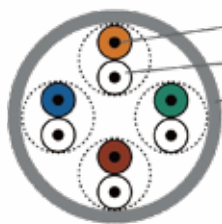




# Communication copper Cable LAN Cable

## Unshielded Twisted Pair Category 5



Conductor: Annealed  
Copper 24 AWG  
Insulation: PE  
Sheath: PVC/LSZH

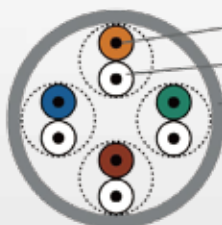
### Electrical Characteristics:

DC Resistance (/100m @ 20): Max.9.5  
Resistance Unbalance (%): Max.2  
Mutual Capacitance (nF/100m): Max.5.6  
Capacitance Unbalance (pF/100m): Max.160

Type	Insulation Dia.	Outer Cable Dia.	Gross Weight (kg/1000ft)	Packing
PVC	0.9+0.01	5.25+0.2	11	305m/box
LSZH	0.9+0.01	5.25+0.2	11	305m/box

Frequency (MHz)	Characteristic Impedance (Ω)	RL (Min. dB)	Attenuation (Max.dB/100m)	NEXT (Min.dB/100m)	FEXT (Min.dB/100m)
1	100±5	--	--	--	--
4	100±5	18.8	4.1	53.3	49.0
8	100±5	19.7	5.8	48.8	42.9
10	100±5	20.0	6.5	47.3	41.0
16	100±5	20.0	8.2	44.2	36.9
20	100±5	20.0	9.3	42.8	35.0
25	100±5	19.3	10.4	41.3	33.0
31.25	100±5	18.6	11.7	39.9	31.1
62.5	100±5	16.5	17.0	35.4	25.1
100	100±5	15.1	22.0	32.3	21.0

## Unshielded Twisted Pair Enhanced Category 5



Conductor: Annealed  
Copper 24 AWG  
Insulation: PE  
Sheath: PVC/LSZH

### Electrical Characteristics:

DC Resistance (/100m @ 20): Max.9.38  
Resistance Unbalance (%): Max.5  
Mutual Capacitance Unbalance (pF/100m): Max.330

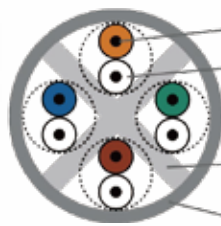
Type	Insulation Dia.	Outer Cable Dia.	Gross Weight (kg/1000ft)	Packing
PVC	0.9+0.01	5.25+0.2	11	305m/box
LSZH	0.9+0.01	5.25+0.2	11	305m/box

Frequency (MHz)	Characteristic Impedance (Ω)	RL (Min. dB)	Attenuation (Max.dB /100m)	NEXT (Min.dB /100m)	PSNEXT (Min. dB/100m)	FEXT (Min.dB /100m)	PSELFEXT (Min.dB /100m)
1	100±5	20.00	2.04	65.30	62.30	64.00	61.00
4	100±5	23.01	4.05	56.27	53.27	51.96	48.96
8	100±5	24.52	5.77	51.75	48.75	45.94	42.94
10	100±5	25.00	6.47	50.30	47.30	44.00	41.00
16	100±5	25.00	8.25	47.24	44.24	39.92	36.92
20	100±5	25.00	9.27	45.78	42.78	37.98	34.98
25	100±5	24.32	10.42	44.33	41.33	36.04	33.04
31.25	100±5	23.64	11.72	42.88	39.88	34.10	31.10
50	100±5	22.21	15.07	39.82	36.82	30.02	27.02
62.5	100±5	21.54	16.99	38.36	35.36	28.08	25.08
100	100±5	20.11	21.98	35.30	32.30	21.00	18.00



# Communication copper Cable LAN Cable

## Unshielded Twisted Pair Category 6



- Conductor: Annealed Copper 24 AWG
- Insulation: PE
- Filler: X-Shaped Filler
- Sheath: PVC/LSZH

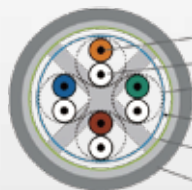
### Electrical Characteristics:

