



# **POLY CABLES**

Connect & Protect

## Technical *Catalogue*

# Manufacture of all kinds of electrical wires & cables



**POLY CABLE INDUSTRIES LIMITED**

# Certificate of Registration

This is to Certify that  
Environmental Management System of

## POLY CABLES INDUSTRIES LIMITED

HEAD OFFICE:  
HOUSE-16, BLOCK-C, MAIN ROAD, AFTABNAGAR, DHAKA-1212, BANGLADESH

FACTORY ADDRESS:  
BHITIKANDI, BHOBERCHAR, GOZARIA, MUNSHIGANJ-1510, BANGLADESH

has been assessed and found to conform to the requirements of  
**ISO 14001:2015**  
for the following scope :

MANUFACTURER AND SUPPLIER OF ELECTRICAL CABLES INCLUDING HOUSE WIRING CABLES, MV AND LV SINGLE CORE AND MULTICORE CABLES (ARMOURED AND UNARMOURED), AERIAL CABLES, SIGNALING CABLES (SHIELDED AND UNSHIELDED), TELEPHONE CABLES, CONCENTRIC CABLES, FIREPROOF CABLES, OPTICAL FIBER CABLES, COAXIAL CABLES, COPPER AND ALUMINUM WIRES AND RODS.

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Initial Registration Date	: 23/10/2024		
Date of Expiry	: 22/10/2027		
1st Surv. Due	: 23/09/2025	2nd Surv. Due	: 23/09/2026



Director



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\*Validity of the Certificate is subject to successful completion of surveillance audits on or before of due date.

# P r e f a c e

"Poly Cable Industries Limited" was incorporated in 1993 as private limited company for manufacturing of Electrical Wires and Cables in Bangladesh. It is one of the leading manufacturers of Electrical PVC/**XLPE** insulated and PVC sheathed cables and bare conductor both copper and Aluminium, mainly all Aluminium conductor (AAC), Aluminium Conductor Steel Reinforced (ACSR) including all aluminium alloy standard conductor (AAAC) in the country.

The factory is well equipped with modern machines to manufacture in conformity with International Standard Specification mainly International Electro Technical Commission ICE-60502, 1983. German Standard VDE-027/3.69 and 0250/3.69 British Imperial Standard (B.S 2004/61) and British metric standard B.S 6004: 1975 and also to meet specific requirement of the customers. The range of its products covers all cables & wires generally used in electrical net work.

Our products are duly marked with "POLY CABLES BANGLADESH" embossed/printed which is a mark of quality.

Quality and reliability have always been our main emphasis. All cables at random length are tested as per IEC test requirements and our quality control techniques are of international standards following standard testing procedures under the guidance of well experienced cables Testing Engineers. Any other special tests required by the customer can also be done.

Various Engineering Data and technical information have been included to assist in selecting of cables at various current rating.

On enquiry our technical personnel will be pleased to provide, where required, additional data to meet customers specific installation and operating requirements.

## **Our Remarkable Achievement**

We have introduced **XLPE** insulation with keen attention in researching at our own R. & D Laboratory by the help of our Engineers and the Foreign Expert. And we tremendously succeeded in marketing our **XLPE** for both LT & HT Cables. Almost 80% consumers are using our **XLPE** cables with exotic demand considering its more longevity, security and current load resistance. Now a days **XLPE** is preferably used all over the world. We are pioneer in producing and marketing our **XLPE** Cables. We suggest to use our **XLPE** Cables for more security and safety.

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300/500 V SINGLE CORE BYM / BAYM OR BYM-FR / BAYM-FR OR BYM-FRLS / BAYM-FRLS	08
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## PRODUCT RANGE

We are committed to deliver the highest stranded conductor and power cables to the local market and also global market. To do so, we produced a versatile product range to cover most of our customer needs:

TYPE OF CABLE	VOLTAGE GRADE	RANGE
Building Wire	300/500 V to 450/750 V	0.22 mm <sup>2</sup> and up to 630 mm <sup>2</sup>
Low Voltage Cables	0.6/1.0 kV to 1.8/3.0 kV	PVC Insulated Single Core 1.0 mm <sup>2</sup> and up to 1000 mm <sup>2</sup> PVC Insulated Multi Core 1.0 mm <sup>2</sup> and up to 400 mm <sup>2</sup> PVC Insulated Aluminium Armoured Single Core 25 mm <sup>2</sup> and up to 1000 mm <sup>2</sup> PVC Insulated Steel Armoured Multi Core 25 mm <sup>2</sup> and up to 400 mm <sup>2</sup> XLPE Insulated Single Core 1.0 mm <sup>2</sup> and up to 1000 mm <sup>2</sup> XLPE Insulated Multi Core 1.0 mm <sup>2</sup> and up to 400 mm <sup>2</sup> XLPE Insulated Aluminium Armoured Single Core 25 mm <sup>2</sup> and up to 1000 mm <sup>2</sup> XLPE Insulated Steel Armoured Multi Core 25 mm <sup>2</sup> and up to 400 mm <sup>2</sup> Flexible Single Core 0.5 mm <sup>2</sup> and up to 630 mm <sup>2</sup> Flexible Multi Core 0.5 mm <sup>2</sup> and up to 300 mm <sup>2</sup>
Medium Voltage Cables	3.8/6.0 kV to 18/30 kV	XLPE Insulated Single Core Un-Armoured 25 mm <sup>2</sup> and up to 1000 mm <sup>2</sup> XLPE Insulated Single Core Armoured 25 mm <sup>2</sup> and up to 1000 mm <sup>2</sup> XLPE Insulated Multi Core Un-Armoured 25 mm <sup>2</sup> and up to 300 mm <sup>2</sup> XLPE Insulated Multi Core Armoured 25 mm <sup>2</sup> and up to 300 mm <sup>2</sup> Aerial Bundle Cable 35 mm <sup>2</sup> and up to 240 mm <sup>2</sup>
Fire Survival Cables	0.6/1.0 kV to 1.8/3.0 kV	PVC-FR or LSZH Insulated Single Core 1.0 mm <sup>2</sup> and up to 1000 mm <sup>2</sup> PVC-FR or LSZH Insulated Multi Core 1.0 mm <sup>2</sup> and up to 400 mm <sup>2</sup> XLPE Insulated Single Core 1.0 mm <sup>2</sup> and up to 1000 mm <sup>2</sup> XLPE Insulated Multi Core 1.0 mm <sup>2</sup> and up to 400 mm <sup>2</sup> Fire Alarm (Fire Resistant) Shield/Un-Shield PVC-FR/XLPE Insulated Single or Multi Core 1.0 mm <sup>2</sup> and up to 6.0 mm <sup>2</sup>
Instrumentation Cables	300/500 V to 450/750 V	Multi Core or Multi Pair 0.22 mm <sup>2</sup> and up to 4.0 mm <sup>2</sup>
Communication Cables	-	Telecommunication Cable 1 pair to 100 pair
Overhead Conductor	-	AAC 16 mm <sup>2</sup> and up to 1200 mm <sup>2</sup> ACSR 20 mm <sup>2</sup> and up to 450 mm <sup>2</sup> or 8 AWG and up to 2515 MCM

## SELECTING / ORDERING POWER CABLES

The following factors are important while selecting a suitable cable construction, required to transmit electrical energy from the power station to the customer:

- Maximum Operation Voltage / System Voltage
- Frequency
- Load to be carried
- Voltage drop
- Type of installation:
  - Under Ground (Direct Buried or in Duct)
  - In Air (Open Air or in Pipe)
- Number of Core (Single Core or Multi Core)
- Type of Conductor (Copper or Aluminium)
- Type of Insulation (PVC or XLPE or Others)
- Type of Cable (Armoured or Un-Armoured)
- Length of cable required and individual drum length

## VOLTAGE

The standard rated voltage of a cable is denoted by  $U_0/U$  ( $U_m$ )

Where,

$U_0$  : is the rated power frequency voltage between conductor and earth or metallic screen for which the cable is designed

$U$  : is the rated power frequency voltage between conductors for which the cable is designed

$U_m$  : is the maximum value of the "highest system voltage" for which the equipment may be used

$U_0/U$	kV	0.3/0.5	0.45/0.75	0.6/1.0	1.8/3.0	3.6/6.0	6/10	8.7/15	12/20	18/30
$U_m$	kV	0.55	0.825	1.2	3.6	7.2	12	17.5	24	36

Note: Cable design for 6/10, 8.7/15, 12/20 and 18/30 kV is applicable for 6.35/11, 9.4/16.25, 12.7/22 and 19/33 kV respectively.

## STANDARDS

Cable described in this catalogue are standard types and their performance has been proven in operation. Construction and tests are in accordance with the recommendation of IEC publication, where applicable. Cables in accordance with other standards (i.e. ASTM, BDS, BS, ICEA, IEEE, IS, ISO, NEMA, VDE, etc) can be manufactured upon customer's request.

## WEIGHT AND OVERALL DIMENSION

Weight and overall dimension are approximate. The deviations are due to manufacturing tolerances.

## MARKING OF CABLES

Standard Printed / Embossed Outer Sheath / Jacket Marking Consists of:

- Name of the Manufacture "POLY CABLES"
- Type designation, Size of Conductor, Rated Voltage
- Standard Compliance
- Continuous Length Marking Every Meter
- Year of Manufacture
- Any Special Part No. of Request

## DESIGNATION CODE FOR CABLES

Voltage Designation of Cables:

- $U_0$  ▶ is the rated power frequency voltage between conductor and earth or metallic screen for which the cable is designed
- $U$  ▶ is the rated power frequency voltage between conductors for which the cable is designed
- $U_m$  ▶ is the maximum value of the "highest system voltage" for which the equipment may be used

Cable Manufacturing Code Designation:

Standard Code

- N ▶ According to VDE Standard (VDE 0250 & 0271)  
▶ According to British Standard (BS 6004) / According to IEC Standard

Conductor Code

- A ▶ Copper Conductor (For Copper Conductor No Condition Used)  
Aluminium Conductor
- ATC ▶ Annealed Tinned Copper Conductor
- re ▶ Conductor of Single Solid having Circular Cross Section
- rm ▶ Conductor of Multiple Stranded Wires having Circular Cross Section
- sm ▶ Conductor of Multiple Stranded Wires having Sector Shaped Cross Section
- rmc ▶ Conductor of Multiple Stranded Wires having Circular Compacted Cross Section

Insulation and Sheath Code

- Y ▶ PVC (Polyvinyl Chloride) for Insulation or Sheath
- 2Y ▶ PE (Polyethylene)
- 2x ▶ XLPE (Cross Linked Polyethylene) for Insulation
- H ▶ LSZH Polyolefin (Thermoplastic Insulation or Sheath)
- 2H ▶ LSZH Polyolefin (Thermosetting Insulation or Sheath)

### Metallic Shield Code (Collective & Braided)

H	Non-Metallic Semi-Conducting Screen over Conductor & over Insulation
SE	▶ Non-Metallic Semi-Conducting Screen over Conductor & over Insulation and Copper Screen around each Individual Core for Three Core Cables
S	▶ Metallic Shield of Copper (Concentric or Collective)
C	▶ Metallic Shield of Copper (Concentric or Collective or Braided)
IS	▶ Individual Pair Shield
OS	▶ Overall Shield

### Armour Code

Ra	▶ Round Aluminum Wire
R	▶ Round Galvanized Steel Wire
F	▶ Flat Galvanized Steel Wire
Ba	▶ Aluminium Tape
B	▶ Galvanized Steel Tape
G	▶ Helical Galvanized Steel Tape Binder over Armour (IEC 60502)
Gb	▶ Helical Galvanized Steel Tape Binder over Armour (VDE 0271)

### Product Category Code

A	▶ Insulated Single Core Cable
M	▶ Sheathed Cable Single Core or Multi Cores
E	▶ Earth Continuity Conductor

### Fire Performance Cable Core

FG	▶ Fiber Glass Wrapped over Copper / Aluminium Conductor
FP	▶ Fire Proof / Fire Resistant Cables
FR	▶ Flame Retardant Cables
FRLS	▶ Flame Retardant Low Smoke Cables
HR	▶ Heat Resistant Cables
FIR	▶ Fire Resistant Cables
LSZH/LSOH	▶ Low Smoke Zero Halogen Cables
LSHF	▶ Low Smoke Halogen Free Cables

## ABBREVIATION

NOMENCLATURE	INTERPRETATION
BSTI	Bangladesh Standard and Testing Institute
IEC	International Electrotechnical Commission
BDSI	Bangladesh Standard Institute
BDS	Bangladesh Standard
VDE	Union of German Electrical Engineer
BS	British Standard
IS	Indian Standard (India)
ASTM	American Society for Testing and Material
ICEA	Insulated Cable Engineers Association
NEMA	National Electric Manufacturers Association
JIS	Japanese Industrial Standard
JEC	Japanese Electrotechnical Committee
SNI	Standards National Indonesia
DIN	Deutsche Industrial Norms
ANSI	American National Standard Institution (USA)
AS	Australian Standard (Australia)
SA	Standards Australia (Australia)
BV	Bureau Veritas (France)
BSI	British Standard Institution (United Kingdom)
CEE	International Commission on Rules for Approval of Electrical Equipment
CEI	Comitato Elettrotecnico Italiano (Italian Electrotechnical Committee)
CSA	Canadian Standard Association (Canada)
CEA	Canadian Electricity Association
UTE	Union technique de l'électricité (France)
EN	European Standards (Germany)
IEE	Institute of Electrical Engineers (Great Britain)

IEEE	Institute of Electrical & Electronics Engineers (Great Britain)
ISO	International Organization for Standardization
NEC	National Electrical Code (USA)
MIL	Military Specification (USA)
UL	Underwriters Laboratories (USA)
HN	Harmonisation des Normes (France)
SEMI	Semiconductor Equipment and Materials International
ICC	Insulated Conductors Committee of the IEEE
ICF	International Cablemakers Federation
LV	Low Voltage (up to 3.0 kV)
MV	Medium Voltage (above 3.0 kV and up to 36 kV)
HV	High Voltage (above 36 kV and up to 150 kV)
EHV	Extra-High Voltage (above 150 kV)
CV	Continuous Vulcanization
CCV	Catenary Continuous Vulcanization
VCV	Vertical Continuous Vulcanization
UCR	Up Casting Rod
CCR	Continuous Casting Rod
PVC	Polyvinyl Chloride
PE	Polyethylene
XLPE	Cross Linked Polyethylene
TR-XLPE	Tree Retardant Cross Linked Polyethylene
WTR-XLPE	Water Tree Retardant Cross Linked Polyethylene
LDPE	Low Density Polyethylene
LLDPE	Linear Low Density Polyethylene
MDPE	Medium Density Polyethylene
HDPE	High Density Polyethylene
EPR	Ethylene Propylene Rubber
EPDM	Ethylene Propylene Diene Monomer
ESCR	Environmental Stress Cracking Resistance
PD	Partial Discharge
CATV	Community Antenna Television (International)
LAN	Local Area Network
WWW	World Wide Web
-J	With Green-Yellow Earth Wire
-O	Without Green-Yellow Earth Wire
-JZ	Core Numbering with One Core Green-Yellow
-OZ	Core Numbering without One Core Green-Yellow

## CABLE CODE DESIGNATION

AS PER IEC 60502-1, VDE 0271, BDS 900

Nomenclature	INTERPRETATION
BYA	Copper Conductor, PVC Insulated Non Sheathed Cable
BYM	Copper Conductor, PVC Insulated PVC Sheathed 300/500V Cable
BYFY	Copper Conductor, PVC Insulated PVC Sheathed Cable Multi Core Flat Cable
BYFYE	Copper Conductor, PVC Insulated PVC Sheathed Cable With Earth Wire Multi Core Flat Cable
BHA	Copper Conductor, PVC Insulated Non Sheathed Liner Cable
BYA-FIR	Copper Conductor With Glass Fiber Wrapped, FR or FRLS-PVC Insulated Non Sheathed Fire Survival Cable
BYAF	Flexible Copper Conductor, PVC Insulated Non Sheathed Cable
NY/YY	Copper Conductor, PVC Insulated and PVC Sheathed Single or Multicore 600/1000V Power Cable
AYY	Aluminium Conductor, PVC Insulated and PVC Sheathed Single or Multicore 600/1000V Power Cable
NYRaY/YRaY	Copper Conductor, PVC Insulation, Round Aluminium Wire Armouring over Common Covering of Cores and PVC Sheathed Multicore 600/1000V Power Cable
NYBaY/YBaY	Copper Conductor, PVC Insulation, Flat Aluminium Tape Armouring over Common Covering of Cores and PVC Sheathed Multicore 600/1000V Power Cable
NYRY/YRY/NYRGY/YRGY	Copper Conductor, PVC Insulation, Round Steel Wire Armouring with/without Open Helix Steel Tape Binder over Common Covering of Cores and PVC Sheathed Multicore 600/1000V Power Cable
NYBY/YBY	Copper Conductor, PVC Insulation, Flat Steel Tape Armouring over Common Covering of Cores and PVC Sheathed Multicore 600/1000V Power Cable

NYT-1/YY-1	Copper Conductor, PVC Insulated and PVC Sheathed Multicore 600/1000V Control Cable
NYBY-1/YRY-1 NYZGY-1/YZGY-1	Copper Conductor, PVC Insulation, Round Steel Wire Armouring with/without Open Helix Steel Tape Binder over Common Covering of Cores and PVC Sheathed Multicore 600/1000V Control Cable
NYCY /YCY NYCwY / YCwY	Copper Conductor, PVC Insulation, Concentric Conductor of Copper over Common Covering of Cores and PVC Sheathed Multicore 600/1000V Cable
NYCSY / YCSY NYCwBY / YCwBY	Copper Conductor, PVC Insulation, Concentric Conductor of Copper over Common Covering of Cores, Flat Steel Tape Armouring over Common Covering of Concentric Conductor and PVC Sheathed Multicore 600/1000V Cable
NYFGBY	Cable with PVC Insulation, Flat Steel Wire Armouring and Helical Steel Taping over Common Covering of Cores and PVC Sheathed Cable
NYFY	Cable with PVC Insulation, Flat Steel Wire Armouring over Common Covering of Cores and PVC Sheathed Cable
NYCY	Cable with PVC Insulation, Concentric Conductor of copper over Common Covering of Cores and PVC Sheathed Cable. The Conductor of the half of a three and half core cable or of the fourth core cable is arranged concentric over the common of the remaining three cores, similarly copper screening of screened control cable is arranged concentrically around the cores
NYSY	Cable with PVC Insulation, Shield of Copper over Common Covering of the Cores and PVC Sheathed Cable. The minimum cross-sectional area of the copper shield is 16 mm <sup>2</sup>
NYCRY / YCRY NYCwRY / YCwRY NYCRGY / YCRGY	Copper Conductor, PVC Insulation, Concentric Conductor of Copper over Common Covering of Cores, Round Steel Wire Armouring with/without Open Helix Steel Tape Binder over Common Covering of Concentric Conductor and PVC Sheathed Multicore 600/1000V Cable
AYRaY / YRaY	Aluminium Conductor, PVC Insulation, Round Aluminium Wire Armouring over Common Covering of Cores and PVC Sheathed Multicore 600/1000V Power Cable
AYBaY / YBaY	Aluminium Conductor, PVC Insulation, Flat Aluminium Tape Armouring over Common Covering of Cores and PVC Sheathed Multicore 600/1000V Power Cable
AYRY / AYRY / AYRGY / YRGY	Aluminium Conductor, PVC Insulation, Round Steel Wire Armouring with/without Open Helix Steel Tape Binder over Common Covering of Cores and PVC Sheathed Multicore 600/1000V Power Cable
AYBY / AYBY	Aluminium Conductor, PVC Insulation, Flat Steel Tape Armouring over Common Covering of Cores and PVC Sheathed Multicore 600/1000V Power Cable
NYBY-1 / YBY-1	Copper Conductor, PVC Insulation, Flat Steel Tape Armouring over Common Covering of Cores and PVC Sheathed Multicore 600/1000V Control Cable
AYCY /AYCY AYCwY / AYCwY	Aluminium Conductor, PVC Insulation, Concentric Conductor of Copper over Common Covering of Cores and PVC Sheathed Multicore 600/1000V Cable
AYCBY / AYCBY AYCwBY / AYCwBY	Aluminium Conductor, PVC Insulation, Concentric Conductor of Copper over Common Covering of Cores, Flat Steel Tape Armouring over Common Covering of Concentric Conductor and PVC Sheathed Multicore 600/1000V Cable
NYRaY / YRaY	Copper Conductor, PVC Insulation, Round Aluminium Wire Armouring over Common Covering of Cores and PVC Sheathed Multicore 600/1000V Power Cable
NYFY	Flexible Copper Conductor Class-5, PVC Insulated and PVC Sheathed 600/1000V Power Cable
N2xY / 2xY	Copper Conductor, XLPE Insulated and PVC Sheathed Single or Multicore 600/1000V Power Cable
A2xY	Aluminium Conductor, XLPE Insulated and PVC Sheathed Single or Multicore 600/1000V Power Cable
N2xRaY / 2xRaY	Copper Conductor, XLPE Insulation, Round Aluminium Wire Armouring over Common Covering of Core and PVC Sheathed Single Core 600/1000V Power Cable
A2xRaY	Aluminium Conductor, XLPE Insulation, Round Aluminium Wire Armouring over Common Covering of Core and PVC Sheathed Single Core 600/1000V Power Cable
N2xBaY / 2xBaY	Copper Conductor, XLPE Insulation, Flat Aluminium Tape Armouring over Common Covering of Core and PVC Sheathed Single Core 600/1000V Power Cable
A2xBaY	Aluminium Conductor, XLPE Insulation, Flat Aluminium Tape Armouring over Common Covering of Core and PVC Sheathed Single Core 600/1000V Power Cable
N2xRY / 2xRY	Copper Conductor, XLPE Insulation, Round Steel Wire Armouring over Common Covering of Cores and PVC Sheathed Multicore 600/1000V Power Cable

A2xBY	Aluminium Conductor, XLPE Insulation, Flat Steel Tape Armouring over Common Covering and PVC Sheathed Multicore 600/1000V Power Cable
N2xY-1 / 2xY-1	Copper Conductor, XLPE Insulated and PVC Sheathed Multicore 600/1000V Control Cable
N2xBY-1 / 2xRY-1	Copper Conductor, XLPE Insulation, Round Steel Wire Armouring over Common Covering of Cores and PVC Sheathed Multicore 600/1000V Control Cable
N2xBY-1 / 2xBY-1	Copper Conductor, XLPE Insulation, Flat Steel Tape Armouring over Common Covering of Cores and PVC Sheathed Multicore 600/1000V Control Cable
N2xCY / 2xCY N2xCwY / 2xCwY	Copper Conductor, XLPE Insulation, Concentric Conductor of Copper over Common Covering of Cores and PVC Sheathed Multicore 600/1000V Cable
A2xCY / A2xCwY	Aluminium Conductor, XLPE Insulation, Concentric Conductor of Copper over Common Covering of Cores and PVC Sheathed Multicore 600/1000V Cable
N2xCRY / 2xCRY N2xCwRY / 2xCwRY N2xCRGY / 2xCRGY	Copper Conductor, XLPE Insulation, Concentric Conductor of Copper over Common Covering of Cores, Round Steel Wire Armouring with/without Open Helix Steel Tape Binder over Common Covering of Concentric Conductor and PVC Sheathed Multicore 600/1000V Cable
A2xCRY / A2xCwRY	Aluminium Conductor, XLPE Insulation, Concentric Conductor of Copper over Common Covering of Cores, Round Steel Wire Armouring over Common Covering of Concentric Conductor and PVC Sheathed Multicore 600/1000V Cable
N2xCB Y / 2xCB Y N2xCwBY / 2xCwBY	Copper Conductor, XLPE Insulation, Concentric Conductor of Copper over Common Covering of Cores, Flat Steel Tape Armouring over Common Covering of Concentric Conductor and PVC Sheathed Multicore 600/1000V Cable
A2xCB Y / A2xCwBY	Aluminium Conductor, XLPE Insulation, Concentric Conductor of Copper over Common Covering of Cores, Flat Steel Tape Armouring over Common Covering of Concentric Conductor and PVC Sheathed Multicore 600/1000V Cable
N2xHSY / 2xHSY	Copper Conductor, Semicon Layer over Conductor, XLPE Insulated, Semicon Layer over Insulation, Metallic Screen by Copper and Overall PVC Sheathed Single Core MV Cable
A2xHSY	Aluminium Conductor, Semicon Layer over Conductor, XLPE Insulated, Semicon Layer over Insulation, Metallic Screen by Copper and Overall PVC Sheathed Single Core MV Cable
N2xHSYRaY / 2xHSYRaY	Copper Conductor, Semicon Layer over Conductor, XLPE Insulated, Semicon Layer over Insulation, Metallic Screen by Copper, PVC Separation Sheath, Round Aluminium Wires Armour and Overall PVC Sheathed Single Core MV Cable
A2xHSYRaY	Aluminium Conductor, Semicon Layer over Conductor, XLPE Insulated, Semicon Layer over Insulation, Metallic Screen by Copper, PVC Separation Sheath, Round Aluminium Wires Armour and Overall PVC Sheathed Single Core MV Cable
N2xHSYBaY / 2xHSYBaY	Copper Conductor, Semicon Layer over Conductor, XLPE Insulated, Semicon Layer over Insulation, Metallic Screen by Copper, PVC Separation Sheath, Flat Aluminium Tape Armour and Overall PVC Sheathed Single Core MV Cable
A2xHSYBaY	Aluminium Conductor, Semicon Layer over Conductor, XLPE Insulated, Semicon Layer over Insulation, Metallic Screen by Copper, PVC Separation Sheath, Flat Aluminium Tape Armour and Overall PVC Sheathed Single Core MV Cable
N2xSEY / 2xSEY	Copper Conductor, Semicon Layer over Conductor, XLPE Insulated, Semicon Layer over Insulation, Metallic Screen by Copper, Colored Strip for Core Identification, Three Cores Laid-up with Filler, Binder Taped and Overall PVC Sheathed MV Cable
A2xSEY	Aluminium Conductor, Semicon Layer over Conductor, XLPE Insulated, Semicon Layer over Insulation, Metallic Screen by Copper, Colored Strip for Core Identification, Three Cores Laid-up with Filler, Binder Taped and Overall PVC Sheathed MV Cable
N2xSEYRY / 2xSEYRY N2xSEYRGY / 2xSEYRGY	Copper Conductor, Semicon Layer over Conductor, XLPE Insulated, Semicon Layer over Insulation, Metallic Screen by Copper, Colored Strip for Core Identification, Three Cores Laid-up with Filler, Binder Taped, PVC Separation Sheath, Round Steel Wire Armour with/without Open Helix Steel Tape Binder and Overall PVC Sheathed MV Cable
A2xSEYRY / A2xSEYRY A2xSEYRGY / A2xSEYRGY	Aluminium Conductor, Semicon Layer over Conductor, XLPE Insulated, Semicon Layer over Insulation, Metallic Screen by Copper, Colored Strip for Core Identification, Three Cores Laid-up with Filler, Binder Taped, PVC Separation Sheath, Round Steel Wire Armour with/without Open Helix Steel Tape Binder and Overall PVC Sheathed MV Cable
N2xSEYBY / 2xSEYBY	Copper Conductor, Semicon Layer over Conductor, XLPE Insulated, Semicon Layer over Insulation, Metallic Screen by Copper, Colored Strip for Core Identification, Three Cores Laid-up with Filler, Binder Taped, PVC Separation Sheath, Flat Steel Tape Armour and Overall PVC Sheathed MV Cable
A2xSEYBY	Aluminium Conductor, Semicon Layer over Conductor, XLPE Insulated, Semicon Layer over Insulation, Metallic Screen by Copper, Colored Strip for Core Identification, Three Cores Laid-up with Filler, Binder Taped, PVC Separation Sheath, Flat Steel Tape Armour and Overall PVC Sheathed MV Cable

