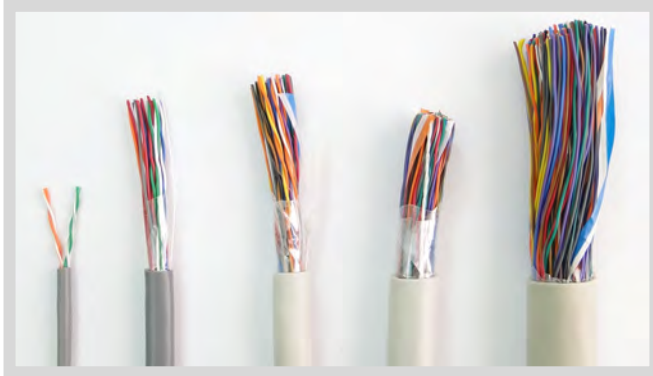
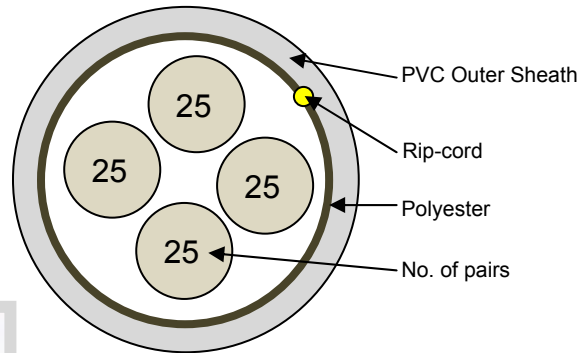


➤ Cat.3 UTP Indoor Cables

- 1.0-16.0 MHz Impedance: 100 ±15 ohms
- Pair to ground capacitance unbalance (PF/100m) 330Max
- Conductor DC resistance unbalance (%)max 5.0
- DC Resistance 20°C (ohm/100m) max 9.5
- Test object: jacket
- Test material: PVC (CM)
- Before Aging tensile strength (Mpa) ≥13.5
- Aging period (°Cxhrs): 100x24x10d
- Before Aging elongation (%): ≥350
- After Aging elongation (%): ≥300
- Cold bend (-20±2 °Cx 4hrs): no cracks



Cable construction:

Conductor	Bare Solid Copper (0.5mm ±0.005mm)							
Insulatio	HDPE (diameter: 0.87±0.02mm)							
Test Standard	TIA/EIA 568B & YD/T1019-2001							
Outer Sheath	PVC							
Outer Sheath Thickness	1.0±0.2mm							
Outer Sheath Diameter (mm)	2 pair	4 pair	10 pair	20 pair	25 pair	30 pair	50 pair	100 pair
	3.9	4.1	8.5	10	11	12	14.5	19
Packing	Wooden Drum (500 Mtr)	Wooden Drum (500 Mtr)	Wooden Drum (500 Mtr)	Wooden Drum (500 Mtr)	Wooden Drum (500 Mtr)	Wooden Drum (500 Mtr)	Wooden Drum (500 Mtr)	Wooden Drum (500 Mtr)
Weight (Approx)	10 kg	15 kg	80 kg	90 kg	100 kg	115 kg	170 kg	300 kg

Technical performance (100m):

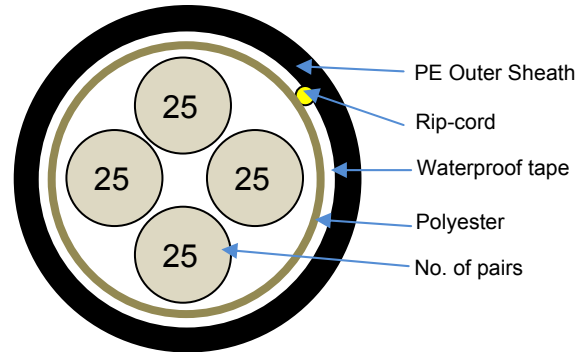
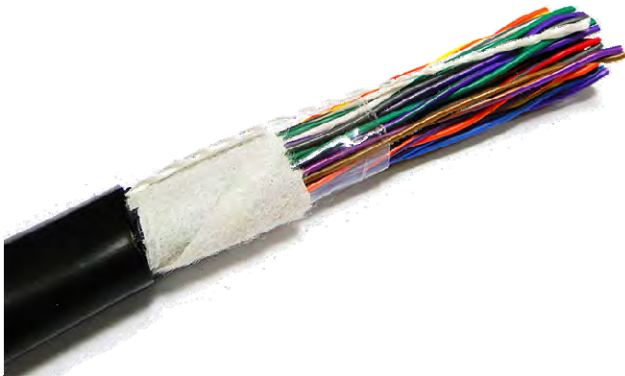
FREQUENCY MHz	ATT (≤dB)	RL (≥dB)	DELAY (≤ns)	NEXT (≥dB)	PSNEXT (≥dB)	ELFEXT (≥dB)	PSELFEXT (≥dB)
1.0	2.6	12.0	570.00	41.3	41.3	39.0	39.0
4.0	5.6	12.0	552.00	32.3	32.3	26.9	26.9
8.0	8.5	12.0	546.73	27.8	27.8	20.9	20.9
10.0	9.7	12.	545.38	26.3	26.3	19.0	19.0
16.0	13.1	9.95	543.00	23.3	23.3	14.9	14.9

Ordering Information:

No. of pairs	PVC	LSOH
2	NB-COP-195	NB-COP-195-LSOH
4	NB-COP-196	NB-COP-196-LSOH
10	NB-COP-194	NB-COP-194-LSOH
20	NB-COP-227	NB-COP-227-LSOH
25	NB-COP-087	NB-COP-087-LSOH
30	NB-COP-240	NB-COP-240-LSOH
50	NB-COP-088	NB-COP-088-LSOH
100	NB-COP-089	NB-COP-089-LSOH

➤ Cat.3 UTP Outdoor Cables

- 1.0-16.0 MHz Impedance: 100 ±15 ohms
- Pair to ground capacitance unbalance (PF/100m) 330Max
- Conductor DC resistance unbalance (%)max 5.0
- DC Resistance 20°C (ohm/100m) max 9.5
- Test object: jacket
- Test material: PE
- Before Aging tensile strength (Mpa) ≥13.5
- Aging period (°Cxhrs): 100x24x10d
- Before Aging elongation (%): ≥350
- After Aging elongation (%): ≥300
- Cold bend (-20±2 °Cx 4hrs): no cracks



