PT KABELINDO MURNI Tbk

Indonesia's Leading Wire & Cable Manufacturer

Power Cable
Low Voltage

Catalogue Alumunium
PVC & XLPE Insulated

Power Cable
Low Voltage

Aluminium Conductor
PVC & XLPE Insulated

SUMMARY

Introduction of company

The Company's history was marked by the founding of PT. Kabel Indonesia (Kabelindo) in 1972, a foreign invested Company at the time and one of the first cable manufacturers in Indonesia. In 1979, the Company's ownership was transferred to Indonesians and names was changed to PT. Kabelindo Murni.

We produce and markets Bare Conductor, Low Voltage Cable, Medium Cable, Instrument Cable, Control Cable, Telephone Cable, Fire Resistant Cable and Flame Retardant Cable. The quality assurance of the products is the main issue that the Company emphasizes. The electrical cables produced by the Company has passed the Indonesian National Standard (SNI) and National Power Company Standard (SPLN). The Company completes several international standards such us : Standard International Electrotechnical (IEC), Australian Standard (AS), British Standard (BS), Japanese Industrial Standard (JIS) and Insulated Cable Engineers Association / National Electrical Manufacturers Association (ICEA/NEMA).

To Support the Company's commitment to quality, the Company has the ISO 9001:2015 ISO 45001 : 2018 ISO 14001 : 2015 and SMK3 certificate.

QSC 00152 OHS 00020 EMS 00151

GENERAL INFORMATION

Aluminium Conductor Resistance SNI IEC 60228

Conductor Size	Class 2		
	DC. Resistance at 20 °C	AC. Resistance at 70 °C	AC. Resistance at 90 °C
sq.mm	Max. (Ω/km)	Max. (Ω/km)	Max. (Ω/km)
10	3.08	3.701	3.949
16	1.91	2.295	2.449
25	1.20	1.442	1.539
35	0.868	1.043	1.113
50	0.641	0.770	0.822
70	0.443	0.533	0.568
95	0.320	0.385	0.411
120	0.253	0.305	0.325
150	0.206	0.249	0.265
185	0.164	0.198	0.212
240	0.125	0.152	0.162
300	0.100	0.122	0.130
400	0.0778	0.096	0.103
500	0.0605	0.076	0.081
630	0.0469	0.061	0.065

Installation

Low voltage aluminium cables with PVC & XLPE insulation are suitable for indoor and outdoor applications. The following recommendations should be followed to achieve the optimal cable service

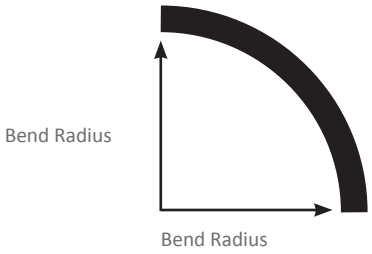
1. Armoured cables are not recommended for tray applications, as they are heavy in weight and extra loads are exerted on the tray.

2. Unarmoured cables are not recommended for direct buried applications, except if the quoted cables are designed and produced to pass direct burial test requirements

3. PVC and XLPE jacket is a very stable material against a wide range of chemicals.

4. Recommended minimum bending radius of cables :

Minimum bending radius during installation	Minimum bending radius of installed
10 x Diameter Cable	8 x Diameter Cable



5. Important note for single core cables, The conductors of an A.C. circuit installed in a ferromagnetic enclosure shall be arranged so that all line conductors and the neutral conductor, if any, and the appropriate protective conductor are contained in the same enclosure. When such conductors enter a ferrous enclosure, they shall be arranged such that the conductors are only collectively surrounded by ferrous material.

Due to the wide range of cables in the catalogue, it is advisable, when ordering, to provide as much information as possible. Please use the following table as a guide:

1. Cable standard / specification number.
2. Voltage designation.
3. Number of cores.
4. Conductor size.
5. Colour of outer sheath.
6. Length of cables required and individual drum lengths.
7. Any other special requirement, e.g. special PVC sheath material, drum weight limitation, etc.

Routine Final Inspection

Final inspection will be done for every length of product, such as :

- Visual
- Dimension
- Conductor resistance
- AC voltage test
- Insulation resistance test

All information is believed to be accurate at the time issue, Information contained in this catalogue may be subject to change without notice

PVC Insulated

PVC Insulated

Aluminium Conductor PVC Insulated Building Wire

Al/PVC 0,6/1 (1,2) kV (NAYA)

SPECIFICATION :

SNI IEC 60502-1
IEC 60502-1

Construction:

Conductor
Aluminium conductor round circular stranded according to SNI IEC 60228

Insulation
Extruded layer of Polyvinyl Chloride (PVC) complied with SNI IEC 60502 - 1
Colour :
- Yellow Strip Green or
- Light Blue or
- Black or
- Yellow or
- Red

Special Features on Request :
• Fire Resistance • Flame Retardant Cat. A/B/C • Oil Resistance • UV Resistance • Anti termite • Anti rodent • Low Smoke Zero Halogen

Applications :
For Installations as underground, outdoor, indoor, in ducts and where mechanical protection is required or for higher tensile stresses during installation and operation.

Note : [rm] Circular stranded conductor

Packing : [D] Drum

Cross section area	Nominal thickness	Overall Diameter	Weight of Cable	Insulation Resistance at 20 °C	Current Carrying Capacity at 30 °C		Short circuit current of conductor at 1.0 sec	Standard Delivery Length
	Insulation	(approx)	(approx)	Min	In Pipe	In Air		
sq.mm	mm	mm	kg/km	M.Ω.km	A	A	kA	m
16 rm	1.0	7.3	77	5	48	77	1.22	1,000
25 rm	1.2	9.0	117	5	65	101	1.90	1,000
35 rm	1.2	10.1	153	4	80	123	2.66	1,000
50 rm	1.4	12.2	210	4	103	154	3.80	1,000
70 rm	1.4	13.7	271	4	129	191	5.32	1,000
95 rm	1.6	16.0	374	4	162	226	7.22	1,000
120 rm	1.6	17.7	452	3	184	269	9.12	1,000
150 rm	1.8	19.7	559	3	-	305	11.40	1,000
185 rm	2.0	22.0	696	3	-	348	14.06	1,000
240 rm	2.2	25.1	903	3	-	410	18.24	1,000
300 rm	2.4	27.9	1,119	3	-	473	22.80	1,000
400 rm	2.6	31.3	1,410	3	-	566	27.20	1,000

Aluminium Conductor PVC Insulated and PVC Sheathed non Armoured Power Cable

Al/PVC/PVC 0,6/1 (1,2) kV (NAYY)

SPECIFICATION :
SNI IEC 60502-1
IEC 60502-1

Construction:

Conductor
Aluminium conductor round circular stranded according to SNI IEC 60228

Insulation
Extruded layer of Polyvinyl Chloride (PVC) complied with SNI IEC 60502 - 1

Colour :
- Natural or
- Black or
- Light Blue or
- etc.

Inner Covering / filler
Extruded Polyvinyl Chloride (PVC), Black colour

Outer Sheath
The Outer Sheath shall be a layer of Extruded Polyvinyl Chloride (PVC) grade ST1 to IEC 60502-1, Black colour.

Special Features on Request :
• Fire Resistance • Flame Retardant Cat. A/B/C • Oil Resistance
• UV Resistance • Anti termite • Anti rodent • Low Smoke Zero Halogen

Applications :
For Installations as underground, outdoor, indoor, in ducts and where mechanical protection is required or for higher tensile stresses during installation and operation.

Note : [rm] Circular stranded conductor

Packing : [D] Drum

No. of cores and cross-section area	Nominal thickness		Overall Diameter	Weight of Cable	Insulation Resistance at 20 °C	Current Carrying Capacity at 30 °C		Short circuit current of conductor at 1.0 sec	Standard Delivery Length
	Insulation	Outer Sheath	(approx)	(approx)	Min	In Air	In Ground		
sq.mm	mm	mm	mm	kg/km	M.Ω.km	A	A	kA	m
1 x 16 rm	1.0	1.4	10.3	135	5	77	76	1.22	1,000
1 x 25 rm	1.2	1.4	11.4	171	5	91	97	1.90	1,000
1 x 35 rm	1.2	1.4	12.6	210	4	112	117	2.66	1,000
1 x 50 rm	1.4	1.4	14.4	276	4	138	138	3.80	1,000
1 x 70 rm	1.4	1.5	16.0	350	4	175	169	5.32	1,000
1 x 95 rm	1.6	1.5	18.5	472	4	216	202	7.22	1,000
1 x 120 rm	1.6	1.5	20.1	557	3	251	229	9.12	1,000
1 x 150 rm	1.8	1.6	22.2	688	3	291	258	11.40	1,000
1 x 185 rm	2.0	1.7	24.6	850	3	339	292	14.06	1,000
1 x 240 rm	2.2	1.8	27.8	1,092	3	407	339	18.24	1,000
1 x 300 rm	2.4	1.9	30.7	1,345	3	471	382	22.80	1,000
1 x 400 rm	2.6	2.0	34.3	1,684	3	565	440	27.20	1,000
1 x 500 rm	2.8	2.1	38.3	2,108	3	653	499	34.00	1,000
1 x 630 rm	2.8	2.3	44.5	2,709	3	762	566	42.48	1,000

Aluminium Conductor PVC Insulated and PVC Sheathed non Armoured Power Cable

Al/PVC/PVC 0,6/1 (1,2) kV (NAYY)

SPECIFICATION :

SNI IEC 60502-1
IEC 60502-1

Construction:

Conductor
Aluminium conductor round circular stranded according to SNI IEC 60228

Insulation
Extruded layer of Polyvinyl Chloride (PVC) complied with SNI IEC 60502 - 1

Colour :
- Light Blue and Brown

Inner Covering / filler
Extruded Polyvinyl Chloride (PVC), Black colour

Outer Sheath
The Outer Sheath shall be a layer of Extruded Polyvinyl Chloride (PVC) grade ST1 to IEC 60502-1, Black colour.

Special Features on Request :
• Fire Resistance • Flame Retardant Cat. A/B/C • Oil Resistance
• UV Resistance • Anti termite • Anti rodent • Low Smoke Zero Halogen

Applications :
For Installations as underground, outdoor, indoor, in ducts and where mechanical protection is required or for higher tensile stresses during installation and operation.

Note : [rm] Circular stranded conductor

Packing : [D] Drum

No. of cores and cross-section area	Nominal thickness		Overall Diameter	Weight of Cable	Insulation Resistance at 20 °C	Current Carrying Capacity at 30 °C		Short circuit current of conductor at 1.0 sec	Standard Delivery Length
	Insulation	Outer Sheath	(approx)	(approx)	Min	In Air	In Ground		
sq.mm	mm	mm	mm	kg/km	M.Ω.km	A	A	kA	m
2 x 25 rm	1.2	1.8	22.9	668	5	94	102	1.90	1,000
2 x 35 rm	1.2	1.8	25.2	816	4	115	125	2.66	1,000
2 x 50 rm	1.4	1.8	28.8	1,077	4	140	147	3.80	1,000
2 x 70 rm	1.4	1.9	32.2	1,355	4	155	156	5.32	1,000
2 x 95 rm	1.6	2.0	37.0	1,798	4	190	191	7.22	1,000
2 x 120 rm	1.6	2.1	40.2	2,131	3	220	220	9.12	1,000
2 x 150 rm	1.8	2.2	44.4	2,608	3	245	245	11.40	1,000
2 x 185 rm	2.0	2.4	50.0	3,312	3	275	275	14.06	1,000
2 x 240 rm	2.2	2.6	56.4	4,226	3	320	320	18.24	500
2 x 300 rm	2.4	2.7	62.5	5,207	3	365	365	22.80	500

Aluminium Conductor PVC Insulated and PVC Sheathed non Armoured Power Cable

Al/PVC/PVC 0,6/1 (1,2) kV (NAYY)

SPECIFICATION :
SNI IEC 60502-1
IEC 60502-1

Construction:

Conductor
Aluminium conductor round circular stranded or sector shaped according to SNI IEC 60228

Insulation
Extruded layer of Polyvinyl Chloride (PVC) complied with SNI IEC 60502 - 1

Colour :

- Yellow Strip Green, Light Blue And Brown
- Brown, Black And Grey

Inner Covering / filler
Extruded Polyvinyl Chloride (PVC), Black colour

Outer Sheath
The Outer Sheath shall be a layer of Extruded Polyvinyl Chloride (PVC) grade ST1 to IEC 60502-1, Black colour.

