



WONDERFUL HI-TECH

Professional / Precision / Technology



ISO 9001
BUREAU VERITAS
Certification



CCCA
Communications Cable & Connectivity Association

CHDBT™

LAN Cable Flame Rating Introduction

Cable Type	Application Area	Standard
CMP	Plenum spaces(ceiling, elevated floor)	NFPA 262
CMR	Between floors/Backbone cable	UL-1666
CM	Any installation(home network, office network..etc)	UL-1685
LSZH	For any installation	IEC-60332

Plenum cable is cable that is laid in the plenum spaces of buildings. In the United States, plastics used in the construction of plenum cable are regulated under the National Fire Protection Association standard NFPA 90A: Standard for the Installation of Air Conditioning and Ventilating Systems. All materials intended for use on wire and cables to be placed in plenum spaces are designed to meet rigorous fire safety test standards in accordance with NFPA 262 and UL-910. Plenum cable is jacketed with a fire-retardant plastic jacket of either a fluorinated ethylene polymer (FEP) or a low-smoke polyvinyl chloride (PVC) .

Cable that is run between floors in non-plenum areas is rated as riser cable. The fire requirements on riser cable are not as strict. Thus, plenum cable can always replace riser cable, but riser cable cannot replace plenum cable in plenum spaces. These pathways do not handle environmental air. The UL-1666 test is the industry standard for this type of cable.

CM cable is suitable for use in any installation that not in a plenum or riser environment, including (home network, office network.etc) , CM cable is designed to meet rigorous fire safety test standards in accordance with UL-1685.

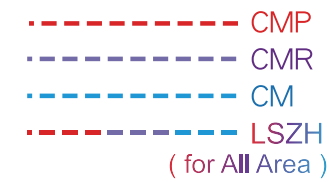
Low smoke zero halogen or low smoke free of halogen (LSZH or LSOH or LSOH or LSFH or OHLS) is a material classification typically used for cable jacketing in the wire and cable industry. LSZH cable jacketing is composed of thermoplastic or thermoset compounds that emit limited smoke and no halogen when exposed to high sources of heat.

Most network cables are insulated with polyethylene, PVC or thermoplastic polyurethane. In a fire, a chlorine-containing plastic material releases hydrogen chloride, a poisonous gas that forms hydrochloric acid when it comes in contact with water. Designated halogen-free cables, on the other hand, do not produce a dangerous gas/acid combination when exposed to flame. Low smoke zero halogen cable reduces the amount of toxic and corrosive gas emitted during combustion.

Fire safety test standards in accordance with IEC-60332



CMP/CMR/CM/LSZH/BURNING COMPARISON



Cable for Computer Mainframe Intelligent Building &Cloud Computing System



Antenna for Mobile Phone, Notebook, All In one PC & Networking Equipment



Power Supply Cable & Power Cord for Household Appliance



Wire Harness for Computer, Car & Household Appliance



Internal Wiring & Flexible PCB for Camera,
Mobile Phone, Video Camera , Notebook,
LED TV, Medical Equipment



HDMI Cable for Communication Product,
Mobile Storage Device & Audio/Video Device



EUROPEAN MARKET

The Construction Products Regulation (CPR)

When the regulations come into effectiveness?

The European Union's (EU) to enforce the new building products regulations 305/2011/EU-CPR as law, and cables shall be required to be compliant from the 1st July 2017. For the construction of the cable, CE certification and product performance statement will become mandatory requirements. EN50575 standard for all power, control and communication cables in the construction period to meet the requirements of fire resistance; EN13501-6 standard provides the reaction to fire classification (Euroclass).

Where should the regulation be applied to?

Any building or civil construction where permanently cabling gets installed is subject, like tunnels, airports, offices, industrial buildings, hospitals and individual homes.

Which Euroclass should be used?

The Euroclass requirement depending on the country, building type, and application potential risk is based on usage and occupancy and client requirements. Therefore it is always important to check the local fire regulations/national CPR implementation and/or insurer's requirements for each country.

What does Wonderful Hi-Tech offer?

Wonderful Hi-Tech offers Euroclass cable with Eca and B2ca, the additional classification of B2ca is B2ca-S1a,d0,a1.

The CPR - Reaction to Fire

Euroclass (ca)	Classification Criteria	Additional Criteria			Risk of Fire	Installation Place / Environment example
		Smoke production EN 50399 / EN 61034-2	Flaming droplets EN 50399	Acidity EN 50267-2-3		
B2	 EN 50399 Heat release Flame spread	 s1a s1b	 d0	 a1	Very High	hospital, tunnels, underground railways, high rise building with large of occupants
C		s1 s2 s3	d1	a2	High	airports, shopping centers, public buildings, escape routes
D	EN 60332-1-2 Flame propagation		d2	a3	Medium	commercial premises, large office, large storehouses
E	EN 60332-1-2 Flame propagation	None			LOW	single residential, industrial premises, small store building with few occupants
F	Fails to meet E ca, Not advisable for public places				outdoor installation and use only	





WONDERFUL HI-TECH



Wonderful Hi-Tech is a proactive, innovative and farseeing provider of high-quality cables and wires. Our goal is to meet the needs of customers around the world with innovative R&D department, stringent QC system, professional sales team, advanced equipment and efficient manufacturing facilities from Taiwan, China, Vietnam and Thailand.

Founded in 1978, Wonderful Hi-Tech grew rapidly and has become a leading manufacturer of wire and cable industry in Asia. In 1995, Wonderful Hi-Tech devoted to producing LAN cables and became a professional manufacturer in structure cabling field. Ever since that, we achieved a lot of milestones with time went by. We get CMP certificate in 1997, Cat 6A (10G) certificate in 2007, we acquired UL “-LP” certificates in 2016, and successfully put Cat8 into mass production in 2018, as the first ETL approved MFR for CMP bulk cable in Asia.

Wonderful Hi-Tech built up a solid foundation for being a reliable global cable manufacturer. To this end, we make capital expense on necessary test and production equipment, as well on new product developments in every year. We have an in-house lab approved by UL, which is the only one in Asia. With these facilities we could assure our customers of qualified products with stable and guaranteed performance. In addition, as an UL-listed cable manufacturer, we have huge annual expense on 3rd party lab certification, covering from electrical wire to communication cable, from Cat5e to Cat8, from flame rating CM to CMP, with all criteria in different cable structures.

In future, Wonderful Hi-Tech will target at expanding business from North American market to other markets around the world. We will focus on delivering the most comprehensive technologies and services, including 5G, IOT, POE, AI, electrical vehicle, and Industry 4.0 application through a process of constant evolution. We are dedicated to fulfill all customers’ demands and put their ideas into practice. Wonderful Hi-Tech connect everything and everywhere.

Worldwide	1
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Cat8 (S/FTP)	7
Cat7A (S/FTP)	8
Cat7 (S/FTP)	10
Cat6A (U/UTP)	11
Cat6A (F/UTP)	13
Cat6A (U/FTP)	14
Cat6A (F/FTP)	16
Cat6A (S/FTP)	17
Cat6A (VTP)	18
Cat6E (U/UTP)	19
Cat6E (F/UTP)	20
Cat6E (SF/UTP)	22
Cat6 (U/UTP)	23
Cat6 (S/FTP)	25
Cat5E (U/UTP)	27
Cat5E (F/UTP)	30
Cat5E (SF/UTP)	32
Cat5 (U/UTP)	34
Product Packaging	35
Fiber Cable	36
Structured Cabling Solutions	40



Wire & Cable Group

To respond the trend of globalization, we have expanded our business to Singapore, Malaysia, Vietnam, Thailand, United States, Hong Kong, China, and so on.

Wonderful Hi-Tech Co., Ltd. (Taiwan)

Address : 1F., No.72 Wugong 6th Rd.,New Taipei Industrial park.,
Wugu Dist., New Taipei City 24891, Taiwan (R.O.C.)
TEL : 886-2-2298-8033
FAX : 886-2-2298-8031
Web : www.wontex.com.tw
Mail : sales@wontex.com.tw
Established : 1978

Factory



Chung-Li, Taiwan



H.K. China

Wonderful Hi-Tech Co., Ltd. (Factory)

Address : 17 Pei Yuan Road, Chung-Li Industrial Park,
Taiwan R.O.C.
TEL : 886-3-452-7777
Main Product : Lan 、 RF Coaxial Cable 、 Hook Up Wire

Wonderful Photoelectricity Co., Ltd. (Dong Guan)

Address : No.51,358 Dart,Loonge Yan,Hu-men,
Dongguan, Guangdong, China PC:523920
TEL : 86-769-8862-0666
Web : www.wonderful-wire.com.cn
Established : 1988
Main Product : Power Cable 、 Hook Up Wire 、 Computer
Cable Flat Ribbon Cable 、 Lan Cable



Hai Duong Province, Vietnam



Chonburi Thailand

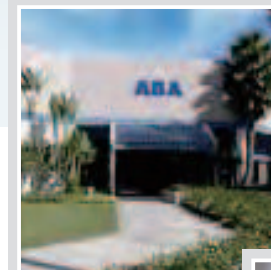
Wonderful Wire & Cable Co., Ltd. (Vietnam)

Address : Lot XN21, Dai An Industrial Zone,KM51,
Highway No.5, Hai Duong Province, Vietnam
TEL : 84-320-3555588
E-mail : luhum543058@hotmail.com
Established : 2010
Main Product : Hook up wire, AV wire, and PVC cable

Thai Wonderful Wire Cable Co., Ltd. (Thailand)

Address : 52-52/1 Moo.5, Tambol Nong Ka-kha, Amphur
Panthong, Chonburi 20160 Thailand
TEL : 66-3845-1433~7(F) 66-2361-8681~3(O)
Web : www.thaiwonderful.com
Established : 1991
Main Product : Hook Up Wire 、 Wire Harness 、 Power Cable 、
Power Cord

Branch office



Los Angeles, USA



Taipei Taiwan



Shanghai China

ABA Industry Inc. (U.S.A)

Address : 639E. Walnut St. Carson, CA 90746
Established : 1996
Main Product : Hook UP Wire 、 RF Coaxial Cable 、 Lan Cable 、
Network Accessories

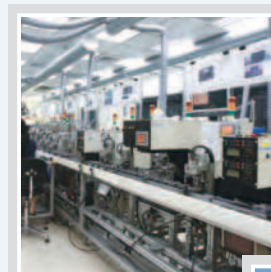
Wonderful Cabling Systems Corp

Address : No.72, Wugong 6th Rd., Wugu Dist.,
New Taipei City 248, Taiwan
TEL : 886-2-2290-1338#202
FAX : 886-2-2290-1339

Shanghai Elitech Technology Co., Ltd.

Address : Room 201,Buildin g 2, No.268,Taihong Road
MinhangDistrict, Shanghai,China
TEL : 86-21-33676880~1
Web : www.wontex.net
Established : 2009
Main Product : Premises Cabling Solutions

Wire Harness Group



Taipei Taiwan



Suzhou China



Dong Guan Humen

Wanshih Electronic Co.,Ltd. (Taiwan)

Address : 72 WuGong 6th RD., WuGu Dist., New Taipei Industrial
Park, New Taipei City 24891, Taiwan, R.O.C.
TEL : 886-2-2298-8066
FAX : 886-2-2298-8131
Web : www.wanshih.com.tw
Mail : Howard_tu@wanshih.com.tw
Established : 1987
Main Product : NB Wire Harness 、 Mobile Phone Wire
Harness 、 Harness for LCD TV 、 Wireless Antenna

Wanshih Electronic Element Co.,Ltd. (Suzhou)

Address : No.68 Wen Du Road, Wan Ting Town, Wu
County, Suzhou City, China
TEL : 86-512-6670-2220
FAX : 86-512-6538-1104
Mail : Alic.yu@wan shih.com.cn
Established : 1994
Main Product : Wire Harness 、 Power Cord 、 Harness
for NB 、 Wireless Antenna 、 Harness for Mobile

Wanshih Electronic Element Co.,Ltd. (Dong Guan Humen)

Address : Long yuan Ind. Area Hu-men Dongguan City,
Guangdong, china
TEL : 86-769-8555-2215
Mail : nelson_liu@wan shih.com.cn

1978

- Establish Wonderful Wire Cable (TWN)

1979

- Factory construction complete, formally commences manufacturing and marketing with total employees of 35

1986

- Become the primary specialized manufacturer of Hook Up Wire in Taiwan

1987

- Joint venture with Asahi Tsushin to establish Wanshin Electronic Co., Ltd.

1988

- Certified by VDE of West Germany, SAA of Australia and F / T Mark of Japan

1989

- Invest in Thai Wonderful Wire Cable Co., Ltd. to set up a wire and cable, and wire harness operations

1990

- Joint venture with Asahi to establish Asahi Best Base in Malaysia for Wire Harness operation
- Add Flat Ribbon Wire into our product lines
- Joint venture with Wan Shih to establish Wan Shin (H. K.) to set up a wire harness factory in Dong Guan

1991

- SEC approves for public filing

1992

- Invest in Lord Hero of Hong Kong
- Invest in Phanthong Wire and Cable of Thailand

1993

- Wonderful Building inauguration, Administration and Marketing departments moved in to meet fast growth of the Company

1994

- Quality Assurance of ISO 9002 1994 Edition certified by BSI of UK and UL of US
- CNS 12682 Quality Assurance certified by the Commodity Inspection Bureau of MOEA
- The first non-Japanese company certified by "Z-Mark" of Japan Electrical Testing Laboratory Inc.
- Invest in DONG GUAN YONG TAI ELECTRIC WIRE&CABLE CO., LTD to manufacture rubber cable through Wonderful Holding (BVI)

1995

- High end product UTP Cat 5 developed
- The first Taiwanese company to be certified by UL on UTP Cat 5

1996

- New product USB wire developed
- Invest in Wonderful International (Cayman) through Wonderful Holding (Cayman)
- Establish Marketing companies in LA and Beijing

1997

- OTC approves listing application

1998

- Listed on the OTC on 4th of February
- Invest in Wonderful Investment co., Ltd

2002

- Rename to Wonderful HI- TECH Co., Ltd. (TWN)
- WSC public on OTC Stock Market (TWN)

2003

- New product RF High Frequency Coaxial Cable commences mass production

2005

- New product Halogen Free (HF) Wires commences mass production 3-layer insulation cable for high frequency transformer commences mass production 10G product commences mass production

2006

- High end LAN cable Cat 6 CMP commences mass production

2007

- New product Cat 6A was certified by ETL

2009

- Invest in Siyang Wan Shih Electronic Component Co., Ltd.
- Invest in Shanghai Elitech Technology Co., Ltd. through Wontex Technology (Hong Kong) CO., LTD.

2010

- Invest in Chongqing Wan Shih Electronic Component Co., Ltd.
- Established Vietnam Wonderful Wire & Cable Factory

2011

- SUNNET CABLING CO.,LTD opened the wiring systembrand 「Wonderful」 market as No.1 brand in Taiwan.
- Vietnam Factory established on Dec 6 and commences mass production and sell.
- Be approbated an official member of TIA (Telecommunication Industry Association) and have the right to vote.

2014

- Wonderful HI-TEC Joined CCCA member

2015

- Wonderful HI-TEC Joined TIA member

2016

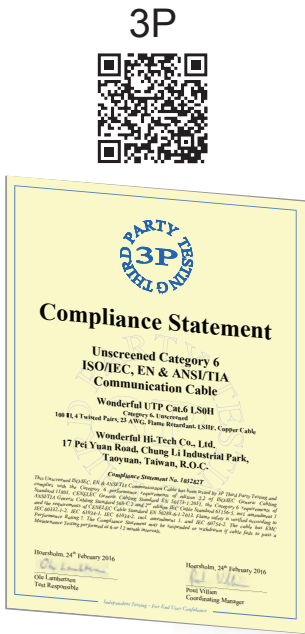
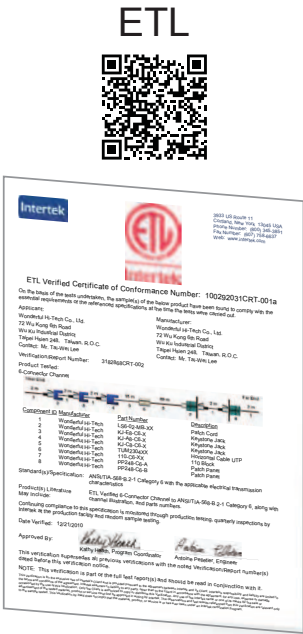
- Committed to research and design Cat8 Cable

2018

- New product Cat 8 was certified by ETL

Product Quality Certification

Wonderful is a leader in the design and manufacture of cable for communication networks



Cat8

		UL	ETL	3P	CPR	PoH
S/FTP 22AWG	CMR	S	P			
S/FTP 22AWG	CMP	S	P			

Cat7A

		UL	ETL	3P	CPR	HDBaseT
S/FTP 23AWG	LSZH		P			
S/FTP 22AWG	CMP	S	P			●
S/FTP 23AWG	CMR	S				

Cat7

		UL	ETL	3P	CPR	PoH
S/FTP 23AWG	PVC			●	E ca	
S/FTP 23AWG	LSZH			●	E ca	
S/FTP 26AWG PC	LSZH			●	E ca	

Cat6A

		UL	ETL	3P	CPR	PoH
U/UTP 23AWG	CM	S				
	CMX	S				
	CMR	●	P			
	CMP	●	P			
	PVC					
	LSZH			●	E ca	

S : Safety Pass P : Performance Pass ● : All Pass

Cat6A

		UL	ETL	3P	CPR	PoH
F/UTP 23AWG	CM	S				
	CMX	S				
	CMR	●-LP(0.5A)	P			
	CMP	●-LP(0.6A)	P			●
	LSZH	DR S		●	B2 ca , E ca	
S/FTP 23AWG	LSZH			●	E ca	
S/FTP 26AWG PC	LSZH			●	E ca	

Cat6

		UL	ETL	3P	CPR	HDBaseT
U/UTP 23AWG W/Slot	CM	●	P			
	CMX	●				
	CMR	●	●			●
	CMP	●-LP(0.5A)	●			
	PVC			●	E ca	
F/UTP 23AWG	LSZH	DR S		●	B2 ca , E ca	
	CM	S				
	CMX	S				
	CMR	●-LP(0.5A)	P			
	CMP	●-LP(0.6A)	P			
U/UTP 23AWG W/O Slot	PVC			●	E ca	
	LSZH	DR		●	B2 ca , E ca	
	CM	●				
	CMX	●				
	CMR	●	P			
U/UTP 24AWG W/Slot	CMP	●	P			
	LSZH	DR				
	CM	●				
	CMX	●				
	CMR	●	P			
U/UTP 24AWG	CMP	S		S	E ca	
U/UTP 24AWG PC	LSZH	DR			E ca	
	CM	S	P			
	CMX	S				
S/FTP 23AWG	CMR	●		S		
SF/UTP 23AWG	LSZH			●	E ca	
U/FTP 23AWG	LSZH			●	E ca	
U/UTP 28AWG	CMR	S				
	LSZH				E ca	

Cat5E

		UL	ETL	3P	CPR	PoH
U/UTP 24AWG	CMP	●	P			
	CMX	●				
F/UTP 24AWG	CMP	S				
	CMX	●				

DR : Dual-Rating, CMR-LSHF S : Safety Pass P : Performance Pass ● : All Pass B2 ca-S1a,d0,a1

Category 6 U/UTP Cable



WONDERFUL

- 符合ANSI/TIA 568.2-D、ISO/IEC 11801 Class E、EN50173 規範設計製造
- 通過多種國際安規認證
- 採用新型易拉箱 (REELEX II) 專利出線口，可同時多箱拉線、易於分辨不打結
- 中心十字型隔離設計有效降低各對線之間的串擾
- 頻寬特性可達500MHz，延遲誤差：<35ns/100m
- 通過歐洲化學總署 (ECHA) ROHS (6大重金屬) 及SVHC (201項有害物質) 檢驗合格
- 適用於水平和建築物主幹電纜的結構化佈線
- 可用在數位/類比訊號傳輸及視頻/音頻上的應用

◆ 國際認證

- UL/UL CSA
- CE Compliance
- ETL
- EC LVD
- 3P
- EU RoHS2
- ROHS
- SVHC

◆ 應用標準

- ANSI/TIA 568.2-D
- ISO/IEC 11801 2nd Class E
- NEMA WC 63.1
- PrEN 50288-6-1
- IEC 61156-5
- UL 444
- CSA 22.2 No.214

◆ 耐燃標準

- CMP (NFPA 262)
- CMR (UL 1666)
- CM (UL 1685)
- CMX
- LSZH (IEC 60332-1)
- FRLSZH (IEC 60332-3-24C)
- CPR
- CMR-LSHF

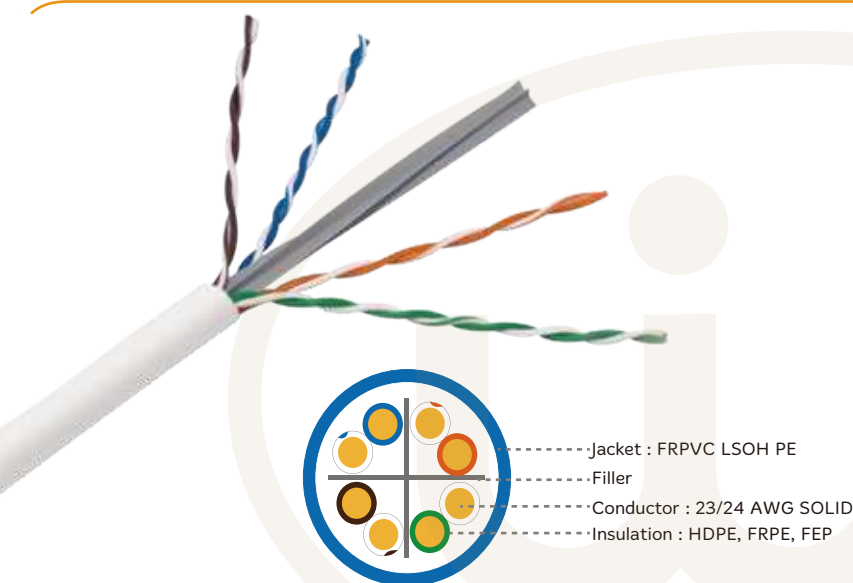
◆ 電氣性能

- Impedance : 100 +/- 15 Ω
- Conductor DC Resistance $\leq 9.38 \Omega/100 \text{ m}$
- Resistance, unbalance $\leq 5\%$
- Spark test: 2.5 KV DC
- Capacitance unbalance pair to ground $\leq 330\text{pF}/100\text{m}$
- Propagation delay skew: 35ns/100M
- Operating Voltage, maximum: 80 V
- Insulation resistance: $\geq 5000 \text{ M}\Omega \cdot \text{km}$
- Installation Temperature : 0°C to +60°C
- Operating Temperature: -20°C to +60°C
- Cable cold bend: -20°C for 4 hr
- Dielectric strength: 1.5 KV ac for 2 s
- Mutual capacitance: $\leq 5.6 \text{ nF}/100\text{m}$

◆ 應用範圍

- 10 / 100 / 1G Base-t IEEE 802.3 i / u / ab.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.

19C
03



Frequency (MHz)	IL Max. dB/100m	NEXT Min. dB/100m	PS.NEXT Min. dB/100m	ACR Min. dB/100m
100	<19.8	>44.3	>42.3	>24.5
250	<32.8	>38.33	>36.33	>5.48
400	<42.97	>35.27	>33.27	N.A.
500	<48.94	>39.82	>37.82	N.A.

