>Max. temperature at conductor, °C:</b>	70 °C
<b>Permitted outer cable temperature, fixed, °C:</b>	70 °C
<b>Permitted outer cable temperature, moved, °C:</b>	-5 - +70 °C
<b>Meter mark:</b>	yes



*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.*

### Core identification

Number of cores	with protective conductor	without protective conductor
1	green-yellow	black
2	-	blue, brown
3	green-yellow, blue, brown	brown, black, grey
4	green-yellow, brown, black, grey	blue, brown, black, grey
5	green-yellow, blue, brown, black, grey	blue, brown, black, grey, black

**NYY-J**

**Nominal voltage U<sub>o</sub>:** 0.6 kV  
**Nominal voltage U:** 1 kV  
**Maximum permitted operating voltage in three-phase systems:** 1.2 kV  
**Nominal voltage DC (core-earth/core-core):** 1,8/1,8 kV  
**Test voltage:** 4 kV  
**Protective conductor:** yes

part no.	part name		RI [Ohm/km]	Wi [mm]	l <sub>bl</sub> [A]	l <sub>be</sub> [A]	lk [kA]	L <sub>b</sub> [mH/km]	W <sub>m</sub> [mm]	R <sub>bv</sub> [mm]	Ø [mm]	F <sub>zv</sub> [N]	Cu	G [kg]
011840	01X4	RE	4.61	1			0.46	0.459	1.8	136.5	9.1	200	38	110
011742	01X6	RE	3.08	1			0.69	0.431	1.8	142.5	9.5	300	58	130
010133	01X10	RE	1.83	1			1.15	0.399	1.8	153	10.2	500	96	180
010116	01X16	RE	1.15	1			1.84	0.371	1.8	168	11.2	800	154	240
010117	01X25	RM	0.727	1.2			2.87	0.35	1.8	183	12.2	1250	240	350
010118	01X35	RM	0.524	1.2			4.02	0.333	1.8	198	13.2	1750	336	460
010119	01X50	RMv	0.387	1.4			5.75	0.325	1.8	231	15.4	2500	480	600
010120	01X70	RMv	0.268	1.4			8.05	0.309	1.8	246	16.4	3500	672	800
010121	01X95	RMv	0.193	1.6			10.9	0.302	1.8	277.5	18.5	4750	912	1100
010147	01X120	RMv	0.153	1.6			13.8	0.294	1.8	307.5	20.5	6000	1152	1350
010148	01X150	RMv	0.124	1.8			17.2	0.29	1.8	337.5	22.5	7500	1440	1650
010506	01X185	RMv	0.0991	2			21.3	0.287	1.8	369	24.6	9250	1776	2000
010507	01X240	RMv	0.0754	2.2			27.6	0.281	1.8	414	27.6	12000	2304	2600
011225	01X300	RMv	0.0601	2.4			34.5	0.279	1.9	445.5	29.7	15000	2880	3200
012110	01X400	RMv	0.047	2.6			41.2	0.275	2	507	33.8	20000	3840	4100
010003	03X1.5	RE	12.1	0.8	19	27	0.17	0.343	1.8	134.4	11.2	225	43	190