Special Features on Request :
• Fire Resistance • Flame Retardant Cat. A/B/C • Oil Resistance
• UV Resistance • Anti termite • Anti rodent • Low Smoke Zero Halogen

Applications :
For Installations as underground, outdoor, indoor, in ducts and where mechanical protection is required or for higher tensile stresses during installation and operation.

Note : [rm] Circular stranded conductor
[sm] Sector shape conductor

Packing : [D] Drum

No. of cores and cross-section area	Nominal thickness		Overall Diameter	Weight of Cable	Insulation Resistance at 20 °C	Current Carrying Capacity at 30 °C		Short circuit current of conductor at 1.0 sec	Standard Delivery Length
	Insulation	Outer Sheath	(approx)	(approx)	Min	In Air	In Ground		
sq.mm	mm	mm	mm	kg/km	M.Ω.km	A	A	kA	m
3 x 25 rm	1.2	1.8	24.3	760	5	82	89	1.90	1,000
3 x 35 rm	1.2	1.8	26.7	933	4	100	107	2.66	1,000
3 x 50 sm	1.4	1.8	29.1	1,069	4	125	129	3.80	1,000
3 x 70 sm	1.4	2.0	32.7	1,392	4	155	156	5.32	1,000
3 x 95 sm	1.6	2.1	36.5	1,795	4	190	191	7.22	1,000
3 x 120 sm	1.6	2.2	39.1	2,143	3	220	220	9.12	1,000
3 x 150 sm	1.8	2.3	43.3	2,659	3	250	245	11.40	1,000
3 x 185 sm	2.0	2.5	47.3	3,211	3	285	275	14.06	1,000
3 x 240 sm	2.2	2.7	52.9	4,113	3	340	320	18.24	1,000
3 x 300 sm	2.4	2.9	57.7	4,985	3	390	365	22.80	500
3 x 400 sm	2.6	3.1	64.7	6,265	3	460	420	27.20	500

Aluminium Conductor PVC Insulated and PVC Sheathed non Armoured Power Cable

Al/PVC/PVC 0,6/1 (1,2) kV (NAYY)

SPECIFICATION :

SNI IEC 60502-1
IEC 60502-1

Construction:

Conductor
Aluminium conductor round circular stranded or sector shaped according to SNI IEC 60228

Insulation
Extruded layer of Polyvinyl Chloride (PVC) complied with SNI IEC 60502 - 1

Colour :

- Yellow Strip Green, Brown, Black And Grey
- Light Blue, Brown, Black And Grey

Inner Covering / filler
Extruded Polyvinyl Chloride (PVC), Black colour

Outer Sheath
The Outer Sheath shall be a layer of Extruded Polyvinyl Chloride (PVC) grade ST1 to IEC 60502-1, Black colour.

Special Features on Request :
• Fire Resistance • Flame Retardant Cat. A/B/C • Oil Resistance
• UV Resistance • Anti termite • Anti rodent • Low Smoke Zero Halogen

Applications :
For Installations as underground, outdoor, indoor, in ducts and where mechanical protection is required or for higher tensile stresses during installation and operation.

Note : [rm] Circular stranded conductor
[sm] Sector shape conductor

Packing : [D] Drum

No. of cores and cross-section area	Nominal thickness		Overall Diameter	Weight of Cable	Insulation Resistance at 20 °C	Current Carrying Capacity at 30 °C		Short circuit current of conductor at 1.0 sec	Standard Delivery Length
	Insulation	Outer Sheath	(approx)	(approx)	Min	In Air	In Ground		
sq.mm	mm	mm	mm	kg/km	M.Ω.km	A	A	kA	m
4 x 25 rm	1.2	1.8	26.4	893	5	82	89	1.90	1,000
4 x 35 rm	1.2	1.8	29.2	1,102	4	100	107	2.66	1,000
4 x 50 sm	1.4	1.9	31.3	1,336	4	125	129	3.80	1,000
4 x 70 sm	1.4	2.1	34.9	1,727	4	155	156	5.32	1,000
4 x 95 sm	1.6	2.2	39.8	2,274	4	190	191	7.22	1,000
4 x 120 sm	1.6	2.3	43.6	2,784	3	220	220	9.12	1,000
4 x 150 sm	1.8	2.5	48.2	3,423	3	250	245	11.40	1,000
4 x 185 sm	2.0	2.7	53.2	4,160	3	285	275	14.06	1,000
4 x 240 sm	2.2	2.9	61.2	5,459	3	340	320	18.24	500
4 x 300 sm	2.4	3.1	66.9	6,517	3	390	365	22.80	500
4 x 400 sm	2.6	3.4	70.6	8,042	3	460	420	27.20	500

Aluminium Conductor PVC Insulated Galvanized Round Steel Wires Armour and PVC Sheathed

Al/PVC/SWA/PVC 0,6/1 (1,2) kV (NAYRGbY)

SPECIFICATION :
SNI IEC 60502-1
IEC 60502-1

Construction:

Conductor
Aluminium conductor round circular stranded according to SNI IEC 60228

Insulation
Extruded layer of Polyvinyl Chloride (PVC) complied with SNI IEC 60502 - 1

Colour :

- Light Blue and Brown

Inner Covering / filler
Extruded Polyvinyl Chloride (PVC), Black colour

Outer Sheath
The Outer Sheath shall be a layer of Extruded Polyvinyl Chloride (PVC) grade ST1 to IEC 60502-1, Black colour.

Armour
A layer of galvanized round steel wires with a counter helix layer of galvanized steel tape.

Special Features on Request :
• Fire Resistance • Flame Retardant Cat. A/B/C • Oil Resistance • UV Resistance • Anti termite • Anti rodent • Low Smoke Zero Halogen

Applications :
For general purpose power distribution in dry or wet location, best suitable for direct burying in ground, outdoor, indoor and in ducts

Note : [rm] Circular stranded conductor

Packing : [D] Drum

No. of cores and cross-section area	Nominal thickness		Overall Diameter	Weight of Cable	Insulation Resistance at 20 °C	Current Carrying Capacity at 30 °C		Short circuit current of conductor at 1.0 sec	Standard Delivery Length
	Insulation	Outer Sheath	(approx)	(approx)	Min	In Air	In Ground		
sq.mm	mm	mm	mm	kg/km	M.Ω.km	A	A	kA	m
2 x 25 rm	1.2	1.8	26.7	1,394	5	94	102	1.90	1,000
2 x 35 rm	1.2	1.8	29.0	1,617	4	115	125	2.66	1,000
2 x 50 rm	1.4	1.8	33.4	2,216	4	140	147	3.80	1,000
2 x 70 rm	1.4	1.9	36.8	2,627	4	180	178	5.32	1,000
2 x 95 rm	1.6	2.2	42.4	3,351	4	215	220	7.22	1,000
2 x 120 rm	1.6	2.3	46.7	4,220	3	250	245	9.12	1,000
2 x 150 rm	1.8	2.4	50.8	4,884	3	290	280	11.40	1,000
2 x 185 rm	2.0	2.6	56.0	5,793	3	335	315	14.06	500
2 x 240 rm	2.2	2.8	62.4	7,012	3	395	370	18.24	500
2 x 300 rm	2.4	2.9	68.5	8,291	3	460	415	22.80	500

Aluminium Conductor PVC Insulated Galvanized Round Steel Wires Armour and PVC Sheathed

Al/PVC/SWA/PVC 0,6/1 (1,2) kV (NAYRGbY)

SPECIFICATION :

SNI IEC 60502-1
IEC 60502-1

Construction:

Conductor
Aluminium conductor round circular stranded or sector shaped according to SNI IEC 60228

Insulation
Extruded layer of Polyvinyl Chloride (PVC) complied with SNI IEC 60502 - 1

Colour :

- Yellow Strip Green, Light Blue And Brown
- Brown, Black And Grey

Inner Covering / filler
Extruded Polyvinyl Chloride (PVC), Black colour

Outer Sheath
The Outer Sheath shall be a layer of Extruded Polyvinyl Chloride (PVC) grade ST1 to IEC 60502-1, Black colour.

Armour
A layer of galvanized round steel wires with a counter helix layer of galvanized steel tape.

Special Features on Request :
• Fire Resistance • Flame Retardant Cat. A/B/C • Oil Resistance • UV Resistance • Anti termite • Anti rodent • Low Smoke Zero Halogen

Applications :
For general purpose power distribution in dry or wet location, best suitable for direct burying in ground, outdoor, indoor and in ducts

Note : [rm] Circular stranded conductor
[sm] Sector shape conductor

Packing : [D] Drum

No. of cores and cross-section area	Nominal thickness		Overall Diameter	Weight of Cable	Insulation Resistance at 20 °C	Current Carrying Capacity at 30 °C		Short circuit current of conductor at 1.0 sec	Standard Delivery Length
	Insulation	Outer Sheath	(approx)	(approx)	Min	In Air	In Ground		
sq.mm	mm	mm	mm	kg/km	M.Ω.km	A	A	kA	m
3 x 25 rm	1.2	1.8	28.1	1,531	5	82	89	1.90	1,000
3 x 35 rm	1.2	1.8	30.5	1,786	4	100	107	2.66	1,000
3 x 50 sm	1.4	2.0	33.9	2,223	4	125	129	3.80	1,000
3 x 70 sm	1.4	2.0	37.1	2,658	4	155	156	5.32	1,000
3 x 95 sm	1.6	2.3	41.3	3,243	4	190	191	7.22	1,000
3 x 120 sm	1.6	2.4	44.9	4,063	3	220	220	9.12	1,000
3 x 150 sm	1.8	2.5	49.1	4,781	3	250	245	11.40	1,000
3 x 185 sm	2.0	2.7	53.3	5,543	3	285	275	14.06	500
3 x 240 sm	2.2	2.9	58.9	6,712	3	340	320	18.24	500
3 x 300 sm	2.4	3.1	63.7	7,811	3	390	365	22.80	500
3 x 400 sm	2.6	3.3	70.7	9,429	3	460	420	27.20	500

Aluminium Conductor PVC Insulated Galvanized Round Steel Wires Armour and PVC Sheathed

Al/PVC/SWA/PVC 0,6/1 (1,2) kV (NAYRGbY)

SPECIFICATION :
SNI IEC 60502-1
IEC 60502-1

Construction:

Conductor
Aluminium conductor round circular stranded or sector shaped according to SNI IEC 60228

Insulation
Extruded layer of Polyvinyl Chloride (PVC) complied with SNI IEC 60502 - 1

Colour :

- Yellow Strip Green, Brown, Black And Grey
- Light Blue, Brown, Black And Grey

Inner Covering / filler
Extruded Polyvinyl Chloride (PVC), Black colour

Outer Sheath
The Outer Sheath shall be a layer of Extruded Polyvinyl Chloride (PVC) grade ST1 to IEC 60502-1, Black colour.

