

CONTENTS

4

Building Wire & Cables

14

Power Cables (0.6-1)KV

44

Instrument & Control Cables

70

Telecommunication &
Coaxial Cables

80

MV & HV Power Cables

108

Aerial Cables

116

Rubber Cables

122

Technical information &
Tables

سیم و کابلهای ساختمانی

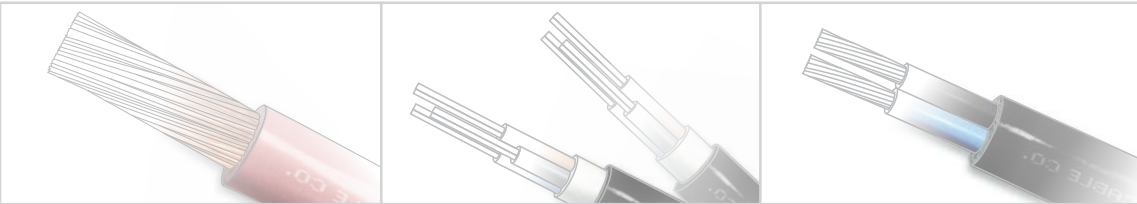




Building Wire & Cables

CONTENTS

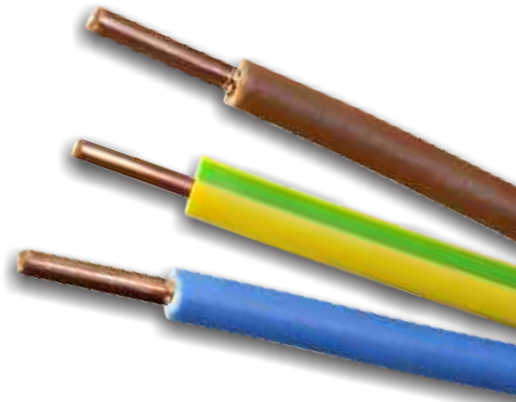
Building Wire & Cables		
1- Wire		
	1-1 Solid & Stranded Wires	CU/PVC 5
		CU/PVC E 6
	1-2 Flexible Wire	CU/PVC 7
		CU/PVC E 8
2- Cable		
	2-1 Solid & Stranded Cables	CU/PVC/PVC 9
	2-2 Flexible Cables	CU/PVC/PVC 11
Power Cables (0.6-1)KV		
Instrument & Control Cables		
Telecommunication & Coaxial Cables		
MV & HV Power Cables		
Aerial Cables		
Rubber Cables		
Technical information & Tables		





Solid & Stranded Wire NYA

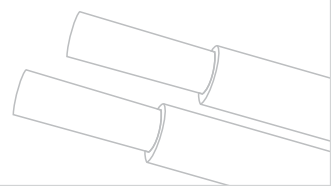
- **Rated Voltage :** 450/750V
- **Applicable Standard:** IEC 60227, IEC 60228, ISIRI (607)3
- **Code Designation According to ISIRI:** (607) 01
- **Construction :**
Conductor: Plain annealed copper wire (class 1&2)
Insulation Type: P.V.C / C
- **Maximum Conductor Temperature:** 70°C
For Single Core Cables No Preferred Colour Scheme, Colour as Per Request
- **Application:** These Wires Are Used For General Purposes as Building, Lighting



No. of Cores & Cross Section	Nominal Insulation Thickness	Overall diameter (Approx)	Total Weight (Approx.)
mm ²	mm	mm	kg/km
1x1.5 RE	0.7	2.8	20
1x1.5 RM	0.7	3.0	21
1x2.5 RE	0.8	3.4	32
1x2.5 RM	0.8	3.6	32
1x4 RE	0.8	3.9	47
1x4 RM	0.8	4.2	49
1x6 RE	0.8	4.4	67
1x6 RM	0.8	4.7	68
1x10 RE	1.0	5.6	111
1x10 RM	1.0	6.1	114
1x16 RM	1.0	7.0	171
1x25 RM	1.2	8.3	264
1x35 RM	1.2	9.4	361
1x50 RM	1.4	10.9	512
1x70 RM	1.4	12.7	704
1x95 RM	1.6	14.6	953
1x120 RM	1.6	16.2	1191
1x150 RM	1.8	17.8	1487
1x185 RM	2.0	20.0	1836
1x240 RM	2.2	22.5	2373
1x300 RM	2.4	25.1	2960
1x400 RM	2.6	28.8	3927

- **Rated Voltage:** 300/500V
- **Code Designation According to ISIRI:** (607) 05.

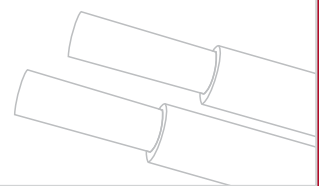
No. of Cores & Cross Section	Nominal Insulation Thickness	Overall diameter (Approx)	Total Weight (Approx.)
mm ²	mm	mm	kg/km
1x0.5	0.6	2.0	9
1x0.75	0.6	2.2	12
1x1	0.6	2.3	15



Solid Wire

- **Rated Voltage :** 300/500V
- **Applicable Standard:** IEC 60227, IEC 60228, ISIRI (607) 3
- **Code Designation According to ISIRI:** (607) 07
- **Construction :**
 Conductor: Plain annealed copper wire (class 1)
 Insulation Type: P.V.C / E
- **Maximum Conductor Temperature:** 90°C
 For Single Core Cables There Is No Preferred Colour Scheme, Colour as Per Request
- **Application:** In dry Indoors, In Electric Panel and Devices, Can Be Laid in Conduit Which Is Under or Over Plaster.

No. of Cores & Cross Section	Nominal Insulation Thickness	Overall diameter (Approx)	Total Weight (Approx.)
mm ²	mm	mm	kg/km
1x0.5	0.6	2.0	8
1x0.75	0.6	2.2	11
1x1	0.6	2.3	13
1x1.5	0.7	2.8	20
1x2.5	0.8	3.4	32



Flexible Wire NYAF - NYFAF (H07V-K)

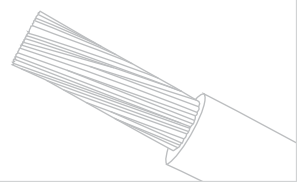
- **Rated Voltage:** 450/750V
- **Applicable Standard:** IEC 60227, IEC 60228, ISIRI (607) 3
- **Code Designation According to ISIRI:** (607) 02
- **Construction :**
Conductor: Plain Annealed Copper Wire (Class 5)
Insulation Type: P.V.C / C
- **Maximum Conductor Temperature:** 70°C
For Single Core Cables No Preferred Colour Scheme, Colour as Per Request
- **Application:**
This Wire Is Used For The Wiring Of Switch Control, Relay and Instrument Panel Of Power Switch-Gear ,and Such Purpose as Internal Connections In Rectifier Equipment and In Motor Starters and Controllers, Where Operation at Temperature 70°



No. of Cores & Cross Section	Nominal Insulation Thickness	Overall diameter (Approx)	Total Weight (Approx.)
mm ²	mm	mm	kg/km
1x1.5	0.7	2.9	20
1x2.5	0.8	3.6	33
1x4	0.8	4.2	48
1x6	0.8	5.1	70
1x10	1.0	6.6	115
1x16	1.0	7.9	175
1x25	1.2	9.8	273
1x35	1.2	11.2	370
1x50	1.4	13.4	527
1x70	1.4	15.4	720
1x95	1.6	17.7	975
1x120	1.6	19.9	1215
1x150	1.8	22.2	1521
1x185	2.0	24.3	1874
1x240	2.2	27.7	2422

- **Rated Voltage:** 300/500V
- **Code Designation According to ISIRI:** (607) 06.

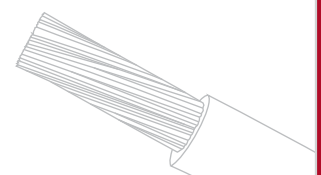
No. of Cores & Cross Section	Nominal Insulation Thickness	Overall diameter (Approx)	Total Weight (Approx.)
mm ²	mm	mm	kg/km
1x0.5	0.6	2.1	8
1x0.75	0.6	2.3	11
1x1	0.6	2.5	14



Flexible Wire

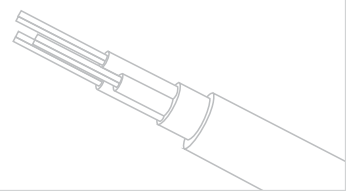
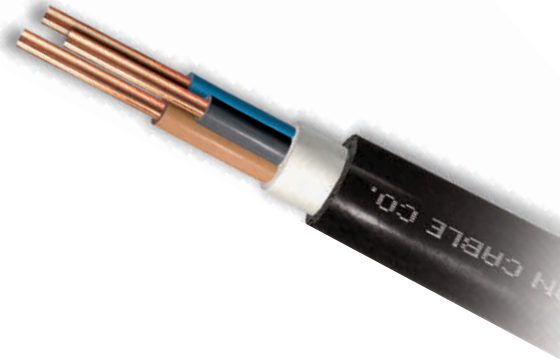
- **Rated Voltage:** 300/500V
- **Applicable Standard:** IEC 60227, IEC 60228, ISIRI (607)3
- **Code Designation According to ISIRI:** (607) 08.
- **Construction :**
Conductor: Plain annealed copper wire (class 5)
Insulation Type: P.V.C / E
- **Maximum Conductor Temperature:** 90°C
For Single Core Cables There Is No Preferred Colour Scheme, Colour Is Per Request
- **Application:** In Dry Indoors, In Electric Panel & Devices, Can Be Laid in Conduit Which Is Under or Over Plaster.

No. of Cores & Cross Section	Nominal Insulation Thickness	Overall diameter (Approx)	Total Weight (Approx.)
mm ²	mm	mm	kg/km
1x0.5	0.6	2.1	8
1x0.75	0.6	2.3	11
1x1	0.6	2.5	14
1x1.5	0.7	2.8	20
1x2.5	0.8	3.4	32



Solid & Stranded Cables

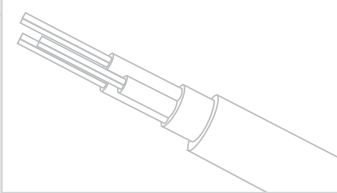
- **Rated Voltage:** 300/500 V
- **Applicable Standard:** ISIRI 607- 4
- **Code Designation according to ISIRI:** (607) 10
- **Construction :**
 - Conductor: Plain Annealed Copper Wire (class 1,2)
 - Insulation Type: P.V.C / C
 - Color Scheme:
 - 2 cores:no preferred color scheme.
 - 3 cores:Green/Yellow, Light Blue, Brown
 - Grey, Black, Brown.
 - 4 cores:Green/Yellow, Light Blue, Grey, Black
 - Light Blue, Black, Brown,Grey.
 - 5 cores:Green/Yellow,Light Blue,Black,Brown,Grey
 - Light Blue,Black,Brown, Grey, Black.
 - Sheath Material: P.V.C/ST4
- **Maximum conductor temperature:** 70°C
- **Application:** For Industrial and Wiring Purposes in the Open, Dry, Damp and Wet Environment in the Open and Concealed, as Well as in Masonary and in Between, Not Suitable for Imbedding Solidified / Concrete.





Solid & Stranded Cables

No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Sheat Thickness	Overall diameter (Approx.)	Total Weight (Approx.)
mm ²	mm	mm	mm	kg/km
2x1.5 RM	0.7	1.2	9.1	122
2x1.5 RE	0.7	1.2	8.8	116
2x2.5 RM	0.8	1.2	10.4	167
2x2.5 RE	0.8	1.2	10.0	158
2x4 RM	0.8	1.2	11.5	218
2x4 RE	0.8	1.2	10.9	204
2x6 RM	0.8	1.2	12.6	280
2x6 RE	0.8	1.2	11.9	262
2x10 RM	1.0	1.4	16.1	461
2x10 RE	1.0	1.4	15.1	428
2x16	1.0	1.4	18.0	632
2x25	1.2	1.4	21.0	911
2x35	1.2	1.6	24.0	1237
3x1.5 RM	0.7	1.2	9.6	138
3x1.5 RE	0.7	1.2	9.2	130
3x2.5 RM	0.8	1.2	11.0	190
3x2.5 RE	0.8	1.2	10.5	180
3x4 RM	0.8	1.2	12.2	253
3x4 RE	0.8	1.2	11.5	239
3x6 RM	0.8	1.4	13.8	342
3x6 RE	0.8	1.4	13.0	325
3x10 RM	1.0	1.4	17.1	541
3x10 RE	1.0	1.4	16.0	512
3x16	1.0	1.4	19.5	771
3x25	1.2	1.6	22.7	1130
3x35	1.2	1.6	25.5	1502
4x1.5RM	0.7	1.2	10.4	164
4x1.5RE	0.7	1.2	9.9	155
4x2.5RM	0.8	1.2	11.9	230
4x2.5RE	0.8	1.2	11.4	221
4x4 RM	0.8	1.4	13.6	321
4x4 RE	0.8	1.4	12.9	307
4x6 RM	0.8	1.4	15.4	437
4x6 RE	0.8	1.4	14.6	420
4x10 RM	1.0	1.4	18.6	672
4x10 RE	1.0	1.4	17.5	643
4x16	1.0	1.4	21.3	968
4x25	1.2	1.6	25.3	1454
4x35	1.2	1.6	27.9	1901
5x1.5RM	0.7	1.2	11.2	202
5x1.5RE	0.7	1.2	10.7	192
5x2.5RM	0.8	1.2	12.9	286
5x2.5ER	0.8	1.2	12.3	273
5x4 RM	0.8	1.4	15.2	416
5x4 ER	0.8	1.4	14.4	396
5x6 RM	0.8	1.4	16.7	544
5x6 RE	0.8	1.4	15.8	521
5x10 RM	1.0	1.4	20.3	843
5x10 RE	1.0	1.4	19.0	803
5x16	1.0	1.6	23.7	1241
5x25	1.2	1.6	27.6	1827
5x35	1.2	1.6	31.0	2432



Flexible Cables : NYMHY

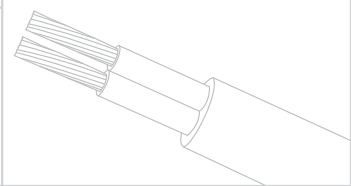
- **Rated Voltage:** 300/500 V
- **Applicable Standard:** IEC 60227, IEC 60228
- **Code Designation according to ISIRI:** (607) 53

- **Construction :**
 Conductor: Plain Annealed Copper Wire (class 5)
 Insulation Type: P.V.C / D
 Color Scheme:
 2 cores: no preferred color scheme.
 3 cores: Green/Yellow, Light Blue, Brown
 Grey, Black, Brown.
 4 cores: Green/Yellow, Light Blue, Grey, Black
 Light Blue, Black, Brown, Grey.
 5 cores: Green/Yellow, Light Blue, Black, Brown, Grey
 Light Blue, Black, Brown, Grey, Black.
 Sheath Material: P.V.C/ST5
- **Maximum conductor temperature:** 70°C

- **Application:** In Dry Locations; Also in Damp and Wet Locations, Not in Industrial or Agricultural Premises, But Permitted in Tailors Shops and Similar Premises. Permitted for Connecting Cooking and Heating Appliances Only if There is No Possibility of Contact Between the Cable and Hot Parts of the Appliance or Other Sources of Heat.



Nominal Insulation Cross Section	No. of Cores & Thickness	Nominal Sheath Thickness	Overall diameter (Approx)	Total weight (Approx)
mm ²	mm	mm	mm	kg/km
2x0.75	0.6	0.8	6.3	56
2x1	0.6	0.8	6.6	64
2x1.5	0.7	0.8	7.4	84
2x2.5	0.8	1.0	9.0	129
3x0.75	0.6	0.8	6.7	67
3x1	0.6	0.8	7.0	77
3x1.5	0.7	0.9	8.1	107
3x2.5	0.8	1.1	9.8	164
4x0.75	0.6	0.8	7.3	82
4x1	0.6	0.9	7.9	99
4x1.5	0.7	1.0	9.0	136
4x2.5	0.8	1.1	10.7	204
5x0.75	0.6	0.9	8.1	43.89
5x1	0.6	0.9	8.6	47.94
5x1.5	0.7	1.1	10.1	67
5x2.5	0.8	1.2	11.9	90.67



کابل‌های قدرت (۱-۶/۰) کیلوولت





Power Cables (0.6-1)KV

CONTENTS

Building Wire & Cables

Power Cables (0.6-1)KV

1- Unarmoured	1-1 NYY	15
	2-1 N2XY	17
	3-1 N2XH	19
	4-1 NYCY	20
	5-1 N2XCY	22
2- Armoured	1-2 NYRY	24
	2-2 NYBY	26
	3-2 N2XRY	28
	4-2 N2XBY	30
	5-2 N2XHRH	32
	6-2 NYCYRY	33
	7-2 N2XCYRY	35
	8-2 NYKYRY	37
	9-2 N2XKYRY	39

Instrument & Control Cables

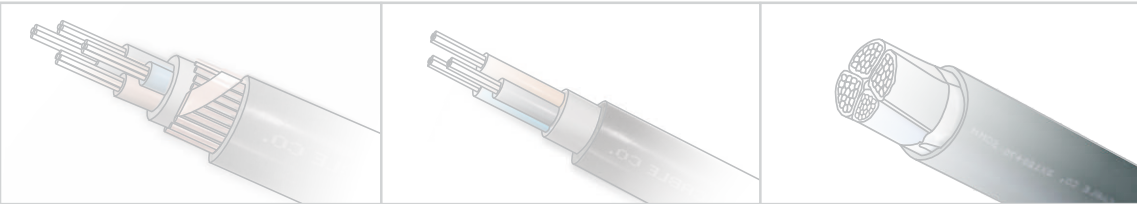
Telecommunication & Coaxial Cables

MV & HV Power Cables

Aerial Cables

Rubber Cables

Technical information & Tables



Power Cable NYY

● **Rated Voltage:** 0.6/1 KV

● **Applicable Standard:** IEC 60502-1, IEC 60228, ISIRI 3569-1

● **Construction :**
 CU/PVC/PVC
 Conductor: Plain Annealed copper wire (class 1,2,5)
 Insulation Type: P.V.C / A
 Filling Material: P.V.C
 Sheath Material: P.V.C - ST1

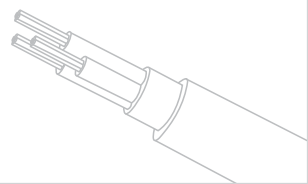
● **Maximum Conductor Temperature:** 70°C

● **Application:**
 Low Voltage Power Cable For Indoor and Outdoor and Under Ground As Well As In Cable Duct.



No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall Diameter (Approx)	Total Weight (Approx.)
mm ²	mm	mm	mm	kg/km
1x1.5 RE	0.8	1.4	5.8	49
1x2.5 RE	0.8	1.4	6.2	61
1x4 RE	1	1.4	7.1	85
1x6 RE	1	1.4	7.6	108
1x10 RE	1	1.4	8.4	151
1x16 RM	1	1.4	9.8	217
1x25 RM	1.2	1.4	11.1	316
1x35 RM	1.2	1.4	12.2	413
1x50 RM	1.4	1.4	13.7	545
1x70 RM	1.4	1.4	15.5	748
1x95 RM	1.6	1.5	17.6	1019
1x120 RM	1.6	1.6	19.4	1264
1x150 RM	1.8	1.6	21.0	1541
1x185 RM	2	1.7	23.4	1919
1x240 RM	2.2	1.8	26.1	2489
1x300 RM	2.4	1.9	28.9	3100
1x400 RM	2.6	2	32.8	3939
2x1.5 RE	0.8	1.8	11.6	184
2x2.5 RE	0.8	1.8	12.4	222
2x4 RE	1	1.8	14.1	299
2x6 RE	1	1.8	15.1	363
2x10 RE	1	1.8	16.7	485
2x16 RM	1	1.8	19.6	691
2x25 RM	1.2	1.8	22.2	964
2x35 RM	1.2	1.8	24.4	1230
2x50 RM	1.4	1.8	27.4	1600
2x70 RM	1.4	2	31.8	2216
2x95 RM	1.6	2.1	35.8	2941
2x120 RM	1.6	2.2	39.2	3601
2x150 RM	1.8	2.3	43.0	4404
2x185 RM	2	2.5	47.8	5465
2x240 RM	2.2	2.7	53.2	6991
2x300 RM	2.4	2.9	59.2	8715

On request, Aluminium Conductor is also available



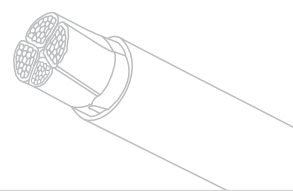
Power Cable NYY

Nominal Insulation Cross Section	No. of Cores & Thickness	Nominal Sheath Thickness	Overall Diameter (Approx.)	Total Weight (Approx.)
mm ²	mm	mm	mm	kg/km
3x1.5 RE	0.8	1.8	12.0	206
3x2.5 RE	0.8	1.8	12.9	254
3x4 RE	1	1.8	14.8	350
3x6 RE	1	1.8	15.9	434
3x10 RE	1	1.8	17.6	592
3x16 RM	1	1.8	20.7	850
3x25 RM	1.2	1.8	23.5	1210
3x35 RM	1.2	1.8	25.9	1562
3x50 SM	1.4	1.8	25.9	1815
3x70 SM	1.4	2	29.2	2436
3x95 SM	1.6	2.1	33.3	3242
3x120SM	1.6	2.2	36.1	3990
3x150SM	1.8	2.3	40.1	4948
3x185SM	2	2.5	44.4	6080
3x240SM	2.2	2.7	49.8	7802
3x300SM	2.4	2.9	52.4	9639
4x1.5 RE	0.8	1.8	12.8	240
4x2.5 RE	0.8	1.8	13.8	300
4x4 RE	1	1.8	15.9	419
4x6 RE	1	1.8	17.1	524
4x10 RE	1	1.8	19.1	730
4x16 RM	1	1.8	22.5	1053
4x25 RM	1.2	1.8	25.7	1519
4x35 RM	1.2	1.9	28.5	1979
4x50 SM	1.4	1.8	27.1	2144
4x70 SM	1.4	1.9	30.7	2967
4x95 SM	1.6	2.1	35.4	4074
4x120SM	1.6	2.2	38.6	5038
4x150SM	1.8	2.3	42.6	6201
4x185SM	2	2.5	47.2	7737
4x240SM	2.2	2.7	53.3	10076
4x300SM	2.4	2.9	58.7	12561
4x400SM	2.6	3.1	66.9	16018
5x1.5 RE	0.8	1.8	13.6	277
5x2.5 RE	0.8	1.8	14.7	349
5x4 RE	1	1.8	17.1	495
5x6 RE	1	1.8	18.5	628
5x10 RM	1	1.8	20.6	875
5x16 RM	1	1.8	24.5	1277
5x25 RM	1.2	1.9	28.2	1861
5x35 RM	1.2	2	31.8	2470
5x50 RM	1.4	2.1	36.0	3260
5x70 RM	1.4	2.3	41.3	4488
5x95 RM	1.6	2.5	47.2	6101
5x120RM	1.6	2.6	51.7	7503
5x150RM	1.8	2.8	56.9	9225
5x185RM	2	3	63.2	11451
3x25+16 RM	1.2 1	1.8	24.9	1400
3x35+16 RM	1.2 1	1.8	26.9	1717
3x50+25 SM	1.4 1.2	1.8	26.4	1914
3x70+35 SM	1.4 1.2	1.9	29.4	2630
3x95+50 SM	1.6 1.4	2	34.0	3604
3x120+70 SM	1.6 1.4	2.1	36.8	4525
3x150+70 SM	1.8 1.4	2.3	41.0	5679
3x185+95 SM	2 1.6	2.4	45.2	7061
3x240+120 SM	2.2 1.6	2.6	51.1	9120
3x300+150 SM	2.4 1.8	2.8	56.8	11380
3x400+185 SM	2.6 2	3	64.4	13790

On request, Aluminium Conductor is also available



NYY N2XY N2XH NYCY N2XCY NYRY NYBY N2XRY
 N2XBY N2XHRH NYCYRY N2XCYRY NYKYRY N2XKYRY





Power Cable N2XY

- **Rated Voltage:** 0.6/1 KV
- **Applicable Standard:** IEC 60502-1, IEC 60228, ISIRI 3569-1

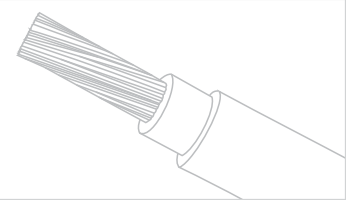
- **Construction :**
CU/XLPE/PVC/PVC
Conductor: Plain Annealed Copper Wire (class 1,2)
Insulation Type: XLPE
Filling Material: PVC
Sheath Material: PVC 90 -ST2

- **Maximum Conductor Temperature:** 90°C

- **Application:**
For Outdoors And Indoors Installation, In Damp And Wet Locations Laid Direct In The Ground (When Properly Protected) In Ducts, In Trenches And In Steel And In Steel Support Brackets.

No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall Diameter (Approx)	Total Weight (Approx.)
mm ²	mm	mm	mm	kg/km
1x1.5 RE	0.7	1.4	5.6	45
1x2.5 RE	0.7	1.4	6	56
1x4 RE	0.7	1.4	6.5	74
1x6 RE	0.7	1.4	7	95
1x10 RE	0.7	1.4	7.8	137
1x16 RM	0.7	1.4	9.2	199
1x25 RM	0.9	1.4	10.5	294
1x35 RM	0.9	1.4	11.6	389
1x50 RM	1	1.4	12.9	510
1x70 RM	1.1	1.4	14.9	713
1x95 RM	1.1	1.5	16.6	964
1x120 RM	1.2	1.5	18.4	1201
1x150 RM	1.4	1.6	20.2	1477
1x185 RM	1.6	1.7	22.6	1843
1x240 RM	1.7	1.8	25.1	2390
1x300 RM	1.8	1.8	27.5	2962
1x400 RM	2	2	31.6	3789
2x1.5 RE	0.7	1.8	11.2	161
2x2.5 RE	0.7	1.8	12	195
2x4 RE	0.7	1.8	12.9	241
2x6 RE	0.7	1.8	13.9	299
2x10 RE	0.7	1.8	15.5	409
2x16 RM	0.7	1.8	18.4	592
2x25 RM	0.9	1.8	21	841
2x35 RM	0.9	1.8	23.2	1084
2x50 RM	1	1.8	25.8	1400
2x70 RM	1.1	1.9	30	1947
2x95 RM	1.1	2	33.6	2588
2x120 RM	1.2	2.2	37.6	3242
2x150 RM	1.4	2.3	41	3942
2x185 RM	1.6	2.4	46	4936
2x240 RM	1.7	2.6	51	6311
2x300 RM	1.8	2.8	56.6	7855

On request, Aluminium Conductor is also available



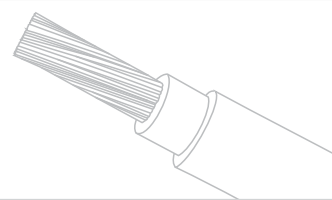
Power Cable N2XY

No. of Cores & Cross Section	Nominal Insulation Thickness		Nominal Sheath Thickness	Overall Diameter (Approx)	Total Weight (Approx.)
mm ²	mm		mm	mm	kg/km
3x1.5 RE	0.7		1.8	11.6	180
3x2.5 RE	0.7		1.8	12.5	224
3x4 RE	0.7		1.8	13.5	284
3x6 RE	0.7		1.8	14.6	361
3x10 RE	0.7		1.8	16.3	505
3x16 RM	0.7		1.8	19.4	739
3x25 RM	0.9		1.8	22.2	1069
3x35 RM	0.9		1.8	24.6	1397
3x50 SM	1		1.8	24.1	1674
3x70 SM	1.1		1.9	27.7	2279
3x95 SM	1.1		2	30.9	3007
3x120 SM	1.2		2.1	34.2	3753
3x150 SM	1.4		2.3	38.3	4684
3x185 SM	1.6		2.4	42.4	5746
3x240 SM	1.7		2.6	47.4	7372
3x300 SM	1.8		2.8	49.4	9103
4x1.5 RE	0.7		1.8	12.3	208
4x2.5 RE	0.7		1.8	13.3	263
4x4 RE	0.7		1.8	14.5	342
4x6 RE	0.7		1.8	15.7	438
4x10 RE	0.7		1.8	17.6	623
4x16 RM	0.7		1.8	21.1	920
4x25 RM	0.9		1.8	24.2	1344
4x35 RM	0.9		1.8	26.9	1767
4x50 SM	1		1.8	25.1	1952
4x70 SM	1.1		1.9	29.2	2761
4x95 SM	1.1		2	32.8	3747
4x120 SM	1.2		2.1	36.5	4697
4x150 SM	1.4		2.3	40.7	5811
4x185 SM	1.6		2.4	45.0	7237
4x240 SM	1.7		2.6	50.7	9431
4x300 SM	1.8		2.7	55.4	11726
4x400 SM	2		3	63.8	15021
5x1.5 RE	0.7		1.8	13.1	241
5x2.5 RE	0.7		1.8	14.2	309
5x4 RE	0.7		1.8	15.5	405
5x6 RE	0.7		1.8	16.8	523
5x10 RE	0.7		1.8	19.0	758
5x16 RM	0.7		1.8	22.9	1128
5x25 RM	0.9		1.8	26.4	1661
5x35 RM	0.9		1.9	29.6	2207
5x50 RM	1		2	33.7	2938
5x70 RM	1.1		2.2	39.5	4141
5x95 RM	1.1		2.4	44.3	5573
5x120 RM	1.2		2.6	49.6	6986
5x150 RM	1.4		2.7	54.5	8579
5x185 RM	1.6		2.9	60.8	10685
3x25+16 RM	0.9	0.7	1.8	23.5	1256
3x35+16 RM	0.9	0.7	1.8	25.4	1552
3x50+25 SM	1	0.9	1.8	24.5	1774
3x70+35 SM	1.1	0.9	1.9	27.9	2482
3x95+50 SM	1.1	1	2	31.5	3365
3x120+70 SM	1.2	1.1	2.1	34.8	4290
3x150+70 SM	1.4	1.1	2.2	39.0	5381
3x185+95 SM	1.6	1.1	2.4	43.2	6716
3x240+120 SM	1.7	1.2	2.5	48.6	8661
3x300+150 SM	1.8	1.4	2.7	53.8	10805
3x400+185 SM	2	1.6	2.9	61.4	13346

On request, Aluminium Conductor is also available



NYY **N2XY** N2XH NYCY N2XCY NYRY NYBY N2XRY
 N2XBY N2XHRH NYCYRY N2XCYRY NYKYRY N2XKYRY

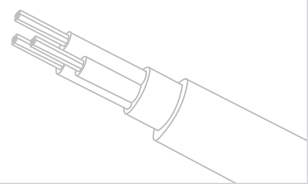


Power Cable N2XH

- **Rated Voltage:** 0.6/1 KV
- **Applicable Standard:** IEC 60502-1, ISIRI 3569-1
- **Construction :**
 CU/MGT/PET/XLPE/HFSL/HFSL
 Conductor: Plain Annealed copper wire (class 2)
 Flam barrier: Mica glass tape
 Insulation Type: XLPE
 Inner sheath: Halogen free, Low smoke, Flame retardant – HFSL
 Outer sheath: Halogen free, Low smoke, Flame retardant – HFSL
- **Technical data:**
 - 1) Temperature: -30°C to + 90°C
 - 2) Maximum short circuit temperature: 250°C (5 seconds Max.)
 - 3) Conductor resistance: As per class 2 of IEC 60228
 - 4) Test voltage: 3.5 kv rms or 8.4 kvdc for 5 minutes
 - 5) Flame retardant test: Acc. IEC 60332-1
 - 6) Flam propagation test: Acc. IEC 60332-3
 - 7) Fire resistance test: Acc. IEC 60331-21
 - 8) Smoke density test: Acc. IEC 61034
 - 9) Halogen content test: Acc. IEC 60754-2
- **Application:**
 These cables can be used for electricity supply and control in public network and industrial plants or public buildings, where people are potentially endangered in case of fire and where, for a defined period of time, the continuity of control and energy supply is of vital necessity.



No. of Cores & Cross Section	No. strand x diameter	Nominal Insulation thickness	Nominal sheath thickness	Overall Diameter (Approx.)	Total Weight (Approx.)
mm ²	No. x mm	mm	mm	mm	kg/km
2x1.5 RM	7x0.53	0.7	1.8	12.4	170
2x2.5 RM	7x0.67	0.7	1.8	13.2	230
2x4 RM	7x0.85	0.7	1.8	14.4	282
2x5 RM	7x1.04	0.7	1.8	15.4	344
3x1.5 RM	7x0.53	0.7	1.8	13.0	222
3x2.5 RM	7x0.67	0.7	1.8	13.9	264
3x4 RM	7x0.85	0.7	1.8	15.2	332
3x6 RM	7x1.04	0.7	1.8	16.4	404
4x1.5 RM	7x0.53	0.7	1.8	14.0	242
4x2.5 RM	7x0.67	0.7	1.8	15.0	288
4x4 RM	7x0.85	0.7	1.8	16.5	378
4x6 RM	7x1.04	0.7	1.8	17.7	472
5x1.5 RM	7x0.53	0.7	1.8	15.2	286
5x2.5 RM	7x0.67	0.7	1.8	16.3	344
5x4 RM	7x0.85	0.7	1.8	18.0	424
5x6 RM	7x1.04	0.7	1.8	19.4	555
7x1.5 RM	7x0.53	0.7	1.8	16.0	300
10x1.5 RM	7x0.53	0.7	1.8	20.0	412
12x1.5 RM	7x0.53	0.7	1.8	20.6	450
19x1.5 RM	7x0.53	0.7	1.8	24.3	605



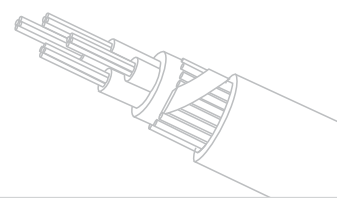
Concentric Power Cable NYCY

- **Rated Voltage:** 0.6/1 KV
- **Applicable Standard:** IEC 60502-1, IEC 60228, ISIRI 3569-1
- **Construction :**
 - CU/PVC/CWS(CTS)/PVC
 - Conductor: Plain Annealed Copper Wire (class 1,2)
 - Insulation Type: P.V.C / A
 - Bedding Material: P.V.C
 - Concentric material: Copper Wire + Copper Tape
 - Sheath Material: P.V.C - ST1
- **Maximum Conductor Temperature:** 70°C
- **Application:**

Predominantly Designed For Installation In Industrial And Control Equipment, In Power House And Where Ever A High Level Of Both Electrical And Mechanical Protection Is Required.



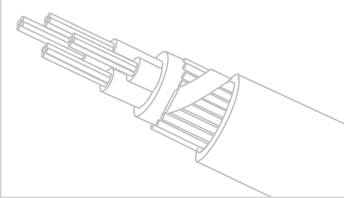
NYY N2XY N2XH **NYCY** N2XCY NYRY NYBY N2XRY
 N2XBY N2XHRH NYCYRY N2XCYRY NYKYRY N2XKYRY



Concentric Power Cable NYCY

No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Inner Layer Thickness	Nominal Concentric Wire Diameter	Nominal Sheath Thickness	Overall Diameter (Approx)	Total Weight (Approx)
mm ²	mm	mm	mm	mm	mm	kg/km
1x1.5RE/1.5	0.8	0	0.5	1.4	7.0	77
1x2.5RE/2.5	0.8	0	0.5	1.4	7.4	98
1x4 RE/4	1	0	0.8	1.4	8.9	142
1x6 RE/6	1	0	0.8	1.4	9.8	191
1x10 RE/10	1	0	0.8	1.4	10.2	264
1x16 RM/16	1	0	0.8	1.4	11.6	387
1x25 RM/25	1.2	0	0.9	1.4	13.1	569
1x35 RM/35	1.2	0	0.9	1.4	14.2	759
1x50 RM/50	1.4	0	0.9	1.5	15.9	998
2x1.5RE/1.5	0.8	1	0.5	1.8	12.8	221
2x2.5RE/2.5	0.8	1	0.5	1.8	13.6	269
2x4 RE/4	1	1	0.8	1.8	15.9	367
2x6 RE/6	1	1	0.8	1.8	16.9	451
2x10 RE/10	1	1	0.8	1.8	18.5	612
2x16 RM/16	1	1	0.8	1.8	21.4	876
2x25 RM/25	1.2	1	0.9	1.8	24.2	1234
2x35 RM/35	1.2	1	0.9	1.8	26.4	1595
2x50 2x50	1.4	1	0.9	1.9	29.6	2081
3x1.5RE/1.5	0.8	1	0.5	1.8	13.2	243
3x2.5RE/2.5	0.8	1	0.5	1.8	14.1	301
3x4 RE/4	1	1	0.8	1.8	16.6	419
3x6 RE/6	1	1	0.8	1.8	17.7	523
3x10 RE/10	1	1	0.8	1.8	19.4	720
3x16 RM/16	1	1	0.8	1.8	22.5	1037
3x25 RM/25	1.2	1	0.8	1.8	25.3	1433
3x35 RM/35	1.2	1	0.9	1.9	28.1	1942
3x50 RM/50	1.4	1	0.9	2	31.5	2484
4x1.5RE/1.5	0.8	1	0.5	1.8	14.0	269
4x2.5RE/2.5	0.8	1	0.5	1.8	15.0	338
4x4 RE/4.4	1	1	0.8	1.8	17.7	474
4x6 RE/6	1	1	0.8	1.8	18.9	597
4x10 RE/10	1	1	0.8	1.8	20.9	838
4x16 RM/16	1	1	0.8	1.8	24.3	1210
4x25 RM/25	1.2	1	0.9	1.8	27.7	1752
4x35 RM/35	1.2	1	0.9	1.8	27.7	2089
4x50 RM/50	1.4	1	0.9	2	31.5	2771
5x1.5RE/1.5	0.8	1	0.5	1.8	14.8	305
5x2.5RE/2.5	0.8	1	0.5	1.8	15.9	386
5x4 RE/4.4	1	1	0.8	1.8	18.9	550
5x6 RE/6	1	1	0.8	1.8	20.3	699
5x10 RE/10	1	1	0.8	1.8	22.4	981
5x16 RM/16	1	1	0.8	1.8	26.3	1431
5x25 RM/25	1.2	1	0.9	1.9	30.2	2091
5x35 RM/35	1.2	1.2	0.9	2	33.8	2782
5x50 RM/50	1.4	1.2	0.9	2.2	38.2	3676
3x25+16RM/16	1.2 1	1	0.8	1.8	26.7	1554
3x35+16RM/16	1.2 1	1	0.8	1.9	28.9	1885
3x50+25 SM/25	1.4 1.2	1	0.9	1.8	30.4	2319
3x70+35 SM/35	1.4 1.2	1.2	0.9	1.9	33.7	3169
3x95+50 SM/50	1.6 1.4	1.2	0.9	2	38.4	4279

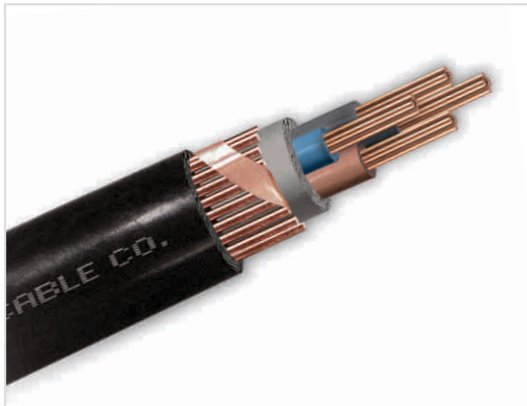
On request, Aluminium Conductor is also available



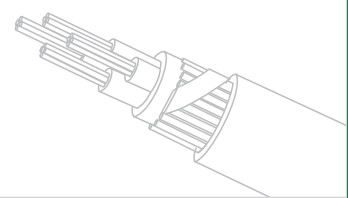
Concentric Power Cable N2XCY

- **Rated Voltage:** 0.6/1 KV
- **Applicable Standard:** IEC 60502-1, IEC 60228, ISIRI 3569-1
- **Construction :**
 - CU/XLPE/PVC/CWS/PVC
 - Conductor: Plain Annealed Copper Wire (class 1,2)
 - Insulation Type: XLPE
 - Bedding Material: PVC
 - Concentric material: Copper Wire + Copper Tape
 - Sheath Material: PVC 90 - ST2
- **Maximum Conductor Temperature:** 90°C
- **Application:**

For Outdoor Installation In Damp And Wet Location, Laid Direct In, The Ground Where Excessive Mechanical Stresses Are Required In Sloping And Movable Terrains And In Vertical Or Inclined Laying , As Well As In Locations Susceptible To Sliding.



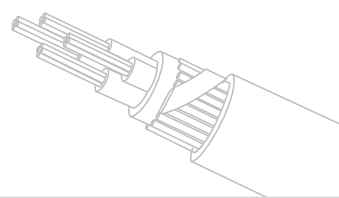
NY Y	N2XY	N2XH	NYCY	N2XCY	NYRY	NYBY	N2XRY
N2XBY	N2XHRH	NYCYRY	N2XC YRY	NYKYRY	N2XKYRY		



Concentric Power Cable N2XCY

No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Inner Layer Thickness	Nominal Concentric Wire Diameter	Nominal Sheath Thickness	Overall Diameter (Approx)	Total Weight (Approx)
mm ²	mm	mm	mm	mm	mm	kg/km
1x1.5 RE/1.5	0.7	0	0.5	1.4	6.8	81
1x2.5 RE/2.5	0.7	0	0.5	1.4	7.2	104
1x4 RE/4	0.7	0	0.8	1.4	8.3	148
1x6 RE/6	0.7	0	0.8	1.4	8.8	190
1x10 RE/10	0.7	0	0.8	1.4	9.6	273
1x16 RM/16	0.7	0	0.8	1.4	11.0	398
1x25 RM/25	0.9	0	0.9	1.4	12.5	585
1x35 RM/35	0.9	0	0.9	1.4	13.6	778
1x50 RM/50	1	0	0.9	1.4	14.9	1005
2x1.5 RE/1.5	0.7	1	0.5	1.8	12.4	220
2x2.5 RE/2.5	0.7	1	0.5	1.8	13.2	266
2x4 RE/4	0.7	1	0.8	1.8	14.7	351
2x6 RE/6	0.7	1	0.8	1.8	15.7	433
2x10 RE/10	0.7	1	0.8	1.8	17.3	590
2x16 RM/16	0.7	1	0.8	1.8	20.2	846
2x25 RM/25	0.9	1	0.9	1.8	23.0	1201
2x35 RM/35	0.9	1	0.9	1.8	25.2	1554
2x50 RM/50	1	1	0.9	1.8	27.8	1987
3x1.5 RE/1.5	0.7	1	0.5	1.8	12.8	241
3x2.5 RE/2.5	0.7	1	0.5	1.8	13.7	298
3x4 RE/4	0.7	1	0.8	1.8	15.3	398
3x6 RE/6	0.7	1	0.8	1.8	16.4	500
3x10 RE/10	0.7	1	0.8	1.8	18.1	693
3x16 RM/16	0.7	1	0.8	1.8	21.2	1000
3x25 RM/16	0.9	1	0.8	1.8	24.0	1383
3x35 RM/35	0.9	1	0.9	1.8	26.6	1880
3x35 RM/16	0.9	1	0.9	1.8	23.8	1592
3x50 RM/50	1	1	0.9	1.9	29.6	2436
3x50 RM/16	1	1	0.9	1.8	26.2	2067
4x1.5 RE/1.5	0.7	1	0.5	1.8	13.5	272
4x2.5 RE/2.5	0.7	1	0.5	1.8	14.5	341
4x4 RE/4	0.7	1	0.8	1.8	16.3	462
4x6 RE/6	0.7	1	0.8	1.8	17.5	584
4x10 RE/10	0.7	1	0.8	1.8	19.4	819
4x16 RM/16	0.7	1	0.8	1.8	22.9	1194
4x25 RM/16	0.9	1	0.9	1.8	26.2	1732
4x35 RM/35	0.9	1	0.9	1.9	29.1	2284
4x50 RM/50	1	1	0.9	1.9	29.3	2584
5x1.5 RE/1.5	0.7	1	0.5	1.8	14.3	308
5x2.5 RE/2.5	0.7	1	0.5	1.8	15.4	389
5x4 RE/4	0.7	1	0.8	1.8	17.3	528
5x6 RE/6	0.7	1	0.8	1.8	18.6	671
5x10 RE/10	0.7	1	0.8	1.8	20.8	955
5x16 RM/16	0.7	1	0.8	1.8	24.7	1400
5x25 RM/16	0.9	1	0.9	1.9	28.6	2059
5x35 RM/35	0.9	1.2	0.9	2.0	32.2	2746
5x50 RM/50	1	1.2	0.9	2.1	35.9	3572
3x25+16 RM/16	0.9 0.7	1	0.8	1.8	25.3	1532
3x35+16 RM/16	0.9 0.7	1	0.8	1.8	27.2	1839
3x50+25 SM/25	1 0.9	1	0.9	1.8	28.5	1360
3x70+35 SM/35	1.1 0.9	1.2	0.9	1.9	32.4	3023
3x95+50 SM/50	1.1 1	1.2	0.9	2	36.1	4037

On request, Aluminium Conductor is also available



Armoured Power Cable NYRY

● **Rated Voltage:** 0.6/1 KV

● **Applicable Standard:** IEC 60502-1, IEC 60228, ISIRI 3569-1

● **Construction :**

CU/PVC/SWA or AWA/PVC

Conductor: Plain Annealed Copper Wire (class 1,2)

Insulation Type: P.V.C / A

Bedding Material: P.V.C

Armour material: Galvanized Steel Wire/Aluminium Wire

Sheath Material: PVC - ST1

● **Maximum Conductor Temperature:** 70°C

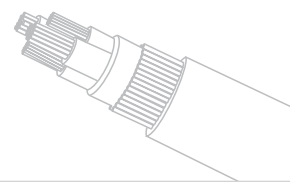
● **Application:**

For Outdoor And Indoor Installation and Wet Location Laid Direct To The Ground, Where Mechanical Damages Are Expected To Occur.