**450/750V BYA / BAYA OR BYA-FR / BAYA-FR OR BYA-FRLS / BAYA-FRLS  
SINGLE CORE (CU or ALU/PVC)  
PVC (FR SKIN COATED) INSULATED NON-SHEATHED SINGLE CORE CABLE**

POLY CABLES MANUFACTURE



POLY CABLES MANUFACTURE



**CONSTRUCTION**

1. CONDUCTOR : Solid / Circular, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228  
 2. INSULATION : PVC (FR Skin Coated)/FR-PVC/FRLS-PVC, Type C to IEC 60227-3  
 COLOR OF INSULATION: ■ Red ■ Yellow ■ Blue ■ Black ■ Green ■ Yellow-Green

**APPLICATION**

Suitable for mounted or embedded conduits or concealed steel conduits or trunking. Also suitable for field protected installation in lighting fittings and inside appliances up to 1000V A.C or up to 750V to earth D.C.

STANDARD: BDS 900, BS 6004, IEC 60227-3, IEC 60332, IEC 61034

VOLTAGE GRADE: 450/750 (825) V

OPERATING TEMPERATURE: -20°C to +70°C

PHYSICAL DATA								ELECTRICAL DATA					
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Approx. Bare Conductor Diameter	Nominal Insulation Thickness	Overall Diameter		Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity			
				Lower Limit	Upper Limit	CU	ALU	CU	ALU	CU	ALU	CU	ALU
mm <sup>2</sup>	No./mm	mm	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amps	Amps	Amps	Amps
<b>SINGLE CORE</b>													
1 X 0.5 FC	1/0.80	0.80	0.60	1.80	2.30	10	7	38.00	---	8	---	11	---
1 X 0.75 FC	1/0.98	0.98	0.60	2.10	2.50	13	8	24.50	---	10	---	13	---
1 X 1.0 FC	1/1.13	1.13	0.70	2.50	3.00	16	---	18.10	---	13	---	18	---
1 X 1.0 FC	3/0.65	1.40	0.70	2.50	3.00	17	10	18.10	---	13	---	18	---
1 X 1.3 FC	3/0.74	1.55	0.70	2.50	3.20	20	12	14.05	22.85	15	9	19	31
1 X 1.5 FC	1/1.38	1.38	0.70	2.80	3.20	22	12	12.10	18.10	16	10	20	12
1 X 1.5 FC	3/0.80	1.72	0.70	2.70	3.30	23	13	12.10	18.10	16	10	20	12
1 X 1.5 FC	7/0.53	1.55	0.70	2.70	3.30	23	13	12.10	18.10	16	10	20	12
1 X 2.0 FC	3/0.93	1.86	0.80	3.10	3.80	30	17	8.11	15.18	20	12	25	15
1 X 2.5 FC	1/1.78	1.78	0.80	3.20	3.80	32	17	7.41	12.10	22	14	28	17
1 X 2.5 FC	7/0.87	2.01	0.80	3.00	4.00	33	18	7.41	12.10	22	14	28	17
1 X 3.0 FC	7/0.74	2.22	0.80	3.50	4.30	40	21	5.89	9.84	26	16	31	19
1 X 4.0 FC	7/0.85	2.55	0.80	3.80	4.80	51	25	4.61	7.41	30	18	37	23
1 X 4.5 FC	7/0.93	2.73	0.80	3.90	4.70	56	28	3.89	5.51	35	21	41	25
1 X 6.0 FC	7/1.05	3.15	0.80	4.30	5.20	71	34	3.08	4.51	38	23	47	29
1 X 7.0 FC	7/1.12	3.36	1.00	4.50	5.80	85	41	2.61	4.29	42	26	51	31
1 X 8.5 FC	7/1.32	3.96	1.00	5.40	6.50	113	52	1.86	3.09	51	31	62	39
1 X 10 FC	7/1.35	4.05	1.00	5.50	6.70	117	53	1.83	3.08	52	32	63	40
1 X 14.5 FC	7/1.63	4.88	1.00	6.20	7.50	164	72	1.23	2.03	68	42	83	51
1 X 18 FC	7/1.71	5.13	1.00	6.40	7.80	179	77	1.15	1.91	70	43	85	52
1 X 18 FC	18/1.05	5.25	1.00	6.50	8.00	181	78	1.15	1.91	70	43	85	52
1 X 25 FC	7/2.14	6.42	1.20	8.10	9.70	276	116	0.727	1.20	81	58	110	69
1 X 25 FC	18/1.30	6.50	1.20	8.20	9.90	278	118	0.727	1.20	81	58	110	69
1 X 35 FC	18/1.59	6.80-7.50	1.20	8.00	10.00	273	118	0.824	0.868	112	60	138	84
1 X 50 FC	18/1.83	7.70-8.80	1.40	10.80	12.80	532	215	0.387	0.641	138	84	164	101
1 X 70 FC	18/2.17	9.30-10.20	1.40	12.10	14.60	732	285	0.258	0.443	173	108	207	127
1 X 95 FC	18/2.52	11.00-12.00	1.60	14.10	17.10	985	392	0.183	0.320	216	133	253	155
1 X 120 FC	37/2.03	12.30-13.59	1.80	15.60	18.80	1227	470	0.153	0.253	244	150	291	179
1 X 150 FC	37/2.27	13.70-15.00	1.80	17.30	20.90	1535	572	0.124	0.206	---	---	330	206
1 X 185 FC	37/2.52	15.30-16.80	2.00	19.30	23.30	1891	705	0.0991	0.164	---	---	381	234
1 X 240 FC	61/2.26	17.60-19.20	2.20	22.00	26.00	2456	910	0.0754	0.125	---	---	452	278
1 X 300 FC	61/2.52	19.70-21.60	2.40	24.50	29.80	3055	1125	0.0601	0.100	---	---	526	323
1 X 400 FC	61/2.89	22.30-24.60	2.60	27.50	33.20	4078	1505	0.0470	0.0778	---	---	638	392
1 X 500 FC	61/3.23	25.30-27.60	2.80	30.50	36.90	5048	1865	0.0336	0.0605	---	---	752	462
1 X 630 FC	61/3.63	28.70-32.50	2.80	34.00	41.10	6383	2310	0.0283	0.0488	---	---	855	526

NOTE: 0.5mm<sup>2</sup> to 25mm<sup>2</sup>: Circular Conductor; 35mm<sup>2</sup> to Above: Circular Compacted Conductor

**300/500V BYM / BAYM OR BYM-FR / BAYM-FR OR BYM-FRLS / BAYM-FRLS  
SINGLE CORE (CU or ALU/PVC/PVC)  
PVC INSULATED PVC SHEATHED SINGLE CORE CABLE**



**CONSTRUCTION**

- 1. CONDUCTOR : Solid / Circular, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228
- 2. INSULATION : Polyvinyl Chloride Compound (PVC), Type C to IEC 60227-4
- COLOR OF INSULATION : For Single Core Cables ■ Black
- 3. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of ST4 to IEC 60227-4 Color: ■ Grey

**APPLICATION**

Suitable for fixed installations in dry or damp premises clipped direct to a surface or on a cable tray unenclosed and also for use in non-metallic conduit.

**STANDARD: BDS 900, BS 6004, IEC 60227-4, IEC 60332, IEC 61034  
VOLTAGE GRADE: 300/500 (550) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA							ELECTRICAL DATA						
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall Diameter		Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Conduit Carrying Capacity			
				Lower Limit	Upper Limit	CU	ALU	CU	ALU	CU	ALU	CU	ALU
mm <sup>2</sup>	No./mm	mm	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amps	Amps	Amps	Amps
<b>SINGLE CORE</b>													
1 X 1.0 FB	1/1.13	0.60	0.60	3.80	4.50	25	18	18.10	---	13	---	16	---
1 X 1.0 FM	3/0.65	0.60	0.60	3.80	4.50	26	20	18.10	---	13	---	16	---
1 X 1.3 FM	3/0.74	0.70	0.60	4.20	4.90	33	25	14.03	22.95	15	10	19	12
1 X 1.5 FB	1/1.38	0.70	0.60	4.20	4.90	33	26	12.10	18.10	18	11	20	14
1 X 1.5 FM	3/0.80	0.70	0.60	4.20	4.90	33	27	12.10	18.10	18	11	20	14
1 X 1.5 FM	7/0.53	0.70	0.60	4.20	4.90	33	27	12.10	18.10	18	11	20	14
1 X 2.0 FM	3/0.91	0.70	0.60	4.50	5.40	44	32	8.11	15.18	20	12	25	15
1 X 2.5 FB	1/1.78	0.80	0.60	4.80	5.80	45	36	7.41	12.10	22	15	28	18
1 X 2.5 FM	7/0.97	0.80	0.60	4.80	5.80	45	37	7.41	12.10	22	15	28	19
1 X 3.0 FM	7/0.74	0.80	0.60	5.10	6.10	60	41	5.88	9.84	28	17	31	20
1 X 4.0 FM	7/0.85	0.80	0.60	5.40	6.80	73	48	4.81	7.41	30	21	37	25
1 X 4.5 FM	7/0.91	0.80	0.60	5.60	7.00	81	52	3.89	6.51	32	22	39	26
1 X 6.0 FM	7/1.05	0.80	0.60	6.00	7.40	98	58	3.08	4.81	38	28	47	32
1 X 7.0 FM	7/1.12	0.80	0.60	6.50	7.90	107	64	2.81	4.29	42	27	51	38
1 X 8.5 FM	7/1.32	1.00	0.90	7.00	8.70	145	82	1.88	3.08	50	32	61	40
1 X 10 FM	7/1.35	1.00	0.90	7.20	8.80	147	84	1.89	3.08	52	35	63	49
1 X 14.5 FM	7/1.63	1.00	1.00	8.00	10.0	206	118	1.23	2.09	65	40	78	50
1 X 18 FM	7/1.71	1.00	1.00	8.40	10.5	218	117	1.15	1.91	70	48	85	55
1 X 18 FM	19/1.05	1.00	1.00	8.40	10.5	220	118	1.15	1.91	70	48	85	55
1 X 25 FM	7/2.14	1.20	1.10	10.0	12.5	328	189	0.727	1.20	91	59	110	72
1 X 25 FM	19/1.30	1.20	1.10	10.0	12.5	330	172	0.727	1.20	91	59	110	72
1 X 35 FMC	19/1.58	1.20	1.10	11.0	13.5	432	211	0.524	0.888	112	73	139	88



**300/500V BYM / BAYM OR BYM-FR / BAYM-FR OR BYM-PRLS / BAYM-FRLS  
MULTI CORE (CU or ALU/PVC/PVC)  
PVC INSULATED PVC SHEATHED MULTI (TWO, THREE, FOUR) CORE CABLE**



**CONSTRUCTION**

- 1. CONDUCTOR : Solid / Circular, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228
- 2. INSULATION : Polyvinyl Chloride Compound (PVC), Type C to IEC 60227-4
- COLOR OF INSULATION : For Two Core Cables ■ Red ■ Black  
For Three Core Cables ■ Red ■ Yellow ■ Blue  
For Four Core Cables ■ Red ■ Yellow ■ Blue ■ Black
- 3. INNER COVERING : Polyvinyl Chloride Compound (PVC) to IEC 60227-4 Color ■ Black
- 4. OUTER SHEATH : PVC/FR-PVC/PRLS -PVC Compound of ST4 to IEC 60227-4 Color ■ Grey

**APPLICATION**

Suitable for fixed installations in dry or damp premises clipped direct to a surface or on a cable tray unenclosed and also for use in non-metallic conduit.

**STANDARD: BDS 900, BS 6004, IEC 60227-4, IEC 60332, IEC 61034  
VOLTAGE GRADE: 300/500 (550) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA								ELECTRICAL DATA					
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall Diameter		Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity			
				Lower Limit	Upper Limit	CU	ALU	CU	ALU	In Conduit at 35°C		In Open Air at 35°C	
mm <sup>2</sup>	No./mm	mm	mm	mm	mm	kg/Km	kg/Km	Ω/Km	Ω/Km	Amps	Amps	Amps	Amps
<b>TWO CORE</b>													
2 X 1.0 mm <sup>2</sup>	1/1.13	0.60	1.20	7.30	8.50	83	---	18.10	---	13	---	15	---
2 X 1.0 mm <sup>2</sup>	3/0.65	0.60	1.20	7.40	8.80	102	---	18.10	---	13	---	15	---
2 X 1.5 mm <sup>2</sup>	1/1.38	0.70	1.30	7.50	10.0	118	108	12.10	18.10	16	11	18	15
2 X 1.5 mm <sup>2</sup>	3/0.80	0.70	1.30	7.80	10.5	171	111	12.10	18.10	16	11	18	19
2 X 1.5 mm <sup>2</sup>	7/0.53	0.70	1.30	7.80	10.5	121	112	12.10	18.10	16	11	18	15
2 X 2.5 mm <sup>2</sup>	1/1.78	0.80	1.30	8.50	11.5	185	194	7.41	12.10	22	15	26	18
2 X 2.5 mm <sup>2</sup>	7/0.67	0.80	1.30	9.00	12.0	187	195	7.41	12.10	22	15	26	18
2 X 4.0 mm <sup>2</sup>	7/0.85	0.80	1.30	10.0	13.0	278	179	4.61	7.41	30	21	33	23
2 X 6.0 mm <sup>2</sup>	7/1.05	0.80	1.30	11.0	14.0	294	216	3.08	4.61	37	26	43	30
2 X 10 mm <sup>2</sup>	7/1.35	1.00	1.40	13.5	17.5	485	356	1.83	3.08	50	35	60	42
2 X 16 mm <sup>2</sup>	7/1.71	1.00	1.40	15.5	20.0	673	471	1.15	1.81	68	43	80	52
2 X 25 mm <sup>2</sup>	7/2.14	1.20	1.40	18.5	24.0	1004	685	0.727	1.20	75	49	88	57
2 X 35 mm <sup>2</sup>	19/1.53	1.20	1.60	21.0	27.5	1547	808	0.524	0.868	82	60	108	70
<b>THREE CORE</b>													
3 X 1.0 mm <sup>2</sup>	1/1.13	0.60	1.20	7.50	8.80	108	---	18.10	---	11	---	12	---
3 X 1.0 mm <sup>2</sup>	3/0.65	0.60	1.20	7.80	9.00	115	---	18.10	---	11	---	12	---
3 X 1.5 mm <sup>2</sup>	1/1.38	0.70	1.30	8.00	10.5	138	115	12.10	18.10	15	10	16	11
3 X 1.5 mm <sup>2</sup>	3/0.80	0.70	1.30	8.20	11.0	142	117	12.10	18.10	16	10	16	11
3 X 1.5 mm <sup>2</sup>	7/0.53	0.70	1.30	8.20	11.0	142	118	12.10	18.10	15	10	16	11
3 X 2.5 mm <sup>2</sup>	1/1.78	0.80	1.30	9.20	12.0	185	160	7.41	12.10	20	14	22	16
3 X 2.5 mm <sup>2</sup>	7/0.67	0.80	1.30	9.40	12.5	198	162	7.41	12.10	20	14	22	16
3 X 4.0 mm <sup>2</sup>	7/0.85	0.80	1.30	10.5	13.5	288	183	4.61	7.41	27	19	30	21
3 X 6.0 mm <sup>2</sup>	7/1.05	0.80	1.40	12.0	16.5	386	273	3.08	4.61	33	23	37	26
3 X 10 mm <sup>2</sup>	7/1.35	1.00	1.40	14.5	19.0	590	400	1.83	3.08	48	32	51	36
3 X 16 mm <sup>2</sup>	7/1.71	1.00	1.40	18.5	21.5	858	553	1.15	1.81	58	38	67	44
3 X 25 mm <sup>2</sup>	7/2.14	1.20	1.60	20.5	26.0	1272	794	0.727	1.20	68	43	77	50
3 X 35 mm <sup>2</sup>	19/1.53	1.20	1.60	22.0	29.0	1886	1023	0.524	0.868	81	53	90	59
<b>FOUR CORE</b>													
4 X 1.0 mm <sup>2</sup>	1/1.13	0.60	1.20	8.20	9.50	124	---	18.10	---	11	---	12	---
4 X 1.0 mm <sup>2</sup>	3/0.65	0.60	1.20	8.30	9.80	151	---	18.10	---	11	---	12	---
4 X 1.5 mm <sup>2</sup>	1/1.38	0.70	1.20	8.50	11.5	164	135	12.10	18.10	15	10	16	11
4 X 1.5 mm <sup>2</sup>	3/0.80	0.70	1.20	9.00	12.0	188	198	12.10	18.10	15	10	16	11
4 X 1.5 mm <sup>2</sup>	7/0.53	0.70	1.20	9.00	12.0	188	138	12.10	18.10	15	10	16	11
4 X 2.5 mm <sup>2</sup>	1/1.78	0.80	1.20	10.0	13.0	224	168	7.41	12.10	20	14	22	15
4 X 2.5 mm <sup>2</sup>	7/0.67	0.80	1.20	10.0	13.5	238	197	7.41	12.10	20	14	22	15
4 X 4.0 mm <sup>2</sup>	7/0.85	0.80	1.40	12.0	15.0	342	241	4.61	7.41	27	19	30	21
4 X 6.0 mm <sup>2</sup>	7/1.05	0.80	1.40	13.0	17.0	464	314	3.08	4.61	33	23	37	26
4 X 10 mm <sup>2</sup>	7/1.35	1.00	1.40	16.0	20.5	718	466	1.83	3.08	48	32	51	36
4 X 16 mm <sup>2</sup>	7/1.71	1.00	1.40	18.0	23.5	1061	647	1.15	1.81	58	38	67	44
4 X 25 mm <sup>2</sup>	7/2.14	1.20	1.60	22.5	28.5	1600	953	0.727	1.20	68	43	77	50
4 X 35 mm <sup>2</sup>	19/1.53	1.20	1.60	24.5	32.0	2085	1202	0.524	0.868	81	53	90	59

NOTE: 0.5mm<sup>2</sup> to 25mm<sup>2</sup>: Circular Conductor; 35mm<sup>2</sup> to Above: Circular Compacted Conductor

**300/500V BYFY / BAYFY OR BYFY-FR / BAYFY-FR OR BYFY-FRLS / BAYFY-FRLS  
MULTI CORE (CU or ALU/PVC/PVC)  
PVC INSULATED PVC SHEATHED MULTI (TWO, THREE) CORE FLAT CABLE**



**CONSTRUCTION**

1. CONDUCTOR : Solid / Circular, Plain Annealed Copper or Aluminum, Class-1 & 2 to IEC 60228  
 2. INSULATION : Polyvinyl Chloride Compound (PVC), Type C to IEC 60227-4  
 COLOR OF INSULATION : For Two Core Cables ■ Red ■ Black  
 For Three Core Cables ■ Red ■ Yellow ■ Blue  
 3. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of ST4 to IEC 60227-4 Color ■ Grey

**APPLICATION**

Suitable for fixed installations in dry or damp premises clipped direct to a surface or on a cable tray unenclosed and also for use in non-metallic conduit.

