

# NAYY

## AL/PVC/ PVC - 0.6/1 (1.2) kV Cable

### CABLE STANDARDS

IEC 60502-1 , ISIRI 3569-1 , IEC 60228, IEC 60332-1-2



### APPLICATION

NAYY is used as a power cable for energy supply in static installations, indoors, outdoors, underground and in concrete where mechanical damages are not to be expected.

### CONSTRUCTION

#### Conductor

Class 1 or 2 stranded Aluminum conductors

#### Insulation

PVC (Polyvinyl Chloride)

#### Sheath

PVC (Polyvinyl Chloride)

### CHARACTERISTICS

#### Voltage Rating (U<sub>0</sub>,U) (Um)

0.6/1 (1.2) kV

#### Test Voltage

8.4 KV

#### Temperature Rating

Fixed: -20°C to +70°C

Flexed: -5°C to +70°C

#### Short Circuit Temperature

+160°C

#### Minimum Bending Radius

12 x Overall Diameter **for Multi Core**

15 x Overall Diameter **for Single Core**

#### Sheath Color

Black

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### Technical Specifications

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA		Max DC Conductor Resistance at 20°C	Short-circuit Current KA 1.sec Approx	CURRENT CARRYING CAPACITY				Capacitance $\mu\text{f.km}$ Approx	Reactance $\Omega\text{.km}$ Approx		OVERALL DIAMETER Mm Approx	WEIGHT kg.km Approx	
					Amps Approx									
	Conductor $\text{mm}^2$		$\Omega\text{.km}$		Trefoil		Flat				Trefoil	Flat		
					Ground	Air	Ground	Air						
1	16	RM.V	1.91	1.28	71	61	93	65	0.77	0.11	0.18	9.3	118	
1	25	RM.V	1.20	1.98	100	86	123	99	0.81	0.10	0.18	10.9	167	
1	35	RM.V	0.868	2.75	127	113	151	131	0.93	0.10	0.17	12.0	204	
1	50	RM.V	0.641	3.91	151	138	179	160	0.91	0.09	0.17	13.3	251	
1	70	RM.V	0.443	5.45	186	174	218	202	1.07	0.09	0.17	15.0	325	
1	95	RM.V	0.320	7.37	223	210	261	249	1.10	0.09	0.16	17.3	436	
1	120	RM.V	0.253	9.29	254	244	297	291	1.23	0.08	0.16	19.0	529	
1	150	RM.V	0.206	11.59	285	281	332	333	1.21	0.08	0.16	20.8	636	
1	185	RM.V	0.164	14.27	323	320	376	384	1.23	0.08	0.16	23.1	790	
1	240	RM.V	0.125	18.48	378	378	437	460	1.27	0.08	0.16	26.1	1009	
1	300	RM.V	0.100	23.07	427	433	494	530	1.30	0.08	0.16	28.6	1237	
1	400	RM.V	0.0778	30.72	496	523	572	642	1.38	0.08	0.16	32.5	1586	
1	500	RM.V	0.0605	38.36	562	603	649	744	1.42	0.08	0.16	35.8	1952	
1	630	RM.V	0.0469	48.28	627	688	724	843	1.60	0.08	0.15	39.6	2419	

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					Amps Approx		Amps Approx			Trefoil	Flat		
	Conductor $\text{mm}^2$		$\Omega\text{.km}$	Trefoil	Flat	Ground	Air	Ground	Air			Trefoil	Flat
2	10	RE	3.08	0.81	42	36	70	30	0.59	0.11	0.19	16.1	358
2	16	RM.V	1.91	1.28	71	61	93	65	0.77	0/15	0/23	18/8	494
2	25	RM.V	1.20	1.98	100	86	123	99	0.81	0/14	0/22	22/1	683
2	35	RM.V	0.868	2.75	127	113	151	131	0.93	0/14	0/22	24/5	843