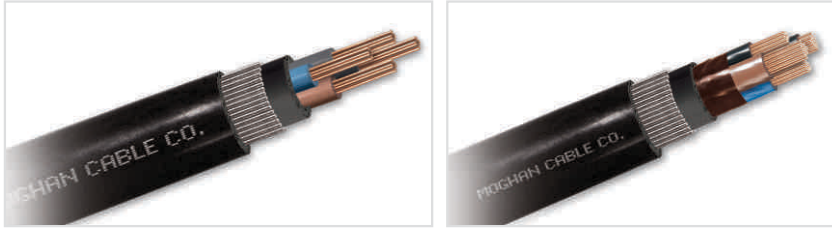
No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Inner Layer Thickness	Armour Wire Diameter	Nominal Sheath Thickness	Overall Diameter (Approx)	Total Weight (Approx)
mm ²	mm	mm	mm	mm	mm	kg/km
1x25 RM	1.2	1	1.25	1.4	15.6	475
1x35 RM	1.2	1	1.25	1.5	16.9	595
1x50 RM	1.4	1	1.25	1.5	18.4	744
1x70 RM	1.4	1	1.25	1.6	20.4	983
1x95 RM	1.6	1	1.6	1.7	23.2	1329
1x120 RM	1.6	1	1.6	1.7	24.8	1591
1x150 RM	1.8	1	1.6	1.8	26.6	1904
1x185 RM	2	1	1.6	1.9	29.0	2319
1x240 RM	2.2	1	1.6	2.0	31.7	2933
1x300 RM	2.4	1.2	2	2.1	35.7	3703
1x400 RM	2.6	1.2	2	2.2	39.6	4612
2x1.5 RE	0.8	1	0.9	1.8	13.4	332
2x2.5 RE	0.8	1	0.9	1.8	14.2	383
2x4 RE	1	1	1.25	1.8	16.6	568
2x6 RE	1	1	1.25	1.8	17.6	650
2x10 RE	1	1	1.25	1.8	19.2	806
2x16 RM	1	1	1.6	1.8	22.8	1181
2x25 RM	1.2	1	1.6	1.8	25.4	1525
2x35 RM	1.2	1	1.6	1.8	27.6	1861
2x50 RM	1.4	1	1.6	1.9	30.8	2311
2x70 RM	1.4	1.2	2	2.1	36.0	3254
2x95 RM	1.6	1.2	2	2.2	40.0	4109
2x120 RM	1.6	1.2	2	2.4	43.6	4895
2x150 RM	1.8	1.4	2.5	2.5	48.4	6209
2x185 RM	2	1.4	2.5	2.7	53.2	7437
2x240 RM	2.2	1.4	2.5	2.8	58.4	9132
2x300 RM	2.4	1.6	2.5	3.0	64.4	11074
3x1.5 RE	0.8	1	0.9	1.8	13.8	363
3x2.5 RE	0.8	1	0.9	1.8	14.7	420
3x4 RE	1	1	1.25	1.8	17.3	630
3x6 RE	1	1	1.25	1.8	18.4	741
3x10 RE	1	1	1.25	1.8	20.1	934
3x16 RM	1	1	1.6	1.8	23.9	1391
3x25 RM	1.2	1	1.6	1.8	26.7	1822
3x35 RM	1.2	1	1.6	1.9	29.3	2243
3x50 SM	1.4	1	1.6	2.0	31.5	2802
3x70 SM	1.4	1.2	1.6	2.1	35.8	3812
3x95 SM	1.6	1.2	1.6	2.1	39.9	4776

On request, Aluminium Conductor is also available

NYY N2XY N2XH NYCY N2XCY NYRY NYBY N2XRY
 N2XBY N2XHRH NYCYRY N2XCYRY NYKYRY N2XKYRY

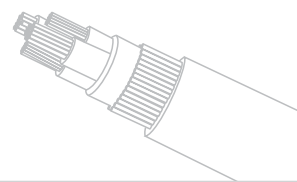


Armoured Power Cable NYRY



No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Inner Layer Thickness	Armour Wire Diameter	Nominal Sheath Thickness	Overall Diameter (Approx)	Total Weight (Approx)
mm ²	mm	mm	mm	mm	mm	kg/km
3x120 SM	1.6	1.2	2	2.3	42.7	5648
3x150 SM	1.8	1.4	2.5	2.5	48.3	7280
3x185 SM	2	1.4	2.5	2.7	52.6	8653
3x240 SM	2.2	1.6	2.5	2.9	58.4	10720
3x300 SM	2.4	1.6	2.5	2.9	60.4	12609
4x1.5 RE	0.8	1	0.9	1.8	14.6	407
4x2.5 RE	0.8	1	1.25	1.8	16.3	563
4x4 RE	1	1	1.25	1.8	18.4	726
4x6 RE	1	1	1.25	1.8	19.6	859
4x10 RE	1	1	1.25	1.8	21.6	1109
4x16 RM	1	1	1.6	1.8	25.7	1638
4x25 RM	1.2	1	1.6	1.9	29.1	2204
4x35 RM	1.2	1	1.6	2.0	31.9	2737
4x50 SM	1.4	1	2	2.0	33.5	3335
4x70 SM	1.4	1.2	2	2.2	37.7	4351
4x95 SM	1.6	1.2	2	2.3	42.2	5649
4x120SM	1.6	1.2	2.5	2.5	46.6	7164
4x150SM	1.8	1.4	2.5	2.6	51.0	8594
4x185 SM	2	1.4	2.5	2.7	55.4	10340
4x240 SM	2.2	1.6	2.5	3.0	62.1	13081
4x300 SM	2.4	1.6	2.5	3.1	67.3	15821
4x400 SM	2.6	1.8	3.15	3.5	77.6	20715
5x1.5 RE	0.8	1	0.9	1.8	15.4	457
5x2.5 RE	0.8	1	1.25	1.8	17.2	630
5x4 RE	1	1	1.25	1.8	19.6	829
5x6 RE	1	1	1.25	1.8	21.0	988
5x10 RE	1	1	1.6	1.8	23.8	1402
5x16 RM	1	1	1.6	1.8	27.7	1921
5x25 RM	1.2	1	1.6	2.0	31.6	2605
5x35 RM	1.2	1.2	2	2.1	36.0	3533
5x50 RM	1.4	1.2	2	2.3	40.4	4476
5x70 RM	1.4	1.2	2.5	2.5	46.7	6273
5x95 RM	1.6	1.4	2.5	2.7	52.6	8095
5x120 RM	1.6	1.4	2.5	2.8	57.1	9710
5x150 RM	1.8	1.6	2.5	3.0	62.3	11601
5x185 RM	2	1.6	2.5	3.2	68.6	14104
3x25+16 RM	1.2	1	1.6	1.9	28.3	2055
3x35+16 RM	1.2	1	1.6	1.9	30.3	2458
3x50+25 SM	1.4	1.2	1.6	1.8	31.6	2834
3x70+35 SM	1.4	1.2	2	1.9	35.7	3927
3x95+50 SM	1.6	1.4	2	2	40.4	5083
3x120+70 SM	1.6	1.4	2	2.1	43.2	6123
3x150+70 SM	1.8	1.4	2.5	2.3	48.7	7880
3x185+95 SM	2	1.6	2.5	2.4	52.9	9463
3x240+120 SM	2.2	1.6	2.5	2.6	59.3	11914
3x300+150 SM	2.4	1.8	2.5	2.8	65.0	14453
3x400+185 SM	2.6	2	3.15	3	73.9	18277

On request, Aluminium Conductor is also available



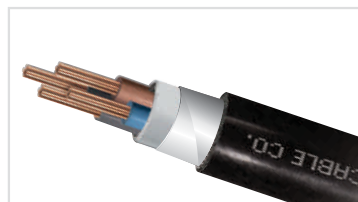
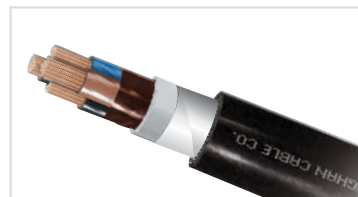
Tape Armoured Power Cable NYBY

- **Rated Voltage:** 0.6/1 KV
- **Applicable Standard:** IEC 60502-1, IEC 60228, VDE 0295, ISIRI 3569-1

- **Construction :**
CU/PVC/Bd/STA or ATA/PVC
Conductor: Plain Annealed Copper Wire (class 1,2)
Insulation Type: P.V.C
Bedding Material: P.V.C
Armour material: Galvanized Steel Tape / Aluminium tape
Sheath Material: PVC

- **Maximum Conductor Temperature:** 70°C

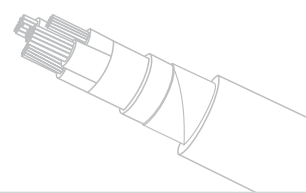
- **Application:**
For Outdoor And Indoor Installation and Wet Location Laid Direct To The Ground , Where Mechanical Damages Are Expected To Occur.



No. of Cores & Cross Section	Nominal Insulation Thickness	Armour Tape Thickness	Nominal Sheath Thickness	Overall Diameter (Approx)	Total Weight (Approx)
mm ²	mm	mm	mm	mm	kg/km
1x35 RM	1.2	0.5	1.5	18.0	588
1x50 RM	1.4	0.5	1.6	19.7	745
1x70 RM	1.4	0.5	1.6	21.5	970
1x95 RM	1.6	0.5	1.7	23.6	1266
1x120 RM	1.6	0.5	1.8	25.4	1532
1x150 RM	1.8	0.5	1.8	27.0	1828
1x185 RM	2	0.5	1.9	29.4	2235
1x240 RM	2.2	0.5	2	32.1	2837
1x300 RM	2.4	0.5	2.1	34.9	3481
1x400 RM	2.6	0.5	2.2	39.2	4402
2x1.5 RE	0.8	0.2	1.8	13.4	256
2x2.5 RE	0.8	0.2	1.8	14.2	297
2x4 RE	1	0.2	1.8	15.9	382
2x6 RE	1	0.2	1.8	16.9	451
2x10 RE	1	0.2	1.8	18.5	579
2x16 RM	1	0.2	1.8	21.4	794
2x25 RM	1.2	0.2	1.8	24.0	1074
2x35 RM	1.2	0.2	1.8	26.2	1342
2x50 RM	1.4	0.2	1.9	29.4	1729
2x70 RM	1.4	0.2	2	33.2	2301
2x95 RM	1.6	0.2	2.2	37.8	3070
2x120 RM	1.6	0.5	2.3	43.0	4149
2x150 RM	1.8	0.5	2.5	46.6	4956
2x185 RM	2	0.5	2.6	51.6	6080
2x240 RM	2.2	0.5	2.8	57.0	7634
2x300 RM	2.4	0.5	3	63.0	9383
3x1.5 RE	0.8	0.2	1.8	13.8	280
3x2.5 RE	0.8	0.2	1.8	14.7	333
3x4 RE	1	0.2	1.8	16.6	439
3x6 RE	1	0.2	1.8	17.7	528
3x10 RE	1	0.2	1.8	19.4	691
3x16 RM	1	0.2	1.8	22.5	961
3x25 RM	1.2	0.2	1.8	25.3	1328
3x35 RM	1.2	0.2	1.8	27.7	1684
3x50 SM	1.4	0.2	1.9	29.3	2173
3x70 SM	1.4	0.2	2.0	32.4	2821
3x95 SM	1.6	0.5	2.2	37.9	4079
3x120 SM	1.6	0.5	2.3	40.7	4895
3x150 SM	1.8	0.5	2.4	45.1	5995
3x185 SM	2	0.5	2.6	49.4	7230
3x240 SM	2.2	0.5	2.8	55.0	9116

On request, Aluminium Conductor is also available

NYY N2XY N2XH NYCY N2XCY NYRY **NYBY** N2XRY
 N2XBY N2XHRH NYCYRY N2XCYRY NYKYRY N2XKYRY

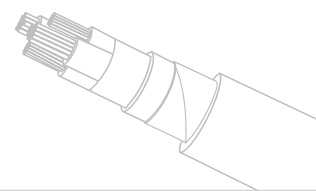




Tape Armoured Power Cable NYBY

No. of Cores & Cross Section	Nominal Insulation Thickness	Armour Tape Thickness	Nominal Sheath Thickness	Overall Diameter (Approx)	Total Weight (Approx)
mm ²	mm	mm	mm	mm	kg/km
4x1.5 RE	0.8	0.2	1.8	14.6	319
4x2.5 RE	0.8	0.2	1.8	15.6	384
4x4 RE	1	0.2	1.8	17.7	513
4x6 RE	1	0.2	1.8	19.8	719
4x6 RE	1	0.2	1.8	18.9	656
4x10 RM	1	0.2	1.8	22.0	950
4x10 RE	1	0.2	1.8	20.9	837
4x16 RM	1	0.2	1.8	24.3	1171
4x25 RM	1.2	0.2	1.8	27.5	1645
4x35 RM	1.2	0.2	1.9	30.3	2108
4x35 SM	1.2	0.2	1.8	27.7	1789
4x50 RM	1.4	0.2	2.1	34.4	2892
4x50 SM	1.4	0.2	2	31.3	2477
4x70 RM	1.4	0.5	2.2	39.7	4312
4x70 SM	1.4	0.2	2.1	35.3	3363
4x95 RM	1.6	0.5	2.4	43.7	5528
4x95 SM	1.6	0.5	2.3	41.8	4928
4x120 RM	1.6	0.5	2.5	48.7	6818
4x120 SM	1.6	0.5	2.4	45.0	5952
4x150 RM	1.8	0.5	2.7	52.9	8191
4x150 SM	1.8	0.5	2.6	49.6	7264
4x185 RM	2.0	0.5	2.9	59.1	10117
4x185 SM	2.0	0.5	2.7	54.0	8865
4x240 RM	2.2	0.5	3.1	65.0	12727
4x240 SM	2.2	0.5	2.9	60.5	11376
4x300 RM	2.4	0.5	3.3	71.2	15541
4x300 SM	2.4	0.5	3.1	65.9	13958
4x400 RM	2.6	0.5	3.6	81.2	19713
4x400 SM	2.6	0.5	3.4	74.3	17604
5x1.5 RM	0.8	0.2	1.8	15.4	394
5x1.5 RE	0.8	0.2	1.8	14.9	342
5x2.5 RM	0.8	0.2	1.8	16.6	477
5x2.5 RE	0.8	0.2	1.8	16.0	420
5x4 RM	1.0	0.2	1.8	18.3	628
5x4 RE	1.0	0.2	1.8	17.3	528
5x6 RM	1.0	0.2	1.8	20.6	805
5x6 RE	1.0	0.2	1.8	18.6	658
5x10 RM	1.0	0.2	1.8	23.1	1100
5x10 RE	1.0	0.2	1.8	20.8	913
5x16 RM	1.0	0.2	1.8	26	1499
5x25 RM	1.2	0.2	1.8	30.6	2130
5x35 RM	1.2	0.2	1.9	32.4	2610
5x50 RM	1.4	0.2	2.1	37.1	3560
5x70 RM	1.4	0.5	2.2	43.1	5163
5x95 RM	1.6	0.5	2.5	49.5	6822
5x120 RM	1.6	0.5	2.6	49.7	8010
5x150 RM	1.8	0.5	2.8	59.5	10200
5x185 RM	2.0	0.5	3.0	65.5	12345
3x25+16 RM	1.2	0.2	1.8	27.0	1642
3x35+16 RM	1.2	0.2	1.8	28.1	1921
3x50+25 SM/RM	1.4	0.2	2.0	31.0	2508
3x70+35 SM	1.4	0.2	2.1	34.3	3284
3x95+50 SM	1.6	0.5	2.3	40.1	4740
3x120+70 SM	1.6	0.5	2.3	43.4	5785
3x150+70 SM	1.8	0.5	2.5	47.8	6931
3x185+95 SM	2.0	0.5	2.7	52.6	8474
3x240+120 SM	2.2	0.5	2.9	58.6	10663
3x300+150 SM	2.4	0.5	3.1	64.6	13063

On request, Aluminium Conductor is also available



Armoured Power Cable N2XRY

- **Rated Voltage:** 0.6/1 KV
- **Applicable Standard:** IEC 60502-1, IEC 60228, ISIRI 3569-1

- **Construction :**
CU/XLPE/Bd/SWA or AWA/PVC
Conductor: Plain Annealed Copper (class 1,2)
Insulation Type: XLPE
Bedding Material: PVC 90
Armour material: Galvanized Steel Wire/Aluminium Wire
Sheath Material: PVC 90 - ST2

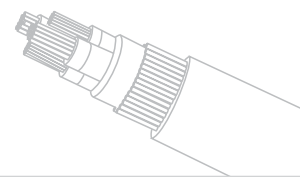
- **Maximum Conductor Temperature:** 90°C

- **Application:**
For Outdoor Installation In Damp And Wet Location, Laid Direct In The Ground, Where Excessive Mechanical Stresses Are Required In Sloping And Movable Terrains And In Vertical Or Inclined Laying, As Well As In Locations Susceptible To Sliding.

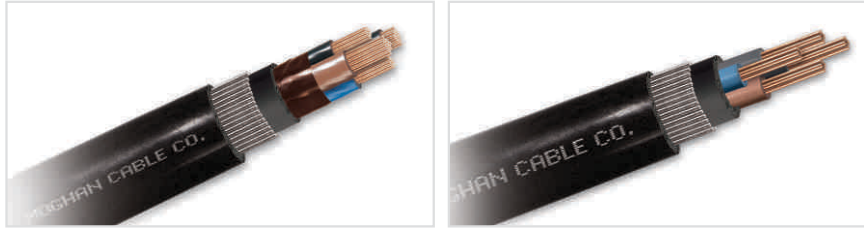
No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Inner Layer Thickness	Armour Wire Diameter	Nominal Sheath Thickness	Overall Diameter (Approx)	Total Weight (Approx)
mm ²	mm	mm	mm	mm	mm	kg/km
1x35 RM	0.9	1	1.25	1.5	16.3	560
1x50 RM	1	1	1.25	1.5	17.6	698
1x70 RM	1.1	1	1.25	1.6	19.8	937
1x95 RM	1.1	1	1.6	1.7	22.2	1258
1x120 RM	1.2	1	1.6	1.7	24.0	1521
1x150 RM	1.4	1	1.6	1.8	25.8	1825
1x185 RM	1.6	1	1.6	1.9	28.2	2228
1x240 RM	1.7	1	1.6	1.9	30.5	2804
1x300 RM	1.8	1	2	2.0	33.9	3502
1x400 RM	2	1.2	2	2.2	38.4	4446
2x1.5 RE	0.7	1	0.9	1.8	13.0	312
2x2.5 RE	0.7	1	0.9	1.8	13.8	356
2x4 RE	0.7	1	0.9	1.8	14.7	417
2x6 RE	0.7	1	1.25	1.8	16.4	573
2x10 RE	0.7	1	1.25	1.8	18.0	722
2x16 RM	0.7	1	1.25	1.8	20.9	974
2x25 RM	0.9	1	1.6	1.8	24.2	1410
2x35 RM	0.9	1	1.6	1.8	26.4	1718
2x50 RM	1	1	1.6	1.9	29.2	2127
2x70 RM	1.1	1	2	2.1	34.4	3037
2x95 RM	1.1	1.2	2	2.2	38.0	3808
2x120 RM	1.2	1.2	2	2.3	41.8	4575
2x150 RM	1.4	1.2	2.5	2.4	46.2	5772
2x185 RM	1.6	1.4	2.5	2.6	51.4	7028
2x240 RM	1.7	1.4	2.5	2.8	56.4	8647
2x300 RM	1.8	1.6	2.5	3.0	62.0	10434
3x1.5 RE	0.7	1	0.9	1.8	13.4	336
3x2.5 RE	0.7	1	0.9	1.8	14.3	395
3x4 RE	0.7	1	0.9	1.8	15.3	471
3x6 RE	0.7	1	1.25	1.8	17.1	655
3x10 RE	0.7	1	1.25	1.8	18.8	838
3x16 RM	0.7	1	1.6	1.8	22.6	1260
3x25 RM	0.9	1	1.6	1.8	25.4	1670
3x35 RM	0.9	1	1.6	1.8	27.8	2078
3x50 SM	1	1	1.6	1.9	29.5	2570
3x70 SM	1.1	1.2	2	2	34.3	3592
3x95 SM	1.1	1.2	2	2.2	37.7	4463
3x120 SM	1.2	1.2	2	2.3	41.0	5338

On request, Aluminium Conductor is also available

NYY N2XY N2XH NYCY N2XCY NYRY NYBY **N2XRY**
 N2XBY N2XHRH NYCYRY N2XCYRY NYKYRY N2XKYRY

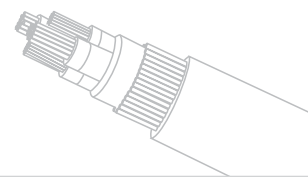


Armoured Power Cable N2XRY



No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Inner Layer Thickness	Armour Wire Diameter	Nominal Sheath Thickness	Overall Diameter (Approx)	Total Weight (Approx)
mm ²	mm	mm	mm	mm	mm	kg/km
3x150 SM	1.4	1.4	2.5	2.5	46.5	6921
3x185 SM	1.6	1.4	2.5	2.6	50.6	8180
3x240 SM	1.7	1.6	2.5	2.8	56.0	10185
3x300 SM	1.8	1.6	2.5	3	58.0	11979
4x1.5 RE	0.7	1	0.9	1.8	14.1	374
4x2.5 RE	0.7	1	0.9	1.8	15.1	450
4x4 RE	0.7	1	1.25	1.8	17.0	626
4x6 RE	0.7	1	1.25	1.8	18.2	751
4x10 RE	0.7	1	1.25	1.8	20.1	985
4x16 RM	0.7	1	1.6	1.8	24.3	1490
4x25 RM	0.9	1	1.6	1.8	27.4	2009
4x35 RM	0.9	1	1.6	1.9	30.3	2527
4x50 SM	1	1	1.6	1.9	30.5	2846
4x70 SM	1.1	1.2	2	2.1	36.0	4068
4x95 SM	1.1	1.2	2	2.2	39.6	5204
4x120 SM	1.2	1.2	2	2.4	43.5	6349
4x150 SM	1.4	1.4	2.5	2.5	48.9	8050
4x185 SM	1.6	1.4	2.5	2.7	53.4	9728
4x240 SM	1.7	1.6	2.5	2.9	59.5	12294
4x300 SM	1.8	1.6	2.5	3.0	64.2	14866
4x400 SM	2	1.6	3.15	3.4	74.1	19437
5x1.5 RE	0.7	1	0.9	1.8	14.9	423
5x2.5 RE	0.7	1	1.25	1.8	16.7	593
5x4 RE	0.7	1	1.25	1.8	18.0	718
5x6 RE	0.7	1	1.25	1.8	19.3	866
5x10 RE	0.7	1	1.6	1.8	22.2	1264
5x16 RM	0.7	1	1.6	1.8	26.1	1762
5x25 RM	0.9	1	1.6	1.9	29.8	2405
5x35 RM	0.9	1	2	2.0	33.8	3257
5x50 RM	1	1.2	2	2.2	38.1	4159
5x70 RM	1.1	1.2	2	2.4	43.9	5570
5x95 RM	1.1	1.4	2.5	2.6	49.7	7585
5x120 RM	1.2	1.4	2.5	2.7	54.8	9217
5x150 RM	1.4	1.6	2.5	2.9	59.9	11076
5x185 RM	1.6	1.6	2.5	3.1	66.2	13465
3x25+16 RM	0.9	0.7	1	1.6	1.8	1906
3x35+16 RM	0.9	0.7	1	1.6	1.9	2284
3x50+25 SM	1	0.9	1	1.6	1.8	2635
3x70+35 SM	1.1	0.9	1	2	1.85	3673
3x95+50 SM	1.1	1	1.2	2	1.97	4753
3x120+70 SM	1.2	1.1	1.2	2	2.07	5801
3x150+70 SM	1.4	1.1	1.2	2.5	2.21	7448
3x185+95 SM	1.6	1.1	1.4	2.5	2.35	9046
3x240+120 SM	1.7	1.2	1.4	2.5	2.52	11263
3x300+150 SM	1.8	1.4	1.6	2.5	2.69	13769
3x400+185 SM	2	1.6	1.6	2.5	2.94	16681

On request, Aluminium Conductor is also available



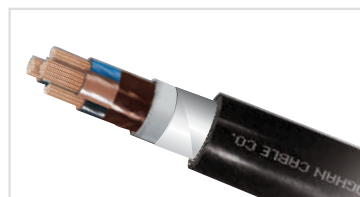
Tape Armoured Power Cable N2XBY

- **Rated Voltage:** 0.6/1 KV
- **Applicable Standard:** IEC 60502-1, IEC 60228, VDE 0295, ISIRI 3569-1
- **Construction :**
 CU/XLPE/Bd/STA or ATA/PVC
 Conductor: Plain Annealed Copper Wire (class 1,2)
 Insulation Type: XLPE
 Bedding Material: P.V.C 90
 Armour material: Galvanized Steel Tape / Aluminium Tape
 Sheath Material: P.V.C 90 - ST2

- **Maximum Conductor Temperature:** 90°C

● **Application:**

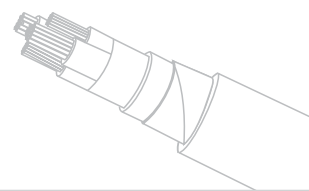
For Outdoor Installation In Damp And Wet Location , Laid Direct In The Ground, Where Excessive Mechanical Stresses Are Required In Sloping And Movable Terrains And In Vertical Or Inclined Laying ,As Well As In Locations Susceptible To Sliding.



No. of Cores & Cross Section	Nominal Insulation Thickness	Armour Tape Thickness	Nominal Sheath Thickness	Overall Diameter (Approx)	Total Weight (Approx)
mm ²	mm	mm	mm	mm	kg/km
1x35 RM	0.9	0.5	1.5	17.4	566
1x50 RM	1	0.5	1.5	18.7	692
1x70 RM	1.1	0.5	1.6	20.9	927
1x95 RM	1.1	0.5	1.7	22.6	1198
1x120 RM	1.2	0.5	1.7	24.4	1457
1x150 RM	1.4	0.5	1.8	26.2	1755
1x185 RM	1.6	0.5	1.9	28.6	2149
1x240 RM	1.7	0.5	1.9	30.9	2713
1x300 RM	1.8	0.5	2	33.5	3327
1x400 RM	2	0.5	2.2	38.0	4237
2x1.5 RE	0.7	0.2	1.8	13.0	239
2x2.5 RE	0.7	0.2	1.8	13.8	279
2x4 RE	0.7	0.2	1.8	14.7	331
2x6 RE	0.7	0.2	1.8	15.7	396
2x10 RE	0.7	0.2	1.8	17.3	518
2x16 RM	0.7	0.2	1.8	20.2	723
2x25 RM	0.9	0.2	1.8	22.8	990
2x35 RM	0.9	0.2	1.8	25.0	1250
2x50 RM	1	0.2	1.8	27.6	1584
2x70 RM	1.1	0.2	2	32.0	2177
2x95 RM	1.1	0.2	2.1	35.6	2846
2x120 RM	1.2	0.5	2.3	41.4	3936
2x150 RM	1.4	0.5	2.4	44.8	4698
2x185 RM	1.6	0.5	2.6	50.0	5807
2x240 RM	1.7	0.5	2.7	54.8	7250
2x300 RM	1.8	0.5	2.9	60.4	8894
3x1.5 RE	0.7	0.2	1.8	13.4	261
3x2.5 RE	0.7	0.2	1.8	14.3	312
3x4 RE	0.7	0.2	1.8	15.3	379
3x6 RE	0.7	0.2	1.8	16.4	464
3x10 RE	0.7	0.2	1.8	18.1	621
3x16 RM	0.7	0.2	1.8	21.2	877
3x25 RM	0.9	0.2	1.8	24.0	1228
3x35 RM	0.9	0.2	1.8	26.4	1573
3x50 SM	1	0.2	1.8	27.3	1996
3x70 SM	1.1	0.2	2.0	31.1	2659
3x95 SM	1.1	0.5	2.2	35.7	3803
3x120 SM	1.2	0.5	2.3	39.0	4630
3x150 SM	1.4	0.5	2.4	43.1	5662
3x185 SM	1.6	0.5	2.6	47.6	6871
3x240 SM	1.7	0.5	2.8	52.8	8649
3x300 SM	1.8	0.5	2.9	54.8	10430

On request, Aluminium Conductor is also available

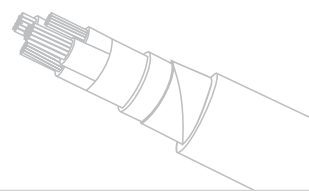
NYY N2XY N2XH NYCY N2XCY NYRY NYBY N2XRY
 N2XBY N2XHRH NYCYRY N2XCYRY NYKYRY N2XKYRY



Tape Armoured Power Cable N2XBY

No. of Cores & Cross Section	Nominal Insulation Thickness	Armour Tape Thickness	Nominal Sheath Thickness	Overall Diameter (Approx)	Total Weight (Approx)
mm ²	mm	mm	mm	mm	kg/km
4x1.5 RE	0.7	0.2	1.8	14.1	294
4x2.5 RE	0.7	0.2	1.8	15.1	357
4x4 RE	0.7	0.2	1.8	16.3	444
4x6 RM	0.7	0.2	1.8	18.3	630
4x6 RE	0.7	0.2	1.8	17.5	577
4x10 RM	0.7	0.2	1.8	20.6	854
4x10 RE	0.7	0.2	1.8	19.4	748
4x16 RM	0.7	0.2	1.8	22.9	1071
4x25 RM	0.9	0.2	1.8	26.0	1517
4x35 RM	0.9	0.2	1.9	28.9	1974
4x35 SM	0.9	0.2	1.8	26.3	1673
4x50 RM	1	0.2	2	32.2	2666
4x50 SM	1	0.2	1.9	29.1	2279
4x70 RM	1.1	0.5	2.2	39.7	4250
4x70 SM	1.1	0.2	2	33.6	3169
4x95 RM	1.1	0.5	2.4	43.7	5458
4x95 SM	1.1	0.5	2.2	39.2	4604
4x120 RM	1.2	0.5	2.5	48.7	6731
4x120 SM	1.2	0.5	2.3	42.9	5643
4x150 RM	1.4	0.5	2.7	52.9	8079
4x150 SM	1.4	0.5	2.5	47.5	6904
4x185 RM	1.6	0.5	2.9	59.1	9972
4x185 SM	1.6	0.5	2.6	51.8	8439
4x240 RM	1.7	0.5	3.1	65.0	12555
4x240 SM	1.7	0.5	2.8	57.9	10831
4x300 RM	1.8	0.5	3.3	71.2	15337
4x300 SM	1.8	0.5	3	62.8	13278
4x400 RM	2	0.5	3.6	81.2	19450
4x400 SM	2	0.5	3.3	71.2	16793
5x1.5 RM	0.7	0.2	1.8	15.5	357
5x1.5 RE	0.7	0.2	1.8	14.9	333
5x2.5 RM	0.7	0.2	1.8	16.6	477
5x2.5 RE	0.7	0.2	1.8	16.0	408
5x4 RM	0.7	0.2	1.8	18.1	595
5x4 RE	0.7	0.2	1.8	17.3	515
5x6 RM	0.7	0.2	1.8	19.6	737
5x6 RE	0.7	0.2	1.8	18.6	643
5x10 RM	0.7	0.2	1.8	22.1	1010
5x10 RE	0.7	0.2	1.8	20.8	894
5x16 RM	0.7	0.2	1.8	24.7	1292
5x25 RM	0.9	0.2	1.9	28.4	1864
5x35 RM	0.9	0.2	2	31.6	2434
5x50 RM	1	0.2	2.1	35.7	3196
5x70 RM	1.1	0.5	2.4	43.5	4890
5x95 RM	1.1	0.5	2.5	48.1	6389
5x120 RM	1.2	0.5	2.7	53.4	7898
5x150 RM	1.4	0.5	2.8	58.3	9581
5x185 RM	1.6	0.5	3.1	64.8	11831
3x25+16 RM	0.9 0.7	0.2	1.8	25.3	1424
3x35+16 RM	0.9 0.7	0.2	1.9	29.4	1904
3x50+25 SM	1 0.9	0.2	1.9	28.5	2093
3x70+35 SM	1.1 0.9	0.2	2	32.0	2796
3x95+50 SM	1.1 1	0.2	2.1	36.0	3811
3x120+70 SM	1.2 1.1	0.5	2.3	41.2	5196
3x150+70 SM	1.4 1.1	0.5	2.4	45.4	6387
3x185+95 SM	1.6 1.1	0.5	2.6	50.1	7742
3x240+120 SM	1.7 1.2	0.5	2.7	55.3	9941
3x300+150 SM	1.8 1.4	0.5	2.9	61.0	12286

On request, Aluminium Conductor is also available



Power Cable N2XHRH

● **Rated Voltage:** 0.6/1 KV

● **Applicable Standard:** IEC 60502-1, ISIRI 3569-1

● **Construction :**

Cu/MGT/PET/XLPE/HFSL/SWA/HFSL

Conductor: Plain Annealed copper wire (class 2)

Flame barrier: Mica glass tape

Insulation Type: XLPE

Bedding: Halogen free, Low smoke, Flame retardant – HFSL

Aarmor: Galvanized steel wire armor

Other sheath: Halogen free, Low smoke, Flame retardant – HFSL

● **Technical data:**

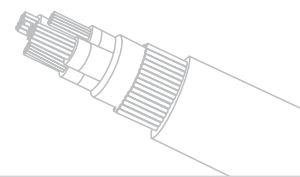
- 1) Temperature: -30°C to + 90°C
- 2) Maximum short circuit temperature: 250°C (5 seconds Max)
- 3) Conductor resistance: As per class 2 of IEC 60228
- 4) Test voltage: 35 kv rms or 8.4 kvdc for 5 minutes
- 5) Flame retardant test: Acc. IEC 60332-1
- 6) Flame propagation test: Acc. IEC 60332-3
- 7) Fire resistance test: Acc. IEC 60331-21
- 8) Smoke density test: Acc. IEC 61034
- 9) Halogen content test: Acc. IEC 60754-2



● **Application:** These cables can be used for electricity supply and control in public network and industrial plants or public buildings, where people are potentially endangered in case of fire and where, for a defined period of time, the continuity of control and energy supply is of vital necessity.

No. of Cores & Cross Section	No. strand x diameter	Nominal Insulation thickness	Nominal sheath thickness	Overall Diameter (Approx.)	Total Weight (Approx.)
mm ²	No. x mm	mm	mm	mm	kg/km
2x1.5 RN	7x0.53	0.7	1.8	12.4	170
2x2.5 RM	7x0.67	0.7	1.8	13.2	230
2x4 RM	7x0.85	0.7	1.8	14.4	282
2x5 RM	7x1.04	0.7	1.8	15.4	344
3x1.5 RM	7x0.53	0.7	1.8	13.0	222
3x2.5 RM	7x0.67	0.7	1.8	13.9	264
3x4 RM	7x0.85	0.7	1.8	15.2	332
3x6 RM	7x1.04	0.7	1.8	16.4	404
4x1.5 RM	7x0.53	0.7	1.8	14.0	242
4x2.5 RM	7x0.67	0.7	1.8	15.0	288
4x4 RM	7x0.85	0.7	1.8	16.5	378
4x6 RM	7x1.04	0.7	1.8	17.7	472
5x1.5 RM	7x0.53	0.7	1.8	15.2	286
5x2.5 RM	7x0.67	0.7	1.8	16.3	344
5x4 RM	7x0.85	0.7	1.8	18.0	424
5x6 RM	7x1.04	0.7	1.8	19.4	555
7x1.5 RM	7x0.53	0.7	1.8	16.0	300
10x1.5 RM	7x0.53	0.7	1.8	20.0	412
12x1.5 RM	7x0.53	0.7	1.8	20.6	450
19x1.5 RM	7x0.53	0.7	1.8	24.3	605
27x1.5 RM	7x0.53	0.7	1.8	28.8	796
37x1.5 RM	7x0.53	0.7	1.8	32.2	1010
48x1.5 RM	7x0.53	0.7	1.8	37.0	1250
7x2.5 RM	7x0.67	0.7	1.8	17.2	382
10x2.5 RM	7x0.67	0.7	1.8	21.6	514
12x2.5 RM	7x0.67	0.7	1.8	22.4	600
19x2.5 RM	7x0.67	0.7	1.8	26.4	810
27x2.5 RM	7x0.67	0.7	1.8	31.5	1080
37x2.5 RM	7x0.67	0.7	1.8	35.4	1370
48x2.5 RM	7x0.67	0.7	1.8	40.3	1746

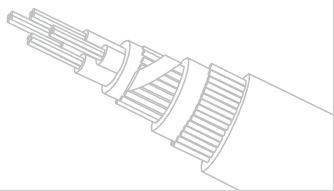
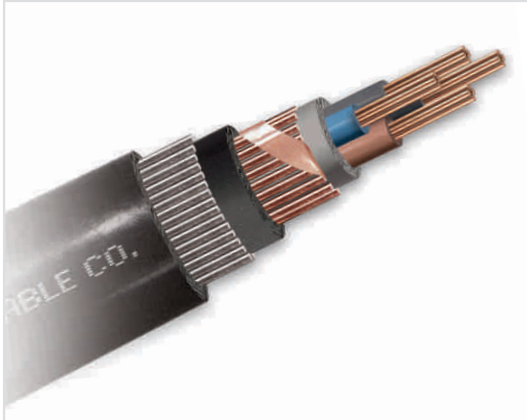
NYY N2XY N2XH NYCY N2XCY NYRY NYBY N2XRY
 N2XBY **N2XHRH** NYCYRY N2XCYRY NYKYRY N2XKYRY



 Concentric - Armoured Power Cable NYCYRY

- **Rated Voltage:** 0.6/1 KV
- **Applicable Standard:** IEC 60502-1, IEC 60228, ISIRI 3569-1
- **Construction :**
 - CU/PVC/CWS/Bd/SWA or AWA/PVC
 - Conductor: Plain Annealed Copper Wire (class 1,2)
 - Insulation Type: P.V.C / A
 - Bedding Material: P.V.C
 - Concentric material: Copper Wire + Copper Tape
 - Separation Sheath Material: PVC 90-ST2
 - Armour Material: Galvanized Steel Wire/Aluminium Wire
 - Sheath Material: P.V.C - ST1
- **Maximum Conductor Temperature:** 70°C
- **Application:**

Predominantly Designed For Installation In Industrial And Control Equipment, In Power House And Where Ever A High Level Of Both Electrical And Mechanical Protection Is Required.

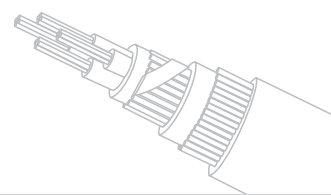


Concentric - Armoured Power Cable NYCYRY

No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Inner Layer Thickness	Nominal Concentric Wire Diameter	Nominal Separation Sheath Thickness	Armour Wire Diameter	Nominal Sheath Thickness	Overall Diameter (Approx)	Total Weight (Approx)
mm ²	mm	mm	mm	mm	mm	mm	mm	kg/km
1x16 RM/16	1	0	0.8	1.2	1.25	1.5	16.7	573
1x25 RM/25	1.2	0	0.9	1.2	1.25	1.5	18.2	777
1x35 RM/35	1.2	0	0.9	1.2	1.25	1.6	19.5	993
1x50 RM/50	1.4	0	0.9	1.2	1.6	1.8	22.1	1306
2x1.5 RE/1.5	0.8	1	0.5	1.2	1.25	1.8	17.7	587
2x2.5 RE/2.5	0.8	1	0.5	1.2	1.25	1.8	18.5	656
2x4 RE/4	1	1	0.8	1.2	1.25	1.8	20.8	820
2x6 RE/6	1	1	0.8	1.2	1.6	1.8	22.5	1045
2x10 RE/10	1	1	0.8	1.2	1.6	1.8	24.1	1257
2x16 RM/16	1	1	0.8	1.2	1.6	1.8	27.0	1606
2x25 RM/25	1.2	1	0.9	1.2	1.6	1.9	30.0	2078
2x35 RM/35	1.2	1	0.9	1.2	2	2.0	33.2	2713
2x50 RM/50	1.4	1	0.9	1.2	2	2.1	36.4	3330
3x1.5 RE/1.5	0.8	1	0.5	1.2	1.25	1.8	18.1	620
3x2.5 RE/2.5	0.8	1	0.5	1.2	1.25	1.8	19.0	701
3x4 RE/4	1	1	0.8	1.2	1.6	1.8	22.2	999
3x6 RE/6	1	1	0.8	1.2	1.6	1.8	23.3	1138
3x10 RE/10	1	1	0.8	1.2	1.6	1.8	25.0	1403
3x16 RE/16	1	1	0.8	1.2	1.6	1.9	28.3	1835
3x25 RM/16	1.2	1	0.8	1.2	1.6	2.0	31.3	2331
3x35 RM/35	1.2	1	0.9	1.2	2	2.1	34.9	2962
3x50 RM/50	1.4	1	0.9	1.2	2	2.1	34.9	3450
4x1.5 RE/1.5	0.8	1	0.5	1.2	1.25	1.8	18.9	679
4x2.5 RE/2.5	0.8	1	0.5	1.2	1.25	1.8	19.9	782
4x4 RE/4	1	1	0.8	1.2	1.6	1.8	23.3	1105
4x6 RE/6	1	1	0.8	1.2	1.6	1.8	24.5	1282
4x10 RE/10	1	1	0.8	1.2	1.6	1.8	26.5	1581
4x16 RM/16	1	1	0.8	1.2	1.6	1.9	30.1	2094
4x25 RM/16	1.2	1	0.9	1.2	2	2.1	34.7	2994
4x35 RM/35	1.2	1	0.9	1.2	2	2.2	37.6	3668
4x50 RM/50	1.4	1	0.9	1.2	2	2.2	38.3	4148
5x1.5 RE/1.5	0.8	1	0.5	1.2	1.25	1.8	19.8	743
5x2.5 RE/2.5	0.8	1	0.5	1.2	1.25	1.8	20.8	854
5x4 RE/4	1	1	0.8	1.2	1.6	1.8	24.5	1234
5x6 RE/6	1	1	0.8	1.2	1.6	1.8	25.9	1423
5x10 RE/10	1	1	0.8	1.2	1.6	1.9	28.2	1791
5x16 RM/16	1	1	0.8	1.2	2	2.0	33.1	2599
5x25 RM/16	1.2	1	0.9	1.2	2	2.1	37.0	3432
5x35 RM/35	1.2	1.2	0.9	1.2	2	2.3	40.8	4290
5x50 RM/50	1.4	1.2	0.9	1.28	2.5	2.4	46.2	5724
3x25+16 RM/16	1.2 1	1	0.8	1.2	2	2.0	33.5	2749
3x35+16 RM/16	1.2 1	1	0.8	1.2	2	2.1	35.7	3192
3x50+25 SM/25	1.4 1.2	1	0.9	1.2	2	1.8	36.8	3627
3x70+35 SM/35	1.4 1.2	1.2	0.9	1.2	2	1.89	40.2	4628
3x95+50 SM/50	1.6 1.4	1.2	0.9	1.29	2.5	2.05	46.0	6321

On request, Aluminium Conductor is also available

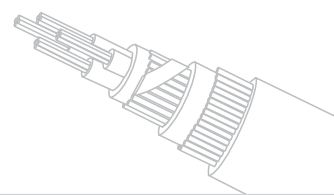
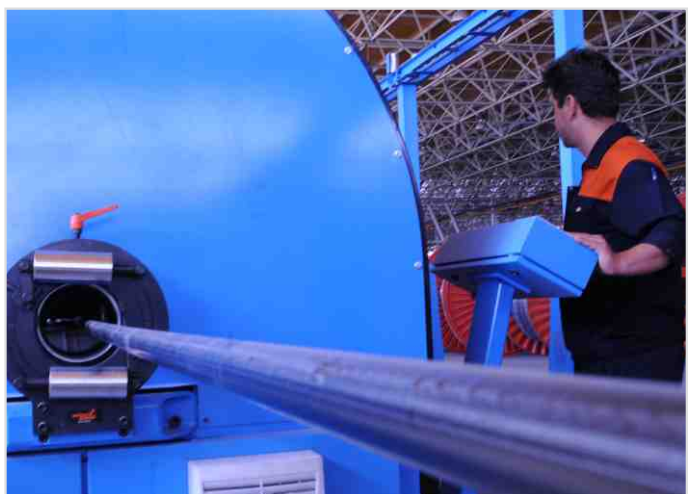
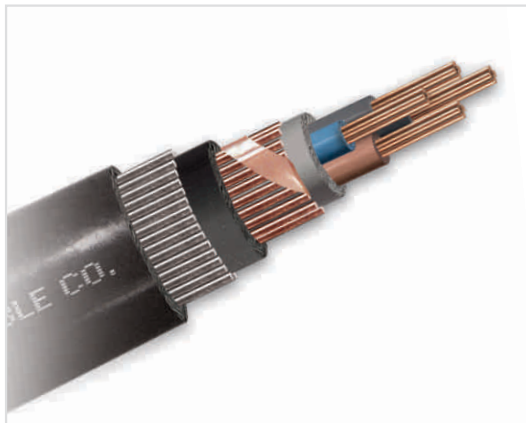
NYY N2XY N2XH NYCY N2XCY NYRY NYBY N2XRY
 N2XBY N2XHRH **NYCYRY** N2XCYRY NYKYRY N2XKYRY



Concentric - Armoured Power Cable N2XCYRY

- **Rated Voltage:** 0.6/1 KV
- **Applicable Standard:** IEC 60502-1, IEC 60228, ISIRI 3569-1
- **Construction :**
 - CU/XLPE/Bd/CWS/Bd/SWA or AWA/PVC
 - Conductor: Plain Annealed Copper Wire (class 1,2)
 - Insulation Type: XLPE
 - Bedding Material: PVC
 - Concentric material: Copper Wire + Copper Tape
 - Separation Sheath Material: PVC 90-ST2
 - Armour Material: Galvanized Steel Wire/Aluminium Wire
 - Sheath Material: PVC 90 - ST2
- **Maximum Conductor Temperature:** 90°C
- **Application:**

For Outdoor Installation In Damp And Wet Location, Laid Direct In The Ground, Where Excessive Mechanical Stresses Are Required In Sloping And Movable Terrains And In Vertical Or Inclined Laying, As Well As In Locations Susceptible To Sliding.

