

# NAYRY

## Al/PVC /PVC/ SWA/ PVC - 0.6/1 kV Cable

### CABLE STANDARDS

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



### APPLICATION

NAYRY is used as a power cable for energy supply in static installations, indoors, outdoors, underground and in concrete and also for places where there are mechanical stresses.

### CONSTRUCTION

#### Conductor

Class 1 or 2 stranded aluminum conductors

#### Insulation

PVC (Polyvinyl Chloride)

#### Bedding

PVC (Polyvinyl Chloride)

#### Armour

Single Core: Aluminum Tape

Multi Core: Steel (Galvanized) Tape

#### Sheath

PVC (Polyvinyl Chloride)

### CHARACTERISTICS

#### Voltage Rating ( $U_0/U$ ) (Um)

0.6/1 (1.2) kV

#### Test Voltage

8.4 KV

#### Temperature Rating

-20°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 Ω.km	Short-circuit Current KA 1.sec Approx	CURRENT CARRYING CAPACITY Amps Approx				Capacitance μf.km Approx	Reactance Ω.km Approx		OVERALL DIAMETER Mm Approx	WEIGHT kg.km Approx
	Conductor mm <sup>2</sup>				Trefoil		Flat			Trefoil	Flat		
			Ground	Air	Ground	Air							
	1	16	RM.V	1.91	1.28	71	61	93	65	0.77	0.13	0.20	12.7
1	25	RM.V	1.20	1.98	100	86	123	99	0.81	0.12	0.20	15.7	331
1	35	RM.V	0.868	2.75	127	113	151	131	0.93	0.12	0.19	16.8	381
1	50	RM.V	0.641	3.91	151	138	179	160	0.91	0.11	0.19	18.1	447
1	70	RM.V	0.443	5.45	186	174	218	202	1.07	0.11	0.18	20.2	560
1	95	RM.V	0.320	7.37	223	210	261	249	1.10	0.11	0.18	23.2	749
1	120	RM.V	0.253	9.29	254	244	297	291	1.23	0.10	0.18	24.9	870
1	150	RM.V	0.206	11.59	285	281	332	333	1.21	0.10	0.18	26.9	1020
1	185	RM.V	0.164	14.27	323	320	376	384	1.23	0.10	0.17	29.2	1211
1	240	RM.V	0.125	18.48	378	378	437	460	1.27	0.10	0.17	32.9	1571
1	300	RM.V	0.100	23.07	427	433	494	530	1.30	0.09	0.17	35.5	1854
1	400	RM.V	0.0778	30.72	496	523	572	642	1.38	0.09	0.17	39.6	2296
1	500	RM.V	0.0605	38.36	562	603	649	744	1.42	0.09	0.17	43.1	2748
1	630	RM.V	0.0469	48.28	627	688	724	843	1.60	0.09	0.17	48.0	3456

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	Conductor mm <sup>2</sup>				Amps  Approx		Trefoil			Flat				Trefoil	Flat
					Ground	Air	Ground	Air							
2	10	RE	3.08	0.81	42	36	70	30	0.59	0.12	0.20	18.6	674		
2	16	RM.V	1.91	1.28	71	61	93	65	0.77	0/16	0/24	22.2	944		
2	25	RM.V	1.20	1.98	100	86	123	99	0.81	0/15	0/23	25.5	1182		
2	35	RM.V	0.868	2.75	127	113	151	131	0.93	0/15	0/23	28.0	1383		
2	16	RM.V	1.91	1.28	71	61	93	65	0.77	0/16	0/24	22.2	944		

