

# NYR(AL)Y 1 x (10-500) mm<sup>2</sup> 0.6/1 kV

## Cu / PVC / AWA / PVC

(Copper Conductor, PVC Insulated, Aluminium Wire Armor, PVC Sheathed)  
Standard Specification : SNI IEC 60502-1 : 2009

### Construction Data

Nom. Cross Section Area	Overall Diameter	Cable Weight
mm <sup>2</sup>	approx. mm	approx. kg/km
10	15.7	384
16	16.7	465
25	18.6	611
35	19.7	733
50	22.0	925
70	23.5	1,162
95	26.0	1,467
120	28.0	1,773
150	30.0	2,085
185	32.5	2,535
240	35.5	3,214
300	38.5	3,847
400	43.5	4,924
500	47.5	6,145

#### Application :

For installation in the ground, indoors, cable trunking and outdoors if increased mechanical protection is required or where high-pulling stresses may occur during installation or operation.

#### Special Features on Request :

- Tinned Coated Copper Conductor
- Fire Resistance
- Oil Resistance
- UV Resistance
- Flame Retardant Cat. A, B, C
- Flame Retardant Non Category
- Heat Resistance
- Anti Termite
- Anti Rodent
- Low Smoke Zero Halogen
- Nylon Coated



#### Conductor Shape

10 sqmm supplied in solid (re) or non compacted circular stranded (rm) conductor shape  
16 sqmm supplied in non compacted circular stranded (rm) conductor shape  
25 - 500 sqmm supplied in non compacted circular stranded (rm) or compacted circular stranded (cm) conductor shape

#### Tinned Coated Copper Conductor

Electrical properties for tinned coated copper conductor will be submitted upon request

#### Standard Packing

10 - 300 sqmm supplied in wooden drum @ 1000 m  
400 - 500 sqmm will be supplied in wooden drum on available length  
Length Tolerance per drum  $\pm 2\%$

### Electrical Data

Conductor			Insulation	Inductance		Current - Carrying Capacity at 30° C				Short circuit current at 1 sec
Nom. Cross Sect.  (mm²)	DC Resistance at 20°C	AC Resistance at 70°C	Insulation Resistance at 20°C  Min. (M.Ω.km)	Trefoil formation 	Flat formation 					
	Max. (Ω/km)	Max. (Ω/km)		Max. (A)	Max. (A)	in air	in ground	in air	in ground	
10	1.83	2.190	50	0.460	0.506	75	77	77	80	1.15
16	1.15	1.376	40	0.429	0.475	98	100	101	103	1.84
25	0.727	0.870	40	0.401	0.447	129	128	133	132	2.88
35	0.524	0.627	40	0.382	0.428	157	153	161	158	4.03
50	0.387	0.463	30	0.364	0.410	190	181	195	186	5.75
70	0.268	0.321	30	0.345	0.391	237	221	243	227	8.05
95	0.193	0.232	30	0.333	0.379	290	264	296	270	10.93
120	0.153	0.184	30	0.325	0.371	335	299	342	304	13.80
150	0.124	0.150	20	0.318	0.365	380	333	386	338	17.25
185	0.0991	0.120	20	0.310	0.356	435	374	441	378	21.28
240	0.0754	0.092	20	0.302	0.348	510	428	514	429	27.60
300	0.0601	0.075	20	0.296	0.342	579	476	581	474	34.50
400	0.0470	0.060	20	0.296	0.342	652	521	646	512	41.20
500	0.0366	0.048	20	0.289	0.335	734	572	721	557	51.50

\* Further information about rating factor for certain cable arrangement can be found on supplementary technical information

# NYRGbY 2 x (1.5-300) mm<sup>2</sup> 0.6/1 kV

## Cu / PVC / SWA / PVC

(Copper Conductor, PVC Insulated, Galvanized Steel Wire Armor, PVC Sheathed)  
Standard Specification : SNI IEC 60502-1 : 2009

### Construction Data

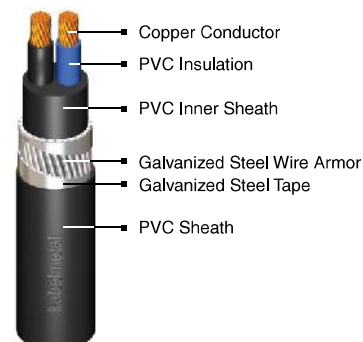
Nom. Cross Section Area	Overall Diameter	Cable Weight
	approx.	approx.
mm <sup>2</sup>	mm	kg/km
1.5	13.9	370
2.5	14.7	418
4	16.5	530
6	18.3	709
10	19.9	860
16	23.0	1,155
25	26.8	1,651
35	28.9	1,979
50	32.6	2,423
70	37.1	3,303
95	41.9	4,217
120	45.2	4,925
150	50.7	6,268
185	56.1	7,540
240	61.7	9,285
300	67.1	11,076

#### Application :

For installation in the ground, indoors, cable trunking and outdoors if increased mechanical protection is required or where high-pulling stresses may occur during installation or operation.