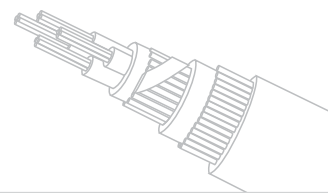


Concentric - Armoured Power Cable N2XCYRY

No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Inner Layer Thickness	Nominal Concentric Wire Diameter	Nominal Separation Sheath Thickness	Armour Wire Diameter	Nominal Sheath Thickness	Overall Diameter (Approx)	Total Weight (Approx)
mm ²	mm	mm	mm	mm	mm	mm	mm	kg/km
1x16 RM/16	0.7	0	0.8	1.2	1.25	1.5	16.1	552
1x25 RM/25	0.9	0	0.9	1.2	1.25	1.5	17.6	751
1x35 RM/35	0.9	0	0.9	1.2	1.25	1.5	18.7	957
1x50 RM/50	1	0	0.9	1.2	1.6	1.6	20.9	1251
2x1.5 RE/1.5	0.7	1	0.5	1.2	1.25	1.8	17.3	564
2x2.5 RE/2.5	0.7	1	0.5	1.2	1.25	1.8	18.1	633
2x4 RE/4	0.7	1	0.8	1.2	1.25	1.8	19.6	746
2x6 RE/6	0.7	1	0.8	1.2	1.6	1.8	21.3	966
2x10 RE/10	0.7	1	0.8	1.2	1.6	1.8	22.9	1173
2x16 RM/16	0.7	1	0.8	1.2	1.6	1.8	25.8	1515
2x25 RM/25	0.9	1	0.9	1.2	1.6	1.9	28.8	1963
2x35 RM/35	0.9	1	0.9	1.2	2	2.0	32.0	2591
2x50 RM/50	1	1	0.9	1.2	2	2.1	34.8	3147
3x1.5 RE/1.5	0.7	1	0.5	1.2	1.25	1.8	17.7	598
3x2.5 RE/2.5	0.7	1	0.5	1.2	1.25	1.8	18.6	678
3x4 RE/4	0.7	1	0.8	1.2	1.6	1.8	20.9	917
3x6 RE/6	0.7	1	0.8	1.2	1.6	1.8	22.0	1053
3x10 RE/10	0.7	1	0.8	1.2	1.6	1.8	23.7	1297
3x16 RM/16	0.7	1	0.8	1.2	1.6	1.8	26.8	1707
3x25 RM/16	0.9	1	0.8	1.2	1.6	1.9	29.8	2193
3x35 RM/35	0.9	1	0.9	1.2	2	2.0	33.4	3002
3x50 RM/50	1	1	0.9	1.2	2	2.0	33.0	3234
4x1.5 RE/1.5	0.7	1	0.5	1.2	1.25	1.8	18.4	651
4x2.5 RE/2.5	0.7	1	0.5	1.2	1.25	1.8	19.4	744
4x4 RE/4	0.7	1	0.8	1.2	1.6	1.8	21.9	1017
4x6 RE/6	0.7	1	0.8	1.2	1.6	1.8	23.1	1174
4x10 RE/10	0.7	1	0.8	1.2	1.6	1.8	25.0	1476
4x16 RM/16	0.7	1	0.8	1.2	1.6	1.9	28.7	1969
4x25 RM/16	0.9	1	0.9	1.2	2	2.0	33.0	2832
4x35 RM/35	0.9	1	0.9	1.2	2	2.1	35.9	3496
4x50 RM/35	1	1	0.9	1.2	2	2.1	36.1	3871
5x1.5 RE/1.5	0.7	1	0.5	1.2	1.25	1.8	19.2	710
5x2.5 RE/2.5	0.7	1	0.5	1.2	1.25	1.8	20.3	825
5x4 RE/4	0.7	1	0.8	1.2	1.6	1.8	22.9	1118
5x6 RE/6	0.7	1	0.8	1.2	1.6	1.8	24.2	1296
5x10 RE/10	0.7	1	0.8	1.2	1.6	1.8	26.4	1649
5x16 RM/16	0.7	1	0.8	1.2	2	2.0	31.5	2453
5x25 RM/16	0.9	1	0.9	1.2	2	2.1	35.4	3248
5x35 RM/35	0.9	1.2	0.9	1.2	2	2.2	39.0	4074
5x50 RM/50	1	1.2	0.9	1.23	2.5	2.4	43.9	5408
3x25+16 RM/16	0.9 0.7	1	0.8	1.2	2	2.0	32.1	2613
3x35+16 RM/16	0.9 0.7	1	0.8	1.2	2	2.1	34.2	3019
3x50+25 SM/25	1 0.9	1	0.9	1.2	2	1.8	34.9	3421
3x70+35 SM/35	1.1 0.9	1.2	0.9	1.2	2	1.9	38.8	4417
3x95+50 SM/50	1.1 1	1.2	0.9	1.24	2.5	2	43.6	5942

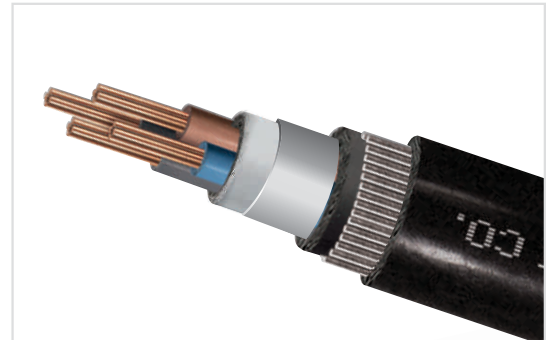
On request, Aluminium Conductor is also available

NYY N2XY N2XH NYCY N2XCY NYRY NYBY N2XRY
 N2XBY N2XHRH NYCYRY **N2XCYRY** NYKYRY N2XKYRY



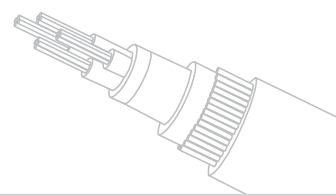
Armoured Lead Sheathed Power Cable NYKYRY

- **Rated Voltage:** 0.6/1 KV
- **Applicable Standard:**
IEC 60502-1, IEC 60228, VDE 0295, ISIRI 3569-1
- **Construction :**
CU/PVC/PVC/LC/PVC/SWA or AWA/PVC
Conductor: Plain Annealed Copper Wire
Insulation Type: P.V.C / A
Bedding Material: P.V.C
Metal Sheath: Lead
Bedding Material: P.V.C
Armour material: Galvanized Steel Wire or Aluminium Wire
Sheath Material: PVC - ST1
- **Maximum Conductor Temperature:** 70°C
- **Application:** For Outdoor & Indoor Installation in Oil ,Gas and Petrochemical industries & Wet Location
Laid Direct To The Ground , Where Mechanical Damages Are Expected To Occur.



No. of Cores & Cross Section	Nominal Insulation Thickness	Lead Thickness	Armour Wire Diameter	Nominal Sheath Thickness	Overall Diameter (Approx)	Total Weight (Approx)
mm ²	mm	mm	mm	mm	mm	kg/km
1x25 RM	1.2	1.2	1.6	1.8	22.7	1259
1x35 RM	1.2	1.2	1.6	1.8	23.8	1430
1x50 RM	1.4	1.2	1.6	1.8	25.3	1664
1x70 RM	1.4	1.2	1.6	1.8	27.1	1987
1x95 RM	1.6	1.2	1.6	1.9	29.2	2390
1x120 RM	1.6	1.2	1.6	1.9	30.8	2734
1x150 RM	1.8	1.3	2	2.1	34.6	3384
1x185 RM	2	1.4	2	2.1	37	4018
1x240 RM	2.2	1.4	2	2.2	39.7	4796
1x300 RM	2.4	1.5	2	2.3	43.1	5788
1x400 RM	2.6	1.6	2.5	2.6	49.6	7393
2x1.5 RE	0.8	1.2	1.25	1.8	19	1037
2x2.5 RE	0.8	1.2	1.25	1.8	19.8	1135
2x4 RE	1	1.2	1.6	1.8	22.9	1514
2x6 RE	1	1.2	1.6	1.8	23.9	1666
2x10 RE	1	1.2	1.6	1.8	25.5	1925
2x16 RM	1	1.2	1.6	1.9	28.6	2392
2x25 RM	1.2	1.3	1.6	2	31.6	2987
2x35 RM	1.2	1.3	2	2.1	35.6	3814
2x50 RM	1.4	1.4	2	2.2	39	4626
2x70 RM	1.4	1.5	2	2.4	43.6	5820
2x95 RM	1.6	1.6	2.5	2.6	50	7701
2x120 RM	1.6	1.7	2.5	2.7	53.6	8967
2x150 RM	1.8	1.9	2.5	2.8	57.8	10606
2x185 RM	2	2	2.5	3	62.8	12549
2x240 RM	2.2	2.1	2.5	3.2	68.4	15075
2x300 RM	2.4	2.3	3.15	3.5	77.6	19356

On request, Aluminium Conductor is also available



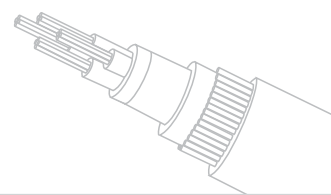


Armoured Lead Sheathed Power Cable NYKYRY

No. of Cores & Cross Section	Nominal Insulation Thickness	Lead Thickness	Armour Wire Diameter	Nominal Sheath Thickness	Overall Diameter (Approx)	Total Weight (Approx)
mm ²	mm	mm	mm	mm	mm	kg/km
3x1.5 RE	0.8	1.2	1.25	1.8	19.5	1098
3x2.5 RE	0.8	1.2	1.25	1.8	20.3	1205
3x4 RE	1	1.2	1.6	1.8	23.6	1624
3x6 RE	1	1.2	1.6	1.8	25.2	1863
3x10 RE	1	1.2	1.6	1.8	26.9	2188
3x16 RM	1	1.2	1.6	1.9	29.7	2671
3x25 RM	1.2	1.3	2	2.1	34.7	3736
3x35 RM	1.2	1.4	2	2.2	37.5	4455
3x50 SM	1.4	1.5	2	2.3	41.1	5986
3x70 SM	1.4	1.6	2.5	2.5	48	8157
3x95 SM	1.6	1.7	2.5	2.7	52.7	9829
3x120 SM	1.6	1.8	2.5	2.8	56.6	11530
3x150 SM	1.8	1.9	2.5	2.9	60.8	13546
3x185 SM	2	2.1	2.5	3.1	66.4	16716
3x240 SM	2.2	2.3	3.15	3.4	75.8	21492
3x300 SM	2.4	2.4	3.15	3.6	82	25756
3x25+16 RM	1.2 1	1.3	2	2.1	36.1	3935
3x35+16 RM	1.2 1	1.4	2	2.2	38.5	4568
3x50+25 SM	1.4 1.2	1.4	2	2.2	40	5072
3x70+35 SM	1.4 1.2	1.5	2	2.4	43.8	6307
3x95+50 SM	1.6 1.4	1.7	2.5	2.6	50.9	8598
3x120+70 SM	1.6 1.4	1.7	2.5	2.7	53.7	9898
3x150+70 SM	1.8 1.4	1.9	2.5	2.9	58.8	11724
3x185+95 SM	2 1.6	2	2.5	3	63.1	13860
3x240+120 SM	2.2 1.6	2.2	2.5	3.2	69.9	17167
3x300+150 SM	2.4 1.8	2.3	3.15	3.5	78.6	21622
3x400+185 SM	2.6 2	2.5	3.15	3.8	86.7	26341
4x1.5 RE	0.8	1.2	1.25	1.8	20.3	1193
4x2.5 RE	0.8	1.2	1.6	1.8	22.6	1506
4x4 RE	1	1.2	1.6	1.8	24.7	1785
4x6 RE	1	1.2	1.6	1.8	25.9	2009
4x10 RE	1	1.2	1.6	1.9	28.1	2398
4x16 RM	1	1.3	1.6	2	31.9	3151
4x25 RM	1.2	1.4	2	2.2	37.3	4394
4x35 RM	1.2	1.4	2	2.2	39.9	5160
4x50 SM	1.4	1.5	2	2.3	41.1	5493
4x70 SM	1.4	1.6	2.5	2.5	47.5	7472
4x95 SM	1.6	1.7	2.5	2.6	52.2	9248
4x120 SM	1.6	1.8	2.5	2.8	55.8	10796
4x150 SM	1.8	1.9	2.5	2.9	60.4	12726
4x185 SM	2	2.1	2.5	3.1	65.4	15214
4x240 SM	2.2	2.2	3.15	3.4	74.9	19859
4x300 SM	2.4	2.4	3.15	3.6	80.7	23649
4x400 SM	2.6	2.6	3.15	3.9	89.9	29164
5x1.5 RE	0.8	1.2	1.6	1.8	22.4	1453
5x2.5 RE	0.8	1.2	1.6	1.8	23.5	1619
5x4 RE	1	1.2	1.6	1.8	25.9	1974
5x6 RE	1	1.2	1.6	1.8	27.3	2222
5x10 RE	1	1.2	1.6	1.9	29.6	2680
5x16 RM	1	1.3	2	2.1	35.7	3909
5x25 RM	1.2	1.4	2	2.2	39.6	4975
5x35 RM	1.2	1.5	2	2.4	43.6	6153
5x50 RM	1.4	1.7	2.5	2.6	50.4	8309
5x70 RM	1.4	1.8	2.5	2.8	55.9	10474
5x95 RM	1.6	2	2.5	3	62.2	13308
5x120 RM	1.6	2.1	2.5	3.1	66.9	15676
5x150 RM	1.8	2.2	3.15	3.4	75.1	19624
5x185 RM	2	2.4	3.15	3.6	81.8	23487

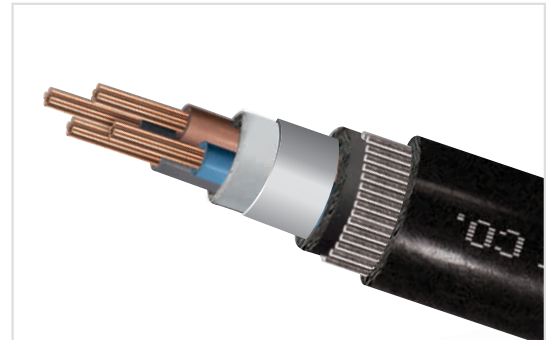
On request, Aluminium Conductor is also available

NYY N2XY N2XH NYCY N2XCX NYRY NYBY N2XRY
 N2XBY N2XHRH NYCXY N2XCXY NYKYRY N2XKYRY



Armoured Lead Sheathed Power Cable N2XKYRY

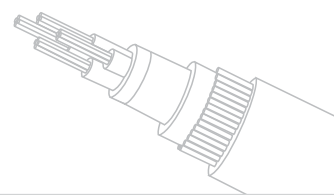
- **Rated Voltage:** 0.6/1 KV
- **Applicable Standard:**
IEC 60502-1, IEC 60228, VDE 0295, ISIRI 3569-1
- **Construction :**
CU/XLPE/PVC/LC/PVC/SWA or AWA/PVC
Conductor: Plain Annealed Copper Wire
Insulation Type: XLPE
Bedding Material: P.V.C
Metal Sheath: Lead
Bedding Material: P.V.C
Armour material: Galvanized Steel Wire or Aluminium Wire
Sheath Material: PVC - ST2



- **Maximum Conductor Temperature:** 90°C
- **Application:**
For Outdoor & Indoor Installation in Oil ,Gas and Petrochemical industries & Wet Location
Laid Direct To The Ground , Where Mechanical Damages Are Expected To Occur.

No. of Cores & Cross Section	Nominal Insulation Thickness	Lead Thickness	Armour Wire Diameter	Nominal Sheath Thickness	Overall Diameter (Approx)	Total Weight (Approx)
mm ²	mm	mm	mm	mm	mm	kg/km
1x25 RM	0.9	1.2	1.25	1.8	20.8	1115
1x35 RM	0.9	1.2	1.6	1.8	23.2	1364
1x50 RM	1	1.2	1.6	1.8	24.5	1570
1x70 RM	1.1	1.2	1.6	1.8	26.5	1910
1x95 RM	1.1	1.2	1.6	1.9	28.2	2269
1x120 RM	1.2	1.2	1.6	1.9	30	2625
1x150 RM	1.4	1.3	1.6	2	32	3095
1x185 RM	1.6	1.3	2	2.1	36	3777
1x240 RM	1.7	1.4	2	2.2	38.7	4607
1x300 RM	1.8	1.5	2	2.3	41.9	5561
1x400 RM	2	1.6	2.5	2.5	48.2	7103
2x1.5 RE	0.7	1.2	1.25	1.8	18.6	993
2x2.5 RE	0.7	1.2	1.25	1.8	19.4	1089
2x4 RE	0.7	1.2	1.25	1.8	20.4	1212
2x6 RE	0.7	1.2	1.6	1.8	22.7	1526
2x10 RE	0.7	1.2	1.6	1.8	24.3	1779
2x16 RM	0.7	1.2	1.6	1.8	27.2	2222
2x25 RM	0.9	1.2	1.6	1.9	30	2723
2x35 RM	0.9	1.3	2	2.1	34.4	3609
2x50 RM	1	1.4	2	2.2	37.4	4329
2x70 RM	1.1	1.5	2	2.3	42.2	5552
2x95 RM	1.1	1.6	2.5	2.5	47.8	7257
2x120 RM	1.2	1.7	2.5	2.6	51.8	8594
2x150 RM	1.4	1.8	2.5	2.8	56	10029
2x185 RM	1.6	1.9	2.5	2.9	60.8	11846
2x240 RM	1.7	2.1	2.5	3.1	66.2	14411
2x300 RM	1.8	2.2	3.15	3.4	74.8	18256

On request, Aluminium Conductor is also available

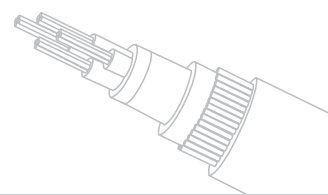


Armoured Lead Sheathed Power Cable N2XKYRY

No. of Cores & Cross Section	Nominal Insulation Thickness	Lead Thickness	Armour Wire Diameter	Nominal Sheath Thickness	Overall Diameter (Approx)	Total Weight (Approx)
mm ²	mm	mm	mm	mm	mm	kg/km
3x1.5 RE	0.7	1.2	1.25	1.8	19.1	1052
3x2.5 RE	0.7	1.2	1.25	1.8	19.9	1157
3x4 RE	0.7	1.2	1.25	1.8	21	1311
3x6 RE	0.7	1.2	1.6	1.8	23.9	1708
3x10 RE	0.7	1.2	1.6	1.8	25.6	2009
3x16 RM	0.7	1.2	1.6	1.9	28.4	2495
3x25 RM	0.9	1.3	1.6	2	31.6	3182
3x35 RM	0.9	1.3	2	2.1	35.8	4114
3x50 SM	1	1.4	2	2.2	37.6	4460
3x70 SM	1.1	1.5	2	2.3	41.8	5600
3x95 SM	1.1	1.6	2	2.4	45.2	6800
3x120 SM	1.2	1.7	2.5	2.6	50.4	8520
3x150 SM	1.4	1.9	2.5	2.7	53.1	9808
3x185 SM	1.6	2	2.5	2.8	57.6	11545
3x240 SM	1.7	2.2	2.5	3.0	63.6	14275
3x300 SM	1.8	2.3	2.5	3.2	66.0	16443
3x25+16 RM	0.9 0.7	1.3	2	2.1	34.6	3657
3x35+16 RM	0.9 0.7	1.4	2	2.1	36.8	4280
3x50+25 SM	1 0.9	1.4	2	2.2	38.1	4720
3x70+35 SM	1.1 0.9	1.5	2	2.3	42.2	5974
3x95+50 SM	1.1 1	1.6	2.5	2.5	48.2	7942
3x120+70 SM	1.2 1.1	1.7	2.5	2.6	51.6	9358
3x150+70 SM	1.4 1.1	1.8	2.5	2.8	56.6	11022
3x185+95 SM	1.6 1.1	1.9	2.5	2.9	60.9	13068
3x240+120 SM	1.7 1.2	2.1	2.5	3.1	67.1	16142
3x300+150 SM	1.8 1.4	2.2	3.15	3.4	75.4	20328
3x400+185 SM	2 1.6	2.5	3.15	3.7	83.7	25117
4x1.5 RE	0.7	1.2	1.25	1.8	19.8	1136
4x2.5 RE	0.7	1.2	1.3	1.8	20.9	1287
4x4 RE	0.7	1.2	1.6	1.8	23.3	1622
4x6 RE	0.7	1.2	1.6	1.8	24.5	1824
4x10 RE	0.7	1.2	1.6	1.8	26.4	2197
4x16 RM	0.7	1.2	1.6	1.9	30.1	2844
4x25 RM	0.9	1.3	2	2.1	35.4	4027
4x35 RM	0.9	1.4	2	2.2	38.5	4895
4x50 SM	1	1.5	2	2.3	42.4	6023
4x50 SM	1	1.4	2	2.2	38.7	4992
4x70 SM	1.1	1.5	2	2.4	43.6	6443
4x95 SM	1.1	1.6	2.5	2.6	49.6	8541
4x120 SM	1.2	1.7	2.5	2.7	53.5	10083
4x150 SM	1.4	1.9	2.5	2.8	58.3	12131
4x185 SM	1.6	2	2.5	3	63	14359
4x240 SM	1.7	2.2	2.5	3.2	69.5	17849
4x300 SM	1.8	2.3	3.15	3.5	77.4	22261
4x400 SM	2	2.5	3.15	3.8	86.6	27639
5x1.5 RE	0.7	1.2	1.25	1.8	20.6	1230
5x2.5 RE	0.7	1.2	1.6	1.8	23	1549
5x4 RE	0.7	1.2	1.6	1.8	24.3	1771
5x6 RE	0.7	1.2	1.6	1.8	25.6	2002
5x10 RE	0.7	1.2	1.6	1.8	27.8	2443
5x16 RM	0.7	1.3	2	2	33.9	3636
5x25 RM	0.9	1.4	2	2.2	38	4683
5x35 RM	0.9	1.5	2	2.3	41.8	5789
5x50 RM	1	1.6	2.5	2.5	47.9	7656
5x70 RM	1.1	1.8	2.5	2.7	54.1	10011
5x95 RM	1.1	1.9	2.5	2.9	59.1	12351
5x120 RM	1.2	2	2.5	3	64.4	14798
5x150 RM	1.4	2.2	2.5	3.2	69.9	17654
5x185 RM	1.6	2.4	3.15	3.5	79.4	22584

On request, Aluminium Conductor is also available

NYY N2XY N2XH NYCY N2XCX NYRY NYBY N2XRY
 N2XBY N2XHRH NYCXY N2XCXY NYKYRY N2XKYRY



Note:

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

کابل‌های کنترل و ابزار دقیق





Instrument & Control Cables

3

CONTENTS

Building Wire & Cables

Power Cables (0.6-1)KV

Instrument & Control Cables

1- Control

Flexible (300-500 V)

Unshielded 1-1 NYSLYO 43

Braid Shielded 1-2 NYSLYCYO 47

2- Instrument
& Cables

Multicore Overall
Screen

Unarmored 2-1 MSR-Y(ST)Y 49

Armored 2-2 MSR-Y(ST)YRY 51

Pair/Triple

Unarmored 2-3 MSR-Y(ST)Y 53

2-4 MSR-Y(ST)Y-PIMF 57

2-5 MSR-2X(ST)H-PIMF 59

Armored 2-6 MSR-Y(ST)YRY 61

2-7 MSR-Y(ST)YRY-PIMF 65

2-8 MSR-2X(ST)HRH-PIMF 67

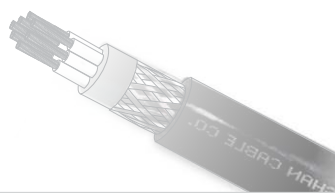
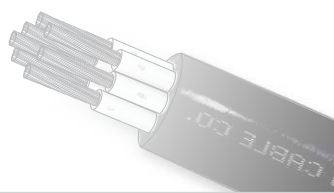
Telecommunication &
Coaxial Cables

MV & HV Power Cables

Aerial Cables

Rubber Cables

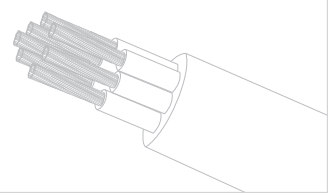
Technical information &
Tables



Flexible Unscreened Cable NYSLYO

- **Rated Voltage:** 300-500 V
- **Applicable Standard:** IEC 60227, IEC 60228
- **Code Designation Of Wire According IEC:** 60227 IEC 75
- **Construction :**
Conductor: Plain Annealed Copper Wire or Tin Coated Wires(Class 5)
Insulation Type: P.V.C/D
Outer Sheath Type: P.V.C/ST9
- **Maximum Conductor Temperature:** 70°C
- **Application:**
Suitable for internal/external wiring of electrical equipment at medium mechanical stress, in dry and damp interiors as well as in industrial environments. These cables can be used in machine tool manufacturing, machines, devices, office machine, data processing and as a control cable for static and flexible but not for continuously flexible application where electrical protection is not required.

No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall Dia. (Approx.)	Total Weight (Approx.)
mm ²	mm	mm	mm	kg/km
2x0.5	0.6	0.7	5.8	35
2x0.75	0.6	0.8	6.4	44
2x1	0.6	0.8	6.7	51
2x1.5	0.7	0.9	7.7	70
2x2.5	0.8	1.0	9.2	104
5x0.5	0.6	0.9	7.7	73
5x0.75	0.6	0.9	8.2	88
5x1	0.6	1.0	8.9	109
5x1.5	0.7	1.0	10.0	146
5x2.5	0.8	1.2	12.0	223
7x0.5	0.6	1.0	9.2	99
7x0.75	0.6	1.0	9.9	122
7x1	0.6	1.1	10.7	149
7x1.5	0.7	1.2	12.3	207
7x2.5	0.8	1.4	14.7	314
12x0.5	0.6	1.1	11.2	157
12x0.75	0.6	1.2	12.2	199
12x1	0.6	1.2	13.0	238
12x1.5	0.7	1.4	15.0	335
12x2.5	0.8	1.6	18.0	513
19x0.5	0.6	1.3	13.3	236
19x0.75	0.6	1.3	14.4	298
19x1	0.6	1.4	15.5	363
19x1.5	0.7	1.6	17.9	513
19x2.5	0.8	1.8	21.3	779
24x0.5	0.6	1.4	15.7	302
24x0.75	0.6	1.5	17.1	384
24x1	0.6	1.6	18.4	467
24x1.5	0.7	1.8	21.2	657
24x2.5	0.8	2.1	25.4	1003



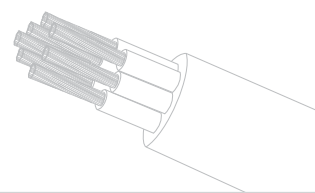


Flexible Unscreened Cable NYSLYO



No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall Dia. (Approx.)	Total Weight (Approx.)
mm ²	mm	mm	mm	kg/km
30x0.5	0.6	1.5	16.7	364
30x0.75	0.6	1.6	18.3	469
30x1	0.6	1.7	19.6	568
30x1.5	0.7	1.9	22.6	801
30x2.5	0.8	2.2	27.1	1227
37x0.5	0.6	1.6	18.2	443
37x0.75	0.6	1.7	19.9	570
37x1	0.6	1.8	21.3	690
37x1.5	0.7	2.0	24.5	970
37x2.5	0.8	2.4	29.6	1504
48x0.5	0.6	1.8	21.0	574
48x0.75	0.6	1.9	23.0	739
48x1	0.6	2.0	24.6	893
48x1.5	0.7	2.3	28.4	1263
48x2.5	0.8	2.7	34.2	1948
50x0.5	0.6	1.8	21.1	595
50x0.75	0.6	1.9	23.0	761
50x1	0.6	2.0	24.6	920
50x1.5	0.7	2.3	28.4	1302
50x2.5	0.8	2.7	34.3	2018
54x0.5	0.6	1.8	21.6	631
54x0.75	0.6	2.0	23.8	823
54x1	0.6	2.1	25.5	997
54x1.5	0.7	2.4	29.4	1409
54x2.5	0.8	2.8	35.4	2175
55x0.5	0.6	1.8	21.6	640
55x0.75	0.6	2.0	23.8	834
55x1	0.6	2.1	25.5	1012
55x1.5	0.7	2.4	29.4	1429
55x2.5	0.8	2.8	35.4	2207

NYSLYO NYSLYCYO MSR - Y (ST) Y MSR-Y (ST) YRY MSR - Y (ST) Y MSR - Y (ST) Y - PIMF
MSR 2X(ST)H - PIMF MSR - Y (ST) YRY MSR - Y (ST) YRY - PIMF MSR-2X(ST)HRH - PIMF



Flexible Screened Cable NYSLYCYO

● **Rated Voltage:** 300-500 V

● **Applicable Standard:** IEC 60227, IEC 60228

● **Code Designation According IEC:** 60227 IEC 74

● **Construction :**

Conductor: Plain Annealed Copper Wire or Tin Coated Wires (Class 5)

Insulation Type: P.V.C/D

Inner Sheath Type: P.V.C/ST5

Screen: Braided Copper Wire

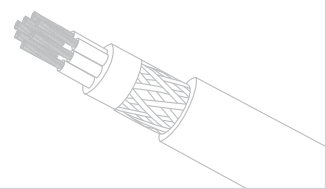
Outer Sheath Type: P.V.C/ST9

● **Maximum Conductor Temperature:** 70°C

● **Application:**

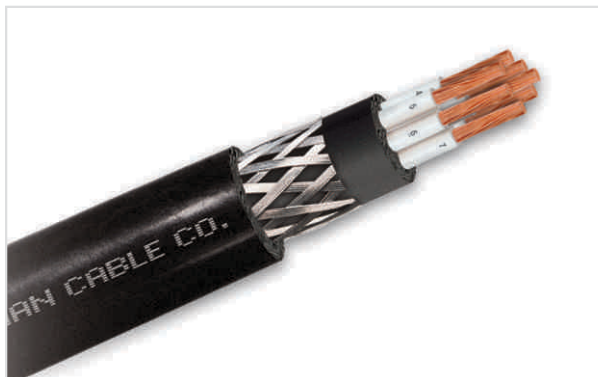
Flexible screened cables are used for medium mechanical stress, but without tensile stress or forced movements in dry wet and moist areas but are not suitable for open air application. These cables are used in measuring and control technics conveyor belts, production lines, air - conditioning, machine tools etc. the cores are numbered in such way that they are still recognizable even after a small part of the outer sheath is removed. special PVC compound ensures good flexibility and is extensively oil resistant.

No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Inner Layer Dia.	Armour Wire Dia.	Nominal Sheath Thickness	Overall Dia. (Approx.)	Total Weight (Approx.)
mm ²	mm	mm	mm	mm	mm	kg/km
2x0.5	0.6	0.7	0.15	0.9	8.2	88
2x0.75	0.6	0.7	0.15	0.9	8.6	96
2x1	0.6	0.7	0.15	1.0	9.1	107
2x1.5	0.7	0.7	0.15	1.0	9.9	126
2x2.5	0.8	0.7	0.15	1.1	11.4	167
5x0.5	0.6	0.7	0.15	1.0	9.9	130
5x0.75	0.6	0.7	0.15	1.1	10.6	152
5x1	0.6	0.7	0.15	1.1	11.1	170
5x1.5	0.7	0.8	0.15	1.2	12.6	226
5x2.5	0.8	0.8	0.2	1.4	14.8	321
7x0.5	0.6	0.7	0.15	1.1	11.4	161
7x0.75	0.6	0.8	0.15	1.2	12.5	201
7x1	0.6	0.8	0.15	1.3	13.3	232
7x1.5	0.7	0.8	0.2	1.4	15.1	307
7x2.5	0.8	0.8	0.2	1.5	17.3	417
12x0.5	0.6	0.8	0.2	1.3	14.0	251
12x0.75	0.6	0.8	0.2	1.4	15.0	298
12x1	0.6	0.8	0.2	1.4	15.8	341
12x1.5	0.7	0.8	0.2	1.6	17.8	448
12x2.5	0.8	0.9	0.2	1.8	21.0	656
19x0.5	0.6	0.8	0.2	1.5	16.1	341
19x0.75	0.6	0.8	0.2	1.5	17.2	408
19x1	0.6	0.9	0.2	1.6	18.5	486
19x1.5	0.7	0.9	0.2	1.8	20.9	656
19x2.5	0.8	1.0	0.2	2.0	24.5	950
24x0.5	0.6	0.9	0.2	1.6	18.7	433
24x0.75	0.6	0.9	0.2	1.7	20.1	522
24x1	0.6	0.9	0.2	1.8	21.4	612
24x1.5	0.7	1.0	0.2	2.0	24.4	828
24x2.5	0.8	1.0	0.25	2.3	28.8	1212



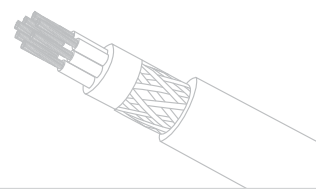


Flexible Screened Cable NYSLYCYO



No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Inner Layer Dia.	Armour Wire Dia.	Nominal Sheath Thickness	Overall Dia. (Approx.)	Total Weight (Approx.)
mm ²	mm	mm	mm	mm	mm	kg/km
30x0.5	0.6	0.9	0.2	1.7	19.7	501
30x0.75	0.6	0.9	0.2	1.8	21.3	614
30x1	0.6	0.9	0.2	1.9	22.6	719
30x1.5	0.7	1.0	0.25	2.1	26.0	994
30x2.5	0.8	1.1	0.25	2.5	30.9	1532
37x0.5	0.6	0.9	0.2	1.8	21.2	588
37x0.75	0.6	0.9	0.2	1.9	22.9	723
37x1	0.6	1.0	0.2	2.0	24.5	861
37x1.5	0.7	1.0	0.25	2.3	28.1	1187
37x2.5	0.8	1.1	0.25	2.6	33.2	1810
48x0.5	0.6	0.9	0.2	2.0	24.0	733
48x0.75	0.6	1.0	0.25	2.2	26.6	946
48x1	0.6	1.0	0.25	2.3	28.2	1110
48x1.5	0.7	1.1	0.25	2.6	32.2	1577
48x2.5	0.8	1.2	0.3	3.0	38.4	2347
50x0.5	0.6	0.9	0.2	2.0	24.1	755
50x0.75	0.6	1.0	0.25	2.2	26.6	968
50x1	0.6	1.0	0.25	2.3	28.2	1137
50x1.5	0.7	1.1	0.25	2.6	32.2	1616
50x2.5	0.8	1.2	0.3	3.0	38.5	2418
54x0.5	0.6	1.0	0.2	2.1	25.0	816
54x0.75	0.6	1.0	0.25	2.2	27.2	1023
54x1	0.6	1.0	0.25	2.3	28.9	1207
54x1.5	0.7	1.1	0.25	2.6	33.0	1715
54x2.5	0.8	1.2	0.3	3.1	39.6	2582
55x0.5	0.6	1.0	0.2	2.1	25.0	824
55x0.75	0.6	1.0	0.25	2.2	27.2	1034
55x1	0.6	1.0	0.25	2.3	28.9	1221
55x1.5	0.7	1.1	0.25	2.6	33.0	1735
55x2.5	0.8	1.2	0.3	3.1	39.6	2615

NYSLYO NYSLYCYO MSR - Y (ST) Y MSR-Y (ST) YRY MSR - Y (ST) Y MSR - Y (ST) Y - PIMF
MSR 2X(ST)H - PIMF MSR - Y (ST) YRY MSR - Y (ST) YRY - PIMF MSR-2X(ST)HRH - PIMF





Multi-core Screened Instrument Cables MSR - Y (ST) Y

● **Rated Voltage:** 300-500 V

● **Applicable Standard:** BS 5308, BS-EN 50288-7

● **Construction :**

CU/PVC/OSCR/PVC

Conductor: Plain Annealed Copper - Class (1,2,5)

Insulation Type: P.V.C

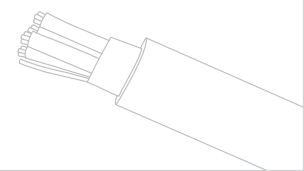
Screen Over Laying up Cores: Polyester tape + Drain Wire + Aluminum Foil

Sheath: P.V.C

● **Application:**

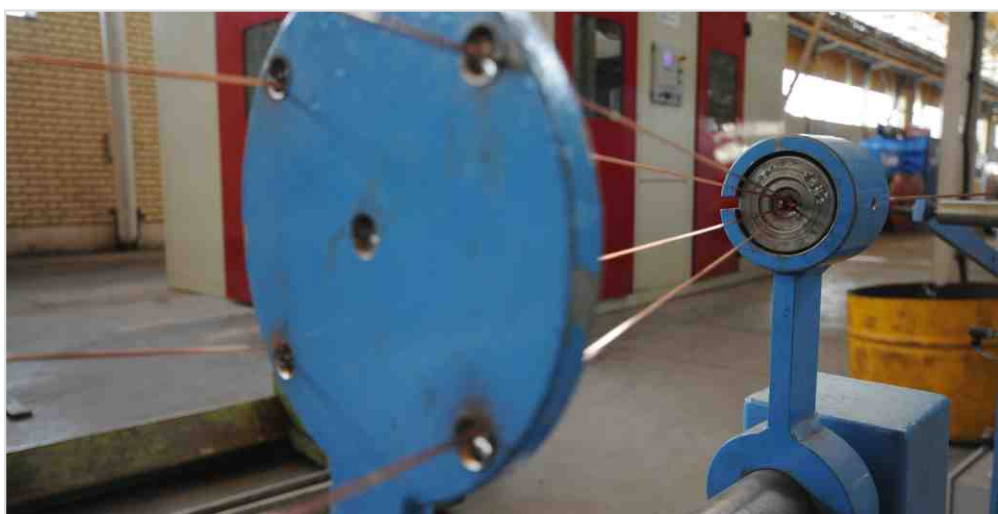
Transmission of Analog and Digital Signals in Instrumentation System, the cables are suitable to be laid indoors and outdoors, on the trays or in pipes.

No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall Dia. (Approx.)	Total Weight (Approx.)
mm ²	mm	mm	mm	kg/km
2x0.5	0.6	0.8	6.2	44.6
3x0.5	0.6	0.8	6.5	54.8
4x0.5	0.6	0.8	7.1	65.7
5x0.5	0.6	0.9	7.4	78.4
6x0.5	0.6	0.9	8.5	92.1
7x0.5	0.6	1.1	8.9	108.6
8x0.5	0.6	1.1	10.3	125.1
9x0.5	0.6	1.1	11.0	137.9
10x0.5	0.6	1.1	11.0	146.4
11x0.5	0.6	1.2	11.2	160.0
12x0.5	0.6	1.2	11.5	170.7
13x0.5	0.6	1.2	12.0	182.5
14x0.5	0.6	1.2	12.0	191.1
15x0.5	0.6	1.2	12.6	203.6
20x0.5	0.6	1.2	14.0	256.3
25x0.5	0.6	1.3	15.6	315.3
30x0.5	0.6	1.3	16.4	364.0
35x0.5	0.6	1.3	17.7	415.4
40x0.5	0.6	1.3	18.4	463.0
45x0.5	0.6	1.5	20.2	533.7
50x0.5	0.6	1.5	20.5	579.2
55x0.5	0.6	1.5	21.1	626.2
2x1	0.6	0.8	7.0	59.3
3x1	0.6	0.9	7.6	78.6
4x1	0.6	0.9	8.2	95.9
5x1	0.6	1.1	8.8	118.8
6x1	0.6	1.1	10.1	140.2
7x1	0.6	1.2	10.2	159.0
8x1	0.6	1.2	11.9	183.5
9x1	0.6	1.2	12.7	202.9
10x1	0.6	1.2	12.7	217.0
11x1	0.6	1.3	12.9	237.0
12x1	0.6	1.3	13.3	253.9
13x1	0.6	1.3	14.0	272.2
14x1	0.6	1.3	14.0	286.3
15x1	0.6	1.3	14.7	305.4
20x1	0.6	1.3	16.2	388.7
25x1	0.6	1.5	18.3	487.4
30x1	0.6	1.5	19.3	566.1
35x1	0.6	1.5	20.8	648.3
40x1	0.6	1.5	21.6	725.5
45x1	0.6	1.7	23.7	830.6
50x1	0.6	1.7	24.1	904.9
55x1	0.6	1.7	24.7	981.3



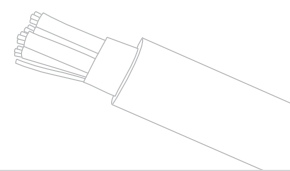


Multi-core Screened Instrument Cables MSR - Y (ST) Y



No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall Dia. (Approx.)	Total Weight (Approx.)
mm ²	mm	mm	mm	kg/km
2x1.5	0.6	0.8	7.6	72.6
3x1.5	0.6	1.0	8.4	101.6
4x1.5	0.6	0.9	8.9	120.8
5x1.5	0.6	1.1	9.6	149.9
6x1.5	0.6	1.1	10.9	177.5
7x1.5	0.6	1.2	11.1	202.1
8x1.5	0.6	1.3	13.2	239.0
9x1.5	0.6	1.4	14.3	271.4
10x1.5	0.6	1.4	14.3	290.9
11x1.5	0.6	1.3	14.1	303.9
12x1.5	0.6	1.4	14.8	333.1
13x1.5	0.6	1.3	15.3	350.5
14x1.5	0.6	1.5	15.7	384.1
15x1.5	0.6	1.3	16.1	394.1
20x1.5	0.6	1.3	17.8	506.5
25x1.5	0.6	1.5	20.1	635.0
30x1.5	0.6	1.5	21.3	741.3
35x1.5	0.6	1.5	22.9	851.6
40x1.5	0.6	1.5	23.8	956.2
45x1.5	0.6	1.7	26.1	1091.8
50x1.5	0.6	1.7	26.5	1193.2
55x1.5	0.6	1.7	27.3	1296.9

NYSLYO NYSLYCYO MSR - Y (ST) Y MSR-Y (ST) YRY MSR - Y (ST) Y MSR - Y (ST) Y - PIMF
 MSR 2X(ST)H - PIMF MSR - Y (ST) YRY MSR - Y (ST) YRY - PIMF MSR-2X(ST)HRH - PIMF



Multi-Core Screened Armoured Instrument Cables MSR-Y (ST) YRY

● **Rated Voltage:** 300-500 V

● **Applicable Standard:** BS 5308, BS-EN 50288-7

● **Construction :**

CU/PVC/OSCR/PVC/SWA/PVC

Conductor: Plain Annealed Copper - Class (1,2,5)

Insulation Type: P.V.C

Screen over Laying up Cores: Polyester tape + Drain Wire + Aluminum Foil

Inner Sheath: P.V.C

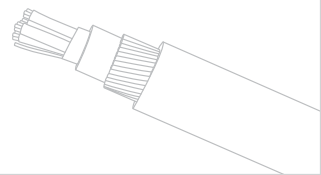
Armour: Galvanized Steel Wire

Sheath: P.V.C

● **Application:**

Transmission of Analog and Digital Signals in Instrumentation System,
the cables are suitable to be laid indoors and outdoors,
on cable trays or in pipes or in earth.

