



Cat6 UTP/FTP Armoured Data Cable

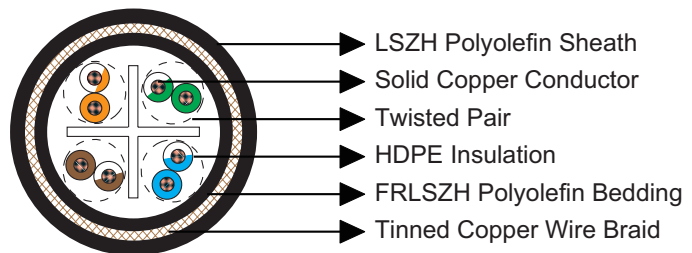
Applications

Cat6 Cable is a cable standard for Gigabit Ethernet and other network protocol, suitable for 10BaseT, 100BaseTx & 1000BaseT (Gigabit Ethernet) application. In addition, these cables are with tinned copper wire braid armoured & flame retardant mud resistant outer sheath, providing additional mechanically protection still maintaining the flexibility of the cable.



Standards

- IEC 60332-3-22
- IEC 60754-1,2
- IEC 61034-1,2
- NEK 606:2004



Construction

- **Conductors:** 23AWG solid bare copper.
- **Insulation:** HDPE.
- **Twinning:** Two coloured insulated conductors twisted together to form a pair.
- **Bedding:** Flame retardant, low smoke and halogen-free polyolefin, coloured black.
- **Armour:** 0.2/0.3mm tinned copper wire braid.
- **Outer Sheath:** Low smoke and halogen-free polyolefin.

Optional

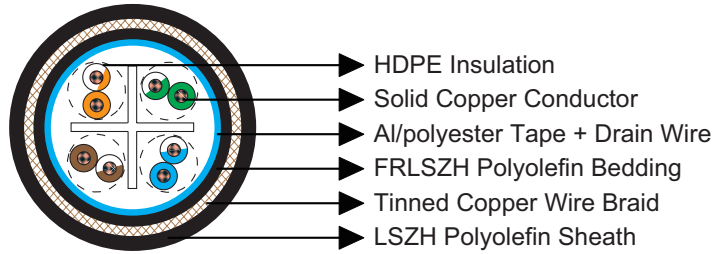
Cat6 F/UTP: These cables have collective shielding of aluminium/Polyester tape with drain wire.

Cat6 SF/UTP: These cables have double collective shieldings of aluminium/Polyester tape & tinned copper wire braid with drain wire.



Data Cables

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Electrical Characteristics

AWG		23
Nominal Conductor Diameter	mm	0.58
Maximum DC Resistant@20°C	Ω/100m	7.5
Maximum DCR Unbalance	%	3
Maximum Mutual Capacitance	pF/m	5.6
Maximum Capacitance Unbalance	pF/100m	330
Characteristic Impedance@1-100MHz	Ω	100+/-15
Maximum Propagation Delay Skew	ns/100m	18

FREQ MHz	Maximum Attenuation dB/100m	Minimum NEXT dB	Minimum PSNEXT dB	Minimum ELFEXT dB/100m	Minimum PSELFEXT dB/100m	Minimum RL dB
0.772	1.8	76.0	74.0	70.0	67.0	—
1	2.0	74.3	72.3	67.8	64.8	20.0
4	3.8	65.3	63.3	55.7	52.7	23.0
8	5.3	60.8	58.8	49.7	46.7	24.5
10	6.0	59.3	57.3	47.8	44.8	25.0
16	7.6	56.3	54.3	43.7	40.7	25.0
20	8.5	54.8	52.8	41.7	38.7	25.0
25	9.5	53.3	51.3	39.8	36.8	24.3
31.25	10.7	51.9	49.9	37.9	34.9	23.6
62.5	15.4	47.4	45.4	31.8	28.8	21.5
100	19.8	44.3	42.3	27.8	24.8	20.1
155	25.2	41.5	39.5	23.9	20.9	18.8
200	29.0	39.8	37.8	21.7	18.7	18.0
250	32.8	38.3	36.3	19.8	16.8	17.3



Mechanical and Thermal Properties

- Bending Radius: 8×OD (during installation); 4×OD (fixed installed)
- Temperature Range: -30°C ~ +75°C

Dimensions and Weight

Construction No. of elements×No. of cores in element×Conductor diameter(mm)	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm		Nominal Overall Diameter mm	Nominal Weight kg/km
		Inner	Outer		
4×2×0.58	0.23	0.8	1.14	11.6	214