#### Special Features on Request :

- Tinned Coated Copper Conductor
- Fire Resistance
- Oil Resistance
- UV Resistance
- Flame Retardant Cat. A, B, C
- Flame Retardant Non Category
- Heat Resistance
- Anti Termite
- Anti Rodent
- Low Smoke Zero Halogen



#### Conductor Shape

1.5 - 10 sqmm supplied in solid (re) or non compacted circular stranded (rm) conductor shape  
16 sqmm supplied in non compacted circular stranded (rm) conductor shape  
25 - 300 sqmm supplied in compacted circular stranded (cm) conductor shape

#### Tinned Coated Copper Conductor

Electrical properties for tinned coated copper conductor will be submitted upon request

#### Standard Packing

1.5 - 70 sqmm supplied in wooden drum @ 1000 m  
95 - 300 sqmm will be supplied in wooden drum on available length  
Length Tolerance per drum ± 2%

### Electrical Data

Conductor			Inductance	Current - Carrying Capacity at 30°C *		Short circuit current at 1 sec
Nom. Cross Sect.	DC Resistance at 20°C	AC Resistance at 70°C		in air	in ground	
1.5	12.1	14.5	0.343	22	26	0.17
2.5	7.41	8.87	0.318	29	34	0.29
4	4.61	5.52	0.317	39	45	0.46
6	3.08	3.69	0.298	50	56	0.69
10	1.83	2.190	0.269	66	78	1.15
16	1.15	1.376	0.255	90	102	1.84
25	0.727	0.870	0.255	120	134	2.88
35	0.524	0.627	0.246	150	160	4.03
50	0.387	0.464	0.247	180	187	5.75
70	0.268	0.321	0.238	230	230	8.05
95	0.193	0.232	0.238	275	280	10.93
120	0.153	0.184	0.233	320	320	13.80
150	0.124	0.150	0.233	375	355	17.25
185	0.0991	0.121	0.233	430	409	21.28
240	0.0754	0.093	0.232	510	472	27.60
300	0.0601	0.075	0.231	590	525	34.50

\* Further information about rating factor for certain cable arrangement can be found on supplementary technical information

# NYRGrbY 3 x (1.5-300) mm<sup>2</sup> 0.6/1 kV

## Cu / PVC / SWA / PVC

(Copper Conductor, PVC Insulated, Galvanized Steel Wire Armor, PVC Sheathed)  
Standard Specification : SNI IEC 60502-1 : 2009

### Construction Data

Nom. Cross Section Area	Overall Diameter	Cable Weight
mm <sup>2</sup>	approx. mm	approx. kg/km
1.5	14.4	399
2.5	15.2	462
4	17.9	683
6	19.1	790
10	20.8	988
16	24.2	1,353
25	28.2	1,955
35	30.4	2,371
50	33.8	2,754
70	38.4	3,789
95	42.7	4,801
120	45.6	5,637
150	51.4	7,195
185	56.1	8,628
240	62.4	10,801
300	67.9	12,924

#### Application :

For installation in the ground, indoors, cable trunking and outdoors if increased mechanical protection is required or where high-pulling stresses may occur during installation or operation.

#### Special Features on Request :

- Tinned Coated Copper Conductor
- Fire Resistance
- Oil Resistance
- UV Resistance
- Flame Retardant Cat. A, B, C
- Flame Retardant Non Category
- Heat Resistance
- Anti Termite
- Anti Rodent
- Low Smoke Zero Halogen

#### Note :

##### Conductor Shape

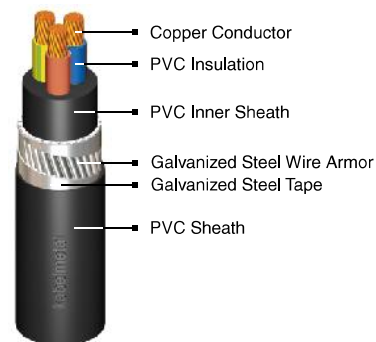
1.5 - 10 sqmm supplied in solid (re) or non compacted circular stranded (rm) conductor shape  
16 sqmm supplied in non compacted circular stranded (rm) conductor shape  
25 - 35 sqmm supplied in compacted circular stranded (cm) conductor shape  
50 - 300 sqmm supplied in sector shaped stranded (sm) conductor