No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Inner Layer Thickness	Armour Wire Dia.	Nominal Sheath Thickness	Overall Dia. (Approx.)	Total Weight (Approx.)
mm ²	mm	mm	mm	mm	mm	kg/km
2x0.5	0.6	0.8	0.9	1.3	10.6	221
3x0.5	0.6	0.8	0.9	1.3	10.9	238.2
4x0.5	0.6	0.8	0.9	1.3	11.5	262.5
5x0.5	0.6	0.9	0.9	1.4	12.0	287.8
6x0.5	0.6	0.9	0.9	1.4	13.1	323.4
7x0.5	0.6	1.1	0.9	1.5	13.7	358.8
8x0.5	0.6	1.1	1.25	1.5	15.8	495.9
9x0.5	0.6	1.1	1.25	1.5	16.5	523.2
10x0.5	0.6	1.1	1.25	1.5	16.5	531.8
11x0.5	0.6	1.2	1.25	1.6	16.9	564.2
12x0.5	0.6	1.2	1.25	1.6	17.2	587.1
13x0.5	0.6	1.2	1.25	1.6	17.7	612.4
14x0.5	0.6	1.2	1.25	1.6	17.7	621.0
15x0.5	0.6	1.2	1.25	1.6	18.3	647.7
20x0.5	0.6	1.2	1.25	1.6	19.7	739.4
25x0.5	0.6	1.3	1.6	1.7	22.2	985.5
30x0.5	0.6	1.3	1.6	1.7	23.0	1072.9
35x0.5	0.6	1.3	1.6	1.7	24.3	1165.8
40x0.5	0.6	1.3	1.6	1.7	25.0	1234.7
45x0.5	0.6	1.5	1.6	1.9	27.2	1408.0
50x0.5	0.6	1.5	1.6	1.9	27.5	1456.5
55x0.5	0.6	1.5	1.6	1.9	28.1	1524.1
2x0.75	0.6	0.8	0.9	1.3	11.0	236.1
3x0.75	0.6	0.8	0.9	1.3	11.4	256.4
4x0.75	0.6	0.8	0.9	1.4	12.2	289.6
5x0.75	0.6	0.9	0.9	1.4	12.6	318.1
6x0.75	0.6	0.9	0.9	1.4	13.7	357.6
7x0.75	0.6	1.1	0.9	1.5	14.3	396.6
8x0.75	0.6	1.1	1.25	1.5	16.5	547.7
9x0.75	0.6	1.1	1.25	1.5	17.3	578.8
10x0.75	0.6	1.1	1.25	1.5	17.3	590.2
11x0.75	0.6	1.2	1.25	1.6	17.7	626.2
12x0.75	0.6	1.2	1.25	1.6	18.1	652.4
13x0.75	0.6	1.2	1.25	1.6	18.7	681.4
14x0.75	0.6	1.2	1.25	1.6	18.7	692.8
15x0.75	0.6	1.2	1.25	1.6	19.3	732.8
20x0.75	0.6	1.2	1.6	1.6	21.5	960.8
25x0.75	0.6	1.3	1.6	1.8	23.6	1133.4
30x0.75	0.6	1.3	1.6	1.8	24.6	1220.7
35x0.75	0.6	1.3	1.6	1.8	26.0	1346.2
40x0.75	0.6	1.3	1.6	1.8	26.7	1430.6
45x0.75	0.6	1.5	1.6	2.0	29.07	1624.2
50x0.75	0.6	1.5	1.6	2.0	29.4	1687.5
55x0.75	0.6	1.5	1.6	2.0	30.0	1786.6



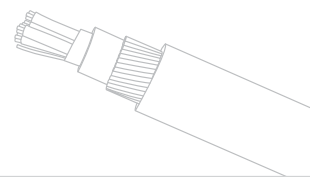


Multi-Core Screened Armoured Instrument Cables MSR-Y (ST) YRY



No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Inner Layer Thickness	Armour Wire Dia.	Nominal Sheath Thickness	Overall Dia. (Approx.)	Total Weight (Approx.)
mm ²	mm	mm	mm	mm	mm	kg/km
2x1	0.6	0.8	0.9	1.4	11.6	255.6
3x1	0.6	0.9	0.9	1.4	12.2	288.9
4x1	0.6	0.9	0.9	1.4	12.8	320.5
5x1	0.6	1.1	0.9	1.4	13.4	357.3
6x1	0.6	1.1	0.9	1.4	14.6	406.9
7x1	0.6	1.2	1.25	1.6	15.9	536.8
8x1	0.6	1.2	1.25	1.6	17.6	612.3
9x1	0.6	1.2	1.25	1.6	18.4	657.4
10x1	0.6	1.2	1.25	1.6	18.4	671.6
11x1	0.6	1.3	1.25	1.7	18.8	701.6
12x1	0.6	1.3	1.25	1.7	19.2	731.3
13x1	0.6	1.3	1.25	1.7	19.9	764.1
14x1	0.6	1.3	1.25	1.7	19.9	778.3
15x1	0.6	1.3	1.25	1.7	20.6	822.4
20x1	0.6	1.3	1.6	1.7	22.8	1080.1
25x1	0.6	1.5	1.6	1.9	25.3	1281.7
30x1	0.6	1.5	1.6	1.9	26.3	1401.2
35x1	0.6	1.5	1.6	1.9	27.8	1544.1
40x1	0.6	1.5	1.6	1.9	28.6	1644.3
45x1	0.6	1.7	1.6	2.1	31.1	1859.4
50x1	0.6	1.7	1.6	2.1	31.5	1953.5
55x1	0.6	1.7	1.6	2.1	32.1	2052.1
2x1.5	0.6	0.8	0.9	1.4	12.2	282.9
3x1.5	0.6	1.0	0.9	1.4	13.0	332.5
4x1.5	0.6	0.9	0.9	1.4	13.5	365.1
5x1.5	0.6	1.1	0.9	1.4	14.2	408.4
6x1.5	0.6	1.1	1.25	1.4	16.2	555.3
7x1.5	0.6	1.2	1.25	1.6	16.8	606.0
8x1.5	0.6	1.3	1.25	1.6	18.9	706.6
9x1.5	0.6	1.4	1.25	1.6	20.0	766.9
10x1.5	0.6	1.4	1.25	1.6	20.0	786.4
11x1.5	0.6	1.3	1.25	1.7	20.0	807.0
12x1.5	0.6	1.4	1.25	1.7	20.7	851.0
13x1.5	0.6	1.3	1.6	1.7	21.9	1018.4
14x1.5	0.6	1.5	1.6	1.7	22.3	1055.1
15x1.5	0.6	1.3	1.6	1.7	22.7	1085.0
20x1.5	0.6	1.3	1.6	1.7	24.4	1258.3
25x1.5	0.6	1.5	1.6	1.9	27.1	1508.7
30x1.5	0.6	1.5	1.6	1.9	28.3	1656.9
35x1.5	0.6	1.5	1.6	1.9	29.9	1829.5
40x1.5	0.6	1.5	1.6	1.9	30.8	1958.0
45x1.5	0.6	1.7	2.0	2.1	34.3	2449.0
50x1.5	0.6	1.7	2.0	2.1	34.7	2579.7
55x1.5	0.6	1.7	2.0	2.1	35.5	2715.3

NYSLYO NYSLYCYO MSR - Y (ST) Y MSR-Y (ST) YRY MSR - Y (ST) Y MSR - Y (ST) Y - PIMF
MSR 2X(ST)H - PIMF MSR - Y (ST) YRY MSR - Y (ST) YRY - PIMF MSR-2X(ST)HRH - PIMF



Multi-Pair / Triple Screened Instrument Cables MSR - Y (ST) Y

● **Rated Voltage:** 300-500 V

● **Applicable Standard:** BS 5308, BS-EN 50288-7

● **Construction :**

CU/PVC/OSCR/PVC

Conductor: Plain Annealed Copper wire - Class (1,2,5)

Insulation Type: P.V.C

Twisted Pair / Triples

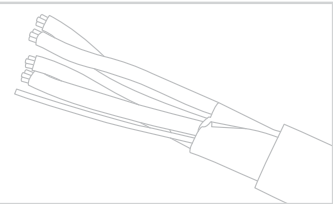
Screen Over Laying Up Pairs: Polyester tape + Drain Wire + Aluminum Foil

Sheath: P.V.C

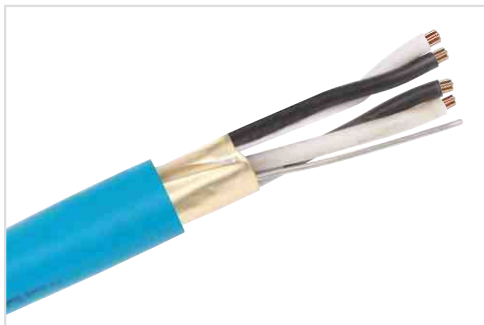
● **Application:**

Transmission of Analog and Digital Signals in Instrumentation System, the cables are suitable to be laid indoors and outdoors, on the trays or in pipes.

No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall Dia. (Approx.)	Total Weight (Approx.)
mm ²	mm	mm	mm	kg/km
1x2x0.5	0.6	0.8	6.2	45
2x2x0.5	0.6	1.1	8.5	80
3x2x0.5	0.6	1.2	9.9	109
4x2x0.5	0.6	1.2	11.0	133
5x2x0.5	0.6	1.2	12.0	157
6x2x0.5	0.6	1.3	13.1	185
7x2x0.5	0.6	1.3	13.9	208
8x2x0.5	0.6	1.3	14.5	229
9x2x0.5	0.6	1.3	15.4	252
10x2x0.5	0.6	1.3	16.0	273
11x2x0.5	0.6	1.5	17.0	310
12x2x0.5	0.6	1.5	17.7	332
13x2x0.5	0.6	1.5	18.1	352
14x2x0.5	0.6	1.5	18.7	374
15x2x0.5	0.6	1.5	19.3	396
20x2x0.5	0.6	1.5	21.6	502
25x2x0.5	0.6	1.7	24.4	628
30x2x0.5	0.6	1.7	26.2	730
35x2x0.5	0.6	2.2	28.9	895
40x2x0.5	0.6	2.2	30.6	999
45x2x0.5	0.6	2.2	32.3	1103
50x2x0.5	0.6	2.2	33.8	1205
1x2x0.75	0.6	0.8	6.6	52
2x2x0.75	0.6	1.1	9.0	95
3x2x0.75	0.6	1.2	10.6	131
4x2x0.75	0.6	1.2	11.8	161
5x2x0.75	0.6	1.2	12.9	191
6x2x0.75	0.6	1.3	14.1	226
7x2x0.75	0.6	1.3	15.0	255
8x2x0.75	0.6	1.3	15.7	282
9x2x0.75	0.6	1.3	16.6	311
10x2x0.75	0.6	1.3	17.3	339
11x2x0.75	0.6	1.5	18.4	383
12x2x0.75	0.6	1.5	19.1	411
13x2x0.75	0.6	1.5	19.5	437
14x2x0.75	0.6	1.5	20.2	465
15x2x0.75	0.6	1.5	20.9	493
20x2x0.75	0.6	1.7	23.9	651
25x2x0.75	0.6	2.0	27.0	824
30x2x0.75	0.6	2.0	29.1	959
35x2x0.75	0.6	2.2	31.3	1120
40x2x0.75	0.6	2.2	33.2	1254
45x2x0.75	0.6	2.2	35.0	1388
50x2x0.75	0.6	2.2	36.7	1520

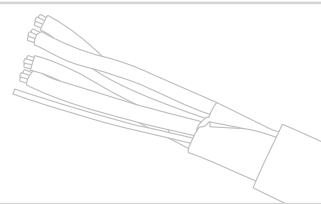


Multi-Pair / Triple Screened Instrument Cables MSR - Y (ST) Y



No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall Dia. (Approx.)	Total Weight (Approx.)
mm ²	mm	mm	mm	kg/km
1x2x1	0.6	0.8	7.0	59
2x2x1	0.6	1.2	9.7	113
3x2x1	0.6	1.3	11.4	156
4x2x1	0.6	1.3	12.7	193
5x2x1	0.6	1.3	13.9	230
6x2x1	0.6	1.5	15.3	278
7x2x1	0.6	1.5	16.3	314
8x2x1	0.6	1.5	17.1	348
9x2x1	0.6	1.5	18.1	384
10x2x1	0.6	1.5	18.8	418
11x2x1	0.6	1.7	20.0	470
12x2x1	0.6	1.7	20.7	505
13x2x1	0.6	1.7	21.2	537
14x2x1	0.6	1.7	21.9	572
15x2x1	0.6	1.7	22.7	607
20x2x1	0.6	1.7	25.4	775
25x2x1	0.6	2.0	28.8	979
30x2x1	0.6	2.0	31.0	1143
35x2x1	0.6	2.2	33.4	1335
40x2x1	0.6	2.2	35.4	1498
45x2x1	0.6	2.2	37.4	1662
50x2x1	0.6	2.2	39.1	1822
1x2x1.5	0.6	0.8	7.6	73
2x2x1.5	0.6	1.2	10.6	140
3x2x1.5	0.6	1.3	12.5	195
4x2x1.5	0.6	1.3	13.9	244
5x2x1.5	0.6	1.3	15.2	292
6x2x1.5	0.6	1.5	16.8	353
7x2x1.5	0.6	1.5	17.9	401
8x2x1.5	0.6	1.5	18.7	446
9x2x1.5	0.6	1.5	19.8	494
10x2x1.5	0.6	1.5	20.7	539
11x2x1.5	0.6	1.7	21.9	604
12x2x1.5	0.6	1.7	22.7	650
13x2x1.5	0.6	1.7	23.3	694
14x2x1.5	0.6	1.7	24.1	740
15x2x1.5	0.6	1.7	25.0	786
20x2x1.5	0.6	1.7	28.0	1011
25x2x1.5	0.6	2.0	31.7	1276
30x2x1.5	0.6	2.0	34.2	1496
35x2x1.5	0.6	2.2	36.9	1747
40x2x1.5	0.6	2.2	39.1	1966
45x2x1.5	0.6	2.2	41.3	2186
50x2x1.5	0.6	2.2	43.3	2402

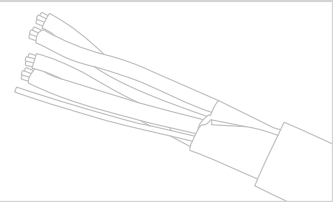
NYSLYO NYSLYCYO MSR - Y (ST) Y MSR-Y (ST) YRY MSR - Y (ST) Y MSR - Y (ST) Y - PIMF
MSR 2X(ST)H - PIMF MSR - Y (ST) YRY MSR - Y (ST) YRY - PIMF MSR-2X(ST)HRH - PIMF



Multi-Pair / Triple Screened Instrument Cables MSR - Y (ST) Y



No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall dia. (Approx.)	Total Weight (Approx.)
mm ²	mm	mm	mm	kg/km
1x3x0.5	0.6	1.2	7.3	67
2x3x0.5	0.6	1.3	12.0	127
3x3x0.5	0.6	1.4	13.0	163
4x3x0.5	0.6	1.4	14.2	197
5x3x0.5	0.6	1.4	15.4	232
6x3x0.5	0.6	1.5	17.0	275
7x3x0.5	0.6	1.5	17.0	301
8x3x0.5	0.6	1.6	20.2	359
9x3x0.5	0.6	1.6	21.7	397
10x3x0.5	0.6	1.6	21.7	423
11x3x0.5	0.6	1.6	21.7	448
12x3x0.5	0.6	1.7	22.6	490
13x3x0.5	0.6	1.7	23.8	526
14x3x0.5	0.6	1.7	23.8	551
15x3x0.5	0.6	1.8	25.3	600
25x3x0.5	0.6	2.0	31.6	943
30x3x0.5	0.6	2.0	33.5	1090
35x3x0.5	0.6	2.1	36.3	1262
40x3x0.5	0.6	2.2	38.0	1423
45x3x0.5	0.6	2.3	41.3	1604
50x3x0.5	0.6	2.3	41.9	1740
1x3x0.75	0.6	1.2	7.8	79
2x3x0.75	0.6	1.4	13.2	156
3x3x0.75	0.6	1.4	14.0	196
4x3x0.75	0.6	1.4	15.2	239
5x3x0.75	0.6	1.5	16.8	291
6x3x0.75	0.6	1.5	18.3	337
7x3x0.75	0.6	1.5	18.3	371
8x3x0.75	0.6	1.7	22.0	450
9x3x0.75	0.6	1.7	23.7	499
10x3x0.75	0.6	1.7	23.7	533
11x3x0.75	0.6	1.7	23.7	567
12x3x0.75	0.6	1.7	24.5	608
13x3x0.75	0.6	1.8	26.0	665
14x3x0.75	0.6	1.8	26.0	699
15x3x0.75	0.6	1.8	27.4	746
20x3x0.75	0.6	1.9	30.8	964
25x3x0.75	0.6	2.1	34.5	1198
30x3x0.75	0.6	2.1	36.6	1391
35x3x0.75	0.6	2.2	39.7	1611
40x3x0.75	0.6	2.3	41.5	1818
45x3x0.75	0.6	2.4	45.1	2048
50x3x0.75	0.6	2.4	45.8	2228

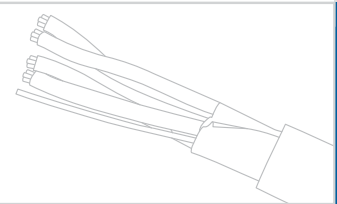


Multi-Pair / Triple Screened Instrument Cables MSR - Y (ST) Y



No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall dia. (Approx.)	Total Weight (Approx.)
mm ²	mm	mm	mm	kg/km
1x3x1	0.6	1.2	8.2	89
2x3x1	0.6	1.4	13.9	178
3x3x1	0.6	1.4	14.8	227
4x3x1	0.6	1.5	16.4	287
5x3x1	0.6	1.5	17.9	340
6x3x1	0.6	1.6	19.7	404
7x3x1	0.6	1.6	19.7	447
8x3x1	0.6	1.7	23.5	528
9x3x1	0.6	1.8	25.5	598
10x3x1	0.6	1.8	25.5	640
11x3x1	0.6	1.8	25.5	683
12x3x1	0.6	1.8	26.3	733
13x3x1	0.6	1.8	27.7	788
14x3x1	0.6	1.8	27.7	830
15x3x1	0.6	1.9	29.5	900
20x3x1	0.6	2.0	33.0	1164
25x3x1	0.6	2.1	36.8	1429
30x3x1	0.6	2.2	39.3	1682
35x3x1	0.6	2.3	42.6	1949
40x3x1	0.6	2.4	44.6	2201
45x3x1	0.6	2.5	48.4	2479
50x3x1	0.6	2.5	49.2	2701
1x3x1.5	0.6	1.2	8.82	109
2x3x1.5	0.6	1.4	15.2	219
3x3x1.5	0.6	1.5	16.4	292
4x3x1.5	0.6	1.5	18.0	362
5x3x1.5	0.6	1.6	19.8	443
6x3x1.5	0.6	1.6	21.7	516
7x3x1.5	0.6	1.6	21.7	574
8x3x1.5	0.6	1.8	26.0	689
9x3x1.5	0.6	1.9	28.3	778
10x3x1.5	0.6	1.9	28.3	837
11x3x1.5	0.6	1.9	28.3	895
12x3x1.5	0.6	1.9	29.2	963
13x3x1.5	0.6	1.9	30.8	1036
14x3x1.5	0.6	1.9	30.8	1094
15x3x1.5	0.6	2.0	32.7	1184
20x3x1.5	0.6	2.1	36.7	1536
25x3x1.5	0.6	2.3	41.1	1908
30x3x1.5	0.6	2.4	43.8	2248
35x3x1.5	0.6	2.5	47.6	2604
40x3x1.5	0.6	2.6	49.7	2944
45x3x1.5	0.6	2.7	54.0	3313
50x3x1.5	0.6	2.7	54.9	3617

NYSLYO NYSLYCYO MSR - Y (ST) Y MSR-Y (ST) YRY MSR - Y (ST) Y MSR - Y (ST) Y - PIMF
MSR 2X(ST)H - PIMF MSR - Y (ST) YRY MSR - Y (ST) YRY - PIMF MSR-2X(ST)HRH - PIMF





Multi-Pair Individual Screened Instrument Cables MSR - Y (ST) Y - PIMF

● **Rated Voltage:** 300-500 V

● **Applicable Standard:** BS 5308, BS-EN 50288-7

● **Construction :**

CU/PVC/ISCR/OSCR/PVC

Conductor: Plain Annealed Copper - Class (1,2,5)

Insulation Type: P.V.C

Twisted Pair Screen: Polyester tape + Drain wire + Aluminum Foil

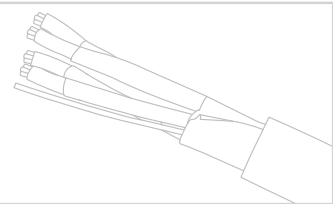
Screen Over Laying Up Pairs: Polyester tape + Drain Wire + Aluminum Foil

Sheath: P.V.C

● **Application:**

Transmission of Analog and Digital Signals in Instrumentation System, the cables are suitable to be laid indoors and outdoors, on the trays or in pipes.

No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall dia. (Approx.)	Total Weight (Approx.)
mm ²	mm	mm	mm	kg/km
1x2x0.5	0.6	0.8	6.2	45
2x2x0.5	0.6	1.1	11.5	113
3x2x0.5	0.6	1.2	12.4	147
4x2x0.5	0.6	1.2	13.6	179
5x2x0.5	0.6	1.2	14.8	211
6x2x0.5	0.6	1.3	16.4	251
7x2x0.5	0.6	1.3	16.4	276
8x2x0.5	0.6	1.3	19.3	320
9x2x0.5	0.6	1.3	20.9	355
10x2x0.5	0.6	1.3	20.9	379
11x2x0.5	0.6	1.5	21.3	423
12x2x0.5	0.6	1.5	22.0	453
13x2x0.5	0.6	1.5	23.1	486
14x2x0.5	0.6	1.5	23.1	510
15x2x0.5	0.6	1.5	24.4	544
20x2x0.5	0.6	1.5	27.2	687
25x2x0.5	0.6	1.7	30.6	861
30x2x0.5	0.6	1.7	32.4	1000
35x2x0.5	0.6	2.2	36.1	1226
40x2x0.5	0.6	2.2	37.5	1366
45x2x0.5	0.6	2.2	40.5	1521
50x2x0.5	0.6	2.2	41.2	1652
1x2x0.75	0.6	0.8	6.5	52
2x2x0.75	0.6	1.1	12.4	129
3x2x0.75	0.6	1.2	13.3	170
4x2x0.75	0.6	1.2	14.6	209
5x2x0.75	0.6	1.2	16.0	248
6x2x0.75	0.6	1.3	17.6	295
7x2x0.75	0.6	1.3	17.6	326
8x2x0.75	0.6	1.3	20.9	378
9x2x0.75	0.6	1.3	22.5	419
10x2x0.75	0.6	1.3	22.5	450
11x2x0.75	0.6	1.5	22.9	501
12x2x0.75	0.6	1.5	23.7	537
13x2x0.75	0.6	1.5	24.9	577
14x2x0.75	0.6	1.5	24.9	607
15x2x0.75	0.6	1.5	26.4	648
20x2x0.75	0.6	1.7	29.8	850
25x2x0.75	0.6	2.0	33.7	1076
30x2x0.75	0.6	2.0	35.7	1249
35x2x0.75	0.6	2.2	39.0	1466
40x2x0.75	0.6	2.2	40.6	1637
45x2x0.75	0.6	2.2	43.9	1825
50x2x0.75	0.6	2.2	44.6	1987



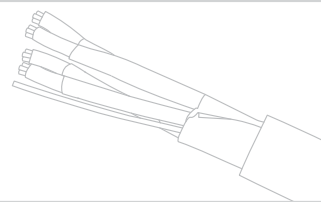


Multi-Pair Individual Screened Instrument Cables MSR - Y (ST) Y - PIMF



No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall dia. (Approx.)	Total Weight (Approx.)
mm ²	mm	mm	mm	kg/km
1x2x1	0.6	0.8	6.9	59
2x2x1	0.6	1.2	13.3	151
3x2x1	0.6	1.3	14.3	199
4x2x1	0.6	1.3	15.7	244
5x2x1	0.6	1.3	17.1	290
6x2x1	0.6	1.5	19.1	355
7x2x1	0.6	1.5	19.1	391
8x2x1	0.6	1.5	22.6	453
9x2x1	0.6	1.5	24.4	503
10x2x1	0.6	1.5	24.4	539
11x2x1	0.6	1.7	24.8	598
12x2x1	0.6	1.7	25.6	641
13x2x1	0.6	1.7	26.9	688
14x2x1	0.6	1.7	26.9	725
15x2x1	0.6	1.7	28.4	774
20x2x1	0.6	1.7	31.8	981
25x2x1	0.6	2.0	35.9	1241
30x2x1	0.6	2.0	38.0	1445
35x2x1	0.6	2.2	41.5	1695
40x2x1	0.6	2.2	43.3	1896
45x2x1	0.6	2.2	46.8	2115
50x2x1	0.6	2.2	47.6	2306
1x2x1.5	0.6	0.8	7.5	72
2x2x1.5	0.6	1.2	14.5	181
3x2x1.5	0.6	1.3	15.6	241
4x2x1.5	0.6	1.3	17.1	299
5x2x1.5	0.6	1.3	18.8	357
6x2x1.5	0.6	1.5	20.9	435
7x2x1.5	0.6	1.5	20.9	482
8x2x1.5	0.6	1.5	24.8	559
9x2x1.5	0.6	1.5	26.8	621
10x2x1.5	0.6	1.5	26.8	668
11x2x1.5	0.6	1.7	27.2	740
12x2x1.5	0.6	1.7	28.1	795
13x2x1.5	0.6	1.7	29.6	855
14x2x1.5	0.6	1.7	29.6	902
15x2x1.5	0.6	1.7	31.3	964
20x2x1.5	0.6	1.7	35.0	1230
25x2x1.5	0.6	2.0	39.5	1554
30x2x1.5	0.6	2.0	41.9	1815
35x2x1.5	0.6	2.2	45.7	2128
40x2x1.5	0.6	2.2	47.6	2387
45x2x1.5	0.6	2.2	51.6	2666
50x2x1.5	0.6	2.2	52.4	2914

NYSLYO NYSLYCYO MSR - Y (ST) Y MSR-Y (ST) YRY MSR - Y (ST) Y MSR - Y (ST) Y - PIMF
MSR 2X(ST)H - PIMF MSR - Y (ST) YRY MSR - Y (ST) YRY - PIMF MSR-2X(ST)HRH - PIMF





Multi-pair Fire Resistance Individual Screened Instrument Cables MSR – 2X(ST)H – PIMF

- **Rated Voltage:** 300-500 V
- **Applicable Standard:** gen. to BS 5308, part 1, type 1, BS-EN 50288-7

- **Construction:**

CU or TiCU/MGT/PET/XLPE/ISCR/OSCR/HFSL

Conductor: plain annealed copper or tinned copper

Flame barrier: Mica glass tape

Insulation: XLPE

Core identification: according to BS 5308 part 1, BS-EN 50288-7

Pair screen: Aluminum Foil + copper drain wire 0.5mm² + Polyester tape

Wrapping: 1 layer of plastic tape

Overall screen: Aluminum Foil + copper or tinned copper drain wire 0.5mm² + Polyester tape

Outer sheath: Halogen free, Low smoke, flame retardant – HFSL

Color: Is black, or blue for intrinsically safety systems



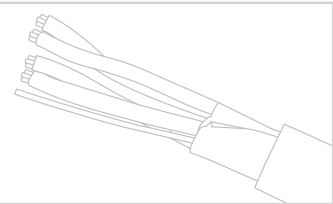
- **Technical data:**

- 1) Temperature: 30°C to + 90°C
- 2) Maximum short circuit temperature: 250°C (5seconds Max)
- 3) Test voltage: 1.0kv rms or 2.4 kvdc for 1 minute
- 4) Conductor resistance: As per class 2 of IEC 60228
- 5) Minimum insulation resistance: 5000 MΩ.km
- 6) Mutual capacitance at 1.0 kHz: 115nf/km for one and two pair, 75 nf/km for other cable.
- 7) L/R (ratio) : 25 μH/Ω for 0.75 mm², 1.0 mm² - 40 μH/Ω for 1.5 mm² - 70 μH/Ω for 2.5 mm²
- 8) Flame retardant: Acc. IEC 60332 - 1
- 9) Flame propagation test: Acc. IEC 60332-3
- 10) Fire resistance test: Acc. IEC 60331-21
- 11) Smoke density test: Acc. IEC 61034
- 12) Halogen content test: Acc. IEC 60754-2

- **Application:**

These cables can be used for transmission of analogue and digital signals in intermentand control system.

No. of Pairs & Cross Section	No. Strand x Diameter	Insulation Thickness	Sheath Thickness	Overall Dia. (Approx.)	Total Weight (Approx.)
mm ²	no. x mm	mm	mm	mm	kg/km
1x2x0.75	7x0.37	0.6	0.9	7.6	78
2x20.75	7x0.37	0.6	0.9	12.6	144
5x2x0.75	7x0.37	0.6	1.2	16.8	262
10x2x0.75	7x0.37	0.6	1.4	22.4	446
15x2x0.75	7x0.37	0.6	1.5	26.0	660
20x2x0.75	7x0.37	0.6	1.6	29.6	850
30x2x0.75	7x0.37	0.6	1.7	36.0	1240
1x2x1	7x0.43	0.6	1.0	8.2	86
2x2x1	7x0.43	0.6	1.1	13.0	148
5x2x1	7x0.43	0.6	1.2	16.4	266
10x2x1	7x0.43	0.6	1.5	23.2	492
15x2x1	7x0.43	0.6	1.6	26.8	718
20x2x1	7x0.43	0.6	1.7	31.2	940
30x2x1	7x0.43	0.6	2.0	36.7	1380
1x2x1.5	7x5.3	0.6	1.0	8.8	104
2x2x1.5	7x5.3	0.6	1.2	15.2	218
5x2x1.5	7x5.3	0.6	1.4	19.6	360
10x2x1.5	7x5.3	0.6	1.6	27.0	670
15x2x1.5	7x5.3	0.6	1.8	32.2	990
20x2x1.5	7x5.3	0.6	1.9	35.6	1240
30x2x1.5	7x5.3	0.6	2.2	43.0	1840
1x2x2.5	7x0.67	0.7	1.2	10.2	116
2x2x2.5	7x0.67	0.7	1.4	16.8	244



Armoured Multi-Pair / Triple Screened Instrument Cables MSR - Y (ST) YRY

● **Rated Voltage:** 300-500 V

● **Applicable Standard:** BS 5308 , BS-EN 50288-7

● **Construction :**

CU/PVC/OSCR/PVC/SWA/PVC

Conductor: Plain Annealed Copper - Class (1,2,5)

Insulation Type: P.V.C

Twisted Pair

Screen Over Laying Up Pairs: Polyester tape + Drain Wire + Aluminum Foil

Inner Sheath: P.V.C

Armour: Galvanized Steel Wire

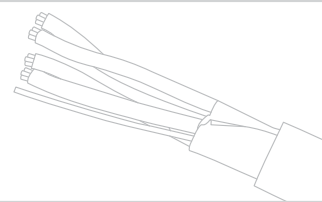
Sheath: P.V.C

● **Application:**

Transmission of Analog and Digital Signals in Instrumentation System, the cables are suitable to be laid indoors and outdoors, on cable trays or in pipes or in earth.

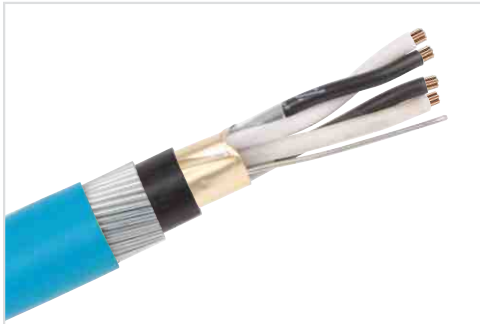
No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Inner Layer Thickness	Armour Wire Diameter	Nominal Sheath Thickness	Overall Dia. (Approx.)	Total Weight (Approx.)
mm ²	mm	mm	mm	mm	mm	kg/km
1x2x0.5	0.6	0.8	0.9	1.3	10.6	221
2x2x0.5	0.6	1.1	0.9	1.3	12.9	306
3x2x0.5	0.6	1.2	0.9	1.5	14.7	382
4x2x0.5	0.6	1.2	1.25	1.5	16.5	518
5x2x0.5	0.6	1.2	1.25	1.5	17.5	578
6x2x0.5	0.6	1.3	1.25	1.6	18.8	642
7x2x0.5	0.6	1.3	1.25	1.6	19.6	690
8x2x0.5	0.6	1.3	1.25	1.6	20.2	736
9x2x0.5	0.6	1.3	1.6	1.6	21.8	911
10x2x0.5	0.6	1.3	1.6	1.6	22.4	953
11x2x0.5	0.6	1.5	1.6	1.7	23.6	1039
12x2x0.5	0.6	1.5	1.6	1.7	24.3	1082
13x2x0.5	0.6	1.5	1.6	1.7	24.7	1122
14x2x0.5	0.6	1.5	1.6	1.7	25.3	1165
15x2x0.5	0.6	1.5	1.6	1.7	25.9	1207
20x2x0.5	0.6	1.5	1.6	1.8	28.4	1408
25x2x0.5	0.6	1.7	1.6	1.9	31.4	1650
30x2x0.5	0.6	1.7	2.0	1.9	34.0	2058
35x2x0.5	0.6	2.2	2.0	2.1	37.1	2379
40x2x0.5	0.6	2.2	2.0	2.1	38.8	2574
45x2x0.5	0.6	2.2	2.0	2.1	40.5	2745
50x2x0.5	0.6	2.2	2.0	2.1	42.0	2910
1x2x0.75	0.6	0.8	0.9	1.3	11.0	236
2x2x0.75	0.6	1.1	0.9	1.4	13.6	340
3x2x0.75	0.6	1.2	1.25	1.5	16.1	514
4x2x0.75	0.6	1.2	1.25	1.5	17.3	571
5x2x0.75	0.6	1.2	1.25	1.5	18.4	638
6x2x0.75	0.6	1.3	1.25	1.7	20.0	728
7x2x0.75	0.6	1.3	1.25	1.7	20.9	784
8x2x0.75	0.6	1.3	1.6	1.7	22.3	953
9x2x0.75	0.6	1.3	1.6	1.7	23.2	1021
10x2x0.75	0.6	1.3	1.6	1.7	23.9	1070
11x2x0.75	0.6	1.5	1.6	1.8	25.2	1166
12x2x0.75	0.6	1.5	1.6	1.8	25.9	1232
13x2x0.75	0.6	1.5	1.6	1.8	26.3	1278
14x2x0.75	0.6	1.5	1.6	1.8	27.0	1328
15x2x0.75	0.6	1.5	1.6	1.8	27.7	1377
20x2x0.75	0.6	1.7	1.6	2.0	31.1	1668
25x2x0.75	0.6	2.0	2.0	2.0	35.0	2199
30x2x0.75	0.6	2.0	2.0	2.0	37.1	2428
35x2x0.75	0.6	2.2	2.0	2.2	39.7	2745
40x2x0.75	0.6	2.2	2.0	2.2	41.6	2948
45x2x0.75	0.6	2.2	2.0	2.2	43.4	3176
50x2x0.75	0.6	2.2	2.5	2.2	46.1	3794

NYSLYO NYSLYCYO MSR - Y (ST) Y MSR-Y (ST) YRY MSR - Y (ST) Y MSR - Y (ST) Y - PIMF
MSR 2X(ST)H - PIMF MSR - Y (ST) YRY MSR - Y (ST) YRY - PIMF MSR-2X(ST)HRH - PIMF

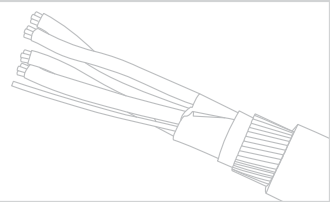




Armoured Multi-Pair/Triple Screened Instrument Cables MSR - Y (ST) YRY



No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Inner Layer Thickness	Armour Wire dia.	Nominal Sheath Thickness	Overall dia. (Approx.)	Total Weight (Approx)
mm ²	mm	mm	mm	mm	mm	kg/km
1x2x1	0.6	0.8	0.9	1.4	11.6	256
2x2x1	0.6	1.2	0.9	1.4	14.3	373
3x2x1	0.6	1.3	1.25	1.6	17.1	562
4x2x1	0.6	1.3	1.25	1.6	18.4	637
5x2x1	0.6	1.3	1.25	1.6	19.6	712
6x2x1	0.6	1.5	1.6	1.8	22.1	957
7x2x1	0.6	1.5	1.6	1.8	23.1	1033
8x2x1	0.6	1.5	1.6	1.8	23.9	1089
9x2x1	0.6	1.5	1.6	1.8	24.9	1165
10x2x1	0.6	1.5	1.6	1.8	25.6	1221
11x2x1	0.6	1.7	1.6	1.9	27.0	1327
12x2x1	0.6	1.7	1.6	1.9	27.7	1400
13x2x1	0.6	1.7	1.6	1.9	28.2	1453
14x2x1	0.6	1.7	1.6	1.9	28.9	1510
15x2x1	0.6	1.7	1.6	1.9	29.7	1567
20x2x1	0.6	1.7	2.0	2.0	33.4	2086
25x2x1	0.6	2.0	2.0	2.1	37.0	2462
30x2x1	0.6	2.0	2.0	2.1	39.2	2722
35x2x1	0.6	2.2	2.0	2.4	42.2	3094
40x2x1	0.6	2.2	2.5	2.4	45.2	3723
45x2x1	0.6	2.2	2.5	2.4	47.2	4025
50x2x1	0.6	2.2	2.5	2.4	48.9	4283
1x2x1.5	0.6	0.8	0.9	1.4	12.2	283
2x2x1.5	0.6	1.2	1.25	1.4	15.9	506
3x2x1.5	0.6	1.3	1.25	1.6	18.2	638
4x2x1.5	0.6	1.3	1.25	1.6	19.6	726
5x2x1.5	0.6	1.3	1.6	1.6	21.6	950
6x2x1.5	0.6	1.5	1.6	1.8	23.6	1076
7x2x1.5	0.6	1.5	1.6	1.8	24.7	1164
8x2x1.5	0.6	1.5	1.6	1.8	25.5	1248
9x2x1.5	0.6	1.5	1.6	1.8	26.6	1337
10x2x1.5	0.6	1.5	1.6	1.8	27.5	1421
11x2x1.5	0.6	1.7	1.6	1.9	28.9	1541
12x2x1.5	0.6	1.7	1.6	1.9	29.7	1611
13x2x1.5	0.6	1.7	1.6	1.9	30.3	1675
14x2x1.5	0.6	1.7	1.6	1.9	31.1	1761
15x2x1.5	0.6	1.7	1.6	1.9	32.0	1846
20x2x1.5	0.6	1.7	2.0	2.0	36.0	2446
25x2x1.5	0.6	2.0	2.0	2.1	39.9	2887
30x2x1.5	0.6	2.0	2.0	2.1	42.4	3231
35x2x1.5	0.6	2.2	2.5	2.4	46.7	4065
40x2x1.5	0.6	2.2	2.5	2.4	48.9	4426
45x2x1.5	0.6	2.2	2.5	2.4	51.1	4748
50x2x1.5	0.6	2.2	2.5	2.4	53.1	5103



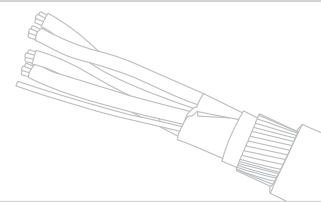


Armoured Multi-Pair/Triple Screened Instrument Cables MSR - Y (ST) YRY



No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Inner Layer Thickness	Armour Wire Dia.	Nominal Sheath Thickness	Overall Dia. (Approx.)	Total Weight (Approx.)
mm ²	mm	mm	mm	mm	mm	kg/km
1x3x0.5	0.6	1.2	0.9	1.3	11.7	266
2x3x0.5	0.6	1.3	1.25	1.5	17.5	549
3x3x0.5	0.6	1.4	1.25	1.5	18.5	611
4x3x0.5	0.6	1.4	1.25	1.6	19.9	692
5x3x0.5	0.6	1.4	1.6	1.7	22.0	901
6x3x0.5	0.6	1.5	1.6	1.7	23.6	1004
7x3x0.5	0.6	1.5	1.6	1.7	23.6	1030
8x3x0.5	0.6	1.6	1.6	1.8	27.0	1221
9x3x0.5	0.6	1.6	1.6	1.9	28.7	1332
10x3x0.5	0.6	1.6	1.6	1.9	28.7	1358
11x3x0.5	0.6	1.6	1.6	1.9	28.7	1384
12x3x0.5	0.6	1.7	1.6	1.9	29.6	1450
13x3x0.5	0.6	1.7	1.6	1.9	30.8	1527
14x3x0.5	0.6	1.7	1.6	1.9	30.8	1553
15x3x0.5	0.6	1.8	2.0	2.0	33.3	1909
20x3x0.5	0.6	1.9	2.0	2.1	36.6	2224
25x3x0.5	0.6	2.0	2.0	2.2	40.0	2570
30x3x0.5	0.6	2.0	2.0	2.3	42.1	2830
35x3x0.5	0.6	2.1	2.5	2.4	46.1	3535
40x3x0.5	0.6	2.2	2.5	2.5	48.0	3815
45x3x0.5	0.6	2.3	2.5	2.6	51.5	4212
50x3x0.5	0.6	2.3	2.5	2.6	52.1	4396
1x3x0.75	0.6	1.2	0.9	1.3	12.2	290
2x3x0.75	0.6	1.4	1.25	1.5	18.7	615
3x3x0.75	0.6	1.4	1.25	1.6	19.7	679
4x3x0.75	0.6	1.4	1.6	1.6	21.6	897
5x3x0.75	0.6	1.5	1.6	1.7	23.4	1019
6x3x0.75	0.6	1.5	1.6	1.8	25.1	1120
7x3x0.75	0.6	1.5	1.6	1.8	25.1	1154
8x3x0.75	0.6	1.7	1.6	1.9	29.0	1388
9x3x0.75	0.6	1.7	1.6	1.9	30.7	1500
10x3x0.75	0.6	1.7	1.6	1.9	30.7	1534
11x3x0.75	0.6	1.7	1.6	1.9	30.7	1568
12x3x0.75	0.6	1.7	1.6	2.0	31.7	1663
13x3x0.75	0.6	1.8	2.0	2.0	34.0	2005
14x3x0.75	0.6	1.8	2.0	2.0	34.0	2040
15x3x0.75	0.6	1.8	2.0	2.1	35.6	2166
20x3x0.75	0.6	1.9	2.0	2.2	39.2	2558
25x3x0.75	0.6	2.1	2.0	2.3	43.1	2975
30x3x0.75	0.6	2.1	2.5	2.5	46.6	3727
35x3x0.75	0.6	2.2	2.5	2.6	49.9	4122
40x3x0.75	0.6	2.3	2.5	2.6	51.7	4430
45x3x0.75	0.6	2.4	2.5	2.8	55.7	4948
50x3x0.75	0.6	2.4	2.5	2.8	56.4	5176

NYSLYO NYSLYCYO MSR - Y (ST) Y MSR-Y (ST) YRY MSR - Y (ST) Y MSR - Y (ST) Y - PIMF
 MSR 2X(ST)H - PIMF MSR - Y (ST) YRY MSR - Y (ST) YRY - PIMF MSR-2X(ST)HRH - PIMF

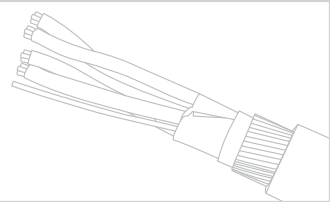




Armoured Multi-Pair/Triple Screened Instrument Cables MSR - Y (ST) YRY



No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Inner Layer Thickness	Armour Wire Dia.	Nominal Sheath Thickness	Overall Dia. (Approx.)	Total Weight (Approx.)
mm ²	mm	mm	mm	mm	mm	kg/km
1x3x1	0.6	1.2	0.9	1.3	12.6	308
2x3x1	0.6	1.4	1.25	1.6	19.6	661
3x3x1	0.6	1.4	1.25	1.6	20.5	735
4x3x1	0.6	1.5	1.6	1.7	23.0	995
5x3x1	0.6	1.5	1.6	1.7	24.5	1093
6x3x1	0.6	1.6	1.6	1.8	26.5	1246
7x3x1	0.6	1.6	1.6	1.8	26.5	1289
8x3x1	0.6	1.7	1.6	1.9	30.5	1527
9x3x1	0.6	1.8	2.0	2.0	33.5	1909
10x3x1	0.6	1.8	2.0	2.0	33.5	1951
11x3x1	0.6	1.8	2.0	2.0	33.5	1994
12x3x1	0.6	1.8	2.0	2.1	34.5	2093
13x3x1	0.6	1.8	2.0	2.1	35.9	2210
14x3x1	0.6	1.8	2.0	2.1	35.9	2253
15x3x1	0.6	1.9	2.0	2.2	37.9	2431
20x3x1	0.6	2.0	2.0	2.3	41.6	2875
25x3x1	0.6	2.1	2.5	2.5	46.8	3768
30x3x1	0.6	2.2	2.5	2.5	49.3	4166
35x3x1	0.6	2.3	2.5	2.7	53.0	4675
40x3x1	0.6	2.4	2.5	2.7	55.0	5030
45x3x1	0.6	2.5	2.5	2.9	59.2	5603
50x3x1	0.6	2.5	2.5	2.9	60.0	5875
1x3x1.5	0.6	1.2	0.9	1.4	13.4	348
2x3x1.5	0.6	1.4	1.6	1.6	21.6	877
3x3x1.5	0.6	1.5	1.6	1.7	23.0	1001
4x3x1.5	0.6	1.5	1.6	1.7	24.6	1131
5x3x1.5	0.6	1.6	1.6	1.8	26.6	1286
6x3x1.5	0.6	1.6	1.6	1.9	28.7	1435
7x3x1.5	0.6	1.6	1.6	1.9	28.7	1494
8x3x1.5	0.6	1.8	2.0	2.1	34.2	2045
9x3x1.5	0.6	1.9	2.0	2.1	36.5	2231
10x3x1.5	0.6	1.9	2.0	2.1	36.5	2290
11x3x1.5	0.6	1.9	2.0	2.1	36.5	2348
12x3x1.5	0.6	1.9	2.0	2.2	37.6	2492
13x3x1.5	0.6	1.9	2.0	2.2	39.2	2630
14x3x1.5	0.6	1.9	2.0	2.2	39.2	2688
15x3x1.5	0.6	2.0	2.0	2.3	41.3	2891
20x3x1.5	0.6	2.1	2.5	2.5	46.7	3873
25x3x1.5	0.6	2.3	2.5	2.6	51.3	4515
30x3x1.5	0.6	2.4	2.5	2.7	54.2	5028
35x3x1.5	0.6	2.5	2.5	2.8	58.2	5652
40x3x1.5	0.6	2.6	2.5	2.9	60.5	6125
45x3x1.5	0.6	2.7	2.5	3.1	65.2	6804
50x3x1.5	0.6	2.7	2.5	3.1	66.1	7161





Armoured Multi-Pair Individual Screened Instrument Cables MSR - Y (ST) YRY - PIMF

● **Rated Voltage:** 300-500 V

● **Applicable Standard:** BS 5308, BS-EN 50288-7

● **Construction :**

CU/PVC/ISCR/OSCR/PVC/SWA/PVC

Conductor: Plain Annealed Copper - Class (1,2,5)

Insulation Type: P.V.C

Twisted Pair & Screen: Polyester tape + Drain Wire + Aluminum Foil

Screen Over Laying Up Pairs: Polyester tape + Drain Wire + Aluminum Foil

Inner Sheath: P.V.C

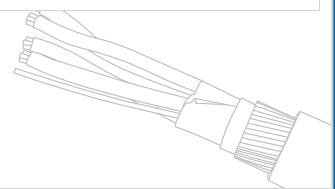
Armour: Galvanized Steel Wire

Sheath: P.V.C

● **Application:**

Transmission of Analog and Digital Signals in Instrumentation System, the cables are suitable to be laid indoors and outdoors, on cable trays or in pipes or in earth.