**STANDARD: BDS 900, BS 6004, IEC 60227-4, IEC 60332, IEC 61034**

**VOLTAGE GRADE: 300/500 (550) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA								ELECTRICAL DATA					
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall Diameter		Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity			
				Lower Limit	Upper Limit	CU	ALU	CU	ALU	CU	ALU	CU	ALU
mm <sup>2</sup>	No./mm	mm	mm	mm	mm	kg/10m	kg/10m	Ω/km	Ω/km	Amps	Amps	Amps	Amps
<b>TWO CORE</b>													
2 X 1.0 mm <sup>2</sup>	1/1.18	0.60	0.80	4.0 X 6.2	4.7 X 7.4	55	---	18.10	---	13	---	15	---
2 X 1.0 mm <sup>2</sup>	3/0.65	0.60	0.90	4.1 X 6.3	4.8 X 7.8	60	---	18.10	---	13	---	15	---
2 X 1.3 mm <sup>2</sup>	3/0.74	0.70	0.90	4.2 X 6.9	5.2 X 8.2	70	54	14.03	22.85	15	8	17	11
2 X 1.5 mm <sup>2</sup>	1/1.99	0.70	0.90	4.4 X 7.0	5.4 X 8.4	73	55	12.10	16.10	16	19	18	15
2 X 1.5 mm <sup>2</sup>	3/0.80	0.70	0.90	4.5 X 7.2	5.5 X 8.6	77	58	12.10	18.10	16	18	18	15
2 X 1.5 mm <sup>2</sup>	7/0.53	0.70	0.90	4.5 X 7.3	5.5 X 8.7	78	59	12.10	18.10	16	18	18	15
2 X 2.0 mm <sup>2</sup>	3/0.91	0.70	0.90	5.1 X 8.2	6.1 X 9.6	83	66	9.11	15.18	20	14	23	16
2 X 2.5 mm <sup>2</sup>	1/1.78	0.80	1.00	5.2 X 8.4	6.2 X 9.8	104	76	7.41	12.10	22	16	26	20
2 X 2.5 mm <sup>2</sup>	7/0.67	0.80	1.00	5.3 X 8.6	6.3 X 10.0	108	79	7.41	12.10	22	16	26	20
2 X 3.0 mm <sup>2</sup>	7/0.74	0.80	1.00	5.5 X 8.4	6.5 X 10.6	128	91	5.98	8.84	24	17	28	21
2 X 4.0 mm <sup>2</sup>	7/0.85	0.80	1.00	5.8 X 9.5	7.2 X 11.5	154	104	4.61	7.41	30	22	33	26
2 X 4.5 mm <sup>2</sup>	7/0.91	0.80	1.00	5.9 X 10.2	7.4 X 11.7	167	110	3.88	6.51	32	23	38	27
2 X 6.0 mm <sup>2</sup>	7/1.05	0.80	1.10	6.4 X 10.5	8.0 X 13.0	210	139	3.08	4.61	37	27	43	35
2 X 7.0 mm <sup>2</sup>	7/1.12	0.80	1.10	6.5 X 11.5	8.5 X 13.7	231	177	2.61	4.28	38	28	46	35
2 X 9.5 mm <sup>2</sup>	7/1.32	1.00	1.10	7.6 X 13.7	9.5 X 15.9	318	225	1.86	3.09	48	33	57	43
2 X 10 mm <sup>2</sup>	7/1.35	1.00	1.20	7.8 X 13.0	9.8 X 16.0	326	201	1.83	3.08	50	37	60	47
2 X 14.5 mm <sup>2</sup>	7/1.63	1.00	1.20	8.4 X 15.4	10.8 X 17.9	476	334	1.29	2.03	64	42	73	55
2 X 16 mm <sup>2</sup>	7/1.71	1.00	1.20	9.0 X 15.5	11.0 X 18.5	474	371	1.15	1.91	68	43	80	62
2 X 18 mm <sup>2</sup>	19/1.05	1.00	1.20	9.1 X 15.6	11.2 X 18.6	476	379	1.15	1.91	68	43	80	62
<b>THREE CORE</b>													
3 X 1.0 mm <sup>2</sup>	1/1.18	0.60	0.90	4.0 X 8.4	4.7 X 9.8	78	---	18.10	---	11	---	12	---
3 X 1.0 mm <sup>2</sup>	3/0.65	0.60	0.90	4.1 X 8.5	4.8 X 10.0	85	---	18.10	---	11	---	12	---
3 X 1.5 mm <sup>2</sup>	1/1.99	0.70	0.90	4.4 X 9.9	5.4 X 11.5	104	77	12.10	18.10	15	12	19	13
3 X 1.5 mm <sup>2</sup>	7/0.53	0.70	0.90	4.5 X 10.0	5.5 X 11.5	111	82	12.10	18.10	15	12	19	13
3 X 2.5 mm <sup>2</sup>	1/1.78	0.80	1.00	5.2 X 11.5	6.2 X 13.5	162	108	7.41	12.10	20	16	22	17
3 X 2.5 mm <sup>2</sup>	7/0.67	0.80	1.00	5.3 X 11.6	6.3 X 13.8	164	115	7.41	12.10	20	16	22	17
3 X 4.0 mm <sup>2</sup>	7/0.85	0.80	1.10	5.8 X 13.3	7.4 X 16.5	232	157	4.61	7.41	33	24	30	25
3 X 6.0 mm <sup>2</sup>	7/1.05	0.80	1.10	6.4 X 15.0	8.0 X 18.0	308	194	3.08	4.61	37	30	37	30
3 X 10 mm <sup>2</sup>	7/1.35	1.00	1.20	7.8 X 18.0	9.8 X 22.5	480	280	1.83	3.08	48	35	48	35
3 X 16 mm <sup>2</sup>	7/1.71	1.00	1.20	9.0 X 22.0	11.0 X 26.5	696	396	1.15	1.91	64	47	64	47
3 X 18 mm <sup>2</sup>	19/1.05	1.00	1.20	9.1 X 22.2	11.2 X 26.6	700	368	1.15	1.91	64	47	64	47

**300/500V BYFYE OR BYFYE-FR OR BYFYE-FRLS  
MULTI CORE (CU/PVC/PVC)  
PVC INSULATED PVC SHEATHED MULTI (TWO, THREE) CORE FLAT CABLE**



**CONSTRUCTION**

- 1. CONDUCTOR : Solid / Circular, Plain Annealed Copper, Class-1 & 2 to BS EN 60228
- ECC CONDUCTOR : Solid / Circular, Plain Annealed Copper, Class-1 & 2 to BS EN 60228
- 2. INSULATION : Polyvinyl Chloride Compound (PVC), Type III to BS 6004
- COLOR OF INSULATION : For Two Core Cables ■ Red ■ Black  
For Three Core Cables ■ Red ■ Yellow ■ Blue
- 3. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of Type 6 to BS 6004 Color ■ Grey

**APPLICATION**

Suitable for fixed installations in dry or damp premises clipped direct to a surface or on a cable tray unenclosed and also for use in non-metallic conduit.

**STANDARD: BDS 900, BS 6004, IEC 60227-4, IEC 60332, IEC 61034**

**VOLTAGE GRADE: 300/500 (550) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA						ELECTRICAL DATA				
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Number and Diameter of ECC Strand	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall Diameter		Approximate Weight of Cable	Max. DC Resistance of Conductor at 20°C	Current Carrying Capacity	
					Lower Limit	Upper Limit			In Conduit at 30°C	In Open Air at 30°C
mm <sup>2</sup>	No./mm	No./mm	mm	mm	mm	mm	kg/km	Ω/km	Amps	Amps
<b>TWO CORE</b>										
2 X 1.0 PE	1/1.13	1/1.13	0.60	0.90	3.9 X 7.2	4.8 X 8.7	68	18.10	13	15
2 X 1.5 PE	1/1.38	1/1.13	0.70	0.90	4.4 X 8.1	5.3 X 9.7	85	12.10	16	18
2 X 2.5 PE	1/1.78	1/1.13	0.80	1.00	5.1 X 9.6	6.2 X 11.7	119	7.41	22	26
2 X 4.0 PE	7/0.85	1/1.38	0.80	1.00	6.7 X 10.8	8.8 X 13.1	175	4.81	30	33
2 X 6.0 PE	7/1.05	1/1.78	0.80	1.10	6.4 X 12.4	7.8 X 15.0	245	3.08	37	43
2 X 10 PE	7/1.35	7/0.85	1.00	1.20	7.9 X 15.8	9.5 X 19.8	388	1.83	50	60
2 X 16 PE	7/1.71	7/1.05	1.00	1.30	8.8 X 18.1	10.8 X 21.9	538	1.15	66	80
<b>THREE CORE</b>										
3 X 1.0 PE	1/1.13	1/1.13	0.60	0.90	3.9 X 9.4	4.8 X 11.4	90	18.10	11	13
3 X 1.5 PE	1/1.38	1/1.13	0.70	0.90	4.4 X 10.7	5.3 X 12.8	126	12.10	15	16
3 X 2.5 PE	1/1.78	1/1.13	0.80	1.00	5.1 X 12.8	6.2 X 15.3	160	7.41	20	22
3 X 4.0 PE	7/0.85	1/1.38	0.80	1.00	6.7 X 14.8	8.9 X 17.9	242	4.61	27	28
3 X 6.0 PE	7/1.05	1/1.78	0.80	1.10	6.4 X 16.9	7.8 X 20.2	338	3.08	34	39
3 X 10 PE	7/1.35	7/0.85	1.00	1.20	7.8 X 21.8	9.5 X 25.7	506	1.83	45	55
3 X 16 PE	7/1.71	7/1.05	1.00	1.30	8.8 X 24.6	10.8 X 28.7	740	1.15	58	72

NOTE- 0.5mm<sup>2</sup> to 25mm<sup>2</sup>: Circular Conductor; 35mm<sup>2</sup> to Above: Circular Compacted Conductor

**450/750V BHA / BAHA OR BYA-LSZH / BAYA-LSZH**  
**SINGLE CORE (CU or ALU/PVC)**  
**LSZH (LINER) INSULATED NON-SHEATHED SINGLE CORE CABLE**

POLY CABLES BANGLADESH



POLY CABLES BANGLADESH



**CONSTRUCTION**

1. CONDUCTOR : Solid / Circular, Plain Annealed Copper or Aluminium, Class-1 B 2 to BS EN 60228  
 2. INSULATION : Low Smoke Zero Halogen (LSZH) Compound to BS 7211  
 COLOR OF INSULATION : ■ Red ■ Yellow ■ Blue ■ Black ■ Green

**APPLICATION**

Suitable for mounted or embedded conduits or concealed steel conduits or trunking. Also suitable for field protected installation in lighting fittings and inside appliances up to 1000V A.C or up to 750V to earth D.C.

STANDARD: BDS 900, BS 7211, IEC 60227-3, IEC 60332, IEC 61034

VOLTAGE GRADE: 450/750 (825) V

OPERATING TEMPERATURE: -20°C to +70°C

PHYSICAL DATA								ELECTRICAL DATA					
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Approx. Bare Conductor Diameter	Nominal Insulation Thickness	Overall Diameter		Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity			
				Lower Limit	Upper Limit	CU	ALU	CU	ALU	In Conduit at 35°C	In Open Air at 25°C	CU	ALU
mm <sup>2</sup>	No./mm	mm	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amps	Amps	Amps	Amps
<b>SINGLE CORE</b>													
1 X 1.0 mm <sup>2</sup>	1/1.13	1.13	0.70	2.50	3.00	16	---	18.70	---	13	---	16	---
1 X 1.0 mm <sup>2</sup>	3/0.85	1.40	0.70	2.50	3.00	17	10	18.10	---	13	---	16	---
1 X 1.3 mm <sup>2</sup>	3/0.74	1.58	0.70	2.60	3.20	20	12	14.03	22.95	15	8	15	11
1 X 1.5 mm <sup>2</sup>	1/1.38	1.38	0.70	2.60	3.30	22	12	12.10	18.10	16	10	20	12
1 X 1.5 mm <sup>2</sup>	3/0.80	1.72	0.70	2.70	3.40	23	13	12.30	18.10	16	10	20	12
1 X 1.5 mm <sup>2</sup>	7/0.53	1.58	0.70	2.70	3.40	20	13	12.10	18.10	16	10	20	12
1 X 2.0 mm <sup>2</sup>	3/0.81	1.86	0.80	3.10	3.80	30	17	8.11	15.18	20	12	25	15
1 X 2.5 mm <sup>2</sup>	1/1.78	1.78	0.80	3.20	4.00	32	17	7.41	12.10	22	14	28	17
1 X 2.5 mm <sup>2</sup>	7/0.87	2.01	0.80	3.30	4.10	33	19	7.41	12.10	22	14	28	17
1 X 3.0 mm <sup>2</sup>	7/0.74	2.22	0.80	3.50	4.30	40	21	5.99	9.84	25	16	31	19
1 X 4.0 mm <sup>2</sup>	7/0.85	2.55	0.80	3.80	4.70	51	26	4.01	7.41	30	18	37	23
1 X 4.5 mm <sup>2</sup>	7/0.91	2.73	0.80	3.90	4.70	55	28	3.80	6.51	35	21	41	25
1 X 6.0 mm <sup>2</sup>	7/1.05	3.15	0.80	4.30	5.40	71	34	3.08	4.81	38	23	47	29
1 X 7.0 mm <sup>2</sup>	7/1.12	3.38	1.00	4.50	5.80	85	41	2.61	4.29	42	25	51	31
1 X 8.5 mm <sup>2</sup>	7/1.32	3.96	1.00	5.40	6.50	118	52	1.86	3.00	51	31	62	38
1 X 10 mm <sup>2</sup>	7/1.35	4.05	1.00	5.60	7.00	117	53	1.83	3.08	52	32	63	40
1 X 14.5 mm <sup>2</sup>	7/1.83	4.89	1.00	6.30	7.80	164	72	1.23	2.08	68	42	83	51
1 X 16 mm <sup>2</sup>	7/1.71	5.13	1.00	6.40	8.00	178	77	1.15	1.91	70	43	85	53
1 X 18 mm <sup>2</sup>	10/1.05	5.25	1.00	6.50	8.10	181	79	1.15	1.81	70	43	85	53
1 X 25 mm <sup>2</sup>	7/2.14	6.42	1.20	8.10	10.10	276	116	0.727	1.00	91	56	110	68
1 X 25 mm <sup>2</sup>	10/1.90	6.50	1.20	8.20	10.20	276	118	0.727	1.20	91	56	110	68
1 X 35 mm <sup>2</sup>	10/1.53	6.80-7.60	1.20	8.00	11.00	378	153	0.524	0.868	112	60	136	84
1 X 50 mm <sup>2</sup>	10/1.83	7.70-8.60	1.40	10.50	13.20	532	216	0.367	0.641	136	84	164	101
1 X 70 mm <sup>2</sup>	10/2.17	8.30-10.20	1.40	12.10	15.10	732	288	0.268	0.443	173	106	207	127
1 X 95 mm <sup>2</sup>	10/2.62	11.00-12.00	1.60	14.10	17.60	986	382	0.193	0.320	216	133	253	155
1 X 120 mm <sup>2</sup>	37/2.03	12.30-13.50	1.60	16.80	19.40	1227	470	0.153	0.253	244	150	281	170
1 X 150 mm <sup>2</sup>	37/2.27	18.70-19.00	1.80	17.30	21.60	1636	672	0.124	0.206	---	333	205	---
1 X 185 mm <sup>2</sup>	37/2.52	15.30-16.80	2.00	18.30	24.10	1891	705	0.0991	0.164	---	381	234	---
1 X 240 mm <sup>2</sup>	61/2.25	17.60-19.20	2.20	22.90	27.50	2458	910	0.0754	0.125	---	452	278	---
1 X 300 mm <sup>2</sup>	61/2.52	19.70-21.60	2.40	24.50	30.60	3055	1125	0.0601	0.100	---	---	526	323
1 X 400 mm <sup>2</sup>	61/2.89	22.30-24.60	2.60	27.50	34.30	4078	1505	0.0470	0.0778	---	---	639	392
1 X 500 mm <sup>2</sup>	61/3.23	25.30-27.60	2.80	30.50	38.20	5048	1885	0.0338	0.0526	---	---	762	462
1 X 600 mm <sup>2</sup>	61/3.60	28.70-32.50	2.80	34.00	42.60	6393	2310	0.0283	0.0460	---	---	855	526

## 450/750V BYA-FIR / BAYA-FIR

SINGLE CORE (CU or ALU/Mica Tape/FR-PVC or FLRS-PVC)

FR-PVC or FRLS-PVC INSULATED NON-SHEATHED SINGLE CORE FIRE SURVIVAL CABLE



### CONSTRUCTION

1. CONDUCTOR : Solid / Circular, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228
  2. FIRE BARRIER : Mica Tape (Synthetic or Glass Fiber)
  3. INSULATION : FR-PVC/FRLS-PVC, Type C to IEC 60227-3
- COLOR OF INSULATION : ■ Red ■ Orange

### APPLICATION

These cables are designed for emergency lighting, fire alarms and essential equipment in fire situations where an uninterrupted power supply has to be guaranteed.

During fire, electric circuits and the associated lighting may be damaged. Power and data communications may be suspended. Human safety may depend on continued operation of lighting, elevators and escalators, fire fighting water pumps, fire alarm and ventilation fans. The conductor is manufactured with a specially designed heat barrier and fire resistant insulation which resists the fire to reach conductor surface. The cable continues to remain into operation at high temperature like 650°C, 750°C & 950°C as per various conditions of operation and applications.

STANDARD: BDS 900, BS 6004, IEC 60227-3

VOLTAGE GRADE: 450/750 (825) V

OPERATING TEMPERATURE: -20°C to +70°C

PHYSICAL DATA							ELECTRICAL DATA						
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Approx. Bare Conductor Diameter	Fire Barrier Tape Thickness	Nominal Insulation Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity			
mm <sup>2</sup>	No./mm	mm	mm	mm	mm	kg/km	kg/100m	Ω/km	Ω/100m	In Conduit at 35°C		In Open Air at 35°C	
								CU	ALU	CU	ALU	CU	ALU
								Amps	Amps	Amps	Amps	Amps	Amps
<b>SINGLE CORE</b>													
1 X 1.5 FC	1/1.38	1.38	≥ 0.10	0.70	3.20	25	16	12.10	18.10	18	10	20	12
1 X 1.5 FMC	7/0.53	1.59	≥ 0.10	0.70	3.30	26	17	12.10	18.10	18	10	20	12
1 X 2.5 FC	1/1.78	1.78	≥ 0.10	0.80	3.80	39	22	7.41	12.10	22	14	28	17
1 X 2.5 FMC	7/0.67	2.01	≥ 0.10	0.80	4.00	39	24	7.41	12.10	22	14	28	17
1 X 4.0 FC	7/0.85	2.55	≥ 0.10	0.80	4.50	38	32	4.61	7.41	30	18	37	23
1 X 4.0 FMC	7/1.05	3.15	≥ 0.10	0.80	5.20	77	38	3.08	4.81	38	23	47	29
1 X 6.0 FC	7/1.35	4.05	≥ 0.10	1.00	6.30	125	52	1.89	3.08	52	32	53	40
1 X 6.0 FMC	7/1.71	5.13	≥ 0.10	1.00	7.50	189	85	1.15	1.91	70	43	85	52
1 X 10 FC	10/1.05	6.25	≥ 0.10	1.00	7.30	188	87	1.15	1.91	70	43	85	52
1 X 10 FMC	7/2.14	8.42	≥ 0.10	1.20	8.30	290	133	0.727	1.20	81	58	110	68
1 X 25 FC	10/1.90	8.50	≥ 0.10	1.20	9.40	290	135	0.727	1.20	81	58	110	68
1 X 35 FMC	10/1.58	8.30-7.50	≥ 0.10	1.20	10.00	379	158	0.524	0.889	112	80	130	84
1 X 50 FMC	10/1.88	7.70-8.60	≥ 0.10	1.40	11.80	524	230	0.387	0.641	139	84	134	101
1 X 70 FMC	10/2.17	5.30-10.20	≥ 0.10	1.40	12.20	715	298	0.288	0.443	179	106	207	127
1 X 95 FMC	10/2.52	11.00-12.00	≥ 0.10	1.60	15.70	970	404	0.189	0.320	219	133	259	155
1 X 120 FMC	37/2.09	12.30-13.50	≥ 0.10	1.60	16.80	1200	480	0.153	0.253	244	150	291	179
1 X 160 FMC	37/2.27	13.70-15.00	≥ 0.10	1.80	19.00	1517	610	0.114	0.209	---	---	333	209
1 X 185 FMC	37/2.52	16.30-18.80	≥ 0.10	2.00	21.00	1858	740	0.0991	0.164	---	---	381	234
1 X 240 FMC	61/2.25	17.80-19.20	≥ 0.10	2.20	24.10	2425	966	0.0754	0.125	---	---	452	278
1 X 300 FMC	61/2.52	19.70-21.60	≥ 0.10	2.40	26.50	3008	1176	0.0601	0.100	---	---	526	320
1 X 400 FMC	61/2.88	22.80-24.60	≥ 0.10	2.50	30.10	4000	1552	0.0473	0.0778	---	---	639	392
1 X 500 FMC	61/3.23	25.30-27.60	≥ 0.10	2.80	33.30	4650	1800	0.0396	0.0626	---	---	752	462
1 X 630 FMC	61/3.58	28.70-32.50	≥ 0.10	2.80	37.00	6185	2320	0.0283	0.0489	---	---	855	525

NOTE: 0.5mm<sup>2</sup> to 25mm<sup>2</sup>: Circular Conductor, 35mm<sup>2</sup> to 630mm<sup>2</sup>: Circular Compacted Conductor

**450/750V BYA FLEXIBLE OR BYA FLEXIBLE-FR OR BYA FLEXIBLE-FRLS  
SINGLE CORE (CU/PVC)  
PVC (FR SKIN COATED) INSULATED NON-SHEATHED SINGLE CORE FLEXIBLE CABLE**



**CONSTRUCTION**

- 1. CONDUCTOR : Circular Flexible, Plain Annealed Copper, Class-5 to IEC 60228
  - 2. BINDER : Non-Hygroscopic Polypropylene Tape (Optional)
  - 3. INSULATION : PVC (FR Skin Coated)/FR-PVC/FRLS-PVC, Type C to IEC 60227-3
- COLOR OF INSULATION: ■ Red ■ Yellow ■ Blue ■ Black ■ Green ■ Yellow-Green

**APPLICATION**

These type are permitted for the inner wiring of equipment, distributor and switchboards and also for protective laying to the lightings with a nominal voltage up to 1000 V A.C or up to 750V to earth D.C.

**STANDARD: BDS 900, BS 6004, IEC 60227-3, IEC 60332, IEC 61034**

**VOLTAGE GRADE: 450/750 (825) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA							ELECTRICAL DATA					
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Approximate Weight of Cable		Nominal Insulation Thickness	Overall Diameter		Approximate Weight of Cable	Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity		
		Bunched	Multiple		Lower Limit	Upper Limit		Plain	Tinned	In Conduit at 35°C	In Open Air at 35°C	
mm <sup>2</sup>	No./mm	mm	mm	mm	mm	mm	kg/km	Ω/km	Ω/km	Amps	Amps	
<b>SINGLE CORE</b>												
1 X 0.50 mm <sup>2</sup>	16/0.20	0.99	---	0.60	2.10	2.50	8	30.00	40.10	3	4	
1 X 0.75 mm <sup>2</sup>	24/0.20	1.14	---	0.60	2.20	2.70	12	25.00	28.70	5	7	
1 X 1.0 mm <sup>2</sup>	32/0.20	1.32	---	0.60	2.40	2.80	15	18.50	20.00	6	10	
1 X 1.5 mm <sup>2</sup>	30/0.25	1.60	---	0.70	2.80	3.40	24	13.00	13.70	10	22	
1 X 2.5 mm <sup>2</sup>	50/0.25	2.00	---	0.80	3.40	4.10	34	7.88	8.21	24	30	
1 X 4.0 mm <sup>2</sup>	38/0.30	2.60	---	0.80	3.90	4.80	52	4.85	5.09	32	39	
1 X 6.0 mm <sup>2</sup>	84/0.30	3.80	3.50	0.80	4.40	5.30	72	3.30	3.38	41	50	
1 X 10 mm <sup>2</sup>	80/0.40	4.20	4.50	1.00	5.70	6.80	118	1.91	1.95	57	97	
1 X 18 mm <sup>2</sup>	128/0.40	5.90	5.70	1.00	6.70	8.10	180	1.21	1.24	75	90	
1 X 25 mm <sup>2</sup>	198/0.40	8.60	7.10	1.20	8.40	10.2	278	0.780	0.795	98	105	
1 X 35 mm <sup>2</sup>	278/0.40	7.80	8.50	1.20	9.70	11.7	378	0.554	0.595	119	140	
1 X 50 mm <sup>2</sup>	398/0.40	9.40	10.30	1.40	11.5	13.9	538	0.389	0.399	142	170	
1 X 70 mm <sup>2</sup>	360/0.50	11.20	12.40	1.40	13.2	16.0	785	0.272	0.277	182	215	
1 X 95 mm <sup>2</sup>	476/0.50	13.40	14.50	1.60	15.1	18.2	992	0.208	0.210	222	260	
1 X 120 mm <sup>2</sup>	508/0.50	14.50	16.00	1.60	16.7	20.3	1283	0.181	0.184	255	302	
1 X 150 mm <sup>2</sup>	758/0.50	---	18.00	1.80	18.8	22.5	1540	0.128	0.132	298	355	
1 X 185 mm <sup>2</sup>	950/0.50	---	20.00	2.00	20.8	24.9	1800	0.106	0.109	339	408	
1 X 240 mm <sup>2</sup>	1221/0.50	---	28.00	2.20	23.5	28.4	2482	0.0801	0.0817	401	478	

## 300/500V FLEXIBLE OR FLEXIBLE-FR OR FLEXIBLE-FRLS

### SINGLE CORE (CU/PVC)

### PVC (FR SKIN COATED) INSULATED NON-SHEATHED SINGLE CORE FLEXIBLE CABLE

## POLY CABLES BANGLADESH



#### CONSTRUCTION

1. CONDUCTOR : Circular Flexible, Plain Annealed Copper, Class-5 to IEC 60228  
 2. INSULATION : PVC (FR Skin Coated)/FR-PVC/FRLS-PVC, Type C to IEC 60227-3  
 COLOR OF INSULATION : ■ Red ■ Yellow ■ Blue ■ Black ■ Green ■ Yellow-Green

#### APPLICATION

These type are permitted for the inner wiring of equipment, distributor and switchboards and also for protective laying to the lightings with a nominal voltage up to 500 V.

STANDARD: BDS 899, BS 6004, IEC 60227-3, IEC 60332, IEC 61034

VOLTAGE GRADE: 300/500 (550) V

OPERATING TEMPERATURE: -20°C to +70°C

PHYSICAL DATA						ELECTRICAL DATA		
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Overall Diameter		Approximate Weight of Cable	Max. DC Resistance of Conductor at 20°C	Current Carrying Capacity	
			Lower Limit	Upper Limit			In Conduit at 35°C	In Open Air at 35°C
mm <sup>2</sup>	No./mm	mm	mm	mm	kg/km	Ω/km	Amps	Amps
<b>SINGLE CORE</b>								
1 X 0.4 mm	14/0.193 (0.0076)	0.80	2.00	2.40	8	47.33	2	3
1 X 0.65 mm	28/0.193 (0.0076)	0.80	2.20	2.60	12	28.79	5	6
1 X 1.2 mm	40/0.193 (0.0076)	0.80	2.50	3.00	17	16.58	11	13
1 X 2.0 mm	70/0.193 (0.0076)	0.70	3.20	3.70	28	9.48	18	19
1 X 3.0 mm	110/0.193 (0.0076)	0.80	3.70	4.50	43	6.01	22	24

## 300/500V FLEXIBLE (T/T) OR FLEXIBLE-FR (T/T) OR FLEXIBLE-FRLS (T/T)

### SINGLE CORE (CU/PVC)

### PVC (FR SKIN COATED) INSULATED NON-SHEATHED SINGLE CORE FLEXIBLE CABLE



#### CONSTRUCTION

1. CONDUCTOR : Circular Flexible, Plain Annealed Copper, Class-5 to IEC 60228  
 2. INSULATION : PVC (FR Skin Coated)/FR-PVC/FRLS-PVC, Type C to IEC 60227-3  
 COLOR OF INSULATION : For Two Core Cables ■ Red ■ Black

#### APPLICATION

These for dry place where mechanical stress do not exist, at the connections of mobile equipment.