產品編號	產品描述	單位
TUM24046XX	CAT.6 U/UTP CM Solid 24AWG	305M/BOX
TUR24046XX	CAT.6 U/UTP CMR Solid 24AWG	305M/BOX
TUP24046XX	CAT.6 U/UTP CMP Solid 24AWG	305M/BOX
TUL23046XX	CAT.6 U/UTP LSOH Solid 23AWG	305M/BOX
TUM23046XX	CAT.6 U/UTP CM Solid 23AWG	305M/BOX
TUR23046XX	CAT.6 U/UTP CMR Solid 23AWG	305M/BOX
TUP23046XX	CAT.6 U/UTP CMP Solid 23AWG	305M/BOX

★ (xx)Color :

本產品型錄規格如有爭議以本公司解釋為主並保留變更修正之權利

◆ WONDERFUL HI-TECH CO., LTD.
<http://www.wontex.com>

◆ WONDERFUL CABLING SYSTEMS
<http://www.wondernet.com.tw>

◆ WONDERFUL WIRE & CABLE CO., LTD (VIETNAM)
<http://www.vwt-wonderful.com/>

◆ ABA INDUSTRY INC.(U.S.A)
<http://www.aba-cable.com>

◆ SHANGHAI ELITECH TECHNOLOGY CO., LTD.
<http://www.wontex.com.cn>

◆ THAI WONDERFUL WIRE CABLE CO., LTD.
(THAILAND)
<http://www.thaiwonderful.com>

◆ WANSHIH ELECTRONIC CO.,LTD
<http://www.wanshih.com.tw>

◆ WONDERFUL PHOTOELECTRICITY
(DONG GUAN) CO., LTD.
<http://www.wonderful-wire.com.cn>

Category 6 SF/UTP Cable



WONDERFUL

- 符合ANSI/TIA 568-C.2、ISO/IEC 11801 Class E、EN50173 規範設計製造
- 金屬鉛箔遮蔽纜線
- 通過多種國際安規認證
- 各對鉛箔隔離設計有效降低各對線之間的串擾
- 頻寬特性標準為250MHz，最高可達500MHz，延遲誤差：<35ns/100m
- 通過歐洲化學總署 (ECHA) 高關注物質篩檢規範
- ROHS (6大重金屬) 及SVHC (201項高關注有害物質) 檢驗合格

◆ 國際認證

- UL/UL CSA
- CE Compliance
- ETL
- EC LVD
- 3P
- EU RoHS2
- ROHS
- SVHC

◆ 應用標準

- ANSI/TIA-568-C.2 (2009)
- ISO/IEC 11801 2nd Class E (Edition 2.2)
- NEMA WC 63.1
- PrEN 50288-5-1
- IEC 61156-5 (Edition 2.1)

◆ 耐燃標準

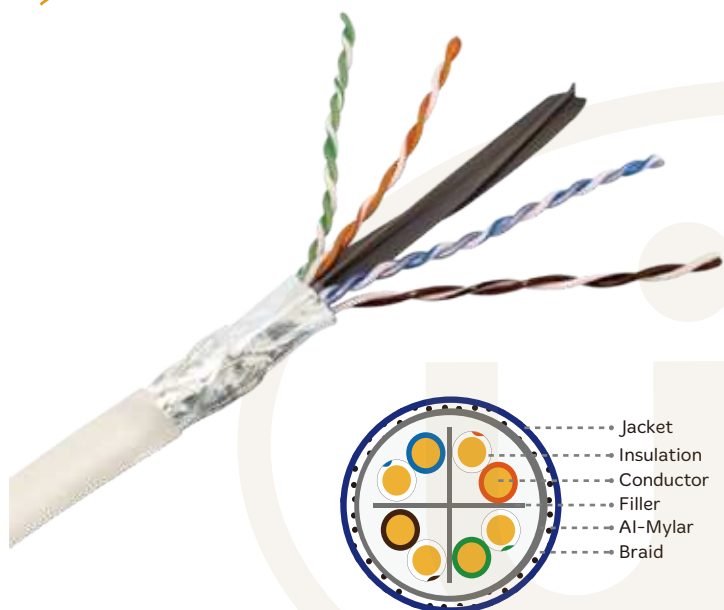
- CMP (NFPA 262)
- CMR (UL 1666)
- CM (UL 1685)
- CMX
- LSZH (IEC 60332-1)
- IEC 61034-1 / 61034-2
- IEC 60754-2
- FRLSZH (IEC 60332-3-24C)
- CPR
- CMR-LSHF

◆ 電氣性能

- Impedance : 100 +/- 15 ohms
- DC Resistance, MAX:9.38 ohms/100 m
- DC Resistance, unbalance of a pair: 3% Max
- Spark test: 2.5 KV DC
- Capacitance unbalance: 330pF/100m Max
- Propagation delay skew: 35nS/100M
- Operating Voltage, maximum:80 V
- Insulation resistance: ≥ 5000 MΩ·km
- Installation Temperature :0°C to +60°C
- Operating Temperature:-20°C to +60°C
- Cable cold bend: -20°C for 4 hr
- Dielectric strength: 1.5 KV ac for 2 s
- Mutual capacitance: ≤ 5.6 nF/100m

◆ 應用範圍

- 10 / 100 / 1G Base-t IEEE 802.3 i / u / ab.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.



TYPE	Frequency (MHz)	IL Max. dB/100m	NEXT Min. dB/100m	PS.NEXT Min. dB/100m	ACR Min. dB/100m
Solid	100	<19.80	>44.30	>42.30	>24.50
	250	<32.85	>38.33	>36.33	>5.48
	400	<42.97	>35.27	>33.27	N.A.
Stranded	100	<29.94	>45.30	>42.30	>15.36
	250	<49.68	>39.33	>36.33	N.A.
	400	<65.02	>36.27	>33.27	N.A.

產品編號	產品描述	單位
TCM23046XX	CAT.6 SF/UTP CM Solid23AWG	305M/REEL
TCR23046XX	CAT.6 SF/UTP CMR Solid23AWG	305M/REEL
TCP23046XX	CAT.6 SF/UTP CMP Solid23AWG	305M/REEL

★ (xx)Color :

19C
05

本產品型錄規格如有爭議以本公司解釋為主並保留變更修正之權利

◆ WONDERFUL HI-TECH CO., LTD.
<http://www.wontex.com>

◆ WONDERFUL CABLING SYSTEMS
<http://www.wondernet.com.tw>

◆ WONDERFUL WIRE & CABLE CO., LTD (VIETNAM)
<http://www.vwt-wonderful.com/>

◆ ABA INDUSTRY INC.(U.S.A)
<http://www.aba-cable.com>

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(THAILAND)
<http://www.thaiwonderful.com>

◆ WANSHIH ELECTRONIC CO.,LTD
<http://www.wanshih.com.tw>

◆ WONDERFUL PHOTOELECTRICITY
(DONG GUAN) CO., LTD.
<http://www.wonderful-wire.com.cn>

Category 6A F/UTP cable



WONDERFUL

- 符合ANSI/TIA 568.2-D、ISO/IEC 11801 Class EA、EN50173 規範設計製造
- 通過多種國際安規認證
- 採用金屬鋁箔遮蔽纜線
- 中心十字型隔離設計有效降低各對線之間的串擾
- 頻寬特性可達500MHz，延遲誤差：<35 ns/100m。
- 通過歐洲化學總署 (ECHA) 高關注物質篩檢規範
- ROHS (6大重金屬) 及SVHC (201項高關注有害物質) 檢驗合格

國際認證

- UL/UL CSA
- ETL
- 3P
- ROHS
- SVHC
- CE Compliance
- EC LVD
- EU RoHS2
- DELTA

應用標準

- ANSI/TIA 568.2-D
- ISO/IEC 11801 2nd Class E
- NEMA WC 63.1
- PrEN 50288-6-1
- IEC 61156-5

耐燃標準

- CMP (NFPA 262)
- CMR (UL 1666)
- CM (UL 1685)
- CMX
- LSZH (IEC 60332-1)
- FRLSZH (IEC 60332-3-24C)
- CPR
- CMR-LSHF

電氣性能

- Impedance : 100 +/- 15 ohms
- DC Resistance, MAX:9.38 ohms/100 m
- DC Resistance, unbalance of a pair: 3% Max
- Spark test: 2.5 KV DC
- Capacitance unbalance: 330pF/100m Max
- Propagation delay skew: 35nS/100M
- Resistance unbalance ≤ 4%
- Operating Voltage, maximum:80 V
- Insulation resistance: ≥ 5000 MΩ · km
- Installation Temperature :0°C to +60°C
- Operating Temperature:-20°C to +60°C
- Cable cold bend: -20°C for 4 hr
- Dielectric strength: 1.5 KV ac for 2 s
- Mutual capacitance: ≤ 5.6 nF/100m

應用範圍

- 10 / 100 / 1G /10G Base-t IEEE 802.3 i/u/ab.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.



TYPE	Frequency	IL	NEXT	PS.NEXT	ACR
	(MHz)	(Max.)	(Min.)	(Min.)	(Min.)
		dB/100m	dB/100m	dB/100m	dB/100m
Solid	100	<19.14	>44.30	>42.30	>25.17
	250	<31.07	>38.33	>36.33	>7.26
	500	<45.26	>33.82	>31.82	N.A.
Stranded	100	<28.70	>45.30	>42.30	<16.60
	250	<46.60	>39.33	>36.33	N.A.
	500	<67.89	>34.82	>31.82	N.A.

產品編號	產品描述	單位
TSR2304SXX	CAT.6A F/UTP CMR Solid 23AWG	305M / REEL
TSM2304SXX	CAT.6A F/UTP CM Solid 23AWG	305M / REEL
TSL2304SXX	CAT.6A F/UTP LSOH Solid 23AWG	305M / REEL

★ (xx)Color :

19C
08

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◆ WONDERFUL PHOTOELECTRICITY
(DONG GUAN) CO., LTD.
<http://www.wonderful-wire.com.cn>

Category 7 S/FTP Cable



WONDERFUL

- 符合ANSI/TIA 568-C.2、ISO/IEC 11801 Class F、EN50173 規範設計製造
- 銅網編織加鋁箔隔離式電纜
- 通過多種國際安規認證
- 各對鋁箔隔離設計有效降低各對線之間的串擾
- 頻寬特性可達750MHz，延遲誤差：<25ns/100m
- 通過歐洲化學總署 (ECHA) 高關注物質篩檢規範
- ROHS (6大重金屬) 及SVHC (201項高關注有害物質) 檢驗合格

國際認證

- UL/UL CSA
- ETL
- 3P
- ROHS
- SVHC
- CE Compliance
- EC LVD
- EU RoHS2

應用標準

- ANSI/TIA 568-C.2
- ISO/IEC 11801 2nd Class E
- NEMA WC 63.1
- PrEN 50288-6-1
- IEC 61156-5

耐燃標準

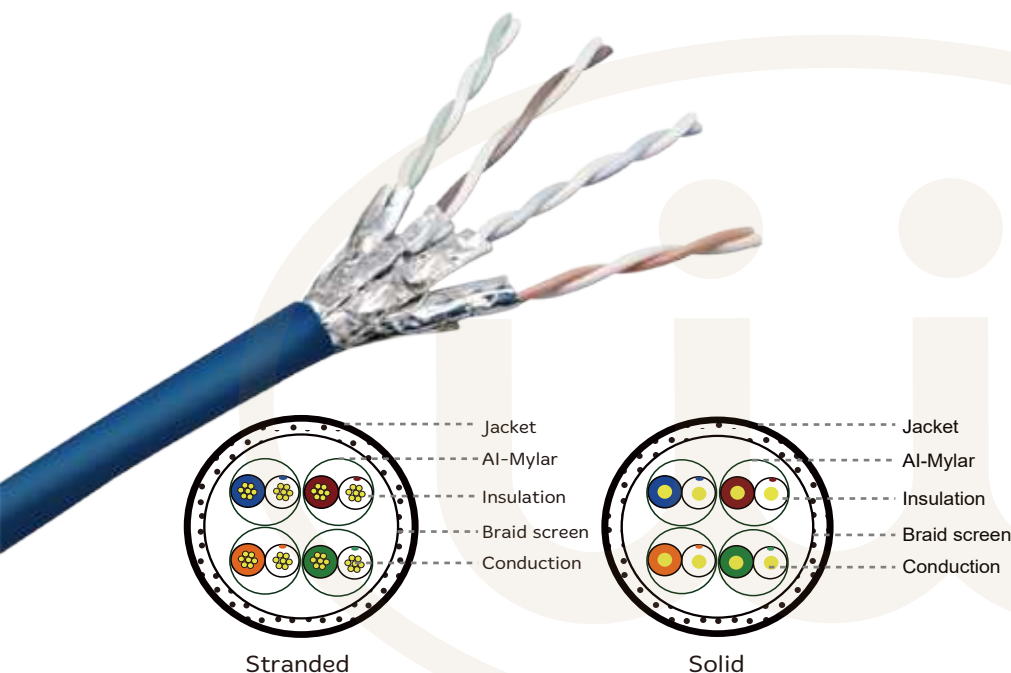
- CMP (NFPA 262)
- CMR (UL 1666)
- CM (UL 1685)
- CMX
- LSZH (IEC 60332-1)
- FRLSZH (IEC 60332-3-24C)
- CPR
- CMR-LSHF

電氣性能

- Impedance : 100 +/- 15 ohms
- DC Resistance, MAX:9.38 ohms/100 m
- DC Resistance, unbalance of a pair: 5% Max
- Spark test: 2.5 KV DC
- Capacitance unbalance: 330pF/100m Max
- Propagation delay skew: 25nS/100M
- Operating Voltage, maximum:80 V
- Insulation resistance: ≥ 5000 MΩ · km
- Installation Temperature :0°C to +60°C
- Operating Temperature:-20°C to +60°C
- Cable cold bend: -20°C for 4 hr
- Dielectric strength: 1.5 KV ac for 2 s
- Mutual capacitance: ≤ 5.6 nF/100m

應用範圍

- 10/100/1G/10G/40GBase-t IEEE 802.3 i/u/ab.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.



TYPE	Frequency (MHz)	IL (Max.) dB/100m	NEXT (Min.) dB/100m	PS.NEXT (Min.) dB/100m	ACR (Min.) dB/100m
Solid	100	<19.02	>72.40	>69.40	>53.38
	500	<45.26	>61.92	>58.92	>16.66
	750	<56.80	>59.27	>56.27	>2.47
Stranded	100	<28.53	>72.40	>69.40	>43.87
	500	<67.89	>61.92	>58.92	N.A.
	750	<85.20	>59.27	>56.27	N.A.

產品編號

產品描述

單位

TFL2304AXX

CAT.7 SFTP LSOH 23AWG

305M / REEL

★ (xx)Color :

19C
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(DONG GUAN) CO., LTD.
<http://www.wonderful-wire.com.cn>

CAT.6 Patch Cord

24AWG U/UTP PVC/LSZH



WONDERFUL

- 符合TIA/EIA-568-C.2 、ISO/IEC 11801 、EN50173 標準
- 通過Cat.6 Patch cable Fluke測試
- 可依需求提供多種顏色外被之跳接線供現場顏色管理用
- 外被覆為耐燃PVC或LSOH被覆，耐燃測試符合IEC 60332-1
- 可提供活動式號碼管供編號及貼式標籤
- RJ45採多種形式，機械式壓接，防潮、堅固、耐彎折
- RJ45接頭具彈片保護設計，防止相互勾扯斷裂
- RJ45接觸金片針採磷青銅鍍銀100u接觸面加鍍金50u可抗拔插後磨損氧化
- 提供預套式、可拆式及充膠式保護套供選擇

國際認證

- UL
- 3P
- ETL
- CSA

應用標準

- TIA/EIA 568-C.2
- ISO/IEC 11801 2nd version
- EN-50173 2nd version
- RJ 45 complies with FCC part 68 standard.
- IEC 61935-2
- IEC 603.7-51

耐燃標準

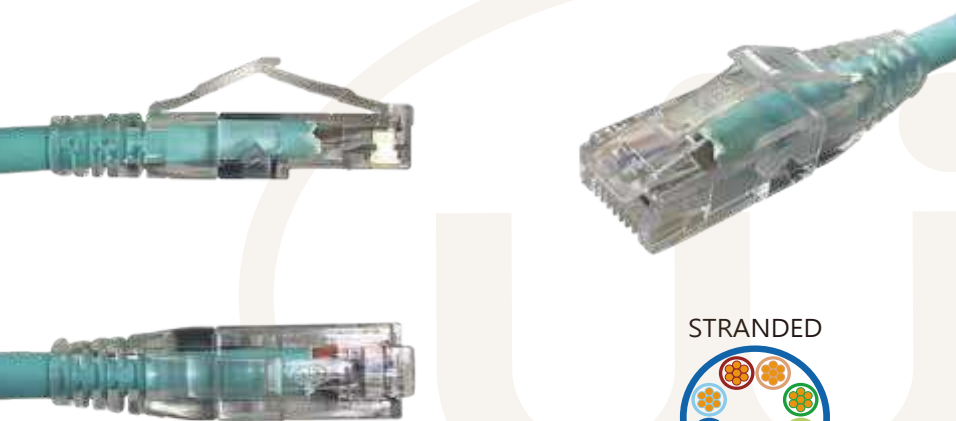
- PVC : CM
CMR
CMP
- LSOH : IEC 60332-1
IEC 61034
IEC 60754
- CPR
- CMR-LSHF

規格性能

- Insulation material UL-94V-0
- Insertion life cycles : >1000(Typical)
- Plug retention force : >30lb
- Impedance: 100+/-15 Ω
- Temperature : -10°C to +75°C
- F/ UTP S/FTP
- 24AWG 7/0.16mm/ HDPE Stranded
- Length : 0.5m 、1m 、2m 、3m ~ 20m

應用範圍

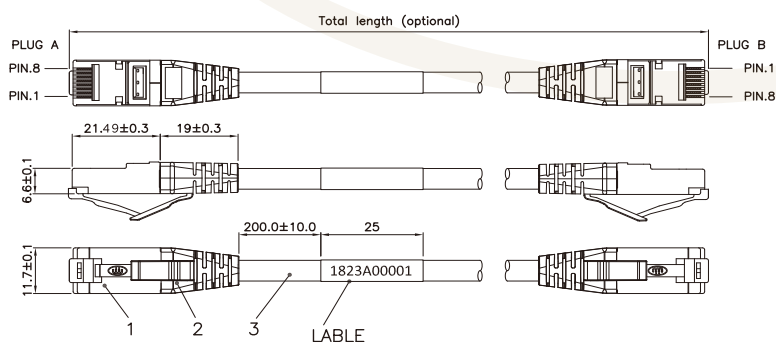
- 10/100/1000 Base T
- ATM 155MHz
- TP-PMD ADSL ISDN
- FDDI/CDDI



可加號碼環

STRANDED

24AWG 7/0.2mm/ HDPE Insulation



產品編號	產品描述	單位
L6-NXXASU24**	CAT.6 UTP PATCH CORD	1/EA/BAG

- ★ (**) Color
- ★ (XX) Length : 01-20M

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<http://www.thaiwonderful.com>

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<http://www.wanshih.com.tw>

◆ WONDERFUL PHOTOELECTRICITY
(DONG GUAN) CO., LTD.
<http://www.wonderful-wire.com.cn>

CAT.6A Patch Cord

28AWG U/FTP LSZH



- 符合ANSI/TIA-568.2-D、ISO/IEC 11801、EN50173 標準
- 通過Cat. 6A Patch cable Fluke測試
- 可依需求提供多種顏色外被之跳接線供現場顏色管理用
- 外被覆為耐燃LSOH被覆，耐燃測試符合 IEC 60332-1
- 可提供活動式號碼管供編號及貼式標籤
- RJ45接頭採金屬全包覆式遮蔽接頭，機械式壓接及，防潮、耐彎折
- RJ45接頭具彈片保護設計，防止相互勾扯斷裂
- RJ45接觸金片針採磷青銅鍍銀100u接觸面加鍍金50u可抗拔插後磨損氧化
- 提供預套式、可拆式及充膠式保護套供選擇。

◆ 國際認證

- UL
- 3P
- ETL
- CSA

◆ 應用標準

- ANSI/TIA-568.2-D
- ISO/IEC 11801 2nd version
- EN-50173 2nd version
- RJ 45 complies with FCC part 68 standard.
- IEC 61935-2
- IEC 603.7-51

◆ 耐燃標準

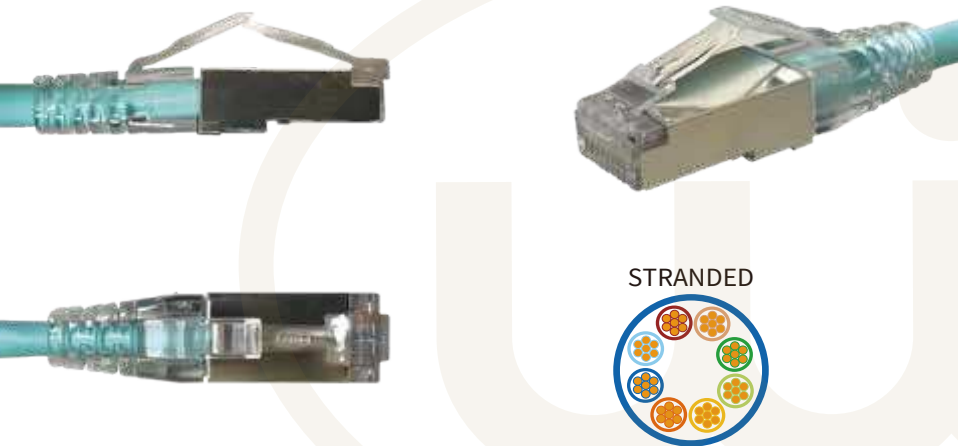
- PVC : CM
CMR
CMP
- LSOH : IEC 60332-1
IEC 61034
IEC 60754
- CPR
· CMR-LSHF

◆ 規格性能

- Insulation material meet UL-94V-O
- Insertion life cycles : >1000(Typical)
- Plug retention force : >30lb
- Impedance : 100+/-15 Ω
- Temperature : -10°C to +75°C
- 28AWG 7/0.127mm/ HDPE Insulation
- F/ UTP S/FTP
- Length : 0.5m、1m、2m、3m ~ 20m

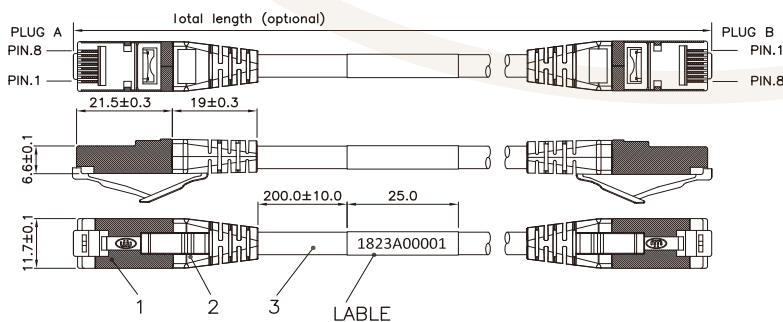
◆ 應用範圍

- 10/100/1000/10G Base T
- ATM 155/622MHz 1.2/2.4GHz
- TP-PMD ADSL ISDN
- FDDI/CDDI



STRANDED

28AWG 7/0.127mm/ HDPE Insulation



產品編號	產品描述	單位
L6ANXXAST28**	CAT.6A U/FTP 28AWG PATCH CORD	1/EA/BAG

- ★ (xx)Color :      
- ★ (XX)Length : 01-20M

19C
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(DONG GUAN) CO., LTD.
<http://www.wonderful-wire.com.cn>

