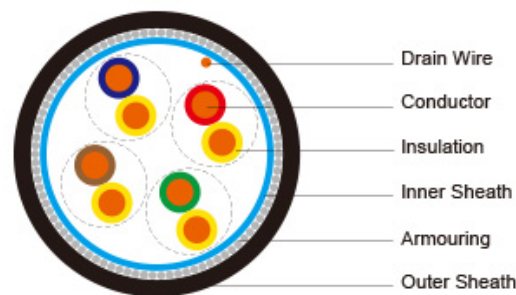


**Flame Retardant CAT6 Armoured Data Cables**



**Application:**

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 copper wire braid armoured & flame retardant mud resistant outer sheath, providing additional mechanical protection still maintaining the flexibility of the cable.

**Standard:**

Basic design to EN50173

**FIRE PERFORMANCE**

<b>Flame Retardance (Single Vertical Wire Test)</b>	EN 60332-1-2; IEC 60332-1-2; BS EN 60332-1-2; VDE 0482-332-1; CEI 20-35/1-2; EN 50265-2-1; DIN VDE 0482-265-2-1
<b>Reduced Fire Propagation (Vertically-mounted bundled wires &amp; cable test)</b>	EN 60332-3-24 (cat. C); IEC 60332-3-24; BS EN 60332-3-24; VDE 0482-332-3; CEI 20-22/3-4; EN 50266-2- 4; DIN VDE 0482-266-2-4
<b>Halogen Free</b>	IEC 60754-1; EN 50267-2-1; DIN VDE 0482-267-2-1; CEI 20-37/2-1 ; BS 6425-1
<b>No Corrosive Gas Emission</b>	IEC 60754-2; EN 50267-2-2; DIN VDE 0482-267-2-2; CEI 20-37/2-2 ; BS 6425-2
<b>minimum Smoke Emission</b>	IEC 61034-1&2; EN 61034 -1&2; DIN VDE 0482-1034-1&2; CEI 20-37/3-1&2; EN 50268-1&2; BS 7622-1&2
<b>No Toxic gases</b>	NES 02-713

**VOLTAGE RATING 60V**

**CABLE CONSTRUCTION**

Conductors: 23AWG solid bare copper. Insulation: HDPE .

Twinning: Two coloured insulated conductors twisted together to form a pair.

Inner Sheath: Flame retardant, low smoke and halogen-free polyolefin, coloured black.

Armouring: cwb: copper Wire Braid

swb: Steel Wire Braid

swa: Steel Wire Armour

Outer Sheath: Thermoplastic LSZH compound type LTS3 as per BS 7655-6.1 (Thermosetting LSZH compound type SW2-SW4 as per BS 7655:section 2.6 can be offered.)

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 & copper wire braid with drain wire.

**Physical AND THERMAL PROPERTIES**

Temperature range: -30°C ~ +75°C

Minimum bending radius during installation (mobile state): 8 x Overall Diameter

Minimum bending radius during operation (fixed state): 4 x Overall Diameter

**Electrical Properties**

AWG		23
Nominal Conductor Diameter	mm	0.56/0.57
maximum DC Resistant@20°C	Ω/100m	9.38
maximum DCR Unbalance	%	3
maximum mutual Capacitance	pF/m	5.8
maximum Capacitance Unbalance	pF/100m	30
Characteristic Impedance@1-100mHz	Ω	100+/-15
maximum Propagation Delay Skew	ns/100m	18

**Transmission Properties**

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.	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

**Cat6 SF/UTP**

**CONSTRUCTION PARAMETERS**

Cable Code	Construction No. of elements×No. of cores in element×Conductor diameter	Nominal Insulation Thickness	Nominal Inner Sheath Thickness	Nominal Outer Sheath Thickness	Nominal Overall Diameter	Nominal Weight
	mm	mm	mm	mm	mm	kg/km
CAT6 U/UTP	4×2×0.58	0.2	0.6	1.0	7.88	115

CWB						
CAT6 U/UTP SWB	4×2×0.58	0.2	0.6	1.0	7.88	109
CAT6 U/UTP SWA	4×2×0.53	0.2	0.6	1.0	8.88	189
CAT6 f/UTP CWB	4×2×0.58	0.2	0.6	1.0	8.48	126
CAT6 f/UTP SWB	4×2×0.58	0.2	0.6	1.0	8.48	132
CAT6 f/UTP SWA	4×2×0.58	0.2	0.6	1.0	9.48	213
CAT6 sf/UTP CWB	4×2×0.58	0.2	0.6	1.0	8.96	154
CAT6 sf/UTP SWB	4×2×0.58	0.2	0.6	1.0	8.96	148
CAT6 sf/UTP SWA	4×2×0.58	0.2	0.6	1.0	9.96	242