STANDARD: BDS 899, BS 6004, IEC 60227-3, IEC 60332, IEC 61034

VOLTAGE GRADE: 300/500 (550) V

OPERATING TEMPERATURE: -20°C to +70°C

PHYSICAL DATA						ELECTRICAL DATA		
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Overall Diameter		Approximate Weight of Cable	Max. DC Resistance of Conductor at 20°C	Current Carrying Capacity	
			Lower Limit	Upper Limit			In Conduit at 35°C	In Open Air at 35°C
mm <sup>2</sup>	No./mm	mm	mm	mm	kg/km	Ω/km	Amps	Amps
<b>SINGLE CORE</b>								
2 X 0.4 mm	14/0.193 (0.0076)	0.80	2.00	2.40	16	47.33	2	3
2 X 0.6 mm	18/0.20	0.80	2.10	2.50	18	39.00	3	4
2 X 0.85 mm	23/0.193 (0.0076)	0.80	2.20	2.60	24	28.78	5	6
2 X 0.75 mm	24/0.20	0.80	2.20	2.70	25	26.00	6	7
2 X 1.0 mm	32/0.20	0.80	2.40	2.80	30	19.50	9	10
2 X 1.2 mm	40/0.193 (0.0076)	0.80	2.50	3.00	34	16.58	11	13
2 X 2.0 mm	70/0.193 (0.0076)	0.70	3.20	3.70	55	9.48	18	19
2 X 3.0 mm	110/0.193 (0.0076)	0.80	3.70	4.50	85	6.01	22	24

**300/500V FLEXIBLE (F/T) OR FLEXIBLE-FR (F/T) OR FLEXIBLE-FRLS (F/T)  
TWO CORE (CU/PVC/PVC)  
PVC INSULATED AND PVC SHEATHED TWO CORE FLAT FLEXIBLE CABLE**



**CONSTRUCTION**

- 1. CONDUCTOR : Circular Flexible, Plain Annealed Copper, Class-5 to IEC 60228
- 2. INSULATION : Polyvinyl Chloride Compound (PVC), Type D to IEC 60227-5
- COLOR OF INSULATION : For Two Core Cables ■ Red ■ Black
- 3. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of STS to IEC 60227-5
- COLOR OF SHEATH : ■ Grey ■ White

**APPLICATION**

These type are permitted for the inner wiring of equipment, distributor and switchboards and also for protective laying to the lightings with a nominal voltage up to 500 V.

**STANDARD: BDS 899, BS 6500, IEC 60227-5, IEC 60332, IEC 61034**

**VOLTAGE GRADE: 300/500 (550) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA					ELECTRICAL DATA				
Nominal Cross-Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall Diameter		Approximate Weight of Cable	Max. DC Resistance of Conductor at 20°C	Current Carrying Capacity	
				Lower Limit	Upper Limit			In Conduit at 30°C	In Open Air at 35°C
mm <sup>2</sup>	No./mm	mm	mm	mm	mm	kg/km	Ω/km	Amps	Amps
<b>TWO CORE</b>									
2 x 0.4 mm <sup>2</sup>	14/0.188 (1/0.0078)	0.60	0.80	3.30 x 5.40	4.30 x 6.60	37	47.33	3	4
2 x 0.5 mm <sup>2</sup>	18/0.20	0.60	0.80	3.50 x 5.60	4.40 x 7.00	41	39.00	3	4
2 x 0.65 mm <sup>2</sup>	23/0.188 (1/0.0078)	0.60	0.80	3.80 x 5.90	4.50 x 7.10	45	28.79	5	6
2 x 0.75 mm <sup>2</sup>	24/0.20	0.60	0.80	3.70 x 6.00	4.50 x 7.20	46	26.00	6	7
2 x 1.0 mm <sup>2</sup>	32/0.20	0.65	0.80	3.90 x 6.20	4.70 x 7.50	58	19.50	8	9



**300/500V FLEXIBLE CORD OR FLEXIBLE CORE-FR OR FLEXIBLE CORE-FRLS  
TWO CORE (CU/PVC/PVC)  
PVC INSULATED AND PVC SHEATHED MULTI (TWO, THREE, FOUR) CORE FLEXIBLE CABLE.**



**CONSTRUCTION**

- 1. CONDUCTOR : Circular Flexible, Plain Annealed Copper, Class-5 to IEC 60228
- 2. INSULATION : Polyvinyl Chloride Compound (PVC), Type D to IEC 60227-5
- COLOR OF INSULATION : For Two Core Cables ■ Red ■ Black  
For Three Core Cables ■ Red ■ Yellow ■ Blue  
For Four Core Cables ■ Red ■ Yellow ■ Blue ■ Black
- 3. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of STS to IEC 60227-5
- COLOR OF SHEATH : ■ Grey ■ White

**APPLICATION**

Use on household appliances in covered, dry, steamed and humid areas where low mechanical stress exists.

**STANDARD: BDS 899, BS 6500, IEC 60227-5, IEC 60332, IEC 61034**

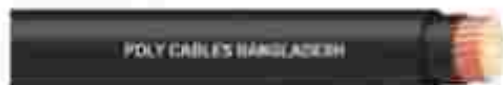
**VOLTAGE GRADE: 300/500 (550) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA							ELECTRICAL DATA			
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall Diameter		Approximate Weight of Cable	Max. DC Resistance of Conductor at 20°C	Current Carrying Capacity		
				Lower Limit	Upper Limit			In Conduit at 35°C	In Open Air at 35°C	
mm <sup>2</sup>	No./mm	mm	mm	mm	mm	kg/km	Ω/km	Amps	Amps	
<b>TWO CORE</b>										
2 X 0.4 mm	14/0.199 (/0.0076)	0.60	0.80	5.30	6.70	46	47.93	2	4	
2 X 0.5 mm	16/0.20	0.60	0.80	5.40	6.80	54	39.00	3	4	
2 X 0.65 mm	23/0.193 (/0.0076)	0.60	0.80	5.60	7.10	60	29.79	6	7	
2 X 0.75 mm	24/0.20	0.60	0.80	5.70	7.20	64	26.00	7	8	
2 X 1.0 mm	32/0.20	0.60	0.80	5.80	7.50	74	18.50	10	11	
2 X 1.2 mm	40/0.193 (/0.0076)	0.60	0.80	6.30	7.80	78	16.56	13	15	
2 X 1.5 mm	30/0.25	0.70	0.80	6.60	8.60	85	13.30	15	17	
2 X 2.0 mm	70/0.193 (/0.0076)	0.70	1.00	8.20	9.50	127	9.46	18	20	
2 X 2.5 mm	50/0.25	0.80	1.00	9.40	10.6	153	7.98	20	22	
2 X 3.0 mm	110/0.193 (/0.0076)	0.80	1.10	9.60	11.2	174	6.01	24	26	
2 X 4.0 mm	55/0.30	0.80	1.10	10.5	11.8	200	4.95	25	27	
<b>THREE CORE</b>										
3 X 0.4 mm	14/0.193 (/0.0076)	0.60	0.80	5.30	7.10	58	47.33	2	3	
3 X 0.5 mm	16/0.20	0.60	0.80	5.60	7.30	64	39.00	3	4	
3 X 0.65 mm	23/0.193 (/0.0076)	0.60	0.80	5.80	7.40	70	29.79	6	7	
3 X 0.75 mm	24/0.20	0.60	0.80	6.00	7.60	75	26.00	7	8	
3 X 1.0 mm	32/0.20	0.60	0.80	6.30	8.00	88	18.50	10	11	
3 X 1.2 mm	40/0.193 (/0.0076)	0.60	0.80	6.60	8.60	100	16.56	13	15	
3 X 1.5 mm	30/0.25	0.70	0.80	7.40	9.40	124	13.30	15	17	
3 X 2.0 mm	70/0.193 (/0.0076)	0.70	1.10	8.80	10.2	165	9.46	18	20	
3 X 2.5 mm	50/0.25	0.80	1.10	9.20	11.4	184	7.98	20	22	
3 X 3.0 mm	110/0.193 (/0.0076)	0.80	1.20	10.5	11.8	215	6.01	24	26	
3 X 4.0 mm	55/0.30	0.80	1.20	11.2	12.7	264	4.95	25	27	
<b>FOUR CORE</b>										
4 X 0.4 mm	14/0.193 (/0.0076)	0.60	0.80	6.20	7.70	66	47.33	2	3	
4 X 0.5 mm	16/0.20	0.60	0.80	6.30	7.80	71	39.00	3	4	
4 X 0.65 mm	23/0.193 (/0.0076)	0.60	0.80	6.60	8.20	86	29.79	6	7	
4 X 0.75 mm	24/0.20	0.60	0.80	6.60	8.30	93	26.00	7	8	
4 X 1.0 mm	32/0.20	0.60	0.80	7.10	8.00	113	18.50	10	11	
4 X 1.2 mm	40/0.193 (/0.0076)	0.60	1.00	7.90	9.40	124	16.56	13	15	
4 X 1.5 mm	30/0.25	0.70	1.00	8.40	10.5	168	13.30	15	17	
4 X 2.0 mm	70/0.193 (/0.0076)	0.70	1.10	9.60	11.2	184	9.46	18	20	
4 X 2.5 mm	50/0.25	0.80	1.10	10.1	12.5	226	7.98	20	21	
4 X 3.0 mm	110/0.193 (/0.0076)	0.80	1.20	11.8	13.4	274	6.01	24	26	
4 X 4.0 mm	55/0.30	0.80	1.20	12.3	13.9	315	4.95	25	27	

NOTE: 0.5mm<sup>2</sup> to 25mm<sup>2</sup> Circular Conductor, 35mm<sup>2</sup> to Above Circular Compacted Conductor

**NYY**  
**SINGLE CORE (CU or ALU/PVC/PVC)**  
**PVC INSULATED PVC SHEATHED SINGLE CORE CABLE**



**CONSTRUCTION**

- 1. CONDUCTOR : Solid / Circular; Plain Annealed Copper or Aluminum, Class-1 & 2 to IEC 60228
- 2. INSULATION : Polyvinyl Chloride Compound (PVC), Type DIV2 to VDE 0276
- COLOR OF INSULATION : ■ Black
- 3. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of DMV2 to VDE 0276 Color ■ Black

**APPLICATION**

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

**STANDARD: BDS 901, VDE 0271/3.69, IEC 60332, IEC 61034**

**VOLTAGE GRADE: 600/1000 (1200) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA						ELECTRICAL DATA							
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Approx. Bare Conductor Diameter	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity			
						CU	ALU	CU	ALU	In Ground at 30°C	In Open Air at 35°C	CU	ALU
mm <sup>2</sup>	No./mm	mm	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amps	Amps	Amps	Amps
<b>SINGLE CORE</b>													
1 X 1.5 RE	1/1.38	1.38	0.80	1.00	6.50	65	50	12.10	18.10	27	21	22	18
1 X 1.5 RM	7/0.53	1.58	0.80	1.00	6.80	68	58	12.10	18.10	27	21	22	18
1 X 2.5 RE	1/1.78	1.78	0.80	1.00	7.20	80	60	7.41	12.10	36	28	30	25
1 X 2.5 RM	7/0.67	2.01	0.80	1.00	7.40	86	71	7.41	12.10	36	28	30	25
1 X 4.0 RE	7/0.95	2.55	1.00	1.00	8.20	119	86	4.61	7.41	47	36	39	32
1 X 4.0 RM	7/1.05	3.15	1.00	1.00	8.80	140	107	3.08	4.81	59	44	50	41
1 X 6.0 RE	7/1.35	4.05	1.00	1.00	9.70	150	125	1.88	3.08	78	59	59	55
1 X 6.0 RM	7/1.71	5.13	1.00	1.00	10.8	262	158	1.15	1.91	100	75	84	72
1 X 10.0 RE	19/1.05	5.25	1.00	1.00	11.0	268	180	1.15	1.91	100	75	84	72
1 X 10.0 RM	7/2.14	8.42	1.20	1.00	12.4	375	215	0.727	1.20	130	87	125	89
1 X 25.0 RE	19/1.30	6.50	1.20	1.00	12.8	365	220	0.727	1.20	130	87	125	89
1 X 35.0 RMC	19/1.53	6.80-7.50	1.20	1.00	13.3	452	248	0.524	0.868	165	120	160	120
1 X 35.0 RM	19/1.53	7.65	1.20	1.00	13.7	472	262	0.524	0.868	155	120	130	120
1 X 50.0 RMC	19/1.83	7.70-8.60	1.40	1.00	14.7	510	310	0.387	0.641	185	145	195	150
1 X 50.0 RM	19/1.83	9.15	1.40	1.00	15.0	645	322	0.387	0.641	185	145	195	150
1 X 70.0 RMC	18/2.17	8.30-10.20	1.40	1.00	15.4	808	388	0.268	0.443	225	170	245	185
1 X 70.0 RM	18/2.17	10.65	1.40	1.00	17.3	858	415	0.268	0.443	225	170	245	185
1 X 95.0 RMC	19/2.52	11.50-12.00	1.50	1.00	15.6	1095	510	0.199	0.320	270	205	300	215
1 X 95.0 RM	19/2.52	12.80	1.80	1.00	18.4	1128	530	0.199	0.320	270	205	300	215
1 X 120.0 RMC	37/2.09	12.30-13.50	1.50	1.00	20.0	1340	600	0.158	0.253	310	250	350	250
1 X 120.0 RM	37/2.08	14.21	1.80	1.00	21.0	1884	628	0.158	0.253	310	250	350	250
1 X 150.0 RMC	37/2.27	13.70-15.00	1.80	1.00	21.0	1940	722	0.124	0.206	350	285	405	294
1 X 150.0 RM	37/2.27	15.89	1.80	1.00	23.1	1758	784	0.124	0.206	350	285	405	294
1 X 185.0 RMC	37/2.52	15.90-18.80	2.00	2.00	24.4	2028	805	0.0891	0.154	390	325	460	330
1 X 185.0 RM	37/2.52	17.64	2.00	2.00	25.7	2007	800	0.0891	0.154	390	325	460	330
1 X 240.0 RMC	61/2.25	17.80-19.20	2.20	2.00	27.2	2640	1134	0.0754	0.125	450	368	555	382
1 X 240.0 RM	61/2.25	20.25	2.20	2.00	28.7	2708	1180	0.0754	0.125	450	368	555	382
1 X 300.0 RMC	61/2.52	18.70-21.60	2.40	2.00	29.8	3250	1387	0.0601	0.100	515	407	640	431
1 X 300.0 RM	61/2.52	22.68	2.40	2.00	31.5	3330	1412	0.0601	0.100	515	407	640	431
1 X 400.0 RMC	61/3.00	22.30-24.60	2.80	2.20	33.2	4220	1742	0.0470	0.0778	585	455	770	488
1 X 400.0 RM	61/2.99	25.01	2.50	2.20	35.6	4330	1810	0.0470	0.0778	585	455	770	488
1 X 500.0 RMC	61/3.23	23.30-27.60	2.80	2.20	36.6	5215	2117	0.0396	0.0805	660	483	800	534
1 X 500.0 RM	61/3.23	29.07	2.80	2.20	38.2	5350	2208	0.0396	0.0805	660	483	800	534
1 X 630.0 RMC	61/3.63	28.70-32.50	2.80	2.20	41.2	6515	2585	0.0283	0.0458	800	538	1030	610
1 X 630.0 RM	61/3.63	32.67	2.80	2.20	42.8	6625	2652	0.0283	0.0458	800	538	1030	610
1 X 800.0 RMC	61/4.10	32.30-35.70	2.80	2.40	45.2	8152	3211	0.0221	0.0357	945	---	1160	---
1 X 800.0 RM	61/4.10	38.90	2.80	2.40	47.3	8300	3258	0.0221	0.0357	945	---	1160	---
1 X 1000.0 RMC	61/4.60	36.30-40.50	3.00	2.80	51.7	10120	3930	0.0175	0.0291	1095	---	1310	---
1 X 1000.0 RM	61/4.60	41.40	3.00	2.80	52.6	10320	4017	0.0175	0.0291	1095	---	1310	---

**600/1000V YY / AYY OR YY-FR / AYY-FR OR YY-FRLS / AYY-FRLS  
SINGLE CORE (CU or ALU/PVC/PVC)  
PVC INSULATED AND PVC SHEATHED SINGLE CORE CABLE**



**CONSTRUCTION**

- 1. CONDUCTOR : Solid / Circular, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228
- 2. INSULATION : Polyvinyl Chloride Compound (PVC), Type A to IEC 60502-1
- COLOR OF INSULATION : ■ Black
- 3. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of ST1 to IEC 60502-1 Color ■ Black

**APPLICATION**

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

**STANDARD: BDS 901, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034**

**VOLTAGE GRADE: 600/1000 (1200) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA						ELECTRICAL DATA							
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Approx. Bare Conductor Diameter	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity			
						CU	ALU	CU	ALU	CU	ALU	CU	ALU
mm <sup>2</sup>	No./mm	mm	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amps	Amps	Amps	Amps
<b>SINGLE CORE</b>													
1 X 1.5 PE	1/1.38	1.38	0.80	1.40	6.10	52	42	12.10	18.10	27	21	22	18
1 X 1.5 FM	7/0.50	1.58	0.80	1.40	6.30	55	45	12.10	18.10	27	21	22	18
1 X 2.5 PE	1/1.78	1.78	0.80	1.40	6.50	68	52	7.41	12.10	35	28	30	25
1 X 2.5 FM	7/0.67	2.01	0.80	1.40	6.70	71	55	7.41	12.10	38	28	30	25
1 X 4.0 FM	7/0.85	2.55	1.00	1.40	7.70	95	70	4.81	7.41	47	36	35	32
1 X 6.0 FM	7/1.05	3.15	1.00	1.40	8.40	125	87	3.08	4.81	55	44	50	41
1 X 10 FM	7/1.35	4.05	1.00	1.40	9.30	171	120	1.83	3.08	78	50	60	55
1 X 15 FM	7/1.71	5.13	1.00	1.40	10.5	240	140	1.15	1.81	100	75	84	72
1 X 18 FM	19/1.05	5.25	1.00	1.40	10.6	255	151	1.15	1.81	100	75	84	72
1 X 25 FM	7/2.14	6.42	1.20	1.40	12.2	355	197	0.727	1.20	130	97	125	99
1 X 25 FM	19/1.30	6.60	1.20	1.40	12.3	360	200	0.727	1.20	130	97	125	99
1 X 35 FMC	19/1.53	6.80-7.50	1.20	1.40	12.5	408	227	0.524	0.888	155	120	150	120
1 X 50 FMC	19/1.83	7.70-8.50	1.40	1.40	14.0	600	280	0.387	0.641	185	145	195	150
1 X 70 FMC	19/2.17	9.30-10.20	1.40	1.40	15.5	802	366	0.288	0.443	225	170	245	185
1 X 85 FMC	19/2.52	11.00-12.00	1.80	1.50	16.0	1047	478	0.183	0.320	270	205	300	215
1 X 120 FMC	37/2.03	12.30-13.50	1.80	1.50	18.4	1317	572	0.153	0.253	310	250	350	260
1 X 150 FMC	37/2.27	13.70-15.00	1.80	1.80	21.5	1830	708	0.124	0.208	350	285	405	294
1 X 185 FMC	37/2.52	15.30-16.80	2.00	1.70	23.8	2015	888	0.0991	0.164	390	325	450	330
1 X 240 FMC	61/2.25	17.80-19.20	2.20	1.80	26.8	2638	1084	0.0754	0.125	450	368	555	382
1 X 300 FMC	61/2.52	19.70-21.60	2.40	1.90	29.5	3128	1343	0.0601	0.100	515	407	640	431
1 X 400 FMC	61/2.89	22.30-24.60	2.60	2.00	32.8	4188	1710	0.0470	0.0778	585	455	770	496
1 X 500 FMC	61/3.03	26.30-27.60	2.80	2.10	38.4	5198	2100	0.0388	0.0605	680	488	850	584
1 X 630 FMC	61/3.63	28.70-32.50	2.80	2.20	41.0	6485	2572	0.0283	0.0463	800	588	1080	610
1 X 800 FMC	61/4.10	32.80-36.70	2.80	2.30	45.8	8150	3177	0.0221	0.0367	945	---	1180	---
1 X 1000 FMC	61/4.60	38.30-40.50	3.00	2.50	51.1	10108	3918	0.0178	0.0281	1095	---	1310	---

NOTE: 0.5mm<sup>2</sup> to 25mm<sup>2</sup>: Circular Conductor; 35mm<sup>2</sup> to Above: Circular Compacted Conductor

**600/1000V NYY / NAYY OR YY / AYY OR YY-FR / AYY-FR OR YY-FRLS / AYY-FRLS  
MULTI CORE (CU or ALU/PVC/PVC)  
PVC INSULATED AND PVC SHEATHED MULTI (TWO, THREE) CORE CABLE**



**CONSTRUCTION**

- 1. CONDUCTOR : Solid / Circular / Shaped, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228
- 2. INSULATION : Polyvinyl Chloride Compound (PVC), Type A to IEC 60502-1
- COLOR OF INSULATION : For Two Core Cables ■ Red ■ Black  
For Three Core Cables ■ Red ■ Yellow ■ Blue
- 3. FILLER : Polypropylene Filler (Optional)
- 4. CORE BINDER : Polypropylene Tape (Optional)
- 5. INNER COVERING : PVC Compound of ST1 to IEC 60502-1 (Optional) Color ■ Black
- 6. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of ST1 to IEC 60502-1 Color ■ Black

**APPLICATION**

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

**STANDARD: BDS 901, VDE 0271/3.69, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034**

**VOLTAGE GRADE: 600/1000 (1200) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA						ELECTRICAL DATA						
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity			
					kg/10m	kg/km	CU	ALU	CU	ALU	CU	ALU
mm <sup>2</sup>	No./mm	mm	mm	mm	kg/10m	kg/km	D/km	D/km	Amps	Amps	Amps	Amps
<b>TWO CORE</b>												
2 X 1.5 PE	1/1.38	0.80	1.80	11.0	165	140	12.10	18.10	25	18	18	18
2 X 1.5 FM	7/0.53	0.80	1.80	11.2	170	146	12.10	18.10	25	18	19	18
2 X 2.5 PE	1/1.78	0.80	1.80	12.4	205	165	7.41	12.10	34	25	27	21
2 X 2.5 FM	7/0.67	0.80	1.80	12.8	215	175	7.41	12.10	34	25	27	21
2 X 4.0 FM	7/0.85	1.00	1.80	14.5	305	229	4.61	7.41	44	33	35	29
2 X 6.0 FM	7/1.05	1.00	1.80	16.6	375	257	3.08	4.81	55	42	45	38
2 X 10 FM	7/1.35	1.00	1.80	17.5	509	314	1.83	3.08	74	58	62	51
2 X 16 FM	7/1.71	1.00	1.80	19.5	691	390	1.15	1.91	87	74	84	64
2 X 25 FM	7/2.14	1.20	1.80	23.5	1044	518	0.727	1.20	125	97	110	85
2 X 35 FMO	18/1.53	1.20	1.80	26.0	1810	620	0.524	0.868	159	119	140	108
<b>THREE CORE</b>												
3 X 1.5 PE	1/1.38	0.80	1.80	11.5	195	170	12.10	18.10	22	16	18	18
3 X 1.5 FM	7/0.53	0.80	1.80	11.8	200	175	12.10	18.10	22	16	18	18
3 X 2.5 PE	1/1.78	0.80	1.80	12.7	250	198	7.41	12.10	30	22	23	19
3 X 2.5 FM	7/0.67	0.80	1.80	13.2	260	208	7.41	12.10	30	22	23	19
3 X 4.0 FM	7/0.85	1.00	1.80	15.0	360	280	4.61	7.41	38	29	32	25
3 X 6.0 FM	7/1.05	1.00	1.80	16.4	450	305	3.08	4.81	48	37	41	33
3 X 10 FM	7/1.35	1.00	1.80	18.5	625	378	1.83	3.08	64	49	53	44
3 X 16 FM	7/1.71	1.00	1.80	21.0	920	480	1.15	1.91	83	64	75	56
3 X 25 FM	7/2.14	1.20	1.80	25.0	1320	552	0.727	1.20	119	82	98	76
3 X 35 FM	18/1.53	1.20	1.80	24.2	1400	604	0.524	0.868	130	88	120	84
3 X 50 FM	18/1.89	1.40	1.80	25.9	1815	1045	0.387	0.641	155	119	150	114
3 X 70 FM	18/2.17	1.40	2.00	29.2	2444	1325	0.298	0.443	190	148	180	142
3 X 85 FM	18/2.52	1.60	2.10	33.4	3350	1735	0.199	0.320	225	178	230	189
3 X 120 SM	37/2.03	1.80	2.20	36.3	4110	2040	0.158	0.253	260	203	270	199
3 X 150 SM	37/2.27	1.80	2.30	39.5	5100	2475	0.124	0.206	295	229	305	229
3 X 185 SM	37/2.52	2.00	2.50	43.5	6290	3040	0.0991	0.164	330	255	350	262
3 X 240 SM	37/2.89	2.20	2.70	48.8	7800	3785	0.0754	0.125	385	300	410	305
3 X 300 SM	37/3.23	2.40	2.90	54.1	10000	4700	0.0601	0.100	425	332	470	343