Telephone Keystone Jack

90° 標準型



WONDERFUL

- 90°110型薄型設計標準型
- 可安裝於24P 1U模組式配線架上
- RJ12 接觸彈片採磷青銅鍍銀100u表面鍍金50u，防止表面產生氧化造成接觸不良
- 資訊插座有EIA色碼，提供不同顏色以上標示及區分作為顏色管理用途
- 資訊插座視實際需求可安裝在面板資訊盒或模組式跳線面板搭配使用
- IDC端子可收容22AWG~26AWG之芯線，具USOC雙線位標示

◆ 國際認證

- UL CSA

◆ 符合標準

- ANSI/TIA 568-C2 CAT.3
- ISO/IEC 11801 2nd
- EN 50173-1: 2011
- IEC60603-7
- IEC60512-27
- IEC60352

◆ 產品描述

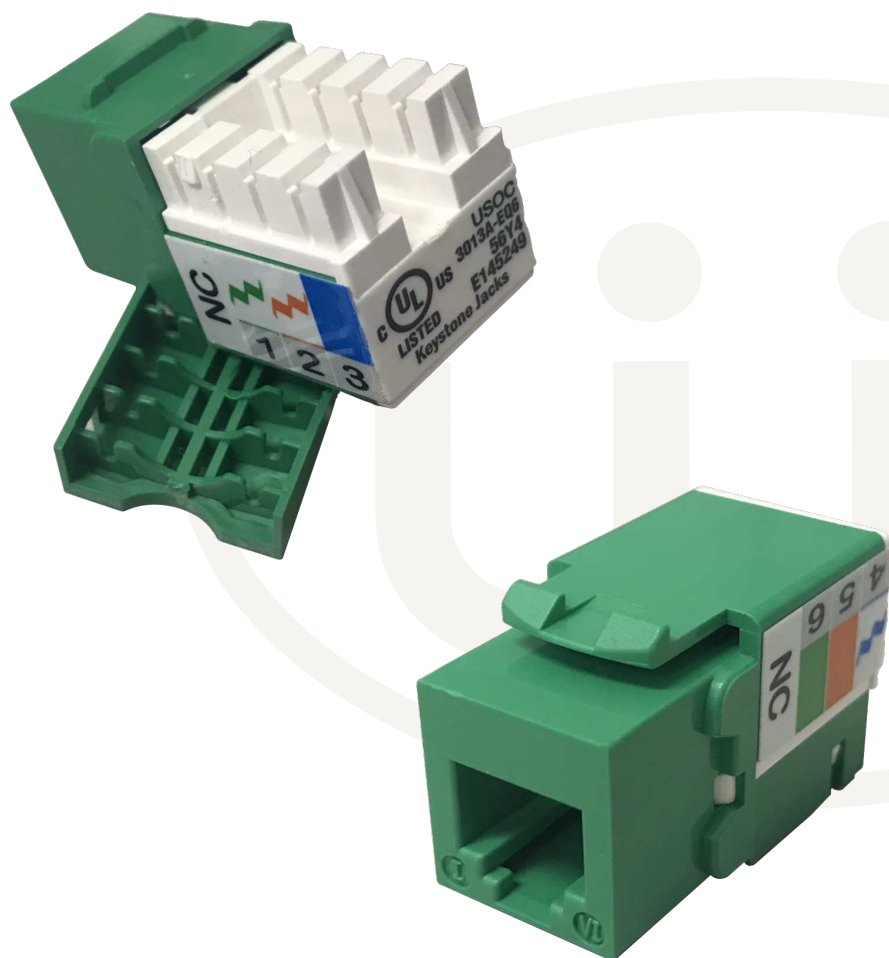
- USOC wiring
- RJ 12 complies with FCC part 68 standard
- 110 IDC universal Provides termination for IDC connector 22~26 AWG wire

◆ 電氣性能

- Housing is fire-resistance ABS
- Contacts are 50u" gold-plated
- Insertion life cycles >1000 (Typical)
- IDC insertion life cycles >200
- Contact resistance : 20M Ω
- Current rating : 1.5Amps
- DC resistance: Max.0.1 Ω
- Operating temperture: -40~+60 C degrees

◆ 應用標準

- TP-PMD
- ADSL
- ISDN



產品編號

WKJE6TLUAKYXX

產品描述

一般型電話插座

單位

10/EA/BAG

★ (xx)Color: ☐ ☒

19K
06

2024.05.15

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<http://www.wonderful-wire.com.cn>

CAT.5E/6 Keystone Jack

Q系列 UTP 自動防塵



WONDERFUL

- Tool-Free設計免專用工具即可完成安裝
- 專利自動防塵蓋設計，RJ45插入無須手動掀蓋，直接插入可滑行至定位點卡合
- RJ45拔出後防塵蓋自動彈回關閉可有效防止灰塵及其他汙染侵入
- RJ45及壓線端子採無焊錫 (press-in) 接合技術可有效抑制錫點產生的串音衰減及RL問題
- RJ45接觸彈片採磷青銅鍍鎳100u表面鍍金50u，防止表面產生氧化造成接觸不良
- 資訊插座有EIA色碼，提供六種不同顏色以上標示及區分作為顏色管理用途
- 資訊插座視實際需求可安裝在面板資訊盒或模組式跳線面板搭配使用
- IDC端子可收容22AWG~26AWG之芯線，具T568A及T568B雙線位標示

◆ 國際認證

- UL CSA
- 3P
- ETL

◆ 符合標準

- ANSI/TIA 568-C2 CAT. 5E/CAT. 6
- ISO/IEC 11801 2nd class D/E
- EN 50173-1: 2011
- IEC60603-7
- IEC60512-27
- IEC60352

◆ 產品描述

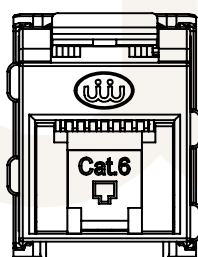
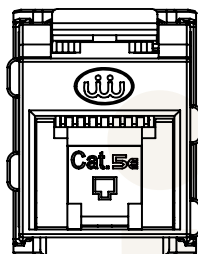
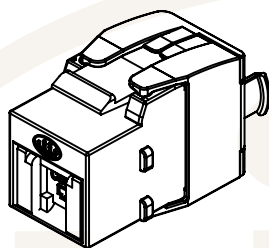
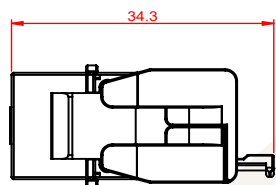
- T-568A/B wiring
- RJ45 complies with FCC part 68 standard.
- Termination for 22~26 AWG solid wire

◆ 電氣性能

- Housing is fire-resistance ABS/PC
- Gold-plated Contacts: 50u"
- Insertion life cycles: > 1000 (Typical)
- IDC insertion life cycles:>200
- Contact resistance: 20M Ω
- Current rating: 1.5Amps
- DC resistance: Max. 0.1 Ω
- Operating temperature: -40~+60° C

◆ 應用範圍

- 10/100 Base-T
- Gigabit Ethernet
- ATM155
- ATM 1.2/2.4Gbps
- TP-PMD
- ADSL
- ISDN
- POE++



產品編號	產品描述	單位
WKJA85EUQKDXD	CAT.5E UTP Keystone Jack	24 / EA / BOX
WKJA8C6UQKDXD	CAT.6 UTP Keystone Jack	24 / EA / BOX

★ (xx)Color :      

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<http://www.wontex.com>

◆ WONDERFUL CABLING SYSTEMS
<http://www.wondernet.com.tw>

◆ WONDERFUL WIRE & CABLE CO., LTD (VIETNAM)
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◆ ABA INDUSTRY INC.(U.S.A)
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CAT.6A Keystone Jack

STP /UTP自動防塵



WONDERFUL

- STP其有Tool-Free設計免專用工具即可完成安裝
- 專利自動防塵蓋設計，RJ45插入無須手動掀蓋，直接插入可滑行至定位點卡合
- RJ45拔出後防塵蓋自動彈回關閉可有效防止灰塵及其他汙染侵入
- RJ45及壓線端子採無焊錫 (press-in) 接合技術可有效抑制錫點產生的串音衰減及RL問題
- RJ45接觸彈片採磷青銅鍍銀100u表面鍍金50u，防止表面產生氧化造成接觸不良
- 資訊插座視實際需求可安裝在面板資訊盒或模組式跳線面板搭配使用
- IDC端子可收容22AWG~26AWG之芯線，具T568A及T568B雙線位標示
- 資訊插座以金屬全包覆，隔離干擾及提供鏈路接地功能

◆ 國際認證

- UL CSA
- ETL

◆ 符合標準

- ANSI/TIA 568-C2 CAT.6A
- ISO/IEC 11801 2nd class EA
- EN 50173-1: 2011
- IEC60603-7
- IEC60512-27
- IEC60352

◆ 產品描述

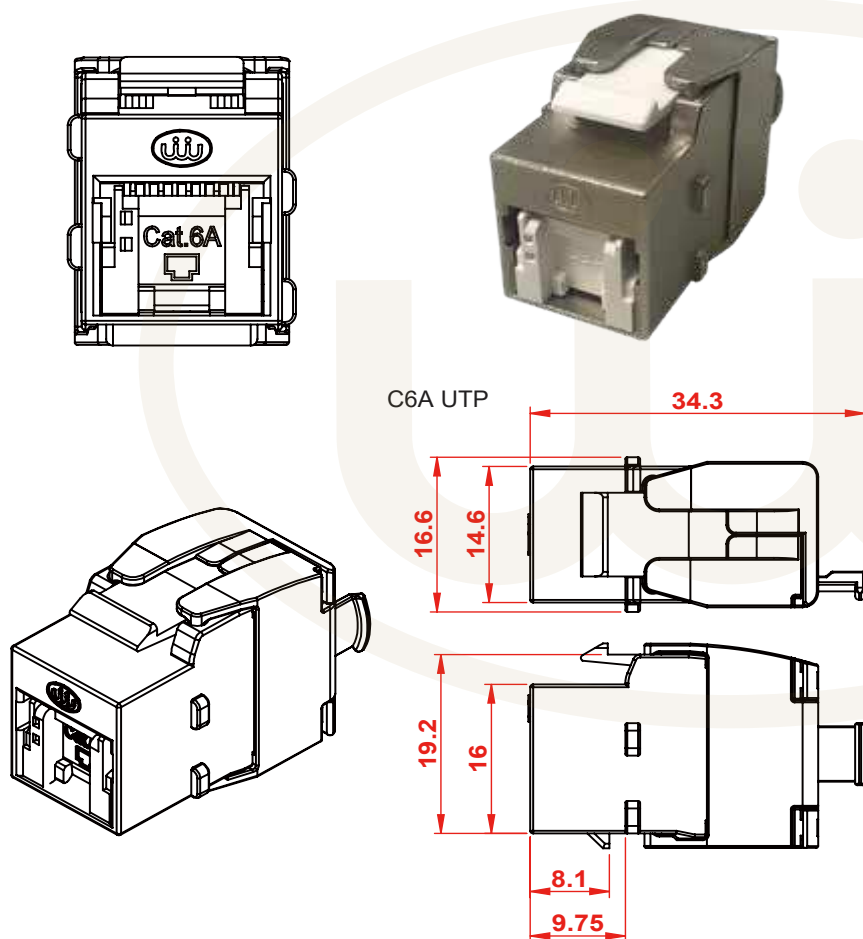
- T-568A/B wiring
- RJ 45 complies with FCC part 68 standard.
- 110 IDC universal provides termination for IDC connector 22~26 AWG solid wire

◆ 電氣性能

- Housing is fire-resistance ABS/PC
- Contacts are 50u" gold-plated
- Insertion life cycles > 1000 (Typical)
- IDC insertion life cycles >200
- Contact resistance : 20MΩ
- Current rating : 1.5Amps
- DC resistance: Max.0.1Ω
- Operating temperature: -40~+60°C

◆ 應用範圍

- 10/100/1000 Base-T
- 10 Gigabit Ethernet
- ATM155/622
- TP-PMD
- ADSL
- ISDN
- POE+



產品編號	產品描述	單位
KJC8C6AXXS	CAT.6A STP Keystone Jack	1/EA/BAG
KJC8C6AXXU	CAT.6A UTP Keystone Jack	1/EA/BAG

★ (xx)Color :      

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boot & Modular Plug

RJ45 CAT.5E UTP



5.5mm Ø

RJ45 CAT.6 UTP



6.0mm Ø



6.3mm Ø

RJ45 CAT.5E
UTP/FTP
雙排單件式



7.0mm Ø

CAT.6 FTP
雙排三件式



7.0mm Ø

CAT.6A FTP



8.0mm Ø

RJ11/12 Telephone
兩叉大拐腳(單股線用)



符合標準

- 符合標準：FCC Part 68 Standard
- 規格說明：
- RJ 45 /12/11 8P8C/6P6C/6P4C
- UTP 2叉/3叉
- FTP 2叉/3叉

材質特性

- 本體材質：P.C. PVC：UL94V-0 /2
- 耐電壓：500 V AC 250V @ 2A
- 絕緣阻抗：100 M Ω.
- 線纜抗張：>100N
- 接觸面耐插拔：1000 次
- 安裝線導體：23/24/26 AWG (O.D. 0.95~1.05mm)
- 表面鍍金：50u"

A09

Faceplates



- 表面亮化處理汙染容易擦拭，不積塵
- 可提供橫式1. 2. 3 孔位面板、直式1. 2. 3. 4. 6孔
- 插座面板底座為ABS材質並符合UL94V-0之耐火測試
- 防火、耐燃、抗衝擊且容易清潔，永不髒汙或退色
- 金屬結構可與接地系統連接，形成完整的接地網
- 可依需求選擇安裝各式模組如RJ45、RJ12、ST、SC、F Type、BNC等
- 提供不銹鋼面板供特殊環境長期使用

◆ 國際認證

- UL cUL

◆ 產品特點

- Hi-impact UL94V-0 ABS
- Snap-In module type : RJ45, RJ12, ST, SC, LC, F Type, BNC, RCA
- Standard color : White
- Operating Temperature : -10°C to +60°C



橫式面板
FL00R800XH



星光系列面板
FL00R8000X



直式面板
FL00R800XV



不銹鋼系列面板
FL00R8000X

產品編號	產品描述	單位
FLOOR8000X	星光系列面板1、2、3孔	個
FLOOR800XH	標準型橫式面板1、2、3孔	個
FLOOR800XV	標準型直式面板1、2、4、6孔	個
FLOOR8000X	不銹鋼系列面板1、2、4孔	個

★ (xx) 顏色: WH、RED、BU、GR、YL、OR

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CAT.5E/6 Patch Panel

UTP 6X4 PCB Patch Panel



專利網路配線面板及跳接面板之結構 TAIWAN NO: I 376998

全新設計模組式配線架，
前方可 6 Port 模組可取出，
方便安裝及維修。



◆ 國際認證

- UL cUL
- ETL
- 3P

◆ 運用標準

- ANSI/TIA- 568-B2.1/C2
- ISO/IEC 11801 Class D/E
- EN 50173-1: 2008/2011
- IEC-60603-7-2/4
- IEC-60512-26/27-100
- EIA-310-D

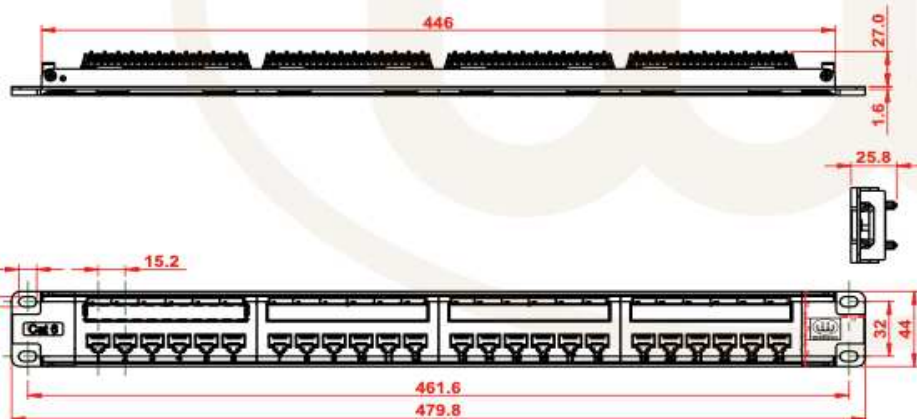
◆ 規格特性

- Housing is fire-resistance ABS
- Contacts are 50u" gold-plated
- Insertion life cycles > 1000 (Typical)
- IDC insertion life cycles >250
- Contact resistance : 20M ohm
- Current rating : 1.5Amps
- DC resistance: Max.0.1ohm
- Operating temperature: -40~+60°C
- T-568A/B wiring
- RJ 45 complies with FCC part 68 standard.
- 110 IDC connector : 22~26 AWG wire

◆ 運用範圍

- Gigabit Ethernet
- ATM155/622
- TP-PMD
- ADSL
- ISDN

- 適用於1U19吋機櫃，採用6P X 4模組設計，可由前方拆卸安裝維修
- 配合模組10mm高大型標示透明銘版設計
- 跳線面板具有後方理線架可整理及導引進線避免裝置時折角過大，有助於特性穩定
- ABS前後框固定模組設計，尺寸精準穩定美觀適用於機房理線
- RJ45接觸彈片採磷青銅鍍銀100u表面鍍金50u，防止表面產生氧化造成接觸不良
- 通過 ETL CAT6，6 connector channel 合格認證
- 通過 UL ETL 3P 單體認證



產品編號	產品描述	單位
PP248C6M	CAT.6 24 port RJ45 patch panel (6x4)	1/10 EA/BOX
PP248C5EM	C5E 24 port RJ45 patch panel (6x4)	1/10 EA/BOX

★ (xx)顏色:WH、RED、BU、GR、YL、OR

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Cable Management

1U/2U 理線架



- 理線槽為ABS塑膠材質符合UL94V-0之耐火測試，適合19英寸標準儀器櫃使用。
- 線槽內部提供倒鉤式理線環以防止線材整理完畢脫落，以方便施工。
- 理線槽後方有大型進線孔，便於機架內外理線，無銳角不傷線材。
- 前方提供橫式蓋板，可將跳接線隱藏於蓋板內，以達整齊美觀之效果，前蓋板提供上下兩邊皆可翻面開啟功能，以便於跳線由上下兩端方向皆可進線。
- 可於機櫃內水平或垂直應用。



- 固定底座金屬製採用熱硬化粉體塗裝，以防生鏽氧化及刮傷、脫漆、可抗強酸、強鹼侵蝕
- 正面提供五個整線環扣設計，可提供良好插拔空間。
- 理線槽為5環固定，並附有大型前後出線孔便於機架內外理線，無銳角不傷線材。
- 理線環扣及蓋板為防火ABS材質符合UL94-V-0耐燃規範



◆ 符合規範

- EIA-310
- UL94-V-0
- ROHS

- 固定底座金屬製採用熱硬化粉體塗裝，以防生鏽氧化及刮傷、脫漆、可抗強酸、強鹼侵蝕
- 提供24槽整線環扣設計，可提供配合24P配線架孔位插拔理線用
- 大型前後出線孔便於機架內外理線，無銳角不傷線材
- 理線槽及蓋板為防火ABS材質符合UL94-V-0耐燃規範

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戶外型充膠式金屬光纜 4~12C



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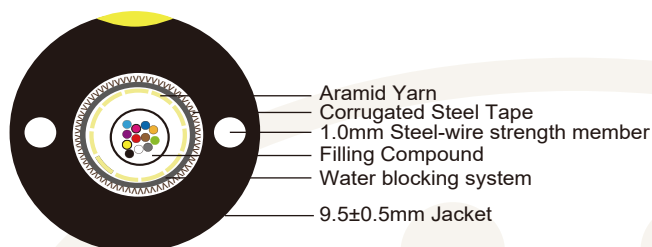
- 採用充膠石油膏填充於束管內具有防水功能
- 束管外層放置指水帶及凱芙拉具防水抗張功能
- 光纜外被覆兩側置放1.0mm金屬支撐條
- 光纜束管採用波紋鋼帶被覆，使光纜有更強抗壓性及防鼠咬功能
- 外被覆依據光纜規格注入顏色注條區分用途及功能
- 充膠式設計適合於戶外及長距離施工安裝
- 小線徑設計4~12C/8.0mm易於通過建築物內外管道及豎井

◆ 運用範圍

- 室內外管道
- 跨廠區連接使用
- 廠區建築內水平佈放

◆ 符合規範

- ANSI/TIA-568-C.3
- ISO 11801
- ITU-T G.652.D / ITU-T G.657.A1, A2
- ITU-T G.651.OM2, OM3, OM4
- IEC60332-1 IEC60332-3 IEC 383
- IEC 60793 IEC 60794
- ANSI/TIA/EIA 492AAA/492AAB
- CNS14301, EL3600-6規範
- Telcordia GR-20-CORE
- RoHS compliant (2011/65/EU)



Jacket: PE/LSOH(料號依規格書為準)

Fiber Core Geometric Characteristics

Type	ITU-T G.652.D / G.657.A1 / G.657.A2	ITU-T G.651.OM2 / OM3 / OM4
Core Diameter	9.2 ± 0.3 μm	50.0 ± 2.5 μm
Clad Diameter	125 ± 1.0 μm	125 ± 1 μm
Coating Diameter	240 ± 5 μm	245 ± 10 μm
Attenuation	@1310 nm ≤ 0.4 dB/km	@850 nm ≤ 3.5 dB/km
Attenuation 1550 nm	@1550 nm ≤ 0.3 dB/km	@1300 nm ≤ 1.0 dB/km

Product Environmental Condition

Storage/Shipping	LSOH/PE	-20/40°C to +75/85°C
Installation	LSOH/PE	-10°C to +60°C
Operation	LSOH/PE	-20/40°C to +75/85°C

Product Construction

Fiber Core Count	4~12C
PBT Tube Diameter	2.0 ~ 2.5 ± 0.2mm
PBT Tube Count	12C /1Tube
Dielectric Aramid Strength Members	10 Clusters of Kevlar 1500D
Water Block Systems	Water Block Tape
PE/FRP Strength Members	1.0mm Steel wire X2
Jacket Diameter	9.5± 0.5mm
Jacket Color	Black with Yellow/Orange/Aqua Strip
Tensile Loading (Short Term / Long Term)	2700 N / 900N
Crush Load (Short Term / Long Term)	1000 N/ 300 N(100mm)
Bend Radius (Short Term / Long Term)	15 / 10 Times of Cable Diameter

Product Reliability Characteristics

Items	Values
Tensile Strength(TIA/EIA-455-33A)	SM ≤ 0.2 dB MM ≤ 0.3 dB
Crush Test(TIA/EIA-455-41A)	SM ≤ 0.2 dB MM ≤ 0.3 dB
Repeated Bending(TIA/EIA-455-104A)	SM ≤ 0.2 dB MM ≤ 0.3 dB
Impact Test(TIA/EIA-455-25B)	SM ≤ 0.2 dB MM ≤ 0.3 dB
Torsion Test(TIA/EIA-455-85A)	SM ≤ 0.2 dB MM ≤ 0.3 dB

Package

Condition	Dimension	Length
Plywood Reel	900x320x510x460 mm	3000 m

Fiber Color Code (中華電信色碼可依需求訂購)