Cable construction:

Conductor	Bare Solid Copper (0.5mm ±0.005mm)							
Insulation	HDPE (diameter: 0.87±0.02mm)							
Test Standard	TIA/EIA 568B & YD/T1019-2001							
Outer Sheath	Black LDPE							
Outer Sheath Thickness	1.0±0.2mm							
Outer Sheath Diameter (mm)	2 pair	4 pair	10 pair	20 pair	25 pair	30 pair	50 pair	100 pair
	4.1 ±0.8	4.5 ±0.8	9 ±0.8	10.6 ±0.8	11.6 ±0.8	12.0 ±0.8	15.2 ±0.8	20.4 ±0.8
Packing	Wooden Drum (500 Mtr)	Wooden Drum (500 Mtr)	Wooden Drum (500 Mtr)	Wooden Drum (500 Mtr)	Wooden Drum (500 Mtr)	Wooden Drum (500 Mtr)	Wooden Drum (500 Mtr)	Wooden Drum (500 Mtr)
Weight (Approx)	12 kg	17 kg	83 kg	95 kg	105 kg	120 kg	180 kg	315 kg

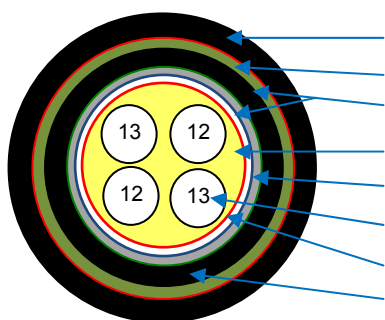
Technical performance (100m):

FREQUENCY MHz	ATT (≤dB)	RL (≥dB)	DELAY (≤ns)	NEXT (≥dB)	PSNEXT (≥dB)	ELFEXT (≥dB)	PSELFEXT (≥dB)
1.0	2.6	12.0	570.00	41.3	41.3	39.0	39.0
4.0	5.6	12.0	552.00	32.3	32.3	26.9	26.9
8.0	8.5	12.0	546.73	27.8	27.8	20.9	20.9
10.0	9.7	12.0	545.38	26.3	26.3	19.0	19.0
16.0	13.1	9.95	543.00	23.3	23.3	14.9	14.9

Ordering Information:

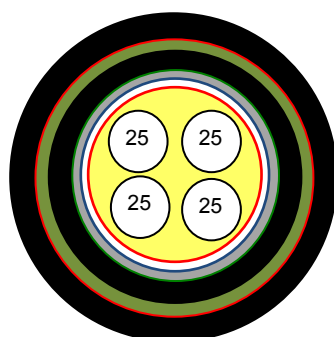
No. of pairs	P/N (PE Outer Sheath)
2	NB-COP-195-PE
4	NB-COP-196-PE
10	NB-COP-194-PE
20	NB-COP-227-PE
25	NB-COP-087-PE
30	NB-COP-240-PE
50	NB-COP-088-PE
100	NB-COP-089-PE

➤ Armored Outdoor Jelly Filled Communication Cables

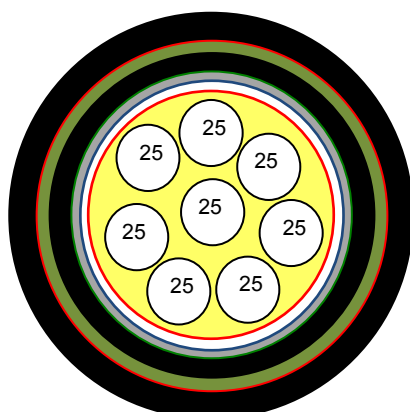


LDPE outer sheath
Corrugated steel tape
Waterproof tape
Filling compound
Co-polyester coated Aluminium tape
No. of pairs
Polyester
Inner Jacket

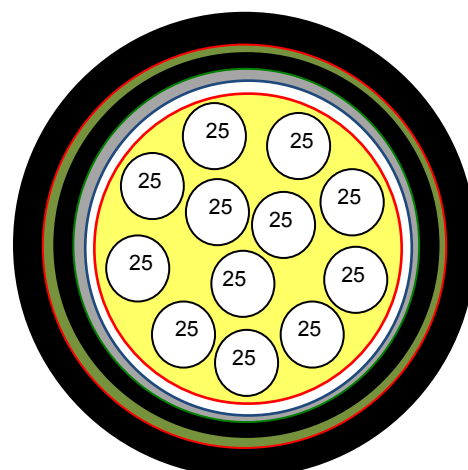
50 Pair construction



100 Pair construction



200 Pair construction



300 Pair construction

Cable construction:

Conductor	Bare Solid Copper (0.6mm)				
Insulation	Solid HDPE				
Twisting	Two single wires twisted				
Standard reference	Comply to YD/T322-1996				
Cable core	Each unit wrapped with double-color tape to form cable core				
Filler	Jelly filled in the cable core				
Cable core wrapping	Polyester wrapping tape, and then water blocking tape wrapping. Both helically wrapped.				
Armouring	Corrugated steel tape				
Shield screen	0.25mm thickness aluminium tape with plastic cover on both sides, longitude wrapped				
Outer Sheath	Black LDPE				
Outer Sheath Diameter (mm)	25 pair	50 pair	100 pair	200 pair	300 pair
	20.0mm	26.5mm	33.5mm	43.0mm	50.0mm
Weight (Approx)/km	650kg	1170kg	1810kg	2900kg	3990kg
Volume / Drum/1000Mtrs	130x40x75cm	180x80x75cm	180x80x115cm	220x110x115cm	240x120x115cm
Inner jacket	Black PE				

Cable core and jacket thickness:

Pairs	Cable Construction		Inside Jacket thickness(mm)	Outside Jacket thickness(mm)
	First layer	Second layer		
50	2*(12+13) pair		1.2	1.8
100	25 pair*4		1.2	1.8
200	25 pair*1	25 pair*7	1.2	1.8
300	25 pair*3	25 pair*9	1.2	2.0