No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Inner Layer Thickness	Armour Wire Dia.	Nominal Sheath Thickness	Overall Dia. (Approx.)	Total Weight (Approx.)
mm ²	mm	mm	mm	mm	mm	kg/km
1x2x0.5	0.6	0.8	0.9	1.3	10.6	221
2x2x0.5	0.6	1.1	1.25	1.5	17.0	521
3x2x0.5	0.6	1.2	1.25	1.6	18.1	590
4x2x0.5	0.6	1.2	1.25	1.6	19.3	659
5x2x0.5	0.6	1.2	1.25	1.6	20.5	730
6x2x0.5	0.6	1.3	1.6	1.8	23.2	970
7x2x0.5	0.6	1.3	1.6	1.8	23.2	995
8x2x0.5	0.6	1.3	1.6	1.8	26.1	1143
9x2x0.5	0.6	1.3	1.6	1.8	27.7	1238
10x2x0.5	0.6	1.3	1.6	1.8	27.7	1263
11x2x0.5	0.6	1.5	1.6	1.8	28.1	1326
12x2x0.5	0.6	1.5	1.6	1.8	28.8	1377
13x2x0.5	0.6	1.5	1.6	1.8	29.9	1451
14x2x0.5	0.6	1.5	1.6	1.8	29.9	1476
15x2x0.5	0.6	1.5	1.6	1.8	31.2	1553
20x2x0.5	0.6	1.5	2.0	1.9	35.0	2073
25x2x0.5	0.6	1.7	2.0	2.1	38.8	2436
30x2x0.5	0.6	1.7	2.0	2.1	40.6	2642
35x2x0.5	0.6	2.2	2.5	2.4	45.9	3497
40x2x0.5	0.6	2.2	2.5	2.4	47.3	3731
45x2x0.5	0.6	2.2	2.5	2.4	50.3	4036
50x2x0.5	0.6	2.2	2.5	2.4	51.0	4213
1x2x0.75	0.6	0.8	0.9	1.3	10.9	236
2x2x0.75	0.6	1.1	1.25	1.5	17.9	563
3x2x0.75	0.6	1.2	1.25	1.6	19.0	639
4x2x0.75	0.6	1.2	1.25	1.6	20.3	716
5x2x0.75	0.6	1.2	1.6	1.6	22.4	927
6x2x0.75	0.6	1.3	1.6	1.8	24.4	1057
7x2x0.75	0.6	1.3	1.6	1.8	24.4	1087
8x2x0.75	0.6	1.3	1.6	1.8	27.7	1261
9x2x0.75	0.6	1.3	1.6	1.8	29.3	1365
10x2x0.75	0.6	1.3	1.6	1.8	29.3	1395
11x2x0.75	0.6	1.5	1.6	1.9	29.9	1479
12x2x0.75	0.6	1.5	1.6	1.9	30.7	1538
13x2x0.75	0.6	1.5	1.6	1.9	31.9	1620
14x2x0.75	0.6	1.5	1.6	1.9	31.9	1651
15x2x0.75	0.6	1.5	2.0	1.9	34.2	1977
20x2x0.75	0.6	1.7	2.0	2.0	37.8	2351
25x2x0.75	0.6	2.0	2.0	2.2	42.1	2800
30x2x0.75	0.6	2.0	2.5	2.2	45.1	3475
35x2x0.75	0.6	2.2	2.5	2.5	49.0	3908
40x2x0.75	0.6	2.2	2.5	2.5	50.6	4176
45x2x0.75	0.6	2.2	2.5	2.5	53.9	4557
50x2x0.75	0.6	2.2	2.5	2.5	54.6	4766

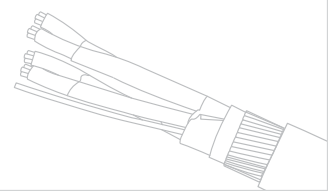




Armoured Individual Screened Instrument Cables MSR - Y (ST) YRY - PIMF



No. of Cores & Cross Section	Nominal Insulation Thickness	Nominal Inner Layer Thickness	Armour Wire Dia.	Nominal Sheath Thickness	Overall Dia. (Approx.)	Total Weight (Approx.)
mm ²	mm	mm	mm	mm	mm	kg/km
1x2x1	0.6	0.8	0.9	1.4	11.5	255
2x2x1	0.6	1.2	1.25	1.6	19.0	619
3x2x1	0.6	1.3	1.25	1.7	20.2	704
4x2x1	0.6	1.3	1.6	1.7	22.3	915
5x2x1	0.6	1.3	1.6	1.7	23.7	1021
6x2x1	0.6	1.5	1.6	1.9	26.1	1188
7x2x1	0.6	1.5	1.6	1.9	26.1	1224
8x2x1	0.6	1.5	1.6	1.9	29.6	1412
9x2x1	0.6	1.5	1.6	1.9	31.4	1525
10x2x1	0.6	1.5	1.6	1.9	31.4	1562
11x2x1	0.6	1.7	1.6	2.0	32.0	1654
12x2x1	0.6	1.7	2.0	2.0	33.6	1953
13x2x1	0.6	1.7	2.0	2.0	34.9	2063
14x2x1	0.6	1.7	2.0	2.0	34.9	2099
15x2x1	0.6	1.7	2.0	2.0	36.4	2212
20x2x1	0.6	1.7	2.0	2.1	40.0	2592
25x2x1	0.6	2.0	2.5	2.4	45.7	3510
30x2x1	0.6	2.0	2.5	2.4	47.8	3815
35x2x1	0.6	2.2	2.5	2.7	51.9	4330
40x2x1	0.6	2.2	2.5	2.7	53.7	4669
45x2x1	0.6	2.2	2.5	2.7	57.2	5088
50x2x1	0.6	2.2	2.5	2.7	58.0	5328
1x2x1.5	0.6	0.8	0.9	1.4	12.1	282
2x2x1.5	0.6	1.2	1.25	1.6	20.2	687
3x2x1.5	0.6	1.3	1.6	1.7	22.2	912
4x2x1.5	0.6	1.3	1.6	1.7	23.7	1029
5x2x1.5	0.6	1.3	1.6	1.7	25.4	1148
6x2x1.5	0.6	1.5	1.6	1.9	27.9	1332
7x2x1.5	0.6	1.5	1.6	1.9	27.9	1379
8x2x1.5	0.6	1.5	1.6	1.9	31.8	1601
9x2x1.5	0.6	1.5	2.0	1.9	34.6	1978
10x2x1.5	0.6	1.5	2.0	1.9	34.6	2025
11x2x1.5	0.6	1.7	2.0	2.0	35.2	2142
12x2x1.5	0.6	1.7	2.0	2.0	36.1	2230
13x2x1.5	0.6	1.7	2.0	2.0	37.6	2353
14x2x1.5	0.6	1.7	2.0	2.0	37.6	2400
15x2x1.5	0.6	1.7	2.0	2.0	39.3	2553
20x2x1.5	0.6	1.7	2.0	2.1	43.2	2996
25x2x1.5	0.6	2.0	2.5	2.4	49.3	4018
30x2x1.5	0.6	2.0	2.5	2.4	51.7	4422
35x2x1.5	0.6	2.2	2.5	2.7	56.1	5010
40x2x1.5	0.6	2.2	2.5	2.7	58.0	5409
45x2x1.5	0.6	2.2	2.5	2.7	62.0	5893
50x2x1.5	0.6	2.2	2.5	2.7	62.8	6191





Armoured Multi-pair Fire Resistance Individual Screened Instrument Cables MSR – 2X(st)HRH – PIMF

● **Rated Voltage:** 300-500 V

● **Applicable Standard:** gen. to BS 5308, part 1, type 2, BS-EN 50288-7

● **Construction:**

CU or TiCU/MGT/PET/XLPE/ISCR/OSCR/HFSL/SWA/HFSL

Conductor: plain annealed copper or tinned copper

Flame barrier: Mica glass tape

Insulation: XLPE

Core identification: according to BS 5308 part 1

Pair screen: Aluminum Foil + copper drain wire 0.5mm² + Polyester tape

Wrapping: 1 layer of plastic tape

Overall screen: Aluminum Foil + copper or tinned copper drain wire 0.5mm² + Polyester tape

Bedding: Halogen free, Low smoke, Flame retardant – HFSL

Armor: galvanized round steel wire

Outer sheath: Halogen free, Low smoke, Flame retardant – HFSL

Color: Is black, or blue for intrinsically safety systems

● **Technical data:**

1) Temperature: -30°C to + 90°C

2) Maximum short circuit temperature: 250 °C (5 seconds Max)

3) Test voltage: 1.0 kv rms or 2.4 kvdc for 1 minutes

4) Conductor resistance: As per class 2 of IEC 60228

5) Minimum insulation resistance: 5000 MΩ km

6) Mutual capacitance at 1.0 kHz: 115 nf/km for one and two pair, 75 nf/km for other cable.

7) L/R (ratio): 25μHΩ for 0.75 mm², 1.0 mm² - 40μHΩ for 1.5 mm² - 70 μHΩ for 2.5mm²

8) Flame retardant: Acc. IEC 60331-1

9) Flame propagation test: Acc. IEC 60332-3

10) Fire resistance test: Acc. IEC 60331-21

11) Smoke density test: Acc. IEC 61034

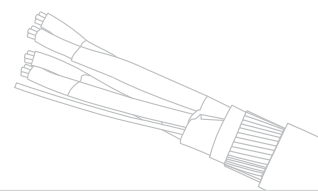
12) Halogen content test: Acc. IEC 60754-2

● **Application:**

these cables can be used for transmission of analogue and digital signals in instrument and control systems.

No. of Cores & Cross Section	No. Strand x diameter	Insulation Thickness	Armour Wire Dia.	Sheath Thickness	Overall Dia. (Approx.)	Total Weight (Approx.)
mm ²	No. x mm	mm	mm	mm	mm	kg/km
5x1.5	7x0.53	0.7	0.9	1.8	18.2	540
7x1.5	7x0.53	0.7	1.2	1.8	19.5	650
10x1.5	7x0.53	0.7	1.2	1.8	24.3	830
12x1.5	7x0.53	0.7	1.6	1.8	25.0	1070
19x1.5	7x0.53	0.7	1.6	1.8	28.5	1380
27x1.5	7x0.53	0.7	1.6	1.9	34.0	1980
37x1.5	7x0.53	0.7	2.0	1.9	38.4	2520
48x1.5	7x0.53	0.7	2.0	2.0	43.6	3040
5x2.5	7x0.67	0.7	0.9	1.8	19.3	620
7x2.5	7x0.67	0.7	1.2	1.8	21.8	830
10x2.5	7x0.67	0.7	1.6	1.8	26.4	1140
12x2.5	7x0.67	0.7	1.6	1.8	27.2	1250
19x2.5	7x0.67	0.7	1.6	1.8	32.6	1840
27x2.5	7x0.67	0.7	2.0	1.8	37.6	2520
37x2.5	7x0.67	0.7	2.0	1.9	42.0	3100
48x2.5	7x0.67	0.7	2.0	2.1	48.5	4140

NYSLYO NYSLYCYO MSR - Y (ST) Y MSR-Y (ST) YRY MSR - Y (ST) Y MSR - Y (ST) Y - PIMF
MSR 2X(ST)H - PIMF MSR - Y (ST) YRY MSR - Y (ST) YRY - PIMF MSR-2X(ST)HRH - PIMF



Note:

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....



Telecommunication & Coaxial Cables

4

CONTENTS

Building Wire & Cables

Power Cables (0.6-1)KV

Instrument & Control Cables

Telecommunication & Coaxial Cables

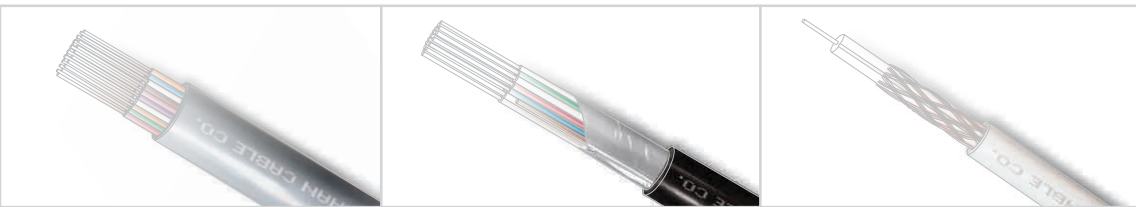
1- Jumper Wire	Y	71
	YV	71
2- Telephone Cables	A2Y (ST) 2Y	72
	JYY	73
	JY-(ST) Y	74
3- Self Supporting		75
4- Interphone Cables		75
5- Coaxial Cables		76

MV & HV Power Cables

Aerial Cables

Rubber Cables

Technical information & Tables



Jumper Wire (Y)

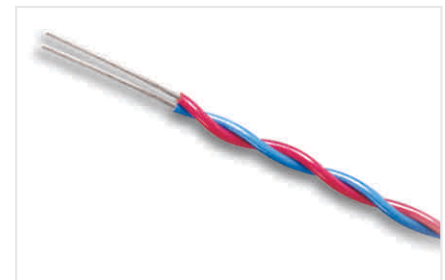
- **Operating Voltage:** 600 v
- **Applicable Standard:** VDE 0815 & 812
- **Construction :**
Solid plain (or tinned) annealed copper wire
PVC insulation type YI 1
- **Min. Insulation Resistance at 20°C :** 20 Mohm.Km
- **Application:**
Single core for use in small apparatus , switching and intercom system and for data transmission



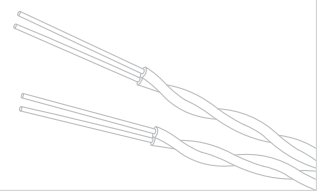
No. of wires conductor /core dia.	Insulation Thickness	SheathThickness	Overall Dia. (Approx.)	Total Weight (Approx.)
	mm	mm	kg/km	ohms/km
1x0.6/1.4	0.4	1.4	4.2	65
2x0.6/1.4	0.4	2.8	8.5	
3x0.6/1.4	0.4	3.0	12.8	
4x0.6/1.4	0.4	3.4	17.0	
1x0.8/1.6	0.4	1.6	6.5	36.6
2x0.8/1.6	0.4	3.2	13.2	
3x0.8/1.6	0.4	3.4	19.9	
4x0.8/1.6	0.4	3.9	26.5	

Jumper Wire (YV)

- **Operating Voltage:** 500V for 0.9 core Dia.
900V for 1.1 to 2.2 core Dia.
1500V for 2.8 core Dia.
- **Applicable Standard:** VDE 0812 & 815
- **Construction :**
Solid tinned annealed copper wire
PVC insulation type YI 3
- **Application:**
For use in telephone wiring and signal installation in premises



No. of wires conductor /core dia.	Insulation Thickness	SheathThickness	Overall Dia. (Approx.)	Total Weight (Approx.)
	mm	mm	kg/km	ohms/km
1x0.5/09	0.2	0.9	2.5	92.2
2x0.5/09	0.2	1.8	5.0	95.0
3x0.5/09	0.2	2.0	7.5	95.0
4x0.5/09	0.2	2.2	10	95.0
1x0.5/1.1	0.3	1.1	3.0	92.2
2x0.5/1.1	0.3	2.2	6.0	95.0
1x0.6/1.1	0.25	1.1	3.7	64.0
2x0.6/1.1	0.25	2.2	7.5	66.0
3x0.6/1.1	0.25	2.4	11.0	66.0
4x0.6/1.1	0.25	2.7	15.0	66.0
1x0.6/1.4	0.4	1.4	4.5	65.0
2x0.6/1.4	0.4	2.8	9.0	66.0
3x0.6/1.4	0.4	3.0	13.5	66.0
4x0.6/1.4	0.4	3.4	18.0	66.0
5x0.6/1.4	0.4	3.8	23.0	66.0
1x0.8/1.4	0.3	1.4	6.0	36.0
2x0.8/1.4	0.3	2.8	12.0	36.7
1x1.0/1.8	0.4	1.8	10.0	22.8
2x1.0/1.8	0.4	3.6	20.0	23.3
1x1.4/2.2	0.4	2.2	17.5	11.6
1x1.8/2.8	0.5	2.8	28.0	7.1



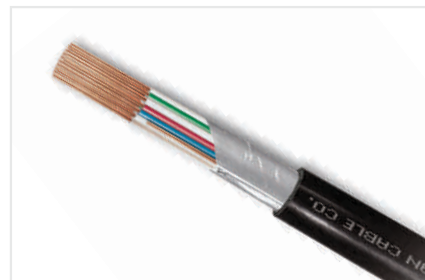


Telephone Cables A2Y (ST) 2Y

Similar to VDE 0816 & IEC 60708

Construction :

Solid plain (or tinned) annealed copper conductor
 HDPE insulation type III ASTM D 1248
 Static Screen : polyester tape + drain wire + AL polyester
 LDPE black sheath type I ASTM D1248
 Galvanized steel wire (if required)
 Outer sheath: PE black



Application:

For use in outdoor telecommunication installation in dry and damp places, but also in internal network open under ground where better mechanical protection is required we offer armoured with galvanized steel wire .

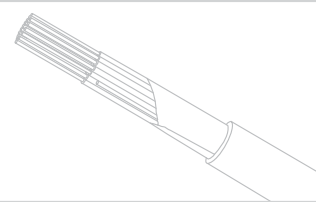
No. of Pairs	Conductor dia.	Overall Dia. (Approx.)	Total Weight (Approx.)	Approx. Cable Weight
	mm	mm	mm	kg/km
2	0.4	1.0	4.8	22
4	0.4	1.0	5.5	28
6	0.4	1.0	6.1	36
8	0.4	1.0	6.4	40
10	0.4	1.0	7.8	53
20	0.4	1.2	8.4	89
30	0.4	1.4	11.4	129
40	0.4	1.4	11.5	158
50	0.4	1.4	13.4	191
100	0.4	1.8	18.6	377
2	0.5	1.0	5.8	30
4	0.5	1.0	6.5	39
6	0.5	1.0	7.5	50
8	0.5	1.0	7.9	63
10	0.5	1.0	9.1	74
20	0.5	1.2	11.3	135
30	0.5	1.4	14.2	202
40	0.5	1.4	15.8	258
50	0.5	1.4	16.5	302
100	0.5	1.8	24.2	580
2	0.6	1.0	6.4	34
4	0.6	1.0	6.6	46
6	0.6	1.0	8.1	63
8	0.6	1.0	8.7	80
10	0.6	1.0	9.4	100
20	0.6	1.2	11.9	176
30	0.6	1.4	14.25	258
40	0.6	1.4	15.8	327
50	0.6	1.4	17.8	400
100	0.6	1.8	28.8	783

Electrical Details	0.4	0.5	0.6	0.8	0.9	
Conductor resistance (Max.av.)	144	92.1	63.9	35.3	28	ohm/km
Insulation resistance (Min.)	5000	5000	5000	5000	5000	Mohm.km
Mutual capacitance (Max.av)	56	56	56	56	59	pF/m
Capacitance unbalance(Max.av)	150	150	150	150	150	pF/500m
Test voltage core-core (at 1min.)	500	500	500	500	500	V D.C
Core-screen (at 1 min.)	1500	1500	1500	2250	2250	V D.C

Number of cores upon request

Conductor size 0.8 & 0.9mm upon request

Detail cable construction upon request

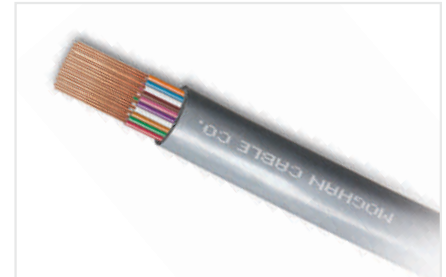


Telephone Cables JYY

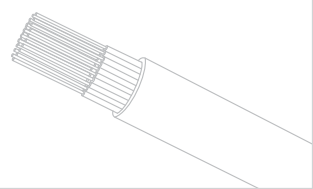
● **Applicable Standard:** VDE 0815 & 189

● **Construction :**
Solid plain (or tinned) annealed copper conductor
PVC insulation type YJ 1
PVC sheath type YM 1

● **Application:**
Used in telephone and signal transmission, suitable for installation in dry & damp indoor environment.
Laying under ground is not permissible



No. of Pairs	Conductor dia.	Insulation Thickness	Sheath Thickness	Overall Dia. (Approx.)	Total Weight (Approx.)
	mm	mm	mm	mm	kg/km
2	0.5	0.2	0.8	4.8	23
4	0.5	0.2	0.8	6.1	37
6	0.5	0.2	1.0	7.4	55
10	0.5	0.2	1.0	7.7	75
20	0.5	0.2	1.0	9.9	134
30	0.5	0.2	1.2	12.0	196
40	0.5	0.2	1.2	13.5	252
50	0.5	0.2	1.2	14.8	313
60	0.5	0.2	1.4	16.3	378
80	0.5	0.2	1.4	18.5	486
100	0.5	0.2	1.4	20.5	598



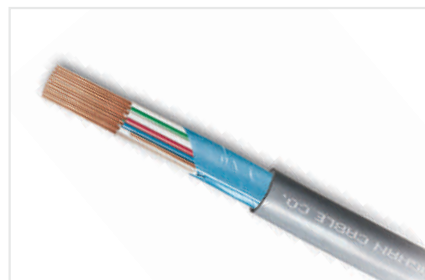


Telephone Cables JY-(ST) Y

● **Applicable Standard:** IEC 0189

● **Construction :**

Solid plain (or tinned) annealed copper conductor
PVC insulation type YJ 1
Static screen : polyester tape + drain wire + AL polyester tape
PVC sheath type YM 1

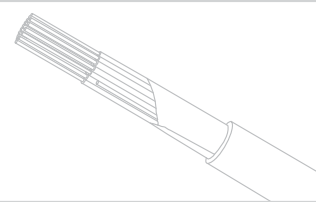


● **Application:**

For use in indoor telecommunication installation in dry and damp places, but also in the for fixed installation on outer wall of building. laying under ground is not permissible .

No. of Pairs	Conductor dia.	Insulation Thickness	Sheath Thickness	Overall Dia. (Approx.)	Total Weight (Approx.)
	mm	mm	mm	mm	kg/km
2	0.5	0.2	0.6	5.2	28
4	0.5	0.2	0.7	6.1	41
6	0.5	0.2	0.7	6.8	52
8	0.5	0.2	0.7	7.1	62
10	0.5	0.2	0.7	8.2	83
20	0.5	0.2	1.0	9.9	134
30	0.5	0.2	1.2	12	196
40	0.5	0.2	1.2	13.4	252
50	0.5	0.2	1.2	14.8	313
100	0.5	0.2	1.6	23	700
2	0.6	0.2	0.7	5.6	34
4	0.6	0.2	0.7	6.5	50
6	0.6	0.2	0.7	7.4	68
8	0.6	0.2	0.7	7.9	82
10	0.6	0.2	0.7	8.9	103
20	0.6	0.2	1.0	11.3	193
30	0.6	0.2	1.0	13.3	271
40	0.6	0.2	1.2	15.8	342
50	0.6	0.2	1.2	17.6	423
100	0.6	0.2	1.6	25.0	850

Electrical Details	0.5	0.6	
Conductor Resistance (Max)	96.5	67	ohm/km
Insulation Resistance (Max)	500	500	mohm.km
Mutual Capacitance (Max)	120	120	pF/m
Capacitance Unbalance (Max)	400	400	pF/500m
Test Voltage (at 1 min.)	1500	1500	V D.C



Self Supporting

● **Applicable Standard:** IEC 708

● **Construction :**

Solid plain annealed conductor
PE Type III ASTM-D 1248
Two insulated conductor twisted together
Pairs in 25 pair units system
Pairs (or units) laid-up together to form a cable core &
25 pair units is distinguished by colour binders.
A polyester tape and aluminium-polyester tape with drain
wire form overall screen
Aluminium tape (0.2 mm) coated with a copolymer
(only for moisture barrier cable)
High tensile 7-strand steel wires as messenger for Aerial
Self-Support cable
PE Type I ASTM-D 1248



● **Application:**

Aerial (unfilled) Self-Support cables with integral suspension
strand suitable for aerial installation and they are used for
transmission of signals in external networks .

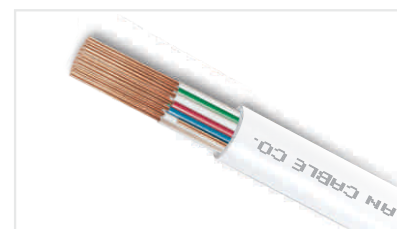
No. of Pairs	Conductor dia.	Support No. & dia.	Sheath Thickness	Overall Dia. (Approx.)	Total Weight (Approx.)
	mm	mm	mm	mm	kg/km
10	0.4	7 x 0.9	1.4	16.3 x 9.1	140
15	0.4	7 x 0.9	1.4	17.4 x 8.9	151
20	0.4	7 x 0.9	1.4	18.3 x 10.3	190
30	0.4	7 x 0.9	1.4	19.8 x 12.1	210
40	0.4	7 x 0.9	1.4	21.0 x 12.8	250
50	0.4	7 x 0.9	1.4	22.3 x 14	307
60	0.4	7 x 0.9	1.4	23.3 x 14.8	310
70	0.4	7 x 1.2	1.4	25.1 x 15.8	391

NOTE : CONDUCTOR SIZE : 0.4, 0.6 , 0.8

Interphone Cables

● **Construction :**

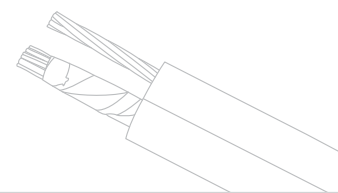
Solid Plain Annealed Copper Conductor 0.5 mm
Earth wire of bare copper wire (optional)
PVC Insulation Type TI 1 BS 6746
PVC Sheath Type TM 1 or Type 6 BS 6746



● **Application:**

These cables are used for internal wiring for interphone
systems in buildings .

No. of Cores	Conductor dia.	Insulation Thickness	Sheath Thickness	Overall Dia. (Approx.)	Total Weight (Approx.)
	mm	mm	mm	mm	kg/km
2	0.5	0.2	0.6	3.1	13.5
4	0.5	0.2	0.6	3.95	21.4
6	0.5	0.2	0.6	4.5	26
8	0.5	0.2	0.6	5	32
10	0.5	0.2	0.6	5.4	39
12	0.5	0.2	0.6	5.75	44
Electrical Details			0.5		
DC Resistance (Max.)		95		Ohms/km	
Insulation Resistance (Min.)		50		Mohms.km @20° C	
Test voltage		1500		Vrms Spark Test	





High Frequency Coaxial Cables

Construction :

Inner Conductor : Plain Annealed Copper Conductor

Dielectric : Polyethylene

Shield : Plain or Tinned annealed Copper

Sheath : PVC

Application:

Radio Frequency Cables (RFC) are manufactured for application in high quality communication apparatus as well as leading wire for high frequency measuring instruments, TV down leads and localized transmitter-reciever units. Generally intended for military and civil application.



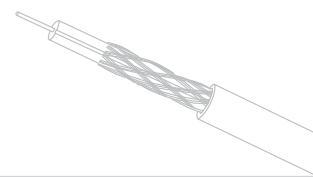
According to JIS C-3501

75 Ohms Coaxial Cables						
Type	Conductor No. & Diameter of Wires	Diameter Over Insulation	Sheath Thickness	Overall Dia. (Approx.)	Total Weight (Approx.)	Attenuation @ 10 MHz
	mm	mm	mm	mm	kg/km	db/km
2.5C-2V	1x0.4	2.4	0.5	4	17	45
3C-2V	1x0.5	3.1	0.8	5.4	41	42
3C-2W	1x0.5	3.1	1	6.5	68	40
3C-2T	1x0.5	3.1	1	7.4	1.3	40
5C-2V	1x0.8	4.9	0.9	7.4	71	27
5C-2W	1x0.8	4.9	1	8.3	102	27
7C-2V	7x0.4	7.3	1.1	10.4	141	22

50 Ohms Coaxial Cables						
Type	Conductor No. & Diameter of Wires	Diameter Over Insulation	Sheath Thickness	Overall Dia. (Approx.)	Total Weight (Approx.)	Attenuation @ 10 MHz
	mm	mm	mm	mm	kg/km	db/km
2.5D-2V	1x0.8	2.7	0.5	4.4	33	85
3D-2V	7x0.32	3.2	0.8	5.4	31	47
3D-2W	7x0.32	3.2	1	5.6	36	47
5D-2V	1x1.4	4.8	0.9	7.3	78	27
5D-2W	1x1.4	4.8	0.9	8	106	27
8D-2V	7x0.8	7.8	1.2	11.1	178	20
8D-2W	7x0.8	7.8	1.4	12.4	245	20

According to MIL-C-17

Type	Conductor No. & Diameter of Wires	Diameter Over Insulation	Sheath Thickness	Overall Dia. (Approx.)	Total Weight (Approx.)	Attenuation @ 10 MHz	Impedance
	mm	mm	mm	mm	kg/km	db/km	Ohms
RG-11	7x0.4	7.3	1	10.2	136	7	75
RG-58	19x0.18	2.96	0.72	4.95	36	17	50
RG-59	1x0.58	3.7	0.86	6.1	46	12	75
RG-62	1x0.8	3.71	0.8	6	47	10.5	93
RG-213	7x0.75	7.25	1.3	13	162	7	50
RG-216	7x0.4	5	1.3	11	187	7	75



Note:

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

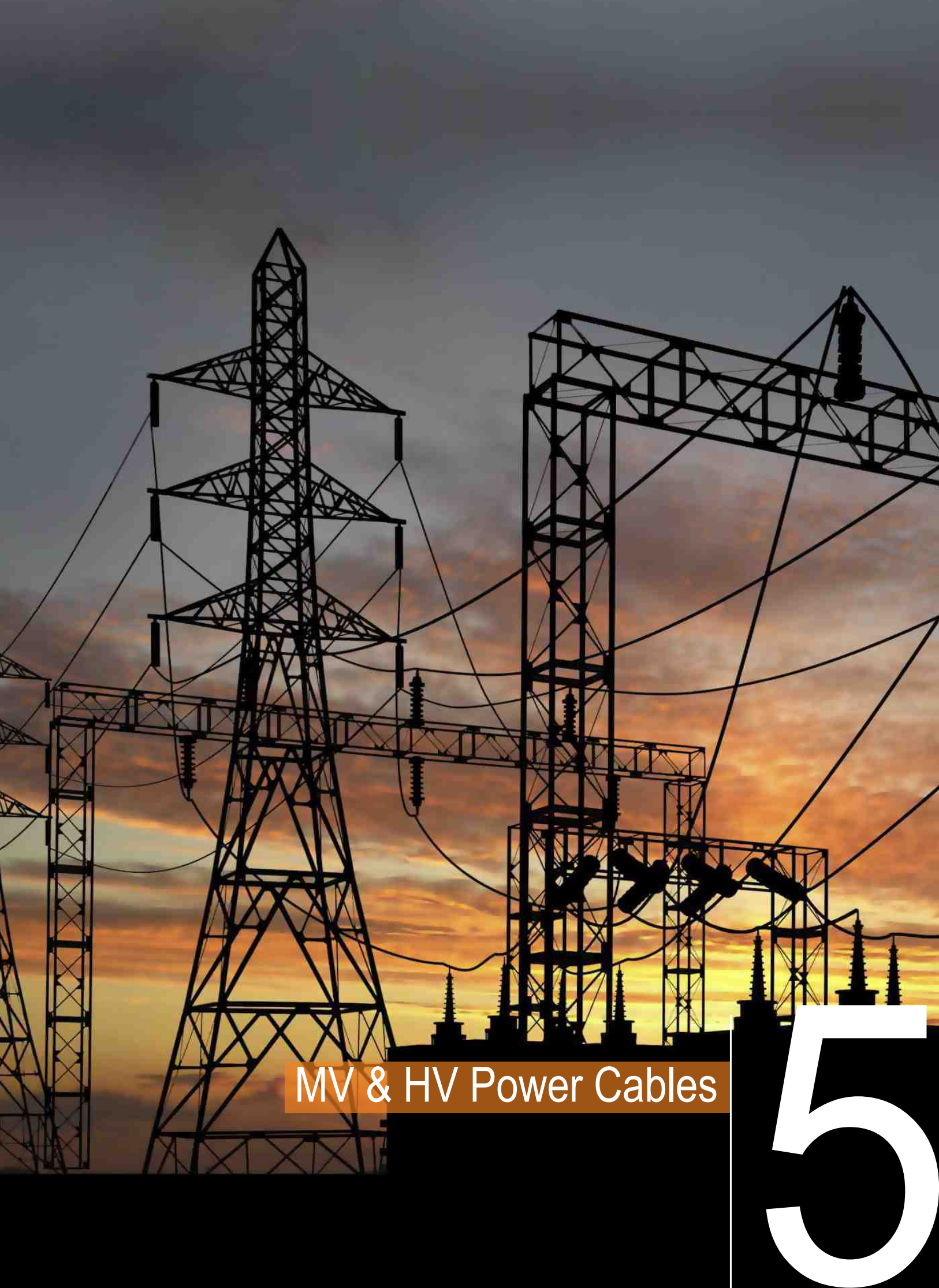
.....

.....

.....

.....

.....

The image shows a series of high-voltage power transmission towers and electrical equipment, including insulators and cross-arms, silhouetted against a dramatic sunset sky. The towers are constructed from metal lattice. The sky is filled with clouds, illuminated from below by the setting sun, creating a warm orange and yellow glow. The overall scene conveys a sense of industrial power and infrastructure.

MV & HV Power Cables

5

CONTENTS

Building Wire & Cables

Power Cables (0.6-1)KV

Instrument & Control Cables

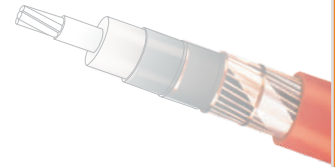
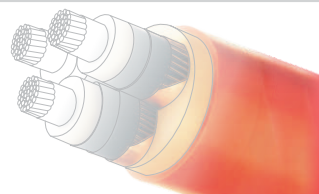
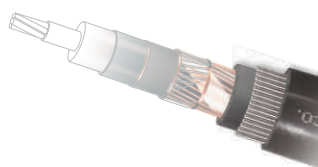
Telecommunication &
Coaxial Cables

MV & HV Power Cables

1- 3.6/6 KV	1-1 Unarmoured Power Cables	81
	1-2 Wire Armoured Power Cables	82
	1-3 Tape Armoured Power Cables	83
	1-4 ELECTRICAL CHARACTERISTICS	84
2- 6/10 KV	2-1 Unarmoured Power Cables	85
	2-2 Wire Armoured Power Cables	86
	2-3 Tape Armoured Power Cables	87
	2-4 ELECTRICAL CHARACTERISTICS	88
3- 12/20 KV	3-1 Unarmoured Power Cables	89
	3-2 Wire Armoured Power Cables	90
	3-3 Tape Armoured Power Cables	91
	3-4 ELECTRICAL CHARACTERISTICS	92
4- 18/30 KV	4-1 Unarmoured Power Cables	93
	4-2 Wire Armoured Power Cables	94
	4-3 Tape Armoured Power Cables	95
	4-4 ELECTRICAL CHARACTERISTICS	96
5- 36/63 KV	5-1 Unarmoured Power Cables	97
	5-2 Wire Armoured Power Cables	98
	5-3 Tape Armoured Power Cables	99
	5-4 ELECTRICAL CHARACTERISTICS	100
	6-1 Unarmoured Water Blocking Power Cables	101
	6-2 Wire Armoured Water Blocking Power Cables	102
	6-3 Tape Armoured Water Blocking Power Cables	103
	6-4 ELECTRICAL CHARACTERISTICS	104

Aerial Cables

Rubber Cables

Technical information &
Tables


UNARMoured XLPE MV POWER CABLES U0/U(Um)=3.6/6(7.2)KV

- Single Core N2XSY/ NA2XSY
- Three Core N2XSEY/ NA2XSEY

- Standard:
IEC 60502-2
ISIRI 3569-2

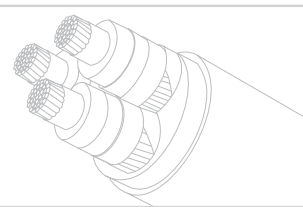
- Construction :
CU or AL/SC/XLPE/SC/SCT/CWT/PET/PVC
Stranded & Compacted Copper or Aluminium Conductor
Conductor Screen of Semi-Conducting Compound
Dry Cured XLPE Insulation
Insulation Screen of Semi-Conducting Compound
Semi-Conducting Bedding Tape
Copper Wire Screen + Equalizing Cu Tape
Separation Polyester Tape
Overall Sheath PVC(1)



CONSTRUCTIONAL & DESIGN DATA

Conductor & Screen Nominal Cross Section		Conductor Diameter	Insulation Thickness	Sheath Thickness	Approx. Overall Diameter	Approx. Cable Weight	
						Copper	Aluminium
mm ²		mm	mm	mm	mm	kg/km	
1x35	RM/16	6.9	2.5	1.8	20.4	720	510
1x50	RM/16	8.1	2.5	1.8	21.6	860	560
1x70	RM/16	9.7	2.5	1.8	23.2	1080	660
1x95	RM/16	11.4	2.5	1.8	24.9	1360	760
1x120	RM/16	12.7	2.5	1.8	26.2	1620	860
1x150	RM/25	14.3	2.5	1.9	28.4	1900	960
1x185	RM/25	16.0	2.5	1.9	30.1	2260	1100
1x240	RM/25	18.4	2.6	2.0	32.9	2900	1370
1x300	RM/25	20.7	2.8	2.1	35.8	3500	1600
1x400	RM/35	23.2	3.0	2.2	38.9	4500	2060
1x500	RM/35	27.0	3.2	2.4	43.5	5600	2500
1x630	RM/35	30.5	3.2	2.5	47.2	7050	3000
1x800	RM/35	34.5	3.2	2.6	51.4	8800	3600
1x1000	RM/35	39.0	3.2	2.8	57.0	10800	4300
3x35	RM/16	6.9	2.5	2.3	42	2900	2258
3x50	RM/16	8.1	2.5	2.4	45	3552	2682
3x70	RM/16	9.7	2.5	2.6	49	4417	3169
3x95	RM/16	11.4	2.5	2.7	53	5412	3678
3x120	RM/16	12.7	2.5	2.8	56	6470	4286
3x150	RM/25	14.3	2.5	2.9	60	7640	4937
3x185	RM/25	16.0	2.5	3.1	64	9080	5708
3x240	RM/25	18.4	2.6	3.2	71	11270	6857
3x300	RM/25	20.7	2.8	3.4	76	13860	8334
3x400	RM/35	23.2	3.0	3.6	84	16600	9550
3x500	RM/35	27.0	3.2	3.8	90	20000	10850

(1) On request ,other materials including PE,EPR,HFFR&LSZH is available.

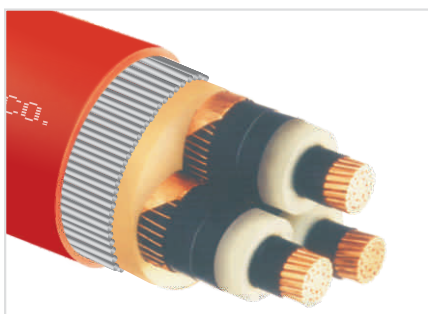


WIRE ARMoured XLPE MV POWER CABLES U₀/U(U_m)=3.6/6(7.2)KV

- Aluminium Wire Armoured Single Core N2XSYRY/ NA2XSYRY
- Steel Wire Armoured Three Core N2XSEYRY/ NA2XSEYRY

Standard:
IEC 60502-2
ISIRI 3569-2

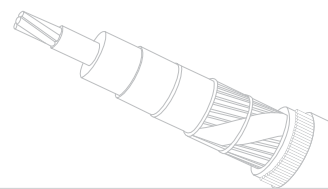
- Construction :**
CU or AL/SC/XLPE/SC/SCT/CWT/Bd/AWA or SWA/PVC
Stranded & Compacted Copper or Aluminium Conductor
Conductor Screen of Semi-Conducting Compound
Dry Cured XLPE Insulation
Insulation Screen of Semi-Conducting Compound
Semi-Conducting Bedding Tape
Copper Wire Screen + Equalizing Cu Tape
Separation Sheath PVC
Wire Armour
Overall Sheath PVC⁽¹⁾



CONSTRUCTIONAL & DESIGN DATA

Conductor & Screen Nominal Cross Section	Conductor Diameter	Insulation Thickness	Separation Sheath Thickness	Armour Wire Dia.	Sheath Thickness	Approx. Overall Diameter	Approx. Cable Weight	
							Copper	Aluminium
mm ²	mm	mm	mm	mm	mm	mm	kg/km	
1x35 RM/16	6.9	2.5	1.2	1.6	1.8	26	1150	936
1x50 RM/16	8.1	2.5	1.2	1.6	1.8	27	1500	1210
1x70 RM/16	9.7	2.5	1.2	1.6	1.9	29	1460	1044
1x95 RM/16	11.4	2.5	1.2	1.6	1.9	31	1790	1212
1x120 RM/16	12.7	2.5	1.2	1.6	2.0	32	2050	1322
1x150 RM/25	14.3	2.5	1.2	2.0	2.1	34	2500	1599
1x185 RM/25	16.0	2.5	1.2	2.0	2.1	37	3000	1876
1x240 RM/25	18.4	2.6	1.2	2.0	2.2	40	3650	2179
1x300 RM/25	20.7	2.8	1.2	2.0	2.3	42	4350	2508
1x400 RM/35	23.2	3.0	1.3	2.5	2.4	47	5580	3230
1x500 RM/35	27.0	3.2	1.3	2.5	2.5	51	6800	3750
1x630 RM/35	30.5	3.2	1.4	2.5	2.5	55	8300	4360
3x35 RM/16	6.9	2.5	1.3	2.5	2.4	48	4240	3598
3x50 RM/16	8.1	2.5	1.3	2.5	2.6	51	5400	4530
3x70 RM/16	9.7	2.5	1.4	2.5	2.7	55	6450	5262
3x95 RM/16	11.4	2.5	1.5	2.5	2.8	59	7590	5856
3x120 RM/16	12.7	2.5	1.5	3.15	3.0	63	8700	6516
3x150 RM/25	14.3	2.5	1.6	3.15	3.2	67	10020	7317
3x185 RM/25	16.0	2.5	1.7	3.15	3.3	72	11570	8198
3x240 RM/25	18.4	2.6	1.8	3.15	3.6	79	14950	10537
3x300 RM/25	20.7	2.8	1.9	3.15	3.8	85	17690	12164
3x400 RM/35	23.2	3.0	2.0	4.0	4.0	94	21500	14450
3x500 RM/35	27.0	3.2	2.1	4.0	4.1	103	25600	16450

⁽¹⁾ on request ,other materials including PE,EPR,HFFR&LSZH is available.



TAPE ARMoured XLPE MV POWER CABLES $U_0/U(U_m)=3.6/6(7.2)KV$

- Aluminium Tape Armoured Single Core N2XSYBY/ NA2XSYBY
- Steel Tape Armoured Three Core N2XSEYBY/ NA2XSEYBY

- Standard:**
IEC 60502-2
ISIRI 3569-2

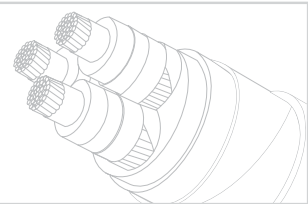
- Construction :**
CU or AL/SC/XLPE/SC/SCT/CWT/Bd/ATA or STA/PVC
Stranded & Compacted Copper or Aluminium Conductor
Conductor Screen of Semi-Conducting Compound
Dry Cured XLPE Insulation
Insulation Screen of Semi-Conducting Compound
Semi-Conducting Bedding Tape
Copper Wire Screen + Equalizing Cu Tape
Separation Sheath PVC
Double Tape Armour
Overall Sheath PVC (*)



CONSTRUCTIONAL & DESIGN DATA

Conductor & Screen Nominal Cross Section	Conductor Diameter	Insulation Thickness	Separation Sheath Thickness	Tape Thickness	Sheath Thickness	Approx. Overall Diameter	Approx. Cable Weight	
							Copper	Aluminium
mm ²	mm	mm	mm	mm	mm	mm	kg/km	
1x35 RM/16	6.9	2.5	1.2	0.5	1.8	27	1150	936
1x50 RM/16	8.1	2.5	1.2	0.5	1.8	28	1500	1210
1x70 RM/16	9.7	2.5	1.2	0.5	1.9	30	1450	1034
1x95 RM/16	11.4	2.5	1.2	0.5	1.9	32	1770	1192
1x120 RM/16	12.7	2.5	1.2	0.5	2.0	33	2050	1322
1x150 RM/25	14.3	2.5	1.2	0.5	2.1	35	2450	1549
1x185 RM/25	16.0	2.5	1.2	0.5	2.1	37	2900	1776
1x240 RM/25	18.4	2.6	1.2	0.5	2.2	39	3500	2029
1x300 RM/25	20.7	2.8	1.2	0.5	2.3	41	4200	2358
1x400 RM/35	23.2	3.0	1.3	0.5	2.4	45	5200	2850
1x500 RM/35	27.0	3.2	1.3	0.5	2.5	49	6300	3250
1x630 RM/35	30.5	3.2	1.4	0.5	2.6	52	7800	3860
3x35 RM/16	6.9	2.5	1.3	0.5	2.5	50	3440	2798
3x50 RM/16	8.1	2.5	1.3	0.5	2.6	53	4090	3220
3x70 RM/16	9.7	2.5	1.4	0.5	2.8	56	5000	3752
3x95 RM/16	11.4	2.5	1.5	0.5	2.9	60	6080	4346
3x120 RM/16	12.7	2.5	1.5	0.5	3.0	64	7090	4906
3x150 RM/25	14.3	2.5	1.6	0.5	3.2	68	8280	5577
3x185 RM/25	16.0	2.5	1.7	0.5	3.3	71	9800	6428
3x240 RM/25	18.4	2.6	1.8	0.5	3.5	77	12000	7587
3x300 RM/25	20.7	2.8	1.9	0.5	3.6	82	14540	9014
3x400 RM/35	23.2	3.0	2.0	0.8	3.9	91	18400	11350
3x500 RM/35	27.0	3.2	2.1	0.8	4.0	99	22200	13050

(*) on request ,other materials including PE,EPR,HFFR&LSZH is available.