Code	1	2	3	4	5	6	7	8	9	10	11	12
Color	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Rose	Aqua

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充膠式非金屬光纜 4~24C



WONDERFUL

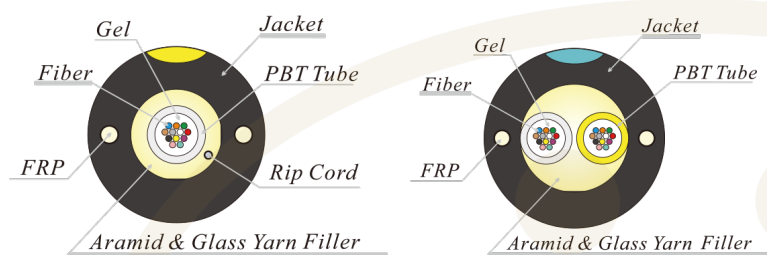
- 採用充膠石油膏填充於束管內具有防水功能
- 束管外層放置玻璃紗 (Glass yarn) 多一層保護加強防蟲鼠咬功能性
- 光纜外被覆內置0.5mmFRP/PE支撐條於兩側
- 通過24小時防水測試合格
- 外被覆依據光纜規格注入顏色注條區分用途及功能
- 充膠式設計適合於戶外及長距離施工安裝
- 小線徑設計12C/6.5mm, 24C/8.0mm 易於通過建築物內外管道及豎井

◆ 運用範圍

- 室內外管道
- 跨廠區連接使用
- 廠區建築內水平佈放

◆ 符合規範

- ANSI/TIA-568-C.3
- ISO 11801
- ITU-T G.652.D / ITU-T G.657.A1, A2
- ITU-T G.651.OM2, OM3, OM4
- IEC60332-1 IEC60332-3IEEE 383
- IEC 60793 IEC 60794
- ANSI/TIA/EIA 492AAA/492AAB
- CNS14301, EL3600-6規範
- Telcordia GR-20-CORE
- RoHS compliant (2011/65/EU)



Jacket:PE/LSOH(料號依規格書為準)

Fiber Core Geometric Characteristics

Type	ITU-T G.652.D / G.657.A1 / G.657.A2	ITU-T G.651.OM2 / OM3 / OM4
Core Diameter	9.0 ± 0.4 μm	50.0 ± 2.5 μm
Clad Diameter	125 ± 0.7 μm	125 ± 1 μm
Coating Diameter	240 ± 5 μm	245 ± 10 μm
Attenuation	@1310 nm ≤ 0.4 dB/km	@850 nm ≤ 3.5dB/km
Attenuation 1550 nm	@1550 nm ≤ 0.3 dB/km	@1300 nm ≤ 1.0 dB/km

Product Construction

Fiber Core Count	4~24
PBT Tube Diameter	2.0 ~ 2.5 ± 0.2mm
PBT Tube Count	4~12C Single/ 24C Twin
Dielectric Strength Members	10 Clusters of Kevlar 1500D 5 Clusters E Glass 1000D
PE/FRP Strength Members	2 E-Glass FRP 0.5 mm
Jacket Diameter	6.5/8.0 ± 0.3mm
Jacket Color	Black with Yellow/Orange/Aqua Strip
Tensile Loading (Short Term / Long Term)	2700 N / 900N
Crush Load (Short Term / Long Term)	1000 N/ 300 N(100mm)
Bend Radius (Short Term / Long Term)	15 / 10 Times of Cable Diameter

Fiber Color Code (中華電信色碼可依需求訂購)

Code	1	2	3	4	5	6	7	8	9	10	11	12
Color	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Rose	Aqua

Product Environmental Condition

Storage/Shipping	LSOH/PE	-20/-40°C to +75/85°C
Installation	LSOH/PE	-10°C to +60°C
Operation	LSOH/PE	-20/-40°C to +75/85°C

Product Reliability Characteristics

Items	Values
Tensile Strength(TIA/EIA-455-33A)	SM ≤ 0.2 dB MM ≤ 0.3 dB
Crush Test(TIA/EIA-455-41A)	SM ≤ 0.2 dB MM ≤ 0.3 dB
Repeated Bending(TIA/EIA-455-104A)	SM ≤ 0.2 dB MM ≤ 0.3 dB
Impact Test(TIA/EIA-455-25B)	SM ≤ 0.2 dB MM ≤ 0.3 dB
Torsion Test(TIA/EIA-455-85A)	SM ≤ 0.2 dB MM ≤ 0.3 dB

Package

Condition	Dimension	Length
Plywood Reel	760x320x510x460 mm	3000 m

2020.10

本產品型錄規格如有爭議以本公司解釋為主並保留變更修改之權利

◆ WONDERFUL HI-TECH CO., LTD.
http://www.wontex.com

◆ WONDERFUL CABLING SYSTEMS
http://www.wondernet.com.tw

◆ WONDERFUL WIRE & CABLE CO., LTD (VIETNAM)
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19F
03

戶外型充膠式金屬光纜 24~96C



WONDERFUL

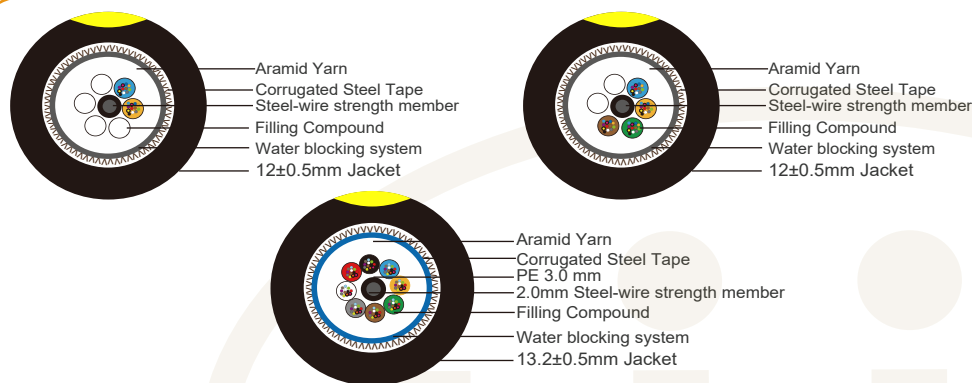
- 採用充膠石油膏填充於束管內具有防水功能
- 束管外層放置止水帶及凱芙拉具防水抗張功能
- 光纜內中心置放2.0/3.2mm Steel /PE Wire
- 通過24小時防水測試合格
- 外被覆依據光纜規格注入顏色注條區分用途及功能
- 充膠式設計適合於戶外及長距離施工安裝
- 小線徑設計24/48/96C/12.0mm易於通過建築物內外管道及豎井

◆ 運用範圍

- 室內外管道
- 跨廠區連接使用
- 廠區建築內水平佈放

◆ 符合規範

- ANSI/TIA-568-C.3
- ISO 11801
- ITU-T G.652.D / ITU-T G.657.A1, A2
- ITU-T G.651.OM2, OM3, OM4
- Telcordia GR-20-CORE
- IEC 60793 IEC 60794 IEC60332-1 IEC60332-3
- ANSI/TIA/EIA 492AAA/492AAB
- RoHS compliant (2011/65/EU)
- IEEE 383



Jacket:PE/LSOH(料號依規格書為準)

Fiber Core Geometric Characteristics

Type	ITU-T G.652.D / G.657.A1 / G.657.A2	ITU-T G.651.OM2 / OM3 / OM4
Core Diameter	9.2 ± 0.3 μm	50.0 ± 2.5 μm
Clad Diameter	125 ± 0.7 μm	125 ± 1 μm
Coating Diameter	240 ± 5 μm	245 ± 10 μm
Attenuation	@1310 nm ≤ 0.4 dB/km	@850 nm ≤ 3.5 dB/km
Attenuation 1550 nm	@1550 nm ≤ 0.3 dB/km	@1300 nm ≤ 1.0 dB/km

Product Environmental Condition

Storage/Shipping	LSOH/PE	-20/40°C to +75/85°C
Installation	LSOH/PE	-10°C to +60°C
Operation	LSOH/PE	-20/40°C to +75/85°C

Product Construction

Fiber Core Count	24~96c
PBT Tube Diameter	2.0 mm
PBT Tube Count	24C 2/6Tube 48C 4/6Tube ; 96C/8 Tube
Dielectric Aramid Strength Members	10 Clusters of Kevlar 1500D
Water Block Systems	Water Block Tape
Steel Strength Members	2.0 Steel wire/3.2PE
Jacket Diameter	12/13.2 ± 0.5mm
Jacket Color	Black with Yellow/Orange/Aqua Strip
Tensile Loading (Short Term / Long Term)	2700 N / 900N
Crush Load (Short Term / Long Term)	1000 N/ 300 N(100mm)
Bend Radius (Short Term / Long Term)	15 / 10 Times of Cable Diameter

Product Reliability Characteristics

Items	Values
Tensile Strength(TIA/EIA-455-33A)	SM ≤ 0.2 dB MM ≤ 0.3 dB
Crush Test(TIA/EIA-455-41A)	SM ≤ 0.2 dB MM ≤ 0.3 dB
Repeated Bending(TIA/EIA-455-104A)	SM ≤ 0.2 dB MM ≤ 0.3 dB
Impact Test(TIA/EIA-455-25B)	SM ≤ 0.2 dB MM ≤ 0.3 dB
Torsion Test(TIA/EIA-455-85A)	SM ≤ 0.2 dB MM ≤ 0.3 dB

Package

Condition	Dimension	Length
Plywood Reel	900x320x510x460 mm	3000 m

Fiber Color Code (中華電信色碼可依需求訂購)

Code	1	2	3	4	5	6	7	8	9	10	11	12
Color	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Rose	Aqua

Tube Color code

Code	1	2	3	4	5	6	7	8	9	10	11	12
Color	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Rose	Aqua

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充膠非金屬光纜48~96C



WONDERFUL

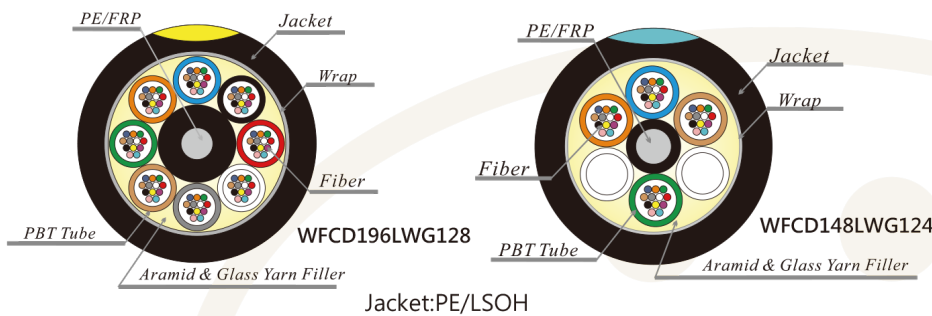
- 採用充膠石油膏填充於束管內具有防水功能
- 束管外層放置玻璃紗 (Glass yarn) 多一層保護加強防蟲鼠咬功能性
- 光纜內中心置放2.4/4.1mm FRP/PE支撐條
- 通過24小時防水測試合格
- 外被覆依據光纜規格注入顏色注條區分用途及功能
- 充膠式設計適合於戶外及長距離施工安裝
- 小線徑設計48C/10.5mm, 96C/12mm 易於通過建築物內外管道及豎井

◆ 運用範圍

- 室內外管道
- 跨廠區連接使用
- 廠區建築內水平佈放

◆ 符合規範

- ANSI/TIA-568-C.3
- ISO 11801
- ITU-T G.652.D / ITU-T G.657.A1, A2
- ITU-T G.651.OM2, OM3, OM4
- IEC60332-1 IEC60332-3 IEC 383
- IEC 60793 IEC 60794
- ANSI/TIA/EIA 492AAA/492AAB
- CNS14301, EL3600-6規範
- Telcordia GR-20-CORE
- RoHS compliant (2011/65/EU)



Fiber Core Geometric Characteristics

Type	ITU-T G.652.D / G.657.A1 / G.657.A2	ITU-T G.651.OM2 / OM3 / OM4
Core Diameter	9.0 ± 0.4 μm	50.0 ± 2.5 μm
Clad Diameter	125 ± 0.7 μm	125 ± 1 μm
Coating Diameter	240 ± 5 μm	245 ± 10 μm
Attenuation	@1310 nm ≤ 0.4 dB/km	@850 nm ≤ 3.5 dB/km
Attenuation 1550 nm	@1550 nm ≤ 0.3 dB/km	@1300 nm ≤ 1.0 dB/km

Product Environmental Condition

Storage/Shipping	LSOH/PE	-20/-40°C to +75/85°C
Installation	LSOH/PE	-10°C to +60°C
Operation	LSOH/PE	-20/-40°C to +75/85°C

Product Construction

Fiber Core Count	48~96c
PBT Tube Diameter	2.0 ~ 2.5 ± 0.2mm
PBT Tube Count	48C 4/6Tube; 96C/8 Tube
Dielectric Strength Members	12 Clusters of Kevlar 1500D 5 Clusters E Glass 1000D
PE/FRP Strength Members	1/ E-Glass FRP / PE 2.3/4.1mm
Jacket Diameter	10.5/12 ± 0.3mm
Jacket Color	Black with Yellow/Orange/Aqua Strip
Tensile Loading (Short Term / Long Term)	2700 N / 900N
Crush Load (Short Term / Long Term)	1000 N/ 300 N(100mm)
Bend Radius (Short Term / Long Term)	15 / 10 Times of Cable Diameter

Product Reliability Characteristics

Items	Values
Tensile Strength(TIA/EIA-455-33A)	SM ≤ 0.2 dB MM ≤ 0.3 dB
Crush Test(TIA/EIA-455-41A)	SM ≤ 0.2 dB MM ≤ 0.3 dB
Repeated Bending(TIA/EIA-455-104A)	SM ≤ 0.2 dB MM ≤ 0.3 dB
Impact Test(TIA/EIA-455-25B)	SM ≤ 0.2 dB MM ≤ 0.3 dB
Torsion Test(TIA/EIA-455-85A)	SM ≤ 0.2 dB MM ≤ 0.3 dB

Package

Condition	Dimension	Length
Plywood Reel	900x320x510x460 mm	3000 m

Fiber Color Code (中華電信色碼可依需求訂購)

Code	1	2	3	4	5	6	7	8	9	10	11	12
Color	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Rose	Aqua

Tube Color code

Code	1	2	3	4	5	6	7	8	9	10	11	12
Color	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Rose	Aqua

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Fiber PIGTAIL

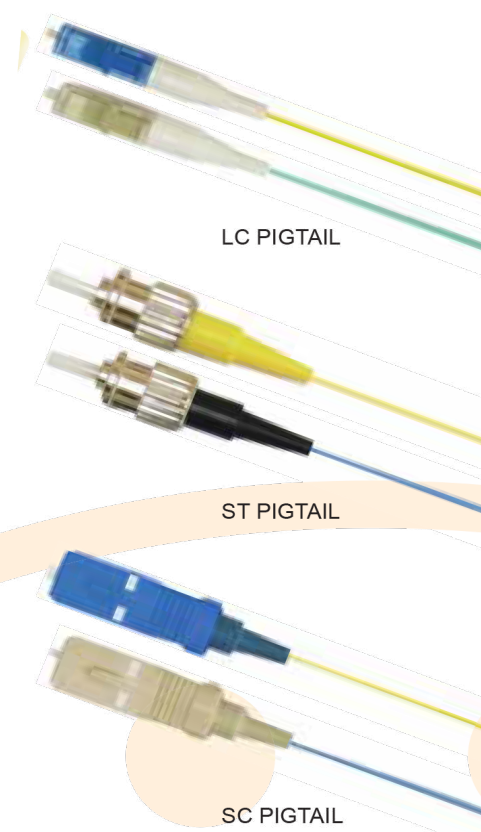
- 符合 TIA/EIA 568-C.3、ISO/IEC11801 2nd Edition標準。
- 適用於設備端跳接線，外被覆為PVC或LSOH材質。
- 提供62.5/125 μ m、50/125 μ m及9/125 μ m全系列產品。
- 精密陶瓷材質，低損耗適用於LAN/WAN及CATV/CCTV等應用。
- 可依設備介面需要提供ST、SC、FC、LC及MTRJ等接頭。
- 光纖頭套為最高級之精密陶瓷(Ceramic)其斷面為PC凸球面損失小，耐磨損，壽命長，特性穩定。
- 單模光纖纖核(Core)直徑為9/125 μ m；多模光纖纖核(Core)直徑為50/125 μ m。
- 接頭製作損失 < 0.3dB。
- 線徑提供0.9mm(標準)/3.0mm(訂製)可供選擇。

Specifications :

Nominal O.D.	125+/-0.2 μ m
Operating temperature	-20°C~+70°C
Insertion loss	<0.2dB



Simplex



Part No.	Fiber Type	Connector	Cable counts	Length
WFPS9	SM/MM	ST	Simplex	XM
WFT6	SM/MM	SC	Simplex	XM
WFT5	SM/MM	LC	Simplex	XM
WFPTM3	SM/MM	FC	Simplex	XM

XX:0.5m、1m、2m~20m、 ∞

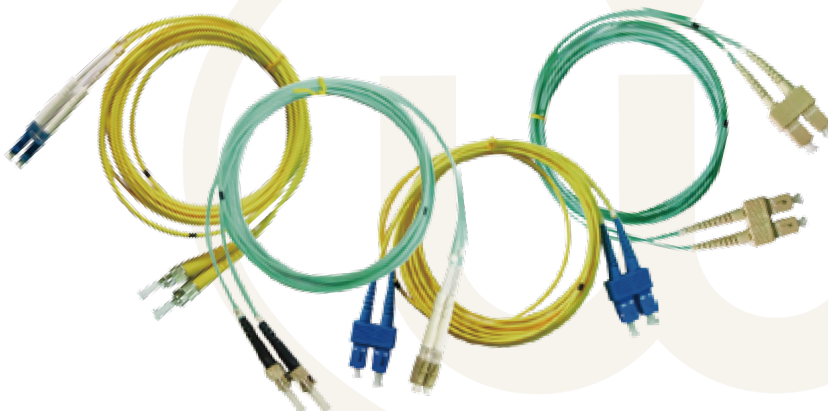
Wonderful Fiber Patch cord

單多模LSOH光纖跳接線

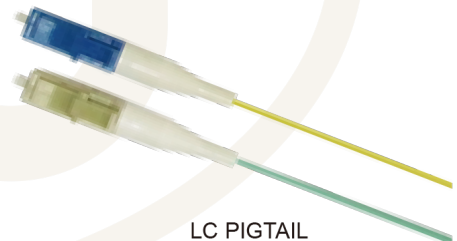


WONDERFUL

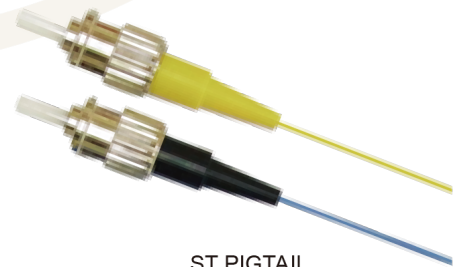
- 符合 TIA/EIA 568-C.3、ISO/IEC11801 2nd 標準。
- 跳線製作符合 IEC61754-20/ IEC 60793-2。
- 符合Telcordia GR-326-CORE。
- 提供62.5/125 μ m、50/125 μ m (OM3) 及9/125 μ m (G657A) 全系列產品。
- 疲勞系數 Nd >29 ITU-T 10ppm@20 Year (IEC-60793-1-33)。
- 光纖頭套為最高級之精密陶瓷 (Ceramic) 其斷面為PC凸球面損失小，耐磨損，壽命長，特性穩定，低損耗適用於LAN/WAN及CATV/CCTV等應用。
- 支援10/100/1000BaseF、10GBase-SR/LX4等網路應用。
- 可依設備介面需要提供ST、SC、FC、LC及MTRJ等接頭。
- 提供1.6/2.0/3.0mm單芯及雙芯纜線。



ST/SC/LC 1 M ~ xx M
OM3/G657A 全系列耐彎型低煙無毒跳線



LC PIGTAIL



ST PIGTAIL



SC PIGTAIL

◆ Specifications

- | | |
|---------------------------|-----------------------|
| · Nominal O.D. | 125 $\pm$ 0.2 μ m |
| · Operating temperature | -40°C~+85°C |
| · Insertion loss | <0.2dB |
| · Connector Repeatability | <0.1dB(500reconnects) |
| · Return loss | >50dB/UPC >60dB/APC |
| · Long life time 20 tear | >30 Nd (@R15mm) |
| · Maximum pulling load | 900N |
| · Storage temperature | -50°C~+80°C |
| · Operating temperature | -40°C~+80°C |

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19F
09

光纖耦合器

- 型式：FC、ST、SC、LC
- 規格：多模 / multi-mode
單模 / Single-mode
- 芯數：單芯 Simplex
雙芯 Duplex
- 符合 ITU 光纖規範
- 符合 ITU、IEC 及 EIA/TIA-FOTP 光纖檢驗規範
- 低損失值
- 適用於連接光收容箱對接接續使用
- 遠距之光纖設備連線、企業主線路、光纖通訊、學校校園主線路連接
- 提供高頻寬傳輸連接，使用於電話通訊、電腦網路、影像傳輸連接、... 光纖數據、線電視傳輸連接



Features

- Low insertion loss
- Low back reflection loss
- Easy to handle
- Environmentally stable

Applications

- Telecommunications
- Fiber optic sensors
- Local area network
- Testing instruments
- Fiber to the home
- CATV



	FC		ST		SC		LC	
	Ceramic	Bronze	Ceramic	Bronze	Ceramic	Bronze	Ceramic	Bronze
Typical IL/dB	S/M ≤0.13dB	M/M ≤0.20dB	S/M ≤0.13dB	M/M ≤0.20dB	S/M ≤0.13dB	M/M ≤0.20dB	S/M ≤0.13dB	M/M ≤0.20dB
套筒材質	陶瓷	金屬	陶瓷	金屬	陶瓷	金屬	陶瓷	陶瓷

Part.No	Description	Std.Pkg. Qty
FASTMM	ST多模光纖耦合器	1
FASTSM	ST單模光纖耦合器	1
FALCLCD	LC單模陶瓷雙芯耦合器	1
FASCMM	SC多模光纖耦合器	1
FASCSM	SC單模光纖耦合器	1

Fiber Optic Patch Panel



WONDERFUL



W190024STH
W190024SCH

1U 24 Port
Material: Aluminum
Dimension: 415*315*43 mm
Color: White/Black



1900482UH

2U 48Port
Material: Aluminum
Dimension: 435*335*90mm
Color: White



1900484UH

4U 48 Port
Material: Aluminum
Dimension: 430*300*170 mm
Color: White



1900966USCSMH

1900966UH

6U 96 Port
Material: Aluminum
Dimension: 430*300*300 mm
Color: White

機架式(FDU) 12~96C 機架式光纖收容箱

- 符合 EIA-310標準19吋標準機架式收容箱
- 採用鋁合金材質製造；表層粉底塗裝、重量輕、耐磨型烤漆處理。
- 支撐架以活動式設計方式，使整個箱體能前後移動
- 大型透明光纖收容盤及熔接固定盤更容易收容光纖餘長
- Easy lock 上蓋扣設計，免螺絲免工具即可；單獨裝至所有之機架及機櫃用品，安裝更簡易。
- 左右各有進出線口，以橡膠套保護防止鼠蟲進入。
- 模組式設計，可安裝ST、SC、MTRJ、LC模組。
- 光纖耦合器為陶瓷(ceramic)材質適合單、多模接頭之耦合器。
- 前方托線盤，提供光纖跳接線最好的安全保護