Armour
A layer of galvanized round steel wires with a counter helix layer of galvanized steel tape.

Special Features on Request :
• Fire Resistance • Flame Retardant Cat. A/B/C • Oil Resistance • UV Resistance • Anti termite • Anti rodent • Low Smoke Zero Halogen

Applications :
For general purpose power distribution in dry or wet location, best suitable for direct burying in ground, outdoor, indoor and in ducts

Note : [rm] Circular stranded conductor
[sm] Sector shape conductor

Packing : [D] Drum

No. of cores and cross-section area	Nominal thickness		Overall Diameter	Weight of Cable	Insulation Resistance at 20 °C	Current Carrying Capacity at 30 °C		Short circuit current of conductor at 1.0 sec	Standard Delivery Length
	Insulation	Outer Sheath	(approx)	(approx)	Min	In Air	In Ground		
sq.mm	mm	mm	mm	kg/km	M.Ω.km	A	A	kA	m
4 x 25 rm	1.2	1.8	30.2	1,736	5	82	89	1.90	1,000
4 x 35 rm	1.2	1.9	33.2	2,051	4	100	107	2.66	1,000
4 x 50 sm	1.4	2.1	36.1	2,584	4	125	129	3.80	1,000
4 x 70 sm	1.4	2.2	39.5	3,092	4	155	156	5.32	1,000
4 x 95 sm	1.6	2.4	45.6	4,228	4	190	191	7.22	1,000
4 x 120 sm	1.6	2.5	49.4	4,921	3	220	220	9.12	500
4 x 150 sm	1.8	2.7	54.0	5,775	3	250	245	11.40	500
4 x 185 sm	2.0	2.9	59.6	6,848	3	285	275	14.06	500
4 x 240 sm	2.2	3.1	67.2	8,461	3	340	320	18.24	500
4 x 300 sm	2.4	3.3	73.0	9,797	3	390	365	22.80	500
4 x 400 sm	2.6	3.6	76.6	11,480	3	460	420	27.20	250

Aluminium Conductor PVC Insulated Galvanized Flat Steel Wires Armour and PVC Sheathed

Al/PVC/SFA/PVC 0,6/1 (1,2) kV (NAYFGbY)

SPECIFICATION :

SNI IEC 60502-1
IEC 60502-1

Construction:

Conductor
Aluminium conductor round circular stranded according to SNI IEC 60228

Insulation
Extruded layer of Polyvinyl Chloride (PVC) complied with SNI IEC 60502 - 1

Colour :
- Light Blue and Brown

Inner Covering / filler
Extruded Polyvinyl Chloride (PVC), Black colour

Outer Sheath
The Outer Sheath shall be a layer of Extruded Polyvinyl Chloride (PVC) grade ST1 to IEC 60502-1, Black colour.

Armour
A layer of galvanized flat steel wires with a counter helix layer of galvanized steel tape.

Special Features on Request :
• Fire Resistance • Flame Retardant Cat. A/B/C • Oil Resistance • UV Resistance • Anti termite • Anti rodent • Low Smoke Zero Halogen

Applications :
For general purpose power distribution in dry or wet location, best suitable for direct burying in ground.

Note : [rm] Circular stranded conductor

Packing : [D] Drum

No. of cores and cross-section area	Nominal thickness		Overall Diameter	Weight of Cable	Insulation Resistance at 20 °C	Current Carrying Capacity at 30 °C		Short circuit current of conductor at 1.0 sec	Standard Delivery Length
	Insulation	Outer Sheath	(approx)	(approx)	Min	In Air	In Ground		
sq.mm	mm	mm	mm	kg/km	M.Ω.km	A	A	kA	m
2 x 25 rm	1.2	1.8	25.1	1,108	5	94	102	1.90	1,000
2 x 35 rm	1.2	1.8	27.4	1,303	4	115	125	2.66	1,000
2 x 50 rm	1.4	1.9	31.2	1,652	4	140	147	3.80	1,000
2 x 70 rm	1.4	2.0	34.6	2,001	4	180	178	5.32	1,000
2 x 95 rm	1.6	2.1	39.8	2,591	4	215	220	7.22	1,000
2 x 120 rm	1.6	2.2	43.1	3,008	3	250	245	9.12	1,000
2 x 150 rm	1.8	2.3	47.2	3,557	3	290	280	11.40	1,000
2 x 185 rm	2.0	2.5	52.4	4,322	3	335	315	14.06	1,000
2 x 240 rm	2.2	2.7	58.8	5,364	3	395	370	18.24	500
2 x 300 rm	2.4	2.8	64.9	6,471	3	460	415	22.80	500

Aluminium Conductor PVC Insulated Galvanized Flat Steel Wires Armour and PVC Sheathed

Al/PVC/SFA/PVC 0,6/1 (1,2) kV (NAYFGbY)

SPECIFICATION :
SNI IEC 60502-1
IEC 60502-1

Construction:

Conductor
Aluminium conductor round circular stranded or sector shaped according to SNI IEC 60228

Insulation
Extruded layer of Polyvinyl Chloride (PVC) complied with SNI IEC 60502 - 1

Colour :

- Yellow Strip Green, Light Blue And Brown
- Brown, Black And Grey

Inner Covering / filler
Extruded Polyvinyl Chloride (PVC), Black colour

Outer Sheath
The Outer Sheath shall be a layer of Extruded Polyvinyl Chloride (PVC) grade ST1 to IEC 60502-1, Black colour.

Armour
A layer of galvanized flat steel wires with a counter helix layer of galvanized steel tape.

Special Features on Request :
• Fire Resistance • Flame Retardant Cat. A/B/C • Oil Resistance • UV Resistance • Anti termite • Anti rodent • Low Smoke Zero Halogen

Applications :
For general purpose power distribution in dry or wet location, best suitable for direct burying in ground.

Note : [rm] Circular stranded conductor
[sm] Sector shape conductor

Packing : [D] Drum

No. of cores and cross-section area	Nominal thickness		Overall Diameter	Weight of Cable	Insulation Resistance at 20 °C	Current Carrying Capacity at 30 °C		Short circuit current of conductor at 1.0 sec	Standard Delivery Length
	Insulation	Outer Sheath	(approx)	(approx)	Min	In Air	In Ground		
sq.mm	mm	mm	mm	kg/km	M.Ω.km	A	A	kA	m
3 x 25 rm	1.2	1.8	24.5	1,228	5	82	89	1.90	1,000
3 x 35 rm	1.2	1.8	28.9	1,453	4	100	107	2.66	1,000
3 x 50 sm	1.4	1.9	31.5	1,648	4	125	129	3.80	1,000
3 x 70 sm	1.4	2.0	34.9	2,037	4	155	156	5.32	1,000
3 x 95 sm	1.6	2.2	38.9	2,534	4	190	191	7.22	1,000
3 x 120 sm	1.6	2.3	41.5	2,936	3	220	220	9.12	1,000
3 x 150 sm	1.8	2.4	45.7	3,539	3	250	245	11.40	1,000
3 x 185 sm	2.0	2.6	49.7	4,170	3	285	275	14.06	1,000
3 x 240 sm	2.2	2.8	55.3	5,187	3	340	320	18.24	500
3 x 300 sm	2.4	3.0	60.1	6,156	3	390	365	22.80	500
3 x 400 sm	2.6	3.2	67.1	7,581	3	460	420	27.20	500

Aluminium Conductor PVC Insulated Galvanized Flat Steel Wires Armour and PVC Sheathed

Al/PVC/SFA/PVC 0,6/1 (1,2) kV (NAYFGbY)

SPECIFICATION :

SNI IEC 60502-1
IEC 60502-1

Construction:

Conductor
Aluminium conductor round circular stranded or sector shaped according to SNI IEC 60228

Insulation
Extruded layer of Polyvinyl Chloride (PVC) complied with SNI IEC 60502 - 1

Colour :

- Yellow Strip Green, Brown, Black And Grey
- Light Blue, Brown, Black And Grey

Inner Covering / filler
Extruded Polyvinyl Chloride (PVC), Black colour

Outer Sheath
The Outer Sheath shall be a layer of Extruded Polyvinyl Chloride (PVC) grade ST1 to IEC 60502-1, Black colour.

Armour
A layer of galvanized flat steel wires with a counter helix layer of galvanized steel tape.

Special Features on Request :
• Fire Resistance • Flame Retardant Cat. A/B/C • Oil Resistance • UV Resistance • Anti termite • Anti rodent • Low Smoke Zero Halogen

Applications :
For general purpose power distribution in dry or wet location, best suitable for direct burying in ground.

Note : [rm] Circular stranded conductor
[sm] Sector shape conductor

Packing : [D] Drum

No. of cores and cross-section area	Nominal thickness		Overall Diameter	Weight of Cable	Insulation Resistance at 20 °C	Current Carrying Capacity at 30 °C		Short circuit current of conductor at 1.0 sec	Standard Delivery Length
	Insulation	Outer Sheath	(approx)	(approx)	Min	In Air	In Ground		
sq.mm	mm	mm	mm	kg/km	M.Ω.km	A	A	kA	m
4 x 25 rm	1.2	1.8	28.6	1,407	5	82	89	1.90	1,000
4 x 35 rm	1.2	1.9	31.6	1,687	4	100	107	2.66	1,000
4 x 50 sm	1.4	2.0	33.7	1,962	4	125	129	3.80	1,000
4 x 70 sm	1.4	2.1	37.1	2,406	4	155	156	5.32	1,000
4 x 95 sm	1.6	2.3	42.2	3,071	4	190	191	7.22	1,000
4 x 120 sm	1.6	2.4	46.0	3,659	3	220	220	9.12	1,000
4 x 150 sm	1.8	2.6	50.6	4,389	3	250	245	11.40	1,000
4 x 185 sm	2.0	2.8	56.0	5,288	3	285	275	14.06	500
4 x 240 sm	2.2	3.0	63.6	6,689	3	340	320	18.24	500
4 x 300 sm	2.4	3.2	69.4	7,864	3	390	365	22.80	500
4 x 400 sm	2.6	3.5	73.0	9,455	3	460	420	27.20	500

Aluminium Conductor PVC Insulated Galvanized Steel Tape Armour and PVC Sheathed

Al/PVC/DSTA/PVC 0,6/1 (1,2) kV (NAYBY)

SPECIFICATION :
SNI IEC 60502-1
IEC 60502-1

Construction:

Conductor
Aluminium conductor round circular stranded according to SNI IEC 60228

Insulation
Extruded layer of Polyvinyl Chloride (PVC) complied with SNI IEC 60502 - 1

Colour :

- Light Blue and Brown

Inner Covering / filler
Extruded Polyvinyl Chloride (PVC), Black colour

Outer Sheath
The Outer Sheath shall be a layer of Extruded Polyvinyl Chloride (PVC) grade ST1 to IEC 60502-1, Black colour.

Armour
Two layers of Galvanized steel tape helically applied.

Special Features on Request :
• Fire Resistance • Flame Retardant Cat. A/B/C • Oil Resistance • UV Resistance • Anti termite • Anti rodent • Low Smoke Zero Halogen

Applications :
For Installations as underground, outdoor, indoor, in ducts and where mechanical protection is required or for higher tensile stresses during installation and operation.