XLPE MV POWER CABLES U₀/U(U_m)=3.6/6(7.2) KV

Conductor & Screen Nominal Cross Section		Max DC Resistance of Conductor at 20°C	Effective AC Resistance of Conductor at 90°C		Inductance		Capacitance
mm ²		Ω/Km	Ω/Km		mH/Km		μF/Km
							
COPPER CONDUCTOR CABLES (N2XS_Y)							
1x35	RM/16	0.524	0.60	0.61	0.37	0.56	0.29
1x50	RM/16	0.387	0.50	0.52	0.35	0.54	0.31
1x70	RM/16	0.268	0.35	0.36	0.33	0.52	0.35
1x95	RM/16	0.193	0.25	0.26	0.32	0.51	0.38
1x120	RM/16	0.153	0.20	0.22	0.31	0.50	0.42
1x150	RM/25	0.124	0.16	0.18	0.31	0.49	0.46
1x185	RM/25	0.0991	0.13	0.15	0.30	0.48	0.51
1x240	RM/25	0.0754	0.10	0.12	0.29	0.47	0.55
1x300	RM/25	0.0601	0.08	0.10	0.28	0.47	0.56
1x400	RM/35	0.0470	0.07	0.09	0.28	0.46	0.59
1x500	RM/35	0.0366	0.06	0.07	0.27	0.46	0.62
1x630	RM/35	0.0283	0.05	0.06	0.27	0.45	0.69
1x800	RM/35	0.0221	0.04	0.05	0.26	0.44	0.74
1x1000	RM/35	0.0176	0.03	0.04	0.25	0.43	0.79

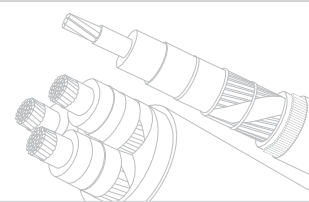
SINGLE CORE

ALUMINIUM CONDUCTOR CABLES (NA2XS_Y)							
1x35	RM/16	0.868	1.10	1.15	0.37	0.56	0.29
1x50	RM/16	0.641	0.83	0.84	0.35	0.54	0.31
1x70	RM/16	0.443	0.57	0.59	0.33	0.52	0.35
1x95	RM/16	0.320	0.41	0.43	0.32	0.51	0.38
1x120	RM/16	0.253	0.33	0.34	0.31	0.50	0.42
1x150	RM/25	0.206	0.27	0.29	0.31	0.49	0.46
1x185	RM/25	0.164	0.22	0.23	0.30	0.48	0.51
1x240	RM/25	0.125	0.17	0.18	0.29	0.47	0.55
1x300	RM/25	0.100	0.14	0.15	0.28	0.47	0.56
1x400	RM/35	0.0778	0.11	0.13	0.28	0.46	0.59
1x500	RM/35	0.0605	0.09	0.11	0.27	0.46	0.62
1x630	RM/35	0.0469	0.07	0.08	0.27	0.45	0.69
1x800	RM/35	0.0367	0.06	0.07	0.26	0.44	0.74
1x1000	RM/35	0.0291	0.04	0.05	0.25	0.43	0.79

COPPER CONDUCTOR CABLES (N2XSEY/N2XSEYRY/N2XSEYBY)							
3x35	RM/16	0.524	0.674		0.325		0.251
3x50	RM/16	0.387	0.497		0.312		0.302
3x70	RM/16	0.268	0.345		0.296		0.347
3x95	RM/16	0.193	0.250		0.290		0.379
3x120	RM/16	0.153	0.199		0.280		0.419
3x150	RM/25	0.124	0.164		0.277		0.460
3x185	RM/25	0.0991	0.132		0.268		0.502
3x240	RM/25	0.0754	0.102		0.261		0.541
3x300	RM/25	0.0601	0.0831		0.258		0.558
3x400	RM/35	0.0470	0.0686		0.255		0.583
3x500	RM/35	0.0366	0.0563		0.245		0.621

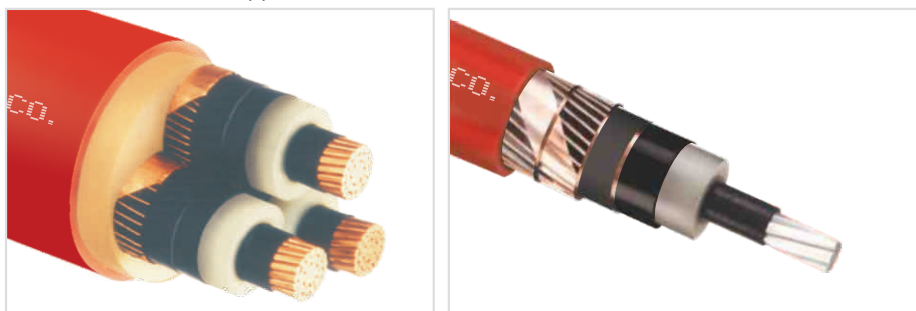
THREE CORE

ALUMINIUM CONDUCTOR CABLES (NA2XSEY/NA2XSEYRY/NA2XSEYBY)							
3x35	RM/16	0.868	1.12		0.325		0.251
3x50	RM/16	0.641	0.825		0.312		0.302
3x70	RM/16	0.443	0.571		0.296		0.347
3x95	RM/16	0.320	0.414		0.290		0.379
3x120	RM/16	0.253	0.328		0.280		0.419
3x150	RM/25	0.206	0.269		0.277		0.460
3x185	RM/25	0.164	0.215		0.268		0.502
3x240	RM/25	0.125	0.166		0.261		0.541
3x300	RM/25	0.100	0.134		0.258		0.558
3x400	RM/35	0.0778	0.107		0.255		0.583
3x500	RM/35	0.0605	0.0857		0.245		0.621



UNARMoured XLPE MV POWER CABLES U0/U(Um)=6/10(12)KV

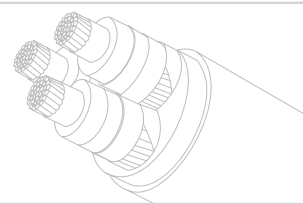
- **Single Core** N2XSY/ NA2XSY
- **Three Core** N2XSEY/ NA2XSEY
- **Standard:**
 - IEC 60502-2
 - ISIRI 3569-2
 - VDE 0276-620
- **Construction :**
 - CU or AL/SC/XLPE/SC/SCT/CWT/PET/PVC
 - Stranded & Compacted Copper or Aluminium Conductor
 - Conductor Screen of Semi-Conducting Compound
 - Dry Cured XLPE Insulation
 - Insulation Screen of Semi-Conducting Compound
 - Semi-Conducting Bedding Tape
 - Copper Wire Screen + Equalizing Cu Tape
 - Separation Polyester Tape
 - Overall Sheath PVC(1)



CONSTRUCTIONAL & DESIGN DATA

Conductor& Screen Nominal Cross Section		Conductor Diameter	Insulation Thickness	Sheath Thickness	Approx. Overall Diameter	Approx. Cable Weight	
						Copper	Aluminium
mm ²		mm	mm	mm	mm	kg/km	
1x35	RM/16	6.9	3.4	1.8	22	780	560
1x50	RM/16	8.1	3.4	1.8	24	920	630
1x70	RM/16	9.7	3.4	1.8	25	1150	730
1x95	RM/16	11.4	3.4	1.8	27	1430	840
1x120	RM/16	12.7	3.4	1.8	28	1700	950
1x150	RM/25	14.3	3.4	1.9	30	2000	1070
1x185	RM/25	16.0	3.4	2.0	32	2350	1200
1x240	RM/25	18.4	3.4	2.1	34	3000	1450
1x300	RM/25	20.7	3.4	2.1	37	3600	1700
1x400	RM/35	23.2	3.4	2.2	40	4550	2130
1x500	RM/35	27.0	3.4	2.3	44	5650	2550
1x630	RM/35	30.5	3.4	2.5	47	7100	3050
1x800	RM/35	34.5	3.4	2.6	52	8800	3650
1x1000	RM/35	39.0	3.4	2.8	57	10850	4380
3x35	RM/16	6.9	3.4	2.4	48	3320	2678
3x50	RM/16	8.1	3.4	2.6	50	3980	3110
3x70	RM/16	9.7	3.4	2.7	54	4892	3644
3x95	RM/16	11.4	3.4	2.8	57	5990	4256
3x120	RM/16	12.7	3.4	2.9	60	7010	4826
3x150	RM/25	14.3	3.4	3.1	65	8190	5487
3x185	RM/25	16.0	3.4	3.2	70	9660	6288
3x240	RM/25	18.4	3.4	3.4	75	11890	7477
3x300	RM/25	20.7	3.4	3.6	80	14240	8714
3x400	RM/35	23.2	3.4	3.8	87	17300	10250
3x500	RM/35	27.0	3.4	3.9	93	20800	11650

(1) on request ,other materials including PE,EPR,HFFR&LSZH is available.





WIRE ARMoured XLPE MV POWER CABLES U₀/U(U_m)=6/10(12)KV

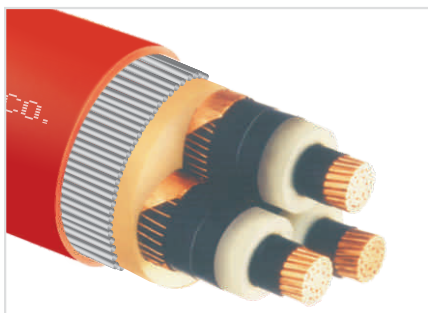
- Aluminium Wire Armoured Single Core N2XSYRY/ NA2XSYRY
- Steel Wire Armoured Three Core N2XSEYRY/ NA2XSEYRY

Standard:

IEC 60502-2
ISIRI 3569-2
VDE 0276-620

Construction :

CU or AL/SC/XLPE/SC/SCT/CWT/Bd/AWA or SWA/PVC
Stranded & Compacted Copper or Aluminium Conductor
Conductor Screen of Semi-Conducting Compound
Dry Cured XLPE Insulation
Insulation Screen of Semi-Conducting Compound
Semi-Conducting Bedding Tape
Copper Wire Screen + Equalizing Cu Tape
Separation Sheath PVC
Wire Armour
Overall Sheath PVC(¹)



CONSTRUCTIONAL & DESIGN DATA

Conductor & Screen Nominal Cross Section		Conductor Diameter	Insulation Thickness	Separation Sheath Thickness	Armour Wire Dia.	Sheath Thickness	Approx. Overall Diameter	Approx. Cable Weight	
mm ²		mm	mm	mm	mm	mm	mm	Copper	Aluminium
		kg/km							
1x35	RM/16	6.9	3.4	1.2	1.6	1.8	28	1150	936
1x50	RM/16	8.1	3.4	1.2	1.6	1.9	29	1300	1010
1x70	RM/16	9.7	3.4	1.2	1.6	1.9	31	1600	1184
1x95	RM/16	11.4	3.4	1.2	1.6	2.0	33	1900	1322
1x120	RM/16	12.7	3.4	1.2	2.0	2.1	35	2270	1542
1x150	RM/25	14.3	3.4	1.2	2.0	2.1	37	2600	1699
1x185	RM/25	16.0	3.4	1.2	2.0	2.2	39	3000	1876
1x240	RM/25	18.4	3.4	1.2	2.0	2.3	41	3700	2229
1x300	RM/25	20.7	3.4	1.3	2.0	2.4	44	4350	2508
1x400	RM/35	23.2	3.4	1.3	2.5	2.5	48	5450	3100
1x500	RM/35	27.0	3.4	1.4	2.5	2.6	52	6700	3650
1x630	RM/35	30.5	3.4	1.4	2.5	2.7	56	8250	4310
3x35	RM/16	6.9	3.4	1.4	2.5	2.7	53	5227	4585
3x50	RM/16	8.1	3.4	1.4	2.5	2.8	56	6000	5130
3x70	RM/16	9.7	3.4	1.5	2.5	2.9	60	7080	5832
3x95	RM/16	11.4	3.4	1.6	2.5	2.9	65	8250	6516
3x120	RM/16	12.7	3.4	1.6	2.5	3.0	68	9420	7236
3x150	RM/25	14.3	3.4	1.7	3.15	3.2	72	10740	8037
3x185	RM/25	16.0	3.4	1.8	3.15	3.4	77	13240	9868
3x240	RM/25	18.4	3.4	1.8	3.15	3.6	82	15650	11237
3x300	RM/25	20.7	3.4	1.9	3.15	3.7	87	19400	13874
3x400	RM/35	23.2	3.4	2.0	3.15	3.9	94	22500	15450
3x500	RM/35	27.0	3.4	2.2	3.15	4.0	101	26000	16850

(¹) on request ,other materials including PE,EPR,HFFR&LSZH is available.

3.6/6 KV

UN ARMoured

6/10 KV

WIRE ARMoured

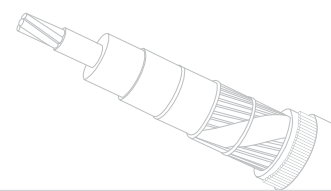
12/20 KV

TAPE ARMoured

18/30 KV

ELECTRICAL CHARACTERISTICS

36/63 KV

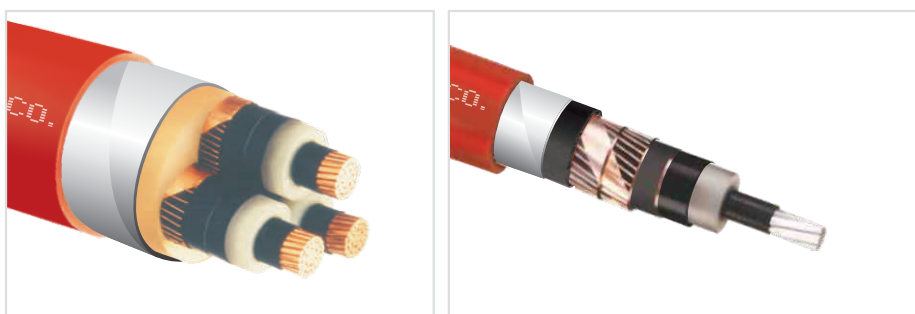


TAPE ARMoured XLPE MV POWER CABLES U₀/U(U_m)=6/10(12)KV

- Aluminium Tape Armoured Single Core N2XSYBY/ NA2XSYBY
- Steel Tape Armoured Three Core N2XSEYBY/ NA2XSEYBY

- Standard:**
IEC 60502-2
ISIRI 3569-2
VDE0 276-620

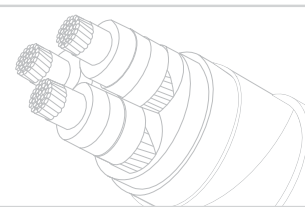
- Construction :**
CU or AL/SC/XLPE/SC/SCT/CWT/Bd/ATA or STA/PVC
Stranded & Compacted Copper or Aluminium Conductor
Conductor Screen of Semi-Conducting Compound
Dry Cured XLPE Insulation
Insulation Screen of Semi-Conducting Compound
Semi-Conducting Bedding Tape
Copper Wire Screen + Equalizing Cu Tape
Separation Sheath PVC
Double Tape Armour
Overall Sheath PVC (*)



CONSTRUCTIONAL & DESIGN DATA

Conductor & Screen Nominal Cross Section		Conductor Diameter	Insulation Thickness	Separation Sheath Thickness	Tape Thickness	Sheath Thickness	Approx. Overall Diameter	Approx. Cable Weight	
mm ²		mm	mm	mm	mm	mm	mm	Copper	Aluminium
		kg/km							
1x35	RM/16	6.9	3.4	1.2	0.5	1.8	25	1060	850
1x50	RM/16	8.1	3.4	1.2	0.5	1.8	26	1200	900
1x70	RM/16	9.7	3.4	1.2	0.5	1.8	28	1450	1030
1x95	RM/16	11.4	3.4	1.2	0.5	1.9	30	1750	1150
1x120	RM/16	12.7	3.4	1.2	0.5	1.9	31	2030	1300
1x150	RM/25	14.3	3.4	1.2	0.5	2.0	33	2430	1500
1x185	RM/25	16.0	3.4	1.2	0.5	2.1	35	2830	1700
1x240	RM/25	18.4	3.4	1.2	0.5	2.1	37	3500	2000
1x300	RM/25	20.7	3.4	1.2	0.5	2.2	40	4170	2250
1x400	RM/35	23.2	3.4	1.3	0.5	2.4	44	5100	2700
1x500	RM/35	27.0	3.4	1.3	0.5	2.5	48	6300	3200
1x630	RM/35	30.5	3.4	1.4	0.5	2.5	52	7800	3730
3x35	RM/16	6.9	3.4	1.3	0.5	2.3	45	3890	3248
3x50	RM/16	8.1	3.4	1.3	0.5	2.4	48	4580	3710
3x70	RM/16	9.7	3.4	1.4	0.5	2.5	52	5530	4282
3x95	RM/16	11.4	3.4	1.5	0.5	2.7	56	6580	4846
3x120	RM/16	12.7	3.4	1.5	0.5	2.8	60	7650	5466
3x150	RM/25	14.3	3.4	1.6	0.5	2.9	63	8860	6157
3x185	RM/25	16.0	3.4	1.7	0.5	3.0	68	10390	7018
3x240	RM/25	18.4	3.4	1.8	0.5	3.2	73	12550	8137
3x300	RM/25	20.7	3.4	1.9	0.5	3.4	78	14990	9464
3x400	RM/35	23.2	3.4	2.0	0.8	3.7	88	19000	11950
3x500	RM/35	27.0	3.4	2.1	0.8	4.0	97	22800	13650

(*) on request ,other materials including PE,EPR,HFFR&LSZH is available.

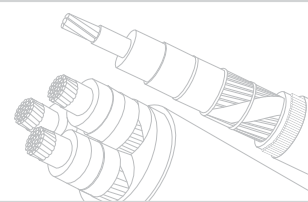


XLPE MV POWER CABLES U₀/U(U_m)=6/10(12) KV

Conductor & Screen Nominal Cross Section		Max DC Resistance of Conductor at 20°C	Effective AC Resistance of Conductor at 90°C		Inductance		Capacitance
mm ²		Ω/Km	Ω/Km		mH/Km		μF/Km
							
COPPER CONDUCTOR CABLES (N2XS _Y)							
1x35	RM/16	0.524	0.672	0.687	0.455	0.747	0.212
1x50	RM/16	0.387	0.497	0.511	0.434	0.719	0.233
1x70	RM/16	0.268	0.345	0.359	0.409	0.685	0.270
1x95	RM/16	0.193	0.250	0.262	0.391	0.659	0.301
1x120	RM/16	0.153	0.199	0.211	0.377	0.638	0.323
1x150	RM/25	0.124	0.164	0.181	0.364	0.613	0.354
1x185	RM/25	0.0991	0.132	0.149	0.353	0.595	0.385
1x240	RM/25	0.0754	0.102	0.117	0.338	0.572	0.428
1x300	RM/25	0.0601	0.0831	0.0972	0.329	0.556	0.471
1x400	RM/35	0.0470	0.0686	0.0864	0.315	0.526	0.530
1x500	RM/35	0.0366	0.0563	0.0724	0.306	0.511	0.591
1x630	RM/35	0.0283	0.0432	0.0664	0.292	0.492	0.660
1x800	RM/35	0.0221	0.0330	0.0360	0.283	0.485	0.754
1x1000	RM/35	0.0176	0.0270	0.0290	0.280	0.472	0.828
ALUMINIUM CONDUCTOR CABLES (NA2XS _Y)							
1x35	RM/16	0.868	1.12	1.13	0.455	0.747	0.212
1x50	RM/16	0.641	0.825	0.840	0.434	0.719	0.233
1x70	RM/16	0.443	0.571	0.585	0.409	0.685	0.270
1x95	RM/16	0.320	0.414	0.426	0.391	0.659	0.301
1x120	RM/16	0.253	0.328	0.340	0.377	0.638	0.323
1x150	RM/25	0.206	0.269	0.287	0.364	0.613	0.354
1x185	RM/25	0.164	0.215	0.232	0.353	0.595	0.385
1x240	RM/25	0.125	0.166	0.181	0.338	0.572	0.428
1x300	RM/25	0.100	0.134	0.148	0.329	0.556	0.471
1x400	RM/35	0.0778	0.107	0.126	0.315	0.526	0.530
1x500	RM/35	0.0605	0.0857	0.103	0.306	0.511	0.591
1x630	RM/35	0.0469	0.0664	0.080	0.292	0.492	0.660
1x800	RM/35	0.0367	0.0514	0.0624	0.274	0.485	0.754
1x1000	RM/35	0.0291	0.0467	0.0495	0.270	0.472	0.828
COPPER CONDUCTOR CABLES (N2XSEY/N2XSEYRY/N2XSEYBY)							
3x35	RM/16	0.524	0.672		0.347		0.225
3x50	RM/16	0.387	0.497		0.331		0.249
3x70	RM/16	0.268	0.345		0.315		0.283
3x95	RM/16	0.193	0.250		0.306		0.315
3x120	RM/16	0.153	0.199		0.296		0.347
3x150	RM/25	0.124	0.164		0.290		0.374
3x185	RM/25	0.0991	0.132		0.283		0.406
3x240	RM/25	0.0754	0.102		0.274		0.456
3x300	RM/25	0.0601	0.0831		0.268		0.495
3x400	RM/35	0.0470	0.0686		0.258		0.558
3x500	RM/35	0.0366	0.0563		0.248		0.613
ALUMINIUM CONDUCTOR CABLES (NA2XSEY/NA2XSEYRY/NA2XSEYBY)							
3x35	RM/16	0.868	1.12		0.347		0.225
3x50	RM/16	0.641	0.825		0.331		0.249
3x70	RM/16	0.443	0.571		0.315		0.283
3x95	RM/16	0.320	0.414		0.306		0.315
3x120	RM/16	0.253	0.328		0.296		0.347
3x150	RM/25	0.206	0.269		0.290		0.374
3x185	RM/25	0.164	0.215		0.283		0.406
3x240	RM/25	0.125	0.166		0.274		0.456
3x300	RM/25	0.100	0.134		0.268		0.495
3x400	RM/35	0.0778	0.107		0.258		0.558
3x500	RM/35	0.0605	0.0857		0.248		0.613

SINGLE CORE

THREE CORE



UNARMoured XLPE MV POWER CABLES U0/U(Um)=12/20(24)KV

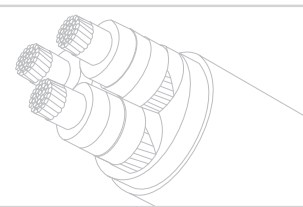
- **Single Core** N2XSY/ NA2XSY
- **Three Core** N2XSEY/ NA2XSEY
- **Standard:**
 - IEC 60502-2
 - ISIRI 3569-2
 - VDE 0276-620
- **Construction :**
 - CU or AL/SC/XLPE/SC/SCT/CWT/PET/PVC
 - Stranded & Compacted Copper or Aluminium Conductor
 - Conductor Screen of Semi-Conducting Compound
 - Dry Cured XLPE Insulation
 - Insulation Screen of Semi-Conducting Compound
 - Semi-Conducting Bedding Tape
 - Copper Wire Screen + Equalizing Cu Tape
 - Separation Polyester Tape
 - Overall Sheath PVC⁽¹⁾



CONSTRUCTIONAL & DESIGN DATA

Conductor & Screen Nominal Cross Section		Conductor Diameter	Insulation Thickness	Sheath Thickness	Approx. Overall Diameter	Approx. Cable Weight	
						Copper	Aluminium
mm ²		mm	mm	mm	mm	kg/km	
1x35	RM/16	6.9	5.5	1.8	27	945	725
1x50	RM/16	8.1	5.5	1.8	28	1100	800
1x70	RM/16	9.7	5.5	1.9	30	1350	910
1x95	RM/16	11.4	5.5	1.9	31	1650	1050
1x120	RM/16	12.7	5.5	2.0	33	1920	1200
1x150	RM/25	14.3	5.5	2.1	35	2220	1300
1x185	RM/25	16.0	5.5	2.1	36	2630	1470
1x240	RM/25	18.4	5.5	2.2	39	3250	1720
1x300	RM/25	20.7	5.5	2.3	41	3890	1970
1x400	RM/35	23.2	5.5	2.4	44	4880	2540
1x500	RM/35	27.0	5.5	2.5	48	6000	2980
1x630	RM/35	30.5	5.5	2.6	52	7450	3500
1x800	RM/35	34.5	5.5	2.7	56	9200	3900
1x1000	RM/35	39.0	5.5	2.8	61	11300	4900
3x35	RM/16	6.9	5.5	2.7	56	4500	3858
3x50	RM/16	8.1	5.5	2.9	60	5215	4345
3x70	RM/16	9.7	5.5	3.0	64	6180	4932
3x95	RM/16	11.4	5.5	3.1	67	7280	5546
3x120	RM/16	12.7	5.5	3.3	70	8370	6186
3x150	RM/25	14.3	5.5	3.4	76	9700	6997
3x185	RM/25	16.0	5.5	3.5	79	11280	7908
3x240	RM/25	18.4	5.5	3.7	85	13580	9167
3x300	RM/25	20.7	5.5	3.9	90	16000	10474
3x400	RM/35	23.2	5.5	4.1	95	19900	12850
3x500	RM/35	27.0	5.5	4.2	101	23600	14450

(¹) on request ,other materials including PE,EPR,HFFR&LSZH is available.





WIRE ARMoured XLPE MV POWER CABLES $U_0/U(U_m)=12/20(24)KV$

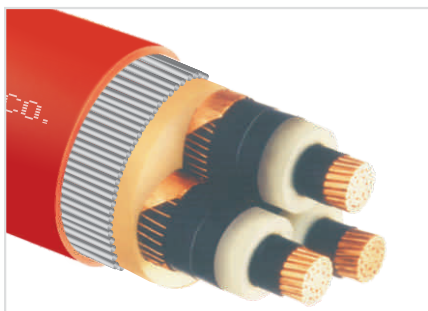
- Aluminium Wire Armoured Single Core N2XSYRY/ NA2XSYRY
- Steel Wire Armoured Three Core N2XSEYRY/ NA2XSEYRY

Standard:

IEC 60502-2
ISIRI 3569-2
VDE 0276-620

Construction :

CU or AL/SC/XLPE/SC/SCT/CWT/Bd/AWA or SWA/PVC
Stranded & Compacted Copper or Aluminium Conductor
Conductor Screen of Semi-Conducting Compound
Dry Cured XLPE Insulation
Insulation Screen of Semi-Conducting Compound
Semi-Conducting Bedding Tape
Copper Wire Screen + Equalizing Cu Tape
Separation Sheath PVC
Wire Armour
Overall Sheath PVC⁽¹⁾



CONSTRUCTIONAL & DESIGN DATA

Conductor & Screen Nominal Cross Section		Conductor Diameter	Insulation Thickness	Separation Sheath Thickness	Armour Wire Dia.	Sheath Thickness	Approx. Overall Diameter	Approx. Cable Weight	
mm ²		mm	mm	mm	mm	mm	mm	Copper	Aluminium
		kg/km							
1x35	RM/16	6.9	5.5	1.2	1.6	2.0	32	1400	1186
1x50	RM/16	8.1	5.5	1.2	2.0	2.1	35	1660	1370
1x70	RM/16	9.7	5.5	1.2	2.0	2.1	37	1950	1534
1x95	RM/16	11.4	5.5	1.2	2.0	2.2	38	2280	1702
1x120	RM/16	12.7	5.5	1.2	2.0	2.2	40	2590	1862
1x150	RM/25	14.3	5.5	1.2	2.0	2.3	41	2940	2639
1x185	RM/25	16.0	5.5	1.2	2.0	2.3	43	3450	2326
1x240	RM/25	18.4	5.5	1.3	2.5	2.5	47	4150	2679
1x300	RM/25	20.7	5.5	1.3	2.5	2.5	49	4900	3058
1x400	RM/35	23.2	5.5	1.4	2.5	2.6	53	6100	3750
1x500	RM/35	27.0	5.5	1.4	2.5	2.8	57	7100	4050
1x630	RM/35	30.5	5.5	1.5	2.5	2.9	60	8700	4800
3x35	RM/16	6.9	5.5	1.5	2.5	3.1	63	6700	6058
3x50	RM/16	8.1	5.5	1.6	3.15	3.1	66	7520	6650
3x70	RM/16	9.7	5.5	1.7	3.15	3.3	71	8600	7352
3x95	RM/16	11.4	5.5	1.7	3.15	3.4	75	10760	9026
3x120	RM/16	12.7	5.5	1.8	3.15	3.4	78	12070	9886
3x150	RM/25	14.3	5.5	1.8	3.15	3.5	83	13400	10697
3x185	RM/25	16.0	5.5	1.9	3.15	3.6	87	15230	11858
3x240	RM/25	18.4	5.5	2.0	3.15	3.8	93	19180	14767
3x300	RM/25	20.7	5.5	2.1	3.15	4.1	98	22600	17074
3x400	RM/35	23.2	5.5	2.2	4.0	4.4	106	25700	18650
3x500	RM/35	27.0	5.5	2.3	4.0	4.6	112	29800	20650

⁽¹⁾ on request ,other materials including PE,EPR,HFFR & LSZH is available.

3.6/6 KV

UN ARMoured

6/10 KV

WIRE ARMoured

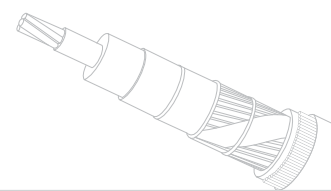
12/20 KV

TAPE ARMoured

18/30 KV

ELECTRICAL CHARACTERISTICS

36/63 KV

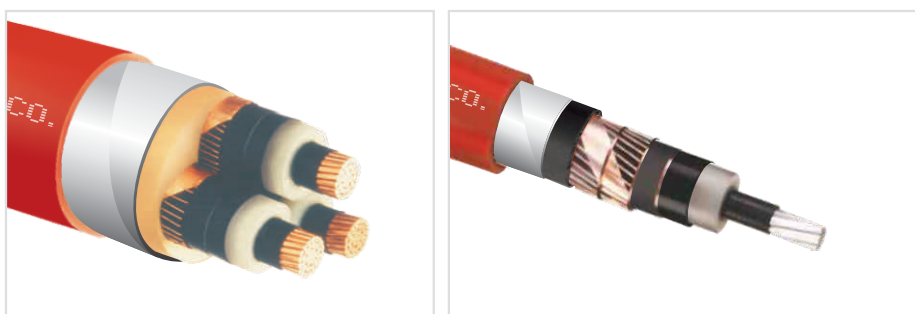


TAPE ARMoured XLPE MV POWER CABLES U0/U(Um)=12/20(24)KV

- Aluminium Tape Armoured Single Core N2XSYBY/ NA2XSYBY
- Steel Tape Armoured Three Core N2XSEYBY/ NA2XSEYBY

- Standard:**
IEC 60502-2
ISIRI 3569-2
VDE 0276-620

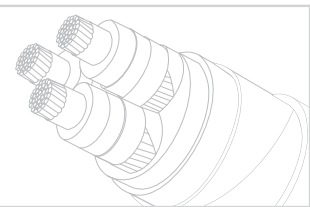
- Construction :**
CU or AL/SC/XLPE/SC/SCT/CWT/Bd/ATA or STA/PVC
Stranded & Compacted Copper or Aluminium Conductor
Conductor Screen of Semi-Conducting Compound
Dry Cured XLPE Insulation
Insulation Screen of Semi-Conducting Compound
Semi-Conducting Bedding Tape
Copper Wire Screen + Equalizing Cu Tape
Separation Sheath PVC
Double Tape Armour
Overall Sheath PVC (*)



CONSTRUCTIONAL & DESIGN DATA

Conductor & Screen Nominal Cross Section		Conductor Diameter	Insulation Thickness	Separation Sheath Thickness	Tape Thickness	Sheath Thickness	Approx. Overall Diameter	Approx. Cable Weight	
mm ²		mm	mm	mm	mm	mm	mm	Copper	Aluminium
		kg/km							
1x35	RM/16	6.9	5.5	1.2	0.5	1.9	31	1280	1066
1x50	RM/16	8.1	5.5	1.2	0.5	2.0	33	1450	1160
1x70	RM/16	9.7	5.5	1.2	0.5	2.0	34	1700	1284
1x95	RM/16	11.4	5.5	1.2	0.5	2.1	36	2050	1472
1x120	RM/16	12.7	5.5	1.2	0.5	2.1	38	2320	1592
1x150	RM/25	14.3	5.5	1.2	0.5	2.2	39	2770	1869
1x185	RM/25	16.0	5.5	1.2	0.5	2.2	41	3170	2046
1x240	RM/25	18.4	5.5	1.3	0.5	2.4	44	3850	2379
1x300	RM/25	20.7	5.5	1.3	0.5	2.4	46	4530	2688
1x400	RM/35	23.2	5.5	1.4	0.5	2.5	50	5500	3150
1x500	RM/35	27.0	5.5	1.4	0.5	2.6	53	6700	3650
1x630	RM/35	30.5	5.5	1.5	0.5	2.7	57	8200	4260
3x35	RM/16	6.9	5.5	1.5	0.5	2.9	60	5080	4438
3x50	RM/16	8.1	5.5	1.6	0.5	3.0	62	5840	5160
3x70	RM/16	9.7	5.5	1.7	0.5	3.1	67	6860	5612
3x95	RM/16	11.4	5.5	1.7	0.5	3.2	71	8000	6266
3x120	RM/16	12.7	5.5	1.8	0.5	3.3	74	9150	6966
3x150	RM/25	14.3	5.5	1.8	0.5	3.4	78	10400	7697
3x185	RM/25	16.0	5.5	1.9	0.8	3.6	82	12000	8628
3x240	RM/25	18.4	5.5	2.0	0.8	3.8	89	15300	10887
3x300	RM/25	20.7	5.5	2.1	0.8	4.0	94	17500	11974
3x400	RM/35	23.2	5.5	2.2	0.8	4.1	101	20800	13750
3x500	RM/35	27.0	5.5	2.3	0.8	4.3	109	25000	15850

(*) on request ,other materials including PE,EPR,HFFR & LSZH is available.



XLPE MV POWER CABLES U0/U(Um)=12/20(24) KV

Conductor & Screen Nominal Cross Section		Max DC Resistance of Conductor at 20°C	Effective AC Resistance of Conductor at 90°C		Inductance		Capacitance
mm ²		Ω/Km	Ω/Km		mH/Km		μF/Km
							
COPPER CONDUCTOR CABLES (N2XSY)							
1x35	RM/16	0.524	0.671	0.685	0.488	0.757	0.159
1x50	RM/16	0.387	0.497	0.509	0.465	0.729	0.175
1x70	RM/16	0.268	0.345	0.357	0.438	0.695	0.196
1x95	RM/16	0.193	0.249	0.261	0.419	0.668	0.216
1x120	RM/16	0.153	0.198	0.209	0.403	0.645	0.235
1x150	RM/25	0.124	0.163	0.179	0.389	0.622	0.254
1x185	RM/25	0.0991	0.132	0.147	0.377	0.605	0.273
1x240	RM/25	0.0754	0.102	0.116	0.361	0.581	0.304
1x300	RM/25	0.0601	0.0827	0.0958	0.350	0.565	0.329
1x400	RM/35	0.0470	0.0681	0.0848	0.335	0.536	0.368
1x500	RM/35	0.0366	0.0557	0.0709	0.326	0.519	0.402
1x630	RM/35	0.0283	0.0432	0.0602	0.311	0.485	0.473

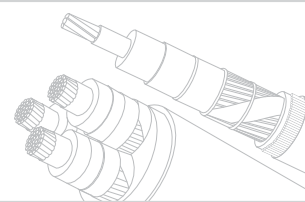
SINGLE CORE

ALUMINIUM CONDUCTOR CABLES (NA2XSY)							
1x35	RM/16	0.868	1.12	1.13	0.488	0.757	0.159
1x50	RM/16	0.641	0.825	0.840	0.465	0.729	0.175
1x70	RM/16	0.443	0.571	0.585	0.438	0.695	0.196
1x95	RM/16	0.320	0.414	0.426	0.419	0.668	0.216
1x120	RM/16	0.253	0.328	0.340	0.403	0.645	0.235
1x150	RM/25	0.206	0.269	0.287	0.389	0.622	0.254
1x185	RM/25	0.164	0.215	0.232	0.377	0.605	0.273
1x240	RM/25	0.125	0.166	0.181	0.361	0.581	0.304
1x300	RM/25	0.100	0.134	0.148	0.350	0.565	0.329
1x400	RM/35	0.0778	0.107	0.126	0.335	0.536	0.368
1x500	RM/35	0.0605	0.0857	0.103	0.326	0.519	0.402
1x630	RM/35	0.0469	0.0664	0.080	0.311	0.485	0.473

COPPER CONDUCTOR CABLES (N2XSEY/N2XSEYRY/N2XSEYBY)							
3x35	RM/16	0.524	0.671		0.382		0.159
3x50	RM/16	0.387	0.497		0.369		0.175
3x70	RM/16	0.268	0.345		0.350		0.196
3x95	RM/16	0.193	0.249		0.341		0.216
3x120	RM/16	0.153	0.199		0.328		0.235
3x150	RM/25	0.124	0.163		0.322		0.254
3x185	RM/25	0.0991	0.132		0.309		0.273
3x240	RM/25	0.0754	0.102		0.299		0.304
3x300	RM/25	0.0601	0.0827		0.290		0.329
3x400	RM/35	0.0470	0.0681		0.280		0.368
3x500	RM/35	0.0366	0.0557		0.271		0.402

THREE CORE

ALUMINIUM CONDUCTOR CABLES (NA2XSEY/NA2XSEYRY/NA2XSEYBY)							
3x35	RM/16	0.868	1.12		0.382		0.159
3x50	RM/16	0.641	0.825		0.369		0.175
3x70	RM/16	0.443	0.571		0.350		0.196
3x95	RM/16	0.320	0.413		0.341		0.216
3x120	RM/16	0.253	0.328		0.328		0.235
3x150	RM/25	0.206	0.269		0.322		0.254
3x185	RM/25	0.164	0.215		0.309		0.273
3x240	RM/25	0.125	0.165		0.299		0.304
3x300	RM/25	0.100	0.133		0.290		0.329
3x400	RM/35	0.0778	0.107		0.280		0.368
3x500	RM/35	0.0605	0.0852		0.271		0.402



UNARMoured XLPE MV POWER CABLES U0/U(Um)=18/30(36)KV

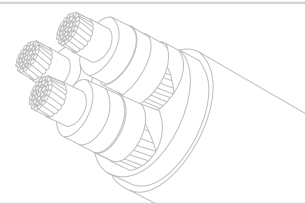
- **Single Core** N2XSY/ NA2XSY
- **Three Core** N2XSEY/ NA2XSEY
- **Standard:**
 - IEC 60502-2
 - ISIRI 3569-2
 - VDE 0276-620
- **Construction :**
 - CU or AL/SC/XLPE/SC/SCT/CWT/PET/PVC
 - Stranded & Compacted Copper or Aluminium Conductor
 - Conductor Screen of Semi-Conducting Compound
 - Dry Cured XLPE Insulation
 - Insulation Screen of Semi-Conducting Compound
 - Semi-Conducting Bedding Tape
 - Copper Wire Screen + Equalizing Cu Tape
 - Separation Polyester Tape
 - Overall Sheath PVC(1)



CONSTRUCTIONAL & DESIGN DATA

Conductor & Screen Nominal Cross Section		Conductor Diameter	Insulation Thickness	Sheath Thickness	Approx. Overall Diameter	Approx. Cable Weight	
						Copper	Aluminium
mm ²		mm	mm	mm	mm	kg/km	
1x35	RM/16	6.9	8	2.0	32	1110	970
1x50	RM/16	8.1	8	2.0	33	1380	1070
1x70	RM/16	9.7	8	2.1	35	1630	1200
1x95	RM/16	11.4	8	2.1	37	1950	1350
1x120	RM/16	12.7	8	2.2	38	2230	1480
1x150	RM/25	14.3	8	2.2	40	2550	1630
1x185	RM/25	16.0	8	2.3	42	2950	1800
1x240	RM/25	18.4	8	2.4	44	3600	2100
1x300	RM/25	20.7	8	2.5	47	4300	2380
1x400	RM/35	23.2	8	2.6	50	5200	2750
1x500	RM/35	27.0	8	2.7	54	6350	3200
1x630	RM/35	30.5	8	2.8	58	7800	3800
1x800	RM/35	34.5	8	2.9	62	9600	4450
1x1000	RM/35	39.0	8	3.0	67	11800	5300
3x35	RM/16	6.9	8	3.0	68	6050	5408
3x50	RM/16	8.1	8	3.2	71	6890	6020
3x70	RM/16	9.7	8	3.3	74	7970	6722
3x95	RM/16	11.4	8	3.5	78	9160	7426
3x120	RM/16	12.7	8	3.6	82	10370	8186
3x150	RM/25	14.3	8	3.6	86	11600	8897
3x185	RM/25	16.0	8	3.9	90	13200	9828
3x240	RM/25	18.4	8	4.0	95	15860	11447
3x300	RM/25	20.7	8	4.2	100	18100	12574
3x400	RM/35	23.2	8	4.4	108	21300	14250
3x500	RM/35	27.0	8	4.6	116	25900	16750

Ø request ,other materials including PE,EPR,HFFR&LSZH is available.





WIRE ARMoured XLPE MV POWER CABLES U₀/U(U_m)=18/30(36)KV

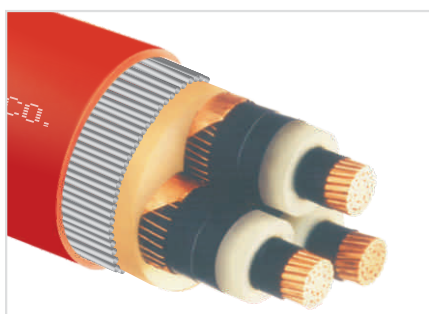
- **Aluminium Wire Armoured Single Core** N2XSYRY/ NA2XSYRY
- **Steel Wire Armoured Three Core** N2XSEYRY/ NA2XSEYRY

● **Standard:**

IEC 60502-2
ISIRI 3569-2
VDE 0276-620

● **Construction :**

CU or AL/SC/XLPE/SC/SCT/CWT/Bd/AWA or SWA/PVC
Stranded & Compacted Copper or Aluminium Conductor
Conductor Screen of Semi-Conducting Compound
Dry Cured XLPE Insulation
Insulation Screen of Semi-Conducting Compound
Semi-Conducting Bedding Tape
Copper Wire Screen + Equalizing Cu Tape
Separation Sheath PVC
Wire Armour
Overall Sheath PVC(*)



● **CONSTRUCTIONAL & DESIGN DATA**

Conductor & Screen Nominal Cross Section		Conductor Diameter	Insulation Thickness	Separation Sheath Thickness	Armour Wire Dia.	Sheath Thickness	Approx. Overall Diameter	Approx. Cable Weight	
mm ²		mm	mm	mm	mm	mm	mm	Copper	Aluminium
		kg/km							
1x35	RM/16	6.9	8	1.2	2.0	2.1	39	1710	1400
1x50	RM/16	8.1	8	1.2	2.0	2.2	40	2050	1750
1x70	RM/16	9.7	8	1.2	2.0	2.3	42	2350	1940
1x95	RM/16	11.4	8	1.2	2.0	2.3	44	2700	2100
1x120	RM/16	12.7	8	1.3	2.5	2.4	45	3190	2440
1x150	RM/25	14.3	8	1.3	2.5	2.5	48	3650	2730
1x185	RM/25	16.0	8	1.3	2.5	2.5	50	4100	2950
1x240	RM/25	18.4	8	1.4	2.5	2.6	53	4850	3350
1x300	RM/25	20.7	8	1.4	2.5	2.7	55	5550	3650
1x400	RM/35	23.2	8	1.5	2.5	2.8	58	6600	4150
1x500	RM/35	27.0	8	1.5	2.5	3.0	63	7800	4700
1x630	RM/35	30.5	8	1.6	3.15	3.2	69	8900	7960
3x35	RM/16	6.9	8	1.8	3.15	3.4	78	11500	10858
3x50	RM/16	8.1	8	1.8	3.15	3.5	79	12540	11670
3x70	RM/16	9.7	8	1.9	3.15	3.6	83	13800	12552
3x95	RM/16	11.4	8	1.9	3.15	3.7	87	15630	13896
3x120	RM/16	12.7	8	2.0	4.0	3.9	93	16840	14656
3x150	RM/25	14.3	8	2.1	4.0	4.0	96	19000	16297
3x185	RM/25	16.0	8	2.1	4.0	4.1	100	22020	18648
3x240	RM/25	18.4	8	2.2	4.0	4.3	106	23500	19087
3x300	RM/25	20.7	8	2.3	4.0	4.5	113	26500	20974
3x400	RM/35	23.2	8	2.4	5.0	4.8	121	33800	26750
3x500	RM/35	27.0	8	2.5	5.0	5	130	39500	30350

(*) on request ,other materials including PE,EPR,HFFR & LSZH is available.

3.6/6 KV

UN ARMoured

6/10 KV

WIRE ARMoured

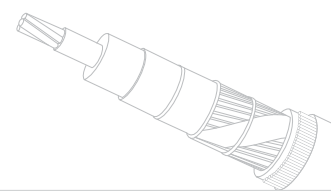
12/20 KV

TAPE ARMoured

18/30 KV

ELECTRICAL CHARACTERISTICS

36/63 KV

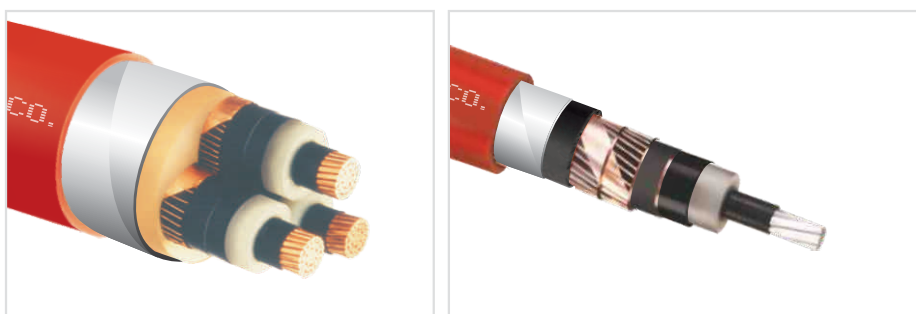


TAPE ARMoured XLPE MV POWER CABLES U₀/U_m=18/30(36)KV

- Aluminium Tape Armoured Single Core N2XSYBY/ NA2XSYBY
- Steel Tape Armoured Three Core N2XSEYBY/ NA2XSEYBY

Standard:
IEC 60502-2
ISIRI 3569-2
VDE 0276-620

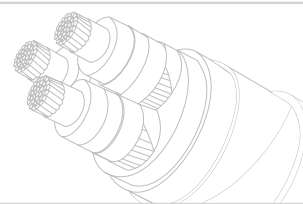
- Construction :**
CU or AL/SC/XLPE/SC/SCT/CWT/Bd/ATA or STA/PVC
Stranded & Compacted Copper or Aluminium Conductor
Conductor Screen of Semi-Conducting Compound
Dry Cured XLPE Insulation
Insulation Screen of Semi-Conducting Compound
Semi-Conducting Bedding Tape
Copper Wire Screen + Equalizing Cu Tape
Separation Sheath PVC
Double Tape Armour
Overall Sheath PVC (*)



CONSTRUCTIONAL & DESIGN DATA

Conductor & Screen Nominal Cross Section		Conductor Diameter	Insulation Thickness	Separation Sheath Thickness	Tape Thickness	Sheath Thickness	Approx. Overall Diameter	Approx. Cable Weight	
mm ²		mm	mm	mm	mm	mm	mm	Copper	Aluminium
		kg/km							
1x35	RM/16	6.9	8	1.2	0.5	0.5	36	1490	1250
1x50	RM/16	8.1	8	1.2	0.5	0.5	38	1780	1390
1x70	RM/16	9.7	8	1.2	0.5	0.5	40	2060	1550
1x95	RM/16	11.4	8	1.2	0.5	0.5	41	2400	1700
1x120	RM/16	12.7	8	1.3	0.5	0.5	43	2730	1900
1x150	RM/25	14.3	8	1.3	0.5	0.5	45	3150	2230
1x185	RM/25	16.0	8	1.3	0.5	0.5	47	3600	2450
1x240	RM/25	18.4	8	1.4	0.5	0.5	49	4330	2800
1x300	RM/25	20.7	8	1.4	0.5	0.5	52	5000	3100
1x400	RM/35	23.2	8	1.5	0.5	0.5	55	6000	3580
1x500	RM/35	27.0	8	1.5	0.5	0.5	59	7200	4100
1x630	RM/35	30.5	8	1.6	0.5	0.5	62	8500	4560
3x35	RM/16	6.9	8	1.8	0.5	3.3	74	7250	6608
3x50	RM/16	8.1	8	1.8	0.5	3.4	75	8140	7270
3x70	RM/16	9.7	8	1.9	0.5	3.5	79	10050	8802
3x95	RM/16	11.4	8	1.9	0.8	3.6	84	11340	4606
3x120	RM/16	12.7	8	2.0	0.8	3.7	87	12650	10466
3x150	RM/25	14.3	8	2.1	0.8	3.8	91	13950	11247
3x185	RM/25	16.0	8	2.1	0.8	4.0	95	15650	12278
3x240	RM/25	18.4	8	2.2	0.8	4.2	101	18490	14077
3x300	RM/25	20.7	8	2.3	0.8	4.3	106	21200	15674
3x400	RM/35	23.2	8	2.4	0.8	4.5	113	25000	18000
3x500	RM/35	27.0	8	2.5	0.8	4.6	119	29000	19850

(*) on request ,other materials including PE,EPR,HFFR & LSZH is available.