FWM506SCH/STH

6 Port
Material: Aluminum
Dimension: 150*130*30 mm
Color: White



FWM508SCH/STH

8 Port
Material: Aluminum
Dimension: 153*150*44mm
Color: White



FWM512SCH/STH

12 Port
Material: Aluminum
Dimension: 250*220*50 mm
Color: White



FWM524SCH/STH

24 Port
Material: Aluminum
Dimension: 320*260*90 mm
Color: White

壁掛式光纖收容箱

- 採用鋁合金材質製造；表層粉底塗裝、重量輕、耐磨型烤漆處理
- 箱體提供6/8/12/24/48 PORT 多種選擇
- Easy lock 上蓋扣設計，免螺絲免工具即可；單獨裝至所有之機架及機櫃用品，安裝更簡易
- 左右各有進出線口，以橡膠套保護防止鼠蟲進入
- 模組式設計，可安裝ST、SC、LC、FC 模組
- 光纖耦合器為陶瓷(ceramic)材質適合單、多模接頭之耦合器

V202106

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07

戶外型光纖接續盒(桶型)



WONDERFUL



FP24BOTH



FP96BOTH

- 符合IP-65防水等級
- 適用各種型式光纖及各種不同環境(直埋、人孔、手孔、桿上、架空)
- 適用於各種戶外光纖接續應用、防水性佳(直線或分歧、部份分接、維護搶修)
- 開啟護蓋再封合時，不需更換護蓋間隙封塞防水材料
- 可容納之光纖芯數最大為96芯，彎曲半徑 >3.5cm。
- 筒蓋與底座採機械式密封方式，密封性佳開啟容易。
- 採掀背式收容盤組，每盤可容納24芯，並足夠空間可收容光纖餘長。
- 光纖收容盤能滿足光纖熱縮套管之收容需求。
- 操作溫度 -30°C ~ +75°C。

光纖耦合器(Adapter/Coupler)



SC雙芯耦合器
FASCMM02



LC雙芯耦合器
FALCMM02



SC單芯耦合器
FASCMM01



ST單芯耦合器
FASTMM01



FC單芯耦合器
FAFCSM01



ST單芯耦合器

- 符合 ITU · IEC 及 EIA/TIA-FOTP光纖檢驗規範
- 適用於連接光收容箱對接接續使用
- 可適用於多模 OM-1/2/3/4 單模 OS1/2 G-652D/657A 各式光纖規格接續
- 低損失值提供高頻寬傳輸連接，使用於通訊、電腦網路、有線電視、影像傳輸。
- 接頭標準符合 TIA/EIA-604-2/3/4/5/10/12

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<http://www.vwt-wonderful.com/>

◆ ABA INDUSTRY INC.(U.S.A)
<http://www.aba-cable.com>

◆ SHANGHAI ELITECH TECHNOLOGY CO., LTD.
<http://www.wontex.com.cn>

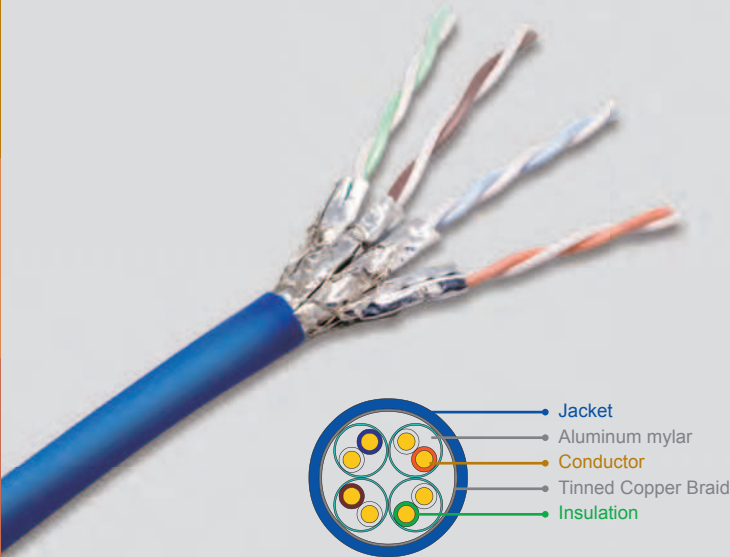
◆ THAI WONDERFUL WIRE CABLE CO., LTD.
(THAILAND)
<http://www.thaiwonderful.com>

◆ WANSHIH ELECTRONIC CO.,LTD
<http://www.wanshih.com.tw>

◆ WONDERFUL PHOTOELECTRICITY
(DONG GUAN) CO., LTD.
<http://www.wonderful-wire.com.cn>

WONDERFUL 40GS® CATEGORY 8
2000MHz S/FTP SOLID CABLE/PATCH CORD

Wonderful is a leader in the design and manufacture of cable for communication networks



Product Feature

- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 2000 MHz.

Product Description

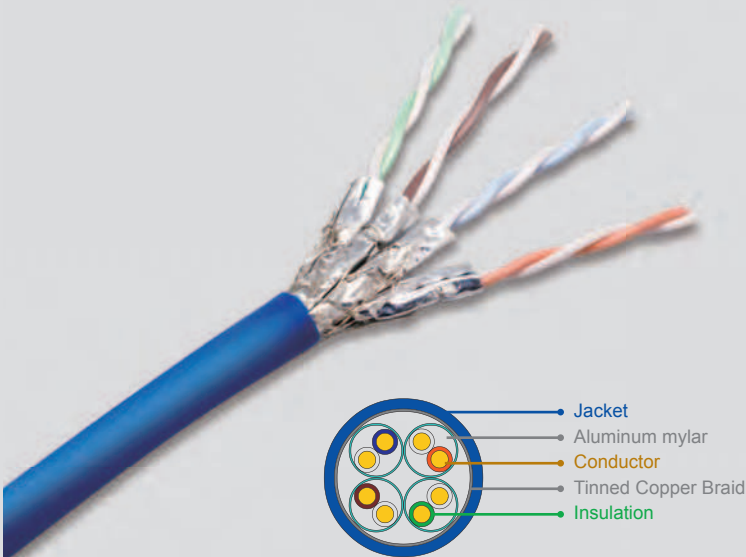
- S/FTP, 22AWG solid bare copper, CAT.8.
- Each pair twist with metal foil screen.
- With braid wire.

Application

- Transmission of digital and analogue for data, video and audio applications.
- Metal shielded and braided providing good protection from EMI noise.
- Beyond IEEE Std 802.3bq-2016 25G/40GBASE-T and legacy speeds.
- Top-of-Rack(ToR), End-of-Row(EoR), Middle-of Row(MoR) and for data center cabling.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.

WONDERFUL 10GS® CATEGORY 7A
1000MHz S/FTP SOLID CABLE

Wonderful is a leader in the design and manufacture of cable for communication networks



Product Feature

- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 1000 MHz.

Product Description

- S/FTP, 22AWG / 23AWG solid bare copper, CAT.7A.
- Each pair twist with metal foil screen.
- With braid wire.

Application

- Structure cabling for horizontal and building backbone cable.
- Transmission of digital and analogue for data, video and audio applications.
- Metal shielded and braided providing good protection from EMI noise.
- 10 / 100 / 1G / 10G / 40G Base-T IEEE 802.3 i / u / ab / an / ba.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.

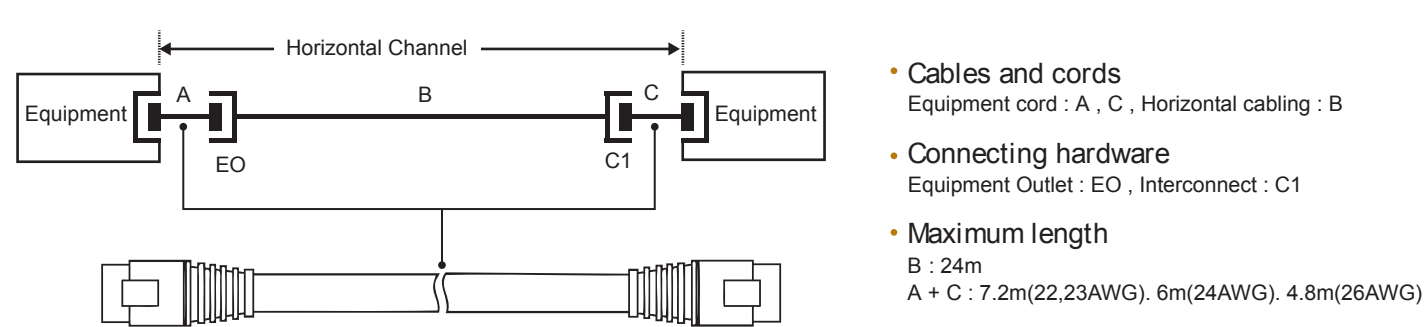
Cable data

TYPE	PRODUCT NO.	AWG	FLAME	DIAMETER	PACKAGING
			RETARDANT	(mm/inch)	Put-Up
			RATING		
Solid	TFP2204Z	22AWG	CMP	8.2 +/-0.25mm	1,000ft
	TFR2204Z	22AWG	CMR	8.6 +/-0.25mm	1,000ft

Reference electrical characteristics

Frequency	IL	NEXT	PS.NEXT	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew	PS. ANEXT	PS. AACRF
(MHz)	(Max.)	(Min.)	(Min.)	(Min.)	(Min.)	(Min.)	(Max.)	(Max.)	Min.	Min.
	dB/30m	dB/30m	dB/30m	dB/30m	dB/30m	dB/30m	ns/30m	ns/30m	dB/30m	dB/30m
100	5.56	75.4	72.4	60.6	57.6	22.2	161.3		80	62.2
500	12.83	64.9	61.9	46.6	43.6	17.3	160.7	7.5	77	48.2
1000	18.56	60.4	57.4	40.6	37.6	15.2	160.5		72.5	42.2
2000	27.15	55.9	52.9	34.6	31.6	13.1	160.4		68	36.2

Schematic representation of a horizontal channel configuration



Cable data

TYPE	PRODUCT NO.	AWG	FLAME	DIAMETER	PACKAGING
			RETARDANT	(mm/inch)	Put-Up
			RATING		
Solid	TFP2204T	22AWG	CMP	8.1 ± 0.2 mm	1,000ft
	TFR2304T	23AWG	CMR	8.0 ± 0.2 mm	1,000ft
	TFM2304T	23AWG	CM	8.0 ± 0.2 mm	1,000ft
	TFX2304T	23AWG	CMX	8.0 ± 0.2 mm	1,000ft
	TFL2304T	23AWG	LSZH	8.0 ± 0.2 mm	1,000ft
	TFL2304T	23AWG	FRLSZH	8.0 ± 0.2 mm	1,000ft

Reference electrical characteristics

Frequency	IL	NEXT	PS.NEXT	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew
(MHz)	(Max.)	(Min.)	(Min.)	(Min.)	(Min.)	(Min.)	(Max.)	(Max.)
	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m	ns/100m
100	18.53	75.40	72.40	55.30	52.30	20.11	537.60	25.00
500	42.76	64.92	61.92	41.32	38.32	17.30	535.61	25.00
1000	61.93	60.40	57.40	35.30	32.30	15.08	535.14	25.00

Applicable Standard

- Electrical Transmission
ISO/IEC 11801 (Edition 2.2)
IEC 61156-5 (Edition 2.1)
- Flame Test
NFPA 262 (CMP)
UL 1666 (CMR)
UL 1685 (CM)
UL 1581 (CMX)
IEC 60332-1 (LSZH)
IEC 60332-3-24(C) (FRLSZH)
- Material and Construction
UL 444
CSA 22.2 NO.214
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

Physical & Electrical Characteristics (at 20°C)

- Temperature & voltage rating 75°C
- Spark test 2.5 KV DC
- AC leakage current through overall jacket ≤ 10mA (1.5KV AC)
- Cable cold bend -20°C for 4 hr
- Conductor DC resistance ≤ 9.5 Ω/100m
- Resistance unbalance ≤ 2%
- Dielectric strength 1.5 KV ac for 2 s
- Insulation resistance ≥ 5000 MΩ•km
- Mutual capacitance ≤ 5.6 nF/100m
- Capacitance unbalance pair-to-ground ≤ 160 pF/100m

Applicable Standard

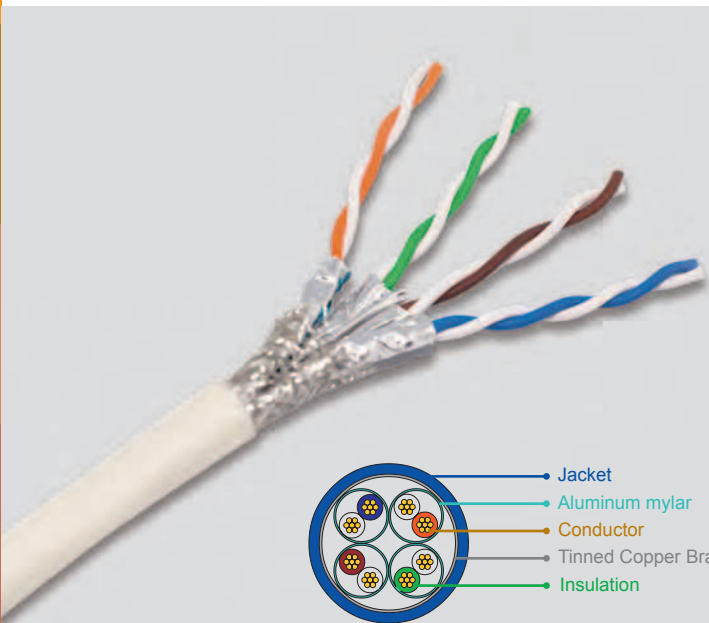
- Electrical Transmission
ANSI/TIA-568.2-D
ISO/IEC 11801 (Edition 2.2)
IEC 61156-9 (Category 8.2)
- Flame Test
NFPA 262 (CMP)
UL 1666 (CMR)
- Material and Construction
UL 444
CSA 22.2 NO.214
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)

Physical & Electrical Characteristics (at 20°C)

- Temperature & voltage rating 75°C
- Spark test 2.5 KV DC
- AC leakage current through overall jacket ≤ 10mA (1.5KV AC)
- Cable cold bend -20°C for 4 hr
- Conductor DC resistance ≤ 2.1 Ω/30m
- Resistance unbalance ≤ 2%
- Dielectric strength 1.5 KV ac for 2 s
- Insulation resistance ≥ 5000 MΩ•km
- Capacitance unbalance pair-to-ground ≤ 36 pF/30m

WONDERFUL 10GS® CATEGORY 7A
1000MHz S/FTP STRANDED CABLE

Wonderful is a leader in the design and manufacture of cable for communication networks



Product Feature

- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 1000 MHz.

Product Description

- S/FTP, 26AWG stranded bare copper, CAT.7A.
- Each pair twist with metal foil screen.
- With braid wire.

Application

- Structure cabling for horizontal and building backbone cable.
- Transmission of digital and analogue for data, video and audio applications.
- Metal shielded and braided providing good protection from EMI noise.
- 10 / 100 / 1G / 10G / 40G Base-T IEEE 802.3 i / u / ab / an / ba.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.

Cable data

TYPE	PRODUCT NO.	AWG	FLAME	DIAMETER	PACKAGING
			RETARDANT	(mm/inch)	Put-Up
			RATING		
Stranded	TGM2604T	26AWG	CM	6.3 ± 0.2 mm	1,000ft
	TGL2604T	26AWG	LSZH	6.3 ± 0.2 mm	1,000ft
	TGL2604T	26AWG	FRLSZH	6.3 ± 0.2 mm	1,000ft

Reference electrical characteristics

Frequency	IL	NEXT	PS.NEXT	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew
(MHz)	Max.	Min.	Min.	Min.	Min.	Min.	Max.	Max.
	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m	ns/100m
100	27.78	78.00	75.00	54.00	51.00	18.99	537.60	25.00
500	64.14	67.92	64.92	40.02	37.02	15.60	535.61	25.00
1000	92.89	63.40	60.40	34.00	31.00	13.69	535.14	25.00

Applicable Standard

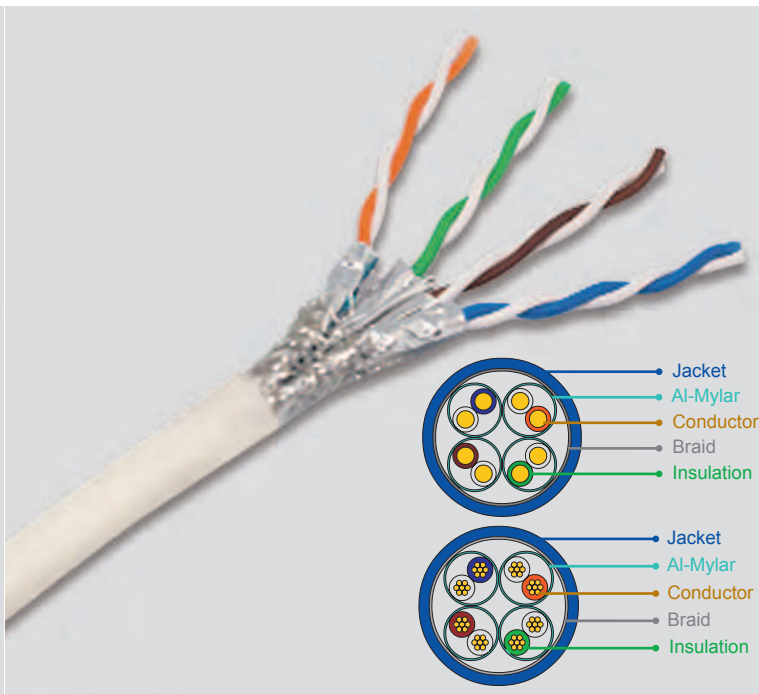
- Electrical Transmission
 - ISO/IEC 11801 (Edition 2.2)
 - IEC 61156-6 (Edition 3.1)
- Flame Test
 - UL 1685 (CM)
 - IEC 60332-1 (LSZH)
 - IEC 60332-3-24(C) (FRLSZH)
- Material and Construction
 - UL 444
 - CSA 22.2 NO.214
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

Physical & Electrical Characteristics (at 20°C)

- Temperature & voltage rating75°C
- Spark test2.5 KV DC
- AC leakage current through overall jacket≤ 10mA (1.5KV AC)
- Cable cold bend-20°C for 4 hr
- Conductor DC resistance≤ 14.5 Ω/100m
- Resistance unbalance≤ 2%
- Dielectric strength1.5 KV ac for 2 s
- Insulation resistance≥ 5000 MΩ·km
- Mutual capacitance≤ 5.6 nF/100m
- Capacitance unbalance pair-to-ground≤ 160 pF/100m

WONDERFUL 10GS® CATEGORY 7
750MHz S/FTP SOLID/STRANDED CABLE

Wonderful is a leader in the design and manufacture of cable for communication networks



Product Feature

- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 750 MHz.

Product Description

- S/FTP, 23AWG solid bare copper, CAT.7.
- S/FTP, 26AWG stranded bare copper, CAT.7.
- Each pair twist with metal foil screen.
- With braid wire.

Application

- Structure cabling for horizontal and building backbone cable.
- Transmission of digital and analogue for data, video and audio applications.
- Metal shielded and braided providing good protection from EMI noise.
- 10 / 100 / 1G / 10G / 40G Base-T IEEE 802.3 i / u / ab / an / ba.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.

Cable data

TYPE	PRODUCT NO.	AWG	FLAME	DIAMETER	PACKAGING
			RETARDANT	(mm/inch)	Put-Up
			RATING		
Solid	TFR2304A	23AWG	CMR	7.7 ± 0.2 mm	1,000ft
	TFM2304A	23AWG	CM	7.7 ± 0.2 mm	1,000ft
	TFX2304A	23AWG	CMX	7.7 ± 0.2 mm	1,000ft
Stranded	TFL2304A	23AWG	LSZH, E ca	7.7 ± 0.2 mm	1,000ft
	TGM2604A	26AWG	CM	7.7 ± 0.2 mm	1,000ft
	TGL2604A	26AWG	LSZH, E ca	7.7 ± 0.2 mm	1,000ft
	TGL2604A	26AWG	FRLSZH, E ca	6.3 ± 0.2 mm	1,000ft

Reference electrical characteristics

TYPE	Frequency	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew
	(MHz)	(Max.)	(Min.)	(Min.)	(Min.)	(Min.)	(Min.)	(Min.)	(Min.)	(Max.)	(Max.)
		dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m	ns/100m
Solid	100	19.02	72.40	69.40	53.38	50.38	54.00	51.00	20.11	537.60	25.00
	500	45.26	61.92	58.92	16.66	13.66	40.02	37.02	17.30	535.61	25.00
	750	56.80	59.27	56.27	2.47	N.A.	36.50	33.50	16.33	535.31	25.00
Stranded	100	28.53	72.40	69.40	43.87	40.87	54.00	51.00	18.99	537.60	25.00
	500	67.89	61.92	58.92	N.A.	N.A.	40.02	37.02	15.60	535.61	25.00
	750	85.20	59.27	56.27	N.A.	N.A.	36.50	33.50	14.77	535.31	25.00

Applicable Standard

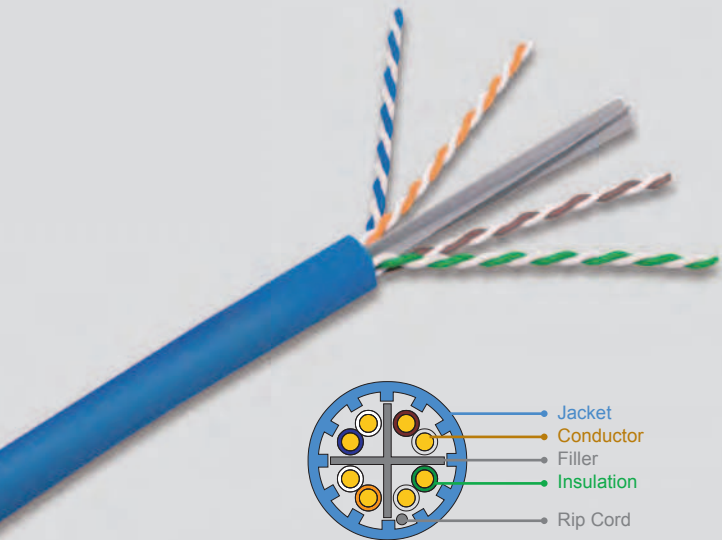
- Electrical Transmission
 - ISO/IEC 11801 (Edition 2.2)
 - IEC 61156-5 (Edition 2.1)
- Flame Test
 - UL 1666 (CMR)
 - UL 1685 (CM)
 - UL 1581 (CMX)
 - IEC 60332-1 (LSZH)
 - IEC 60332-3-24(C) (FRLSZH)
 - EN 60332-1-2 (E ca)
- Material and Construction
 - UL 444
 - CSA 22.2 NO.214
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

Physical & Electrical Characteristics (at 20°C)

- Temperature & voltage rating75°C
- Spark test2.5 KV DC
- AC leakage current through overall jacket≤ 10mA (1.5KV AC)
- Cable cold bend-20°C for 4 hr
- Conductor DC resistance≤ 14.5 Ω/100m
- Resistance unbalance≤ 2%
- Dielectric strength1.5 KV ac for 2 s
- Insulation resistance≥ 5000 MΩ·km
- Mutual capacitance≤ 5.6 nF/100m
- Capacitance unbalance pair-to-ground≤ 160 pF/100m

WONDERFUL 10GS® CATEGORY 6A
650MHz U/UTP SOLID CABLE

Wonderful is a leader in the design and manufacture of cable for communication networks



Product Feature

- High performance of single cable transmission.
- Zigzag jacket design provides excellent performance of six around one. bundle transmission.
- Round and smooth jacket without twisted stripe.
- High quality of safety property.
- Sweep frequency up to 650 MHz.

