

# NYBY

## CU/PVC/ PVC/STA/PVC – 0.6/1 kV Cable

### CABLE STANDARDS

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



### APPLICATION

NYBY 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 copper 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 mm²				Trefoil		Flat			Trefoil	Flat		
			Ground		Air	Ground	Air						
1	16	RM.V	1.15	1.91	107	89	127	103	0.76	0.13	0.20	12.6	311
1	25	RM.V	0.727	2.96	137	118	163	137	0.79	0.12	0.20	14.4	433
1	35	RM.V	0.524	4.13	165	145	195	169	0.92	0.11	0.19	15.7	548
1	50	RM.V	0.387	5.87	195	176	230	206	0.90	0.11	0.19	17.1	687
1	70	RM.V	0.268	8.19	239	224	282	261	1.06	0.10	0.18	19.1	924
1	95	RM.V	0.193	11.09	287	271	336	321	1.09	0.10	0.18	21.2	1208
1	120	RM.V	0.153	13.99	326	314	382	374	1.22	0.10	0.17	22.9	1472
1	150	RM.V	0.124	17.46	366	361	428	428	1.21	0.10	0.17	25.1	1794
1	185	RM.V	0.0991	21.50	414	412	483	494	1.21	0.09	0.17	27.2	2175
1	240	RM.V	0.0754	27.86	481	484	561	590	1.26	0.09	0.17	30.3	2793
1	300	RM.V	0.0601	34.79	542	549	632	678	1.29	0.09	0.17	33.0	3429
1	400	RM.V	0.0470	46.34	624	657	730	817	1.35	0.09	0.17	36.9	4346
1	500	RM.V	0.0366	57.88	698	749	823	940	1.43	0.09	0.16	40.8	5461
1	630	RM.V	0.0283	72.87	773	839	918	1060	1.67	0.08	0.16	46.3	7008

OFOGH ALBORZ INDUSTRIAL GROUP

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### Technical Specifications

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		Amps			Ω.km			
	Approx				Approx		Approx			Trefoil	Flat		
	Ground	Air			Ground	Air							
2	1.5	RE	12.1	0.19	32	20	39	25	0.77	0.16	0.23	11.6	221
2	2.5	RE	7.41	0.32	43	27	51	34	0.42	0.15	0.22	12.3	259
2	4	RE	4.61	0.50	55	37	66	45	0.42	0.14	0.22	14.3	352
2	6	RE	3.08	0.73	68	48	82	57	0.49	0.13	0.21	15.2	418
2	10	RE	1.83	1.20	90	66	109	78	0.60	0.12	0.20	16.8	543
2	16	RM.V	1.15	1.91	107	89	127	103	0.76	0/15	0/23	19.4	759
2	25	RM.V	0.727	2.96	137	118	163	137	0.79	0/15	0/22	22.6	1059
2	35	RM.V	0.524	4.13	165	145	195	169	0.92	0/14	0/22	25.0	1343

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Technical Specifications

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  Ω.km		OVERALL DIAMETER  Mm Approx	WEIGHT  kg.km Approx		
	Conductor  mm <sup>2</sup>				Amps  Approx		Trefoil			Flat				Trefoil	Flat
					Ground	Air	Ground	Air		Ground	Air				
3	1.5	RE	12.1	0.19	32	25	-	-	0.77	0.15	-	12.1	248		
3	2.5	RE	7.41	0.32	43	34	-	-	0.42	0.14	-	12.9	296		
3	4	RE	4.61	0.50	55	44	-	-	0.42	0.14	-	15.0	407		
3	6	RE	3.08	0.73	68	57	-	-	0.49	0.13	-	16.0	491		
3	10	RE	1.83	1.20	90	77	-	-	0.60	0.12	-	17.7	653		
3	16	RM.V	1.15	1.91	107	89	-	-	0.76	0.11	-	20.5	929		
3	25	RM.V	0.727	2.96	137	118	-	-	0.79	0.10	-	24.1	1327		
3	35	RM.V	0.524	4.13	165	145	-	-	0.92	0.10	-	26.5	1684		
3	50	SM	0.387	5.87	195	176	-	-	0.90	0.10	-	28.5	1975		
3	70	SM	0.268	8.19	239	224	-	-	1.06	0.09	-	32.1	2666		
3	95	SM	0.193	11.09	287	271	-	-	1.09	0.09	-	38.1	3942		
3	120	SM	0.153	13.99	326	314	-	-	1.22	0.09	-	41.0	4735		
3	150	SM	0.124	17.46	366	361	-	-	1.21	0.09	-	45.1	5729		
3	185	SM	0.0991	21.50	414	412	-	-	1.21	0.09	-	49.9	7035		
3	240	SM	0.0754	27.86	481	484	-	-	1.26	0.09	-	56.2	8993		
3	300	SM	0.0601	34.79	542	549	-	-	1.29	0.09	-	62.0	11050		