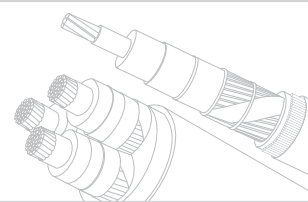
 Electrical Characteristics

XLPE MV POWER CABLES U₀/U(U_m)=18/30(36) KV

Conductor& Screen Nominal Cross Section		Max DC Resistance of Conductor at 20°C	Effective AC Resistance of Conductor at 90°C		Inductance		Capacitance
mm ²		Ω/Km	Ω/Km		mH/Km		μF/Km
							
COPPER CONDUCTOR CABLES (N2XSY)							
1x35	RM/16	0.524	0.671	0.683	0.521	0.768	0.212
1x50	RM/16	0.387	0.496	0.508	0.496	0.740	0.233
1x70	RM/16	0.268	0.345	0.355	0.468	0.705	0.270
1x95	RM/16	0.193	0.249	0.259	0.474	0.678	0.301
1x120	RM/16	0.153	0.198	0.208	0.430	0.656	0.323
1x150	RM/25	0.124	0.163	0.177	0.415	0.632	0.354
1x185	RM/25	0.0991	0.131	0.145	0.402	0.615	0.385
1x240	RM/25	0.0754	0.101	0.114	0.384	0.591	0.428
1x300	RM/25	0.0601	0.0823	0.0944	0.373	0.575	0.471
1x400	RM/35	0.0470	0.0677	0.0831	0.357	0.545	0.530
1x500	RM/35	0.0366	0.0552	0.0695	0.346	0.529	0.591
1x630	RM/35	0.0283	0.0411	0.0452	0.323	0.497	0.660
ALUMINIUM CONDUCTOR CABLES (NA2XSY)							
1x35	RM/16	0.868	1.12	1.13	0.521	0.768	0.212
1x50	RM/16	0.641	0.825	0.840	0.496	0.740	0.233
1x70	RM/16	0.443	0.571	0.585	0.468	0.705	0.270
1x95	RM/16	0.320	0.414	0.426	0.474	0.678	0.301
1x120	RM/16	0.253	0.328	0.340	0.430	0.656	0.323
1x150	RM/25	0.206	0.269	0.287	0.415	0.632	0.354
1x185	RM/25	0.164	0.215	0.232	0.402	0.615	0.385
1x240	RM/25	0.125	0.166	0.181	0.384	0.591	0.428
1x300	RM/25	0.100	0.134	0.148	0.373	0.575	0.471
1x400	RM/35	0.0778	0.107	0.126	0.357	0.545	0.530
1x500	RM/35	0.0605	0.0857	0.103	0.346	0.529	0.591
1x630	RM/35	0.0469	0.0664	0.080	0.323	0.497	0.660
COPPER CONDUCTOR CABLES (N2XSEY/N2XSEYRY/N2XSEYBY)							
3x35	RM/16	0.524	0.671		0.417		0.125
3x50	RM/16	0.387	0.496		0.408		0.136
3x70	RM/16	0.268	0.345		0.389		0.151
3x95	RM/16	0.193	0.249		0.373		0.165
3x120	RM/16	0.153	0.198		0.360		0.178
3x150	RM/25	0.124	0.163		0.350		0.191
3x185	RM/25	0.0991	0.131		0.341		0.205
3x240	RM/25	0.0754	0.101		0.325		0.227
3x300	RM/25	0.0601	0.0823		0.315		0.244
3x400	RM/35	0.0470	0.0677		0.306		0.271
3x500	RM/35	0.0366	0.0552		0.296		0.295
ALUMINIUM CONDUCTOR CABLES (NA2XSEY/NA2XSEYRY/NA2XSEYBY)							
3x35	RM/16	0.868	1.12		0.417		0.125
3x50	RM/16	0.641	0.825		0.408		0.136
3x70	RM/16	0.443	0.571		0.389		0.151
3x95	RM/16	0.320	0.413		0.373		0.165
3x120	RM/16	0.253	0.327		0.360		0.178
3x150	RM/25	0.206	0.269		0.350		0.191
3x185	RM/25	0.164	0.215		0.341		0.205
3x240	RM/25	0.125	0.165		0.325		0.227
3x300	RM/25	0.100	0.133		0.315		0.244
3x400	RM/35	0.0778	0.106		0.306		0.271
3x500	RM/35	0.0605	0.0849		0.296		0.295

SINGLE CORE

THREE CORE



UNARMoured XLPE H.V. POWER CABLES U₀/U_m= 36/63(72.5)KV⁽¹⁾

N2XSY/NA2XSY

Standard:
IEC 60840 , VDE 0276 -632

Construction :

CU or AL/SCT/SC/XLPE/SC/SCT(WB)/CWS/PET/PVC
Stranded and compacted Aluminum or copper conductor
semi-conducting tape
inner semi conductor
XLPE insulation
outer semi conductor
Water blocking semi conducting tape
copper wire screen + copper tape applied helically
polyester tape
PVC outer sheath ⁽²⁾



CONSTRUCTIONAL & DESIGN DATA

Conductor & Screen Nominal Cross Section	Conductor Diameter	Insulation Thickness	Diameter over Insulation	Outer Sheath Thickness	Approx. Overall Diameter
No.xmm ²	mm	mm	mm	mm	mm
1x185 RM/25	16	10.5	39	2.5	49
1x240 RM/25	18.4	10.5	42	2.6	51
1x300 RM/25	20.5	10.5	44	2.7	54
1x400 RM/35	23.3	10.5	47	2.8	57
1x500 RM/50	26.5	10.5	50	2.9	61
1x630 RM/50	30.2	10.5	54	3	65
1x800 RM/50	34.5	10.5	58	3.2	69
1x1000 RM/50	39	10.5	63	3.3	74
1x1200 RM/50	42	10.5	66	3.5	77

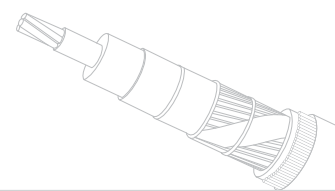
Max .conductor temperature in continuous operation : 90°C

Max . conductor temperature in short circuit.250°C

⁽¹⁾ Dry curing/Dry cooling

Dry: Nitrogen gas

⁽²⁾ HDPE , halogen free and low smoke, chemical resistant, low smoke PVC, anti rodent over sheath.
is also available on request .



WIRE ARMoured XLPE H.V . POWER CABLES U0/U(Um)= 36/63(72.5)KV⁽¹⁾

N2XSYRY/NA2XSYRY

Standard:
IEC 60840 , VDE 0276-632

Construction :

CU or AL/SCT/SC/XLPE/SC/SCT(WB)/CWS/PET/PVC(Bd)/AWA/PVC
Stranded and compacted Aluminum or copper conductor
inner semi conductor
XLPE insulation
outer semi conductor
water blocking semi conducting tape
copper wire screen + copper tape applied helically
polyester tape
PVC inner sheath
Aluminum wire armor
PVC outer sheath⁽²⁾



CONSTRUCTIONAL & DESIGN DATA

Conductor & Screen Nominal Cross Section	Conductor Diameter	Insulation Thickness	Diameter over Insulation	Armour Wire Dia.	Outer Sheath Thickness	Approx. Overall Diameter
No.xmm ²	mm	mm	mm	mm	mm	mm
1x185 RM/25	16	10.5	39	2.5	2.8	58
1x240 RM/25	18.4	10.5	42	3.15	2.9	62
1x300 RM/25	20.5	10.5	44	3.15	3	64
1x400 RM/35	23.3	10.5	47	3.15	3.1	67
1x500 RM/50	26.5	10.5	50	3.15	3.2	71
1x630 RM/50	30.2	10.5	54	3.15	3.4	75
1x800 RM/50	34.5	10.5	58	3.15	3.5	80
1x1000 RM/50	39	10.5	63	3.15	3.7	85
1x1200 RM/50	42	10.5	66	3.15	3.8	88

Max .conductor temperature in continuous operation : 90°C

Max . conductor temperature in short circuit.250°C

⁽¹⁾ Dry curing/Dry cooling

Dry: Nitrogen gas

⁽²⁾ HDPE , halogen free and low smoke, chemical resistant, low smoke PVC, anti rodent over sheath. is also available on request .

3.6/6 KV

6/10 KV

12/20 KV

18/30 KV

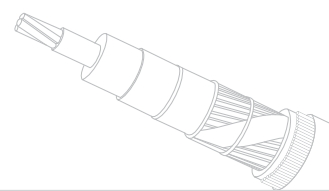
36/63 KV

UN ARMoured

WIRE ARMoured

TAPE ARMoured

ELECTRICAL CHARACTERISTICS



TAPE ARMoured XLPE H.V. POWER CABLES U₀/U(U_m)= 36/63(72.5)KV⁽¹⁾

N2XSYBY/NA2XSYBY

Standard:
IEC 60840 , VDE 0276-632

Construction :

CU or AL/SCT/SC/XLPE/SC/SCT(WB)/CWS/PET/PVC(Bd)/ ATA/PVC
Stranded and compacted Aluminum or copper conductor
semi-conducting tape
inner semi conductor
XLPE insulation
outer semi conductor
water blocking semi conducting tape
copper wire screen + copper tape applied helically
polyester tape
PVC inner sheath,
Aluminum tape armor
PVC outer sheath ⁽²⁾



CONSTRUCTIONAL & DESIGN DATA

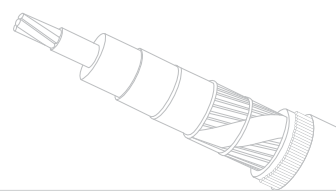
Conductor & Screen Nominal Cross Section	Conductor Diameter	Insulation Thickness	Diameter over Insulation	Armoured Tape Thickness	Outer Sheath Thickness	Approx. Overall Diameter
No.xmm ²	mm	mm	mm	mm	mm	mm
1x185 RM/25	16	10.5	39	0.5	2.7	54
1x240 RM/25	18.4	10.5	42	0.5	2.8	57
1x300 RM/25	20.5	10.5	44	0.5	2.9	60
1x400 RM/35	23.3	10.5	47	0.5	3	63
1x500 RM/50	26.5	10.5	50	0.5	3.1	67
1x630 RM/50	30.2	10.5	54	0.5	3.2	71
1x800 RM/50	34.5	10.5	58	0.5	3.4	76
1x1000 RM/50	39	10.5	63	0.8	3.6	82
1x1200 RM/50	42	10.5	66	0.8	3.7	85

Max .conductor temperature in continuous operation : 90°C
Max . conductor temperature in short circuit.250°C

⁽¹⁾ Dry curing/Dry cooling

Dry: Nitrogen gas

⁽²⁾ HDPE , halogen free and low smoke, chemical resistant, low smoke PVC, anti rodent over sheath. is also available on request .



 Electrical Characteristics

XLPE HV POWER CABLES U₀/U(U_m)=36/63(72.5) KV

Core/screen Cross-section	Max.DC resistance of Conductor at 20°C	Max . AC resistance of Conductor at 90°C	Reactance		Capacitance
No.xmm ²	Ω/Km	Ω/Km	 Ω/Km	 Ω/Km	μF/Km
NA2XSY					
1x185 RM/25	0.164	0.208	0.122	0.180	0.165
1x240 RM/25	0.125	0.159	0.117	0.175	0.181
1x300 RM/25	0.100	0.127	0.114	0.172	0.194
1x400 RM/35	0.0778	0.0973	0.109	0.167	0.214
1x500 RM/50	0.0605	0.0782	0.106	0.164	0.234
1x630 RM/50	0.0469	0.0614	0.102	0.160	0.257
1x800 RM/50	0.0367	0.0493	0.098	0.156	0.284
1x1000RM/50	0.0291	0.0396	0.095	0.153	0.311
1x1200RM/50	0.0247	0.0326	0.094	0.152	0.330
NA2XSYRY					
1x185 RM/25	0.164	0.208	0.132	0.190	0.165
1x240 RM/25	0.125	0.159	0.128	0.186	0.181
1x300 RM/25	0.100	0.127	0.124	0.183	0.194
1x400 RM/35	0.0778	0.0973	0.119	0.177	0.214
1x500 RM/50	0.0605	0.0782	0.115	0.173	0.234
1x630 RM/50	0.0469	0.0614	0.112	0.170	0.257
1x800 RM/50	0.0367	0.0493	0.108	0.166	0.284
1x1000RM/50	0.0291	0.0396	0.104	0.162	0.311
1x1200RM/50	0.0247	0.0326	0.103	0.161	0.330
NA2XSYBY					
1x185 RM/25	0.164	0.208	0.128	0.186	0.165
1x240 RM/25	0.125	0.159	0.123	0.181	0.181
1x300 RM/25	0.100	0.127	0.120	0.178	0.194
1x400 RM/35	0.0778	0.0973	0.115	0.173	0.214
1x500 RM/50	0.0605	0.0782	0.111	0.169	0.234
1x630 RM/50	0.0469	0.0614	0.108	0.166	0.257
1x800 RM/50	0.0367	0.0493	0.104	0.162	0.284
1x1000RM/50	0.0291	0.0396	0.102	0.160	0.311
1x1200RM/50	0.0247	0.0326	0.100	0.158	0.330
N2XSY					
1x185 RM/ 25	0.0991	0.127	0.122	0.180	0.165
1x240 RM/ 25	0.0754	0.0973	0.117	0.175	0.181
1x300 RM /25	0.0601	0.0782	0.114	0.172	0.194
1x400 RM /35	0.0470	0.0614	0.109	0.167	0.214
1x500 RM/50	0.0366	0.0493	0.106	0.164	0.234
1x630 RM/50	0.283	0.0396	0.102	0.160	0.257
1x800 RM/50	0.0221	0.0326	0.098	0.156	0.284
1x1000 RM/50	0.0176	0.0276	0.095	0.153	0.311
N2XSYRY					
1x185 RM/ 25	0.0991	0.127	0.132	0.190	0.165
1x240 RM/ 25	0.0754	0.0973	0.128	0.186	0.181
1x300 RM /25	0.0601	0.0782	0.124	0.183	0.194
1x400 RM /35	0.0470	0.0614	0.119	0.177	0.214
1x500 RM/50	0.0366	0.0493	0.115	0.173	0.234
1x630 RM/50	0.283	0.0396	0.112	0.170	0.257
1x800 RM/50	0.0221	0.0326	0.108	0.166	0.284
1x1000 RM/50	0.0176	0.0276	0.104	0.162	0.311
N2XSYBY					
1x185 RM/ 25	0.0991	0.127	0.128	0.186	0.165
1x240 RM/ 25	0.0754	0.0973	0.123	0.181	0.181
1x300 RM /25	0.0601	0.0782	0.120	0.178	0.194
1x400 RM /35	0.0470	0.0614	0.115	0.173	0.214
1x500 RM/50	0.0366	0.0493	0.111	0.169	0.234
1x630 RM/50	0.283	0.0396	0.108	0.166	0.257
1x800 RM/50	0.0221	0.0326	0.104	0.162	0.284
1x1000 RM/50	0.0176	0.0276	0.102	0.160	0.311

3.6/6 KV

UN ARMoured

6/10 KV

WIRE ARMoured

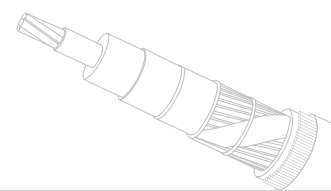
12/20 KV

TAPE ARMoured

18/30 KV

ELECTRICAL CHARACTERISTICS

36/63 KV



UNARMoured WATER BLOCKING XLPE H.V. POWER CABLES U0/U(Um)=36/63(72.5)KV⁽¹⁾

● **N2XS(FL)2Y/NA2XS(FL)2Y**

● **Standard:**
IEC 60840, VDE 0276-632

● **Construction :**
CU or AL/SCT/SC/XLPE/SC/SCT(WB)/CWS/WBT/ALCO/HDPE
Stranded and compacted Aluminum or copper conductor
semi-conductor tape
inner semi conductor
XLPE insulation
outer semi conductor
water blocking semi conducting tape
copper wire screen + copper tape applied helically
water blocking tape
AL copolymer coated tape applied longitudinally
HDPE outer sheath⁽²⁾



● CONSTRUCTIONAL & DESIGN DATA

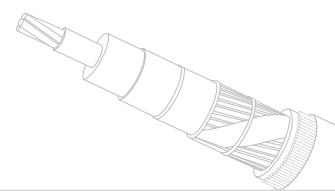
Conductor & Screen Nominal Cross Section	Conductor Diameter	Insulation Thickness	Diameter over Insulation	AL copolymer coated Tape thickness	Outer Sheath Thickness	Overall Diameter
No.mm ²	mm	mm	mm	mm	mm	mm
1x185 RM/25	16	10.5	40	0.3	2.6	51
1x240 RM/25	18.4	10.5	42	0.3	2.7	54
1x300 RM/25	20.5	10.5	45	0.3	2.8	56
1x400 RM/35	23.3	10.5	48	0.3	2.9	60
1x500 RM/50	26.5	10.5	51	0.3	3	63
1x630 RM/50	30.2	10.5	55	0.3	3.1	67
1x800 RM/50	34.5	10.5	59	0.3	3.3	72
1x1000 RM/50	39	10.5	63	0.3	3.4	76
1x1200 RM/50	42	10.5	66	0.3	3.5	80

Max .conductor temperature in continuous operation : 90°C
Max . conductor temperature in short circuit.250°C

⁽¹⁾ Dry curing/Dry cooling

Dry: Nitrogen gas

⁽²⁾ HDPE , halogen free and low smoke, chemical resistant, low smoke PVC, anti rodent over sheath.
is also available on request .





WIRE ARMoured WATER BLOCKING XLPE H.V. POWER CABLES U₀/U_m=36/63(72.5)KV⁽¹⁾

● N2XS(FL)2YRY/NA2XS(FL)2YRY

● Standard:

IEC 60840, VDE 0276-632

● Construction :

CU or AL/SCT/SC/XLPE/SC/SCT(WB)/CWS/WBT/ALCO/PE(Bd)/AWA/PVC

Stranded and compacted Aluminum or copper conductor

inner semi conductor

XLPE insulation

outer semi conductor

water blocking semi conducting tape

copper wire screen plus copper tape applied helically

water blocking tape

AL copolymer coated tape applied longitudinally

PE inner sheath

Aluminum wire armor

PVC outer sheath⁽²⁾



● CONSTRUCTIONAL & DESIGN DATA

Conductor & Screen Nominal Cross Section	Conductor Diameter	Insulation Thickness	Diameter over Insulation	AL copolymer coated Tape thickness	Armor Wire Dia.	Outer Sheath Thickness	Overall Diameter
No.mm ²	mm	mm	mm	mm	mm	mm	mm
1x185 RM/25	16	10.5	40	0.3	2.5	2.9	60
1x240 RM/25	18.4	10.5	42	0.3	3.15	3	64
1x300 RM/25	20.5	10.5	45	0.3	3.15	3.1	66
1x400 RM/35	23.3	10.5	48	0.3	3.15	3.2	70
1x500 RM/50	26.5	10.5	51	0.3	3.15	3.3	73
1x630 RM/50	30.2	10.5	55	0.3	3.15	3.5	78
1x800 RM/50	34.5	10.5	59	0.3	4	3.7	84
1x1000 RM/50	39	10.5	63	0.3	4	3.8	89
1x1200 RM/50	42	10.5	66	0.3	4	3.9	92

Max .conductor temperature in continuous operation : 90°C

Max . conductor temperature in short circuit.250°C

⁽¹⁾ Dry curing/Dry cooling

Dry: Nitrogen gas

⁽²⁾ HDPE , halogen free and low smoke, chemical resistant, low smoke PVC, anti rodent over sheath. is also available on request .

3.6/6 KV

6/10 KV

12/20 KV

18/30 KV

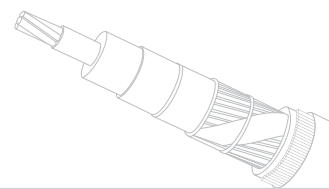
36/63 KV

UN ARMoured

WIRE ARMoured

TAPE ARMoured

ELECTRICAL CHARACTERISTICS



TAPE ARMoured WATER BLOCKING XLPE H.V. POWER CABLES U0/U(Um)=36/63(72.5)KV⁽¹⁾

● N2XS(FL)2YBY/NA2XS(FL)2YBY

● **Standard:**
IEC 60840 · VDE 0276-632

● **Construction :**
CU or AL/SCT/SC/XLPE/SC/SCT(WB)/ALCO/PE(Bd)/ATA/PVC
Stranded and compacted Aluminum or copper conductor
inner semi conductor
XLPE insulation
outer semi conductor
water blocking semi conducting tape
copper wire screen plus copper tape applied helically
water blocking tape
AL copolymer coated tape applied longitudinally
PE inner sheath
Aluminum tape armor
PVC outer sheath⁽²⁾



● CONSTRUCTIONAL & DESIGN DATA

Conductor & Screen Nominal Cross Section	Conductor Diameter	Insulation Thickness	Diameter over Insulation	AL copolymer coated Tape thickness	Aarmor tape thickness	Outer Sheath Thickness	Overall Diameter
No.mm ²	mm	mm	mm	mm	mm	mm	mm
1x185 RM/25	16	10.5	40	0.3	0.5	2.8	57
1x240 RM/25	18.4	10.5	42	0.3	0.5	2.9	60
1x400 RM/35	23.3	10.5	48	0.3	0.5	2.9	62
1x500 RM/50	26.5	10.5	51	0.3	0.5	3.1	65
1x630 RM/50	30.2	10.5	55	0.3	0.5	3.2	69
1x800 RM/50	34.5	10.5	59	0.3	0.5	3.3	73
1x1000 RM/50	39	10.5	63	0.3	0.8	3.5	78
1x1200 RM/50	42	10.5	66	0.3	0.8	3.7	84

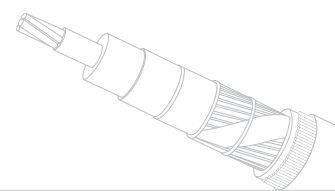
Max .conductor temperature in continuous operation : 90°C

Max . conductor temperature in short circuit.250°C

⁽¹⁾ Dry curing/Dry cooling

Dry: Nitrogen gas

⁽²⁾ HDPE , halogen free and low smoke, chemical resistant, low smoke PVC, anti rodent over sheath. is also available on request .



 Electrical Characteristics

XLPE HV POWER CABLES U₀/U(U_m)=36/63(72.5) KV

No. of cores x Cross section Screen cross section	Max.DC resistance of Conductor at 20°C	Max . AC resistance of Conductor at 90°C	Reactance		Capacitance
			 Ω/Km	 Ω/Km	
No.xmm ²	Ω/Km	Ω/Km			μF/Km
N2XS(FL)2Y					
1x185 RM/ 25	0.0991	0.127	0.123	0.181	0.165
1x240 RM/ 25	0.0754	0.0973	0.118	0.176	0.181
1x300 RM /25	0.0601	0.0782	0.115	0.173	0.194
1x400 RM /35	0.0470	0.0614	0.110	0.168	0.214
1x500 RM/50	0.0366	0.0493	0.106	0.165	0.234
1x630 RM/50	0.283	0.0396	0.103	0.161	0.257
1x800 RM/50	0.0221	0.0326	0.099	0.158	0.284
1x1000 RM/50	0.0176	0.0276	0.096	0.155	0.311
N2XS(FL)2YRY					
1x185 RM/25	0.0991	0.127	0.132	0.190	0.165
1x240 RM/25	0.0754	0.0973	0.129	0.187	0.181
1x300 RM/25	0.0601	0.0782	0.125	0.183	0.194
1x400 RM/35	0.0470	0.0614	0.120	0.178	0.214
1x500 RM/50	0.0366	0.0493	0.116	0.174	0.234
1x630 RM/50	0.283	0.0396	0.113	0.171	0.257
1x800 RM/50	0.0221	0.0326	0.110	0.168	0.284
1x1000 RM/50	0.0176	0.0276	0.106	0.164	0.311
N2XS(FL)2YBY					
1x185 RM/25	0.0991	0.127	0.129	0.187	0.165
1x240 RM/25	0.0754	0.0973	0.124	0.182	0.181
1x300 RM/25	0.0601	0.0782	0.120	0.178	0.194
1x400 RM/35	0.0470	0.0614	0.116	0.174	0.214
1x500 RM/50	0.0366	0.0493	0.112	0.170	0.234
1x630 RM/50	0.283	0.0396	0.108	0.166	0.257
1x800 RM/50	0.0221	0.0326	0.105	0.163	0.284
1x1000 RM/50	0.0176	0.0276	0.103	0.161	0.311
NA2XS(FL)2Y					
1x185 RM/25	0.164	0.208	0.123	0.181	0.165
1x240 RM/25	0.125	0.159	0.118	0.176	0.181
1x300 RM/25	0.100	0.127	0.115	0.173	0.194
1x400 RM/35	0.0778	0.0973	0.110	0.169	0.214
1x500 RM/50	0.0605	0.0782	0.106	0.165	0.234
1x630 RM/50	0.0469	0.0614	0.103	0.161	0.257
1x800 RM/50	0.0367	0.0493	0.099	0.158	0.284
1x1000 RM/50	0.0291	0.0396	0.096	0.155	0.311
NA2XS(FL)2YRY					
1x185 RM/25	0.0991	0.127	0.132	0.190	0.165
1x240 RM/25	0.0754	0.0973	0.129	0.187	0.181
1x300 RM/25	0.0601	0.0782	0.125	0.183	0.194
1x400 RM/35	0.0470	0.0614	0.120	0.178	0.214
1x500 RM/50	0.0366	0.0493	0.116	0.174	0.234
1x630 RM/50	0.283	0.0396	0.113	0.171	0.257
1x800 RM/50	0.0221	0.0326	0.110	0.168	0.284
1x1000 RM/50	0.0291	0.0396	0.106	0.164	0.311
NA2XS(FL)2YBY					
1x185 RM/25	0.164	0.208	0.129	0.187	0.165
1x240 RM/25	0.125	0.159	0.124	0.182	0.181
1x300 RM/25	0.100	0.127	0.120	0.178	0.194
1x400 RM/35	0.0778	0.0973	0.116	0.174	0.214
1x500 RM/50	0.0605	0.0782	0.112	0.170	0.234
1x630 RM/50	0.0469	0.0614	0.108	0.166	0.257
1x800 RM/50	0.0367	0.0493	0.105	0.163	0.284
1x1000 RM/50	0.0291	0.0396	0.103	0.161	0.311

3.6/6 KV

UN ARMoured

6/10 KV

WIRE ARMoured

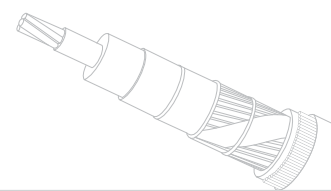
12/20 KV

TAPE ARMoured

18/30 KV

ELECTRICAL CHARACTERISTICS

36/63 KV



Note:

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....



Aerial Cables

6

CONTENTS

Building Wire & Cables

Power Cables (0.6-1)KV

Instrument & Control Cables

Telecommunication &
Coaxial Cables

MV & HV Power Cables

Aerial Cables

1- All Aluminium conductor – AAC	109
2- All Aluminium Alloy conductor – AAAC	110
3- Aluminium conductor Steel Reinforced – ACSR-GA	111
4- Aerial Cables	112

Rubber Cables

Technical information &
Tables

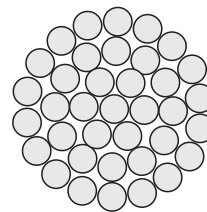


All Aluminium conductor – AAC

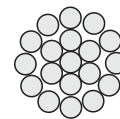
● **Standard:**
IEC 61089 Type A1

● **Construction :**
All-Aluminium conductors are the most favoured type for use in the construction of relatively short span distribution schemes and are in common use on lines for voltages up to 63 KV.
Another frequent application for all – Aluminium conductor is in flexible busbar connections. Although aluminium-to-copper connection can be made, it is better to use aluminium conductors for service connections, various forms cable being available for this purpose. The data sheets show the most common sizes of conductor but other sizes, related to any recognized specification, can be supplied.

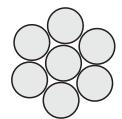
● **Application:**
These conductors have great economical advantage when compared with copper type bare conductors and Insulated cables regarding installation of overhead distribution lines at low and medium voltages.



37 All Al.



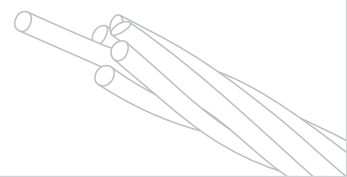
19 All Al.



7 All Al.

● CONSTRUCTIONAL & DESIGN DATA

Code number	Area	No. of Wires	Dia. of Wires	Weight	Rated strength	D.C. resistance
	mm ²	No	mm	Kg/km	KN	ohm/km
10	10	7	1.35	27.4	1.95	2.8633
15	15	7	1.71	43.8	3.04	1.7896
25	25	7	2.13	68.4	4.50	1.1453
40	40	7	2.70	109.4	6.80	0.7158
63	63	7	3.39	172.3	10.39	0.4545
100	100	19	2.59	274.8	17.00	0.2877
125	125	19	2.89	343.6	21.25	0.2302
160	160	19	3.27	439.8	26.40	0.1798
200	200	19	3.66	549.7	32.00	0.1439
250	250	19	4.09	687.1	40.00	0.1151
315	315	37	3.29	867.9	51.97	0.0916
400	400	37	3.71	1102.0	64.00	0.0721
450	450	37	3.94	1239.8	72.00	0.0641
500	500	37	4.15	1377.6	80.00	0.0577
560	560	37	4.39	1542.9	89.60	0.515
630	630	61	3.63	1738.3	100.80	0.0458
710	710	61	3.85	1959.1	113.60	0.0407
800	800	61	4.09	2207.4	128.00	0.0361
900	900	61	4.33	2483.3	144.00	0.0321
1000	1000	61	4.57	2759.2	160.00	0.0289
1120	1120	91	3.98	3093.5	179.20	0.0258
1250	1250	91	8.14	3452.6	200.00	0.0231
1400	1400	91	4.43	3866.9	224.00	0.0207
1500	1500	91	4.58	4143.1	240.00	0.0193



All Aluminium Alloy conductor – AAAC

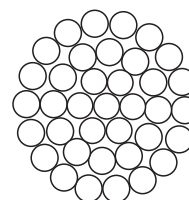
● **Standard:**
German Standard DIN 48201

● **Construction :**

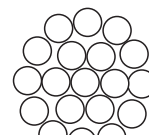
These conductors are formed by several of these, with other wires of galvanized steel, stranded in concentric layers. The central wire which from the core are of either alloy or steel and the outer layers are of alloy. Normally the composition of these conductors is the same as the ones pertaining to the aluminium steel conductors. In the case of alloy conductors, all the wire can be the same nominal diameter and in the case of alloy conductors with a steel core, the diameters of the alloy and the steel wire can be the same or different of one other. The basic composition of this alloy pertains to the aluminium - magnesium - silicon group which is also known in Europe as Almelec Aldery and after their drawing they must undergo a thermal treatment at a temperature of approximately 165°C.

● **Application:**

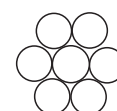
As regards aluminium, the wire of this alloy has a double tensile strength (greater than 30kg/mm²), its electrical conductivity is 15% lower (53% instead of 61%) and the weight is the same. By making use of these characteristics, in many cases, an alloy conductor can be replaced the Aluminium conductor steel reinforced with a similar installation cost. The Aluminium Alloy steel reinforced conductors have a much higher strength and low, medium, high and very high voltage lines.



37 Al.Alloy



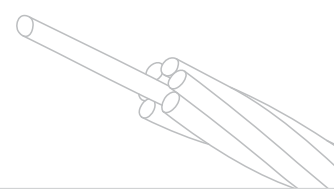
19 Al.Alloy



7 Al.Alloy

● **CONSTRUCTIONAL & DESIGN DATA**

Code number		Stranding and wire diameter	Overall diameter	Weight	Nominal breaking load	Maximum DC resistance at 20°C	Maximum AC resistance		Current rating ambient temp	
Nominal	Actual						25°C	75°C	25°C	40°C
mm ²	mm ²	No./mm	mm	Kg/km	Kp	ohm/km	ohm/km		A	
16	15.89	7/1.7	5.1	43	453	2.09127	2.13350	2.55490	96	80
25	24.25	7/2.1	6.3	66	691	1.37047	1.39827	1.67445	127	106
35	34.36	7/2.5	7.5	94	979	0.96700	0.98715	1.18213	160	134
50	49.46	7/3.0	9.0	135	1409	0.67153	0.68552	0.82092	206	170
50	48.36	19/1.8	9.0	133	1377	0.69063	0.70502	0.84427	201	168
70	65.82	19/2.10	10.5	181	1875	0.50740	0.51797	0.62028	246	206
95	93.27	19/2.50	12.5	256	2657	0.35802	0.36601	0.43831	310	260
120	117.00	19/2.80	14.0	322	3333	0.28541	0.29178	0.34941	361	303
150	147.10	37/2.25	15.7	405	4191	0.22742	0.23279	0.27888	420	352
185	181.60	37/2.50	17.5	500	5174	0.18421	0.18890	0.22621	483	405
240	242.53	61/2.25	20.2	670	6909	0.13835	0.14265	0.17082	584	489
300	299.04	61/2.50	22.5	827	8530	0.11206	0.11600	0.13891	671	562
400	400.13	61/2.89	26.0	1105	11398	0.08386	0.08839	0.10585	807	676
500	499.82	61/3.23	29.1	1381	14238	0.06713	0.07137	0.08546	932	781
625	626.28	91/2.96	32.6	1733	17838	0.05369	0.05830	0.06981	1071	898
800	802.06	91/3.35	36.8	2226	22848	0.04192	0.04752	0.05691	1237	1036
1000	999.68	91/3.74	41.1	2767	28477	0.03367	0.04037	0.04835	1393	1166



Aluminium conductor Steel Reinforced – ACSR-GA

Standard:

British Standard BS 215 Part 2

Construction :

Aluminium Conductors Consist of several wires of Aluminium and galvanized high carbon steel, stranded in concentric layers, the wire or wires which form the core are made galvanized steel core of 1,7 or 19 wires, Surrounded by concentric layers of Aluminium wires.

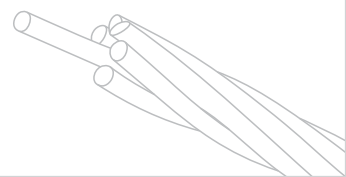
Application:

The Aluminium conductors (ACSR) are suitable for over head lines of medium, high and extra high voltages for short or long distances.



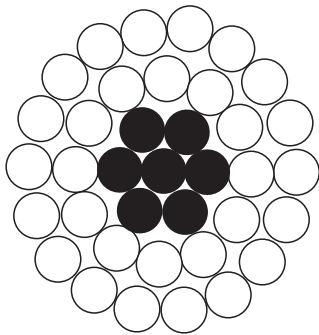
CONSTRUCTIONAL & DESIGN DATA

Code name	Area				Stranding and wire diameter		Approx derail diameter	Weight			Nominal breaking load	Maximum DC resistance at 20°C	Maximum AC resistance		current rating ambient temp	
	Aluminium		Steel	Total	Aluminium	Steel		Aluminium	Steel	Total			25°C	75°C	25°C	40°C
	Nominal	mm ²	mm ²	mm ²	No./mm	No./mm		kg/km	kg/km	kg/km			ohm/km		A	
Mole	-	10.60	1.77	12.37	6/1.50	1/1.50	4.5	29	14	43	421	2.63987	2.69317	3.22513	82	69
Squirrel	-	2098	3.50	24.48	62.11	1/1.1	6.33	58	27	85	806	1.3414	1.36120	1.63006	129	108
Gopher	25	26.25	4.37	30.62	6/2.36	12.36	7.08	72	34	106	980	1.06645	1.08808	1.30300	149	135
Weasel	30	31.61	5.27	36.88	6/2.59	12.59	7.77	87	41	128	1157	0.88545	0.90358	1.082206	169	141
Fox	-	3668	6.11	42.79	6/2.79	12.79	8.37	101	48	148	1343	0.76306	0.77868	0.93249	186	165
Ferret	40	42.41	7.07	49.48	6/3.00	1/3.00	9	116	55	171	1553	0.65997	0.67348	0.80651	205	172
Rabbit	50	52.88	8.81	61.70	6/3.35	1/3.35	10.05	145	69	214	1873	0.52927	0.5429	0.64701	238	199
Mink	-	63.12	10.52	73.64	6/3.66	1/3.66	10.98	173	82	255	2223	0.44341	0.45289	0.54234	267	224
Shrunk	-	63.22	36.88	100.10	12/2.59	7/2.59	12.95	175	288	463	5378	0.42001	0.46076	0.55176	290	243
Beaver	-	75.02	12.50	87.52	6/3.99	1/3.99	11.97	206	97	303	2627	0.3709	0.38107	0.45634	300	251
Horse	70	73.36	42.79	116.16	12/2.79	7/2.79	13.95	203	334	537	6240	0.36195	0.39706	0.47549	321	269
Recon	-	79.21	13.20	92.42	6/4.10	1/4.10	12.3	217	103	320	2774	0.35334	0.36123	0.43258	311	261
Otter	-	83.92	13.99	97.90	6/4.22	1/4.22	12.66	230	109	339	2930	0.33353	0.34098	0.40833	323	271
Cat	-	95.42	15.90	111.33	6/4.50	1/4.50	13.5	262	124	386	3341	0.29332	0.29986	0.35909	352	295
Hare	-	104.98	17.50	122.43	6/4.72	1/4.72	14.16	288	136	424	3665	0.26661	0.27291	0.2368	376	314
Dog	100	104.98	13.55	118.53	6/4.72	7/1.57	14.15	288	106	394	3333	0.26811	0.27896	0.33406	374	313
Hyena	-	105.96	20.48	126.43	7/4.39	7/1.93	14.57	291	160	451	4194	0.26316	0.27602	0.33054	381	319
Leopard	-	13137	16.84	148.21	6/5.28	7/1.75	15.81	360	132	492	4157	0.21432	0.22338	0.28748	433	363
Coyote	-	131.74	20.06	151.80	26/2.54	7/1.91	15.89	364	156	510	4684	0.21443	0.22417	0.26845	434	364
Cougar	-	131.51	7.31	138.81	18/3.05	1/3.05	15.25	362	58	420	3116	0.21717	0.22270	0.26669	425	355
Tiger	-	131.23	30.62	161.85	30/2.36	7/2.36	16.52	363	239	602	5916	0.21273	0.22466	0.26903	441	370
Wolf	150	158.05	36.88	194.93	30/2.59	7/2.59	18.13	437	288	725	7061	0.17663	0.18697	0.22391	499	419
-	150	158.65	8.81	167.46	18/3.35	1/3.35	16.75	437	69	506	3460	0.1900	0.18502	0.22155	481	403
Lynx	175	183.40	42.79	226.20	30/2.79	7/2.79	19.53	507	334	841	8137	0.15221	0.16113	0.19295	551	462
-	175	184.23	10.24	194.47	18/3.61	1/3.61	18.05	508	80	558	3983	0.15501	0.15933	0.19080	532	446

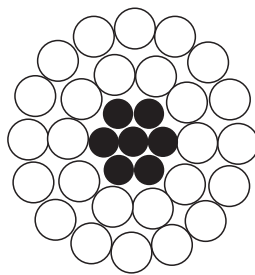




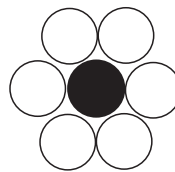
Aluminium conductor Steel Reinforced – ACSR-GA



30 Al.
7 Steel



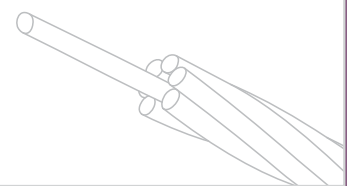
26 Al.
7 Steel



6 Al.
1 Steel

CONSTRUCTIONAL & DESIGN DATA

Code name	Area				Stranding and wire diameter		Approx derail diameter	Weight			Nominal breaking load	Maximum DC resistance at 20°C	Maximum AC resistance		Current rating ambient temp	
	Aluminium		Steel	Total	Aluminium	Steel		Aluminium	Steel	Total			25°C	75°C	25°C	40°C
	Nominal	mm ²	mm ²	mm ²	No./mm	No./mm		kg/km	mm ²	mm ²		ohm/km	ohm/km		A	
Panther	200	21205	49.48	261.53	30/2.00	7/3.00	21	586	387	973	9408	0.13165	0.13979	0.16740	806	509
Lion	-	238.26	55.59	293.85	30/3.18	7/3.18	22.26	658	435	1083	10247	0.11717	0.12491	0.14958	654	549
Bear	-	264.42	61.70	326.11	30/3.35	7/3.35	26.45	731	482	1213	11345	0.10558	0.11310	0.18544	700	587
Goat	-	324.30	75.67	399.97	30/3.71	7/3.71	25.97	896	591	1488	13848	0.08608	0.09277	0.1110	799	671
Sheep	-	3750.10	87.52	462.62	30/3.99	7/3.99	27.93	1036	684	1721	15940	0.07442	0.08079	0.09675	878	736
Antelope	-	374.10	48.49	422.59	54/2.97	7/2.97	26.73	1015	379	1394	12087	0.07445	0.07975	0.09550	865	725
Bison	-	381.69	49.48	431.17	54/3.00	7/3.00	27	1036	337	1423	12130	0.07297	0.07817	0.09360	876	736
-	200	210.63	11.70	222.33	18/3.86	1/3.86	19.3	580	91	672	4513	0.13558	0.14291	0.1713	674	481
Deer	-	429.59	100.24	529.83	300/4.27	7/4.27	29.89	1187	783	1971	18212	0.06498	0.07114	0.08520	957	803
Zebra	400	428.87	55.59	484.465	54/3.18	7/3.18	28.62	1164	435	1599	13454	0.06494	0.07016	0.08402	943	791
Elk	-	477.12	111.33	588.44	30/4.50	7/4.50	31.5	1318	870	2189	20227	0.5851	0.06469	0.07747	1022	857
Camel	-	475.95	61.7	537.65	54/3.35	7/3.35	30.15	1292	482	1774	14883	0.05852	0.06385	0.07646	1006	844
Moose	-	528.47	68.5	596.98	54/3.53	7/3.53	31.77	1434	685	1970	16417	0.6270	0.05816	0.06985	1073	900





Aerial Bundled Cables : ABC

Type 1: SINGLE PHASE SELF SUPPORTING CABLE WITH ACSR CORE (0.6/1KV) NA2X-T

● **construction:**

Conductor : Aluminium (phase and lighting), ACSR (neutral and messenger)
insulation : XLPE

● **abbreviation:**

AL/XLPE
ACSR/XLPE

● **standard:** TAVANIR, NFC 33-209

TYPE 2: 3 PHASE SELF SUPPORTING CABLE WITH ACSR CORE (0.6/1KV) NA2X-T

● **construction:**

Conductor : Aluminium (3 phases, and lighting), ACSR (neutral and messenger)
insulation : XLPE

● **abbreviation:**

AL/XLPE
ACSR/XLPE

● **standard:** TAVANIR, NFC 33-209

TYPE 3: 3 PHASE SELF SUPPORTING CABLE WITH NEUTRAL AND LIGHTING CORE (0.6/1KV)TYPE 2 NA2X-T

● **construction:**

Conductor : Aluminium (3 phases, neutral and lighting), galvanized steel wires (messenger)
Insulation : XLPE

● **abbreviation:**

AL/XLPE

● **standard:** TAVANIR, NFC 33-209

TYPE4: 3 PHASE SELF-SUPPORTING CABLE WITH LIGHTING, NAUTRAL – MESSENGER AL-ALLOY NA2X-T

● **construction:** aluminium (phase and lighting) al-alloy (messenger - nautral)

Insulation : XLPE

● **abbreviation:**

AL/XLPE

● **standard:** TAVANIR, NFC 33-209

Type 5: MEDIUM VOLTAGE SELF SUPPORTING CABLES 3 PHASE 20KV CABLES WITH INDIVIDUAL MESSENGER

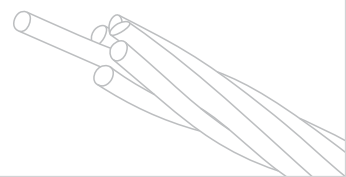
● **construction:**

Conductor : stranded and compacted aluminium conductor screen and insulation screen :
extruded semi conductor insulation : dry cured XLPE
Outer covering of each core : uv resistant HDPE
Messenger : steel wires
Insulation of messenger : uv resistant PVC

● **abbreviation :**

AL/SC/XLPE/SC/SC TAPE/CWS/PET/HDPE

● **standard :** IEC 60502-2, IEC 60228





Rubber Cables

CONTENTS

Building Wire & Cables

Power Cables (0.6-1)KV

Instrument & Control Cables

Telecommunication & Coaxial Cables

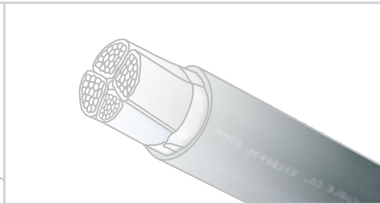
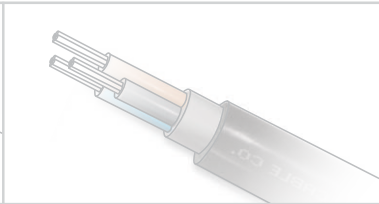
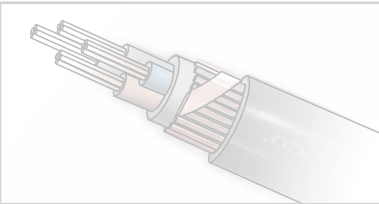
MV & HV Power Cables

Aerial Cables

Rubber Cables

1- Rubber Sheathed Cable Characteristics	117
2- Arc Welding Cable	118
3- Rubber Flat Power Cable	119
4- Rubber Power Cable	120
5- Protolon	121

Technical information & Tables





RUBBER SHEATHED CABLES

Special Characteristics :

Moisture and Water resistance (while used in deep water wells, high humid environment , dams marine platforms and structures coastline port and anchorage terminals , vessels etc) resistance against high temperature rubber (90° c) and silicon (+180° c) tolerance against sever low temperature rubber (-35° c) and silicon (-50° c) suitable to be used in tropical and arctic regions . melting and metallurgy workshops , places with direct exposure to sun ray locations with high risk of explosion flames and fires resulted from electrical shocks, resistance against petroleum oil and corrosive substances and materials (such as refineries , petrochemical complexes, excavation, cement factories , chemical and paint industries, ...) extraordinary elasticity. flexibility and softness (suitable for cranes , lifters, elevators and any other mobile vehicles that need to carry the cables with them) shock resistance and durability against friction and environment physical damages (tunnels , mountainous areas , tough and hard job workshops,...).

