NAYY power cable, 0,6/1 kV, VDE approved





Technical data

Power and control cable to DIN VDE 0276 part 603, HD 603 S1 and IEC 60502 Insulation and jacket-compound of thermoplastic PVC

Temperature range

flexing -5 °C to +50 °C

fixed installation -40 °C to +70 °C

Permissible operating temperature

at conductor +70 °C

Permissible **short circuit temperature**

+160 °C (short circuit duration 5 sec.)

Nominal voltage U_0/U 0,6/1 kV Test voltage 4 kV

Max. permissible **tensile stress**

with cable grip for Alu-conductor = 30 N/mm²

Current carrying capacity

as per DIN VDE 0276 part 603, in normal operation table 14 and 15, under short circuit conditions table 17

Minimum bending radius

for multi core approx. 12x cable ø for single core approx. 15x cable ø

Current carrying capacity

see Technical Informations

Caloric load values

see Technical Informations

Cable structure

Solid aluminium conductor, as per VDE 0295 cl. 1 or cl. 2 (round and sector shaped), BS 6360 cl. 1 or cl. 2, IEC 60228 and HD 383

PVC core insulation, DIV4 to HD 603.1 Conductor colours: green-yellow, brown, black, grey

Cores stranded in layers

Inner covering

PVC outer jacket black, DMV5 to HD 603.1 Sheath colour black

Properties

PVC self-extinguishing and flame retardant according to VDE 0482-332-1-2, DIN EN 60332-1-2/ IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B) The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

Highest permissible voltage

Direct current systems 1,8 kV Alternating current systems, single-phase systems Both conductors insulated 1,4 kV single-phase systems One conductor earthed 0,7 kV three-phase systems 1,2 kV

Note

re = round solid core; se = sectional core; rm = stranded core.

Application

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations, for industry and distribution boards as well as in subscriber networks, where mechanical damages are not be expected.

CE The product is conformed with the EC Low-Voltage Directive 2006/95/EG.

No.cores x cross-sec. mm²		Outer Ø approx. m	Alu weight m kg / km	Weight approx. kg / km	J type Part no.	AWG-No.	0 type Part no.	AWG-No.	
4 x 16	re	23,0	186,0	750,0	32301	6	32184	6	
4 x 25	re	26,0	290,0	950,0	32302	4	32185	4	
4 x 35	re	28,5	406,0	1120,0	32303	2	32186	2	
4 x 50	se	30,0	580,0	1151,0	32304	1	32187	1	
4 x 70	se	35,0	812,0	1549,0	32305	2/0	32188	2/0	
4 x 95	se	39,5	1102,0	2030,0	32306	3/0	32189	3/0	
4 x 95	sm	39,5	1102,0	2030,0	32177	3/0	32190	3/0	
4 x 120	se	44,0	1392,0	2400,0	32307	4/0	32191	4/0	
4 x 120	sm	44,0	1392,0	2400,0	32178	4/0	32192	4/0	
4 x 150	se	46,0	1740,0	3030,0	32308	300 kcmil	32193	300 kcmil	
4 x 150	sm	46,0	1740,0	3030,0	32179	300 kcmil	32194	300 kcmil	
4 x 185	se	51,0	2146,0	3650,0	32309	350 kcmil	32195	350 kcmil	
4 x 185	sm	51,0	2146,0	3650,0	32180	350 kcmil	32196	350 kcmil	
4 x 240	se	56,0	2784,0	4800,0	32310	500 kcmil	32197	500 kcmil	
4 x 240	sm	56,0	2784,0	4800,0	32181	500 kcmil	32198	500 kcmil	
4 x 300	se	64,0	3480,0	5596,0	32182	600 kcmil	32199	600 kcmil	
4 x 300	sm	64,0	3480,0	5596,0	32183	600 kcmil	32258	600 kcmi l	

Continuation



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No.cores x cross-sec. mm²		Outer Ø approx. m	Alu weight m kg / km	Weight approx. kg/km	J type Part no.	AWG-No.	0 type Part no.	AWG-No.	
5 x 10	re	22,0	145,0	637,0	33275	8	33283	8	
5 x 16	re	25,0	232,0	832,0	33276	6	33284	6	
5 x 25	re	28,0	363,0	1175,0	33277	4	33285	4	
5 x 35	re	31,0	508,0	1399,0	33278	2	33286	2	
5 x 50	sm	35,0	725,0	1855,0	33279	1	33287	1	
5 x 70	sm	40,0	1015,0	2351,0	33280	2/0	33288	2/0	
5 x 95	sm	45,0	1378,0	3071,0	33281	3/0	33289	3/0	
5 x 120	sm	49.0	1740.0	3631.0	33282	4/0	33290	4/0	

No.cores x cross-sec. mm²		Outer Ø approx. m	Alu weight m kg / km	Weight approx. kg/km	J type Part no.	AWG-No.	0 type Part no.	AWG-No.	
1 x 35	re	13,0	102,0	240,0	32328	2	32311	2	
1 x 50	rm	15,0	145,0	360,0	32329	1	32312	1	
1 x 70	rm	16,5	203,0	410,0	32390	2/0	32313	2/0	
1 x 95	rm	19,0	276,0	570,0	32391	3/0	32314	3/0	
1 x 120	rm	20,5	348,0	691,0	32392	4/0	32315	4/0	
1 x 150	rm	22,5	435,0	804,0	32393	300 kcmil	32321	300 kcmil	
1 x 185	rm	25,0	537,0	979,0	32394	350 kcmi l	32322	350 kcmil	
1 x 240	rm	28,0	696,0	1253,0	32395	500 kcmil	32323	500 kcmil	
1 x 300	rm	30,0	870,0	1395,0	32396	600 kcmi l	32324	600 kcmil	
1 x 400	rm	34,0	1160,0	1890,0	32397	750 kcmi l	32325	750 kcmil	
1 x 500	rm	38,0	1450,0	2600,0	32398	1000 kcmi l	32326	1000 kcmi l	
1 x 630	rm	43,0	1827,0	2780,0	32399	-	32327	•	

Dimensions and specifications may be changed without prior notice. (RQ01)