DC Resistance (/100m @ 20): Max.9.5  
 Resistance Unbalance (%): Max.2  
 Mutual Capacitance (nF/100m): Max.5.6  
 Capacitance Unbalance (pF/100m): Max.160

Type	Insulation Dia.	Outer Cable Dia.	Gross Weight (kg/1000ft)	Packing
PVC	1.02±0.02	6.2±0.2	12	305m/box
LSZH	1.02±0.02	6.2±0.2	12	305m/box

Frequency (MHz)	Characteristic Impedance (Ω)	RL (Min. dB)	Attenuation (Max.dB /100m)	NEXT (Min.dB /100m)	PSNEXT (Min. dB/100m)	FEXT (Min.dB /100m)	PSELFEXT (Min.dB /100m)
1	100±5	--	--	--	--	--	--
4	100±5	23.0	3.8	66.3	63.3	56.0	53.0
8	100±5	24.5	5.3	61.8	58.8	49.9	46.9
10	100±5	25.0	6.0	60.3	57.3	48.0	45.0
16	100±5	25.0	7.6	57.2	54.2	43.9	40.9
20	100±5	25.0	8.5	55.8	52.8	42.0	39.0
25	100±5	24.3	9.5	54.3	51.3	40.0	37.0
31.25	100±5	23.6	10.7	52.9	49.9	38.1	35.1
62.5	100±5	21.5	15.4	48.4	45.4	32.1	29.1
100	100±5	20.1	19.8	45.3	42.3	28.0	25.0
200	100±22	18.0	29.0	40.8	37.8	22.0	19.0
250	100±22	17.3	32.8	39.3	36.3	20.0	17.0

## Shielded Twisted Pair Category 6



- Conductor: Annealed Copper 23AWG
- Tape: Polyester Wrapping
- Taping: PS Tape (Optional)
- Drain Wire: 0.5mm tinned Copper Wire
- Shield: Aluminum
- Polyester Screen
- Sheath: PVC/LSZH

### Electrical Characteristics:

DC Resistance (/100m @ 20): Max.9.5  
 Resistance Unbalance (%): Max.2  
 Capacitance Unbalance (pF/100m): Max.160

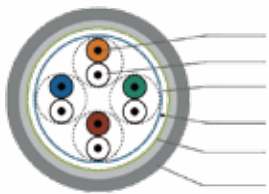
Type	Insulation Dia.	Outer Cable Dia.	Gross Weight (kg/1000ft)	Packing
PVC	1.15±0.02	6.6±0.2	15	Reel
LSZH	1.15±0.02	6.6±0.2	15	Reel

Frequency (MHz)	Characteristic Impedance (Ω)	RL (Min. dB)	Attenuation (Max.dB /100m)	NEXT (Min.dB /100m)	PSNEXT (Min. dB/100m)	FEXT (Min.dB /100m)	PSELFEXT (Min.dB /100m)
1	100±5	--	--	--	--	--	--
4	100±5	23.0	3.8	66.3	63.3	56.0	53.0
8	100±5	24.5	5.3	61.8	58.8	49.9	46.9
10	100±5	25.0	6.0	60.3	57.3	48.0	45.0
16	100±5	25.0	7.6	57.2	54.2	43.9	40.9
20	100±5	25.0	8.5	55.8	52.8	42.0	39.0
25	100±5	24.3	9.5	54.3	51.3	40.0	37.0
31.25	100±5	23.6	10.7	52.9	49.9	38.1	35.1
62.5	100±5	21.5	15.4	48.4	45.4	32.1	29.1
100	100±5	20.1	19.8	45.3	42.3	28.0	25.0
200	100±22	18.0	29.0	40.8	37.8	22.0	19.0
250	100±22	17.3	32.8	39.3	36.3	20.0	17.0



# Communication copper Cable LAN Cable

## Shielded Twisted Pair Category 5E



Conductor: Annealed Copper 24 AWG  
 Insulation: HDPE  
 Tape: Polyester Wrapping  
 Drain Wire: 0.5mm tinned Copper Wire  
 Shield: Aluminum  
 Polyester Screen  
 Sheath: PVC/LSZH