➤ Armored Outdoor Jelly Filled Communication Cables

Electrical characteristics:

Test Items	Indicators
	0.6 mm conductor
Direct Current Resistance of single conductor (Max) ohm/km	65.3 ohm/km
Imbalance of Direct Current Resistance(Max)	5%
Insulation resistance of each single insulated conductor to other shield or connected to the earth DC 500 V	>3000M·ohm/km
Working Capacitance(800Khz/km) Max.	10p <=58nF/km
Pair to Pair Capacitance(800Hz/300m) Max	<=250 pF/km
Electric Strength DC Time of Inputing Power Conductor to conductor Conductor to Shield	1 minute 1000 V 3000 V

Insulation color code:

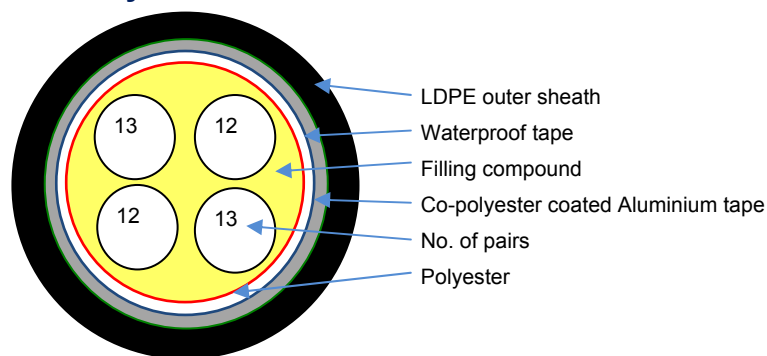
Pair No.	Colour Code	Pair No.	Colour Code
1	White/Blue	14	Black/Brown
2	White/Orange	15	Black/Gray
3	White/Green	16	Yellow/Blue
4	White/Brown	17	Yellow/Orange
5	White/Gray	18	Yellow/Green
6	Red/Blue	19	Yellow/Brown
7	Red/Orange	20	Yellow/Gray
8	Red/Green	21	Purple/Blue
9	Red/Brown	22	Purple/Orange
10	Red/Gray	23	Purple/Green
11	Black/Blue	24	Purple/Brown
12	Black/Orange	25	Purple/Gray
13	Black/Green		

Ties chromatography:

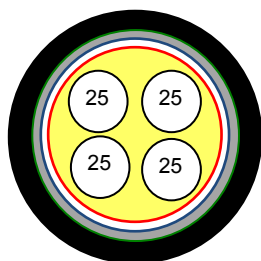
50 pair			100 pair			200 pair			300 pair		
Ties No	Pairs	Color Code	Ties No	Pairs	Color Code	Ties No	Pairs	Color Code	Ties No	Pairs	Color Code
1	12	White/Blue	1	25	White/Blue	1	25	White/Blue	1	25	White/Blue
2	13	White/Blue	2	25	White/Orange	2	25	White/Orange	2	25	White/Orange
3	12	White/Orange	3	25	White/Green	3	25	White/Green	3	25	White/Green
4	13	White/Orange	4	25	White/Brown	4	25	White/Brown	4	25	White/Brown
						5	25	White/Gray	5	25	White/Gray
						6	25	Red/Blue	6	25	Red/Blue
						7	25	Red/Orange	7	25	Red/Orange
						8	25	Red/Green	8	25	Red/Green
									9	25	Red/Brown
									10	25	Red/Gray
									11	25	Black/Blue
									12	25	Black/Orange

No. of pairs	P/N
25	NB-COP-237-RGD
50	NB-COP-231-RGD
100	NB-COP-232-RGD
200	NB-COP-233-RGD
300	NB-COP-234-RGD

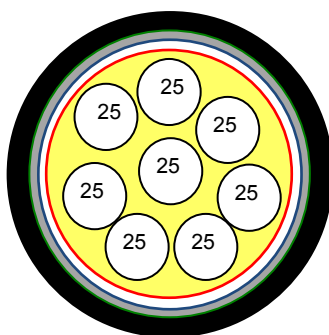
➤ Non-Armored Outdoor Jelly Filled Communication Cables



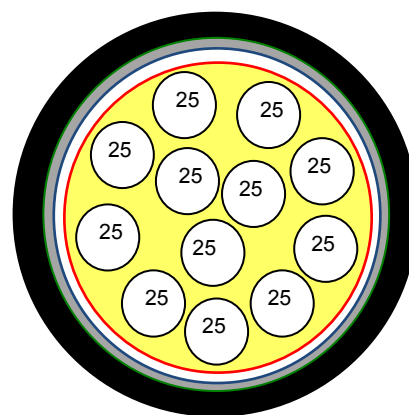
50 Pair construction



100 Pair construction



200 Pair construction



300 Pair construction

Cable construction:

Conductor	Bare Solid Copper (0.6mm)				
Insulation	Solid HDPE				
Twisting	Two single wires twisted				
Standard reference	Comply to YD/T322-1996				
Cable core	Each unit wrapped with double-color tape to form cable core				
Filler	Jelly filled in the cable core				
Cable core wrapping	Polyester wrapping tape, and then water blocking tape wrapping. Both helically wrapped.				
Shield screen	0.25mm thickness aluminium tape with plastic cover on both sides, longitude wrapped				
Outer Sheath	Black LDPE				
Outer Sheath Diameter (mm)	25 pair	50 pair	100 pair	200 pair	300 pair
	16.0mm	21.0mm	28.5mm	38.5mm	46.0mm
Weight (Approx)/km	370kg	620kg	1480kg	2410kg	3350kg
Volume / Drum/1000Mtrs	90x40x75cm	130x50x75cm	160x80x115cm	200x100x115cm	220x110x115cm

Cable core and jacket thickness:

Pairs	Cable Construction		Min. Jacket thickness(mm)
	First layer	Second layer	
50	2*(12+13) pair		1.4
100	25 pair*4		1.6
200	25 pair*1	25 pair*7	1.8
300	25 pair*3	25 pair*9	2.0

➤ Non-Armored Outdoor Jelly Filled Communication Cables

Electrical characteristics:

Test Items	Indicators
	0.6 mm conductor
Direct Current Resistance of single conductor (Max) ohm/km	65.3 ohm/km
Imbalance of Direct Current Resistance(Max)	5%
Insulation resistance of each single insulated conductor to other shield or connected to the earth DC 500 V	>3000M·ohm/km
Working Capacitance(800Khz/km) Max.	10p <=58nF/km
Pair to Pair Capacitance(800Hz/300m) Max	<=250 pF/km
Electric Strength DC Time of Inputing Power Conductor to conductor Conductor to Shield	1 minute 1000 V 3000 V

Insulation color code:

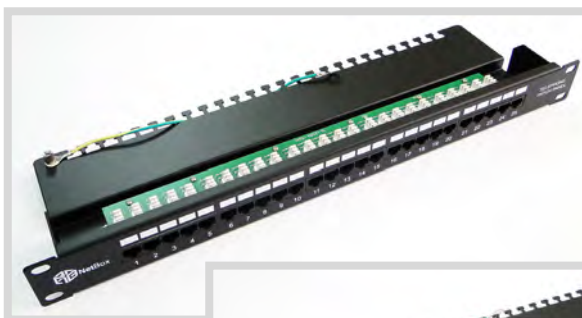
Pair No.	Colour Code	Pair No.	Colour Code
1	White/Blue	14	Black/Brown
2	White/Orange	15	Black/Gray
3	White/Green	16	Yellow/Blue
4	White/Brown	17	Yellow/Orange
5	White/Gray	18	Yellow/Green
6	Red/Blue	19	Yellow/Brown
7	Red/Orange	20	Yellow/Gray
8	Red/Green	21	Purple/Blue
9	Red/Brown	22	Purple/Orange
10	Red/Gray	23	Purple/Green
11	Black/Blue	24	Purple/Brown
12	Black/Orange	25	Purple/Gray
13	Black/Green		

Ties chromatography:

50 pair			100 pair			200 pair			300 pair		
Ties No	Pairs	Color Code	Ties No	Pairs	Color Code	Ties No	Pairs	Color Code	Ties No	Pairs	Color Code
1	12	White/Blue	1	25	White/Blue	1	25	White/Blue	1	25	White/Blue
2	13	White/Blue	2	25	White/Orange	2	25	White/Orange	2	25	White/Orange
3	12	White/Orange	3	25	White/Green	3	25	White/Green	3	25	White/Green
4	13	White/Orange	4	25	White/Brown	4	25	White/Brown	4	25	White/Brown
						5	25	White/Gray	5	25	White/Gray
						6	25	Red/Blue	6	25	Red/Blue
						7	25	Red/Orange	7	25	Red/Orange
						8	25	Red/Green	8	25	Red/Green
									9	25	Red/Brown
									10	25	Red/Gray
									11	25	Black/Blue
									12	25	Black/Orange

No. of pairs	P/N
25	NB-COP-237
50	NB-COP-231
100	NB-COP-232
200	NB-COP-233
300	NB-COP-234

➤ Cat.3 Telephone Patch Panel



Electrical:

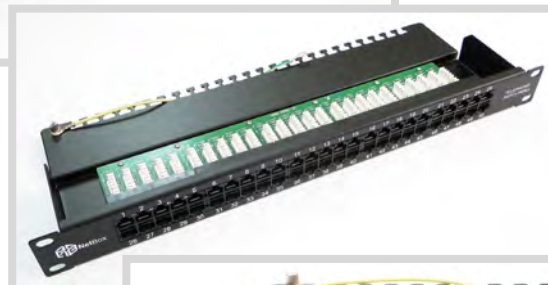
- Voltage rating: 125 VAC RMS
- Current rating: 1.5 AMP
- Contact resistance: 100 Milliohms Max
- Insulation resistance: 1000 Megohms Min @ 500 VDC
- Dielectric strength: 750 VAC RMS 60Hz, 1Min

Environmental:

- Storage : -40°C to +85°C
- Operation: 0°C to 70°C
- Conform to ANSI/TIA/EIA 568B Category 3
- Mates with modular plug conforming to FCC Part 68

Mechanical:

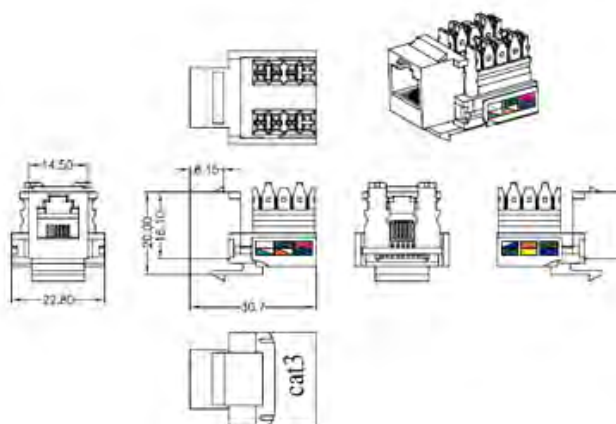
- Housing material: PBT + 15% GF UL94V-0
- Panel Frame: Carbon steel, powder coating in black color
- Contact material: PC UL94V-0 contact, Phosphor bronze with nickel plating
- RJ45 Jack life: 750 Times Min
- IDC Life: 200 Times Min
- Wire: AWG 24-26



Ordering Information:

P/N	Description
NB-COP-092	Cat. 3 Telephone patch panel, 25 port, Krone IDC
NB-COP-093	Cat. 3 Telephone patch panel, 50 port, Krone IDC

➤ Cat.3 Keystone Jack



Product Description:

- Keystone jack, Cat3 class, UTP Type, fit for connecting application of communication ports in working area.
- Inserting duration: 750 times.
- Punching duration: 250 times.

