

Application

Medium voltage cables for distribution networks. They are suitable for laying Indoor, tunnel, cable trench, shaft or buried laying, The cable can withstand mechanical external forces and a certain tensile force, it widely used in transformer stations, electric power plants and industrial plants.

Construction

- Conductor :Copper, class 2, circular compacted conductors
- Conductor screen:Non-metallic,semi-conducting compound
- Insulation:Cross-Linked polyethylene XLPE
- Insulation screen:Non-metallic,semi-conducting compound
- Metallic screen:Copper tape
- Inner sheath:Polyvinyl chloride PVC
- Armour: Non-magnetic steel tape
- Outer sheath: Polyvinyl chloride PVC

Chaircteritics

Good electrical and mechanical properties. Minimal dielectric loss, high insulation resistance. The PVC outer sheath allows adequate resistance to grease, oil and abrasion.

Standards

MV Cable Standard	MV Standard Description
IEC 60502-2	Cables with extruded insulation with voltage rating between 6kV and 30kV
N2XSH / N2XS(F)H / N2XS(FL)H NA2XSH / NA2XS(F)H / NA2XS(FL)H	Single core Copper (N) or Aluminium (NA) XLPE/LSZH cables in accordance with IEC60502-2 with optional single or dual waterblocking. Available as 3-core variants under references N2XSEH / NA2XSEH.
N2XS2Y / N2XS(F)2Y / N2XS(FL)2Y NA2XS2Y / NA2XS(F)2Y / NA2XS(FL)2Y	Single core Copper (N) or Aluminium (NA) XLPE/MDPE cables in accordance with IEC60502-2 with optional single or dual waterblocking. Available as 3-core variants under references N2XSE2Y / NA2XSE2Y.
N2XSY NA2XSY	Single core Copper (N) or Aluminium (NA) XLPE/PVC cables in accordance with IEC60502-2. Available as 3-core variants under references N2XSEY.
BS6622	Armoured cable with PVC outer sheathing and voltage rating from 3.3/6kV to 19/33kV - AWA single core, SWA multicore.
BS7835	Armoured cable with LSZH outer sheathing and voltage rating from 3.3/6kV to 19/33kV - AWA single core, SWA multicore.
BS7870-4.10	Single core cables for distribution utilities with extruded insulation up to and including 11kV and 33kV
HD620	Cables with extruded insulation and voltage ratings 3.6/6 (7.2)kV to 20.8/36 (42)kV (often seen in conjunction with IEC60502-2)
DIN VDE 0276 Part 620	Distribution cables of nominal voltages 3.6kV to 20.8/36kV

Parameter
Aluminium Medium Voltage Power Cables Types

	XLPE Insulation PVC Sheath	XLPE Insulation PE Sheath	Cross Section
Twisted Cables 2-4 cores	NFA2XSY(AI / XLPE / CWS / PVC) (Aluminium Conductor, XLPE Insulated, Copper Wire Screen, PVC Sheathed)	NFA2XS2Y(AI / XLPE / CWS / PE) (Aluminium Conductor, XLPE Insulated, Copper Wire Screen, PE Sheathed)	up to 18/30 kV: 35-300
2-3 cores + steel messenger	NFA2XSY-T (AI / XLPE / CWS / PVC) (Aluminium Conductor, XLPE Insulated, Copper Wire Screen, PVC Sheathed with Galvanized Steel Support Messenger)	NFA2XSY-T(AI / XLPE / CWS / PVC) (Aluminium Conductor, XLPE Insulated, Copper Wire Screen, PVC Sheathed with Galvanized Steel Support Messenger)	up to 18/30 kV: (50-240)+95
Single Core + copper tape screen	NA2XSY(AI / XLPE / CTS / PVC) (Aluminium Conductor, XLPE Insulated, Copper Tape Screen, PVC Sheathed)	NA2XS2Y(AI / XLPE / CTS / PE) (Aluminium Conductor, XLPE Insulated, Copper Tape Screen, PE Sheathed)	3.6/6 kV:25-800 6/10 kV: 25-800 8.7/15 kV: 25-800 12/20 kV: 35-800 18/30 kV: 50-800
+ copper wire screen	NA2XC2Y(AI / XLPE / CWS / PVC) (Aluminium Conductor, XLPE Insulated, Copper Wire Screen, PVC Sheathed)	NA2XC2Y(AI / XLPE / CWS / PE) (Aluminium Conductor, XLPE Insulated, Copper Wire Screen, PE Sheathed)	3.6/6 kV:25-800 6/10 kV: 25-800 8.7/15 kV: 25-800 12/20 kV: 35-800 18/30 kV: 50-800

