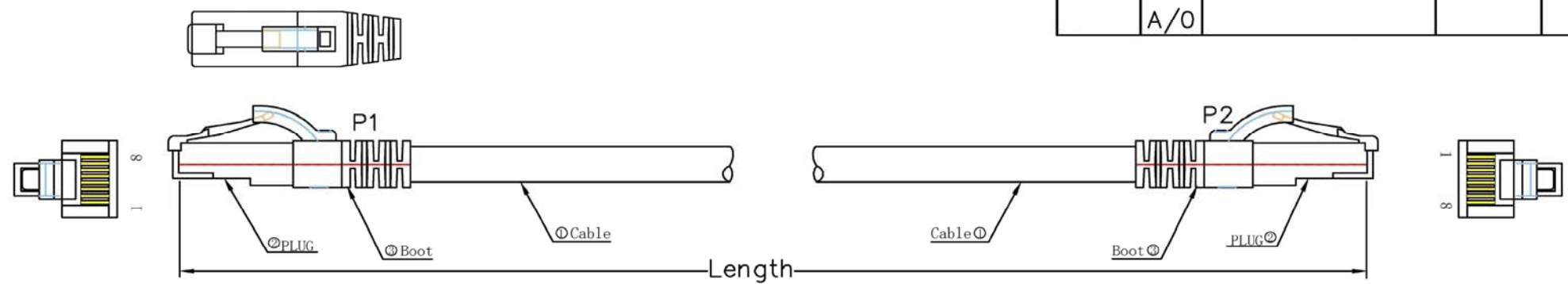
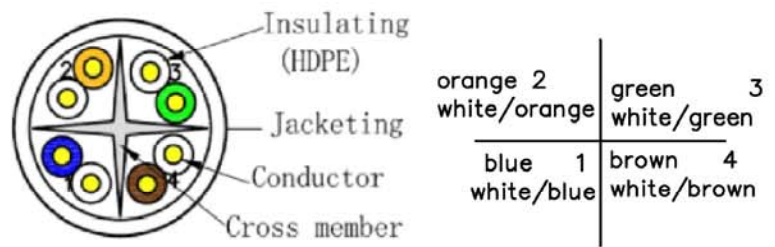


DATE	REV	DESCRIPTION	BY	CHKD
	A/0			



Marking: CE 17 ACT Cat6 U/UTP CU PVC 4X2XAWG24/7 C(UL)US
 CMX E477294-24100 IEC 60332-1-2 ANSI/TIA-568.2-D ISO/IEC
 11801 Class E EN 50288 MM/DD/YY *****M



Conductor	Bare Copper 24AWG
Insulation	Thickness:MIN at any point:0.15mm MAX AVG:0.25mm Diameter: 0.95±0.05mm
Jacket	PVC Thickness:MIN at any point:0.45mm MAX AVG:0.55mm Diameter: 5.9±0.3mm

No.	Part	Color	RAL No.
1	IK84XX	Ivory	RAL1015
2	IK85XX	Red	RAL3031
3	IK86XX	Blue	RAL5012
4	IK87XX	Green	RAL6016
5	IK88XX	Yellow	RAL1023
6	IK89XX	Black	RAL9011

PA/R	P1 (T568B)	WIRE	P2 (T568B)
1	1	WHT/ORG	1
	2	ORG	2
2	3	WHT/GRN	3
	6	GRN	6
3	4	BLU	4
	5	WHT/BLU	5
4	7	WHT/BRN	7
	8	BRN	8

WIRE	CAT6 UTP 24AWG*4P
PLUG	8P8C 50U"
LENGTH	xxM
COLOR	yy

Component level test

Unless specified on the drawing, tolerances are per the follows:
 .X ± 1
 .X ± 0.2
 .XX ± 0.05



ACT					
DRAW.NO	IKXXXX	ITEM	CAT6 UTP STR 24AWG*4P		
DEPARTMENT		DRAW	Du Haihao	DATE	2026/4/15
SCALE		CHECKER	Jia Jianjia	DATE	2026/4/15
UNIT	MM	APPROVAL		DATE	

STANDARD COMPLIANCES

All Proposed Category 6 requirements as per ANSI/TIA, ISO/IEC, and CENELEC EN Standards:

ANSI/TIA-568.2-D Cat.6

ISO/IEC 2nd Edition 11801 Class E

CENELEC EN 50173-1

CENELEC EN 50288-6-2, IEC 61156-6 for patch cable

Flame Retardancy is verified according to IEC 60332-1-2.