Environmental:

- Storage : -40°C to +85°C
- Operation: 0°C to 70°C
- Conform to ANSI/TIA/EIA 568B Category 3

Electrical:

- Voltage rating: 125 VAC RMS
- Current rating: 1.5 AMP
- Contact resistance: 100 Milliohms Max
- Insulation resistance: 1000 Megohms Min @ 500 VDC
- Dielectric strength: 750 VAC RMS 60Hz, 1Min

Mechanical:

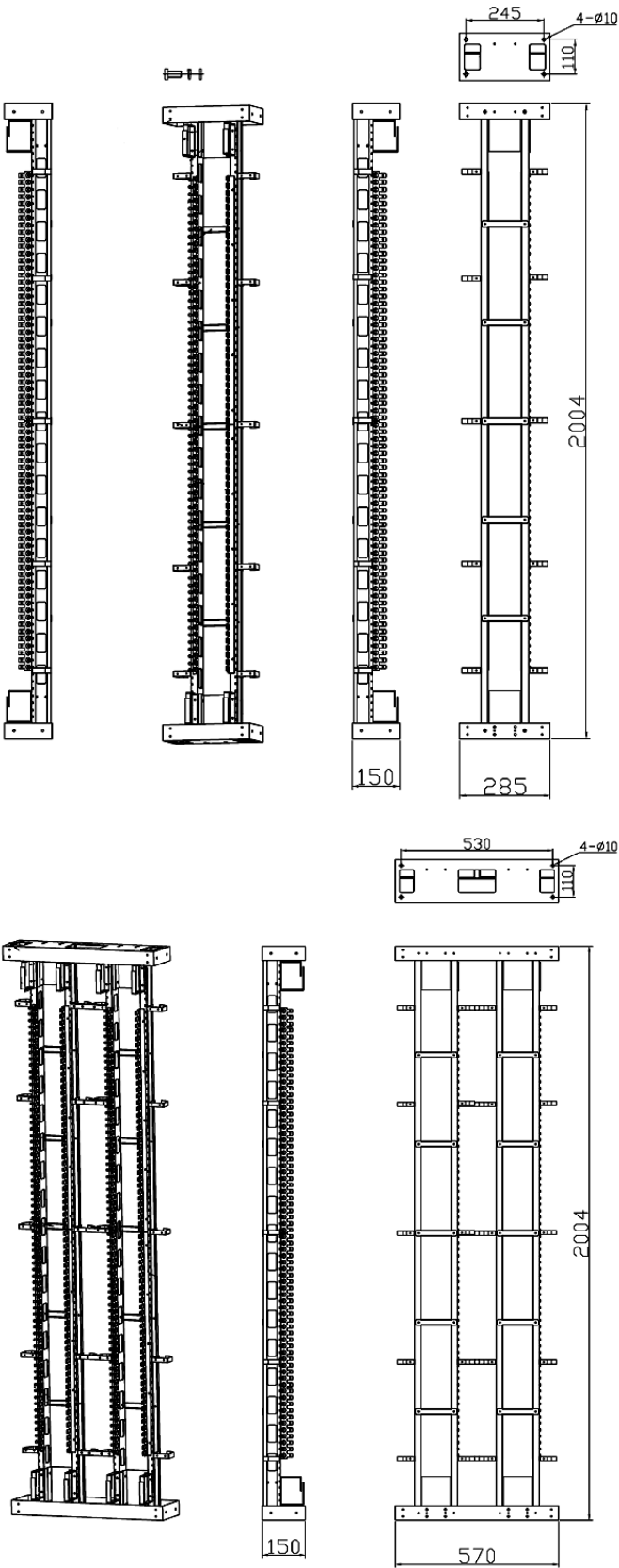
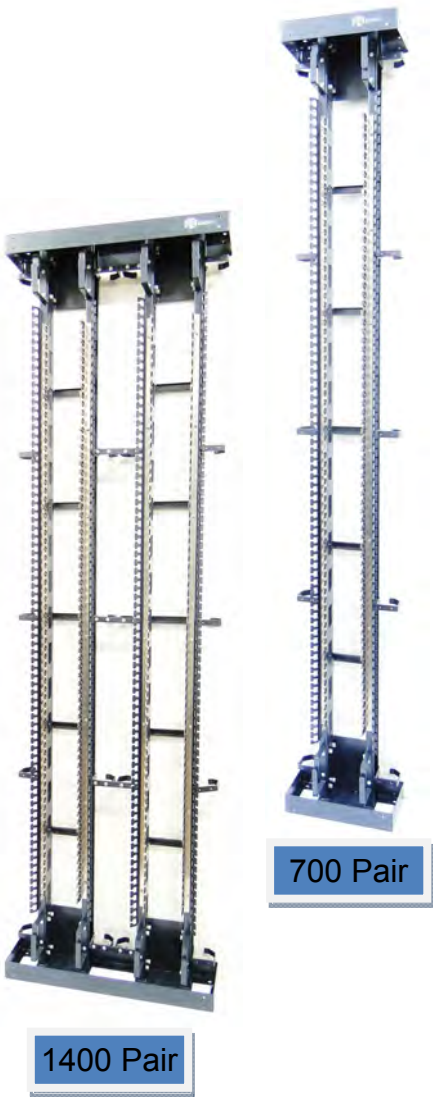
- Housing Material: PC UL94V-0
- Insert Material: Flame Retardancy ABS UL94V-0
- PCB Material: FR-4 Thickness: 1.6mm
- Contact Material: Phosphor bronze stamp pin T=0.35mm
- IDC Contact Material: Phosphor Bronze T=0.50mm with Nickel Plating
- Wire: AWG 24-26

➤ Vertical Distribution Frame

Modular distribution frame, which can either be wall mounted or installed back-to-back for free standing applications. These frames are available in single and double vertical versions.

The following features are offered within the frame construction:

- High durable, rigid frame factory assembled from coated steel
- Back-mount frames manufactured from stainless steel
- Hard wearing, coated steel jumper rings, wire guides and fanning strips for efficient cable management frame design allows easy access to top jumper rings
- Fully earth bounded. Meeting IEC regulation



Ordering Information:

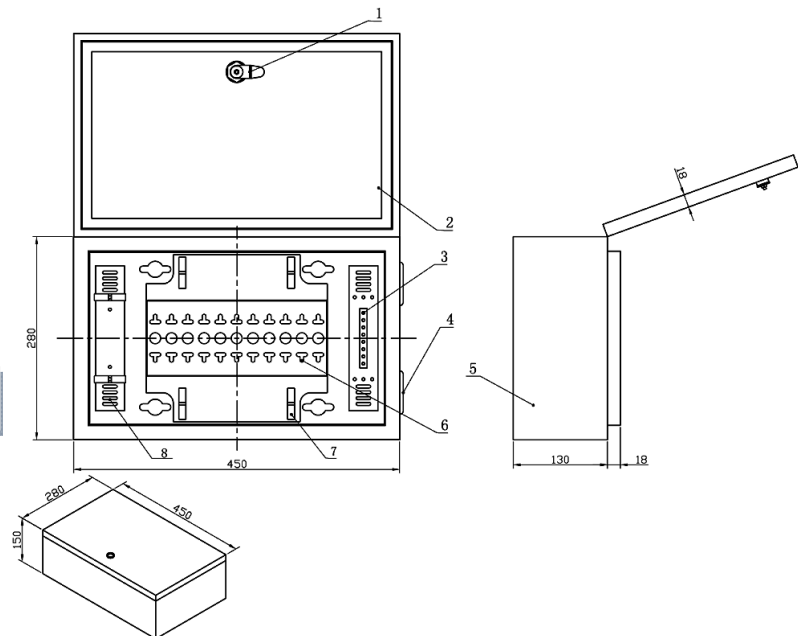
P/N	Description
NB-ACC- 050	Vertical Distribution Frame, 700 pair, Metal, Modules are not included
NB-ACC- 051	Vertical Distribution Frame, 1400 pair, Metal, Modules are not included