**600/1000V NYY / NAPP OR YY / AYY OR YY-FR / AYY-FR OR YY-FRLS / AYY-FRLS  
MULTI CORE (CU or ALU/PVC/PVC)  
PVC INSULATED AND PVC SHEATHED MULTI (THREE & HALF) CORE CABLE**



**CONSTRUCTION**

- 1. CONDUCTOR : Solid / Circular / Shaped, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228
- 2. INSULATION : Polyvinyl Chloride Compound (PVC), Type A to IEC 60502-1
- COLOR OF INSULATION : For Three & Half Core Cables ■ Red ■ Yellow ■ Blue ■ Black
- 3. FILLER : Polypropylene Filler (Optional)
- 4. CORE BINDER : Polypropylene Tape (Optional)
- 5. INNER COVERING : PVC Compound of ST1 to IEC 60502-1 (Optional) Color ■ Black
- 6. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of ST1 to IEC 60502-1 Color: ■ Black

**APPLICATION**

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

**STANDARD: BDS 901, VDE 0271/3.69, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034**

**VOLTAGE GRADE: 600/1000 (1200) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA						ELECTRICAL DATA						
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity			
					CU	ALU	CU	ALU	CU	ALU	CU	ALU
mm <sup>2</sup>	No./mm	mm	mm	mm	kg/km	kg/km	D/km	D/km	Amps	Amps	Amps	Amps
<b>THREE AND HALF CORE</b>												
3 X 25 mm <sup>2</sup> + 1 X 16 mm <sup>2</sup>	7/2.14	1.20	1.80	27.0	1400	910	0.727	1.20	110	82	98	76
3 X 35 mm <sup>2</sup> + 1 X 16 mm <sup>2</sup>	10/1.50	1.20	1.80	26.2	1680	920	0.524	0.868	130	96	120	84
3 X 50 mm <sup>2</sup> + 1 X 25 mm <sup>2</sup>	10/1.80	1.40	1.90	28.5	2180	1200	0.387	0.641	165	119	160	114
3 X 70 mm <sup>2</sup> + 1 X 35 mm <sup>2</sup>	10/2.17	1.40	2.00	32.5	2910	1605	0.268	0.443	180	146	190	142
3 X 95 mm <sup>2</sup> + 1 X 50 mm <sup>2</sup>	10/2.52	1.60	2.20	38.0	3950	2000	0.193	0.320	225	178	230	169
3 X 120 mm <sup>2</sup> + 1 X 70 mm <sup>2</sup>	10/2.89	1.60	2.30	40.8	5050	2390	0.153	0.253	260	201	270	198
3 X 150 mm <sup>2</sup> + 1 X 95 mm <sup>2</sup>	10/2.27	1.80	2.40	45.0	6020	2830	0.124	0.206	295	226	306	223
3 X 185 mm <sup>2</sup> + 1 X 120 mm <sup>2</sup>	10/2.52	2.00	2.50	50.5	7450	3510	0.0991	0.164	330	256	350	262
3 X 240 mm <sup>2</sup> + 1 X 150 mm <sup>2</sup>	10/2.89	2.20	2.80	56.0	9650	4960	0.0754	0.125	365	300	410	305
3 X 300 mm <sup>2</sup> + 1 X 185 mm <sup>2</sup>	10/2.27	2.40	3.00	63.0	12100	5404	0.0601	0.100	425	332	470	343

**NOTE:- 0.5mm<sup>2</sup> to 25mm<sup>2</sup> Circular Conductor; 35mm<sup>2</sup> to Above; Sector Shaped / Compacted Conductor**

**600/1000V NYY / NAPP OR YY / APP OR YY-FR / APP-FR OR YY-FRLS / APP-FRLS  
MULTI CORE (CU or ALU/PVC/PVC)  
PVC INSULATED AND PVC SHEATHED MULTI (FOUR) CORE CABLE**



**CONSTRUCTION**

- 1. CONDUCTOR : Solid / Circular / Shaped, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228
- 2. INSULATION : Polyvinyl Chloride Compound (PVC), Type A to IEC 60502-1
- COLOR OF INSULATION : For Four Core Cables ■ Red ■ Yellow ■ Blue ■ Black
- 3. FILLER : Polypropylene Filler (Optional)
- 4. CORE BINDER : Polypropylene Tape (Optional)
- 5. INNER COVERING : PVC Compound of ST1 to IEC 60502-1 (Optional) Color ■ Black
- 6. OUTER SHEATH : PVC-FR-PVC/FRLS-PVC Compound of ST1 to IEC 60502-1 Color ■ Black

**APPLICATION**

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

**STANDARD: BDS 901, VDE 0271/3.69, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034**

**VOLTAGE GRADE: 600/1000 (1200) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA						ELECTRICAL DATA							
Nominal Core Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable	Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity					
						CU	ALU	In General at 30°C		In Open Air at 35°C			
mm <sup>2</sup>	No./mm	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amps	Amps	Amps	Amps	
<b>FOUR CORE</b>													
4 x 1.5 mm <sup>2</sup>	1/1.38	0.80	1.80	12.5	280	200	12.10	18.10	22	18	18	18	
4 x 1.5 mm <sup>2</sup>	7/0.53	0.80	1.80	13.0	235	205	12.10	18.10	22	18	18	18	
4 x 2.5 mm <sup>2</sup>	1/1.78	0.80	1.80	14.0	305	250	7.41	12.10	30	22	23	18	
4 x 2.5 mm <sup>2</sup>	7/0.97	0.80	1.80	14.6	312	257	7.41	12.10	30	22	23	18	
4 x 4.0 mm <sup>2</sup>	7/0.85	1.00	1.80	16.2	480	290	4.81	7.41	38	28	32	25	
4 x 6.0 mm <sup>2</sup>	7/1.05	1.00	1.80	17.5	540	345	3.08	4.81	48	37	41	30	
4 x 10 mm <sup>2</sup>	7/1.35	1.00	1.80	20.0	750	480	1.88	3.08	64	49	56	44	
4 x 16 mm <sup>2</sup>	7/1.71	1.00	1.80	23.2	1185	860	1.15	1.88	83	64	75	58	
4 x 25 mm <sup>2</sup>	7/2.14	1.20	1.80	27.5	1600	900	0.727	1.20	110	82	98	78	
4 x 35 mm <sup>2</sup>	15/1.58	1.20	1.80	28.4	1800	975	0.524	0.888	130	88	120	84	
4 x 50 mm <sup>2</sup>	15/1.83	1.40	1.80	29.0	2480	1310	0.387	0.641	155	113	150	114	
4 x 70 mm <sup>2</sup>	15/2.17	1.40	2.10	33.5	3250	1700	0.288	0.443	190	145	190	142	
4 x 95 mm <sup>2</sup>	15/2.52	1.60	2.20	36.4	4400	2190	0.198	0.320	225	178	230	180	
4 x 120 mm <sup>2</sup>	37/2.03	1.80	2.40	41.0	5500	2805	0.158	0.253	260	201	270	188	
4 x 150 mm <sup>2</sup>	37/2.27	1.80	2.50	45.2	6900	3210	0.124	0.208	295	229	305	229	
4 x 185 mm <sup>2</sup>	37/2.52	2.00	2.70	50.5	8850	3890	0.0901	0.164	330	250	350	262	
4 x 240 mm <sup>2</sup>	37/2.80	2.20	2.90	56.0	10700	4926	0.0754	0.125	365	300	410	306	
4 x 300 mm <sup>2</sup>	37/3.28	2.40	3.10	64.0	13200	5850	0.0601	0.100	425	332	470	349	

**600/1000V NYYP OR NYYP-FR OR NYYP-FRLS OR NYY-FLEXIBLE  
SINGLE CORE (CU/PVC/PVC)  
PVC INSULATED AND PVC SHEATHED SINGLE CORE FLEXIBLE CABLE**



**CONSTRUCTION**

- 1. CONDUCTOR : Circular Flexible, Plain Annealed Copper, Class-5 to IEC 60228
- 2. BINDER : Non-Hygroscopic Polypropylene Tape (Optional)
- 3. INSULATION : Polyvinyl Chloride Compound (PVC), Type A to IEC 60502-1
- COLOR OF INSULATION : ■ Black
- 6. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of ST1 to IEC 60502-1. Color ■ Black

**APPLICATION**

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

**STANDARD: BDS 901, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034**

**VOLTAGE GRADE: 600/1000 (1200) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA							ELECTRICAL DATA			
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Approximate Diameter of Bare Conductor		Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable	Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity in Open Air at 35°C
		Stranded	Multiple					Plain	Tinned	
mm <sup>2</sup>	No./mm	mm	mm	mm	mm	mm	kg/km	Ω/km	Ω/km	Amps
<b>SINGLE CORE</b>										
1 X 1.0 mm	32/0.20	1.32	---	0.80	1.80	6.90	61	19.50	20.00	15
1 X 1.5 mm	30/0.25	1.60	---	0.80	1.80	7.20	70	13.30	13.70	24
1 X 2.5 mm	50/0.25	2.00	---	0.80	1.80	7.80	90	7.96	8.21	32
1 X 4.0 mm	55/0.30	2.60	---	1.00	1.80	8.60	112	4.95	5.05	41
1 X 6.0 mm	84/0.30	3.30	3.50	1.00	1.80	9.30	141	3.30	3.36	52
1 X 10 mm	80/0.40	4.20	4.50	1.00	1.80	10.3	190	1.91	1.85	72
1 X 16 mm	126/0.40	5.30	5.70	1.00	1.80	11.7	265	1.21	1.24	98
1 X 25 mm	196/0.40	6.60	7.10	1.20	1.80	13.6	379	0.780	0.785	131
1 X 35 mm	278/0.40	7.80	8.50	1.20	1.80	15.0	490	0.554	0.565	167
1 X 50 mm	396/0.40	9.40	10.30	1.40	1.80	17.2	675	0.386	0.389	204
1 X 70 mm	560/0.50	11.20	12.40	1.40	1.80	18.1	890	0.272	0.277	255
1 X 95 mm	775/0.50	13.40	14.50	1.60	1.80	21.6	1170	0.206	0.210	314
1 X 120 mm	908/0.50	14.50	16.00	1.60	1.80	23.4	1439	0.161	0.164	366
1 X 150 mm	1256/0.50	---	18.00	1.80	1.80	25.7	1760	0.128	0.132	423
1 X 185 mm	1650/0.50	---	20.00	2.00	2.00	28.5	2195	0.106	0.108	478
1 X 240 mm	2221/0.50	---	23.00	2.20	2.00	31.4	2750	0.0801	0.0817	580
1 X 300 mm	2925/0.50	---	26.00	2.40	2.00	34.8	3400	0.0641	0.0654	686
1 X 400 mm	4012/0.50	---	30.00	2.60	2.20	38.6	4450	0.0486	0.0496	800
1 X 500 mm	5548/0.50	---	33.50	2.80	2.20	43.5	5660	0.0384	0.0391	935
1 X 630 mm	7210/0.50	---	37.00	2.80	2.20	47.0	6940	0.0287	0.0292	1088

**600/1000V NYYP OR NYYP-FR OR NYYP-FRLS OR NYYP-FLEXIBLE  
MULTI CORE (CU/PVC/PVC)  
PVC INSULATED AND PVC SHEATHED MULTI (TWO, THREE, FOUR) CORE FLEXIBLE CABLE**



**CONSTRUCTION**

- 1. CONDUCTOR : Circular Flexible, Plain Annealed Copper, Class-5 to IEC 60728
- 2. BINDER : Non-Hygroscopic Polypropylene Tape (Optional)
- 3. INSULATION : Polyvinyl Chloride Compound (PVC), Type-A to IEC 60502-1
- COLOR OF INSULATION : For Two Core Cable ■ Red ■ Black  
For Three Core Cable ■ Red ■ Yellow ■ Blue  
For Four Core Cable ■ Red ■ Yellow ■ Blue ■ Black
- 4. FILLER : Polypropylene Filler (Optional)
- 5. CORE BINDER : Polypropylene Tape (Optional)
- 6. INNER COVERING : PVC Compound of ST1 to IEC 60502-1 (Optional) Color ■ Black
- 7. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of ST1 to IEC 60502-1 Color ■ Black

**APPLICATION**

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

**STANDARD: BDS 901, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034**

**VOLTAGE GRADE: 600/1000 (1200) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA						ELECTRICAL DATA				
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Approximate Diameter of Bare Conductor		Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable	Max. DC Resistance of Conductor at 20°C		Current-Carrying Capacity In Open Air at 35°C
		Bunched	Multiple					Plain	Tinned	
mm <sup>2</sup>	No./Dia	mm	mm	mm	mm	mm	kg/km	Ω/km	Ω/km	Amps
<b>TWO CORE</b>										
2 X 1.0 mm <sup>2</sup>	32/0.20	1.32	---	0.80	1.80	11.6	175	18.50	20.00	12
2 X 1.5 mm <sup>2</sup>	30/0.25	1.80	---	0.80	1.80	12.2	198	13.80	13.70	20
2 X 2.5 mm <sup>2</sup>	50/0.25	2.00	---	0.80	1.80	13.5	245	7.88	8.21	28
2 X 4.0 mm <sup>2</sup>	56/0.30	2.80	---	1.00	1.80	15.0	319	4.85	5.08	37
2 X 6.0 mm <sup>2</sup>	84/0.30	3.30	3.60	1.00	1.80	17.0	400	3.80	3.89	47
2 X 10 mm <sup>2</sup>	80/0.40	4.70	4.80	1.00	1.80	18.5	528	1.91	1.95	54
2 X 16 mm <sup>2</sup>	128/0.40	5.30	5.70	1.00	1.80	22.1	750	1.21	1.24	65
2 X 25 mm <sup>2</sup>	196/0.40	6.80	7.10	1.20	1.80	26.2	1135	0.780	0.785	112
2 X 35 mm <sup>2</sup>	278/0.40	7.80	8.50	1.20	1.80	28.0	1320	0.554	0.565	142
<b>THREE CORE</b>										
3 X 1.0 mm <sup>2</sup>	32/0.20	1.32	---	0.80	1.80	12.2	196	19.50	20.00	12
3 X 1.5 mm <sup>2</sup>	30/0.25	1.80	---	0.80	1.80	12.7	215	13.80	13.70	17
3 X 2.5 mm <sup>2</sup>	50/0.25	2.00	---	0.80	1.80	14.4	292	7.88	8.21	24
3 X 4.0 mm <sup>2</sup>	56/0.30	2.80	---	1.00	1.80	16.1	380	4.85	5.08	33
3 X 6.0 mm <sup>2</sup>	84/0.30	3.30	3.60	1.00	1.80	17.7	485	3.80	3.89	43
3 X 10 mm <sup>2</sup>	80/0.40	4.70	4.80	1.00	1.80	19.8	655	1.91	1.95	58
3 X 16 mm <sup>2</sup>	128/0.40	5.30	5.70	1.00	1.80	23.8	890	1.21	1.24	70
3 X 25 mm <sup>2</sup>	188/0.40	6.80	7.10	1.20	1.80	28.2	1200	0.780	0.785	102
3 X 35 mm <sup>2</sup>	278/0.40	7.80	8.50	1.20	1.80	31.0	1580	0.554	0.565	125
3 X 50 mm <sup>2</sup>	396/0.40	9.40	10.30	1.40	1.80	33.0	2100	0.385	0.389	148
3 X 70 mm <sup>2</sup>	560/0.50	11.20	12.40	1.40	2.00	39.0	2920	0.272	0.277	175
<b>FOUR CORE</b>										
4 X 1.0 mm <sup>2</sup>	32/0.20	1.32	---	0.80	1.80	13.0	228	19.50	20.00	12
4 X 1.5 mm <sup>2</sup>	30/0.25	1.80	---	0.80	1.80	13.6	260	13.80	13.70	17
4 X 2.5 mm <sup>2</sup>	50/0.25	2.00	---	0.80	1.80	15.2	345	7.88	8.21	24
4 X 4.0 mm <sup>2</sup>	56/0.30	2.80	---	1.00	1.80	17.6	460	4.85	5.08	30
4 X 6.0 mm <sup>2</sup>	84/0.30	3.30	3.60	1.00	1.80	18.9	575	3.80	3.89	43
4 X 10 mm <sup>2</sup>	80/0.40	4.70	4.80	1.00	1.80	22.0	835	1.91	1.95	58
4 X 16 mm <sup>2</sup>	128/0.40	5.30	5.70	1.00	1.80	25.7	1080	1.21	1.24	70
4 X 25 mm <sup>2</sup>	196/0.40	6.80	7.10	1.20	1.80	28.6	1550	0.780	0.785	102
4 X 35 mm <sup>2</sup>	278/0.40	7.80	8.50	1.20	1.80	32.0	2020	0.554	0.565	125
4 X 50 mm <sup>2</sup>	396/0.40	9.40	10.30	1.40	1.90	37.0	2800	0.385	0.389	148
4 X 70 mm <sup>2</sup>	560/0.50	11.20	12.40	1.40	2.10	42.0	3720	0.272	0.277	175



**600/1000V YBaY / AYBaY OR YBaY-FR / AYBaY-FR OR YBaY-FRLS / AYBaY-FRLS  
SINGLE CORE (CU or ALU/PVC/ATA/PVC)  
PVC INSULATED AND PVC SHEATHED SINGLE CORE ARMoured CABLE**



**CONSTRUCTION**

- 1. CONDUCTOR : Solid / Circular, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228
- 2. INSULATION : Polyvinyl Chloride Compound (PVC), Type A to IEC 60502-1 Color ■ Black
- 3. INNER SHEATH : PVC Compound of ST1 to IEC 60502-1 Color ■ Black
- 4. ARMOUR : Double Aluminium Tape to IEC 60502-1
- 5. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of ST1 to IEC 60502-1 Color ■ Black

**APPLICATION**

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

**STANDARD: BDS 901, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034**

**VOLTAGE GRADE: 600/1000 (1200) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA							ELECTRICAL DATA						
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Thickness of Armour Tape	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable	Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity				
							CU	ALU	In Ground at 30°C		In Open Air at 35°C		
mm²	No./mm	mm	mm	mm	mm	kg/100m	kg/100m	Ω/km	Ω/km	Amps	Amps	Amps	Amps
<b>SINGLE CORE</b>													
1 X 25 FMC	7/2.14	1.20	0.50	1.80	14.6	430	300	0.727	1.20	180	87	125	58
1 X 35 FMC	19/1.53	1.20	0.50	1.80	15.7	530	370	0.524	0.868	155	120	150	120
1 X 50 FMC	19/1.80	1.40	0.50	1.80	17.2	702	350	0.387	0.641	185	145	180	150
1 X 70 FMC	19/2.17	1.40	0.50	1.80	18.8	915	485	0.288	0.443	225	171	245	185
1 X 95 FMC	19/2.52	1.60	0.50	1.80	21.2	1208	628	0.193	0.320	270	205	300	215
1 X 120 FMC	37/2.03	1.60	0.50	1.80	22.6	1447	775	0.153	0.253	310	250	350	250
1 X 150 FMC	37/2.27	1.80	0.50	1.80	24.8	1826	900	0.124	0.206	350	285	405	294
1 X 185 FMC	37/2.52	2.00	0.60	1.80	27.0	2208	1068	0.0991	0.164	380	325	480	338
1 X 240 FMC	51/2.25	2.20	0.60	1.80	29.8	2806	1318	0.0754	0.125	450	368	535	382
1 X 300 FMC	51/2.52	2.40	0.60	1.80	31.2	3510	1615	0.0601	0.100	515	407	640	431
1 X 400 FMC	51/2.80	2.60	0.60	2.00	35.5	4536	2080	0.0470	0.0778	585	445	770	496
1 X 500 FMC	51/3.23	2.80	0.60	2.10	40.8	5670	2235	0.0398	0.0605	680	483	800	534
1 X 630 FMC	51/3.63	2.80	0.60	2.20	43.7	6830	2680	0.0283	0.0459	800	538	1030	610
1 X 800 FMC	51/4.10	2.80	0.60	2.30	48.5	8810	3340	0.0221	0.0367	945	---	1160	---
1 X 1000 FMC	51/4.60	3.00	0.60	2.40	56.0	10880	3990	0.0175	0.0281	1095	---	1310	---

NOTE:- 0.5mm<sup>2</sup> to 25mm<sup>2</sup>: Circular Conductor; 35mm<sup>2</sup> to Above: Circular Compacted Conductor

**600/1000V YBY / AYBY OR YBY-FR / AYBY-FR OR YBY-FRLS / AYBY-FRLS  
MULTI CORE (CU or ALU/PVC/STA/PVC)  
PVC INSULATED AND PVC SHEATHED MULTI (THREE, FOUR) CORE ARMoured CABLE**



**CONSTRUCTION**

- 1. CONDUCTOR : Solid / Circular / Shaped, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228
- 2. INSULATION : Polyvinyl Chloride Compound (PVC), Type A to IEC 60502-1
- COLOR OF INSULATION : For Three Core Cables ■ Red ■ Yellow ■ Blue  
For Four Core Cables ■ Red ■ Yellow ■ Blue ■ Black
- 3. FILLER : Polypropylene Filler (Optional)
- 4. CORE BINDER : Polypropylene Tape (Optional)
- 5. INNER COVERING : PVC Compound of ST1 to IEC 60502-1 Color ■ Black
- 6. ARMOUR : Double Galvanized Steel Tape to IEC 60502-1
- 7. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of ST1 to IEC 60502-1 Color ■ Black

**APPLICATION**

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

**STANDARD: BDS 901, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034**

**VOLTAGE GRADE: 600/1000 (1200) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA							ELECTRICAL DATA						
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Thickness of Armour Tape	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable	Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity				
							CU	ALU	In Duct at 30°C		In Open Air at 25°C		
mm <sup>2</sup>	No./mm	mm	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amps	Amps	Amps	Amps
<b>THREE CORE</b>													
3 X 10 mm <sup>2</sup>	7/1.35	1.00	0.20	1.80	18.7	722	590	1.89	3.08	64	49	56	44
3 X 16 mm <sup>2</sup>	7/1.71	1.00	0.20	1.80	22.1	970	666	1.16	1.91	83	64	75	58
3 X 25 mm <sup>2</sup>	7/2.14	1.20	0.20	1.80	26.5	1380	878	0.727	1.20	110	82	98	78
3 X 35 mm <sup>2</sup>	19/1.53	1.20	0.20	1.80	24.6	1526	898	0.524	0.868	130	99	120	94
3 X 50 mm <sup>2</sup>	19/1.88	1.40	0.20	1.80	28.2	2090	1108	0.387	0.641	155	119	150	114
3 X 70 mm <sup>2</sup>	19/2.17	1.40	0.20	1.80	30.8	2707	1438	0.288	0.443	180	148	180	142
3 X 95 mm <sup>2</sup>	19/2.52	1.60	0.50	2.10	38.4	3828	2205	0.188	0.320	225	178	230	188
3 X 120 mm <sup>2</sup>	37/2.03	1.80	0.50	2.20	39.2	4798	2561	0.163	0.253	260	201	270	196
3 X 160 mm <sup>2</sup>	37/2.27	1.80	0.50	2.80	42.8	6782	3940	0.124	0.208	285	229	305	228
3 X 185 mm <sup>2</sup>	37/2.52	2.00	0.50	2.50	47.5	7050	3894	0.0991	0.164	330	258	350	262
3 X 240 mm <sup>2</sup>	37/2.88	2.20	0.50	2.70	52.8	8873	4518	0.0754	0.125	385	300	410	305
3 X 300 mm <sup>2</sup>	37/3.23	2.40	0.50	2.80	58.0	10907	6484	0.0601	0.100	425	332	470	343
<b>FOUR CORE</b>													
4 X 10 mm <sup>2</sup>	7/1.35	1.00	0.20	1.80	21.9	876	922	1.89	3.08	64	49	56	44
4 X 16 mm <sup>2</sup>	7/1.71	1.00	0.20	1.80	23.9	1180	787	1.16	1.91	83	64	75	58
4 X 25 mm <sup>2</sup>	7/2.14	1.20	0.20	1.80	27.8	1692	1050	0.727	1.20	110	82	98	78
4 X 35 mm <sup>2</sup>	19/1.53	1.20	0.20	1.80	28.1	2030	1192	0.524	0.868	130	99	120	94
4 X 50 mm <sup>2</sup>	19/1.88	1.40	0.20	2.00	33.8	2818	1808	0.387	0.641	155	119	150	114
4 X 70 mm <sup>2</sup>	19/2.17	1.40	0.50	2.20	38.7	4046	2852	0.288	0.443	180	146	180	142
4 X 95 mm <sup>2</sup>	19/2.52	1.60	0.50	2.40	43.7	5264	2985	0.188	0.320	225	178	230	188
4 X 120 mm <sup>2</sup>	37/2.03	1.80	0.50	2.50	47.7	6428	3524	0.163	0.253	260	201	270	196
4 X 160 mm <sup>2</sup>	37/2.27	1.80	0.50	2.70	52.6	7879	4244	0.124	0.208	285	229	305	223
4 X 185 mm <sup>2</sup>	37/2.52	2.00	0.50	2.80	57.8	8580	5093	0.0991	0.164	330	258	350	262
4 X 240 mm <sup>2</sup>	37/2.88	2.20	0.50	3.00	64.3	12065	6260	0.0754	0.125	385	300	410	305
4 X 300 mm <sup>2</sup>	37/3.23	2.40	0.50	3.30	70.9	14824	7565	0.0601	0.100	425	332	470	343