Note : [rm] Circular stranded conductor

Packing : [D] Drum

No. of cores and cross-section area	Nominal thickness		Overall Diameter	Weight of Cable	Insulation Resistance at 20 °C	Current Carrying Capacity at 30 °C		Short circuit current of conductor at 1.0 sec	Standard Delivery Length
	Insulation	Outer Sheath	(approx)	(approx)	Min	In Air	In Ground		
sq.mm	mm	mm	mm	kg/km	M.Ω.km	A	A	kA	m
2 x 25 rm	1.2	1.8	23.5	889	5	94	102	1.90	1,000
2 x 35 rm	1.2	1.8	25.8	1,062	4	115	125	2.66	1,000
2 x 50 rm	1.4	1.8	29.4	1,361	4	140	147	3.80	1,000
2 x 70 rm	1.4	1.9	32.8	1,677	4	180	178	5.32	1,000
2 x 95 rm	1.6	2.1	38.6	2,487	4	215	220	7.22	1,000
2 x 120 rm	1.6	2.2	41.9	2,896	3	250	245	9.12	1,000
2 x 150 rm	1.8	2.4	46.2	3,456	3	290	280	11.40	1,000
2 x 185 rm	2.0	2.5	51.2	4,188	3	335	315	14.06	1,000
2 x 240 rm	2.2	2.7	57.6	5,214	3	395	370	18.24	500
2 x 300 rm	2.4	2.9	63.9	6,336	3	460	415	22.80	500

Aluminium Conductor PVC Insulated Galvanized Steel Tape Armour and PVC Sheathed

Al/PVC/DSTA/PVC 0,6/1 (1,2) kV (NAYBY)

SPECIFICATION :

SNI IEC 60502-1
IEC 60502-1

Construction:

Conductor
Aluminium conductor round circular stranded or sector shaped according to SNI IEC 60228

Insulation
Extruded layer of Polyvinyl Chloride (PVC) complied with SNI IEC 60502 - 1

Colour :

- Yellow Strip Green, Light Blue And Brown
- Brown, Black And Grey

Inner Covering / filler
Extruded Polyvinyl Chloride (PVC), Black colour

Outer Sheath
The Outer Sheath shall be a layer of Extruded Polyvinyl Chloride (PVC) grade ST1 to IEC 60502-1, Black colour.

Armour
Two layers of Galvanized steel tape helically applied.

Special Features on Request :
• Fire Resistance • Flame Retardant Cat. A/B/C • Oil Resistance • UV Resistance • Anti termite • Anti rodent • Low Smoke Zero Halogen

Applications :
For Installations as underground, outdoor, indoor, in ducts and where mechanical protection is required or for higher tensile stresses during installation and operation.

Note : [rm] Circular stranded conductor
[sm] Sector shape conductor

Packing : [D] Drum

No. of cores and cross-section area	Nominal thickness		Overall Diameter	Weight of Cable	Insulation Resistance at 20 °C	Current Carrying Capacity at 30 °C		Short circuit current of conductor at 1.0 sec	Standard Delivery Length
	Insulation	Outer Sheath	(approx)	(approx)	Min	In Air	In Ground		
sq.mm	mm	mm	mm	kg/km	M.Ω.km	A	A	kA	m
3 x 25 rm	1.2	1.8	24.9	996	5	82	89	1.90	1,000
3 x 35 rm	1.2	1.8	27.3	1,196	4	100	107	2.66	1,000
3 x 50 sm	1.4	1.9	29.9	1,369	4	125	129	3.80	1,000
3 x 70 sm	1.4	2.0	33.3	1,726	4	155	156	5.32	1,000
3 x 95 sm	1.6	2.2	37.7	2,433	4	190	191	7.22	1,000
3 x 120 sm	1.6	2.3	40.3	2,828	3	220	220	9.12	1,000
3 x 150 sm	1.8	2.5	44.7	3,441	3	250	245	11.40	1,000
3 x 185 sm	2.0	2.6	48.5	4,043	3	285	275	14.06	1,000
3 x 240 sm	2.2	2.8	54.1	5,045	3	340	320	18.24	500
3 x 300 sm	2.4	3.0	58.9	6,003	3	390	365	22.80	500
3 x 400 sm	2.6	3.3	66.9	7,583	3	460	420	27.20	500

Aluminium Conductor PVC Insulated Galvanized Steel Tape Armour and PVC Sheathed

Al/PVC/DSTA/PVC 0,6/1 (1,2) kV (NAYBY)

SPECIFICATION :
SNI IEC 60502-1
IEC 60502-1

Construction:

Conductor
Aluminium conductor round circular stranded or sector shaped according to SNI IEC 60228

Insulation
Extruded layer of Polyvinyl Chloride (PVC) complied with SNI IEC 60502 - 1

Colour :

- Yellow Strip Green, Brown, Black And Grey
- Light Blue, Brown, Black And Grey

Inner Covering / filler
Extruded Polyvinyl Chloride (PVC), Black colour

Outer Sheath
The Outer Sheath shall be a layer of Extruded Polyvinyl Chloride (PVC) grade ST1 to IEC 60502-1, Black colour.

Armour
Two layers of Galvanized steel tape helically applied.

Special Features on Request :
• Fire Resistance • Flame Retardant Cat. A/B/C • Oil Resistance • UV Resistance • Anti termite • Anti rodent • Low Smoke Zero Halogen

Applications :
For Installations as underground, outdoor, indoor, in ducts and where mechanical protection is required or for higher tensile stresses during installation and operation.

Note : [rm] Circular stranded conductor
[sm] Sector shape conductor

Packing : [D] Drum

No. of cores and cross-section area	Nominal thickness		Overall Diameter	Weight of Cable	Insulation Resistance at 20 °C	Current Carrying Capacity at 30 °C		Short circuit current of conductor at 1.0 sec	Standard Delivery Length
	Insulation	Outer Sheath	(approx)	(approx)	Min	In Air	In Ground		
sq.mm	mm	mm	mm	kg/km	M.Ω.km	A	A	kA	m
4 x 25 rm	1.2	1.8	27.0	1,153	5	82	89	1.90	1,000
4 x 35 rm	1.2	1.9	30.0	1,406	4	100	107	2.66	1,000
4 x 50 sm	1.4	2.0	32.1	1,662	4	125	129	3.80	1,000
4 x 70 sm	1.4	2.2	36.1	2,325	4	155	156	5.32	1,000
4 x 95 sm	1.6	2.4	41.2	2,980	4	190	191	7.22	1,000
4 x 120 sm	1.6	2.5	45.0	3,561	3	220	220	9.12	1,000
4 x 150 sm	1.8	2.6	49.4	4,259	3	250	245	11.40	1,000
4 x 185 sm	2.0	2.8	54.8	5,145	3	285	275	14.06	500
4 x 240 sm	2.2	3.0	62.4	6,527	3	340	320	18.24	500
4 x 300 sm	2.4	3.2	68.2	7,689	3	390	365	22.80	500
4 x 400 sm	2.6	3.5	71.8	9,271	3	460	420	27.20	500

XLPE Insulated

XLPE Insulated

Aluminium Conductor XLPE Insulated and PVC Sheathed non Armoured Power Cable

Al/XLPE/PVC 0,6/1 (1,2) kV (NA2XY)

SPECIFICATION :
SNI IEC 60502-1
IEC 60502-1

Construction:

Conductor
Aluminium conductor round circular stranded according to SNI IEC 60228

Insulation
Extruded layer of Cross-Linked Polyethylene (XLPE) complied with SNI IEC 60502 - 1

Colour :
- Natural or
- Black or
- Light Blue or
- etc.

Inner Covering / filler
Extruded Polyvinyl Chloride (PVC), Black colour

Outer Sheath
The Outer Sheath shall be a layer of Extruded Polyvinyl Chloride (PVC) grade ST2 to IEC 60502-1, Black colour.

Special Features on Request :
• Fire Resistance • Flame Retardant Cat. A/B/C • Oil Resistance • UV Resistance • Anti termite • Anti rodent • Low Smoke Zero Halogen

Applications :
For Installations as underground, outdoor, indoor, in ducts and where mechanical protection is required or for higher tensile stresses during installation and operation.

Note : [rm] Circular stranded conductor

Packing : [D] Drum

No. of cores and cross-section area	Nominal thickness		Overall Diameter	Weight of Cable	Insulation Resistance at 20 °C	Current Carrying Capacity at 30 °C		Short circuit current of conductor at 1.0 sec	Standard Delivery Length
	Insulation	Outer Sheath	(approx)	(approx)	Min	In Air	In Ground		
sq.mm	mm	mm	mm	kg/km	M.Ω.km	A	A	kA	m
1 x 16 rm	0.7	1.4	9.7	113	382	84	91	1.50	1,000
1 x 25 rm	0.9	1.4	10.8	150	394	112	117	2.40	1,000
1 x 35 rm	0.9	1.4	12.0	188	339	138	140	3.36	1,000
1 x 50 rm	1.0	1.4	13.6	240	313	170	166	4.80	1,000
1 x 70 rm	1.1	1.4	15.2	311	293	218	203	6.72	1,000
1 x 95 rm	1.1	1.6	17.7	426	255	269	242	9.12	1,000
1 x 120 rm	1.2	1.6	19.4	515	247	312	275	11.52	1,000
1 x 150 rm	1.4	1.6	21.4	628	259	364	309	14.40	1,000
1 x 185 rm	1.6	1.6	23.6	760	264	424	350	17.76	1,000
1 x 240 rm	1.7	1.8	26.8	983	246	510	406	23.04	1,000
1 x 300 rm	1.8	1.8	29.3	1,195	234	590	458	28.80	1,000
1 x 400 rm	2.0	2.0	33.1	1,525	228	711	528	38.40	1,000
1 x 500 rm	2.2	2.1	37.1	1,923	225	823	599	48.00	1,000
1 x 630 rm	2.4	2.3	43.5	2,473	223	963	680	59.22	1,000

Aluminium Conductor XLPE Insulated and PVC Sheathed non Armoured Power Cable

Al/XLPE/PVC 0,6/1 (1,2) kV (NA2XY)

SPECIFICATION :

SNI IEC 60502-1
IEC 60502-1

Construction:

Conductor
Aluminium conductor round circular stranded according to SNI IEC 60228

Insulation
Extruded layer of Polyvinyl Chloride (PVC) complied with SNI IEC 60502 - 1

Colour :
- Light Blue and Brown

Inner Covering / filler
Extruded Polyvinyl Chloride (PVC), Black colour

Outer Sheath
The Outer Sheath shall be a layer of Extruded Polyvinyl Chloride (PVC) grade ST2 to IEC 60502-1, Black colour.

Special Features on Request :
• Fire Resistance • Flame Retardant Cat. A/B/C • Oil Resistance • UV Resistance • Anti termite • Anti rodent • Low Smoke Zero Halogen

Applications :
For Installations as underground, outdoor, indoor, in ducts and where mechanical protection is required or for higher tensile stresses during installation and operation.