➤ Telecom Metal Connection Boxes

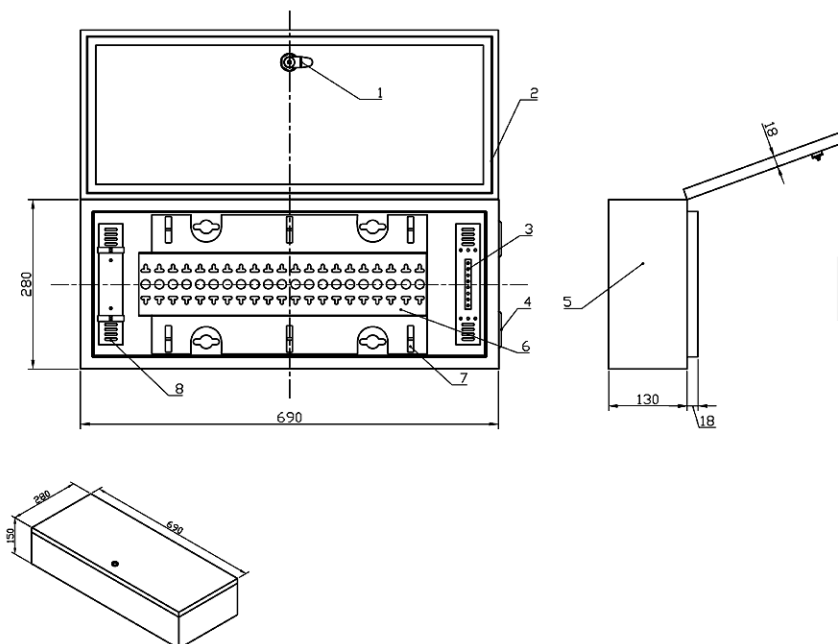
- Cold Rolled Steel
- Color: RAL7035



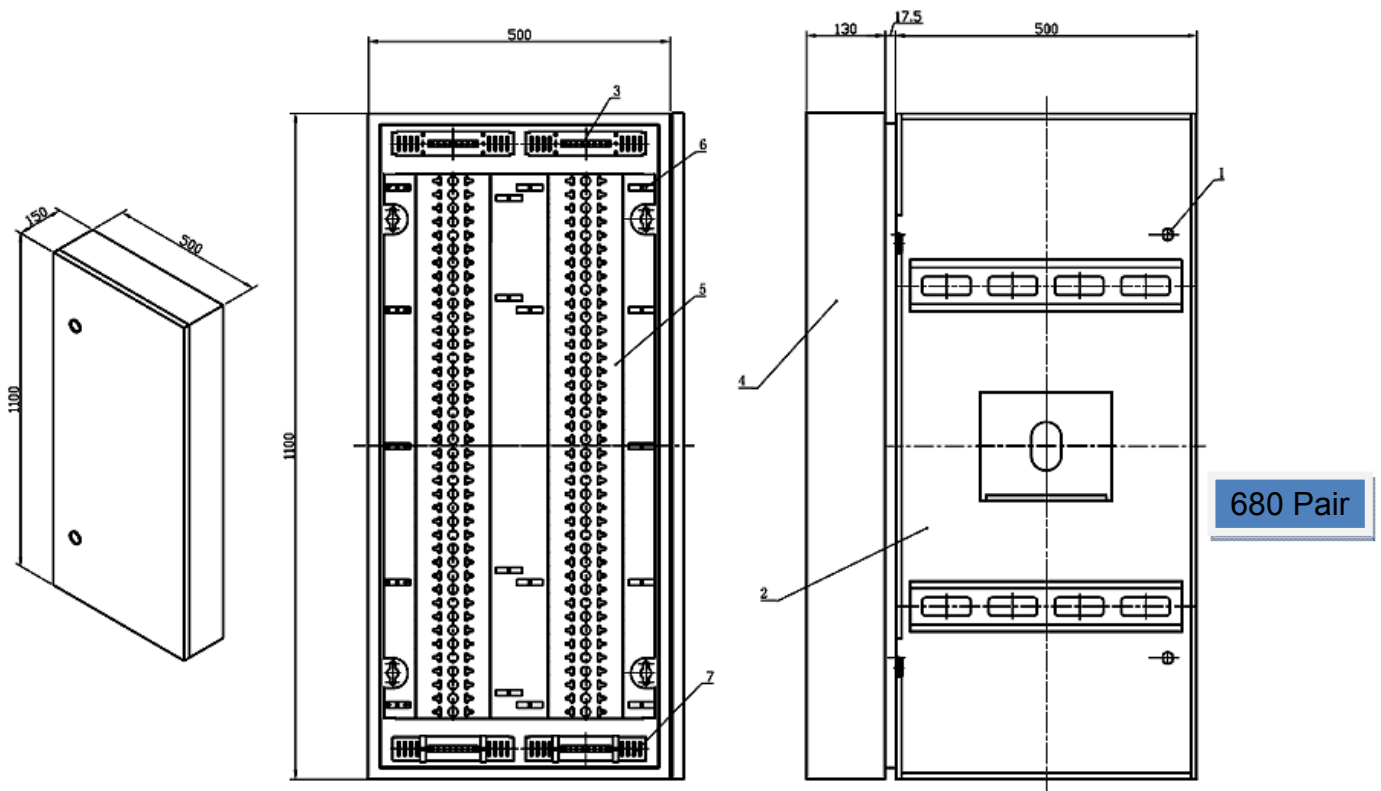
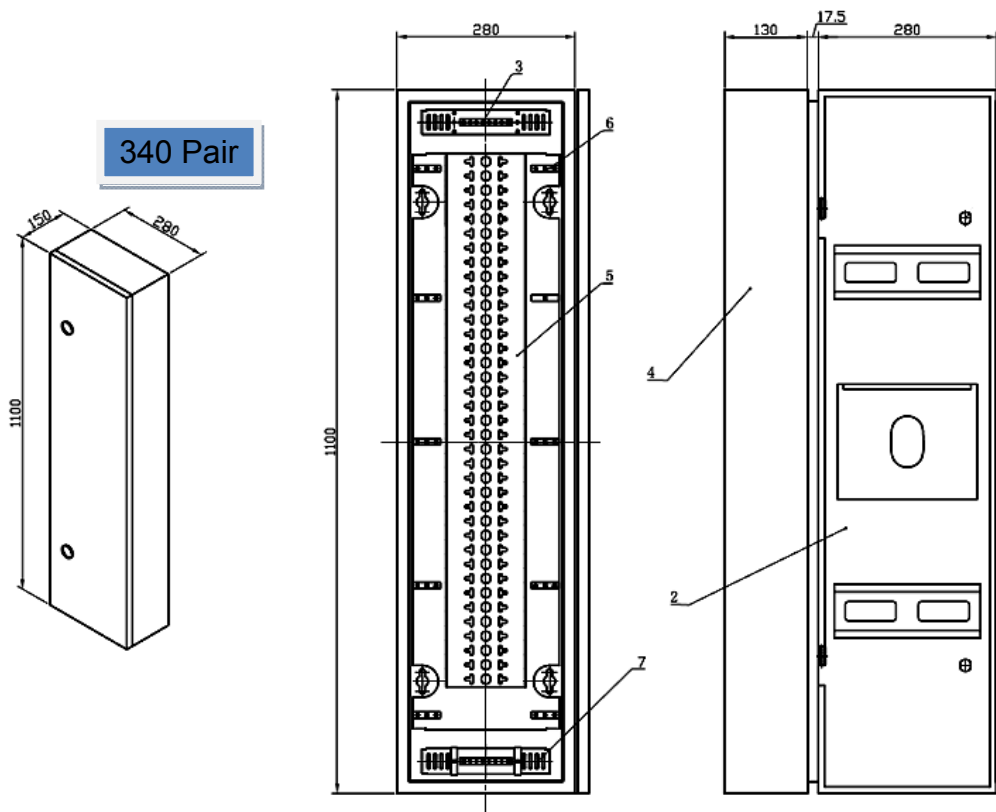
100 Pair