**600/1000V YBY / AYBY OR YBY-FR / AYBY-FR OR YBY-FRLS / AYBY-FRLS  
MULTI CORE (CU or ALU/PVC/STA/PVC)  
PVC INSULATED AND PVC SHEATHED MULTI (THREE AND HALF) CORE ARMoured CABLE**



**CONSTRUCTION**

- 1. CONDUCTOR : Solid / Circular / Shaped, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228
- 2. INSULATION : Polyvinyl Chloride Compound (PVC), Type A to IEC 60502-1
- COLOR OF INSULATION : For Three & Half Core Cables ■ Red ■ Yellow ■ Blue ■ Black
- 3. FILLER : Polypropylene Filler (Optional)
- 4. CORE BINDER : Polypropylene Tape (Optional)
- 5. INNER COVERING : PVC Compound of ST1 to IEC 60502-1 Color ■ Black
- 6. ARMOUR : Double Galvanized Steel Tape to IEC 60502-1
- 7. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of ST1 to IEC 60502-1 Color ■ Black

**APPLICATION**

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

**STANDARD: BDS 901, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034**

**VOLTAGE GRADE: 600/1000 (1200) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA							ELECTRICAL DATA						
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Thickness of Armour Tape	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable	Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity				
							CU	ALU	CU	ALU	CU	ALU	CU
mm <sup>2</sup>	No./mm	mm	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amps	Amps	Amps	Amps
<b>THREE &amp; HALF CORE</b>													
5 x 25 mm <sup>2</sup>	7/2.14	1.20	0.20	1.60	27.2	1554	1000	0.727	1.20	110	82	99	75
1 x 16 mm <sup>2</sup>	7/1.71	1.00						1.15	1.81				
5 x 35 mm <sup>2</sup>	19/1.93	1.20	0.20	1.80	27.1	1780	1085	0.524	0.868	130	99	120	84
1 x 16 mm <sup>2</sup>	7/1.71	1.00						1.15	1.81				
5 x 50 mm <sup>2</sup>	19/1.83	1.40	0.20	2.00	32.6	2522	1474	0.387	0.641	155	119	150	114
1 x 25 mm <sup>2</sup>	7/2.14	1.20						0.727	1.20				
5 x 70 mm <sup>2</sup>	19/2.17	1.40	0.50	2.10	38.8	3594	2128	0.268	0.443	180	140	190	142
1 x 35 mm <sup>2</sup>	19/1.59	1.20						0.524	0.868				
5 x 95 mm <sup>2</sup>	19/2.52	1.60	0.50	2.30	41.5	4686	2682	0.193	0.320	225	170	230	169
1 x 50 mm <sup>2</sup>	19/1.83	1.40						0.387	0.641				
5 x 120 mm <sup>2</sup>	37/2.03	1.80	0.50	2.40	45.7	6798	3725	0.153	0.253	260	201	270	190
1 x 70 mm <sup>2</sup>	37/2.17	1.40						0.268	0.443				
5 x 160 mm <sup>2</sup>	37/2.27	1.80	0.50	2.60	48.5	8874	3762	0.124	0.206	285	229	305	223
1 x 70 mm <sup>2</sup>	37/2.17	1.40						0.268	0.443				
5 x 185 mm <sup>2</sup>	37/2.52	2.00	0.50	2.70	54.4	8384	4505	0.0891	0.164	320	256	350	262
1 x 95 mm <sup>2</sup>	19/2.52	1.60						0.193	0.320				
5 x 240 mm <sup>2</sup>	37/2.89	2.20	0.50	2.90	60.3	10538	5510	0.0754	0.125	365	300	410	305
1 x 120 mm <sup>2</sup>	37/2.03	1.80						0.153	0.253				
5 x 300 mm <sup>2</sup>	37/3.28	2.40	0.50	3.10	65.6	12805	6500	0.0601	0.100	425	337	470	340
1 x 150 mm <sup>2</sup>	37/2.27	1.80						0.124	0.206				

**600/1000V YRaY / AYRaY OR YRaY-FR / AYRaY-FR OR YRaY-FRLS / AYRaY-FRLS  
SINGLE CORE (CU or ALU/PVC/AWA/PVC)  
PVC INSULATED AND PVC SHEATHED SINGLE CORE ARMoured CABLE**



**CONSTRUCTION**

- |                 |  |               |
|-----------------|--|---------------|
| 1. CONDUCTOR    | : Solid / Circular, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228 |               |
| 2. INSULATION   | : Polyvinyl Chloride Compound (PVC), Type A to IEC 60502-1                       | Color ■ Black |
| 3. INNER SHEATH | : PVC Compound of ST1 to IEC 60502-1   | Color ■ Black |
| 4. ARMOUR       | : Round Aluminium Wire to IEC 60502-1  |               |
| 5. BINDER       | : Polypropylene Tape (Optional)  |               |
| 6. OUTER SHEATH | : PVC/FR-PVC/FRLS-PVC Compound of ST1 to IEC 60502-1                             | Color ■ Black |

**APPLICATION**

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

**STANDARD: BDS 901, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034**

**VOLTAGE GRADE: 600/1000 (1200) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA						ELECTRICAL DATA							
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Diameter of Armour Wire	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity			
						CU	ALU	CU	ALU	In Ground at 30°C		In Open Air at 35°C	
mm <sup>2</sup>	No./mm	mm	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amps	Amps	Amps	Amps
<b>SINGLE CORE</b>													
1 X 35 FMC	19/1.53	1.20	1.25	1.80	17.30	615	290	0.574	0.868	155	120	160	120
1 X 50 FMC	19/1.83	1.40	1.25	1.80	18.30	770	370	0.387	0.641	185	145	195	150
1 X 70 FMC	19/2.17	1.40	1.25	1.80	20.8	1000	465	0.268	0.443	225	170	245	185
1 X 95 FMC	19/2.52	1.60	1.25	1.80	23.3	1265	570	0.193	0.320	270	205	300	235
1 X 120 FMC	37/2.09	1.60	1.60	1.80	25.9	1575	800	0.153	0.253	310	250	350	280
1 X 150 FMC	37/2.27	1.80	1.60	1.80	27.5	1915	800	0.124	0.205	350	285	405	294
1 X 185 FMC	37/2.52	2.00	1.60	1.80	28.5	2325	850	0.0891	0.164	390	325	450	333
1 X 240 FMC	61/2.25	2.20	1.60	1.90	32.9	2920	1195	0.0754	0.125	450	368	535	382
1 X 300 FMC	61/2.52	2.40	2.00	2.00	36.0	3620	1485	0.0601	0.100	515	407	640	491
1 X 400 FMC	81/2.89	2.80	2.00	2.10	40.1	4675	1873	0.0470	0.0779	585	455	770	499
1 X 500 FMC	81/3.25	3.00	2.00	2.20	43.6	6725	2270	0.0336	0.0605	680	489	900	534
1 X 630 FMC	81/3.63	2.80	2.00	2.40	47.2	7025	2700	0.0289	0.0469	800	538	1030	610
1 X 800 FMC	81/4.10	2.80	2.50	2.60	54.4	8920	3405	0.0221	0.0387	945	---	1150	---
1 X 1000 FMC	81/4.60	3.00	2.50	2.70	58.3	11020	4250	0.0178	0.0291	1095	---	1310	---

**600/1000V YRGY / AYRGY OR YRGY-FR / AYRGY-FR OR YRGY-FRLS / AYRGY-FRLS  
MULTI CORE (CU or ALU/PVC/SWA/PVC)  
PVC INSULATED AND PVC SHEATHED MULTI (THREE, FOUR) CORE ARMoured CABLE**



**CONSTRUCTION**

- 1. CONDUCTOR : Solid / Circular / Shaped, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228
- 2. INSULATION : Polyvinyl Chloride Compound (PVC), Type A to IEC 60502-1
- COLOR OF INSULATION : For Three Core Cables ■ Red ■ Yellow ■ Blue  
For Four Core Cables ■ Red ■ Yellow ■ Blue ■ Black
- 3. FILLER : Polypropylene Filler (Optional)
- 4. CORE BINDER : Polypropylene Tape (Optional)
- 5. INNER COVERING : PVC Compound of ST1 to IEC 60502-1 Color ■ Black
- 6. ARMOUR : Round Galvanized Steel Wire to IEC 60502-1
- 7. BINDER : Galvanized Steel Tape to IEC 60502-1
- 8. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of ST1 to IEC 60502-1 Color ■ Black

**APPLICATION**

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

**STANDARD: BDS 901, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034**

**VOLTAGE GRADE: 600/1000 (1200) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA							ELECTRICAL DATA						
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Diameter of Armored Wire	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity			
						CU	ALU	CU	ALU	In Ground at 30°C	In Open Air at 35°C	CU	ALU
mm <sup>2</sup>	No./mm	mm	mm	mm	mm	kg/100m	kg/100m	Ω/km	Ω/km	Amps	Amps	Amps	Amps
<b>THREE CORE</b>													
3 x 1.5 mm <sup>2</sup>	7/0.53	0.80	0.80	1.80	14.8	465	375	12.10	18.10	22	16	18	13
3 x 2.5 mm <sup>2</sup>	7/0.67	0.80	0.80	1.80	15.7	472	425	7.41	12.10	30	22	23	18
3 x 4.0 mm <sup>2</sup>	7/0.85	1.00	1.25	1.80	18.0	790	655	4.81	7.41	38	28	32	25
3 x 6.0 mm <sup>2</sup>	7/1.05	1.00	1.25	1.80	20.5	869	745	3.08	4.61	48	37	41	33
3 x 10 mm <sup>2</sup>	7/1.36	1.00	1.25	1.80	22.5	1070	955	1.83	3.08	64	49	58	44
3 x 16 mm <sup>2</sup>	7/1.71	1.00	1.25	1.80	25.0	1340	1034	1.15	1.81	83	64	75	56
3 x 25 mm <sup>2</sup>	7/2.14	1.20	1.80	1.80	28.5	1785	1278	0.727	1.20	110	82	98	76
3 x 35 mm <sup>2</sup>	19/1.53	1.20	1.80	1.80	27.6	2080	1415	0.524	0.868	130	99	120	94
3 x 50 mm <sup>2</sup>	19/1.83	1.40	1.60	2.00	30.7	2650	1898	0.387	0.641	155	118	150	114
3 x 70 mm <sup>2</sup>	18/2.17	1.40	2.00	2.10	34.6	3700	2362	0.288	0.443	180	146	180	142
3 x 95 mm <sup>2</sup>	19/2.52	1.60	2.00	2.20	39.0	4750	2943	0.193	0.320	225	178	230	185
3 x 120 mm <sup>2</sup>	37/2.03	1.80	2.00	2.30	42.1	5680	3382	0.153	0.253	260	201	270	198
3 x 150 mm <sup>2</sup>	37/2.27	1.80	2.50	2.50	47.3	7265	4413	0.124	0.208	295	229	305	223
3 x 185 mm <sup>2</sup>	37/2.52	2.00	2.50	2.70	50.5	8880	5148	0.0891	0.164	330	256	350	262
3 x 240 mm <sup>2</sup>	37/2.85	2.20	2.50	2.90	57.0	11819	8245	0.0754	0.125	385	300	410	305
3 x 300 mm <sup>2</sup>	37/3.23	2.40	2.50	3.10	61.0	12993	7204	0.0601	0.100	425	332	470	343
<b>FOUR CORE</b>													
4 x 1.5 mm <sup>2</sup>	7/0.53	0.80	0.80	1.80	15.6	480	420	12.10	18.10	22	16	18	13
4 x 2.5 mm <sup>2</sup>	7/0.67	0.80	0.80	1.80	16.6	535	470	7.41	12.10	30	22	23	18
4 x 4.0 mm <sup>2</sup>	7/0.85	1.00	1.25	1.80	20.2	880	700	4.81	7.41	38	28	32	25
4 x 6.0 mm <sup>2</sup>	7/1.05	1.00	1.25	1.80	22.0	950	785	3.08	4.61	48	37	41	33
4 x 10 mm <sup>2</sup>	7/1.36	1.00	1.25	1.80	23.5	1200	945	1.83	3.08	64	49	58	44
4 x 16 mm <sup>2</sup>	7/1.71	1.00	1.60	1.80	27.3	1710	1300	1.15	1.81	83	64	75	58
4 x 25 mm <sup>2</sup>	7/2.14	1.20	1.80	1.80	28.4	2038	1400	0.727	1.20	110	82	98	76
4 x 35 mm <sup>2</sup>	19/1.53	1.20	1.80	1.80	29.4	2508	1822	0.524	0.868	130	99	120	94
4 x 50 mm <sup>2</sup>	19/1.83	1.40	2.00	2.10	33.9	3394	2086	0.387	0.641	155	118	150	114
4 x 70 mm <sup>2</sup>	18/2.17	1.40	2.00	2.20	38.8	4508	2720	0.288	0.443	180	146	180	142
4 x 95 mm <sup>2</sup>	19/2.52	1.60	2.50	2.40	43.2	6198	3791	0.193	0.320	225	178	230	185
4 x 120 mm <sup>2</sup>	37/2.03	1.80	2.50	2.50	47.8	7380	4841	0.153	0.253	260	201	270	198
4 x 150 mm <sup>2</sup>	37/2.27	1.80	2.50	2.70	51.2	8898	5888	0.124	0.208	295	229	305	223
4 x 185 mm <sup>2</sup>	37/2.52	2.00	2.50	2.90	57.5	10874	6883	0.0891	0.164	330	256	350	262
4 x 240 mm <sup>2</sup>	37/2.85	2.20	2.50	3.10	62.4	13382	7785	0.0754	0.125	385	300	410	305
4 x 300 mm <sup>2</sup>	37/3.23	2.40	2.50	3.30	66.9	16888	8995	0.0601	0.100	425	332	470	343

NOTE: 0.5mm<sup>2</sup> to 25mm<sup>2</sup>: Circular Conductor; 35mm<sup>2</sup> to Above: Sector Shaped / Compacted Conductor. **POLY CABLES**

**600/1000V YRGY / AYRGY OR YRGY-FR / AYRGY-FR OR YRGY-FRLS / AYRGY-FRLS  
MULTI CORE (CU or ALU/PVC/SWA/PVC)  
PVC INSULATED AND PVC SHEATHED MULTI (THREE AND HALF) CORE ARMoured CABLE**



**CONSTRUCTION**

- 1. CONDUCTOR : Solid / Circular / Shaped, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228
- 2. INSULATION : Polyvinyl Chloride Compound (PVC), Type A to IEC 60502-1
- COLOR OF INSULATION : For Three & Half Core Cables ■ Red ■ Yellow ■ Blue ■ Black
- 3. FILLER : Polypropylene Filler (Optional)
- 4. CORE BINDER : Polypropylene Tape (Optional)
- 5. INNER COVERING : PVC Compound of ST1 to IEC 60502-1 Color ■ Black
- 6. ARMOUR : Round Galvanized Steel Wire to IEC 60502-1
- 7. BINDER : With or Without Helically Applied Galvanized Steel Tape (Optional)
- 8. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of ST1 to IEC 60502-1 Color ■ Black

**APPLICATION**

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

**STANDARD: BDS 901, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034**

**VOLTAGE GRADE: 600/1000 (1200) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA							ELECTRICAL DATA						
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Diameter of Armour Wire	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable	Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity				
							CU	ALU	In Ground at 30°C		In Open Air at 35°C		
mm <sup>2</sup>	No./mm	mm	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amps	Amps	Amps	Amps
<b>THREE &amp; HALF CORE</b>													
8 X 25 mm <sup>2</sup>	7/2.14	1.20	1.50	1.80	30.8	2010	1550	0.727	1.20	110	82	88	76
1 X 18 mm <sup>2</sup>	7/1.71	1.00						1.15	1.81				
8 X 35 mm <sup>2</sup>	18/1.53	1.20	1.50	1.80	30.1	2485	1908	0.524	0.868	130	98	120	94
1 X 16 mm <sup>2</sup>	7/1.71	1.00						1.15	1.81				
8 X 50 mm <sup>2</sup>	18/1.83	1.40	2.00	2.00	33.5	3250	2140	0.397	0.641	155	118	150	114
1 X 25 mm <sup>2</sup>	7/2.14	1.20						0.727	1.20				
8 X 70 mm <sup>2</sup>	18/2.17	1.40	2.00	2.10	38.7	4810	2752	0.288	0.448	180	146	190	142
1 X 35 mm <sup>2</sup>	18/1.53	1.20						0.524	0.868				
8 X 95 mm <sup>2</sup>	18/2.52	1.50	2.00	2.30	43.3	5801	3480	0.190	0.320	225	178	230	169
1 X 60 mm <sup>2</sup>	18/1.83	1.40						0.397	0.641				
8 X 120 mm <sup>2</sup>	37/2.08	1.60	2.50	2.50	48.0	7158	4435	0.158	0.253	260	201	270	196
1 X 70 mm <sup>2</sup>	18/2.17	1.40						0.288	0.448				
8 X 150 mm <sup>2</sup>	37/2.27	1.80	2.50	2.60	51.2	8347	5048	0.124	0.206	285	229	305	223
1 X 70 mm <sup>2</sup>	18/2.17	1.40						0.193	0.253				
8 X 185 mm <sup>2</sup>	37/2.52	2.00	2.50	2.70	56.1	10000	5888	0.0991	0.164	330	258	350	262
1 X 95 mm <sup>2</sup>	18/2.52	1.50						0.189	0.320				
8 X 240 mm <sup>2</sup>	37/2.88	2.20	2.50	2.80	62.3	12883	7048	0.0754	0.126	385	300	410	305
1 X 120 mm <sup>2</sup>	37/2.08	1.60						0.158	0.253				
8 X 300 mm <sup>2</sup>	37/3.23	2.40	2.50	3.10	68.2	15100	8380	0.0601	0.100	425	332	470	343
1 X 150 mm <sup>2</sup>	37/2.27	1.80						0.124	0.206				

**600/1000V YFGY / AYFGY OR YFGY-FR / AYFGY-FR OR YFGY-FRLS / AYFGY-FRLS  
MULTI CORE (CU or ALU/PVC/FSA/PVC)  
PVC INSULATED AND PVC SHEATHED MULTI (THREE, FOUR) CORE ARMoured CABLE**



**CONSTRUCTION**

- 1. CONDUCTOR : Solid / Circular / Shaped, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228
- 2. INSULATION : Polyvinyl Chloride Compound (PVC), Type A to IEC 60502-1
- COLOR OF INSULATION : For Three Core Cables ■ Red ■ Yellow ■ Blue  
For Four Core Cables ■ Red ■ Yellow ■ Blue ■ Black
- 3. FILLER : Polypropylene Filler (Optional)
- 4. CORE BINDER : Polypropylene Tape (Optional)
- 5. INNER COVERING : PVC Compound of ST1 to IEC 60502-1 Color ■ Black
- 6. ARMOUR : Flat Galvanized Steel Wire to IEC 60502-1
- 7. BINDER : With or Without Helically Applied Galvanized Steel Tape (Optional)
- 8. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of ST1 to IEC 60502-1 Color ■ Black

**APPLICATION**

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

**STANDARD: BDS 901, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034**

**VOLTAGE GRADE: 600/1000 (1200) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA							ELECTRICAL DATA						
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Thickness of Armour Wire	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity			
						CU	ALU	CU	ALU	CU	ALU	CU	ALU
mm <sup>2</sup>	No./mm	mm	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amper	Amper	Amper	Amper
<b>THREE CORE</b>													
3 X 25 mm <sup>2</sup>	7/2.14	1.20	0.80	1.80	27.0	1800	1281	0.727	1.20	110	82	88	76
3 X 35 mm <sup>2</sup>	19/1.58	1.20	0.80	1.80	28.0	1900	1390	0.524	0.868	130	99	120	94
3 X 50 mm <sup>2</sup>	19/1.86	1.40	0.80	1.80	28.0	2590	1680	0.387	0.641	155	110	150	114
3 X 70 mm <sup>2</sup>	18/2.17	1.40	0.80	2.00	31.0	3115	1985	0.288	0.443	180	148	190	142
3 X 95 mm <sup>2</sup>	18/2.52	1.80	0.80	2.20	38.4	4325	2478	0.188	0.320	225	179	230	169
3 X 120 mm <sup>2</sup>	37/2.08	1.80	0.80	2.30	38.0	5220	2895	0.153	0.253	260	201	270	198
3 X 150 mm <sup>2</sup>	37/2.37	1.80	0.80	2.40	43.0	5375	3038	0.124	0.206	285	229	305	223
3 X 185 mm <sup>2</sup>	37/2.52	2.00	0.80	2.60	47.0	7650	3995	0.0991	0.164	330	258	350	262
3 X 240 mm <sup>2</sup>	37/2.88	2.20	0.80	2.80	53.0	8650	4884	0.0754	0.125	385	300	410	305
3 X 300 mm <sup>2</sup>	37/3.23	2.40	0.80	3.00	58.5	12080	6920	0.0601	0.100	425	337	470	349
<b>FOUR CORE</b>													
4 X 25 mm <sup>2</sup>	7/2.14	1.20	0.80	1.80	30.0	2100	1500	0.727	1.20	110	82	88	76
4 X 35 mm <sup>2</sup>	19/1.58	1.20	0.80	1.80	29.2	2400	1580	0.524	0.868	130	99	120	94
4 X 50 mm <sup>2</sup>	19/1.86	1.40	0.80	2.00	32.8	3280	2165	0.387	0.641	155	110	150	114
4 X 70 mm <sup>2</sup>	18/2.17	1.40	0.80	2.10	37.5	4285	2914	0.288	0.443	180	148	190	142
4 X 95 mm <sup>2</sup>	18/2.52	1.80	0.80	2.20	42.0	5890	3227	0.188	0.320	225	178	230	169
4 X 120 mm <sup>2</sup>	37/2.08	1.80	0.80	2.40	44.4	6900	3697	0.153	0.253	260	201	270	198
4 X 150 mm <sup>2</sup>	37/2.37	1.80	0.80	2.60	48.5	8190	4365	0.124	0.206	285	229	305	223
4 X 185 mm <sup>2</sup>	37/2.52	2.00	0.80	2.70	54.0	10750	5194	0.0991	0.164	330	258	350	262
4 X 240 mm <sup>2</sup>	37/2.88	2.20	0.80	3.00	60.8	12800	6292	0.0754	0.125	385	300	410	305
4 X 300 mm <sup>2</sup>	37/3.23	2.40	0.80	3.20	67.5	15400	7994	0.0601	0.100	425	337	470	349

NOTE: - 0.5mm<sup>2</sup> to 25mm<sup>2</sup> Circular Conductor; 35mm<sup>2</sup> to Above; Sector Shaped / Compacted Conductor

**600/1000V YFGY / AYFGY OR YFGY-FR / AYFGY-FR OR YFGY-FRLS / AYFGY-FRLS  
MULTI CORE (CU or ALU/PVC/FSA/PVC)  
PVC INSULATED AND PVC SHEATHED MULTI (THREE AND HALF) CORE ARMoured CABLE**



**CONSTRUCTION**

- 1. CONDUCTOR : Solid / Circular / Shaped, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228
- 2. INSULATION : Polyvinyl Chloride-Compound (PVC), Type A to IEC 60502-1
- COLOR OF INSULATION : For Three & Half Core Cables ■ Red ■ Yellow ■ Blue ■ Black
- 3. FILLER : Polypropylene Filler (Optional)
- 4. CORE BINDER : Polypropylene Tape (Optional)
- 5. INNER COVERING : PVC Compound of ST1 to IEC 60502-1 Color: ■ Black
- 6. ARMOUR : Flat Galvanized Steel Wire to IEC 60502-1
- 7. BINDER : With or Without Helically Applied Galvanized Steel Tape (Optional)
- 8. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of ST1 to IEC 60502-1 Color ■ Black