##### Tinned Coated Copper Conductor

Electrical properties for tinned coated copper conductor will be submitted upon request

##### Standard Packing

1.5 - 70 sqmm supplied in wooden drum @ 1000 m  
95 - 300 sqmm will be supplied in wooden drum on available length  
Length Tolerance per drum  $\pm 2\%$



### Electrical Data

Conductor			Inductance	Current - Carrying Capacity at 30°C *		Short circuit current at 1 sec
Nom. Cross Sect.	DC Resistance at 20°C	AC Resistance at 70°C		in air	in ground	
	Max. (Ω/km)	Max. (Ω/km)				
(mm²)			(mH/km)			Max. (kA)
1.5	12.1	14.5	0.343	20	24	0.17
2.5	7.41	8.87	0.318	26	31	0.29
4	4.61	5.52	0.317	35	41	0.46
6	3.08	2.69	0.298	45	51	0.69
10	1.83	2.190	0.269	60	69	1.15
16	1.15	1.376	0.255	80	89	1.84
25	0.727	0.870	0.255	105	116	2.88
35	0.524	0.627	0.246	130	138	4.03
50	0.387	0.464	0.247	160	165	5.75
70	0.268	0.321	0.238	200	205	8.05
95	0.193	0.232	0.238	245	245	10.93
120	0.153	0.184	0.233	285	285	13.80
150	0.124	0.150	0.233	325	315	17.25
185	0.0991	0.121	0.233	370	355	21.28
240	0.0754	0.093	0.232	435	415	27.60
300	0.0601	0.075	0.231	500	465	34.50

\* Further information about rating factor for certain cable arrangement can be found on supplementary technical information

# NYRGbY 4 x (1.5-300) mm<sup>2</sup> 0.6/1 kV

## Cu / PVC / SWA / PVC

(Copper Conductor, PVC Insulated, Galvanized Steel Wire Armor, PVC Sheathed)  
Standard Specification : SNI IEC 60502-1 : 2009

### Construction Data

Nom. Cross Section Area	Overall Diameter	Cable Weight
mm <sup>2</sup>	approx. mm	approx. kg/km
1.5	15.2	448
2.5	16.1	552
4	19.0	770
6	20.3	909
10	22.3	1,165
16	26.8	1,743
25	30.5	2,336
35	33.2	2,867
50	39.0	3,717
70	43.2	4,734
95	49.0	6,459
120	53.0	7,639
150	58.4	9,137
185	64.2	11,046
240	71.2	13,927
300	79.2	17,596

#### Application :

For installation in the ground, indoors, cable trunking and outdoors if increased mechanical protection is required or where high-pulling stresses may occur during installation or operation.

#### Special Features on Request :

- Tinned Coated Copper Conductor
- Fire Resistance
- Oil Resistance
- UV Resistance
- Flame Retardant Cat. A, B, C
- Flame Retardant Non Category
- Heat Resistance
- Anti Termite
- Anti Rodent
- Low Smoke Zero Halogen

#### Note :

##### Conductor Shape

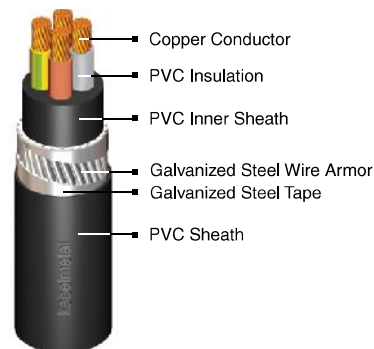
1.5 - 10 sqmm supplied in solid (re) or non compacted circular stranded (rm) conductor shape  
16 sqmm supplied in non compacted circular stranded (rm) conductor shape  
25 - 35 sqmm supplied in compacted circular stranded (cm) conductor shape  
50 - 300 sqmm supplied in sector shaped stranded (sm) conductor

##### Tinned Coated Copper Conductor

Electrical properties for tinned coated copper conductor will be submitted upon request

##### Standard Packing

1.5 - 50 sqmm supplied in wooden drum @ 1000 m  
70 - 300 sqmm will be supplied in wooden drum on available length  
Length Tolerance per drum  $\pm 2\%$