Note : [rm] Circular stranded conductor

Packing : [D] Drum

No. of cores and cross-section area	Nominal thickness		Overall Diameter	Weight of Cable	Insulation Resistance at 20 °C	Current Carrying Capacity at 30 °C		Short circuit current of conductor at 1.0 sec	Standard Delivery Length
	Insulation	Outer Sheath	(approx)	(approx)	Min	In Air	In Ground		
sq.mm	mm	mm	mm	kg/km	M.Ω.km	A	A	kA	m
2 x 25 rm	0.9	1.8	21.7	592	394	119	130	2.40	1,000
2 x 35 rm	0.9	1.8	24.0	735	339	145	157	3.36	1,000
2 x 50 rm	1.0	1.8	27.2	947	313	175	185	4.80	1,000
2 x 70 rm	1.1	1.8	30.8	1,224	293	220	229	6.72	1,000
2 x 95 rm	1.1	2.0	35.4	1,634	255	272	276	9.12	1,000
2 x 120 rm	1.2	2.1	39.0	1,976	247	317	320	11.52	1,000
2 x 150 rm	1.4	2.2	43.2	2,428	259	362	351	14.40	1,000
2 x 185 rm	1.6	2.3	48.2	3,029	264	420	400	17.76	1,000
2 x 240 rm	1.7	2.5	54.2	3,839	246	497	467	23.04	500
2 x 300 rm	1.8	2.7	60.1	4,742	234	577	532	28.80	500

Aluminium Conductor XLPE Insulated and PVC Sheathed non Armoured Power Cable

Al/XLPE/PVC 0,6/1 (1,2) kV (NA2XY)

SPECIFICATION :
SNI IEC 60502-1
IEC 60502-1

Construction:

Conductor
Aluminium conductor round circular stranded or sector shaped according to SNI IEC 60228

Insulation
Extruded layer of Polyvinyl Chloride (PVC) complied with SNI IEC 60502 - 1

Colour :

- Yellow Strip Green, Light Blue And Brown
- Brown, Black And Grey

Inner Covering / filler
Extruded Polyvinyl Chloride (PVC), Black colour

Outer Sheath
The Outer Sheath shall be a layer of Extruded Polyvinyl Chloride (PVC) grade ST2 to IEC 60502-1, Black colour.

Special Features on Request :
• Fire Resistance • Flame Retardant Cat. A/B/C • Oil Resistance • UV Resistance • Anti termite • Anti rodent • Low Smoke Zero Halogen

Applications :
For Installations as underground, outdoor, indoor, in ducts and where mechanical protection is required or for higher tensile stresses during installation and operation.

Note : [rm] Circular stranded conductor
[sm] Sector shape conductor

Packing : [D] Drum

No. of cores and cross-section area	Nominal thickness		Overall Diameter	Weight of Cable	Insulation Resistance at 20 °C	Current Carrying Capacity at 30 °C		Short circuit current of conductor at 1.0 sec	Standard Delivery Length
	Insulation	Outer Sheath	(approx)	(approx)	Min	In Air	In Ground		
sq.mm	mm	mm	mm	kg/km	M.Ω.km	A	A	kA	m
3 x 25 rm	0.9	1.8	23.0	670	394	100	110	2.40	1,000
3 x 35 rm	0.9	1.8	25.4	837	339	123	132	3.36	1,000
3 x 50 sm	1.0	1.8	27.5	913	313	149	156	4.80	1,000
3 x 70 sm	1.1	1.9	31.3	1,225	293	189	193	6.72	1,000
3 x 95 sm	1.1	2.0	34.3	1,539	255	233	232	9.12	1,000
3 x 120 sm	1.2	2.1	37.3	1,888	247	271	268	11.52	1,000
3 x 150 sm	1.4	2.3	41.7	2,371	259	310	296	14.40	1,000
3 x 185 sm	1.6	2.4	45.5	2,846	264	359	336	17.76	1,000
3 x 240 sm	1.7	2.6	50.7	3,637	246	429	429	23.04	1,000
3 x 300 sm	1.8	2.8	55.1	4,393	234	496	447	28.80	500

Aluminium Conductor XLPE Insulated and PVC Sheathed non Armoured Power Cable

Al/XLPE/PVC 0,6/1 (1,2) kV (NA2XY)

SPECIFICATION :

SNI IEC 60502-1
IEC 60502-1

Construction:

Conductor
Aluminium conductor round circular stranded or sector shaped according to SNI IEC 60228

Insulation
Extruded layer of Polyvinyl Chloride (PVC) complied with SNI IEC 60502 - 1

Colour :

- Yellow Strip Green, Brown, Black And Grey
- Light Blue, Brown, Black And Grey

Inner Covering / filler
Extruded Polyvinyl Chloride (PVC), Black colour

Outer Sheath
The Outer Sheath shall be a layer of Extruded Polyvinyl Chloride (PVC) grade ST2 to IEC 60502-1, Black colour.

Special Features on Request :
• Fire Resistance • Flame Retardant Cat. A/B/C • Oil Resistance • UV Resistance • Anti termite • Anti rodent • Low Smoke Zero Halogen

Applications :
For Installations as underground, outdoor, indoor, in ducts and where mechanical protection is required or for higher tensile stresses during installation and operation.

Note : [rm] Circular stranded conductor
[sm] Sector shape conductor

Packing : [D] Drum

No. of cores and cross-section area	Nominal thickness		Overall Diameter	Weight of Cable	Insulation Resistance at 20 °C	Current Carrying Capacity at 30 °C		Short circuit current of conductor at 1.0 sec	Standard Delivery Length
	Insulation	Outer Sheath	(approx)	(approx)	Min	In Air	In Ground		
sq.mm	mm	mm	mm	kg/km	M.Ω.km	A	A	kA	m
4 x 25 rm	0.9	1.8	25.0	784	394	100	110	2.40	1,000
4 x 35 rm	0.9	1.8	27.7	986	339	123	132	3.36	1,000
4 x 50 sm	1.0	1.9	29.3	1,115	313	149	156	4.80	1,000
4 x 70 sm	1.1	2.0	33.5	1,517	293	189	193	6.72	1,000
4 x 95 sm	1.1	2.1	37.6	1,949	255	233	232	9.12	1,000
4 x 120 sm	1.2	2.3	42.0	2,477	247	271	268	11.52	1,000
4 x 150 sm	1.4	2.4	46.4	3,034	259	310	296	14.40	1,000
4 x 185 sm	1.6	2.6	51.4	3,699	264	359	336	17.76	1,000
4 x 240 sm	1.7	2.8	59.0	4,851	246	429	429	23.04	500
4 x 300 sm	1.8	3.0	64.4	5,757	234	496	447	28.80	500

Aluminium Conductor XLPE Insulated Galvanized Round Steel Wires Armour and PVC Sheathed

Al/XLPE/SWA/PVC 0,6/1 (1,2) kV (NA2XRGbY)

SPECIFICATION :
SNI IEC 60502-1
IEC 60502-1

Construction:

Conductor
Aluminium conductor round circular stranded according to SNI IEC 60228

Insulation
Extruded layer of Cross-Linked Polyethylene (XLPE) complied with SNI IEC 60502 - 1

Colour :

- Light Blue and Brown

Inner Covering / filler
Extruded Polyvinyl Chloride (PVC), Black colour

Outer Sheath
The Outer Sheath shall be a layer of Extruded Polyvinyl Chloride (PVC) grade ST2 to IEC 60502-1, Black colour.

Armour
A layer of galvanized round steel wires with a counter helix layer of galvanized steel tape.

Special Features on Request :
• Fire Resistance • Flame Retardant Cat. A/B/C • Oil Resistance • UV Resistance • Anti termite • Anti rodent • Low Smoke Zero Halogen

Applications :
For general purpose power distribution in dry or wet location, best suitable for direct burying in ground, outdoor, indoor and in ducts

Note : [rm] Circular stranded conductor

Packing : [D] Drum

No. of cores and cross-section area	Nominal thickness		Overall Diameter	Weight of Cable	Insulation Resistance at 20 °C	Current Carrying Capacity at 30 °C		Short circuit current of conductor at 1.0 sec	Standard Delivery Length
	Insulation	Outer Sheath	(approx)	(approx)	Min	In Air	In Ground		
sq.mm	mm	mm	mm	kg/km	M.Ω.km	A	A	kA	m
2 x 25 rm	0.9	1.8	25.5	1,267	394	119	130	2.40	1,000
2 x 35 rm	0.9	1.8	27.8	1,480	339	145	157	3.36	1,000
2 x 50 rm	1.0	1.9	32.0	2,022	313	175	185	4.80	1,000
2 x 70 rm	1.1	2.0	35.8	2,458	293	220	229	6.72	1,000
2 x 95 rm	1.1	2.1	40.2	3,021	255	272	276	9.12	1,000
2 x 120 rm	1.2	2.2	44.9	3,900	247	317	320	11.52	1,000
2 x 150 rm	1.4	2.3	49.0	4,527	259	362	351	14.40	1,000
2 x 185 rm	1.6	2.5	54.2	5,390	264	420	400	17.76	1,000
2 x 240 rm	1.7	2.7	60.2	6,485	246	497	467	23.04	500
2 x 300 rm	1.8	2.9	66.1	7,661	234	577	532	28.80	500

Aluminium Conductor XLPE Insulated Galvanized Round Steel Wires Armour and PVC Sheathed

Al/XLPE/SWA/PVC 0,6/1 (1,2) kV (NA2XRGbY)

SPECIFICATION :

SNI IEC 60502-1
IEC 60502-1

Construction:

Conductor
Aluminium conductor round circular stranded or sector shaped according to SNI IEC 60228

Insulation
Extruded layer of Cross-Linked Polyethylene (XLPE) complied with SNI IEC 60502 - 1

Colour :

- Yellow Strip Green, Light Blue And Brown
- Brown, Black And Grey

Inner Covering / filler
Extruded Polyvinyl Chloride (PVC), Black colour

Outer Sheath
The Outer Sheath shall be a layer of Extruded Polyvinyl Chloride (PVC) grade ST2 to IEC 60502-1, Black colour.

Armour
A layer of galvanized round steel wires with a counter helix layer of galvanized steel tape.

Special Features on Request :
• Fire Resistance • Flame Retardant Cat. A/B/C • Oil Resistance • UV Resistance • Anti termite • Anti rodent • Low Smoke Zero Halogen

Applications :
For general purpose power distribution in dry or wet location, best suitable for direct burying in ground, outdoor, indoor and in ducts

Note : [rm] Circular stranded conductor
[sm] Sector shape conductor

Packing : [D] Drum

No. of cores and cross-section area	Nominal thickness		Overall Diameter	Weight of Cable	Insulation Resistance at 20 °C	Current Carrying Capacity at 30 °C		Short circuit current of conductor at 1.0 sec	Standard Delivery Length
	Insulation	Outer Sheath	(approx)	(approx)	Min	In Air	In Ground		
sq.mm	mm	mm	mm	kg/km	M.Ω.km	A	A	kA	m
3 x 25 rm	0.9	1.8	26.8	1,382	394	100	110	2.40	1,000
3 x 35 rm	0.9	1.8	29.2	1,623	339	123	132	3.36	1,000
3 x 50 sm	1.0	1.9	32.1	1,994	313	149	156	4.80	1,000
3 x 70 sm	1.1	2.1	36.1	2,473	293	189	193	6.72	1,000
3 x 95 sm	1.1	2.2	39.1	2,904	255	233	232	9.12	1,000
3 x 120 sm	1.2	2.3	43.1	3,726	247	271	268	11.52	1,000
3 x 150 sm	1.4	2.5	47.5	4,413	259	310	296	14.40	1,000
3 x 185 sm	1.6	2.6	51.5	5,095	264	359	336	17.76	500
3 x 240 sm	1.7	2.8	56.7	6,133	246	429	429	23.04	500
3 x 300 sm	1.8	3.0	61.1	7,096	234	496	447	28.80	500

Aluminium Conductor XLPE Insulated Galvanized Round Steel Wires Armour and PVC Sheathed

Al/XLPE/SWA/PVC 0,6/1 (1,2) kV (NA2XRGbY)

SPECIFICATION :
SNI IEC 60502-1
IEC 60502-1

Construction:

Conductor
Aluminium conductor round circular stranded or sector shaped according to SNI IEC 60228

Insulation
Extruded layer of Cross-Linked Polyethylene (XLPE) complied with SNI IEC 60502 - 1

Colour :

- Yellow Strip Green, Brown, Black And Grey
- Light Blue, Brown, Black And Grey

Inner Covering / filler
Extruded Polyvinyl Chloride (PVC), Black colour

Outer Sheath
The Outer Sheath shall be a layer of Extruded Polyvinyl Chloride (PVC) grade ST2 to IEC 60502-1, Black colour.