+ aluminium tape armor	NA2XSB(AL)Y(AI / XLPE / CTS / PVC / ATA/ PVC) (Aluminium Conductor, XLPE Insulated, Copper Tape Screen, Aluminium Tape Armor, PVC Sheathed)	NA2XSB(AL)2Y(AI / XLPE / CTS / PVC / ATA/ PE) (Aluminium Conductor, XLPE Insulated, Copper Tape Screen, Aluminium Tape Armor, PE Sheathed)	3.6/6 kV:25-800 6/10 kV: 25-800 8.7/15 kV: 25-800 12/20 kV: 35-800 18/30 kV: 50-800
+ aluminium wire armor	NA2XSR(AL)Y(AI / XLPE / CTS / PVC / AWA/ PVC) (Aluminium Conductor, XLPE Insulated, Copper Tape Screen, Aluminium Wire Armor, PVC Sheathed)	NA2XSR(AL)2Y(AI / XLPE / CTS / PVC / AWA/ PE) (Aluminium Conductor, XLPE Insulated, Copper Tape Screen, Aluminium Wire Armor, PE Sheathed)	3.6/6 kV:25-800 6/10 kV: 25-800 8.7/15 kV: 25-800 12/20 kV: 35-800 18/30 kV: 50-800
Three Cores with individual copper tape screen	NA2XSEY(AI / XLPE / CTS / PVC) (Aluminium Conductor, XLPE Insulated, Copper Tape Screen, PVC Sheathed)	NA2XSE2Y(AI / XLPE / CTS / PE) (Aluminium Conductor, XLPE Insulated, Copper Tape Screen, PE Sheathed)	3.6/6 kV:25-300 6/10 kV: 25-300 8.7/15 kV: 25-300 12/20 kV: 35-300 18/30 kV: 50-300
+ steel round wire armor	NA2XSERY(AI / XLPE / CTS / PVC / SWA/ PVC) (Aluminium Conductor, XLPE Insulated, Copper Tape Screen, Galvanized Steel WireArmor, PVC Sheathed)	NA2XSER2Y(AI / XLPE / CTS / PVC / SWA/ PE) (Aluminium Conductor, XLPE Insulated, Copper Tape Screen, Galvanized Steel WireArmor, PE Sheathed)	3.6/6 kV:25-300 6/10 kV: 25-300 8.7/15 kV: 25-300 12/20 kV: 35-300 18/30 kV: 50-300
+ steel flat wire armor	NA2XSEFGbY(AI / XLPE / CTS / PVC / SFWA/ PVC) (Aluminium Conductor, XLPE Insulated, Copper Tape Screen, Galvanized Steel Flat WireArmor, PVC Sheathed)	NA2XSEFGb2Y(AI / XLPE / CTS / PVC / SFWA/ PE) (Aluminium Conductor, XLPE Insulated, Copper Tape Screen, Galvanized Steel Flat WireArmor, PE Sheathed)	3.6/6 kV:25-300 6/10 kV: 25-300 8.7/15 kV: 25-300 12/20 kV: 35-300 18/30 kV: 50-300
+ double steel tape armor	NA2XSEBY(AI / XLPE / CTS / PVC / STA/ PVC) (Aluminium Conductor, XLPE Insulated, Copper Tape Screen, Galvanized Steel TapeArmor, PVC Sheathed)	NA2XSEB2Y(AI / XLPE / CTS / PVC / STA/ PE) (Aluminium Conductor, XLPE Insulated, Copper Tape Screen, Galvanized Steel TapeArmor, PE Sheathed)	3.6/6 kV:25-300 6/10 kV: 25-300 8.7/15 kV: 25-300 12/20 kV: 35-300 18/30 kV: 50-300