### Electrical Data

Conductor			Inductance	Current - Carrying Capacity at 30°C *		Short circuit current at 1 sec
Nom. Cross Sect.	DC Resistance at 20°C	AC Resistance at 70°C		in air	in ground	
(mm²)	Max. (Ω/km)	Max. (Ω/km)				
1.5	12.1	14.5	0.343	20	24	0.17
2.5	7.41	8.87	0.318	26	31	0.29
4	4.61	5.52	0.317	35	41	0.46
6	3.08	3.69	0.298	45	51	0.69
10	1.83	2.190	0.269	60	69	1.15
16	1.15	1.376	0.255	80	89	1.84
25	0.727	0.870	0.255	105	116	2.88
35	0.524	0.627	0.246	130	138	4.03
50	0.387	0.464	0.247	160	165	5.75
70	0.268	0.321	0.238	200	205	8.05
95	0.193	0.232	0.238	245	245	10.93
120	0.153	0.184	0.233	285	285	13.80
150	0.124	0.150	0.233	325	315	17.25
185	0.0991	0.121	0.233	370	355	21.28
240	0.0754	0.093	0.232	435	415	27.60
300	0.0601	0.075	0.231	500	465	34.50

\* Further information about rating factor for certain cable arrangement can be found on supplementary technical information

# NYRGbY 5 x (1.5-50) mm<sup>2</sup> 0.6/1 kV

## Cu / PVC / SWA / PVC

(Copper Conductor, PVC Insulated, Galvanized Steel Wire Armor, PVC Sheathed)

Standard Specification : SNI IEC 60502-1 : 2009

### Construction Data

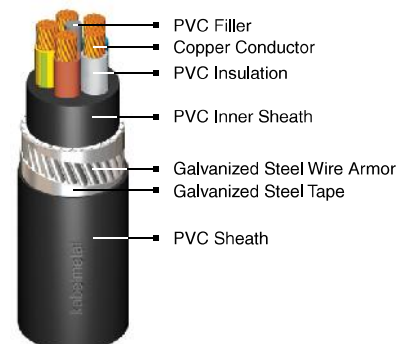
Nom. Cross Section Area	Overall Diameter	Cable Weight
mm <sup>2</sup>	approx. mm	approx. kg/km
1.5	16.1	500
2.5	17.1	592
4	20.3	881
6	21.7	1045
10	24.7	1,482
16	28.9	2,037
25	33.2	2,756
35	37.1	3,646
50	42.4	4,497

#### Application :

For installation in the ground, indoors, cable trunking and outdoors if increased mechanical protection is required or where high-pulling stresses may occur during installation or operation.

#### Special Features on Request :

- Tinned Coated Copper Conductor
- Fire Resistance
- Oil Resistance
- UV Resistance
- Flame Retardant Cat. A, B, C
- Flame Retardant Non Category
- Heat Resistance
- Anti Termite
- Anti Rodent
- Low Smoke Zero Halogen



#### Note :

##### Conductor Shape

1.5 - 10 sqmm supplied in solid (re) or non compacted circular stranded (rm) conductor shape

16 sqmm supplied in non compacted circular stranded (rm) conductor shape

25 - 50 sqmm supplied in compacted circular stranded (cm) conductor shape

##### Tinned Coated Copper Conductor

Electrical properties for tinned coated copper conductor will be submitted upon request

##### Standard Packing

1.5 - 35 sqmm supplied in wooden drum @ 1000 m

50 sqmm will be supplied in wooden drum on available length

Length Tolerance per drum  $\pm 2\%$

### Electrical Data

Conductor			Inductance	Current - Carrying Capacity at 30°C *		Short circuit current at 1 sec
Nom. Cross Sect.	DC Resistance at 20°C	AC Resistance at 70°C		in air	in ground	
(mm²)	Max. (Ω/km)	Max. (Ω/km)	(mH/km)	Max. (A)	Max. (A)	Max. (kA)
1.5	12.1	14.5	0.343	20	24	0.17
2.5	7.41	8.87	0.318	26	31	0.29
4	4.61	5.52	0.317	35	41	0.46
6	3.08	3.69	0.298	45	51	0.69
10	1.83	2.190	0.269	60	69	1.15
16	1.15	1.376	0.255	80	89	1.84
25	0.727	0.870	0.255	105	116	2.88
35	0.524	0.627	0.246	130	138	4.03
50	0.387	0.463	0.247	160	165	5.75

\* Further information about rating factor for certain cable arrangement can be found on supplementary technical information