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NO. OF CORES	NOMINAL CROSS SECTIONAL AREA		Max DC Conduc tor Resista nce at 20°C  Ω.km	Short- circuit Curre nt  KA 1.sec  Approx	CURRENT CARRYING CAPACITY				Capacitance  μf.km  Approx	Reactance		OVERALL DIAMETER Mm  Approx	WEIGHT kg.km  Approx
					Amps  Approx					Ω.km  Approx			
	Conductor  mm <sup>2</sup>				Trefoil		Flat			Trefoil	Flat		
					Ground	Air	Ground	Air					
3	10	RE	3.08	0.81	49	41	-	-	0.59	0.11	-	17.0	345
3	16	RM.V	1.91	1.28	71	62	-	-	0.77	0.15	-	19.9	557
3	25	RM.V	1.20	1.98	99	83	-	-	0.81	0.15	-	23.7	782
3	35	RM.V	0.868	2.75	127	113	-	-	0.93	0.14	-	26.0	953
3	50	SM	0.641	3.91	151	138	-	-	0.91	0.09	-	25.6	784
3	70	SM	0.443	5.45	186	174	-	-	1.07	0.09	-	28.6	1020
3	95	SM	0.320	7.37	223	210	-	-	1.10	0.09	-	33.0	1360
3	120	SM	0.253	9.29	254	244	-	-	1.23	0.08	-	36.1	1637
3	150	SM	0.206	11.59	285	281	-	-	1.21	0.08	-	39.5	1986
3	185	SM	0.164	14.27	323	320	-	-	1.23	0.08	-	44.6	2487
3	240	SM	0.125	18.48	378	378	-	-	1.27	0.08	-	50.3	3188
3	300	SM	0.100	23.07	427	433	-	-	1.30	0.08	-	55.7	3917

**AL/PVC/ PVC - 0.6/1 (1.2) kV Cable**

Technical Specifications

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA		Max DC Conduc tor Resista nce at 20°C  Ω.km	Short- circuit Current  KA 1.sec  Approx	CURRENT CARRYING CAPACITY				Capacitance  μf.km  Approx	Reactance		OVERALL DIAMETER  Mm  Approx	WEIGHT  kg.km  Approx
					Amps  Approx					Ω.km  Approx			
	Conductor  mm <sup>2</sup>				Trefoil		Flat			Trefoil	Flat		
					Ground	Air	Ground	Air					
3+1	25+16	RM.V	1.20	1.98	99	83	-	-	0.81	0.10	-	24.9	853
3+1	35+16	RM.V	0.868	2.75	118	102	-	-	0.93	0.09	-	26.8	1004
3+1	50+25	SM	0.641	3.91	142	124	-	-	0.91	0.09	-	26.9	893
3+1	70+35	SM	0.443	5.45	176	158	-	-	1.07	0.09	-	30.5	1170
3+1	95+50	SM	0.320	7.37	211	190	-	-	1.10	0.09	-	35.1	1569
3+1	120+70	SM	0.253	9.29	242	221	-	-	1.23	0.08	-	38.7	1921
3+1	150+70	SM	0.206	11.59	270	252	-	-	1.21	0.08	-	42.5	2275
3+1	185+95	SM	0.164	14.27	308	289	-	-	1.23	0.08	-	47.9	2876
3+1	240+120	SM	0.125	18.48	363	339	-	-	1.27	0.08	-	53.9	3649
3+1	300+150	SM	0.100	23.07	412	377	-	-	1.30	0.08	-	59.9	4571

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					Amps  Approx					Ω.km  Approx			
	Conductor  mm <sup>2</sup>				Trefoil		Flat			Trefoil	Flat		
					Ground	Air	Ground	Air					
4	10	RE	3.08	0.81	49	41	-	-	0.59	0.11	-	18.5	465
4	16	RM.V	1.91	1.28	71	62	-	-	0.77	0.10	-	21.9	665
4	25	RM.V	1.20	1.98	99	83	-	-	0.81	0.10	-	25.9	919
4	35	RM.V	0.868	2.75	118	102	-	-	0.93	0.10	-	28.7	1138
4	50	SM	0.641	3.91	142	124	-	-	0.91	0.09	-	28.3	1008
4	70	SM	0.443	5.45	176	158	-	-	1.07	0.09	-	31.7	1313
4	95	SM	0.320	7.37	211	190	-	-	1.10	0.09	-	37.2	1782
4	120	SM	0.253	9.29	242	221	-	-	1.23	0.08	-	40.5	2141
4	150	SM	0.206	11.59	270	252	-	-	1.21	0.08	-	44.2	2597
4	185	SM	0.164	14.27	308	289	-	-	1.23	0.08	-	49.7	3250
4	240	SM	0.125	18.48	363	339	-	-	1.27	0.08	-	56.1	4167
4	300	SM	0.100	23.07	412	377	-	-	1.30	0.08	-	62.2	5118

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					Amps		Approx			Ω.km			
	Conductor mm²				Trefoil		Flat			Trefoil	Flat		
					Ground	Air	Ground	Air					
5	10	RE	3.08	0.81	49	41	-	-	0.59	0.11	-	20.2	565
5	16	RM.V	1.91	1.28	71	62	-	-	0.77	0.10	-	23.8	799
5	25	RM.V	1.20	1.98	99	83	-	-	0.81	0.10	-	28.5	1128
5	35	RM.V	0.868	2.75	118	102	-	-	0.93	0.10	-	31.8	1416