Product Description

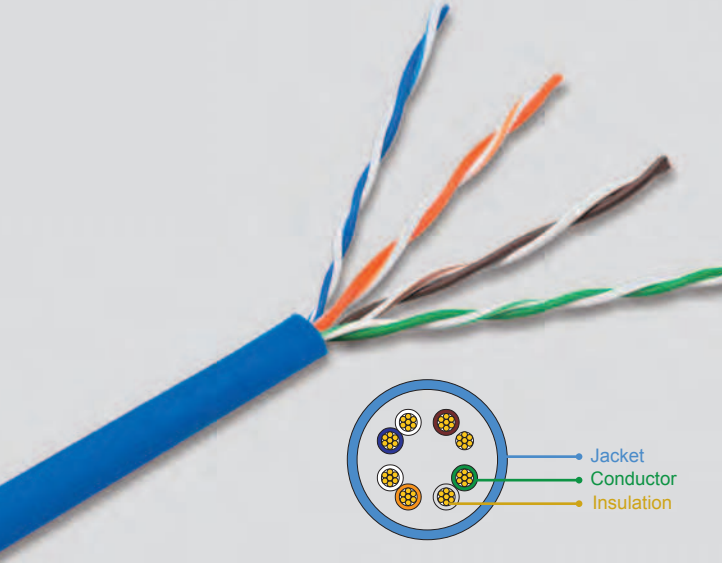
- U/UTP, 23AWG solid bare copper, CAT.6A.
- With cross filler.
- With rip cord.

Application

- Structure cabling for horizontal and building backbone cable.
- Transmission of digital and analogue for data, video and audio applications.
- 10 / 100 / 1G / 10G Base-T IEEE 802.3 i / u / ab / an.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.

WONDERFUL 10GS® CATEGORY 6A
500MHz U/UTP STRANDED CABLE

Wonderful is a leader in the design and manufacture of cable for communication networks



Product Feature

- High performance of single cable transmission.
- Round and smooth jacket.
- High quality of safety property.
- Sweep frequency up to 500 MHz.

Product Description

- U/UTP, 26/28AWG Stranded bare copper, CAT.6A.

Application

- Structure cabling for horizontal and building backbone cable.
- Transmission of digital and analogue for data, video and audio applications.
- 10 / 100 / 1G / 10G Base-T IEEE 802.3 i / u / ab / an.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.

Cable data

TYPE	PRODUCT NO.	AWG	FLAME	DIAMETER	PACKAGING
			RETARDANT	(mm/inch)	Put-Up
			RATING		
Solid	TUP2304S	23AWG	CMP	8.1 ± 0.2 mm	1,000ft
	TUR2304S	23AWG	CMR	8.3 ± 0.2 mm	1,000ft
	TUM2304S	23AWG	CM	8.3 ± 0.2 mm	1,000ft
	TUX2304S	23AWG	CMX	8.3 ± 0.2 mm	1,000ft
	TUL2304S	23AWG	LSZH/FRLSZH, E ca	8.3 ± 0.2 mm	1,000ft

Cable data

TYPE	PRODUCT NO.	AWG	FLAME	DIAMETER	PACKAGING
			RETARDANT	(mm/inch)	Put-Up
			RATING		
Stranded	TPM2604S	26AWG	CM	4.8 ± 0.2 mm	1,000ft
	TPL2604S	26AWG	LSZH	4.8 ± 0.2 mm	1,000ft
	TPM2804S	28AWG	CM	4.0 ± 0.2 mm	1,000ft
	TPL2804S	28AWG	LSZH	4.0 ± 0.2 mm	1,000ft

Reference electrical characteristics

Frequency	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew	PS.ANEXT	PS.AACRF
(MHz)	(Max.)	(Min.)	(Min.)	(Min.)	(Min.)	(Min.)	(Min.)	(Min.)	(Max.)	(Max.)	(Min.)	(Min.)
	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m	ns/100m	dB/100m	dB/100m
100	19.14	44.30	42.30	25.17	23.17	27.80	24.80	20.11	537.60	45.00	62.50	38.20
250	31.07	38.33	36.33	7.26	5.26	19.84	16.84	17.32	536.28	45.00	56.53	30.24
500	45.26	33.82	31.82	N.A.	N.A.	13.82	10.82	15.21	535.61	45.00	52.02	24.22
650	52.33	32.11	30.11	N.A.	N.A.	11.54	8.54	14.42	535.41	45.00	50.31	21.94

Reference electrical characteristics

Frequency	IL	NEXT	PS.NEXT	ACR	PS.ACRF	RL	Propagation Delay	Delay Skew
(MHz)	(Max.)	(Min.)	(Min.)	(Min.)	(Min.)	(Min.)	(Max.)	(Max.)
	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m	ns/100m
100	N.A.	45.30	42.30	N.A.	N.A.	18.99	537.60	45.00
250	N.A.	39.33	36.33	N.A.	N.A.	15.60	536.28	45.00
500	N.A.	34.82	31.82	N.A.	N.A.	15.60	535.61	45.00

Applicable Standard

- Electrical Transmission
ANSI/TIA-568-C.2 (2009)
ISO/IEC 11801 (Edition 2.2)
IEC 61156-5 (Edition 2.1)
- Flame Test
NFPA 262 (CMP)
UL 1666 (CMR)
UL 1685 (CM)
UL 1581 (CMX)
IEC 60332-1 (LSZH)
IEC 60332-3-24(C) (FRLSZH)
EN 60332-1-2 (E ca)
- Material and Construction
UL 444
CSA 22.2 NO.214
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

Physical & Electrical Characteristics (at 20°C)

- Temperature & voltage rating 75°C
- Spark test 2.5 KV DC
- AC leakage current through overall jacket ≤ 10mA (1.5KV AC)
- Cable cold bend -20°C for 4 hr
- Conductor DC resistance ≤ 9.38Ω/100m
- Resistance unbalance ≤ 4%
- Dielectric strength 1.5 KV ac for 2 s
- Insulation resistance ≥ 5000 MΩ·km
- Mutual capacitance ≤ 5.6 nF/100m
- Capacitance unbalance pair-to-ground ≤ 330 pF/100m

Applicable Standard

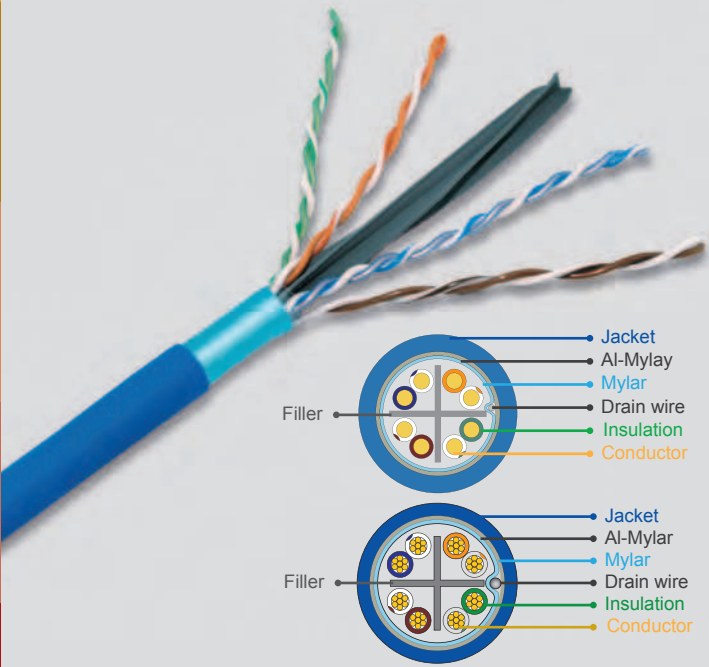
- Electrical Transmission
ANSI/TIA-568-C.2 (2009)
ISO/IEC 11801 (Edition 2.2)
IEC 61156-5 (Edition 2.1)
- Flame Test
UL 1685 (CM)
IEC 60332-1 (LSZH)
- Material and Construction
UL 444
CSA 22.2 NO.214
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

Physical & Electrical Characteristics (at 20°C)

- Temperature & voltage rating 75°C
- Spark test 2.5 KV DC
- AC leakage current through overall jacket ≤ 10mA (1.5KV AC)
- Cable cold bend -20°C for 4 hr
- Conductor DC resistance ≤ 14.5Ω/100m
- Resistance unbalance ≤ 4%
- Dielectric strength 1.5 KV ac for 2 s
- Insulation resistance ≥ 5000 MΩ·km
- Mutual capacitance ≤ 5.6 nF/100m
- Capacitance unbalance pair-to-ground ≤ 160 pF/100m

WONDERFUL 10GS® CATEGORY 6A
500MHz F/UTP SOLID/STRANDED CABLE

Wonderful is a leader in the design and manufacture of cable for communication networks



Product Feature

- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 500 MHz.

Product Description

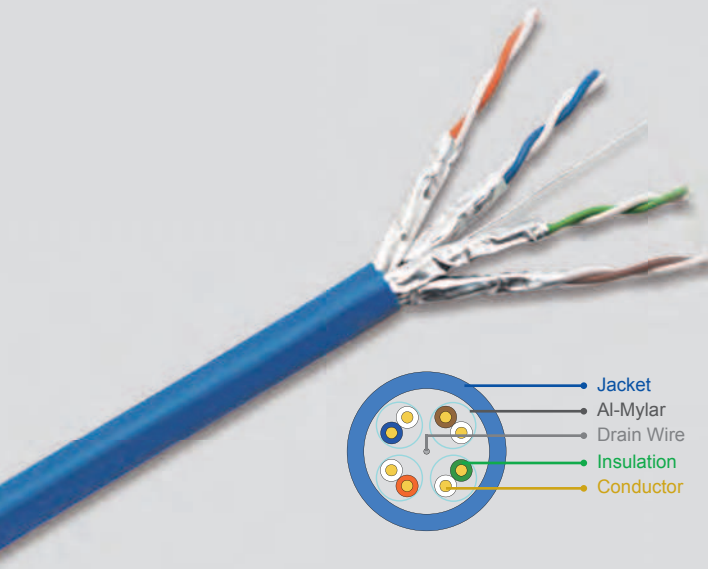
- F/UTP, 23AWG solid bare copper, CAT.6A.
- F/UTP, 26AWG stranded bare copper, CAT.6A.
- With cross filler.
- Overall metal foil screen with drain wire.

Application

- Structure cabling for horizontal and building backbone cable.
- Transmission of digital and analogue for data, video and audio applications.
- Overall metal shielded providing good protection from EMI noise.
- 10 / 100 / 1G / 10G Base-T IEEE 802.3 i / u / ab / an.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.

WONDERFUL 10GS® CATEGORY 6A
500MHz U/FTP SOLID CABLE

Wonderful is a leader in the design and manufacture of cable for communication networks



Product Feature

- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 500 MHz.

Product Description

- U/FTP, 23AWG solid bare copper, CAT.6A.
- Each pair twist with metal foil screen.
- With drain wire.

Application

- Structure cabling for cross-connect cable.
- Transmission of digital and analogue for data, video and audio applications.
- Metal shielded providing good protection from EMI noise.
- 10 / 100 / 1G / 10G Base-T IEEE 802.3 i / u / ab / an.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.

Cable data

TYPE	PRODUCT NO.	AWG	FLAME	DIAMETER	PACKAGING
			RETARDANT	(mm/inch)	Put-Up
			RATING		
Solid	TSP2304S	23AWG	CMP	7.0 ± 0.2 mm	1,000ft
	TSR2304S	23AWG	CMR	7.6 ± 0.2 mm	1,000ft
	TSM2304S	23AWG	CM	7.6 ± 0.2 mm	1,000ft
	TSL2304S	23AWG	LSZH, B2 ca, E ca	7.6 ± 0.2 mm	1,000ft
Stranded	TAM2604S	26AWG	CM	6.3± 0.2 mm	1,000ft

Cable data

TYPE	PRODUCT NO.	AWG	FLAME	DIAMETER	PACKAGING
			RETARDANT	(mm/inch)	Put-Up
			RATING		
Solid	TFR2304S	23AWG	CMR	7.3 ± 0.2 mm	1,000ft
	TFL2304S	23AWG	LSZH	7.3 ± 0.2 mm	1,000ft
	TFL2304S	23AWG	FRLSZH	7.3 ± 0.2 mm	1,000ft
	TFP2304S	23AWG	CMP	7.4 ± 0.2 mm	1,000ft

Reference electrical characteristics

TYPE	Frequency	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew	PS.ANEXT	PS. AACRF
	(MHz)	(Max.)	(Min.)	(Min.)	(Min.)	(Min.)	(Min.)	(Min.)	(Min.)	(Max.)	(Max.)	(Min.)	(Min.)
		dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m	ns/100m	dB/100m	dB/100m
Solid	100	19.14	44.30	42.30	25.17	23.17	27.80	24.80	20.11	537.60	45.00	70.50	42.20
	250	31.07	38.33	36.33	7.26	5.26	19.84	16.84	17.32	536.28	45.00	64.53	34.24
	500	45.26	33.82	31.82	N.A.	N.A.	13.82	10.82	15.21	535.61	45.00	60.02	28.22
Stranded	100	28.70	45.30	42.30	16.60	13.60	28.00	25.00	18.99	537.60	45.00	62.50	38.20
	250	46.60	39.33	36.33	N.A.	N.A.	20.04	17.04	15.60	536.28	45.00	56.53	30.24
	500	67.89	34.82	31.82	N.A.	N.A.	14.02	11.02	15.60	535.61	45.00	52.02	24.22

Reference electrical characteristics

Frequency	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew	PS.ANEXT	PS. AACRF
(MHz)	(Max.)	(Min.)	(Min.)	(Min.)	(Min.)	(Min.)	(Min.)	(Min.)	(Max.)	(Max.)	(Min.)	(Min.)
	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m	ns/100m	dB/100m	dB/100m
100	19.14	44.30	42.30	25.17	23.17	27.80	24.80	20.11	537.60	45.00	62.50	38.20
250	31.07	38.33	36.33	7.26	5.26	19.84	16.84	17.32	536.28	45.00	56.53	30.24
500	45.26	33.82	31.82	N.A.	N.A.	13.82	10.82	15.21	535.61	45.00	52.02	24.22

Applicable Standard

- Electrical Transmission
ANSI/TIA-568-C.2 (2009)
ISO/IEC 11801 (Edition 2.2)
IEC 61156-6 (Edition 3.1)
- Flame Test
NFPA 262 (CMP)
UL 1666 (CMR)
UL 1685 (CM)
IEC 60332-1 (LSZH)
EN 50399 (B2 ca)
EN 60332-1-2 (E ca)
- Material and Construction
UL 444
CSA 22.2 NO.214
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

Physical & Electrical Characteristics (at 20°C)

- Temperature & voltage rating 75°C
- Spark test 2.5 KV DC
- AC leakage current through overall jacket ≤ 10mA (1.5KV AC)
- Cable cold bend -20°C for 4 hr
- Conductor DC resistance ≤ solid 9.38 Ω/100m
≤ stranded 14.5 Ω/100m
- Resistance unbalance ≤ 4%
- Dielectric strength 1.5 KV ac for 2 s
- Insulation resistance ≥ 5000 MΩ•km
- Mutual capacitance ≤ 5.6 nF/100m
- Capacitance unbalance pair-to-ground ≤ 330 pF/100m

Applicable Standard

- Electrical Transmission
ANSI/TIA-568-C.2 (2009)
ISO/IEC 11801 (Edition 2.2)
IEC 61156-6 (Edition 3.1)
- Flame Test
NFPA 262 (CMP)
UL 1666 (CMR)
IEC 60332-1 (LSZH)
IEC 60332-3-24(C) (FRLSZH)
- Material and Construction
UL 444
CSA 22.2 NO.214
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

Physical & Electrical Characteristics (at 20°C)

- Temperature & voltage rating 75°C
- Spark test 2.5 KV DC
- AC leakage current through overall jacket ≤ 10mA (1.5KV AC)
- Cable cold bend -20°C for 4 hr
- Conductor DC resistance ≤ solid 9.38 Ω/100m
- Resistance unbalance ≤ 4%
- Dielectric strength 1.5 KV ac for 2 s
- Insulation resistance ≥ 5000 MΩ•km
- Mutual capacitance ≤ 5.6 nF/100m
- Capacitance unbalance pair-to-ground ≤ 330 pF/100m

WONDERFUL 10GS[®] CATEGORY 6A
500MHz U/FTP STRANDED CABLE

Wonderful is a leader in the design and manufacture of cable for communication networks



Product Feature

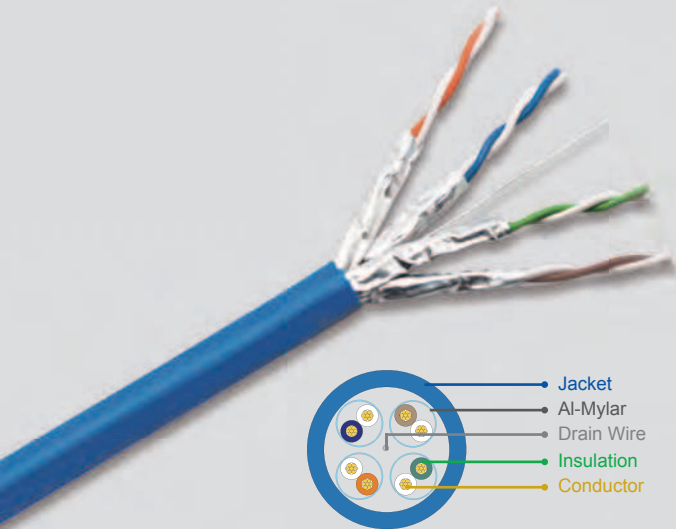
- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 500 MHz.

Product Description

- U/FTP, 26AWG / 28AWG stranded bare copper, CAT.6A.
- Each pair twist with metal foil screen.
- With drain wire.

Application

- Structure cabling for cross-connect cable.
- Transmission of digital and analogue for data, video and audio applications.
- Metal shielded providing good protection from EMI noise.
- 10 / 100 / 1G / 10G Base-T IEEE 802.3 i / u / ab / an.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.



WONDERFUL 10GS[®] CATEGORY 6A
500MHz F/FTP SOLID CABLE

Wonderful is a leader in the design and manufacture of cable for communication networks



Product Feature

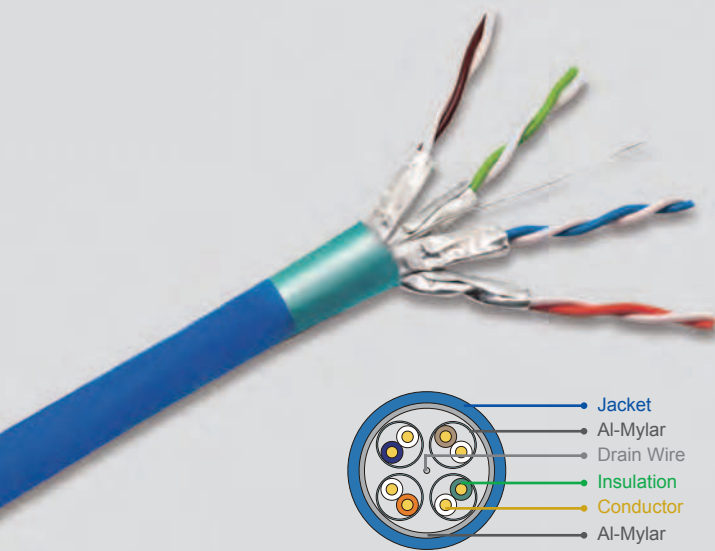
- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 500 MHz.

Product Description

- High performance of transmission.
- High quality of safety property.
- F/FTP, 23AWG solid bare copper, CAT.6A.
- With drain wire.

Application

- Structure cabling for cross-connect cable.
- Transmission of digital and analogue for data, video and audio applications.
- Metal shielded providing good protection from EMI noise.
- 10 / 100 / 1G / 10G Base-T IEEE 802.3 i / u / ab / an.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.



Cable data

TYPE	PRODUCT NO.	AWG	FLAME	DIAMETER	PACKAGING
			RETARDANT	(mm/inch)	Put-Up
			RATING		
Stranded	TGM2604S	26AWG	CM	6.3 ± 0.2 mm	1,000ft
	TGL2604S	26AWG	LSZH	6.3 ± 0.2 mm	1,000ft
	TGM2804S	28AWG	CM	5.1 ± 0.2 mm	1,000ft
	TGL2804S	28AWG	LSZH	5.1 ± 0.3 mm	1,000ft

Cable data

TYPE	PRODUCT NO.	AWG	FLAME	DIAMETER	PACKAGING
			RETARDANT	(mm/inch)	Put-Up
			RATING		
Solid	THR2304S	23AWG	CMR	7.5 ± 0.2 mm	1,000ft
	THL2304S	23AWG	LSZH	7.5 ± 0.2 mm	1,000ft
	THL2304S	23AWG	FRLSZH	7.5 ± 0.2 mm	1,000ft

Reference electrical characteristics

Frequency	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew	PS.ANEXT	PS. AACRF
(MHz)	(Max.)	(Min.)	(Min.)	(Min.)	(Min.)	(Min.)	(Min.)	(Min.)	(Max.)	(Max.)	(Min.)	(Min.)
	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m	ns/100m	dB/100m	dB/100m
100	28.70	45.30	42.30	16.60	13.60	28.00	25.00	18.99	537.60	45.00	62.50	38.20
250	46.60	39.33	36.33	N.A.	N.A.	20.04	17.04	15.60	536.28	45.00	56.53	30.24
500	67.89	34.82	31.82	N.A.	N.A.	14.02	11.02	15.60	535.61	45.00	52.02	24.22

Reference electrical characteristics

Frequency	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew	PS.ANEXT	PS. AACRF
(MHz)	(Max.)	(Min.)	(Min.)	(Min.)	(Min.)	(Min.)	(Min.)	(Min.)	(Max.)	(Max.)	(Min.)	(Min.)
	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m	ns/100m	dB/100m	dB/100m
100	19.14	44.30	42.30	25.17	23.17	27.80	24.80	20.11	537.60	45.00	62.50	38.20
250	31.07	38.33	36.33	7.26	5.26	19.84	16.84	17.32	536.28	45.00	56.53	30.24
500	45.26	33.82	31.82	N.A.	N.A.	13.82	10.82	15.21	535.61	45.00	52.02	24.22

Applicable Standard

- Electrical Transmission
ANSI/TIA-568-C.2 (2009)
ISO/IEC 11801 (Edition 2.2)
IEC 61156-6 (Edition 3.1)
- Flame Test
UL 1685 (CM)
IEC 60332-1 (LSZH)
- Material and Construction
UL 444
CSA 22.2 NO.214
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

Physical & Electrical Characteristics (at 20°C)

- Temperature & voltage rating 75°C
- Spark test 2.5 KV DC
- AC leakage current through overall jacket ≤ 10mA (1.5KV AC)
- Cable cold bend -20°C for 4 hr
- Conductor DC resistance ≤ solid 14.5 Ω/100m
- Resistance unbalance ≤ 4%
- Dielectric strength 1.5 KV ac for 2 s
- Insulation resistance ≥ 5000 MΩ•km
- Mutual capacitance ≤ 5.6 nF/100m
- Capacitance unbalance pair-to-ground ≤ 160 pF/100m

Applicable Standard

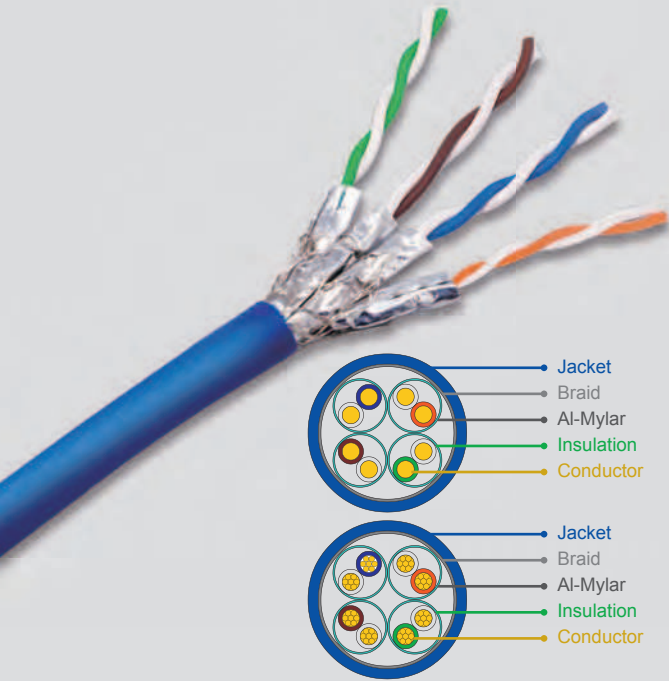
- Electrical Transmission
ANSI/TIA-568-C.2 (2009)
ISO/IEC 11801 (Edition 2.2)
IEC 61156-6 (Edition 3.1)
- Flame Test
UL 1666 (CMR)
IEC 60332-1 (LSZH)
IEC 60332-3-24(C) (FRLSZH)
- Material and Construction
UL 444
CSA 22.2 NO.214
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

Physical & Electrical Characteristics (at 20°C)

- Temperature & voltage rating 75°C
- Spark test 2.5 KV DC
- AC leakage current through overall jacket ≤ 10mA (1.5KV AC)
- Cable cold bend -20°C for 4 hr
- Conductor DC resistance ≤ 9.5 Ω/100m
- Resistance unbalance ≤ 4%
- Dielectric strength 1.5 KV ac for 2 s
- Insulation resistance ≥ 5000 MΩ•km
- Mutual capacitance ≤ 5.6 nF/100m
- Capacitance unbalance pair-to-ground ≤ 330 pF/100m

WONDERFUL 10GS[®] CATEGORY 6A
500MHz S/FTP SOLID/STRANDED CABLE

Wonderful is a leader in the design and manufacture of cable for communication networks



Product Feature

- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 500 MHz.