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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		Amps			Ω.km			
	Approx				Approx		Approx			Trefoil	Flat		
	Conductor mm <sup>2</sup>				Trefoil	Flat	Trefoil	Flat					
				Ground	Air	Ground	Air						
3+1	25+16	RM.V	0.727	2.96	128	106	-	-	0.79	0.10	-	25.3	1505
3+1	35+16	RM.V	0.524	4.13	157	131	-	-	0.92	0.09	-	27.3	1843
3+1	50+25	SM	0.387	5.87	185	159	-	-	0.90	0.10	-	30.5	2290
3+1	70+35	SM	0.268	8.19	228	202	-	-	1.06	0.09	-	35.5	3423
3+1	95+50	SM	0.193	11.09	275	244	-	-	1.09	0.09	-	40.5	4510
3+1	120+70	SM	0.153	13.99	313	282	-	-	1.22	0.09	-	44.7	5639
3+1	150+70	SM	0.124	17.46	353	324	-	-	1.21	0.09	-	48.6	6562
3+1	185+95	SM	0.0991	21.50	399	371	-	-	1.21	0.09	-	53.7	8150
3+1	240+120	SM	0.0754	27.86	464	436	-	-	1.26	0.09	-	60.2	10346
3+1	300+150	SM	0.0601	34.79	524	481	-	-	1.29	0.09	-	66.4	12680

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	Conductor mm <sup>2</sup>				Amps Approx		Trefoil			Flat				Trefoil	Flat
					Ground	Air	Ground	Air							
4	1.5	RE	12.1	0.19	26	18.5	-	-	0.77	0.15	-	12.9	284		
4	2.5	RE	7.41	0.32	34	25	-	-	0.42	0.14	-	14.0	351		
4	4	RE	4.61	0.50	44	34	-	-	0.42	0.14	-	16.1	478		
4	6	RE	3.08	0.73	56	43	-	-	0.49	0.13	-	17.2	583		
4	10	RE	1.83	1.20	75	60	-	-	0.60	0.12	-	19.4	797		
4	16	RM.V	1.15	1.91	98	80	-	-	0.76	0.11	-	22.2	1132		
4	25	RM.V	0.727	2.96	128	106	-	-	0.79	0.10	-	26.3	1629		
4	35	RM.V	0.524	4.13	157	131	-	-	0.92	0.10	-	29.4	2111		
4	50	SM	0.387	5.87	185	159	-	-	0.90	0.09	-	31.4	2540		
4	70	SM	0.268	8.19	228	202	-	-	1.06	0.09	-	36.9	3816		
4	95	SM	0.193	11.09	275	244	-	-	1.09	0.09	-	42.0	5039		
4	120	SM	0.153	13.99	313	282	-	-	1.22	0.09	-	45.3	6079		
4	150	SM	0.124	17.46	353	324	-	-	1.21	0.09	-	50.0	7392		
4	185	SM	0.0991	21.50	399	371	-	-	1.21	0.09	-	55.4	9093		
4	240	SM	0.0754	27.86	464	436	-	-	1.26	0.09	-	62.4	11647		
4	300	SM	0.0601	34.79	524	481	-	-	1.29	0.09	-	68.8	14335		

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					Amps  Approx					Ω.km  Approx			
	Conductor  mm <sup>2</sup>				Trefoil		Flat			Trefoil	Flat		
					Ground	Air	Ground	Air					
5	1.5	RE	12.1	0.26	26	18.5	-	-	0.77	0.15	-	13.9	336
5	2.5	RE	7.41	0.41	34	25	-	-	0.42	0.14	-	14.9	409
5	4	RE	4.61	0.64	44	34	-	-	0.42	0.13	-	17.3	563
5	6	RE	3.08	0.94	56	43	-	-	0.49	0.13	-	18.8	703
5	10	RE	1.83	1.53	75	60	-	-	0.60	0.12	-	20.9	955
5	16	RM.V	1.15	2.41	98	80	-	-	0.76	0.10	-	24.3	1383
5	25	RM.V	0.727	3.73	128	106	-	-	0.79	0.10	-	29.1	2016
5	35	RM.V	0.524	5.19	157	131	-	-	0.92	0.10	-	32.2	2599