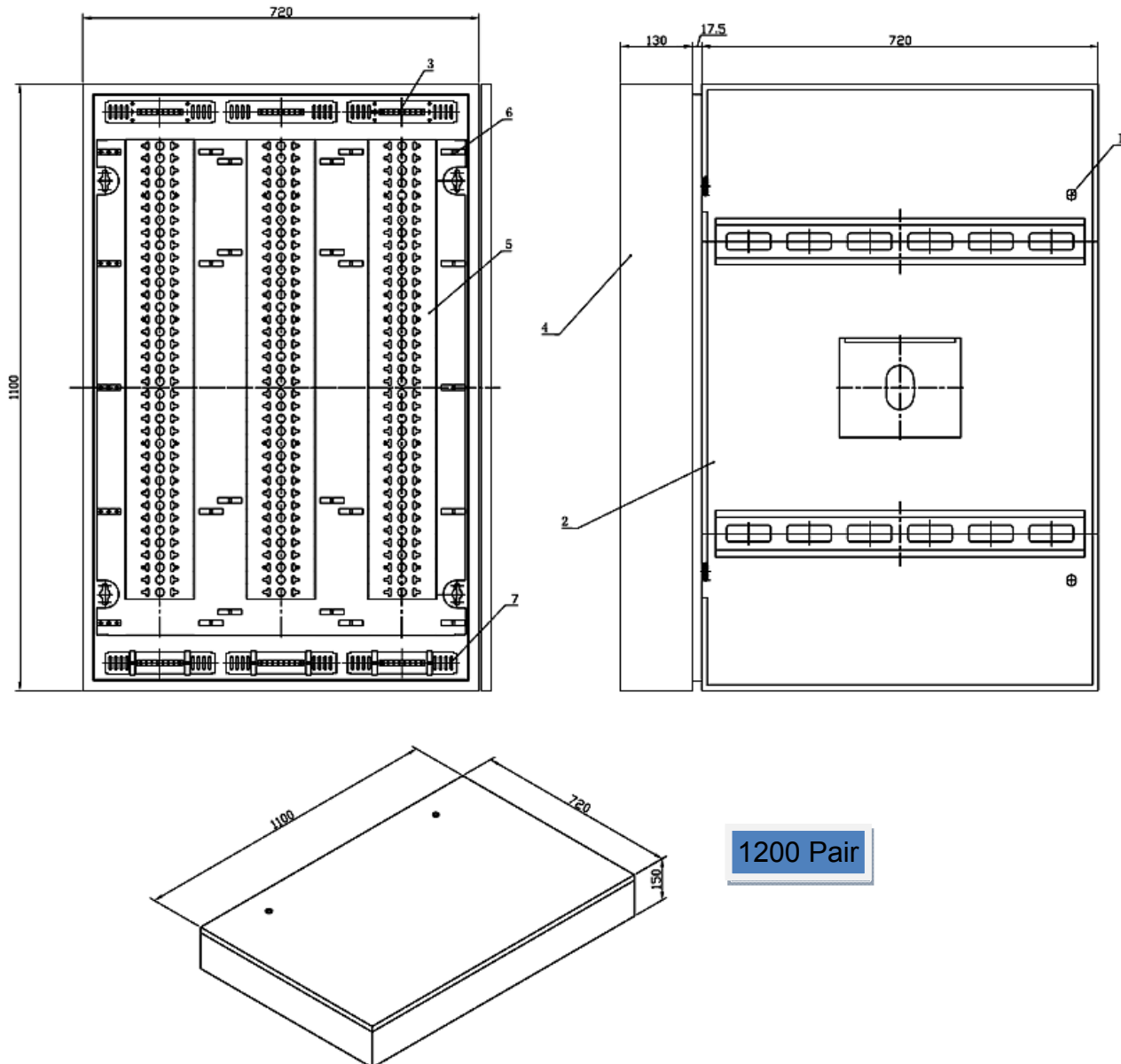
200 Pair



➤ Telecom Metal Connection Boxes



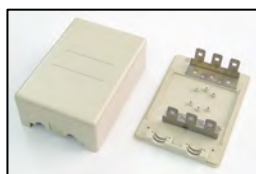
➤ Telecom Metal Connection Boxes



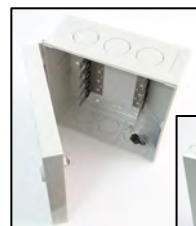
Ordering Information:

P/N	Description
NB-ACC-056	100 pair Metal Box, Dimension: 450mmx280mmx150mm, Modules are not included
NB-ACC-057	200 pair Metal Box, Dimension: 690mmx280mmx150mm, Modules are not included
NB-ACC-053	340 pair cabinet, Dimension: 1100mmx280mmx150mm, Modules are not included
NB-ACC-054	680 pair cabinet. Dimension: 1100mmx500mmx150mm, Modules are not included
NB-ACC-055	1200 pair cabinet. Dimension: 1100mmx720mmx150mm, Modules are not included

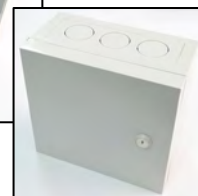
➤ Telecom Plastic Connection Boxes



30 Pair



50 Pair



200 Pair



100 Pair

Ordering Information:

P/N	Description
NB-ACC-049	Telephone Distribution Box, 200 pair, Plastic, Modules are not included
NB-ACC-031	Telephone Distribution Box, 100 pair, Plastic, Modules are not included
NB-ACC-035	Telephone Distribution Box, 50 pair, Plastic, Modules are not included
NB-ACC-042	Telephone Distribution Box, 30 pair, Plastic, Modules are not included

➤ Telecom LSA Blocks & Magazine

- Housing Material: ABS UL94V-2
- Base Material: ABS UL94V-2
- Contact Thickness: 0.5mm
- Contact Material: Phosphor Bronze Plating Over Nickel Over Silver
- Wire Sizes AWG: 24 - 26



NB-ACC-022



NB-ACC-029



NB-ACC-052



NB-ACC-025



NB-ACC-023

Ordering Information:

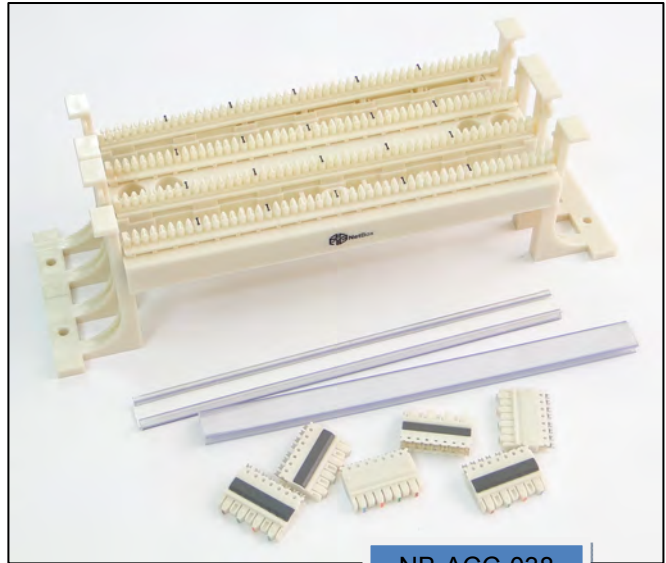
P/N	Description
NB-ACC-025	Disconnecting Plug, Red color
NB-ACC-041	Single Protective Unit
NB-ACC-022	Connection Module, 10 pair
NB-ACC-029	10 pair Magazine, 3 pole Arrester loaded
NB-ACC-023	Disconnection Module, 10 pair
NB-ACC-052	Label Holder for 10 Pair Module

➤ Telecom 110 Blocks

- Voltage rating: 125 VAC RMS
- Current rating: 1.5 AMP
- Contact resistance: 100 Milliohms Max
- Insulation resistance: 1000 Megohms Min @ 500 VDC
- Dielectric strength: 750 VAC RMS 60HZ, 1Min
- Material: PC UL94V-0
- Terminals material: Phosphor bronze T: 0.8mm
- Wire: AWG 24~ 26



NB-ACC-039



NB-ACC-038

Ordering Information:

P/N	Description
NB-ACC-037	110 Wiring Block, 50 pair
NB-ACC-038	110 Wiring Block, 100 pair
NB-ACC-039	Plastic Cable Manager with Legs

➤ One Pair Jumper Cable



NB-COP-228



NB-COP-178



NB-COP-150

Specification:

- Conductor diameter: 0.50mm
- 400 & 500 mtrs/roll
- 100% Oxygen Free highly pure copper, annealed high conductivity
- Insulation thickness : 0.27mm
- Jacket material : 100% Virgin Solid Polythene or PVC
- Diameter Over Insulation : 1.04mm
- Twisted Pair Lay Length : 50mm (Mutual Capacitance is 45Nf/Km)
- Coil in Small Plastic Drum and packed in cartons
- Choice of colors



NB-COP-177

Ordering Information:

Color	Green/White (400M)	Blue/Yellow (400M)	Red/White (500M)	Blue/White (500M)
P/N	NB-COP-150	NB-COP-177	NB-COP-228	NB-COP-178