010012	03X2.5	RE	7.41	0.8	25	36	0.29	0.317	1.8	146.4	12.2	375	72	240
010020	03X4	RE	4.61	1	34	47	0.46	0.316	1.8	170.4	14.2	600	115	330
010023	03X6	RE	3.08	1	43	59	0.69	0.298	1.8	182.4	15.2	900	173	420
010004	03X10	RE	1.83	1	59	79	1.15	0.278	1.8	207.6	17.3	1500	288	580
015771	03X10 RM	RM	1.83	1	59	79	1.15	0.278	1.8	222	18.5	1500	288	640
010009	03X16	RE	1.15	1	79	103	1.84	0.262	1.8	231.6	19.3	2400	461	810
014631	03X16 RM (with reference to)	RM	1.15	1	79	103	1.84	0.262	1.8	222	18.5	2400	461	750
010015	03X25	RM	0.727	1.2	106	133	2.87	0.257	1.8	294	24.5	3750	720	1300
010018	03X35	SM	0.524	1.2	129	159	4.02	0.248	1.8	271.2	22.6	5250	1008	1400
010021	03X50	SMv	0.387	1.4	157	188	5.75	0.247	1.8	307.2	25.6	7500	1440	1800
010024	03X70	SMv	0.268	1.4	199	232	8.05	0.238	2	356.4	29.7	10500	2016	2400
010026	03X95	SMv	0.193	1.6	246	280	10.9	0.238	2.1	405.6	33.8	14250	2736	3300
010005	03X120	SMv	0.153	1.6	285	318	13.8	0.233	2.2	429.6	35.8	18000	3456	4000
010007	03X150	SMv	0.124	1.8	326	359	17.2	0.233	2.3	477.6	39.8	22500	4320	4900
010010	03X185	SMv	0.0991	2	374	406	21.3	0.233	2.5	552	46	27750	5328	6500
010013	03X240	SMv	0.0754	2.2	445	473	27.6	0.231	2.7	612	51	36000	6912	8300
014166	03X400	SMv	0.047		597	613	34.5		2.7		62.4	60000	11520	13721
010491	03X16/10	RE	1.15	1	79	103	1.84	0.262	1.8	255	21.2	2900	557	1030
010016	03X25/16	RM	0.727	1.2	106	133	2.87	0.257	1.8	294	24.5	4550	874	1500
010019	03X35/16	SM	0.524	1.2	129	159	4.02	0.248	1.8	294	24.5	6050	1162	1700
010022	03X50/25	SMv	0.387	1.4	157	188	5.75	0.247	1.9	344.4	28.7	8750	1680	2300
010025	03X70/35	SMv	0.268	1.4	199	232	8.05	0.238	2	380.4	31.7	12250	2352	2800
010027	03X95/50	SMv	0.193	1.6	246	280	10.9	0.238	2.2	453.6	37.8	16750	3216	3800
010006	03X120/70	SMv	0.153	1.6	285	318	13.8	0.233	2.3	492	41	21500	4128	4700
010008	03X150/70	SMv	0.124	1.8	326	359	17.2	0.233	2.4	540	45	26000	4992	5600
010011	03X185/95	SMv	0.0991	2	374	406	21.3	0.233	2.6	600	50	30250	6240	7400
010014	03X240/120	SMv	0.0754	2.2	445	473	27.6	0.231	2.8	684	57	42000	8064	9600
010017	03X300/150	SMv	0.0601	2.4	511	535	34.5	0.231	2.9	768	64	52500	10080	11200