**APPLICATION**

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

**STANDARD: BDS 901, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034**

**VOLTAGE GRADE: 600/1000 (1200) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA							ELECTRICAL DATA						
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Thickness of Armour Wire	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable	Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity				
							CU	ALU	In Ground at 30°C	ALU	CU	ALU	In Open Air at 35°C
mm <sup>2</sup>	No./mm	mm	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amps	Amps	Amps	Amps
<b>THREE &amp; HALF CORE</b>													
3 X 25 mm <sup>2</sup>	7/2.14	1.20	0.60	1.60	28.5	2010	1434	0.727	1.20	110	82	98	76
1 X 38 mm <sup>2</sup>	7/1.71	1.00						1.15	1.91				
3 X 35 mm <sup>2</sup>	19/1.53	1.20	0.60	1.60	28.3	2130	1402	0.524	0.868	130	99	120	94
1 X 38 mm <sup>2</sup>	7/1.71	1.00						1.15	1.91				
3 X 50 mm <sup>2</sup>	19/1.83	1.40	0.80	1.80	32.2	3080	1804	0.387	0.641	155	119	150	114
1 X 25 mm <sup>2</sup>	7/2.14	1.20						0.727	1.20				
3 X 70 mm <sup>2</sup>	19/2.17	1.40	0.80	2.10	36.1	3950	2176	0.266	0.443	190	146	190	142
1 X 38 mm <sup>2</sup>	19/1.53	1.70						0.524	0.868				
3 X 95 mm <sup>2</sup>	19/2.52	1.60	0.80	2.20	41.0	5110	2775	0.193	0.320	225	178	230	169
1 X 50 mm <sup>2</sup>	19/1.83	1.40						0.387	0.641				
3 X 120 mm <sup>2</sup>	37/2.09	1.60	0.80	2.30	44.0	6490	3303	0.153	0.253	260	201	270	196
1 X 70 mm <sup>2</sup>	19/2.17	1.40						0.266	0.443				
3 X 150 mm <sup>2</sup>	37/2.27	1.80	0.80	2.40	48.3	7300	3723	0.124	0.206	285	219	305	228
1 X 70 mm <sup>2</sup>	19/2.17	1.40						0.153	0.253				
3 X 185 mm <sup>2</sup>	37/2.52	2.00	0.80	2.60	53.5	8050	5019	0.0993	0.164	330	256	350	262
1 X 95 mm <sup>2</sup>	19/2.52	1.60						0.193	0.320				
3 X 240 mm <sup>2</sup>	37/2.88	2.20	0.80	2.80	58.5	11100	5812	0.0754	0.125	385	300	410	305
1 X 120 mm <sup>2</sup>	37/2.09	1.60						0.153	0.253				
3 X 300 mm <sup>2</sup>	37/3.23	2.40	0.80	3.00	66.0	14400	7009	0.0601	0.100	425	332	470	348
1 X 150 mm <sup>2</sup>	37/2.27	1.80						0.124	0.206				



**600/1000V NYCY OR YCY OR NYCY-FR OR NYCY-FRLS  
MULTI CORE (CU/PVC/CWS/PVC)  
PVC INSULATED AND PVC SHEATHED MULTI (THREE) CORE CONCENTRIC CABLE**



**CONSTRUCTION**

- 1. CONDUCTOR : Circular / Shaped, Plain Annealed Copper, Class-1 & 2 to IEC 60228
- 2. INSULATION : Polyvinyl Chloride Compound (PVC), Type A to IEC 60502-1
- COLOR OF INSULATION : For Three Core Cables ■ Red ■ Yellow ■ Blue
- 3. FILLER : Polypropylene Filler (Optional)
- 4. CORE BINDER : Polypropylene Tape (Optional)
- 5. INNER COVERING : PVC Compound of ST1 to IEC 60502-1 Color: ■ Black
- 6. METALLIC SCREEN : Plain Annealed Copper Wire Concentric
- 7. BINDER : Helically Applied Copper Tape / Overlap Polypropylene Tape
- 8. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of ST1 to IEC 60502-1 Color: ■ Black

**APPLICATION**

Power cables for increase electrical and also mechanical protection are required. These cables are installed in open air, in underground, in water, indoors and in cable ducts. energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

**STANDARD: BDS 901, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034**

**VOLTAGE GRADE: 600/1000 (1200) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA						ELECTRICAL DATA		
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable	Max. DC Resistance of Conductor at 20°C	Current Carrying Capacity	
							In Ground at 30°C	In Open Air at 35°C
mm <sup>2</sup>	No./mm	mm	mm	mm	kg/km	Ω/km	Amps	Amps
<b>THREE CORE</b>								
3x2.5/	7/0.67	0.80	1.80	15.1	304	7.41	30	23
1x2.50	13/0.50							
3x4.0/	7/0.86	1.00	1.80	17.2	432	4.61	28	32
1x4.00	20/0.50							
3x6.0/	7/1.05	1.00	1.80	18.5	514	3.08	48	41
1x6.00	31/0.50							
3x10/	7/1.35	1.00	1.80	20.5	684	1.83	64	55
1x100	20/0.80							
3x16/	7/1.71	1.00	1.80	23.4	860	1.15	83	75
1x100	31/0.80							
3x25/	7/2.14	1.20	1.80	26.9	1388	0.727	110	88
1x180	31/0.80							
3x35/	18/1.58	1.20	1.80	25.6	1600	0.524	100	120
1x180	31/0.80							
3x50/	18/1.88	1.40	1.80	29.3	2243	0.387	155	160
1x250	50/0.60							
3x70	18/2.17	1.40	2.00	32.0	2995	0.268	190	180
1x350	70/0.80							
3x95	18/2.52	1.60	2.10	37.0	4013	0.183	225	280
1x500	58/1.05							
3x120	37/2.09	1.80	2.70	40.0	4487	0.158	260	270
1x700	71/1.15							
3x150	37/2.37	1.80	2.40	43.8	6018	0.124	295	305
1x700	71/1.15							
3x185	37/2.52	2.00	2.50	48.8	7483	0.0881	330	350
1x950	67/1.35							
3x240	37/2.88	2.20	2.70	54.3	8556	0.0754	385	410
1x1000	67/1.58							
3x300	37/3.23	2.40	2.80	60.0	11838	0.0601	425	470
1x1500	72/1.59							

NOTE: 0.5mm<sup>2</sup> to 25mm<sup>2</sup> Circular Conductor; 35mm<sup>2</sup> to Above: Sector Shaped / Compacted Conductor

**600/1000V NYCRY OR YCRY OR NYCRY-FR OR NYCRY-FRLS  
MULTI CORE (CU/PVC/CWS/PVC/SWA/PVC)  
PVC INSULATED AND PVC SHEATHED MULTI (THREE HALF) CORE CONCENTRIC ARMoured CABLE**



**CONSTRUCTION**

- 1. CONDUCTOR : Circular / Shaped, Plain Annealed Copper, Class-1 & 2 to IEC 60228
- 2. INSULATION : Polyvinyl Chloride Compound (PVC), Type A to IEC 60502-1
- COLOR OF INSULATION : For Three Core Cables ■ Red ■ Yellow ■ Blue
- 3. FILLER : Polypropylene Filler (Optional)
- 4. CORE BINDER : Polypropylene Tape (Optional)
- 5. INNER COVERING : PVC Compound of ST1 to IEC 60502-1 Color ■ Black
- 6. METALLIC SCREEN : Plain Annealed Copper Wire Concentric
- 7. BINDER : Helically Applied Copper Tape / Overlap Polypropylene Tape
- 8. INNER COVERING : PVC Compound of ST1 to IEC 60502-1 Color ■ Black
- 9. ARMOUR : Round Galvanized Steel Wire to IEC 60502-1
- 10. BINDER : With or Without Helically Applied Galvanized Steel Tape (Optional)
- 11. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of ST1 to IEC 60502-1 Color ■ Black

**APPLICATION**

Power cables for increase electrical and also mechanical protection are required. Those cables are installed in open air, in underground, in water, indoors and in cable ducts. energy supply are installed in open air, in underground, in water, indoors, in cable ducts. power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

**STANDARD: BDS 901, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034**

**VOLTAGE GRADE: 600/1000 (1200) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA							ELECTRICAL DATA		
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Diameter of Armaion Wire	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable	Current Carrying Capacity		
							Max. DC Resistance of Conductor at 20°C	In Ground at 30°C	In Open Air at 35°C
mm <sup>2</sup>	N#/mm	mm	mm	mm	mm	kg/km	Ω/km	Amps	Amps
<b>THREE CORE</b>									
3X2.5/	7/0.67	0.80	0.80	1.80	19.8	740	7.41	20	23
1X2.5C	19/0.50								
3X4.0/	7/0.85	1.00	1.25	1.80	22.9	1077	4.61	26	32
1X4.0C	20/0.50								
3X6.0/	7/1.05	1.00	1.25	1.80	23.9	1168	3.08	48	41
1X6.0C	31/0.50								
3X10/	7/1.35	1.00	1.25	1.80	25.9	1476	1.89	64	56
1X10C	20/0.80								
3X16/	7/1.71	1.00	1.25	1.80	29.0	1820	1.15	83	76
1X16C	31/0.80								
3X25/	7/2.14	1.20	1.60	1.80	32.7	2380	0.727	110	98
1X25C	31/0.80								
3X35/	10/1.58	1.20	1.60	2.00	31.8	2586	0.524	130	120
1X35C	31/0.80								
3X50/	10/1.89	1.40	1.60	2.10	36.6	3644	0.387	155	150
1X50C	50/0.80								
3X70/	10/2.17	1.40	2.00	2.20	38.4	4409	0.268	180	180
1X70C	70/0.80								
3X95/	10/2.52	1.60	2.00	2.40	45.0	6157	0.199	225	230
1X95C	50/1.05								
3X120/	37/2.09	1.60	2.00	2.50	48.0	7358	0.163	280	270
1X120C	71/1.15								
3X150/	37/2.27	1.80	2.50	2.70	52.8	8832	0.124	305	305
1X150C	71/1.19								
3X185/	37/2.52	2.00	2.50	2.80	57.7	10342	0.0891	330	350
1X185C	67/1.35								
3X240/	37/2.89	2.20	2.50	3.00	68.7	12810	0.0754	385	410
1X240C	67/1.53								
3X300/	37/3.23	2.40	2.500	3.20	69.4	15433	0.0601	425	470
1X300C	72/1.63								

**600/1000V NYCBY OR YCBY OR NYCHY-FR OR NYCHY-FRLS  
MULTI CORE (CU/PVC/CWS/PVC/STA/PVC)  
PVC INSULATED AND PVC SHEATHED MULTI (THREE) CORE CONCENTRIC ARMoured CABLE**



**CONSTRUCTION**

- 1. CONDUCTOR : Circular / Shaped, Plain Annealed Copper, Class-1 & 2 to IEC 60228
- 2. INSULATION : Polyvinyl Chloride Compound (PVC), Type A to IEC 60502-1
- COLOR OF INSULATION : For Three Core Cables ■ Red ■ Yellow ■ Blue
- 3. FILLER : Polypropylene Filler (Optional)
- 4. CORE BINDER : Polypropylene Tape (Optional)
- 5. INNER COVERING : PVC Compound of ST1 to IEC 60502-1 Color: ■ Black
- 6. METALLIC SCREEN : Plain Annealed Copper Wire Concentric
- 7. BINDER : Helically Applied Copper Tape / Overlap Polypropylene Tape
- 8. INNER COVERING : PVC Compound of ST1 to IEC 60502-1 Color: ■ Black
- 9. ARMOUR : Double Galvanized Steel Tape to IEC 60502-1
- 10. OUTER SHEATH : PVC/FR-PVC/FRLS-PVC Compound of ST1 to IEC 60502-1 Color: ■ Black

**APPLICATION**

Power cables for increase electrical and also mechanical protection are required. These cables are installed in open air, in underground, in water, indoors and in cable ducts. energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected for continuous permissible service voltage of 720/1200 Volts.

**STANDARD: BDS 901, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034**

**VOLTAGE GRADE: 600/1000 (1200) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA							ELECTRICAL DATA			
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Nominal Insulation Thickness	Nominal Diameter of Armour Tape	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable	Max. DC Resistance of Conductor at 20°C	Current Carrying Capacity		
mm <sup>2</sup>	No./mm	mm	mm	mm	mm	kg/km	Ω/km	In Ground at 30°C	In Open Air at 35°C	
<b>THREE CORE</b>										
3x6.0/	7/1.05	1.00	0.20	1.80	20.8	710	2.08	48	41	
1x6.0C	31/0.50									
3x10/	7/1.35	1.00	0.20	1.80	22.7	807	1.83	64	55	
1x10C	20/0.80									
3x16/	7/1.71	1.00	0.20	1.80	25.7	1211	1.35	83	75	
1x16C	31/0.80									
3x25/	7/2.14	1.20	0.20	1.80	28.3	1865	0.727	110	98	
1x25C	31/0.80									
3x35/	19/1.53	1.20	0.20	1.80	28.4	1888	0.524	130	120	
1x35C	31/0.80									
3x50/	19/1.83	1.40	0.20	2.00	32.5	2815	0.387	155	150	
1x50C	50/0.80									
3x70/	19/2.17	1.40	0.20	2.10	35.5	3470	0.268	180	180	
1x70C	70/0.80									
3x95/	18/2.52	1.60	0.50	2.30	40.7	4815	0.183	225	230	
1x95C	50/1.05									
3x120/	37/2.03	1.60	0.50	2.40	44.1	5500	0.153	260	270	
1x120C	71/1.13									
3x150/	37/2.27	1.80	0.50	2.50	47.7	6752	0.124	295	305	
1x150C	71/1.13									
3x185/	37/2.57	2.00	0.50	2.70	52.9	8392	0.0881	330	350	
1x185C	87/1.35									
3x240/	37/2.89	2.20	0.50	2.80	58.6	10517	0.0754	365	410	
1x240C	87/1.53									
3x300/	37/3.23	2.40	0.50	3.00	64.3	12895	0.0501	425	470	
1x300C	72/1.82									

NOTE: 0.5mm<sup>2</sup> to 25mm<sup>2</sup> Circular Conductor; 35mm<sup>2</sup> to Above: Sector Shaped / Compacted Conductor

## 600/1000V NYY-1/NYRY-1/NYBY-1/YBY-1



### CONSTRUCTION

- |                   |   |                |
|-------------------|---|----------------|
| 1. CONDUCTOR      | Solid / Circular Plain Annealed Copper, Class-1 & 2 to IEC 60228        |                |
| 2. INSULATION     | Polyvinyl Chloride Compound (PVC), Type A to IEC 60502-1                |                |
| 3. FILLER         | Polypropylene Filler (Optional)   |                |
| 4. CORE BINDER    | Polypropylene Tape (Optional)   |                |
| 5. INNER COVERING | PVC Compound of ST1 to IEC 60502-1                                      | Color: ■ Black |
| 6. ARMOUR         | Round Galvanized Steel Wire / Flat Galvanized Steel Tape to IEC 60502-1 |                |
| 7. BINDER         | Polypropylene Tape (Optional)   |                |
| 8. OUTER SHEATH   | PVC/FR-PVC/PRLS-PVC Compound of ST1 to IEC 60502-1                      | Color: ■ Black |

### APPLICATION

Suitable for use as a control cables, indoors, outdoors, in cable ducts or Tray or underground and in water for remote or auto control of electrical facilities at power plant or factory, etc., for continuous permissible service voltage of 720/1200 volts.

STANDARD: BDS 901, BS 6346,- IEC 60502-1, IEC 60332, IEC 61034

VOLTAGE GRADE: 600/1000 (1200) V

OPERATING TEMPERATURE: -20°C to +70°C

PHYSICAL DATA													ELECTRICAL DATA		
Nominal Cross Sectional Area of Conductor	Min. and Max. Diameter of Each Strand	Nominal Insulation Thickness	UNARMOUR			STEEL WIRE ARMOUR			STEEL TAPE ARMOUR			Minimum DC Resistance of Conductor at 20°C	Current Carrying Capacity		
			TYPE: NYY-1/YBY-1			TYPE: NYRY-1/YRY-1			TYPE: NYBY-1/YBY-1				In Ground at 30°C	In Open Air at 35°C	
			Nominal Sheath Thickness	Approx. Overall Diameter	Approx. Weight of Cable	Nominal Sheath Thickness	Approx. Overall Diameter	Approx. Weight of Cable	Nominal Sheath Thickness	Approx. Overall Diameter	Approx. Weight of Cable				
mm <sup>2</sup>	No./mm	mm	mm	mm	kg/km	mm	mm	kg/km	mm	mm	kg/km	D/km	Amps	Amps	
2CX1.0	7/0.44	0.80	1.80	11.40	108	1.80	13.80	321	---	---	---	18.50	13	15	
2CX1.5	7/0.53	0.80	1.80	12.00	191	1.80	14.20	353	---	---	---	12.10	25	18	
2CX2.5	7/0.67	0.80	1.80	12.80	229	1.80	15.00	404	---	---	---	7.41	34	27	
2CX4.0	7/0.85	1.00	1.80	14.80	317	1.80	17.50	635	---	---	---	4.81	44	35	
3CX1.0	7/0.44	0.80	1.80	10.50	195	1.80	14.30	344	---	---	---	18.50	11	12	
3CX1.5	7/0.53	0.80	1.80	11.10	158	1.80	14.90	382	---	---	---	12.10	22	16	
3CX2.5	7/0.67	0.80	1.80	12.00	201	1.80	15.80	441	---	---	---	7.41	30	23	
3CX4.0	7/0.85	1.00	1.80	14.10	280	1.80	18.80	697	---	---	---	4.81	38	32	
4CX1.0	7/0.44	0.80	1.80	11.20	158	1.80	15.00	398	---	---	---	18.50	11	12	
4CX1.5	7/0.53	0.80	1.80	11.80	180	1.80	15.70	429	---	---	---	12.10	22	16	
4CX2.5	7/0.67	0.80	1.80	12.80	249	1.80	17.80	808	---	---	---	7.41	30	28	
4CX4.0	7/0.85	1.00	1.80	15.80	859	1.80	20.00	801	---	---	---	4.81	38	32	
5CX1.0	7/0.44	0.80	1.80	12.80	184	1.80	18.70	526	---	---	---	18.50	11	10	
5CX1.5	7/0.53	0.80	1.80	13.80	222	1.80	17.50	587	---	---	---	12.10	18	13	
5CX2.5	7/0.67	0.80	1.80	18.80	280	1.80	18.80	688	---	---	---	7.41	24	18	
5CX4.0	7/0.85	1.00	1.80	16.50	423	1.80	21.30	808	---	---	---	4.81	31	25	
6CX1.0	7/0.44	0.80	1.80	12.80	218	1.80	17.80	578	---	---	---	18.50	11	8	
6CX1.5	7/0.53	0.80	1.80	13.80	258	1.80	18.50	658	---	---	---	12.10	17	12	
6CX2.5	7/0.67	0.80	1.80	15.00	385	1.80	19.70	772	---	---	---	7.41	22	18	
6CX4.0	7/0.85	1.00	1.80	18.80	498	1.80	28.40	1185	1.80	20.20	884	4.81	29	23	
7CX1.0	7/0.44	0.80	1.80	12.80	220	1.80	17.80	595	---	---	---	18.50	10	8	
7CX1.5	7/0.53	0.80	1.80	13.80	250	1.80	18.50	698	---	---	---	12.10	18	12	
7CX2.5	7/0.67	0.80	1.80	15.00	354	1.80	18.70	790	---	---	---	7.41	21	17	
7CX4.0	7/0.85	1.00	1.80	18.80	526	1.80	23.40	1154	1.80	20.20	714	4.81	27	22	
8CX1.0	7/0.44	0.80	1.80	13.70	245	1.80	18.40	634	---	---	---	18.50	9	7	
8CX1.5	7/0.53	0.80	1.80	14.70	301	1.80	19.40	728	---	---	---	12.10	15	11	
8CX2.5	7/0.67	0.80	1.80	16.00	398	1.80	20.70	858	---	---	---	7.41	20	16	
8CX4.0	7/0.85	1.00	1.80	19.80	593	1.80	24.70	1287	1.80	21.50	784	4.81	25	20	
10CX1.0	7/0.44	0.80	1.80	14.80	292	1.80	18.80	718	---	---	---	18.50	8	6	
10CX1.5	7/0.53	0.80	1.80	15.80	357	1.80	20.80	818	---	---	---	12.10	13	10	
10CX2.5	7/0.67	0.80	1.80	17.40	475	1.80	22.10	985	1.80	19.50	858	7.41	18	14	
10CX4.0	7/0.85	1.00	1.80	21.10	718	1.80	28.50	1472	1.80	23.80	940	4.81	29	19	

## 600/1000V NYY-1/NYRY-1/NYBY-1/YBY-1



POLY CABLES BANGLADESH

### CONSTRUCTION

- |                   |   |               |
|-------------------|---|---------------|
| 1. CONDUCTOR      | Solid / Circular Plain Annealed Copper, Class-1 & 2 to IEC 60228        |               |
| 2. INSULATION     | Polyvinyl Chloride Compound (PVC), Type A to IEC 60502-1                |               |
| 3. FILLER         | Polypropylene Filler (Optional)   |               |
| 4. CORE BINDER    | Polypropylene Tape (Optional)   |               |
| 5. INNER COVERING | PVC Compound of ST1 to IEC 60502-1                                      | Color ■ Black |
| 6. ARMOUR         | Round Galvanized Steel Wire / Flat Galvanized Steel Tape to IEC 60502-1 |               |
| 7. BINDER         | Polypropylene Tape (Optional)   |               |
| 8. OUTER SHEATH   | PVC/FR-PVC/FRLS-PVC Compound of ST1 to IEC 60502-1                      | Color ■ Black |

### APPLICATION

Suitable for use as a control cables, indoors, outdoors, in cable ducts or Tray or underground and in water for remote or auto control of electrical facilities at power plant or factory, etc., for continuous permissible service voltage of 720/1200 volts.