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	Conductor  mm <sup>2</sup>				Amps  Approx					Ω.km  Approx			
					Trefoil		Flat			Trefoil	Flat		
					Ground	Air	Ground	Air					
3	10	RE	3.08	0.81	49	41	-	-	0.59	0.12	-	19.5	694
3	16	RM.V	1.91	1.28	71	62	-	-	0.77	0.11	-	23.3	1136
3	25	RM.V	1.20	1.98	99	83	-	-	0.81	0.11	-	27.1	1472
3	35	RM.V	0.868	2.75	127	113	-	-	0.93	0.10	-	29.6	1719
3	50	SM	0.641	3.91	151	138	-	-	0.91	0.11	-	31.1	1733
3	70	SM	0.443	5.45	186	174	-	-	1.07	0.10	-	35.4	2341
3	95	SM	0.320	7.37	223	210	-	-	1.10	0.10	-	40.2	2926
3	120	SM	0.253	9.29	254	244	-	-	1.23	0.10	-	43.3	3330
3	150	SM	0.206	11.59	285	281	-	-	1.21	0.10	-	47.9	4265
3	185	SM	0.164	14.27	323	320	-	-	1.23	0.10	-	53.2	5031
3	240	SM	0.125	18.48	378	378	-	-	1.27	0.09	-	59.0	6088
3	300	SM	0.100	23.07	427	433	-	-	1.30	0.09	-	65.3	7458

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					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	0.11	-	28.5	1545
3+1	35+16	RM.V	0.868	2.75	118	102	-	-	0.93	0.10	-	30.4	1756
3+1	50+25	SM	0.641	3.91	142	124	-	-	0.91	0.10	-	33.7	2150
3+1	70+35	SM	0.443	5.45	176	158	-	-	1.07	0.10	-	37.7	2613
3+1	95+50	SM	0.320	7.37	211	190	-	-	1.10	0.10	-	42.6	3237
3+1	120+70	SM	0.253	9.29	242	221	-	-	1.23	0.10	-	47.4	4179
3+1	150+70	SM	0.206	11.59	270	252	-	-	1.21	0.09	-	51.3	4742
3+1	185+95	SM	0.164	14.27	308	289	-	-	1.23	0.09	-	56.8	5658
3+1	240+120	SM	0.125	18.48	363	339	-	-	1.27	0.09	-	63.6	7042
3+1	300+150	SM	0.100	23.07	412	377	-	-	1.30	0.09	-	70.3	8708

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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	0.12	-	21.8	970
4	16	RM.V	1.91	1.28	71	62	-	-	0.77	0.11	-	25.0	1246
4	25	RM.V	1.20	1.98	99	83	-	-	0.81	0.11	-	29.5	1641
4	35	RM.V	0.868	2.75	118	102	-	-	0.93	0.10	-	33.3	2180
4	50	SM	0.641	3.91	142	124	-	-	0.91	0.10	-	34.7	2295
4	70	SM	0.443	5.45	176	158	-	-	1.07	0.10	-	38.7	2804
4	95	SM	0.320	7.37	211	190	-	-	1.10	0.10	-	45.0	3856
4	120	SM	0.253	9.29	242	221	-	-	1.23	0.09	-	48.6	4408
4	150	SM	0.206	11.59	270	252	-	-	1.21	0.09	-	52.8	5141
4	185	SM	0.164	14.27	308	289	-	-	1.23	0.09	-	58.3	6077
4	240	SM	0.125	18.48	363	339	-	-	1.27	0.09	-	65.7	7761
4	300	SM	0.100	23.07	412	377	-	-	1.30	0.09	-	72.7	9541

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					Amps Approx		Amps Approx			Trefoil	Flat		
	Conductor mm <sup>2</sup>				Trefoil		Flat						
	Ground	Air			Ground	Air	Trefoil	Flat					
5	10	RE	3.08	0.81	49	41	-	-	0.59	0.12	-	23.4	1106
5	16	RM.V	1.91	1.28	71	62	-	-	0.77	0.11	-	27.2	1523
5	25	RM.V	1.20	1.98	99	83	-	-	0.81	0.11	-	33.1	2261
5	35	RM.V	0.868	2.75	118	102	-	-	0.93	0.10	-	36.2	2683