Production Range:

- Welding cables with rubber covering
- Power cables with rubber insulation and sheath
- Flat cables with rubber insulation and sheath
- Round & Flat control cables with rubber insulation and sheath
- Power cables with silicon insulation and sheath
- Round control cables with silicon insulation and sheath
- Instrumentation cables (Shielded & Unshielded)
- Shipboard rubber insulated and sheathed power cables
- Portable mining cable
- Special cables with rubber insulation and sheath on request



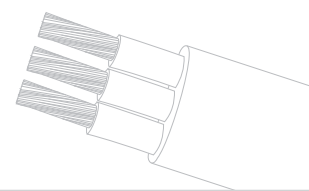
ویژگیهای خاص :

ضد آب، مقاوم در برابر حرارتهای بالا، مقاوم در برابر مواد نفتی، انعطاف پذیری، عدم جذب آب و رطوبت (در چاههای آب مناطق مرطوب، سدها، سازه های دریایی، اسکله و پایانه های آبی، کشتی و انواع شناورها و ...) مقاوم در برابر حرارتهای بالا (لاستیک 90° C +) و سیلیکون 180° C + و سرمای شدید لاستیک 35° C - و سیلیکون 50° C - (مناطق گرمسیر و سردسیر ارگاه های ریخته گری و ذوب فلزات مناطق در معرض مستقیم تابش نور خورشید مناطق دارای مخاطرات انفجار و آتش سوزی به واسطه اتصالات برق، ...) مقاوم در برابر مواد نفتی، روغنی و مواد خورنده (پالایشگاهها، پتروشیمی ها، حفاری، کارخانجات سیمان، کارخانجات رنگ و مواد شیمیایی) انعطاف پذیری و نرمی فوق العاده (جرثقیل ها، بالابر ها، آسانسور ها و هر وسیله محرکی که کابل به همراه آن دائما در حرکت است) ضربه پذیری و استحکام در برابر سایش و آسیبهای فیزیکی محیطی (تونل ها، مناطق کوهستانی، محیطهای خشن کارگاهی و ...)

انواع تولیدات :

- کابل های کنترل گرد با عایق و روکش سیلیکون
- کابل های ابزار دقیق با عایق و روکش سیلیکون (شیلددار و بدون شیلد)
- کابل های قدرت کشتی با عایق و روکش لاستیک
- کابل های معدن
- انواع کابل های خاص با عایق و روکش لاستیک

- کابل های جوشکاری با روکش لاستیک
- کابل های قدرت با عایق و روکش لاستیک
- کابل های تخت با عایق و روکش لاستیک
- کابل های کنترل گرد و تخت با عایق و روکش لاستیک
- کابل های قدرت با عایق و روکش سیلیکون



 Arc Welding cable

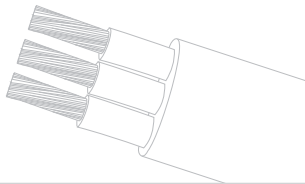
- **Rated Voltage:** 100 V
- **Applicable Standard:** IEC 60245-6, ISIRI 1926-6
- **Harmonized code:** H01N2-D

- **Construction:**
Cu or TiCu/NBR
Conductor: Flexible annealed copper or tinned copper conductor
Separator: Polyester tape over plain conductor
Sheath: Rubber type EM2

- **Application:**
For use between the welding machine and the hand –electrode and the work piece, Auto mobile, Industry, Tool Making machinery, welding Robots.



No. of Cores & Cross Section	Nominal Sheath Thickness	Overall Dia. (Approx.)	Total Weight (Approx.)	Max. Conductor Resistance at 20°C
mm ²	mm	mm	kg/km	Ω/km
1x16	2.0	10	220	1.16
1x25	2.0	12	310	0.758
1x35	2.0	13	410	0.536
1x50	2.2	16	580	0.379
1x70	2.4	17.5	785	0.268
1x95	2.6	19.5	1040	0.198
1x120	2.8	22	1315	0.155
1x150	3.2	24.5	1650	0.129
1x185	3.3	26.7	1960	0.105



Rubber Insulated & Sheathed Flat Power Cable

- **Rated Voltage:** 0.6/1 KV
- **Applicable Standard:** HN 141-A(KSB)

- **Harmonized code:** H01N2-D

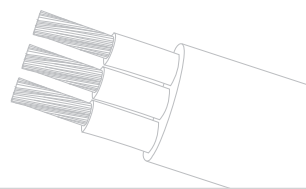
- **Construction:**
Cu/EPDM/NBR
Conductor: Flexible annealed stranded copper class 5
Separator: Polyester tape over plain conductor
Insulation: EPDM type EI7
Laying: cores laying up parallel
Color of cores: Black, Blue, Brown
Sheath: EM2 type



- **Technical data:**
1) Working temperature: Max 90°C
2) Test voltage: 4500 v AC

- **Application:**
For operation of submersed pumps for drinking water or waste water recycling, operation and control equipment in water systems, swimming pools lighting, etc.

No. of Cores & Cross Section	Nominal Sheath Thickness	Overall Dia. (Approx.)	Total Weight (Approx.)	Max. Conductor Resistance at 20°C
mm ²	mm	mm	kg/km	Ω/km
3x1.5	0.70	12.70x5.70	116	13.3
3x2.5	0.90	15.00x6.60	165	7.98
3x4	1.00	18.80x8.50	273	4.95
3x6	1.00	22.20x9.60	380	3.39
3x10	1.20	26.90x11.00	555	1.91
3x16	1.20	31.20x13.00	810	1.21
3x25	1.40	37.60x15.60	1220	0.780
3x35	1.40	41.40x16.60	1515	0.554
3x50	1.60	50.40x21.20	2283	0.386
3x70	1.60	56.00x22.00	2805	0.272
3x95	1.80	63.00x24.50	3742	0.206



Rubber Insulated & Sheathed Power Cable

● **Rated Voltage:** 450/750 V

● **Applicable Standard:** ISIRI 1926-66 - IEC 60245-4

● **Harmonized code:** H07RN-F

● **Construction:**

Cu/EPDM/NBR

Conductor: Flexible annealed stranded copper class 5

Separator: Polyester tape over plain conductor

Insulation: EPDM type EI7

Laying: cores laying up with optimal lay length

Colour of core: Single core: Black

Twin core: Black, Blue

3 core : Black , Blue , Brown

4 core : Black , Blue , Brown , Black

5 core & more: white or black with numerical identified

Outer sheath: EM2 type Acc. to CENELEC HD 22.1 S2

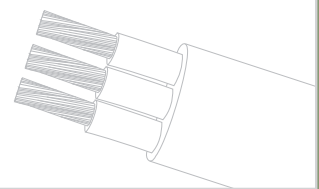


● **Technical data:**

1) Working temperature: -25°C to 90°C

2) Test voltage: 2500 v AC for 450/750 v

No. of Cores & Cross Section	Max Diameter of wire	Insulation Thickness	Sheathing Thickness	Overall Dia.(Approx.)	Total Weight (Approx.)	Max Conductor Resistance at 20°C
mm ²	mm	mm	mm	mm	kg/km	Ω/km
1x10	0.3	1.20	1.80	11	190	1.91
1x16	0.3	1.20	1.90	12.5	270	1.21
1x25	0.3	1.40	2.00	14.5	390	0.780
1x35	0.3	1.40	2.20	17	515	0.554
1x50	0.3	1.60	2.40	18.50	700	0.386
1x70	0.3	1.60	2.60	22	950	0.272
1x95	0.3	1.80	2.80	24.8	1260	0.206
1x120	0.3	1.80	3.00	26.8	1540	0.161
1x150	0.3	2.00	3.20	30	1880	0.129
1x185	0.3	2.20	3.40	31.5	2270	0.106
1x240	0.3	2.40	3.50	34	2850	0.0801
2x4	0.3	1.00	1.80	13	224	4.95
2x6	0.3	1.00	2.00	14	285	3.30
2x10	0.3	1.20	3.10	21	570	1.91
2x16	0.3	1.20	3.30	24	780	1.21
2x25	0.3	1.40	3.60	28	1135	0.780
2x35	0.3	1.40	4.10	33	1525	0.544
3x4	0.3	1.00	1.90	14	280	4.95
3x6	0.3	1.00	2.10	15	360	3.30
3x10	0.3	1.20	3.30	22	700	1.91
3x16	0.3	1.20	3.50	25	980	1.21
3x25	0.3	1.40	3.80	30	1415	0.780
3x35	0.3	1.40	4.10	35	1880	0.554
3x50	0.3	1.60	4.50	39	2530	0.386
3x70	0.3	1.60	4.80	46	3460	0.272
3x95	0.3	1.80	5.30	52	4600	0.206
3x120	0.3	1.80	5.60	56	5570	0.161
4x4	0.3	1.00	2.00	15.2	342	4.95
4x6	0.3	1.00	2.30	16.7	513	3.30
4x10	0.3	1.20	3.30	22.2	700	1.91
4x16	0.3	1.20	3.60	27.6	1200	1.21
4x25	0.3	1.40	4.10	33.2	1790	0.780
4x35	0.3	1.40	4.40	38	2350	0.554
4x50	0.3	1.60	4.80	43	3180	0.386
4x70	0.3	1.60	5.20	51	4360	0.272
4x95	0.3	1.80	5.90	58	5840	0.206
3x25+16	0.3 0.3	1.40 1.20	4.10	31	1525	0.780 1.21
3x35+16	0.3 0.3	1.40 1.20	4.40	35	1935	0.544 1.21
3x50+25	0.3 0.3	1.40 1.20	4.80	39	2470	0.386 0.780
3x70+35	0.3 0.3	1.60 1.40	5.20	47	3580	0.272 0.544
3x95+50	0.3 0.3	1.80 1.60	5.90	53	4550	0.206 0.386





Protolon

- **Rated Voltage:** 6/10 KV
- **Applicable Standard:** VDE 0250-813
- **Harmonized code:** (N)TSCGEWOU (SB)

- **Construction:**

TiCu/SC/EPR/SC/TiCWB/CPE or PROTOFIRM outer sheath

Conductor: Flexible tinned copper class 5

Conductor Shield: Inner Semi conductive layer

Insulation: EPR rubber for MV

Insulation Shield: Outer Semi conductive layer + Tinned copper braid

Core marking: natural color with black conductive rubber

Grounding conductor: tinned annealed copper, class 5

Ground check: EPR insulated tinned annealed copper – color Blue

Assembly: three power, one ground check and two non-insulated Grounding conductor cables together

Over Inner sheath: braid of polyamide yarn

Outer Sheath: PROTOFIRM outer sheath



- **Technical data:**

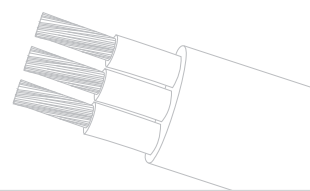
1) Permissible operating temperature: 90°C

2) Permanent tensile force: 15 N/mm²

- **Application:**

Used in dry, damp and wet places, externally, in opened mines, resistant to friction and rubbing needed plants, inside tunnels, in stone houses, in where heavy mechanical effects exist.

No. of Cores & Cross Section	Insulation Thickness	Nominal Sheath Thickness	Overall Dia. (Approx.)	Total Weight (Approx.)	Max. Conductor Resistance at 20°C
mm ²	mm	mm	mm	kg/km	Ω/km
3x25+2x25/2+1x10	3.4	5	49.1	3440	0.795
3x35+2x25/2+1x10	3.4	5.5	53.5	4160	0.565
3x50+2x25/2+1x10	3.4	6.4	56.6	4850	0.393
3x70+2x35/2+1x10	3.4	6.4	61.7	6050	0.277
3x95+2x50/2+1x10	3.4	7.3	67.5	7350	0.21
3x120+2x70/2+1x10	3.4	7.5	70.5	8730	0.164



اطلاعات فنی



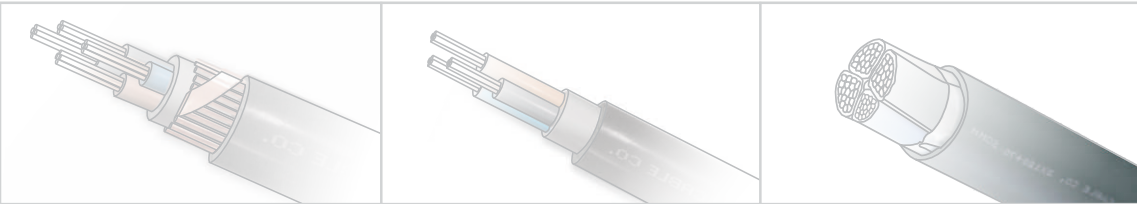
Technical information & Tables

8

CONTENTS

Building Wire & Cables
Power Cables (0.6-1)KV
Instrument & Control Cables
Telecommunication & Coaxial Cables
MV & HV Power Cables
Aerial Cables
Rubber Cables

Technical information & Tables	1- Conductor resistance	125
	2- Inductive Reactance for Low Voltage power cables 0.6/1(1.2) kv	126
	3- Voltage drop at Low voltage power cable	126
	4- Short circuit ratings for copper screen of XLPE-insulated cables	127
	5- Short circuit ratings for PVC-insulated cables (0.6/1 KV)	128
	6- Short circuit ratings for XLPE-insulated cables (0.6/1 - 18/30 KV)	129
	7- Cables and Drum User Guide	
	7-1 Drums handling	130
	7-2 Transport requirement	131
	7-3 Storage requirement	132





Conductor resistance

Maximum Conductor Resistance at 20°C								
Nominal Cross Sectional Area	Annealed Copper Conductor						Aluminum & Aluminum Alloy Conductors	
	Class 1		Class 2		Class 5			
	Solid Conductor		Stranded Conductor		Flexible Conductor		Class 1	Class 2
	Plain (Ω/km)	Metal-Coated (Ω/km)	Plain (Ω/km)	Metal-Coated (Ω/km)	Plain (Ω/km)	Metal-Coated (Ω/km)		
0.5	36	36.7	36	36.7	39	40.1	---	---
0.75	24.5	24.8	24.5	24.8	26	26.7	---	---
1	18.1	18.2	18.1	18.2	19.5	20	---	---
1.5	12.1	12.2	12.1	12.2	13.3	13.7	---	---
2.5	7.41	7.56	7.41	7.56	7.98	8.21	---	---
4	4.61	4.7	4.61	4.7	4.95	5.09	---	---
6	3.08	3.11	3.08	3.11	3.3	3.39	---	---
10	1.83	1.84	1.83	1.84	1.91	1.95	3.08	3.08
16	1.15	1.16	1.15	1.16	1.21	1.24	1.91	1.91
25	0.727	---	0.727	0.734	0.78	0.795	1.2	1.2
35	0.524	---	0.524	0.529	0.554	0.565	0.868	0.868
50	0.387	---	0.387	0.391	0.386	0.393	0.641	0.641
70	0.268	---	0.268	0.27	0.272	0.277	0.443	0.443
95	0.193	---	0.193	0.195	0.206	0.21	0.32	0.32
120	0.153	---	0.153	0.154	0.161	0.164	0.253	0.253
150	0.124	---	0.124	0.126	0.129	0.132	0.206	0.206
185	0.101	---	0.0991	0.1	0.106	0.108	0.164	0.164
240	0.0775	---	0.0754	0.0762	0.0801	0.0817	0.125	0.125
300	0.062	---	0.0601	0.0607	0.0641	0.0654	0.1	0.1
400	0.0465	---	0.047	0.0475	0.0486	0.0495	0.0778	0.0776

Conversion of conductor resistance

Values for deviating ambient Temperatures

$$CU : R_{\delta} = R_{20} \frac{234.5 + \delta}{254.5}$$

$$Al : R_{\delta} = R_{20} \frac{228 + \delta}{248}$$

R_{20} = Conductor resistance at 20°C [Ω/km]

R_{δ} = Conductor resistance at δ °C [Ω/km]

δ = Conductor temperature [°C]



Inductive Reactance(X_L) for Low Voltage power cables 0.6/1(1.2) kv

Nominal Cross Section Of Conductor mm ²	PVC Insulated		XLPE Insulated	
	Single-Core	Multi-Core	Single-Core	Multi-Core
	[/km]		[/km]	
25	0.103	0.082	0.092	0.077
35	0.098	0.079	0.090	0.075
50	0.095	0.078	0.088	0.72
70	0.090	0.075	0.085	0.069
95	0.088	0.075	0.082	0.069
120	0.085	0.073	0.082	0.069
150	0.084	0.073	0.082	0.069
185	0.084	0.073	0.82	0.069
240	0.082	0.072	0.079	0.069
300	0.081	0.072	0.078	0.069
400	0.079	—	0.077	—
500	0.079	----	0.077	----

Notes :

The values have to be increased by 10% for armored cables.



Voltage drop at Low voltage power cable

Cross Section	Cos φ = 0.6		Cos φ = 0.7		Cos φ = 0.8		Cos φ = 0.9		Cos φ = 1.0	
mm ²	Cu	AL	Cu	AL	Cu	AL	Cu	AL	Cu	AL
10	7.9	—	6.9	—	6.1	—	5.5	—	5.0	—
16	12.3	----	10.7	----	9.5	----	8.6	----	8.0	----
25	18.7	11.8	16.4	10.3	14.7	9.1	13.4	8.2	12.6	7.6
35	25.5	15.9	22.2	13.9	20.0	12.4	18.3	11.3	17.5	10.5
50	32.3	20.9	28.9	18.4	26.3	16.5	24.3	15.1	23.7	14.2
70	43.5	28.9	39.5	25.7	36.4	23.3	34.2	21.4	34.2	20.6
95	55.3	37.7	51.0	34.1	47.8	31.1	45.6	28.9	47.5	28.5
120	65.2	45.5	60.9	41.3	57.7	38.2	55.8	35.9	60.0	36.0
150	74.4	52.9	70.4	48.6	67.5	45.2	66.4	43.0	85.0	44.2
185	87.7	62.0	81.2	57.6	79.2	54.4	79.2	52.4	92.2	55.5
240	98.2	74.2	95.8	70.0	95.1	67.1	97.5	65.8	122.0	72.9
300	109.0	84.5	108.0	80.8	109.0	78.6	114.0	78.5	153.0	91.1

Voltage Drop: 5%

Service Voltage: 220/380V

In many cases, especially for Large cross sections, the inductive voltage drop must be taken into consideration.

General formula for three phase system : $e = \frac{100 \cdot \sqrt{3} \cdot I \cdot L}{U} [R \cdot \cos\varphi + x \cdot \sin\varphi]$

U=Phase to phase voltage[V]

L=Length of cable [km]

e= Voltage drop [%]

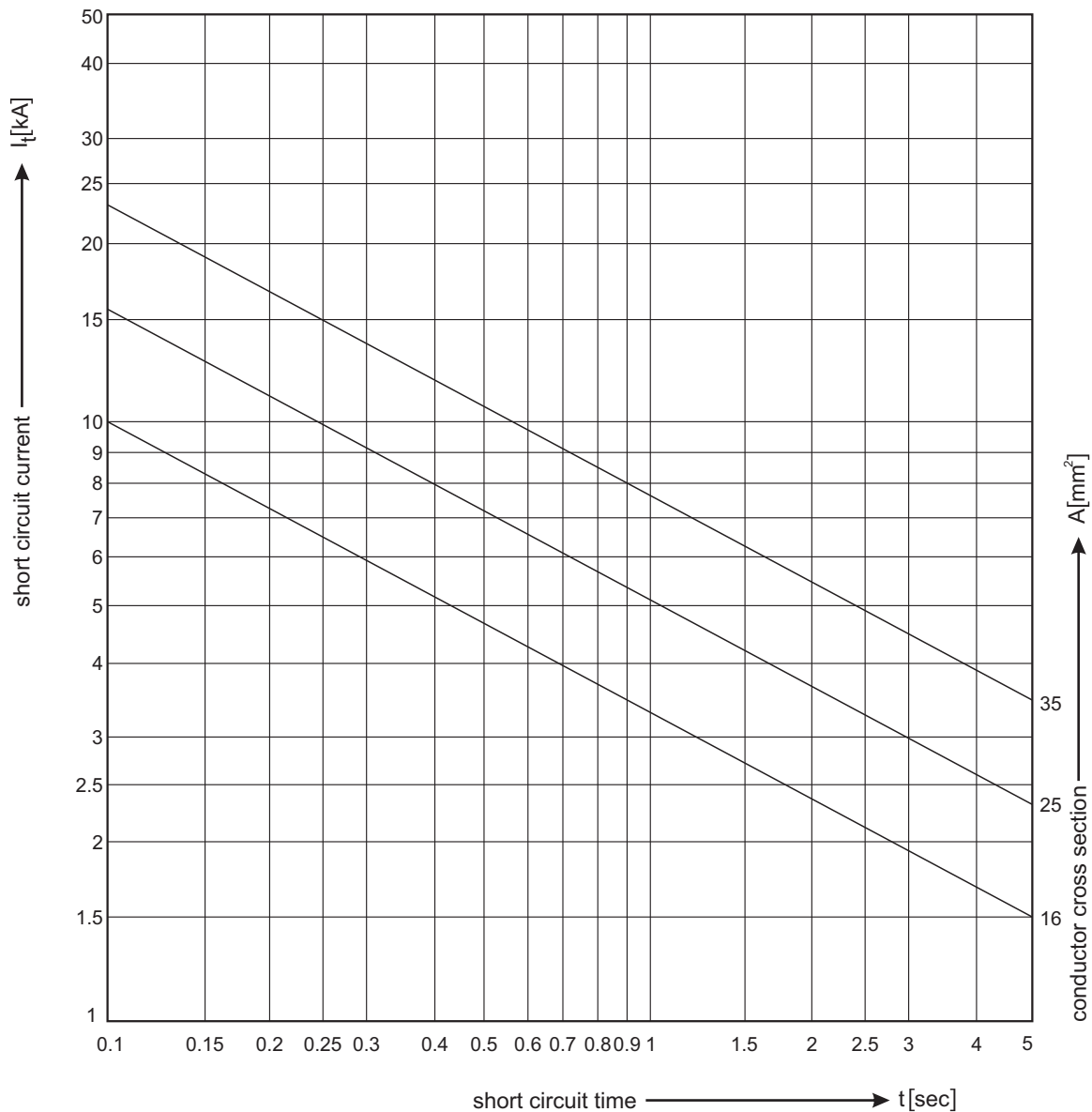
R=Resistance [/km]

I=Current Loading [A]

X=Inductance [/km]



Short circuit ratings for copper screen of XLPE-insulated cables

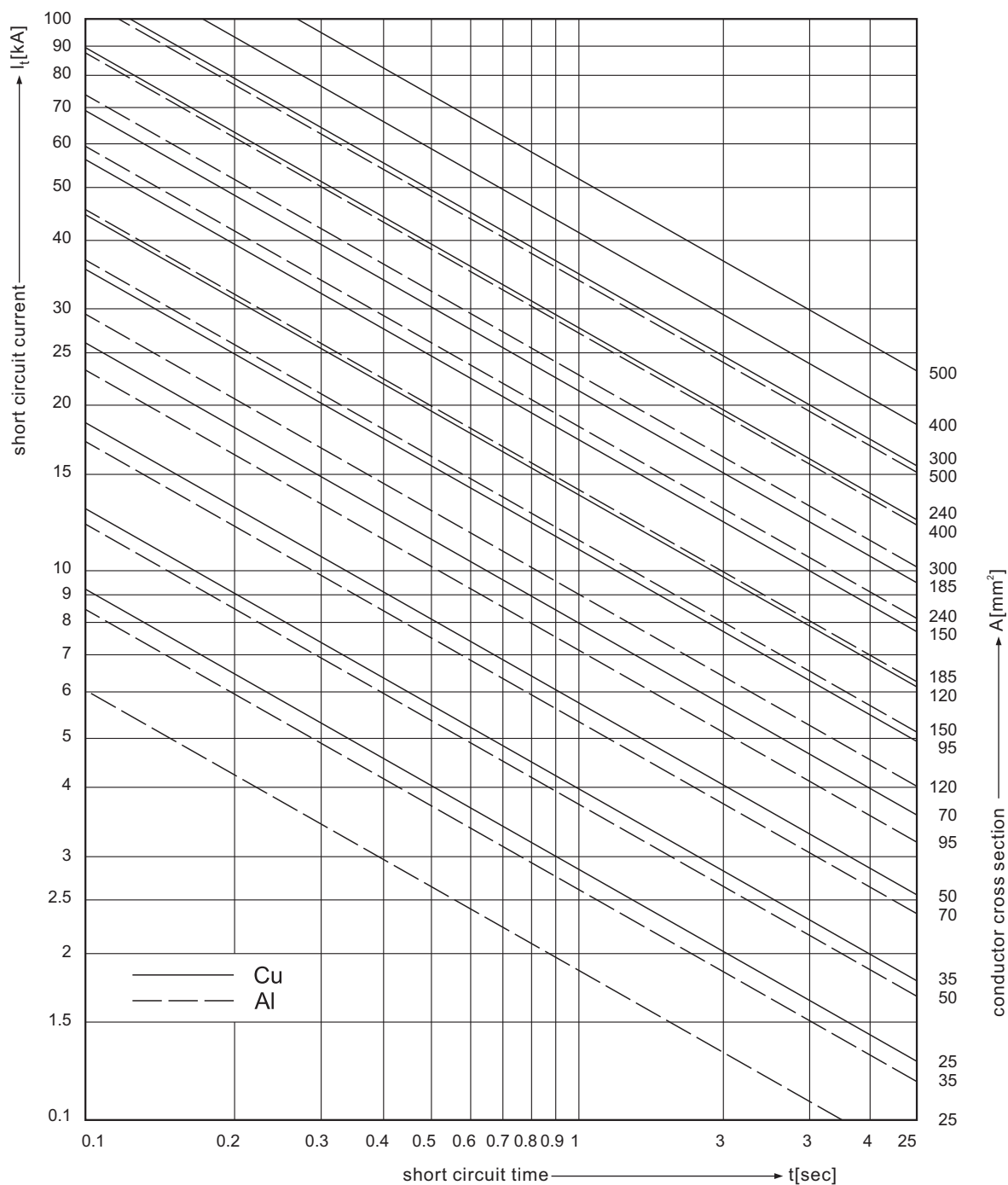


Standard cross section of screens

cross section of conductor mm ²	screen mm ²
35 ... 120	16
150 ... 300	25
400 ... 500	35

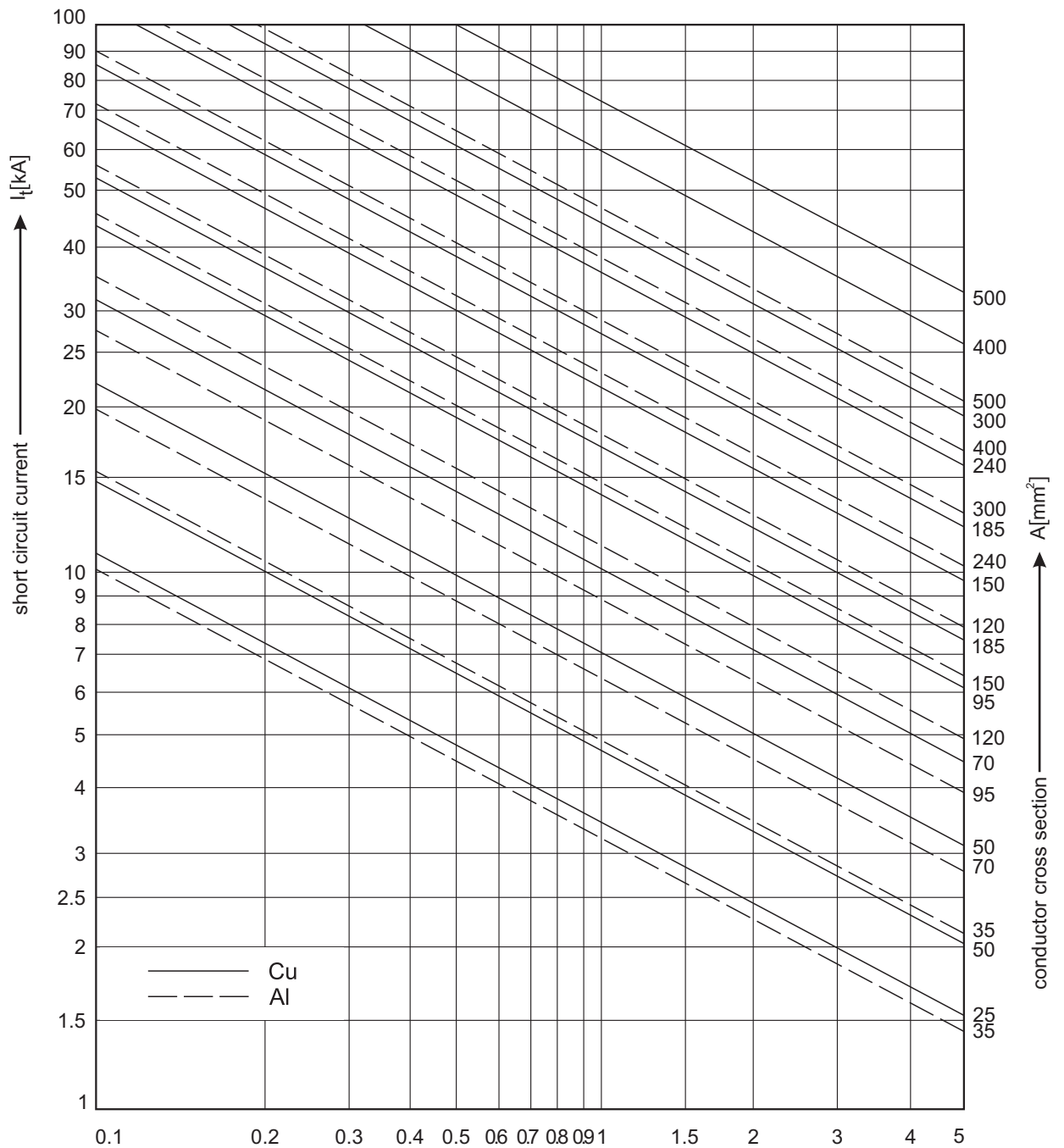


Short circuit ratings for PVC-insulated cables (0.6/1 KV)





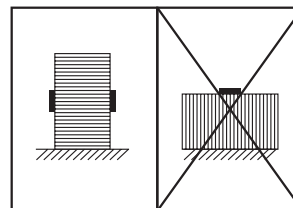
Short circuit ratings for XLPE-insulated cables (0.6/1 - 18/30 KV)





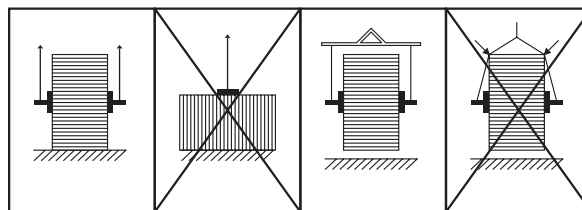
1.1. Position of Drums:

Drums must be handled only in the upright position, not on the Flanges.



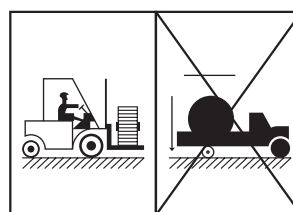
1.2. Loading:

Drums must be lifted only with mandrel or a chain through the central Hole. It is important to use a spacing bar to leave a gap between the Chain and the flanges of the drum. Do not lift more than one drum if its diameter is equal to or greater than 1, 2 meters.



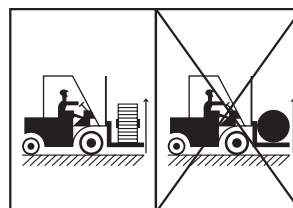
1.3. Unloading:

When unloading from vehicles (truck, ship, wagon etc.) the correct Lifting gear must be used (forklift, truck, crane, etc.). Never drop Drums, even from a small height.



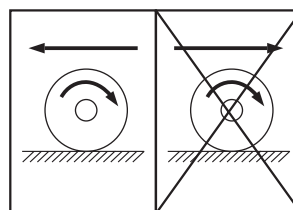
1.4. Handling by forklift:

If a forklift is used, always cradle both drum flanges between the forks. The forks must not bear on the unsupported laggings between flanges.



1.5 Rolling:

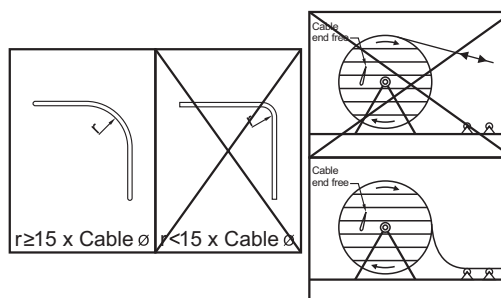
Drums are permitted to be rolled for short distances, the ground being smooth and free of injurious impediments, but only in the opposite direction of the arrow painted on flanges. If arrow sign is missed, drums may be rolled but only in the direction to cable Winding, to keep cable from loosening the drum.



1.6. Paying-off the Cable:

When paying off a cable from a drum;

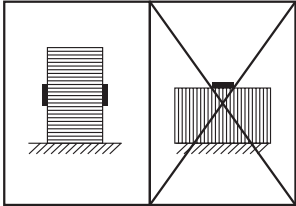
- 1) The lower end of the cable should be free.
- 2) Drums should be unreeled without exceeding the maximum allowed pulling force of the cable.
- 3) The minimum bending radius of the cable should be equal to or greater than 15x of the outer diameter of the cable.





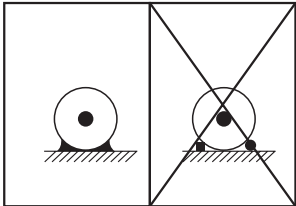
2.1. Position of the Drums:

Drums must be transported only in the upright position, not on the flanges. Never allow an unauthorized person to operate any lifting device or a mechanical transport.



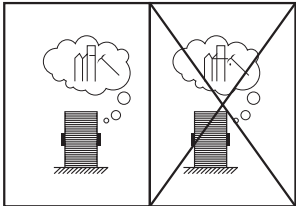
2.2. Fastening Drums:

Wedges must be used to retain drums. Wedges must be positioned at flanges' edges and not between flanges. The use of stones is forbidden. Where the load is unusual and is likely to need special care, ensure that all precautions are properly checked before the transport is allowed to move.



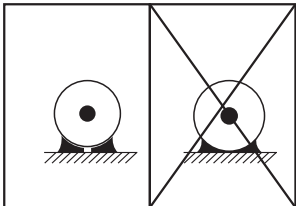
2.3. Use of Nails:

When nails are used to fasten drums on vehicles, be sure that the length of the nail is less than the thickness of the flange.



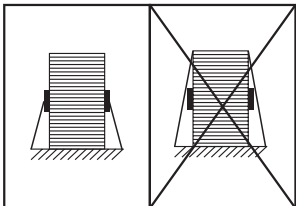
2.4. Bigger Drums:

Drums with diameter greater than 1,6 meters must be supported by wedges and must not touch the vehicle's floor. Never use a lifting device or transport device for a weight which exceeds its permitted capacity.



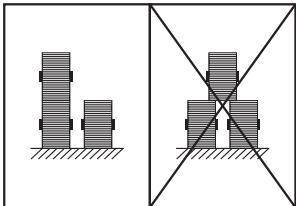
2.5. Binding of the Drums:

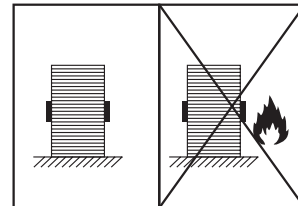
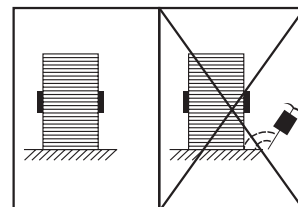
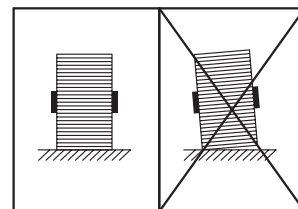
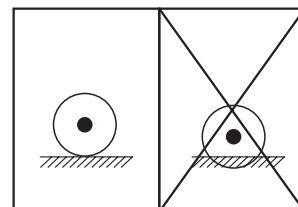
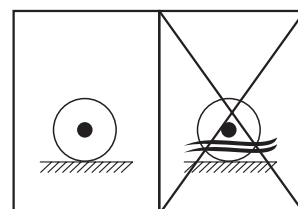
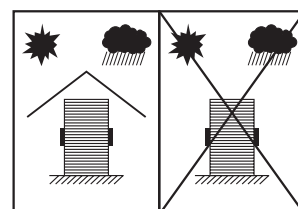
Binding must be made with ropes crossing through the central hole and, if necessary, on the drum flanges. Binding with ropes only crossing the drum's edges is strictly forbidden.



2.6. Multiple Drum Storage:

Multiple drum storage, either double or single layer must be obtained with flange to flange contact. Flanges contacting to unsupported part of lagings are forbidden.



**3.1.** Do not store near heat sources.**3.2.** Do not store on vibrating surfaces. (Ship engine room etc.)**3.3.** Do not store on irregular surfaces.**3.4.** Do not store on soft surfaces.**3.5.** Do not store on areas liable of flooding. All cable ends must be fully sealed at all times to prevent the ingress of water. It is preferable to store reels off the ground on timbers or other supports. In damp locations, it is advisable to allow at least 3 inches between reels to permit circulation of air.**3.6.** If storage is likely to last more than 6 months, drums should be stored in order to be protected from effects like rain, sunlight etc.



شرکت سیم و کابل مغان

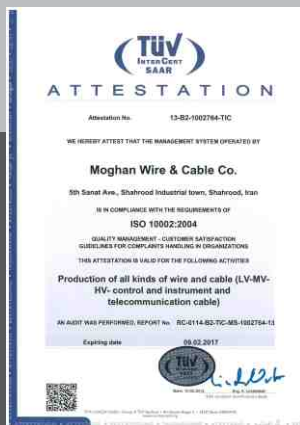
MOGHAN
WIRE & CABLE CO.

8 8 7 5 2 0 1 4

8 8 7 4 3 7 6 4

info@maghancableco.com

www.moghancableco.com



ISO10002:2004



ISO 9001:2008



ISO 18001-2007



ISO 14001-2004



Test Report for: Insulated Electric Cable for railway vehicles(1x70mm²,750V)



گواهینامه تایید صلاحیت آزمایشگاه همکار

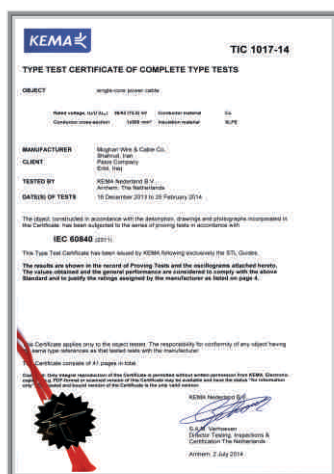


تندیس حمایت از حقوق مصرف کنندگان سال ۱۳۹۲

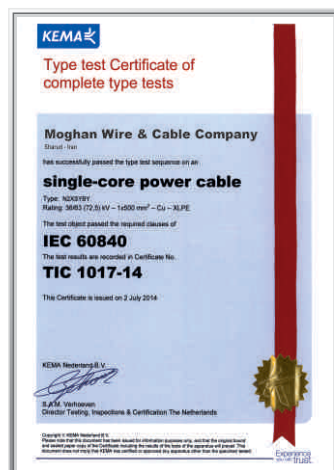
برند برتر کابل خودنگهدار آلومینیوم سال ۱۳۹۲

صادر کننده نمونه استان سمنان سال ۱۳۸۷

برند برتر کابل خودنگهدار آلومینیوم سال ۱۳۹۲



Type Test
N2XSXYBY 1x500,36/63(72.5)kv



برخی از مشتریان

- شرکت بهره برداری راه آهن شهری تهران و حومه (مترو)
- شرکت فروگاههای کشور
- اداره کل ارتباطات و علائم الکتریکی راه آهن ایران
- قرارگاه سازندگی خاتم الانبیا؛
- موسسه شهید رجایی
- شرکت صنایع
- شرکت ایران تابلو
- شرکت ایران ترانسفو
- شرکت کیسبون
- شرکت فولاد مبارکه اصفهان
- شرکت صفا فولاد
- شرکت سهامی ذوب آهن اصفهان
- شرکت کشتی سازی مدررا
- شرکت فاضلاب تهران
- مرکز طراحی و توسعه صنعتی رازی
- شرکت بین المللی پتروشیمی
- شرکت توسعه صنایع نفت و انرژی قشم
- مجتمع گاز پارس جنوبی
- شرکت ملی صنایع پتروشیمی
- شرکت پتروشیمی کارون
- شرکت پالایش نفت آبادان
- شرکت پالایش نفت تبریز
- شرکت پتروشیمی خارک
- شرکت پلیمر کرمانشاه
- شرکت طرح و بازرسی
- شرکت مهندسی و توسعه گاز ایران
- شرکت های توزیع نیروی برق سراسر کشور
- شرکت های مخابرات سراسر کشور
- صادرات افغانستان
- صادرات عراق
- صادرات ترکمنستان



انجمن صنفی تولیدکنندگان
سیم و کابل ایران





تندیس حمایت از حقوق
مصرف کنندگان
سال ۱۳۹۲



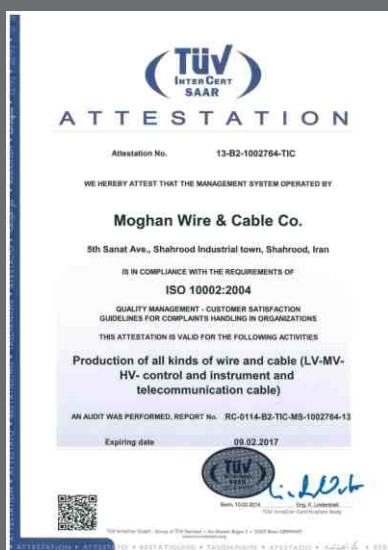
واحد تولیدی نمونه
سازمان استاندارد
سال ۱۳۹۲



صادر کننده نمونه
استان سمنان
سال ۱۳۸۷



برند برتر کابل
خودنگهدار آلومینیوم
سال ۱۳۹۲



ISO10002:2004



ISO 9001:2008



ISO 18001:2007



ISO 14001-2004



Test Report for: Insulated Electric Cable
for railway vehicles(1x70mm²,750V)



گواهینامه تایید صلاحیت آزمایشگاه همکار

برخی از مشتریان

- شرکت بهره برداری راه آهن شهری تهران و حومه (مترو)
- شرکت فرودگاههای کشور
- اداره کل ارتباطات و علائم الکتریکی راه آهن ایران
- قرار گاه ساز ندگی خاتم الانبیا
- موسسه شهید رجایی
- شرکت صنایع
- شرکت ایران تابلو
- شرکت ایران ترانسفو
- شرکت کیسون
- شرکت فولاد مبارکه اصفهان
- شرکت صفا فولاد
- شرکت سهامی ذوب آهن اصفهان
- شرکت کشتی سازی صدرا
- شرکت فاضلاب تهران
- مرکز طراحی و توسعه صنعتی رازی
- شرکت بین المللی پتروتکسان
- شرکت توسعه صنایع نفت و انرژی قشم
- مجتمع گاز پارس جنوبی
- شرکت ملی صنایع پتروشیمی
- شرکت پتروشیمی کارون
- شرکت پالایش نفت آبادان
- شرکت پالایش نفت تبریز
- شرکت پتروشیمی خارک
- شرکت پلیمر کرمانشاه
- شرکت طرح و بازرسی
- شرکت مهندسی و توسعه گاز ایران
- شرکت های توزیع نیروی برق سراسر کشور
- شرکت های مخابرات سراسر کشور
- صادرات افغانستان
- صادرات عراق
- صادرات ترکمنستان



Type Test
N2XSYBY 1x500,36/63(72.5)kv



انجمن صنفی تولیدکنندگان
سیم و کابل ایران



Note:

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....