part no.	part name		RI [Ohm/km]	Wi [mm]	l <sub>bl</sub> [A]	l <sub>be</sub> [A]	l <sub>k</sub> [kA]	L <sub>b</sub> [mH/km]	W <sub>m</sub> [mm]	R <sub>bv</sub> [mm]	Ø [mm]	F <sub>zv</sub> [N]	Cu	G [kg]
010028	04X1.5	RE	12.1	0.8	19	27	0.17	0.366	1.8	146.4	12.2	300	58	220
010034	04X2.5	RE	7.41	0.8	25	36	0.29	0.34	1.8	158.4	13.2	500	96	290
010038	04X4	RE	4.61	1	34	47	0.46	0.339	1.8	183.6	15.3	800	154	400
010040	04X6	RE	3.08	1	43	59	0.69	0.321	1.8	195.6	16.3	1200	230	510
010029	04X10	RE	1.83	1	59	79	1.15	0.301	1.8	219.6	18.3	2000	384	720
014632	04X10 RM (with reference to)	RM	1.83		59	79					18		384	640
015232	04X25 RM + 1x2.5 RE (with reference to)	RM	0.727	1.2	106	133	2.87		1.8	311	25.9	5000	984	1560
010032	04X16	RE	1.15	1	79	103	1.84	0.285	1.8	256.8	21.4	3200	614	1050
011018	04X16 RM (with reference to)	RM	1.15	1	79	103	1.84	0.285	1.8	257	21.4	3200	614	1050
010036	04X25	RM	0.727	1.2	106	133	2.87	0.28	1.8	306	25.5	5000	960	1600
010037	04X35	SM	0.524	1.2	129	159	4.02	0.271	1.8	332.4	27.7	7000	1344	1750
010039	04X50	SMv	0.387	1.4	157	188	5.75	0.27	1.9	357.6	29.8	10000	1920	2300
010041	04X70	SMv	0.268	1.4	199	232	8.05	0.262	2.1	405.6	33.8	14000	2688	3100
010042	04X95	SMv	0.193	1.6	246	280	10.9	0.261	2.2	466.8	38.9	19000	3648	4200
010030	04X120	SMv	0.153	1.6	285	318	13.8	0.256	2.4	504	42	24000	4608	5200
010031	04X150	SMv	0.124	1.8	326	359	17.2	0.256	2.5	564	47	30000	5760	6400
010033	04X185	SMv	0.0991	2	374	406	21.3	0.256	2.7	624	52	37000	7104	8050
010035	04X240	SMv	0.0754	2.2	445	473	27.6	0.254	2.9	696	58	48000	9216	11000
013150	04X300	SMv	0.0601	2.4	511	535	34.5	0.254	3	748	62.4	60000	11520	13127
010043	05X1.5	RE	12.1	0.8	19	27	0.17	0.375	1.8	158.4	13.2	375	72	270
010046	05X2.5	RE	7.41	0.8	25	36	0.29	0.349	1.8	170.4	14.2	625	120	350
010049	05X4	RE	4.61	1	34	47	0.46	0.348	1.8	195.6	16.3	1000	192	480
010050	05X6	RE	3.08	1	43	59	0.69	0.33	1.8	219.6	18.3	1500	288	610
010044	05X10	RE	1.83	1	59	79	1.15	0.31	1.8	244.8	20.4	2500	480	880
014455	05X10 RM (with reference to)	RM	1.83		59	79					19.5		480	816
010045	05X16	RE	1.15	1	79	103	1.84	0.294	1.8	268.8	22.4	4000	768	1250
014039	05X16 RM (with reference to)	RM	1.15	1	79	103	1.84	0.294	1.8	268.8	23	4000	768	1250
010047	05X25	RM	0.727	1.2	106	133	2.87	0.289	1.8	330	27.5	6250	1200	1950
010048	05X35	RM	0.524	1.2	129	159	4.02	0.285	1.8	403.2	33.6	8750	1680	2400
011028	05X50	RMv	0.387	1.4	157	188	5.75	0.28	1.8	480	40	12500	2400	3500
012086	05X70	RMv	0.268	1.4	199	232	8.05	0.275	2.1	508.8	42.4	17500	3360	4450
012087	05X95	RMv	0.193	1.6	246	280	10.9	0.273	2.1	592.8	50	23750	4560	6134
012088	05X120	RMv	0.153	1.6	285	318	13.8	0.27	2.4	615.6	51.3	30000	5760	7483
014648	05X150	RMv	0.124		326	359	17.2				58.5		7200	8361
014535	05X185	RMv	0.0991	2	374	406	21.3		2.7	756	63	46250	8880	11671
013951	05X240	RMv	0.0754	2.2	445	473	27.6		2.9	839	69.9	60000	11520	13348