Product Description

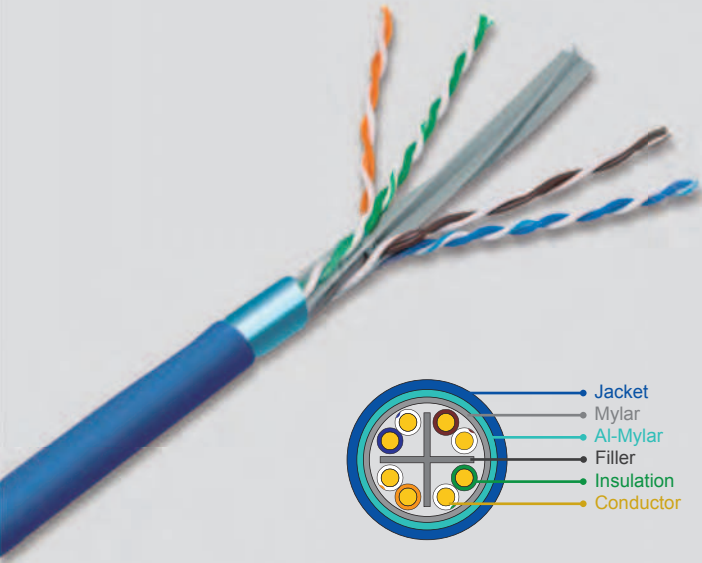
- S/FTP, 23AWG solid bare copper, CAT.6A.
- S/FTP, 24AWG / 26AWG stranded bare copper, CAT.6A.
- Each pair twist with metal foil screen.
- With braid wire.

Application

- Structure cabling for cross-connect cable.
- Transmission of digital and analogue for data, video and audio applications.
- Metal shielded and braided providing good protection from EMI noise.
- 10 / 100 / 1G / 10G Base-T IEEE 802.3 i / u / ab / an.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.

WONDERFUL 1000X[®] CATEGORY 6A
500MHz VTP SOLID CABLE

Wonderful is a leader in the design and manufacture of cable for communication networks



Product Feature

- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 500 MHz.

Product Description

- VTP, 23AWG solid bare copper, CAT.6A.
- With cross filler.
- Overall metal foil screen.

Application

- Structure cabling for horizontal and building backbone cable.
- Transmission of digital and analogue for data, video and audio applications.
- Metal shielded providing good protection from EMI noise.
- 10 / 100 / 1G Base-T IEEE 802.3 i / u / ab.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.

Cable data

TYPE	PRODUCT NO.	AWG	FLAME	DIAMETER	PACKAGING
			RETARDANT	(mm/inch)	Put-Up
			RATING		
Solid	TFM2304S	23AWG	CM	7.7 ± 0.2 mm	1,000ft
	TFX2304S	23AWG	CMX	7.7 ± 0.2 mm	1,000ft
	TFL2304S	23AWG	LSZH, E ca	7.7 ± 0.2 mm	1,000ft
Stranded	TGL2404S	24AWG	LSZH, E ca	7.5 ± 0.2 mm	1,000ft
	TGM2604S	26AWG	CM	6.3 ± 0.2 mm	1,000ft
	TGL2604S	26AWG	LSZH	6.3 ± 0.2 mm	1,000ft

Reference electrical characteristics

TYPE	Frequency	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew	PS.ANEXT	PS.AACRF
	(MHz)	(Max.)	(Min.)	(Min.)	(Min.)	(Min.)	(Min.)	(Min.)	(Min.)	(Max.)	(Max.)	(Min.)	(Min.)
		dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m	ns/100m	dB/100m	dB/100m
Solid	100	19.14	44.30	42.30	25.17	23.17	27.80	24.80	20.11	537.60	45.00	62.50	38.20
	250	31.07	38.33	36.33	7.26	5.26	19.84	16.84	17.32	536.28	45.00	56.53	30.24
	500	45.26	33.82	31.82	N.A.	N.A.	13.82	10.82	15.21	535.61	45.00	52.02	24.22
Stranded	100	28.70	45.30	42.30	16.60	13.60	28.00	25.00	18.99	537.60	45.00	62.50	38.20
	250	46.60	39.33	36.33	N.A.	N.A.	20.04	17.04	15.60	536.28	45.00	56.53	30.24
	500	67.89	34.82	31.82	N.A.	N.A.	14.02	11.02	15.60	535.61	45.00	52.02	24.22

Applicable Standard

- Electrical Transmission
ANSI/TIA-568-C.2 (2009)
ISO/IEC 11801 (Edition 2.2)
IEC 61156-6 (Edition 3.1)
- Flame Test
UL 1685 (CM)
UL 1581 (CMX)
IEC 60332-1 (LSZH)
EN 60332-1-2 (E ca)
- Material and Construction
UL 444
CSA 22.2 NO.214
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

Physical & Electrical Characteristics (at 20°C)

- Temperature & voltage rating 75°C
- Spark test 2.5 KV DC
- AC leakage current through overall jacket ≤ 10mA (1.5KV AC)
- Cable cold bend -20°C for 4 hr
- Conductor DC resistance
Solid ≤ 9.38 Ω/100m
Stranded ≤ 14.5 Ω/100m
- Resistance unbalance ≤ 4%
- Dielectric strength 1.5 KV ac for 2 s
- Insulation resistance ≥ 5000 MΩ•km
- Mutual capacitance ≤ 5.6 nF/100m
- Capacitance unbalance pair-to-ground ≤ 160 pF/100m

Cable data

TYPE	PRODUCT NO.	AWG	FLAME	DIAMETER	PACKAGING
			RETARDANT	(mm/inch)	Put-Up
			RATING		
Solid	TVP2304S	23AWG	CMP	6.9 ± 0.2 mm	1,000ft
	TVR2304S	23AWG	CMR	7.5 ± 0.2 mm	1,000ft
	TVM2304S	23AWG	CM	7.5 ± 0.2 mm	1,000ft
	TVL2304S	23AWG	LSZH, FRLSZH	7.5 ± 0.2 mm	1,000ft

Reference electrical characteristics

Frequency	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew
(MHz)	Max.	Min.	Min.	Min.	Min.	Min.	Min.	Min.	Max.	Max.
	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m	ns/100m
100	19.14	44.30	42.30	25.17	23.17	27.80	24.80	20.11	537.60	45.00
250	31.07	38.33	36.33	7.26	5.26	19.84	16.84	17.32	536.28	45.00
500	45.26	33.82	31.82	N.A.	N.A.	13.82	10.82	15.21	535.61	45.00

Applicable Standard

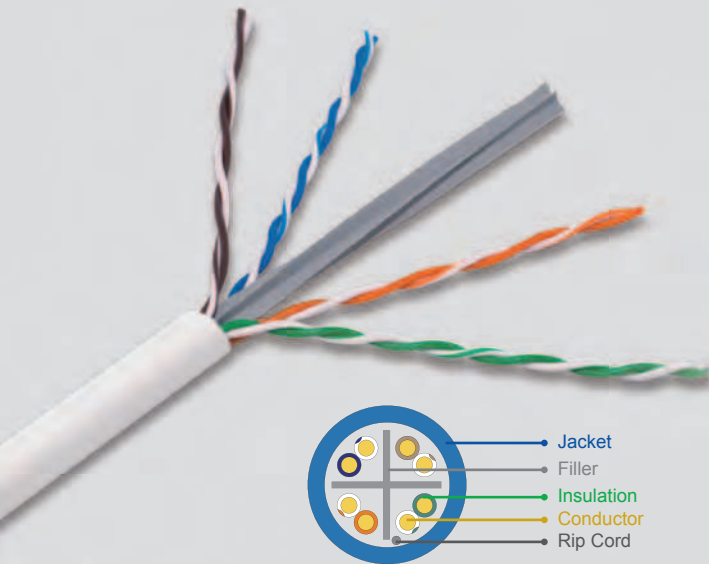
- Electrical Transmission
ANSI/TIA-568-C.2 (2009)
ISO/IEC 11801 (Edition 2.2)
IEC 61156-5 (Edition 2.1)
- Flame Test
NFPA 262 (CMP)
UL 1666 (CMR)
UL 1685 (CM)
UL 1581 (CMX)
IEC 60332-1 (LSZH)
IEC 60332-3-24(C)(FRLSZH)
- Material and Construction
UL 444
CSA 22.2 NO.214
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

Physical & Electrical Characteristics (at 20°C)

- Temperature & voltage rating 75°C
- Spark test 2.5 KV DC
- AC leakage current through overall jacket ≤ 10mA (1.5KV AC)
- Cable cold bend -20°C for 4 hr
- Conductor DC resistance ≤ 9.38 Ω/100m
- Resistance unbalance ≤ 4%
- Dielectric strength 1.5 KV ac for 2 s
- Insulation resistance ≥ 5000 MΩ•km
- Mutual capacitance ≤ 5.6 nF/100m
- Capacitance unbalance pair-to-ground ≤ 330 pF/100m

WONDERFUL 1000X[®] CATEGORY 6E
600MHz U/UTP SOLID CABLE

Wonderful is a leader in the design and manufacture of cable for communication networks



Product Feature

- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 600 MHz.
- Reelex II carton and easy to pull out.
- Carton with one layer corrugated design providing sufficient strength. and saving packaging space.

Product Description

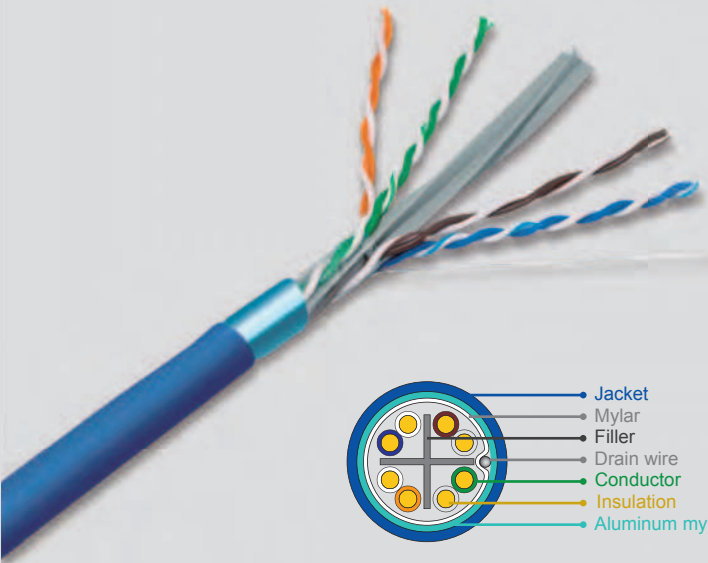
- U/UTP, 23AWG / 24AWG solid bare copper, CAT.6E.
- With cross filler.
- With rip cord.

Application

- Structure cabling for horizontal and building backbone cable.
- Transmission of digital and analogue for data, video and audio applications.
- 10 / 100 / 1G Base-T IEEE 802.3 i / u / ab.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.

WONDERFUL 1000X[®] CATEGORY 6E
400MHz F/UTP SOLID CABLE

Wonderful is a leader in the design and manufacture of cable for communication networks



Product Feature

- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 400 MHz.

Product Description

- F/UTP, 23AWG solid bare copper, CAT.6E.
- With cross filler.
- Overall metal foil screen with drain wire.

Application

- Structure cabling for horizontal and building backbone cable.
- Transmission of digital and analogue for data, video and audio applications.
- Metal shielded providing good protection from EMI noise.
- 10 / 100 / 1G Base-T IEEE 802.3 i / u / ab.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.

Cable data

TYPE	PRODUCT NO.	AWG	FLAME	DIAMETER	PACKAGING
			RETARDANT	(mm/inch)	Put-Up
			RATING		
Solid	TUP2304X	23AWG	CMP	5.7 ± 0.2 mm	1,000ft
	TUP2304H	23AWG	CMP	5.6 ± 0.2 mm	1,000ft
	TUR2304X	23AWG	CMR	6.0 ± 0.2 mm	1,000ft
	TUM2304X	23AWG	CM	6.0 ± 0.2 mm	1,000ft
	TUX2304X	23AWG	CMX	6.7 ± 0.2 mm	1,000ft
	TUL2304X	23AWG	LSZH, B2 ca, E ca	6.0 ± 0.2 mm	1,000ft
	TUR2404X	24AWG	CMR	5.8 ± 0.2 mm	1,000ft
	TUM2404X	24AWG	CM	5.8 ± 0.2 mm	1,000ft
	TUX2404X	24AWG	CMX	5.8 ± 0.2 mm	1,000ft
	TUL2404X	24AWG	LSZH, E ca	5.8 ± 0.2 mm	1,000ft
	TUL2404X	24AWG	FRLSZH, E ca	5.8 ± 0.2 mm	1,000ft

Reference electrical characteristics

Frequency	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew
(MHz)	Max.	Min.	Min.	Min.	Min.	Min.	Min.	Min.	Max.	Max.
	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m	ns/100m
100	19.80	44.30	42.30	24.50	22.50	27.80	24.80	20.11	537.60	45.00
250	32.85	38.33	36.33	5.48	3.48	19.84	16.84	17.32	536.28	45.00
600	54.49	32.63	30.63	N.A.	N.A.	12.24	9.24	14.66	535.47	45.00

Applicable Standard

- Electrical Transmission
ANSI/TIA-568-C.2 (2009)
ISO/IEC 11801 (Edition 2.2)
IEC 61156-5 (Edition 2.1)
- Flame Test
NFPA 262 (CMP)
UL 1666 (CMR)
UL 1685 (CM)
UL 1581 (CMX)
IEC 60332-1 (LSZH)
IEC 60332-3-24(C) (FRLSZH)
EN 50399 (B2 ca)
EN 60332-1-2 (E ca)
- Material and Construction
UL 444
CSA 22.2 NO.214
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

Physical & Electrical Characteristics (at 20°C)

- Temperature & voltage rating 75°C
- Spark test 2.5 KV DC
- AC leakage current through overall jacket ≤ 10mA (1.5KV AC)
- Cable cold bend -20°C for 4 hr
- Conductor DC resistance ≤ 9.38 Ω/100m
- Resistance unbalance ≤ 5%
- Dielectric strength 1.5 KV ac for 2 s
- Insulation resistance ≥ 5000 MΩ•km
- Mutual capacitance ≤ 5.6 nF/100m
- Capacitance unbalance pair-to-ground ≤ 330 pF/100m

Cable data

TYPE	PRODUCT NO.	AWG	FLAME	DIAMETER	PACKAGING
			RETARDANT	(mm/inch)	Put-Up
			RATING		
Solid	TSP2304X	23AWG	CMP	7.0 ± 0.2 mm	1,000ft
	TSR2304X	23AWG	CMR	7.2 ± 0.2 mm	1,000ft
	TSM2304X	23AWG	CM	7.2 ± 0.2 mm	1,000ft
	TSX2304X	23AWG	CMX	7.5 ± 0.2 mm	1,000ft
	TSX2304X	23AWG	CMX outdoor	7.4 ± 0.2 mm	1,000ft
	TSL2304X	23AWG	LSZH, B2 ca, E ca	7.2 ± 0.2 mm	1,000ft

Reference electrical characteristics

Frequency	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew
(MHz)	Max.	Min.	Min.	Min.	Min.	Min.	Min.	Min.	Max.	Max.
	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m	ns/100m
100	19.80	44.30	42.30	24.50	22.50	27.80	24.80	20.11	537.60	45.00
250	32.85	38.33	36.33	5.48	3.48	19.84	16.84	17.32	536.28	45.00
400	42.97	35.27	33.27	N.A.	N.A.	15.76	12.76	15.89	535.80	45.00

Applicable Standard

- Electrical Transmission
ANSI/TIA-568-C.2 (2009)
ISO/IEC 11801 (Edition 2.2)
IEC 61156-5 (Edition 2.1)
- Flame Test
NFPA 262 (CMP)
UL 1666 (CMR)
UL 1685 (CM)
UL 1581 (CMX)
IEC 60332-1 (LSZH)
EN 50399 (B2 ca)
EN 60332-1-2 (E ca)
- Material and Construction
UL 444
CSA 22.2 NO.214
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

Physical & Electrical Characteristics (at 20°C)

- Temperature & voltage rating 75°C
- Spark test 2.5 KV DC
- AC leakage current through overall jacket ≤ 10mA (1.5KV AC)
- Cable cold bend -20°C for 4 hr
- Conductor DC resistance ≤ 9.38 Ω/100m
- Resistance unbalance ≤ 5%
- Dielectric strength 1.5 KV ac for 2 s
- Insulation resistance ≥ 5000 MΩ•km
- Mutual capacitance ≤ 5.6 nF/100m
- Capacitance unbalance pair-to-ground ≤ 330 pF/100m

WONDERFUL 1000X® CATEGORY 6E
400MHz F/UTP STRANDED CABLE

Wonderful is a leader in the design and manufacture of cable for communication networks



Product Feature

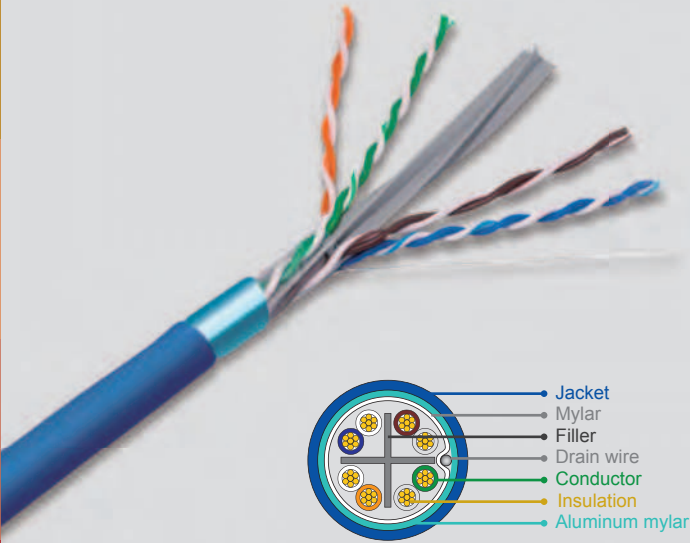
- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 400 MHz.

Product Description

- F/UTP, 24AWG stranded bare copper, CAT.6E.
- Overall metal foil screen with drain wire.

Application

- Structure cabling for horizontal and building backbone cable.
- Transmission of digital and analogue for data, video and audio applications.
- Metal shielded providing good protection from EMI noise.
- 10 / 100 / 1G Base-T IEEE 802.3 i / u / ab.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.



WONDERFUL 1000X® CATEGORY 6E
400MHz SF/UTP SOLID/STRANDED CABLE

Wonderful is a leader in the design and manufacture of cable for communication networks



Product Feature

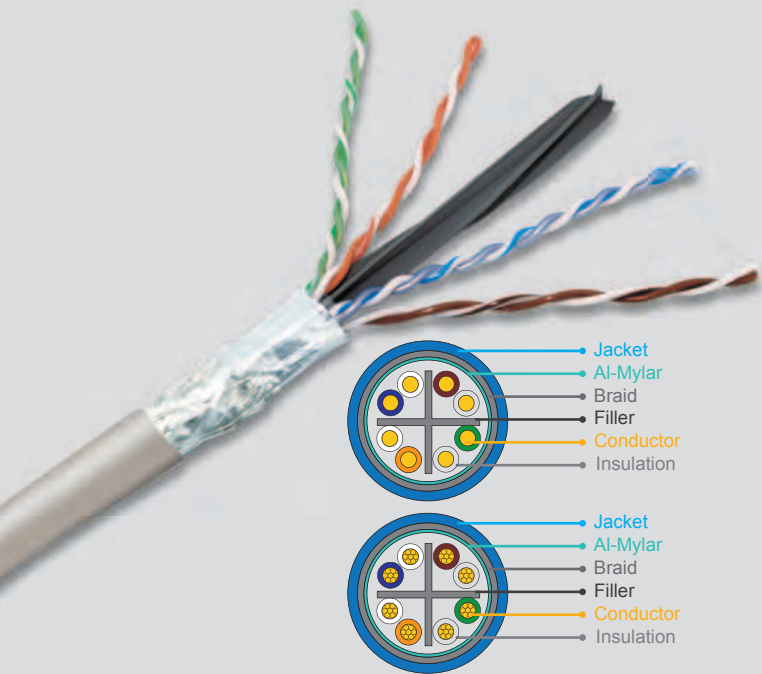
- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 400 MHz.

Product Description

- SF/UTP, 23AWG solid bare copper, CAT.6E.
- SF/UTP, 23AWG stranded bare copper, CAT.6E.
- With cross filler.
- Overall metal foil screen .
- With braid wire.