STANDARD: BDS 901, VDE 0276-603, IEC 60502-1, IEC 60332, IEC 61034

VOLTAGE GRADE: 600/1000 (1200) V

OPERATING TEMPERATURE: -20°C to +70°C

PHYSICAL DATA												ELECTRICAL DATA		
Nominal Cross Sectional Area of Conductor	Nominal Diameter of Each Strand	Nominal Insulation Thickness	UNARMOUR			STEEL WIRE ARMOUR			STEEL TAPE ARMOUR			Max DC Resistance at 20°C	Current Carrying Capacity	
			TYPE NYY-1/YBY-1			TYPE NYRY-1/YRY-1			TYPE NYBY-1/YBY-1				In Ground at 30°C	In Open Air at 35°C
			Nominal Sheath Thickness	Approx. Overall Diameter	Approx. Weight of Cable	Nominal Sheath Thickness	Approx. Overall Diameter	Approx. Weight of Cable	Nominal Sheath Thickness	Approx. Overall Diameter	Approx. Weight of Cable			
mm <sup>2</sup>	mm	mm	mm	mm	kg/km	mm	mm	kg/km	mm	mm	kg/km	Ω/km	Amps	Amps
120x1.0	7/0.44	0.80	1.80	16.90	938	1.80	20.60	797	---	---	---	18.50	7	5
120x1.5	7/0.59	0.80	1.80	17.10	417	1.80	22.50	1034	1.00	19.90	594	12.10	12	8
120x2.5	7/0.87	0.80	1.80	16.70	557	1.80	24.10	1292	1.80	20.90	752	7.41	10	18
120x4.0	7/0.85	1.00	1.80	22.70	842	1.80	28.30	1889	1.80	24.90	1080	4.51	21	17
140x1.0	7/0.44	0.80	1.80	16.80	377	1.80	21.50	883	---	---	---	18.50	8	4
140x1.5	7/0.59	0.80	1.80	18.10	471	1.80	23.50	1126	1.80	20.90	650	12.10	11	8
140x2.5	7/0.87	0.80	1.80	19.80	632	1.80	25.20	1345	1.80	22.10	845	7.41	15	12
160x1.0	7/0.44	0.80	1.80	17.70	421	1.80	20.10	1058	1.80	19.90	608	16.50	5	4
160x1.5	7/0.59	0.80	1.80	19.00	524	1.80	24.50	1205	1.80	21.30	727	12.10	11	8
160x2.5	7/0.87	0.90	1.80	20.90	711	1.80	26.00	1463	1.80	23.10	930	7.41	14	11
180x1.0	7/0.44	0.80	1.80	18.90	484	1.80	24.30	1160	1.80	21.10	681	16.50	4	3
180x1.5	7/0.59	0.80	1.80	20.40	609	1.80	25.80	1342	1.80	22.50	822	12.10	10	7
180x2.5	7/0.87	0.80	1.80	22.40	826	1.80	27.80	1642	1.80	24.60	1081	7.41	13	11
210x1.0	7/0.44	0.80	1.80	19.70	528	1.80	25.00	1235	1.80	21.90	753	16.50	4	3
210x1.5	7/0.59	0.80	1.80	21.20	661	1.80	26.70	1436	1.80	23.50	869	12.10	9	7
210x2.5	7/0.87	0.80	1.80	23.30	899	1.80	28.80	1760	1.80	25.60	1150	7.41	13	10
240x1.0	7/0.44	0.80	1.80	20.70	587	1.80	26.10	1938	1.80	23.00	809	16.50	9	2
240x1.5	7/0.59	0.80	1.80	22.40	742	1.80	27.80	1552	1.80	24.50	977	12.10	9	6
240x2.5	7/0.87	0.80	1.80	24.70	1017	1.80	30.30	1936	1.80	26.90	1276	7.41	13	10
270x1.0	7/0.44	0.80	1.80	21.70	648	1.80	27.10	1437	1.80	24.00	881	16.50	3	2
270x1.5	7/0.59	0.80	1.80	23.50	822	1.80	29.20	1691	1.80	25.70	1088	12.10	8	8
270x2.5	7/0.87	0.80	1.80	25.90	1127	2.00	31.70	2100	1.80	28.10	1400	7.41	11	9
300x1.0	7/0.44	0.80	1.80	22.70	711	1.80	28.10	1938	1.80	24.90	949	16.50	3	1
300x1.5	7/0.59	0.80	1.80	24.50	899	1.80	30.30	1906	1.80	26.80	1189	12.10	8	6
300x2.5	7/0.87	0.80	1.80	27.10	1241	2.00	33.70	2461	1.80	29.50	1549	7.41	10	8
370x1.0	7/0.44	0.80	1.80	24.70	849	1.80	30.30	1768	1.80	27.00	1115	16.50	3	1
370x1.5	7/0.59	0.80	1.80	26.80	1085	2.00	32.80	2098	1.80	29.30	1387	12.10	8	5
370x2.5	7/0.87	0.80	1.80	28.80	1612	2.10	36.80	2808	2.00	32.80	1873	7.41	9	7
480x1.0	7/0.44	0.80	1.80	27.60	1070	2.00	34.20	2918	1.80	30.30	1874	16.50	2	1
480x1.5	7/0.59	0.80	1.80	30.20	1867	2.10	37.20	2788	2.00	33.90	1752	12.10	8	3
480x2.5	7/0.87	0.80	2.00	33.60	1936	2.20	40.60	3520	2.10	38.70	2448	7.41	7	5
610x1.0	7/0.44	0.80	1.90	30.70	1389	2.10	37.80	3772	2.00	33.80	1712	16.50	1	1
610x1.5	7/0.59	0.80	2.00	33.70	1739	2.20	40.70	3922	2.10	36.60	2251	12.10	4	2
610x2.5	7/0.87	0.80	2.10	37.50	2432	2.40	45.70	4588	2.20	40.80	3021	7.41	5	3

**600/1000V NYY-FIR / NAPP-FIR OR YY-FIR / APP-FIR  
SINGLE CORE (CU or ALU/Mica Tape/FR-PVC/FR-PVC)  
FR-PVC INSULATED AND FR-PVC SHEATHED SINGLE CORE FIRE SURVIVAL CABLE**



**CONSTRUCTION**

- 1. CONDUCTOR : Solid / Circular, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228
- 2. FIRE BARRIER : Mica Tape (Synthetic or Glass Fiber)
- 3. INSULATION : Flame Retardant (FR) PVC, Type PVA/A-FR to IEC 60502-1. Color ■ Natural
- B. OUTER SHEATH : Flame Retardant (FR) PVC, Type ST1 to IEC 60502-1
- COLOR OF SHEATH : ■ Red ■ Orange

**APPLICATION**

These cables are designed for emergency lighting, fire alarms and essential equipment in fire situations where an uninterrupted power supply has to be guaranteed. During fire, electric circuits and the associated lighting may be damaged. Power and data communications may be suspended. Human safety may depend on continued operation of lighting, elevators, fire fighting water pumps, fire alarms and ventilation fans for continuous permissible service voltage of 720/1200 Volts.

**STANDARD: BS 6387, IEC 60502-1, IEC 60331-21, IEC 61034**

**VOLTAGE GRADE: 600/1000 (1200) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA							ELECTRICAL DATA							
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Fire Barrier Tape Thickness	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable	Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity					
mm <sup>2</sup>	No./mm	mm	mm	mm	mm	kg/km	CU	ALU	CU	ALU	CU	ALU	CU	ALU
<b>SINGLE CORE</b>														
1 X 1.5 FR	1/1.38	≥ 0.10	0.80	1.40	6.2	60	51	12.10	18.10	27	21	22	18	
1 X 1.5 FR	7/0.53	≥ 0.10	0.80	1.40	6.5	64	54	12.10	18.10	27	21	22	18	
1 X 2.5 FR	1/1.78	≥ 0.10	0.80	1.40	6.8	75	60	7.41	12.10	30	28	30	25	
1 X 2.5 FR	7/0.67	≥ 0.10	0.80	1.40	7.0	78	63	7.41	12.10	30	28	30	25	
1 X 4.0 FR	7/0.85	≥ 0.10	1.00	1.40	8.0	105	80	4.01	7.41	47	36	38	32	
1 X 6.0 FR	7/1.05	≥ 0.10	1.00	1.40	8.5	132	84	3.08	4.61	58	44	50	41	
1 X 10 FR	7/1.35	≥ 0.10	1.00	1.40	8.5	180	112	1.83	3.58	78	59	69	58	
1 X 10 FR	7/1.71	≥ 0.10	1.00	1.40	10.8	250	149	1.15	1.81	100	75	84	72	
1 X 16 FR	19/1.05	≥ 0.10	1.00	1.40	10.8	355	151	1.15	1.81	100	75	84	72	
1 X 25 FR	7/2.14	≥ 0.10	1.20	1.40	12.3	380	201	0.727	1.29	130	87	125	89	
1 X 25 FR	19/1.30	≥ 0.10	1.20	1.40	12.5	388	206	0.727	1.29	130	97	125	89	
1 X 35 FR	19/1.58	≥ 0.10	1.20	1.40	13.0	470	248	0.524	0.888	155	120	160	120	
1 X 50 FR	19/1.83	≥ 0.10	1.40	1.40	14.5	620	305	0.387	0.641	185	145	195	150	
1 X 70 FR	19/2.17	≥ 0.10	1.40	1.40	16.1	840	397	0.288	0.449	225	170	245	185	
1 X 95 FR	19/2.52	≥ 0.10	1.60	1.59	18.5	1100	501	0.183	0.320	270	205	300	215	
1 X 120 FR	37/2.03	≥ 0.10	1.80	1.50	20.0	1370	619	0.153	0.263	310	250	350	260	
1 X 150 FR	37/2.27	≥ 0.10	1.80	1.50	22.0	1700	754	0.124	0.206	350	285	405	294	
1 X 185 FR	37/2.52	≥ 0.10	2.00	1.70	24.3	2075	908	0.0981	0.164	390	325	450	333	
1 X 240 FR	61/2.25	≥ 0.10	2.20	1.80	27.5	2670	1140	0.0754	0.125	450	368	555	382	
1 X 300 FR	61/2.52	≥ 0.10	2.40	1.80	30.3	3310	1391	0.0601	0.100	515	407	640	431	
1 X 400 FR	61/2.89	≥ 0.10	2.60	2.00	34.0	4840	1910	0.0470	0.0778	585	455	770	485	
1 X 500 FR	61/3.28	≥ 0.10	2.80	2.10	37.5	5378	2224	0.0335	0.0605	660	483	800	534	
1 X 630 FR	61/3.85	≥ 0.10	2.80	2.20	41.5	6880	2884	0.0283	0.0469	800	538	1030	610	
1 X 800 FR	61/4.10	≥ 0.10	2.80	2.30	48.3	8600	3558	0.0221	0.0367	845	---	1100	---	
1 X 1000 FR	61/4.60	≥ 0.10	3.00	2.50	53.5	10760	4471	0.0178	0.0291	1095	---	1310	---	

**600/1000V NYY-FIR / NAPP-FIR OR YY-FIR / APP-FIR  
MULTI CORE (CU or ALU/Mica Tape/FR-PVC/FR-PVC)  
FR-PVC INSULATED AND FR-PVC SHEATHED MULTI (TWO, THREE) CORE FIRE SURVIVAL CABLE**



**CONSTRUCTION**

- 1. CONDUCTOR : Solid / Circular, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228
- 2. FIRE BARRIER : Mica Tape (Synthetic or Glass Fiber)
- 3. INSULATION : Flame Retardant (FR) PVC, Type PVA/A-FR to IEC 60502-1
- COLOR OF INSULATION : For Two Core Cables : ■ Red ■ Black  
For Three Core Cables : ■ Red ■ Yellow ■ Blue
- 4. FILLER : Polypropylene Filler (Optional)
- 5. CORE BINDER : Polypropylene Tape (Optional)
- 6. INNER COVERING : PVC Compound of ST1 to IEC 60502-1 (Optional) Color: ■ Black
- 7. OUTER SHEATH : Flame Retardant (FR) PVC, Type ST1 to IEC 60502-1
- COLOR OF SHEATH : ■ Red ■ Orange

**APPLICATION**

These cables are designed for emergency lighting, fire alarms and essential equipment in fire situations where an uninterrupted power supply has to be guaranteed.

During fire, electric circuits and the associated lighting may be damaged. Power and data communications may be suspended. Human safety may depend on continued operation of lighting, elevators, fire fighting water pumps, fire alarms and ventilation fans for continuous permissible service voltage of 720/1200 Volts.

**STANDARD: BS 6387, IEC 60502-1, IEC 60331-21, IEC 61034**

**VOLTAGE GRADE: 600/1000 (1200) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA						ELECTRICAL DATA							
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Fire Barrier Tape Thickness	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity			
						CU	ALU	CU	ALU	CU	ALU	CU	ALU
mm <sup>2</sup>	No./mm	mm	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amps	Amps	Amps	Amps
<b>TWO CORE</b>													
2 x 1.5 FR	1/1.38	± 0.10	0.80	1.80	11.0	165	147	12.10	18.10	25	18	18	18
2 x 1.5 FM	7/0.58	± 0.10	0.90	1.80	11.2	170	151	12.10	18.10	25	18	18	18
2 x 2.5 FR	1/1.78	± 0.10	0.90	1.80	12.4	205	174	7.41	12.10	34	25	27	21
2 x 2.5 FM	7/0.87	± 0.10	0.80	1.80	12.8	215	188	7.41	12.10	34	26	27	21
2 x 4.0 FR	7/0.85	± 0.10	1.00	1.80	14.5	305	255	4.81	7.41	44	33	35	29
2 x 4.0 FM	7/1.05	± 0.10	1.00	1.80	15.8	375	288	3.08	4.81	55	42	45	38
2 x 10 FR	7/1.35	± 0.10	1.00	1.80	17.5	508	388	1.88	3.08	74	58	62	51
2 x 16 FR	7/1.71	± 0.10	1.00	1.80	18.5	681	488	1.15	1.81	87	74	84	64
2 x 25 FR	7/2.14	± 0.10	1.20	1.80	23.5	1044	725	0.727	1.20	125	97	110	85
2 x 35 FR	18/1.53	± 0.10	1.20	1.80	28.0	1330	888	0.524	0.888	150	118	140	108
<b>THREE CORE</b>													
3 x 1.5 FR	1/1.38	± 0.10	0.80	1.80	11.5	195	167	12.10	18.10	22	16	16	13
3 x 1.5 FM	7/0.58	± 0.10	0.80	1.80	11.8	200	171	12.10	18.10	22	16	16	13
3 x 2.5 FR	1/1.78	± 0.10	0.80	1.80	12.7	250	208	7.41	12.10	30	22	23	18
3 x 2.5 FM	7/0.87	± 0.10	0.80	1.80	13.2	260	212	7.41	12.10	30	22	23	18
3 x 4.0 FR	7/0.85	± 0.10	1.00	1.80	15.0	360	288	4.81	7.41	38	28	32	25
3 x 4.0 FM	7/1.05	± 0.10	1.00	1.80	16.4	480	344	3.08	4.81	48	37	41	33
3 x 10 FR	7/1.35	± 0.10	1.00	1.80	18.5	825	418	1.88	3.08	64	49	56	44
3 x 16 FR	7/1.71	± 0.10	1.00	1.80	21.0	920	813	1.15	1.81	83	64	75	58
3 x 25 FR	7/2.14	± 0.10	1.20	1.80	25.0	1320	887	0.727	1.20	110	82	88	76
3 x 35 FR	18/1.53	± 0.10	1.20	1.80	24.7	1400	781	0.524	0.888	130	98	120	94
3 x 50 FR	18/1.85	± 0.10	1.40	1.80	25.8	1815	858	0.387	0.641	155	118	150	114
3 x 70 FR	18/2.17	± 0.10	1.40	2.00	28.2	2444	1101	0.288	0.443	180	148	180	142
3 x 95 FR	18/2.52	± 0.10	1.80	2.10	33.4	3950	1534	0.198	0.320	225	178	220	188
3 x 120 FR	37/2.03	± 0.10	1.80	2.20	36.8	4110	1818	0.158	0.258	250	201	220	198
3 x 160 FR	37/2.37	± 0.10	1.80	2.30	38.5	6100	2238	0.124	0.206	285	220	305	228
3 x 185 FR	37/2.62	± 0.10	2.00	2.50	43.5	6260	2724	0.0881	0.164	330	256	350	262
3 x 240 FR	37/2.80	± 0.10	2.20	2.70	48.8	7800	3264	0.0754	0.125	385	300	410	305
3 x 300 FR	37/3.28	± 0.10	2.40	2.90	54.1	10000	4184	0.0601	0.100	425	332	470	348

**600/1000V NYY-FIR / NAPP-FIR OR YY-FIR / AYY-FIR  
MULTI CORE (CU or ALU/Mica Tape/FR-PVC/FR-PVC)  
FR-PVC INSULATED AND FR-PVC SHEATHED MULTI (THREE AND HALF) CORE FIRE SURVIVAL CABLE**

POLY CABLES BANGLADESH



POLY CABLES BANGLADESH

**CONSTRUCTION**

- 1. CONDUCTOR : Solid / Circular, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228
- 2. FIRE BARRIER : Mica Tape (Synthetic or Glass Fiber)
- 3. INSULATION : Flame Retardant (FR) PVC, Type PVA/A-FR to IEC 60502-1
- COLOR OF INSULATION : For Three & Half Core Cables ■ Red ■ Yellow ■ Blue ■ Black
- 4. FILLER : Polypropylene Filler (Optional)Black
- 5. CORE BINDER : Polypropylene Tape (Optional)
- 6. INNER COVERING : PVC Compound of ST1 to IEC 60502-1 (Optional) Color ■ Black
- 7. OUTER SHEATH : Flame Retardant (FR) PVC, Type ST1 to IEC 60502-1
- COLOR OF SHEATH : ■ Red ■ Orange

**APPLICATION**

These cables are designed for emergency lighting, fire alarms and essential equipment in fire situations where an uninterrupted power supply has to be guaranteed. During fire, electric circuits and the associated lighting may be damaged. Power and data communications may be suspended. Human safety may depend on continued operation of lighting, elevators, fire fighting water pumps, fire alarms and ventilation fans for continuous permissible service voltage of 720/1200 Volts.

**STANDARD: BS 6387, IEC 60502-1, IEC 60331-21, IEC 61034**

**VOLTAGE GRADE: 600/1000 (1200) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA							ELECTRICAL DATA						
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Fire Barrier Tape Thickness	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable	Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity				
							CU	ALU	In Gained at 30°C		In Open Air at 35°C		
mm <sup>2</sup>	No./mm	mm	mm	mm	mm	kg/km	kg/km	Ω/km	Ω/km	Amps	Amps	Amps	Amps
<b>THREE &amp; HALF CORE</b>													
3 X 25 FIM	7/2.14	± 0.10	1.20	1.80	27.0	1400	810	0.727	1.20	110	82	86	76
1 X 18 FIM	7/1.71		1.00					1.15	1.81				
3 X 95 SIM	19/1.59	± 0.10	1.20	1.80	26.2	1680	820	0.524	0.868	190	99	120	94
1 X 16 FIM	7/1.71		1.00					1.15	1.81				
3 X 50 SIM	19/1.83	± 0.10	1.40	1.50	28.5	2180	1200	0.387	0.641	155	118	150	114
1 X 25 FIM	7/2.14		1.20					0.727	1.20				
3 X 70 SIM	19/2.17	± 0.10	1.40	2.00	32.5	2810	1605	0.298	0.443	160	146	190	142
1 X 35 FIMC	19/1.59		1.20					0.524	0.868				
3 X 85 SIM	19/2.52	± 0.10	1.80	2.20	38.0	3850	3000	0.193	0.320	225	178	230	168
1 X 50 FIMC	19/1.83		1.40					0.387	0.641				
3 X 120 SIM	37/2.09	± 0.10	1.80	2.30	40.8	5060	3380	0.153	0.253	260	201	270	198
1 X 70 FIMC	19/2.17		1.40					0.268	0.443				
3 X 150 SIM	37/2.27	± 0.10	1.80	2.40	45.0	6020	3830	0.124	0.208	285	228	305	228
1 X 70 FIMC	19/2.17		1.40					0.268	0.443				
3 X 185 SIM	37/2.52	± 0.10	2.00	2.60	50.5	7450	4510	0.0881	0.154	330	258	350	282
1 X 95 FIMC	19/2.52		1.80					0.193	0.320				
3 X 240 SIM	37/2.88	± 0.10	2.20	2.80	58.0	8660	4880	0.0754	0.125	385	300	410	305
1 X 120 FIMC	37/2.09		1.80					0.153	0.253				
3 X 300 SIM	37/3.29	± 0.10	2.40	3.00	68.0	12100	5404	0.0601	0.100	425	332	470	348
1 X 150 FIMC	37/2.27		1.80					0.124	0.208				



**600/1000V NYY-FIR / NAYY-FIR OR YY-FIR / AYY-FIR  
MULTI CORE (CU or ALU/Mica Tape/FR-PVC/FR-PVC)  
FR-PVC INSULATED AND FR-PVC SHEATHED MULTI (FOUR) CORE FIRE SURVIVAL CABLE**

POLY CABLES BANGLADESH



POLY CABLES BANGLADESH

### CONSTRUCTION

- |                     |  |
|---------------------|--|
| 1. CONDUCTOR        | : Solid / Circular, Plain Annealed Copper or Aluminium, Class-1 & 2 to IEC 60228 |
| 2. FIRE BARRIER     | : Mica Tape (Synthetic or Glass Fiber)   |
| 3. INSULATION       | : Flame Retardant (FR) PVC, Type PVA/A-FR to IEC 60502-1                         |
| COLOR OF INSULATION | : For Four Core Cables ■ Red ■ Yellow ■ Blue ■ Black                             |
| 4. FILLER           | : Polypropylene Filler (Optional)  |
| 5. CORE BINDER      | : Polypropylene Tape (Optional)  |
| 6. INNER COVERING   | : PVC Compound of ST1 to IEC 60502-1 (Optional) Color ■ Black                    |
| 7. OUTER SHEATH     | : Flame Retardant (FR) PVC, Type ST1 to IEC 60502-1                              |
| COLOR OF SHEATH     | : ■ Red ■ Orange   |

### APPLICATION

These cables are designed for emergency lighting, fire alarms and essential equipment in fire situations where an uninterrupted power supply has to be guaranteed.

During fire, electric circuits and the associated lighting may be damaged. Power and data communications may be suspended. Human safety may depend on continued operation of lighting, elevators, fire fighting water pumps, fire alarms and ventilation fans for continuous permissible service voltage of 720/1200 Volts.

**STANDARD: BS 6387, IEC 60502-1, IEC 60331-21, IEC 61034**

**VOLTAGE GRADE: 600/1000 (1200) V**

**OPERATING TEMPERATURE: -20°C to +70°C**

PHYSICAL DATA							ELECTRICAL DATA						
Nominal Cross Sectional Area of Conductor	Number and Diameter of Each Strand	Fire Barrier Tape Thickness	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approximate Weight of Cable		Max. DC Resistance of Conductor at 20°C		Current Carrying Capacity			
						CU	ALU	CU	ALU	In Ground at 30°C		In Open Air at 35°C	
mm <sup>2</sup>	No./mm	mm	mm	mm	mm	kg/km	kg/100'	Ω/km	Ω/100'	Amps	Amps	Amps	Amps
<b>FOUR CORE</b>													
4 X 1.5 FR	1/1.38	≥ 0.10	0.80	1.80	12.5	230	200	12.10	18.10	22	15	15	15
4 X 1.5 FR	7/0.53	≥ 0.10	0.80	1.80	13.0	235	205	12.10	18.10	22	15	15	15
4 X 2.5 FR	1/1.78	≥ 0.10	0.80	1.80	14.0	305	250	7.41	12.10	30	22	23	19
4 X 2.5 FR	7/0.67	≥ 0.10	0.80	1.80	14.8	312	257	7.41	12.10	30	22	23	19
4 X 4.0 FR	7/0.85	≥ 0.10	1.00	1.80	16.2	430	290	4.81	7.41	38	29	32	25
4 X 6.0 FR	7/1.05	≥ 0.10	1.00	1.80	17.5	540	345	3.08	4.81	48	37	41	33
4 X 10 FR	7/1.35	≥ 0.10	1.00	1.80	20.0	760	490	1.83	3.08	64	49	50	44
4 X 16 FR	7/1.71	≥ 0.10	1.00	1.80	23.2	1135	680	1.15	1.83	83	64	75	55
4 X 25 FR	7/2.14	≥ 0.10	1.20	1.80	27.0	1600	900	0.727	1.20	110	82	90	70
4 X 35 FR	19/1.53	≥ 0.10	1.20	1.80	28.4	1800	975	0.524	0.868	130	99	120	94
4 X 50 FR	19/1.83	≥ 0.10	1.40	1.90	29.0	2480	1310	0.387	0.641	155	119	150	114
4 X 70 FR	19/2.17	≥ 0.10	1.40	2.10	33.5	3250	1700	0.288	0.443	190	148	190	142
4 X 95 FR	19/2.52	≥ 0.10	1.60	2.20	38.4	4400	2180	0.193	0.320	225	170	230	169
4 X 120 FR	37/2.03	≥ 0.10	1.60	2.40	41.0	5500	2805	0.153	0.253	260	201	270	198
4 X 150 FR	37/2.27	≥ 0.10	1.80	2.50	45.2	6890	3710	0.124	0.206	288	228	305	228
4 X 185 FR	37/2.52	≥ 0.10	2.00	2.70	50.5	8350	4650	0.0951	0.164	330	256	350	282
4 X 240 FR	37/2.80	≥ 0.10	2.20	2.90	58.0	10700	6025	0.0754	0.125	385	300	410	305
4 X 300 FR	37/3.28	≥ 0.10	2.40	3.10	64.0	13700	7950	0.0601	0.100	425	332	470	343

NOTE: 0.5mm<sup>2</sup> to 25mm<sup>2</sup>: Circular Conductor; 35mm<sup>2</sup> to Above: Sector Shaped / Compacted Conductor

POLY CABLES

**WELDING CABLES**  
**SINGLE CORE ( CU/PVC TAPE/ PVC)**



**CONSTRUCTION**

- 1. CONDUCTOR : Flexible, Plain annealed Copper; Class 6 to IEC 60228
- 2. CORE BINDER : PVC or Non-woven Tape
- 3. INSULATION : PVC, PVC/A to IEC 60502-1
- COLOR OF INSULATION ■ Black

**APPLICATION**

Easy to use inside visible or embedded piping. Direct burial installation or outdoors in wet environments as well as contact with hot parts is not allowed. It must not be subject to thermic radiation.

**STANDARD: IEC 60502-1**  
**VOLTAGE GRADE: 200 V**

PHYSICAL DATA				ELECTRICAL DATA			
Nominal Cross Sectional Area of Conductor	Shape of Conductor	No. of strands & Diameter of wire	Nominal thickness of insulation	Approx. Overall Diameter	Approximate Weight of Cable	Max. DC Resistance of Conductor at 20°C	Current Carrying Capacity at 30°C ambient temp.
mm <sup>2</sup>	mm	nos./mm	mm	mm	kg/km	Ω/km	Amps
<b>SINGLE CORE</b>							
1 × 25	mm	770/0.20	2.0	12.4	340	0.780	159
1 × 35	mm	1084/0.20	2.0	13.5	440	0.554	215
1 × 50	mm	709/0.30	2.0	15.2	595	0.386	294
1 × 70	mm	986/0.30	2.1	17.4	825	0.272	380
1 × 95	mm	1395/0.30	2.1	18.2	1060	0.208	405
1 × 120	mm	1690/0.3	2.2	21.4	1320	0.161	473
1 × 150	mm	2072/0.30	2.2	22.5	1610	0.129	545
1 × 185	mm	1460/0.40	2.2	25.2	2000	0.106	615
1 × 240	mm	1691/0.40	2.3	27.9	2550	0.0801	720