Armour
A layer of galvanized round steel wires with a counter helix layer of galvanized steel tape.

Special Features on Request :
• Fire Resistance • Flame Retardant Cat. A/B/C • Oil Resistance • UV Resistance • Anti termite • Anti rodent • Low Smoke Zero Halogen

Applications :
For general purpose power distribution in dry or wet location, best suitable for direct burying in ground, outdoor, indoor and in ducts

Note : [rm] Circular stranded conductor
[sm] Sector shape conductor

Packing : [D] Drum

No. of cores and cross-section area	Nominal thickness		Overall Diameter	Weight of Cable	Insulation Resistance at 20 °C	Current Carrying Capacity at 30 °C		Short circuit current of conductor at 1.0 sec	Standard Delivery Length
	Insulation	Outer Sheath	(approx)	(approx)	Min	In Air	In Ground		
sq.mm	mm	mm	mm	kg/km	M.Ω.km	A	A	kA	m
4 x 25 rm	0.9	1.8	28.8	1,557	394	100	110	2.40	1,000
4 x 35 rm	0.9	1.8	31.5	1,840	339	123	132	3.36	1,000
4 x 50 sm	1.0	2.0	33.9	2,267	313	149	156	4.80	1,000
4 x 70 sm	1.1	2.2	38.3	2,849	293	189	193	6.72	1,000
4 x 95 sm	1.1	2.3	42.4	3,443	255	233	232	9.12	1,000
4 x 120 sm	1.2	2.5	47.8	4,534	247	271	268	11.52	500
4 x 150 sm	1.4	2.6	52.2	5,304	259	310	296	14.40	500
4 x 185 sm	1.6	2.8	57.4	6,230	264	359	336	17.76	500
4 x 240 sm	1.7	3.0	64.9	7,749	246	429	429	23.04	500
4 x 300 sm	1.8	3.2	70.4	8,913	234	496	447	28.80	500

Aluminium Conductor XLPE Insulated Galvanized Flat Steel Wires Armour and PVC Sheathed

Al/XLPE/SFA/PVC 0,6/1 (1,2) kV (NA2XFGbY)

SPECIFICATION :

SNI IEC 60502-1
IEC 60502-1

Construction:

Conductor
Aluminium conductor round circular stranded according to SNI IEC 60228

Insulation
Extruded layer of Cross-Linked Polyethylene (XLPE) complied with SNI IEC 60502 - 1

Colour :
- Light Blue and Brown

Inner Covering / filler
Extruded Polyvinyl Chloride (PVC), Black colour

Outer Sheath
The Outer Sheath shall be a layer of Extruded Polyvinyl Chloride (PVC) grade ST2 to IEC 60502-1, Black colour.

Armour
A layer of galvanized flat steel wires with a counter helix layer of galvanized steel tape.

Special Features on Request :
• Fire Resistance • Flame Retardant Cat. A/B/C • Oil Resistance • UV Resistance • Anti termite • Anti rodent • Low Smoke Zero Halogen

Applications :
For general purpose power distribution in dry or wet location, best suitable for direct burying in ground.

Note : [rm] Circular stranded conductor

Packing : [D] Drum

No. of cores and cross-section area	Nominal thickness		Overall Diameter	Weight of Cable	Insulation Resistance at 20 °C	Current Carrying Capacity at 30 °C		Short circuit current of conductor at 1.0 sec	Standard Delivery Length
	Insulation	Outer Sheath	(approx)	(approx)	Min	In Air	In Ground		
sq.mm	mm	mm	mm	kg/km	M.Ω.km	A	A	kA	m
2 x 25 rm	0.9	1.8	23.9	996	394	119	130	2.40	1,000
2 x 35 rm	0.9	1.8	26.2	1,181	339	145	157	3.36	1,000
2 x 50 rm	1.0	1.8	29.4	1,461	313	175	185	4.80	1,000
2 x 70 rm	1.1	1.9	33.2	1,824	293	220	229	6.72	1,000
2 x 95 rm	1.1	2.0	37.6	2,302	255	272	276	9.12	1,000
2 x 120 rm	1.2	2.1	41.3	2,736	247	317	320	11.52	1,000
2 x 150 rm	1.4	2.3	45.6	3,269	259	362	351	14.40	1,000
2 x 185 rm	1.6	2.4	50.6	3,967	264	420	400	17.76	1,000
2 x 240 rm	1.7	2.6	56.6	4,898	246	497	467	23.04	500
2 x 300 rm	1.8	2.7	62.3	5,882	234	577	532	28.80	500

Aluminium Conductor XLPE Insulated Galvanized Flat Steel Wires Armour and PVC Sheathed

Al/XLPE/SFA/PVC 0,6/1 (1,2) kV (NA2XFGbY)

SPECIFICATION :
SNI IEC 60502-1
IEC 60502-1

Construction:

Conductor
Aluminium conductor round circular stranded or sector shaped according to SNI IEC 60228

Insulation
Extruded layer of Cross-Linked Polyethylene (XLPE) complied with SNI IEC 60502 - 1

Colour :

- Yellow Strip Green, Light Blue And Brown
- Brown, Black And Grey

Inner Covering / filler
Extruded Polyvinyl Chloride (PVC), Black colour

Outer Sheath
The Outer Sheath shall be a layer of Extruded Polyvinyl Chloride (PVC) grade ST2 to IEC 60502-1, Black colour.

Armour
A layer of galvanized flat steel wires with a counter helix layer of galvanized steel tape.

Special Features on Request :
• Fire Resistance • Flame Retardant Cat. A/B/C • Oil Resistance • UV Resistance • Anti termite • Anti rodent • Low Smoke Zero Halogen

Applications :
For general purpose power distribution in dry or wet location, best suitable for direct burying in ground.

Note : [rm] Circular stranded conductor
[sm] Sector shape conductor

Packing : [D] Drum

No. of cores and cross-section area	Nominal thickness		Overall Diameter	Weight of Cable	Insulation Resistance at 20 °C	Current Carrying Capacity at 30 °C		Short circuit current of conductor at 1.0 sec	Standard Delivery Length
	Insulation	Outer Sheath	(approx)	(approx)	Min	In Air	In Ground		
sq.mm	mm	mm	mm	kg/km	M.Ω.km	A	A	kA	m
3 x 25 rm	0.9	1.8	25.2	1,094	394	100	110	2.40	1,000
3 x 35 rm	0.9	1.8	27.6	1,306	339	123	132	3.36	1,000
3 x 50 sm	1.0	1.9	29.9	1,464	313	149	156	4.80	1,000
3 x 70 sm	1.1	2.0	33.5	1,839	293	189	193	6.72	1,000
3 x 95 sm	1.1	2.1	36.5	2,214	255	233	232	9.12	1,000
3 x 120 sm	1.2	2.2	39.5	2,623	247	271	268	11.52	1,000
3 x 150 sm	1.4	2.4	43.7	3,166	259	310	296	14.40	1,000
3 x 185 sm	1.6	2.5	47.5	3,717	264	359	336	17.76	1,000
3 x 240 sm	1.7	2.7	53.1	4,666	246	429	429	23.04	1,000
3 x 300 sm	1.8	2.9	57.5	5,511	234	496	447	28.80	500

Aluminium Conductor XLPE Insulated Galvanized Flat Steel Wires Armour and PVC Sheathed

Al/XLPE/SFA/PVC 0,6/1 (1,2) kV (NA2XFGbY)

SPECIFICATION :

SNI IEC 60502-1
IEC 60502-1

Construction:

Conductor
Aluminium conductor round circular stranded or sector shaped according to SNI IEC 60228

Insulation
Extruded layer of Cross-Linked Polyethylene (XLPE) complied with SNI IEC 60502 - 1

Colour :

- Yellow Strip Green, Brown, Black And Grey
- Light Blue, Brown, Black And Grey

Inner Covering / filler
Extruded Polyvinyl Chloride (PVC), Black colour

Outer Sheath
The Outer Sheath shall be a layer of Extruded Polyvinyl Chloride (PVC) grade ST2 to IEC 60502-1, Black colour.

Armour
A layer of galvanized flat steel wires with a counter helix layer of galvanized steel tape.

Special Features on Request :
• Fire Resistance • Flame Retardant Cat. A/B/C • Oil Resistance • UV Resistance • Anti termite • Anti rodent • Low Smoke Zero Halogen

Applications :
For general purpose power distribution in dry or wet location, best suitable for direct burying in ground.

Note : [rm] Circular stranded conductor
[sm] Sector shape conductor

Packing : [D] Drum

No. of cores and cross-section area	Nominal thickness		Overall Diameter	Weight of Cable	Insulation Resistance at 20 °C	Current Carrying Capacity at 30 °C		Short circuit current of conductor at 1.0 sec	Standard Delivery Length
	Insulation	Outer Sheath	(approx)	(approx)	Min	In Air	In Ground		
sq.mm	mm	mm	mm	kg/km	M.Ω.km	A	A	kA	m
4 x 25 rm	0.9	1.8	27.2	1,245	394	100	110	2.40	1,000
4 x 35 rm	0.9	1.8	29.9	1,495	339	123	132	3.36	1,000
4 x 50 sm	1.0	2.0	31.7	1,699	313	149	156	4.80	1,000
4 x 70 sm	1.1	2.1	35.9	2,186	293	189	193	6.72	1,000
4 x 95 sm	1.1	2.2	40.0	2,703	255	233	232	9.12	1,000
4 x 120 sm	1.2	2.4	44.4	3,317	247	271	268	11.52	1,000
4 x 150 sm	1.4	2.5	48.8	3,965	259	310	296	14.40	1,000
4 x 185 sm	1.6	2.7	53.8	4,729	264	359	336	17.76	1,000
4 x 240 sm	1.7	2.9	61.4	6,036	246	429	429	23.04	500
4 x 300 sm	1.8	3.1	66.8	7,051	234	496	447	28.80	500

Aluminium Conductor XLPE Insulated Galvanized Steel Tape Armour and PVC Sheathed

Al/XLPE/DSTA/PVC 0,6/1 (1,2) kV (NA2XBY)

SPECIFICATION :
SNI IEC 60502-1
IEC 60502-1

Construction:

Conductor
Aluminium conductor round circular stranded according to SNI IEC 60228

Insulation
Extruded layer of Cross-Linked Polyethylene (XLPE) complied with SNI IEC 60502 - 1

Colour :

- Light Blue and Brown

Inner Covering / filler
Extruded Polyvinyl Chloride (PVC), Black colour

Outer Sheath
The Outer Sheath shall be a layer of Extruded Polyvinyl Chloride (PVC) grade ST2 to IEC 60502-1, Black colour.

Armour
Two layers of Galvanized steel tape helically applied.