We implemented RoHS compliance for the requirement of European Union issued Directive 2002/95/EC.

CONSTRUCTION & CHARACTERISTICS

Conductor	Material / Size	Bare Copper / 24AWG
Insulation	Material	HDPE
	Thickness	Nominal: 0.20±0.05mm
	Diameter	Nominal: 0.95±0.05mm
	Colors	Blue/White-Blue Orange/White-Orange Green/White-Green Brown/White-Brown
	Unaged Elongation	Min. 300%
	Unaged Tensile Strength	Min. 1.683 Kgf/mm ²
Jacket	Material	Flame Retardant PVC
	Thickness	Nominal: 0.5±0.05mm
	Diameter	Nominal: 5.9±0.3mm
	Color	Assorted upon request
	Unaged Elongation	Min. 100%
	Unaged Tensile Strength	Min. 1.407 Kgf/mm ²
	Aging at 100°C for 168Hrs	Min. elongation retention:50% Min. tensile strength retention:75%
Marking		CE 17 ACT Cat6 U/UTP CU PVC 4X2XAWG24/7 C(UL)US CMX E477294-24100 IEC 60332-1-2 ANSI/TIA-568.2-D ISO/IEC 11801 Class E EN 50288 MM/DD/YY *****M
		or as customer request.
(PS): " + " Mould separate		

APPROVALS

UL/cUL Listed

ETI /3P Certified ANSI/TIA-568-C 2 Category 6 Testing Safety/Performance



1000BASE-TX Gigabit Ethernet
 10BASE-T, 100BASE-TX Fast Ethernet (IEEE 802.3)
 100 VG – AnyLAN (IEEE802.12), 155/622 Mbps ATM

550MHz Broadband Video
 Voice, T1, ISDN

ELECTRICAL PERFORMANCES

Dielectric Strength of Insulation		2500 V dc / 2 seconds		
Insulation Resistance Test		Min. 5000 MΩ·Km		
Conductor Resistance		Max. 9.38 Ω/100m at 20°C		
Resistance Unbalance		Max. 2%		
Capacitance Unbalance		Max. 160 pF/100m		
Mutual Capacitance		Max. 5600 pF/100m		
Impedance	772kHz	125Ω ± 20%		
	1~250MHz	100Ω ± 15%		
Attenuation & Near End Cross Talk	Frequency	Max. Attenuation	NEXT	PSNEXT
	(MHz)	(dB/100 meters)	(dB), Min.	(dB), Min.
	1 MHz	2.0*	74.3*	72.3*
	4 MHz	3.8*	65.3*	63.3*
	10 MHz	6.0*	59.3*	57.3*
	16 MHz	7.6*	56.2*	54.2*
	20 MHz	8.5*	54.8*	52.8*
	31.25 MHz	10.7*	51.9*	49.9*
	62.5 MHz	15.4*	47.4*	45.4*
	100 MHz	19.8*	44.3*	42.3*
	150 MHz	24.9*	41.4*	39.4*
	200MHz	29.0*	39.8*	37.8*
250MHz	32.8*	38.3*	36.3*	

The asterisked (*) value are for information only. The minimum Next coupling loss for any pair combination at room temperature is to be greater than the value determined using the formula:

$$NEXT(f\text{ MHz}) \geq NEXT(0.772) - 15 \log_{10}(f\text{ MHz}/0.772) \text{ dB}$$

CONFIGURATION

orange 2 white/orange	green 3 white/green
blue 1 white/blue	brown 4 white/brown