### NYY-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):** 1,8/1,8 kV

**Test voltage:** 4 kV

**Protective conductor:** no

part no.	part name		RI [Ohm/km]	Wi [mm]	l <sub>bl</sub> [A]	l <sub>be</sub> [A]	l <sub>k</sub> [kA]	L <sub>b</sub> [mH/km]	W <sub>m</sub> [mm]	R <sub>bv</sub> [mm]	Ø [mm]	F <sub>zv</sub> [N]	Cu	G [kg]
011512	01X1.5	RE	12.1	0.8	19	27	0.17		1.8	105	7	75	14.4	63
012625	01X2.5	RE	7.41	0.8	28	39	0.29		1.8	119	7.9	125	24	105
010085	01X4	RE	4.61	1	37	50	0.46	0.459	1.8	137	9.1	200	38	110
010087	01X6	RE	3.08	1	47	62	0.69	0.431	1.8	142.5	9.5	300	58	130
010076	01X10	RE	1.83	1	64	83	1.15	0.399	1.8	153	10.2	500	96	180
010079	01X16	RE	1.15	1	84	107	1.84	0.371	1.8	168	11.2	800	154	240

part no.	part name		RI [Ohm/km]	Wi [mm]	Ibl [A]	Ibe [A]	Ik [kA]	Lb [mH/km]	Wm [mm]	Rbv [mm]	Ø [mm]	Fzv [N]	Cu	G [kg]
010082	01X25	RM	0.727	1.2	114	138	2.87	0.35	1.8	183	12.2	1250	240	350
010084	01X35	RM	0.524	1.2	139	164	4.02	0.333	1.8	198	13.2	1750	336	460
010086	01X50	RMv	0.387	1.4	169	195	5.75	0.325	1.8	231	15.4	2500	480	600
010088	01X70	RMv	0.268	4.4	213	238	8.05	0.309	1.8	246	16.4	3500	672	800
010089	01X95	RMv	0.193	1.6	264	280	10.9	0.302	1.8	277.5	18.5	4750	912	1100
010077	01X120	RMv	0.153	1.6	307	325	13.8	0.294	1.8	307.5	20.5	6000	1152	1350
010078	01X150	RMv	0.124	1.8	352	365	11.4	0.29	1.8	337.5	22.5	7500	1440	1650
010080	01X185	RMv	0.0991	2	406	413	21.3	0.287	1.8	369	24.6	9250	1776	2000
010081	01X240	RMv	0.0754	2.2	483	479	27.6	0.281	1.8	414	27.6	12000	2304	2600
010083	01X300	RMv	0.0601	2.4	557	541	34.5	0.279	1.9	445.5	29.7	15000	2880	3200
010115	01X400	RMv	0.047	2.6	646	614	41.2	0.275	2	507	33.8	20000	3840	4100
010141	01X500	RMv	0.0366	2.8	747	693	51.5	0.272	2.1	570	38	25000	4800	5200
010283	01X630	RMv	0.0283	2.8	858	777	64	0.271	2.2	637.5	42.5	31500	6048	6650
014517	01X800	RMv	0.0221	3	971	859			2.4		45.2	40000	7680	8088
010090	02X1.5	RE	12.1	0.8	19	27	0.17		1.8	132	11	150	29	170
010093	02X2.5	RE	7.41	0.8	25	36	0.29		1.8	144	12	250	48	210
010095	02X4	RE	4.61	1	34	47	0.46		1.8	168	14	400	77	290
010096	02X6	RE	3.08	1	43	59	0.69		1.8	182.4	15.2	600	115	360
010091	02X10	RE	1.83	1	59	79	1.15		1.8	199.2	16.6	1000	192	490
010092	02X16	RE	1.15	1	79	103	1.84		1.8	228	19	1600	307	660
010140	02X25	RM	0.727	1.2	106	133	2.87		1.8	276	23	2500	480	940
014009	02X35	RM	0.524	1.2	106	133	4.02				25.6		672	1285
013967	02X50	RMv	0.387	1.4	157	188	5.75		1.8	324	27	5000	960	1620
