

# Power cable NYFGY 1-6 kV



**Application:** As distribution cable for industrial plants and switching boxes. For fixed installation indoors, direct burial in the ground, in water as well as in concrete and for heavy duty mechanical load.

## Construction and technical data:

<b>Standard:</b>	VDE 0271
<b>Conductor material:</b>	copper, bare
<b>Conductor construction:</b>	class 1, from 25 sqmm class 2
<b>Insulation:</b>	PVC YI4
<b>Material inner sheath:</b>	PVC
<b>Armour:</b>	flat steel wire, galvanized
<b>Sheathing material:</b>	PVC YM3
<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>	-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.*

## NYFGY-J 0.6/1 kV

<b>Nominal voltage U<sub>o</sub>:</b>	0.6 kV
<b>Nominal voltage U:</b>	1 kV
<b>Maximum permitted operating voltage in three-phase systems:</b>	1.2 kV
<b>Test voltage:</b>	4 kV
<b>Protective conductor:</b>	yes
<b>Core identification:</b>	colours acc. to VDE 0293 (HD308)

part no.	part name		RI [Ohm/km]	I <sub>bl</sub> [A]	I <sub>be</sub> [A]	I <sub>k</sub> [kA]	L <sub>b</sub> [mH/km]	Ø [mm]	F <sub>zv</sub> [N]	Cu	G [kg]
011771	3X25/16 BK	SM	0.727	106	133	2.87	0.257	26	3750	874	2396
011772	3X35/16 BK	SM	0.524	129	159	4.02	0.248	28	5250	1162	2585
011499	3X50 SM/25 RM BK	SMv	0.387	157	188	5.75	0.247	33	7500	1680	3100
011773	3X70/35 BK	SMv	0.268	199	232	8.05	0.238	35	10500	2352	4028
011740	3X95/50 BK	SMv	0.193	246	280	10.9	0.238	40	14250	3216	4750
011500	3X120/70 BK	SMv	0.153	285	318	13.8	0.233	43	18000	4128	6000
011774	3X150/70 BK	SMv	0.124	326	359	17.2	0.233	47	22500	4992	7320
011509	3X240/120 BK	SMv	0.0754	445	473	27.6	0.231	58	36000	8064	10000
011729	4X50 BK	SMv	0.387	157	188	5.75	0.27	35	10000	1920	3539
015186	4X70 BK	SMv	0.268	199	232	8.05	0.247	35.9	10500	2688	3945
014516	4X95 BK	SMv	0.193	246	280	10.9	0.238	41.4	14250	3648	5251
014525	4X120 BK	SMv	0.153	285	318	13.8	0.233	45.2	18000	4608	6360
011730	4X185 BK	SMv	0.0991	374	406	21.3	0.256	55	37000	7104	10129

## NYFGY 3.6/6 kV

<b>Nominal voltage U<sub>o</sub>:</b>	3.6 kV
<b>Nominal voltage U:</b>	6 kV
<b>Maximum permitted operating voltage in three-phase systems:</b>	7.2 kV
<b>Test voltage:</b>	11 kV
<b>Core identification:</b>	nature colour

part no.	part name		RI [Ohm/km]	I <sub>bl</sub> [A]	I <sub>be</sub> [A]	I <sub>k</sub> [kA]	L <sub>b</sub> [mH/km]	Ø [mm]	F <sub>zv</sub> [N]	Cu	G [kg]
012108	3X35 RD	SM	0.524	131	157	4.02	0.248	37	5250	1008	2450
012109	3X50 RD	SMv	0.387	159	185	5.75	0.247	37.8	7500	1440	2970
012115	3X70 RD	SMv	0.268	202	226	8.05	0.238	40.1	10500	2016	3790
012116	3X95 RD	SMv	0.193	244	275	10.9	0.238	43.1	14250	2736	4625
012117	3X120 RD	SMv	0.153	282	313	13.8	0.233	46.1	18000	3456	5450
012118	3X150 RD	SMv	0.124	316	352	17.2	0.233	49.2	22500	4320	6410
012119	3X185 RD	SMv	0.0991	362	397	21.3	0.233	52.2	27750	5328	7670
012213	3X240 RD	SMv	0.0754	427	460	27.6	0.231	56.5	36000	6912	9420

RI	Conductor resistance
I <sub>bl</sub>	Ampacity in air (30 °C)
I <sub>be</sub>	Ampacity in ground (20 °C)
I <sub>k</sub>	Short-circuit current (1 s)
L <sub>b</sub>	Specific inductivity
Ø	outer diameter approx.
F <sub>zv</sub>	Tensile strength (during installation)
Cu	Copper weight (GER)
G	net weight per 1000