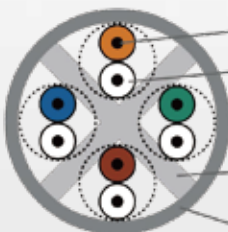
### Electrical Characteristics:

DC Resistance (/100m @ 20): Max.9.5  
 Resistance Unbalance (%): Max.2  
 Mutual Capacitance (nF/100m): Max.5.6  
 Capacitance Unbalance (pF/100m): Max.160

Type	Insulation Dia.	Outer Cable Dia.	Gross Weight (kg/1000ft)	Packing
PVC	1.02±0.02	6.3±0.2	13.2	Reel
LSZH	1.02±0.02	6.3±0.2	13.2	Reel

Frequency (MHz)	Characteristic Impedance (Ω)	RL (Min. dB)	Attenuation (Max.dB /100m)	NEXT (Min.dB /100m)	PSNEXT (Min. dB/100m)	FEXT (Min.dB /100m)	PSELFEXT (Min.dB /100m)
1	100±5	--	--	--	--	--	--
4	100±5	23	4.1	56.3	53.3	52	49.0
8	100±5	24.5	5.8	51.8	48.8	45.9	42.9
10	100±5	25	6.5	50.3	47.3	44	41.0
16	100±5	25	8.2	47.2	44.2	39.9	36.9
20	100±5	25	9.3	45.8	42.8	38.0	35.0
25	100±5	24.3	10.4	44.3	41.3	36.0	33.0
31.25	100±5	23.6	11.7	42.9	39.9	34.1	31.1
62.5	100±5	21.5	17.0	38.4	35.4	28.1	25.1
100	100±5	20.1	22.0	35.3	32.3	24.0	21.0

## Unshielded Twisted Pair Category 6a



Conductor: Annealed Copper 24 AWG  
 Insulation: PE  
 Filler: X-Shaped Filler  
 Sheath: PVC/LSZH

### Electrical Characteristics:

DC Resistance (/100m @ 20): Max.9.5  
 Resistance Unbalance (%): Max.2  
 Mutual Capacitance (nF/100m): Max.5.6  
 Capacitance Unbalance (pF/100m): Max.160

Type	Insulation Dia.	Outer Cable Dia.	Gross Weight (kg/1000ft)	Packing
PVC	1.02±0.02	6.2±0.2	12	305m/box
LSZH	1.02±0.02	6.2±0.2	12	305m/box

Frequency (MHz)	Characteristic Impedance (Ω)	RL (Min. dB)	Attenuation (Max.dB /100m)	NEXT (Min.dB /100m)	PSNEXT (Min. dB/100m)	FEXT (Min.dB /100m)	PSELFEXT (Min.dB /100m)
1	100±5	--	--	--	--	--	--
4	100±5	23.0	3.8	66.3	63.3	56.0	53.0
8	100±5	24.5	5.3	61.8	58.8	49.9	46.9
10	100±5	25.0	5.9	60.3	57.3	48.0	45.0
16	100±5	25.0	7.5	57.2	54.2	43.9	40.9
20	100±5	25.0	8.4	55.8	52.8	42.0	39.0
25	100±5	24.3	9.4	54.3	51.3	40.0	37.0
31.25	100±5	23.6	10.5	52.9	49.9	38.1	35.1
62.5	100±5	21.5	15.0	48.4	45.4	32.1	29.1
100	100±5	20.1	19.1	45.3	42.3	28.0	25.0
200	100±22	18.0	27.6	40.8	37.8	22.0	19.0
250	100±22	17.3	31.1	39.3	36.3	20.0	17.0
300	100±22	17.3	34.3	38.1	35.1	18.5	15.5
400	100±22	17.3	40.1	36.3	33.3	16.0	13.0
500	100±22	17.3	45.3	34.8	31.8	14.0	11.0



# Communication copper Cable Jumper Wire & Drop Wire



## Jumper Wire

### Construction:

Conductor: Solid, annealed, bare or tinned copper wire, 0.5mm diameter  
 Insulation: HDPE