011554	03X1.5	RE	12.1	0.8	19	27	0.17	0.343	1.8	134.4	11.2	225	43	190
011033	03X2.5	RE	7.41	0.8	25	36	0.29	0.317	1.8	146.4	12.2	375	72	240
010480	03X4	RE	4.61	1	34	47	0.46	0.316	1.8	170.4	14.2	600	115	330
010508	03X6	RE	3.08	1	43	59	0.69	0.298	1.8	182.4	15.2	900	173	420
010483	03X10	RE	1.83	1	59	79	1.15	0.278	1.8	207.6	17.3	1500	288	580
010484	03X25	RM	0.727	1.2	106	133	2.87	0.257	1.8	294	24.5	3750	720	1300
011032	03X35	SM	0.524	1.2	129	159	4.02	0.248	1.8	271.2	22.6	5250	1008	1350
010150	03X50	SMv	0.387	1.4	157	188	5.75	0.247	1.8	307.2	25.6	7500	1440	1800
014010	03X70	SMv	0.268	1.4	199	232	8.05		1.8		29.7	10500	2016	2400
010149	03X95	SMv	0.193	1.6	246	280	10.9	0.238	2.1	405.6	33.8	14250	2736	3300
014011	03X120	SMv	0.153	1.6	285	318	13.8		2.4		35.8	18000	3456	4000
010510	03X150	SMv	0.124	1.8	326	359	17.2	0.233	2.3	477.6	39.8	22500	4320	4900
011552	03X185	SMv	0.0991	2	374	406	21.3	0.233	2.5	552	46	27750	5328	6500
014012	03X240	SMv	0.0754	2.2	445	473	27.6		2.9		51	36000	6912	8300
011553	04X1.5	RE	12.1	0.8	19	27	0.17	0.366	1.8	146.4	12.2	300	58	220
011849	04X2.5	RE	7.41	0.8	25	36	0.29	0.34	1.8	158.4	13.2	500	96	290
010509	04X4	RE	4.61	1	34	47	0.46	0.339	1.8	183.6	15.3	800	154	400
010109	04X6	RE	3.08	1	43	59	0.69	0.321	1.8	195.6	16.3	1200	230	510
010102	04X10	RE	1.83	1	59	79	1.15	0.301	1.8	219.6	18.3	2000	384	720
010105	04X16	RE	1.15	1	79	103	1.84	0.285	1.8	256.8	21.4	3200	614	1050
010106	04X25	RM	0.727	1.2	106	133	2.87	0.28	1.8	306	25.5	5000	960	1600
010107	04X35	SM	0.524	1.2	129	159	4.02	0.271	1.8	332.4	27.7	7000	1344	1750
010108	04X50	SMv	0.387	1.4	157	188	5.75	0.27	1.9	357.6	29.8	10000	1920	2300
010110	04X70	SMv	0.268	1.4	199	232	8.05	0.262	2.1	405.6	33.8	14000	2688	3100
010111	04X95	SMv	0.193	1.6	246	280	10.9	0.261	2.2	466.8	38.9	19000	3648	4200
010103	04X120	SMv	0.153	1.6	285	318	13.8	0.256	2.4	504	42	24000	4608	5200
010104	04X150	SMv	0.124	1.8	326	359	17.2	0.256	2.5	564	47	30000	5760	6400
011010	04X185	SMv	0.0991	2	374	406	21.3	0.256	2.7	624	52	37000	7104	8050
011531	04X240	SMv	0.0754	2.2	445	473	27.6	0.254	2.9	696	58	48000	9216	11000

RI	Conductor resistance
Wi	Insulation wall thickness
Ibl	Ampacity in air (30 °C)
Ibe	Ampacity in ground (20 °C)
Ik	Short-circuit current (1 s)
Lb	Specific inductivity
Wm	Wall thickness of sheath
Rbv	Bending radius, fixed installation
Ø	outer diameter approx.
Fzv	Tensile strength (during installation)
Cu	Copper weight (GER)
G	net weight per 1000