Special Features on Request :
• Fire Resistance • Flame Retardant Cat. A/B/C • Oil Resistance • UV Resistance • Anti termite • Anti rodent • Low Smoke Zero Halogen

Applications :
For Installations as underground, outdoor, indoor, in ducts and where mechanical protection is required or for higher tensile stresses during installation and operation.

Note : [rm] Circular stranded conductor

Packing : [D] Drum

No. of cores and cross-section area	Nominal thickness		Overall Diameter	Weight of Cable	Insulation Resistance at 20 °C	Current Carrying Capacity at 30 °C		Short circuit current of conductor at 1.0 sec	Standard Delivery Length
	Insulation	Outer Sheath	(approx)	(approx)	Min	In Air	In Ground		
sq.mm	mm	mm	mm	kg/km	M.Ω.km	A	A	kA	m
2 x 25 rm	0.9	1.8	22.3	789	394	119	130	2.40	1,000
2 x 35 rm	0.9	1.8	24.6	952	339	145	157	3.36	1,000
2 x 50 rm	1.0	1.8	27.8	1,200	313	175	185	4.80	1,000
2 x 70 rm	1.1	1.9	31.6	1,527	293	220	229	6.72	1,000
2 x 95 rm	1.1	2.0	36.4	2,024	255	272	276	9.12	1,000
2 x 120 rm	1.2	2.2	40.3	2,647	247	317	320	11.52	1,000
2 x 150 rm	1.4	2.3	44.4	3,151	259	362	351	14.40	1,000
2 x 185 rm	1.6	2.5	49.6	3,860	264	420	400	17.76	1,000
2 x 240 rm	1.7	2.6	55.4	4,753	246	497	467	23.04	500
2 x 300 rm	1.8	2.8	61.3	5,752	234	577	532	28.80	500

Aluminium Conductor XLPE Insulated Galvanized Steel Tape Armour and PVC Sheathed

Al/XLPE/DSTA/PVC 0,6/1 (1,2) kV (NA2XBY)

SPECIFICATION :

SNI IEC 60502-1
IEC 60502-1

Construction:

Conductor
Aluminium conductor round circular stranded or sector shaped according to SNI IEC 60228

Insulation
Extruded layer of Cross-Linked Polyethylene (XLPE) complied with SNI IEC 60502 - 1

Colour :

- Yellow Strip Green, Light Blue And Brown
- Brown, Black And Grey

Inner Covering / filler
Extruded Polyvinyl Chloride (PVC), Black colour

Outer Sheath
The Outer Sheath shall be a layer of Extruded Polyvinyl Chloride (PVC) grade ST2 to IEC 60502-1, Black colour.

Armour
Two layers of Galvanized steel tape helically applied.

Special Features on Request :
• Fire Resistance • Flame Retardant Cat. A/B/C • Oil Resistance • UV Resistance • Anti termite • Anti rodent • Low Smoke Zero Halogen

Applications :
For Installations as underground, outdoor, indoor, in ducts and where mechanical protection is required or for higher tensile stresses during installation and operation.

Note : [rm] Circular stranded conductor
[sm] Sector shape conductor

Packing : [D] Drum

No. of cores and cross-section area	Nominal thickness		Overall Diameter	Weight of Cable	Insulation Resistance at 20 °C	Current Carrying Capacity at 30 °C		Short circuit current of conductor at 1.0 sec	Standard Delivery Length
	Insulation	Outer Sheath	(approx)	(approx)	Min	In Air	In Ground		
sq.mm	mm	mm	mm	kg/km	M.Ω.km	A	A	kA	m
3 x 25 rm	0.9	1.8	23.6	875	394	100	110	2.40	1,000
3 x 35 rm	0.9	1.8	26	1,063	339	123	132	3.36	1,000
3 x 50 sm	1.0	1.8	28.1	1,180	313	149	156	4.80	1,000
3 x 70 sm	1.1	2.0	32.1	1,551	293	189	193	6.72	1,000
3 x 95 sm	1.1	2.1	35.5	2,130	255	233	232	9.12	1,000
3 x 120 sm	1.2	2.3	38.7	2,550	247	271	268	11.52	1,000
3 x 150 sm	1.4	2.4	42.9	3,091	259	310	296	14.40	1,000
3 x 185 sm	1.6	2.6	46.9	3,656	264	359	336	17.76	1,000
3 x 240 sm	1.7	2.7	51.9	4,516	246	429	429	23.04	1,000
3 x 300 sm	1.8	2.9	56.3	5,349	234	496	447	28.80	500

Aluminium Conductor XLPE Insulated Galvanized Steel Tape Armour and PVC Sheathed

Al/XLPE/DSTA/PVC 0,6/1 (1,2) kV (NA2XBY)

SPECIFICATION :
SNI IEC 60502-1
IEC 60502-1

Construction:

Conductor
Aluminium conductor round circular stranded or sector shaped according to SNI IEC 60228

Insulation
Extruded layer of Cross-Linked Polyethylene (XLPE) complied with SNI IEC 60502 - 1

Colour :

- Yellow Strip Green, Brown, Black And Grey
- Light Blue, Brown, Black And Grey

Inner Covering / filler
Extruded Polyvinyl Chloride (PVC), Black colour

Outer Sheath
The Outer Sheath shall be a layer of Extruded Polyvinyl Chloride (PVC) grade ST2 to IEC 60502-1, Black colour.

Armour
Two layers of Galvanized steel tape helically applied.

Special Features on Request :
• Fire Resistance • Flame Retardant Cat. A/B/C • Oil Resistance • UV Resistance • Anti termite • Anti rodent • Low Smoke Zero Halogen

Applications :
For Installations as underground, outdoor, indoor, in ducts and where mechanical protection is required or for higher tensile stresses during installation and operation.

Note : [rm] Circular stranded conductor
[sm] Sector shape conductor

Packing : [D] Drum

No. of cores and cross-section area	Nominal thickness		Overall Diameter	Weight of Cable	Insulation Resistance at 20 °C	Current Carrying Capacity at 30 °C		Short circuit current of conductor at 1.0 sec	Standard Delivery Length
	Insulation	Outer Sheath	(approx)	(approx)	Min	In Air	In Ground		
sq.mm	mm	mm	mm	kg/km	M.Ω.km	A	A	kA	m
4 x 25 rm	0.9	1.8	25.6	1,006	394	100	110	2.40	1,000
4 x 35 rm	0.9	1.8	28.3	1,229	339	123	132	3.36	1,000
4 x 50 sm	1.0	1.9	29.9	1,405	313	149	156	4.80	1,000
4 x 70 sm	1.1	2.1	34.3	1,866	293	189	193	6.72	1,000
4 x 95 sm	1.1	2.3	39.0	2,616	255	233	232	9.12	1,000
4 x 120 sm	1.2	2.4	43.2	3,203	247	271	268	11.52	1,000
4 x 150 sm	1.4	2.6	47.8	3,862	259	310	296	14.40	1,000
4 x 185 sm	1.6	2.7	52.6	4,592	264	359	336	17.76	1,000
4 x 240 sm	1.7	2.9	60.2	5,880	246	429	429	23.04	500
4 x 300 sm	1.8	3.1	65.6	6,882	234	496	447	28.80	500

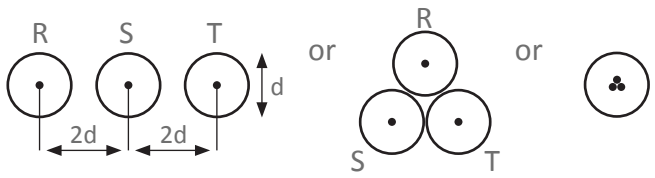
Derating Factors

Derating Factors

Condition for current carrying capacity

The tabulated current ratings are designed by the conditions as below :

- One circuit of three phase load



- Load factor = 1.0
- Maximum operating conductor temperature :
  70°C (PVC Installation) and 90°C (XLPE Installation)
  No other heat sources installed near the group of cables.
- Cable laying :

In air : - Ambient temperature : 30°C

- The cable have to protected against heat radiation of the sun as well as sufficiently large and ventilated rooms whose temperature is not percep tibly increased by the heat dissipating from the loaded cable.

In Ground :
- Soil temperature : 30°C
- Depth of laying : 70 cm
- Specific thermal resistivity of soil : 100°C.m/watt

NOTE:

If the actualinstalled conditions are different from the above mentioned condition, the tabulated current ratings should be multiplied by the appropriate derating factors as shown in tables on the next pages.

DERATING FACTORS

A. Grouping in the ground

1. Variation in ground temperature.

	Ground Temperature °C						
	20	25	30	35	40	45	50
XLPE insulation	1.08	1.04	1.00	0.96	0.91	0.87	0.82
PVC insulation	1.12	1.07	1.00	0.94	0.87	0.79	0.71

2. Variation in thermal resistivity of soil.

	Thermal resistivity of soil (°C.cm/watt)			
	70	100	150	250
XLPE insulation	1.12	1.00	0.87	0.78
PVC insulation	1.11	1.00	0.82	0.70

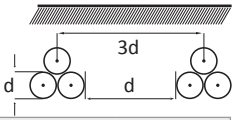
3. Variation in depth of laying.

	Depth of laying (cm)					
	50	70	100	120	160	200
XLPE insulation	1.02	1.00	0.98	0.97	0.95	0.94
PVC insulation	1.01	1.00	0.99	0.98	0.97	0.96

4. GROUPING of multicore cables.

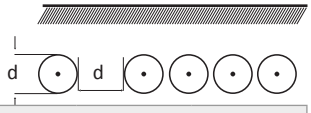
	Number of grouping							
	1	2	3	4	5	6	8	10
XLPE insulation	1.00	0.86	0.76	0.71	0.67	0.64	0.60	0.57
PVC insulation	1.00	0.85	0.75	0.68	0.64	0.60	0.56	0.53

5. GROUPING of single core cables (Trefoil formation)



	Number of grouping							
	1	2	3	4	5	6	8	10
XLPE insulation	1.00	0.89	0.82	0.78	0.75	0.73	0.70	0.68
PVC insulation	1.00	0.90	0.82	0.79	0.76	0.74	0.71	0.69

6. GROUPING of single core cables (Flat formation)



	Number of grouping							
	1	2	3	4	5	6	8	10
XLPE insulation	1.00	0.87	0.77	0.73	0.70	0.68	0.65	0.63
PVC insulation	1.00	0.87	0.78	0.74	0.70	0.68	0.65	0.63

B. Grouping in air

1. Variation in air temperature.

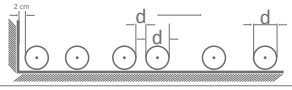
	Air Temperature °C							
	20	25	30	35	40	45	50	55
XLPE insulation	1.08	1.04	1.00	0.96	0.91	0.87	0.82	0.76
PVC insulation	1.12	1.07	1.00	0.93	0.87	0.79	0.71	0.61

2. Single core cable in three phase system.

2.1 Flat formation.

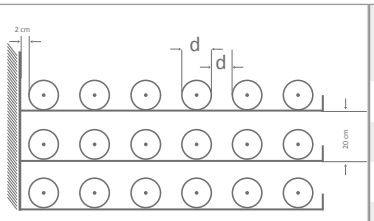
Minimum distance from the wall is 2.0 cm Clearence between systems = Cable diameter (d)	Number of System		
	1	2	3