### Electrical Characteristics @ 20 °C

Conductor resistance: Max 92 Ω/ km  
 Insulation resistance: Min 1000 MΩ/ km

#### Cable Size and Weight

No. of Conductors	Overall Diameter(mm)	Net Weight(Kg/km)	Packag Reel (m)
1	1.1	3.0	500
2	2.2	6.0	500
3	2.4	9.0	500
4	2.7	12.0	250
5	3.0	15.0	250

## Parallel Drop Wire

### Construction:

Conductor: Hard Copper Wire  
 Sheath: Black PE / PVC

### Electrical Characteristics @ 20 °C

Conductor resistance, Max.  
 - **Hard drawn copper**  
 0.8mm Diameter 35.0 Ω/ km  
 0.9mm Diameter 28.0 Ω/ km  
 1.0mm Diameter 24.0 Ω/ km  
 - **Insulation resistance, Min.**

PE 5000 MΩ.km  
 PVC 100 MΩ.km

#### Cable Size and Weight

Conductor Diameter mm	Overall Dimension (W*H) mm	Sheath	Net Weight(kg/km)	Package Reel (m)
0.8	PE	2.6*5.7	20	500
0.9	PE	2.7*5.9	23	500
1.0	PE	3.0*6.5	28	500
0.8	PVC	2.6*5.7	24	500
0.9	PVC	2.7*5.9	27	500
1.0	PVC	3.0*6.5	33	500



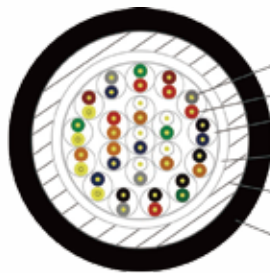


## Communication copper Cable Jumper Wire & Drop Wire

### Non-Jelly filled, Aluminium / Polyethylene Laminated Screen

**Application:**

- ◆ Widely used in MAN Communication Network by duct & aerial installation
- ◆ Transmit audio signals, analog signals at up to 150kHz
- ◆ Transmit digital signals in up to 2048kbit/s



- Solid Copper Wire
- HDPE / Foam-Skin Insulation
- Twisted Pairs
- Polyester Tape
- Aluminium / Polyethylene Screen
- Black PE Sheath



### Jelly Filled, Aluminium / Polyethylene Laminated Screen

**Application:**

- ◆ Widely used in complicated environment of MAN Communication Network by duct installation
- ◆ Jelly filled & Anti-rodent
- ◆ Transmit audio signals & analog signals at up to 150kHz
- ◆ Transmit digital signals in up to 2048kbit/s



- Solid Copper Wire
- HDPE / Foam-Skin Insulation
- Jelly Filling
- Twisted Pairs
- Jelly Filling
- Aluminium / Polyethylene Screen
- Polyester Tape
- Black PE Sheath





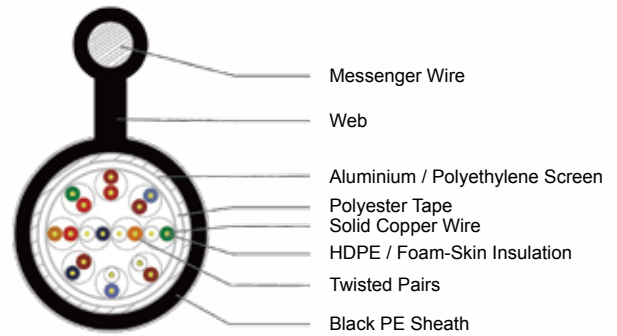
## Communication copper Cable Jumper Wire & Drop Wire



### Self-Supporting, Aluminium / Polyethylene Laminated Screen

**Application:**

- ◆ Widely used in MAN Communication Network by aerial installation
- ◆ Transmit audio signals & analog signals at up to 150kHz
- ◆ Transmit digital signals in up to 2048kbit/s



### Double Sheath & Armored Protection, Directly Buried Underground

**Application:**

- ◆ Widely used in complicated environment of MAN Communication Network by directly buried underground installation
- ◆ Transmit audio signals & analog signals at up to 150kHz
- ◆ Transmit digital signals in up to 2048kbit/s