2.1.1 Laid on the ground in flat formation.



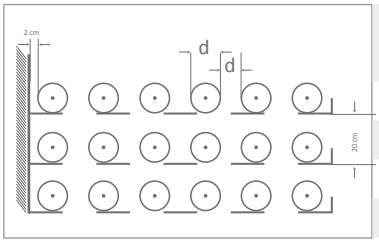
Derating factor		
0.92	0.89	0.88

2.1.2 Laid on troughs (air circulation is restricted)



Number of troughs	Derating factor		
1	0.92	0.89	0.88
2	0.87	0.84	0.83
3	0.84	0.82	0.81
6	0.82	0.80	0.79

2.1.3 Laid on the racks in flat formation.



Number of troughs	Derating factor		
1	1.00	0.97	0.96
2	0.97	0.94	0.93
3	0.96	0.93	0.92
6	0.94	0.91	0.90

2.1.4 Arranged on structures or on the wall.

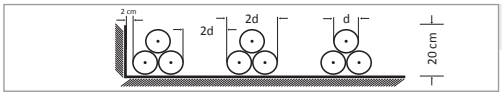
Derating factor		
0.94	0.91	0.89
0.89	0.86	0.84

B. Grouping in air (Continued)

2.2 Trefoil formation.

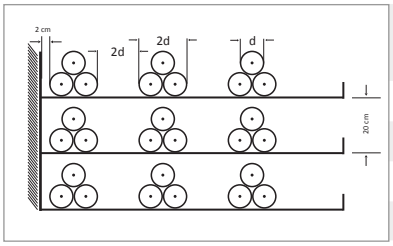
Minimum distance from the wall is 2.0 cm Clearence between systems = 2 x Cable diameter (2d)	Number of System		
	1	2	3

2.2.1 Laid on the ground in trefoil formation.



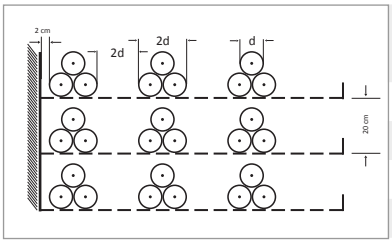
Derating factor		
0.95	0.90	0.88

2.2.2 Laid on troughs (air circulation is restricted)



Number of troughs	Derating factor		
1	0.95	0.90	0.88
2	0.90	0.85	0.83
3	0.88	0.83	0.81
6	0.86	0.81	0.79

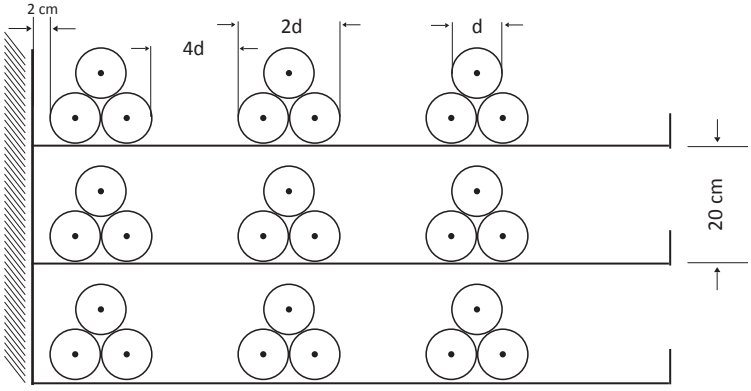
2.2.3 Laid on the racks in trefoil formation.



Number of troughs	Derating factor		
1	1.00	0.98	0.96
2	1.00	0.95	0.93
3	1.00	0.94	0.92
6	1.00	0.93	0.90

2.1.4 Arrangement for which a reduction of the current rating is not necessary (for any number of systems)

- Minimum distance from the wall is 2.0 cm
- Clearence between systems = 4 x Cable diameter (4d)



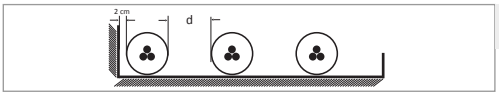
B. Grouping in air (Continued)

3.1 Multicore cables in three phase system and singlecore cables in DC system.

3.1 Trefoil formation.

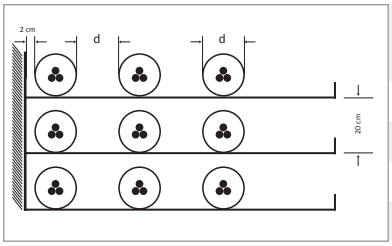
Minimum distance from the wall is 2.0 cm Clearence between systems = Cable diameter (d)	Number of System				
	1	2	3	6	9

3.1.1 Laid on the ground in flat formation.



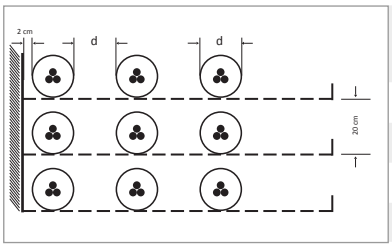
Derating factor				
0.95	0.90	0.88	0.85	0.84

3.1.2 Laid on troughs (air circulation is restricted)



Number of troughs	Derating factor				
1	0.95	0.95	0.95	0.90	0.88
2	0.90	0.90	0.90	0.85	0.83
3	0.83	0.83	0.83	0.83	0.81
6	0.81	0.81	0.81	0.81	0.79

3.1.3 Laid on the racks in trefoil formation.



Number of troughs	Derating factor				
1	0.95	0.95	0.95	0.90	0.88
2	0.90	0.90	0.90	0.85	0.83
3	0.83	0.83	0.83	0.83	0.81
6	0.81	0.81	0.81	0.81	0.79

3.1.4 Arranged on structures or on the wall

Derating factor				
1.00	0.93	0.90	0.87	0.86

3.1.5 Arrangement for which a reduction of the current rating is not necessary (for any number of cables)

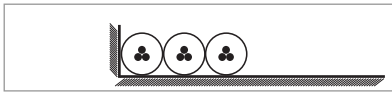
Minimum distance from the wall is 2.0 cm
Clearence between systems = 2 x Cable diameter (2d)

B. Grouping in air (Continued)

3.2 Cables touching throughout and in contact with the wall.

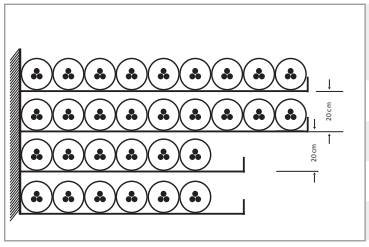
Number of System				
1	2	3	6	9

3.2.1 Laid on the ground in flat formation.



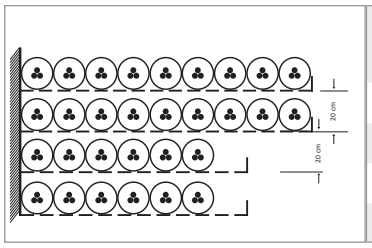
Derating factor				
0.90	0.84	0.80	0.75	0.73

3.2.2 Laid on troughs (air circulation is restricted)



Number of troughs	Derating factor				
1	0.95	0.84	0.80	0.75	0.73
2	0.95	0.80	0.76	0.71	0.69
3	0.95	0.78	0.74	0.70	0.68
6	0.95	0.76	0.72	0.68	0.66

3.2.3 Laid on the racks in flat formation.



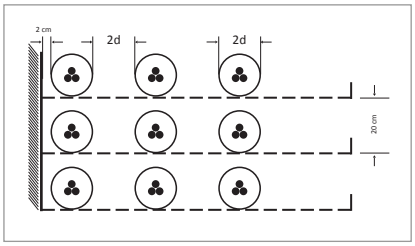
Number of troughs	Derating factor				
1	0.95	0.84	0.80	0.75	0.73
2	0.95	0.80	0.76	0.71	0.69
3	0.95	0.78	0.74	0.70	0.68
6	0.95	0.76	0.72	0.68	0.66

3.1.4 Arranged on structures or on the wall

Derating factor				
0.95	0.78	0.73	0.68	0.66

3.1.5 Arrangement for which a reduction of the current rating is not necessary (for any number of cables)

Minimum distance from the wall is 2.0 cm
Clearence between systems = 2 x Cable diameter (2d)



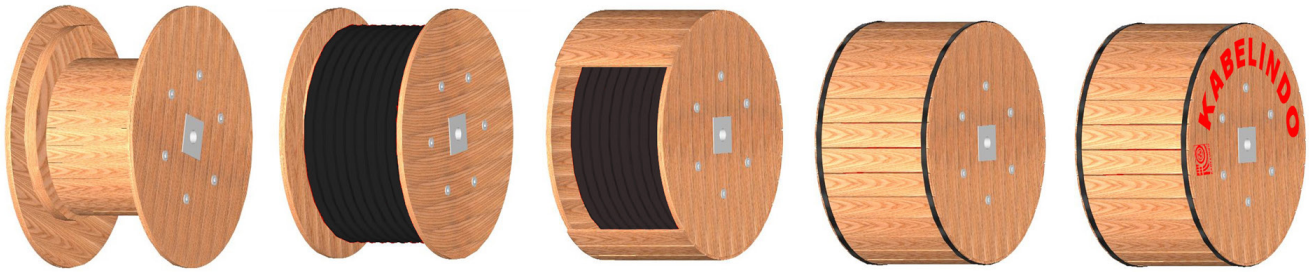
Conversion Table of Conductor Size

IEC	JIS	AMERICAN STANDARD	
sq.mm	sq.mm	AWG or MCM	sq.mm
0.50	0.50	AWG 20	(0.517)
0.75	0.75	19	(0.653)
		18	(0.823)
		17	(1.04)
	1.25	16	(1.31)
1.5		15	(1.65)
	2.0	14	(2.08)
2.5		13	(2.62)
		12	(3.31)
4	3.5	11	(4.17)
		10	(5.26)
	5.5	9	(6.63)
6		8	(8.37)
	8.0	7	(10.55)
10		6	(13.30)
	14	5	(16.77)
25	22	4	(21.15)
		3	(26.67)
35	38	2	(33.63)
		1	(42.41)
50	60	1/0	(53.48)
		2/0	(67.43)
70			
		3/0	(85.03)
95			
	100	4/0	(107.20)
		MCM	
120		250	(126.64)
150	150	300	(152.00)
185	200		
240		400	(202.71)
	250	500	(353.35)
300		600	(304.00)
	350	700	(354.71)
400	400	800	(405.35)
		1000	(506.71)
500	500		
	600		
630			

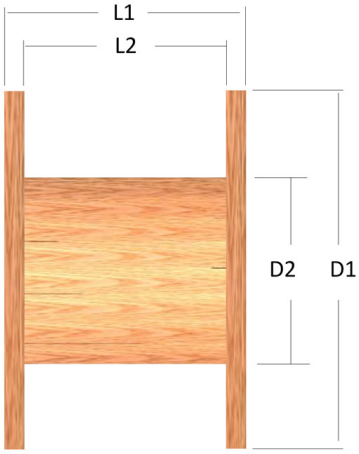
Drum Packing and Handling

Drum Packing and Handling

DRUM PACKING



Drum dimension (Wooden Drum)



Drum Type	D1 (mm)	D2 (mm)	L1 (mm)	L2 (mm)	Volume Drum (m³)	Weight (kg) Approx.
09C	900	350	690	600	0.56	65
11A	1100	450	690	600	0.83	94
14B	1400	600	1060	920	2.08	260
15A	1500	600	690	550	1.58	192
16B	1600	850	1060	920	2.71	315
18A	1800	850	1060	920	3.45	350
20A	2000	850	1060	920	4.25	395
20B	2000	1100	1450	1240	5.80	506
24C	2400	1500	1470	1200	8.50	780
24D	2400	1600	1770	1500	10.20	990

DRUM HANDLING

Notes