Application

- Structure cabling for horizontal and building backbone cable.
- Transmission of digital and analogue for data, video and audio applications.
- Metal shielded and braided providing good protection from EMI noise.
- 10 / 100 / 1G Base-T IEEE 802.3 i / u / ab.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.



Cable data

TYPE	PRODUCT NO.	AWG	FLAME	DIAMETER	PACKAGING
			RETARDANT	(mm/inch)	Put-Up
			RATING		
Stranded	TAR2404X	24AWG	CMR	6.9 ± 0.2 mm	1,000ft
	TAM2404X	24AWG	CM	6.9 ± 0.2 mm	1,000ft
	TAL2404X	24AWG	LSZH	6.9 ± 0.2 mm	1,000ft

Reference electrical characteristics

Frequency	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew
(MHz)	Max.	Min.	Min.	Min.	Min.	Min.	Min.	Min.	Max.	Max.
	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m	ns/100m
100	23.76	44.3	42.3	20.54	18.54	27.8	24.8	18.99	537.60	45.00
250	39.42	38.33	36.33	N.A.	N.A.	19.84	16.84	15.57	536.28	45.00
400	51.56	35.27	33.27	N.A.	N.A.	15.76	12.76	13.81	535.80	45.00

Applicable Standard

- Electrical Transmission
ANSI/TIA-568-C.2 (2009)
ISO/IEC 11801 (Edition 2.2)
IEC 61156-5 (Edition 2.1)
- Flame Test
UL 1666 (CMR)
UL 1685 (CM)
IEC 60332-1 (LSZH)
- Material and Construction
UL 444
CSA 22.2 NO.214
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

Physical & Electrical Characteristics (at 20°C)

- Temperature & voltage rating 75°C
- Spark test 2.5 KV DC
- AC leakage current through overall jacket ≤ 10mA (1.5KV AC)
- Cable cold bend -20°C for 4 hr
- Conductor DC resistance ≤ 14.0 Ω/100m
- Resistance unbalance ≤ 5%
- Dielectric strength 1.5 KV ac for 2 s
- Insulation resistance ≥ 5000 MΩ•km
- Mutual capacitance ≤ 5.6 nF/100m
- Capacitance unbalance pair-to-ground ≤ 330 pF/100m

Cable data

TYPE	PRODUCT NO.	AWG	FLAME	DIAMETER	PACKAGING
			RETARDANT	(mm/inch)	Put-Up
			RATING		
Solid	TCP2304X	23AWG	CMP	7.4 ± 0.2 mm	1,000ft
	TCR2304X	23AWG	CMR	7.4 ± 0.2 mm	1,000ft
	TCX2304X	23AWG	CMX	7.5 ± 0.2 mm	1,000ft
	TCL2304X	23AWG	LSZH, E ca	7.4 ± 0.2 mm	1,000ft
Stranded	TBM2304X	23AWG	CM	7.9 ± 0.2 mm	1,000ft

Reference electrical characteristics

TYPE	Frequency	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew
	(MHz)	Max.	Min.	Min.	Min.	Min.	Min.	Min.	Min.	Max.	Max.
		dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m	ns/100m
Solid	100	19.8	44.3	42.3	24.5	22.5	27.8	24.8	20.11	537.60	45.00
	250	32.85	38.33	36.33	5.48	3.48	19.84	16.84	17.32	536.28	45.00
	400	42.97	35.27	33.27	N.A.	N.A.	15.76	12.76	15.89	535.80	45.00
Stranded	100	23.8	44.3	42.3	20.5	18.5	27.8	24.8	19.0	537.60	45.00
	200	34.8	39.8	37.8	5.0	3.0	21.7	18.7	16.4	536.55	45.00
	250	39.4	38.3	36.3	0.0	NA	19.8	16.8	15.6	536.28	45.00

Applicable Standard

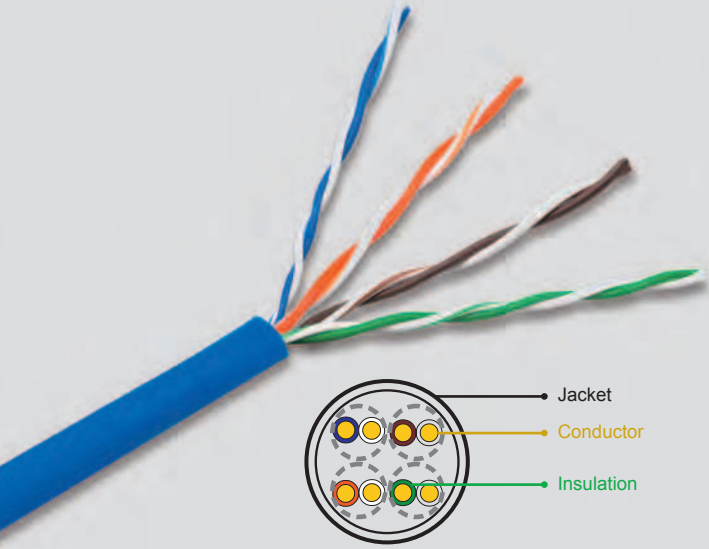
- Electrical Transmission
ANSI/TIA-568-C.2 (2009)
ISO/IEC 11801 (Edition 2.2)
IEC 61156-5 (Edition 2.1)
- Flame Test
NFPA 262 (CMP)
UL 1666 (CMR)
UL 1581 (CMX)
EN 60332-1-2 (E ca)
- Material and Construction
UL 444 (23AWG)
CSA 22.2 NO.214 (23AWG)
IEC 61156-6 (Edition 3.1) (26AWG)
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

Physical & Electrical Characteristics (at 20°C)

- Temperature & voltage rating 75°C
- Spark test 2.5 KV DC
- AC leakage current through overall jacket ≤ 10mA (1.5KV AC)
- Cable cold bend -20°C for 4 hr
- Conductor DC resistance ≤ 14.5 Ω/100m
- Resistance unbalance ≤ 5%
- Dielectric strength 1.5 KV ac for 2 s
- Insulation resistance ≥ 5000 MΩ•km
- Mutual capacitance ≤ 5.6 nF/100m
- Capacitance unbalance pair-to-ground ≤ 330 pF/100m

WONDERFUL 1000X® CATEGORY 6
400MHz U/UTP SOLID CABLE

Wonderful is a leader in the design and manufacture of cable for communication networks



Product Feature

- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 400 MHz.
- Reelex II carton and easy to pull out.
- Carton with one layer corrugated design providing sufficient strength and saving packaging space.

Product Description

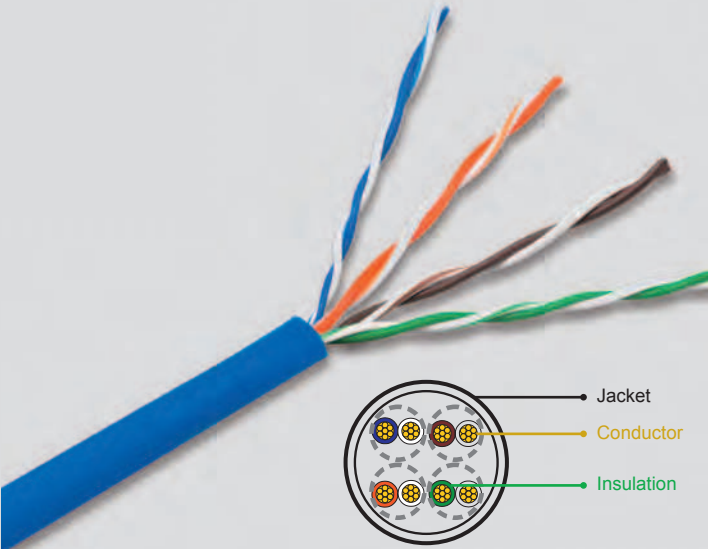
- U/UTP, 23AWG / 28AWG solid bare copper, CAT.6.

Application

- Structure cabling for horizontal and building backbone cable.
- Transmission of digital and analogue for data, video and audio applications.
- 10 / 100 / 1G Base-T IEEE 802.3 i / u / ab.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.

WONDERFUL 1000X® CATEGORY 6
400MHz U/UTP STRANDED CABLE

Wonderful is a leader in the design and manufacture of cable for communication networks



Product Feature

- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 400 MHz
- Reelex II carton and easy to pull out.
- Carton with one layer corrugated design providing sufficient strength and saving packaging space.

Product Description

- U/UTP, 24AWG / 26AWG / 28AWG stranded bare copper, CAT.6.

Application

- Structure cabling for horizontal and building backbone cable.
- Transmission of digital and analogue for data, video and audio applications.
- 10 / 100 / 1G Base-T IEEE 802.3 i / u / ab.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.

Cable data

TYPE	PRODUCT NO.	AWG	FLAME	DIAMETER	PACKAGING
			RETARDANT	(mm/inch)	Put-Up
			RATING		
Solid	TUP2304L	23AWG	CMP	5.1 ± 0.2 mm	1,000ft
	TUP2304U	23AWG	CMP	5.1 ± 0.2 mm	1,000ft
	TUR2304U	23AWG	CMR	5.4 ± 0.2 mm	1,000ft
	TUM2304U	23AWG	CM	5.4 ± 0.2 mm	1,000ft
	TUL2304U	23AWG	LSZH	5.4 ± 0.2 mm	1,000ft
	TUM2804U	28AWG	CM	3.4 ± 0.2 mm	1,000ft
	TUL2804U	28AWG	LSZH, E ca	3.6 ± 0.2 mm	1,000ft

Cable data

TYPE	PRODUCT NO.	AWG	FLAME	DIAMETER	PACKAGING
			RETARDANT	(mm/inch)	Put-Up
			RATING		
Stranded	TPM2404U	24AWG	CM	5.4 ± 0.2 mm	1,000ft
	TPL2404U	24AWG	LSZH	5.4 ± 0.2 mm	1,000ft
	TPP2604U	26AWG	CMP	4.4 ± 0.2 mm	1,000ft
	TPR2604U	26AWG	CMR	4.8 ± 0.2 mm	1,000ft
	TPM2804U	28AWG	CM	4.0 ± 0.2 mm	1,000ft
	TPL2804U	28AWG	LSZH	4.0 ± 0.2 mm	1,000ft

Reference electri cal characteristics

Frequency	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew
(MHz)	Max.	Min.	Min.	Min.	Min.	Min.	Min.	Min.	Max.	Max.
	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m	ns/100m
100	19.8	44.3	42.3	24.5	22.5	27.8	24.8	20.11	537.60	45.00
250	32.85	38.33	36.33	5.48	3.48	19.84	16.84	17.32	536.28	45.00
400	42.97	35.27	33.27	N.A.	N.A.	15.76	12.76	15.89	535.80	45.00

Reference electrical characteristics

Frequency	IL	NEXT	PS.NEXT	RL	Propagation Delay	Delay Skew
(MHz)	Max.	Min.	Min.	Min.	Max.	Max.
	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m	ns/100m
100	N.A.	45.30	42.30	18.99	537.60	45.00
250	N.A.	39.33	36.33	15.60	536.28	45.00
400	N.A.	39.33	36.33	15.60	536.28	45.00

Applicable Standard

- Electrical Transmission
ANSI/TIA-568-C.2 (2009)
ISO/IEC 11801 (Edition 2.2)
IEC 61156-5 (Edition 2.1)
- Flame Test
NFPA 262 (CMP)
UL 1666 (CMR)
UL 1685 (CM)
IEC 60332-1 (LSZH)
EN 60332-1-2 (E ca)
- Material and Construction
UL 444
CSA 22.2 NO.214
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

Physical & Electrical Characteristics (at 20°C)

- Temperature & voltage rating 75°C
- Spark test 2.5 KV DC
- AC leakage current through overall jacket ≤ 10mA (1.5KV AC)
- Cable cold bend -20°C for 4 hr
- Conductor DC resistance ≤ 9.38 Ω/100m
- Resistance unbalance ≤ 5%
- Dielectric strength 1.5 KV ac for 2 s
- Insulation resistance ≥ 5000 MΩ•km
- Mutual capacitance ≤ 5.6 nF/100m
- Capacitance unbalance pair-to-ground ≤ 330 pF/100m

Applicable Standard

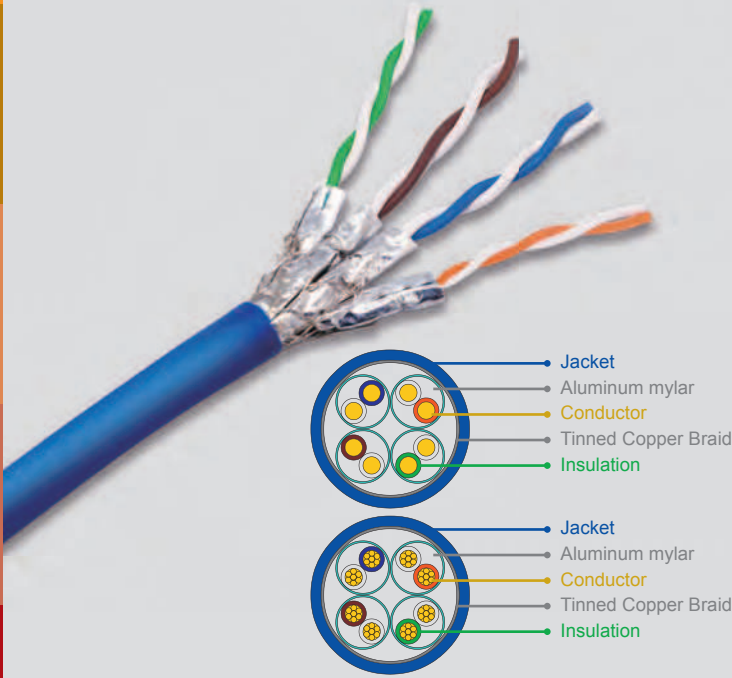
- Electrical Transmission
ANSI/TIA-568-C.2 (2009)
ISO/IEC 11801 (Edition 2.2)
IEC 61156-5 (Edition 2.1)
- Flame Test
UL 1666 (CMR)
UL 1685 (CM)
UL 1581 (CMX)
IEC 60332-1 (LSZH)
- Material and Construction
UL 444
CSA 22.2 NO.214
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

Physical & Electrical Characteristics (at 20°C)

- Temperature & voltage rating 75°C
- Spark test 2.5 KV DC
- AC leakage current through overall jacket ≤ 10mA (1.5KV AC)
- Cable cold bend -20°C for 4 hr
- Conductor DC resistance ≤ 22.3 Ω/100m
- Resistance unbalance ≤ 5%
- Dielectric strength 1.5 KV ac for 2 s
- Insulation resistance ≥ 5000 MΩ•km
- Mutual capacitance ≤ 5.6 nF/100m
- Capacitance unbalance pair-to-ground ≤ 160 pF/100m

WONDERFUL 1000X® CATEGORY 6
550MHz S/FTP SOLID/STRANDED CABLE

Wonderful is a leader in the design and manufacture of cable for communication networks



Product Feature

- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 550 MH.

Product Description

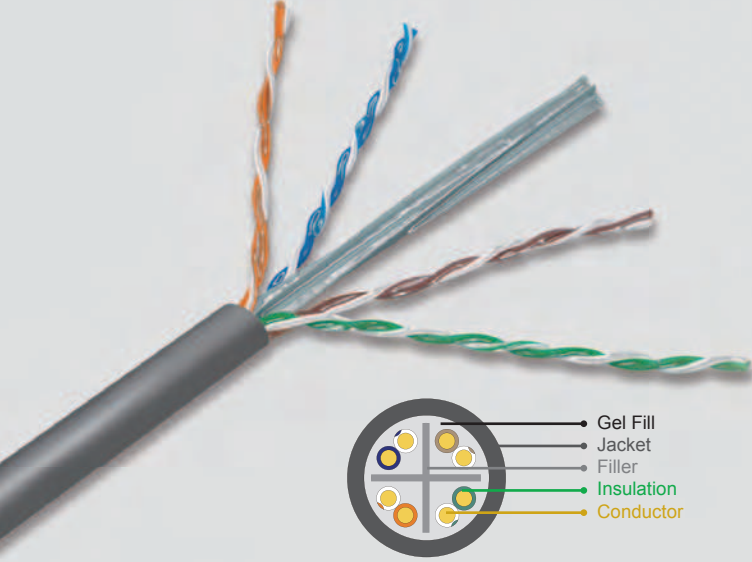
- S/FTP, 23AWG solid bare copper, CAT.6.
- S/FTP, 26AWG stranded bare copper, CAT.6.
- Each pair twist with metal foil screen.
- With braid wire.

Application

- S/FTP, 23AWG Structure cabling for horizontal and building backbone cable.
- S/FTP, 26AWG Structure cabling for cross-connect cable.
- Transmission of digital and analogue for data, video and audio applications.
- Metal shielded and braided providing good protection from EMI noise.
- 10 / 100 / 1G Base-T IEEE 802.3 i / u / ab.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.

WONDERFUL 1000X® CATEGORY 6 DIRECT BURIAL
550MHz U/UTP SOLID CABLE

Wonderful is a leader in the design and manufacture of cable for communication networks



Product Feature

- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 550 MHz.

Product Description

- U/UTP, 24AWG solid bare copper, CAT.6, CMX outdoor Direct Burial.
- With cross filler.
- Sunlight resistant, Waterproof, Pressure resistance.
- Gel Filling.

Application

- Structure cabling for horizontal and building backbone cable.
- Transmission of digital and analogue for data, video and audio applications.
- 10 / 100 / 1G Base-T IEEE 802.3 i / u / ab.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.

Cable data

TYPE	PRODUCT NO.	AWG	FLAME	DIAMETER	PACKAGING
			RETARDANT	(mm/inch)	Put-Up
			RATING		
Solid	TFM2304X	23AWG	CM	7.7 ± 0.2 mm	1,000ft
	TFL2304X	23AWG	LSZH, E ca	7.7 ± 0.2 mm	1,000ft
Stranded	TGL2604X	26AWG	LSZH	6.3 ± 0.2 mm	1,000ft

Cable data

TYPE	PRODUCT NO.	AWG	FLAME	DIAMETER	PACKAGING
			RETARDANT	(mm/inch)	Put-Up
			RATING		
Solid	TUX2404XB	24AWG	CMX	7.2 ± 0.2 mm	1,000ft

Reference electrical characteristics

TYPE	Frequency (MHz)	IL Max.	NEXT Min.	PS.NEXT Min.	ACR Min.	PS.ACR Min.	ACRF Min.	PS.ACRF Min.	RL Min.	Propagation Delay Max.	Delay Skew Max.
		dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m	ns/100m
Solid	100	19.80	44.30	42.30	24.50	22.50	27.80	24.80	20.11	537.60	45.00
	250	32.85	38.33	36.33	5.48	3.48	19.84	16.84	17.32	536.28	45.00
	400	42.97	35.27	33.27	N.A.	N.A.	15.76	12.76	15.89	535.80	45.00
Stranded	100	29.94	45.30	42.30	15.36	12.36	28.00	25.00	18.99	537.60	45.00
	250	49.68	39.33	36.33	N.A.	3.48	19.84	16.84	17.32	536.28	45.00
	400	65.02	36.27	33.27	N.A.	N.A.	15.76	12.76	15.89	535.80	45.00

Reference electrical characteristics

Frequency (MHz)	IL Max.	NEXT Min.	PS.NEXT Min.	ACR Min.	PS.ACR Min.	ACRF Min.	PS.ACRF Min.	RL Min.	Propagation Delay Max.	Delay Skew Max.
	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m	ns/100m
100	19.80	44.30	42.30	24.50	22.50	27.80	24.80	20.11	537.60	45.00
250	32.85	38.33	36.33	5.48	3.48	19.84	16.84	17.32	536.28	45.00
550	51.76	33.19	31.19	N.A.	N.A.	12.99	9.99	14.92	535.54	45.00

Applicable Standard

- Electrical Transmission
ANSI/TIA-568-C.2 (2009)
ISO/IEC 11801 (Edition 2.2)
IEC 61156-5 (Edition 2.1)
- Flame Test
UL 1685 (CM)
IEC 60332-1 (LSZH)
EN 60332-1-2 (E ca)
- Material and Construction
UL 444
CSA 22.2 NO.214
IEC 61156-6 (Edition 3.1)
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

Physical & Electrical Characteristics (at 20°C)

- Temperature & voltage rating
75°C
- Spark test
2.5 KV DC
- AC leakage current through overall jacket
≤ 10mA (1.5KV AC)
- Cable cold bend
-20°C for 4 hr
Solid ≤ 9.38 Ω/100m
Stranded ≤ 14.5 Ω/100m
- Conductor DC resistance
≤ 5% (23AWG) / ≤ 4% (26AWG)
- Resistance unbalance
1.5 KV ac for 2 s
≥ 5 MΩ•km
- Dielectric strength
≥ 5.6 nF/100m
- Insulation resistance
≤ 5.6 nF/100m
- Mutual capacitance
≤ 160 pF/100m
- Capacitance unbalance pair-to-ground

Applicable Standard

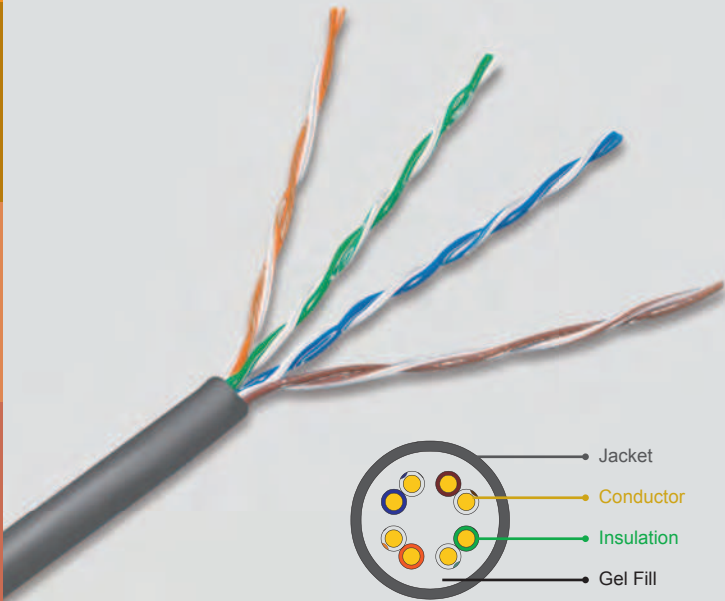
- Electrical Transmission
ANSI/TIA-568-C.2 (2009)
ISO/IEC 11801 (Edition 2.2)
IEC 61156-5 (Edition 2.1)
- Flame Test
UL 1581 (CMX)
- Material and Construction
UL 444
UL 13 (Sec.35 & 36)
CSA 22.2 NO.214
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

Physical & Electrical Characteristics (at 20°C)

- Temperature & voltage rating
75°C
- Spark test
2.5 KV DC
- AC leakage current through overall jacket
≤ 10mA (1.5KV AC)
- Cable cold bend
-20°C for 4 hr
- Conductor DC resistance
≤ 9.38 Ω/100m
- Resistance unbalance
≤ 5%
- Dielectric strength
1.5 KV ac for 2 s
≥ 5000 MΩ•km
- Insulation resistance
≥ 5.6 nF/100m
- Mutual capacitance
≤ 330 pF/100m
- Capacitance unbalance pair-to-ground

WONDERFUL 350® CATEGORY 5E DIRECT BURIAL
350MHz U/UTP SOLID CABLE

Wonderful is a leader in the design and manufacture of cable for communication networks



Product Feature

- High performance of transmission.
- High quality of safety property.
- sweep frequency up to 350 MHz.

Product Description

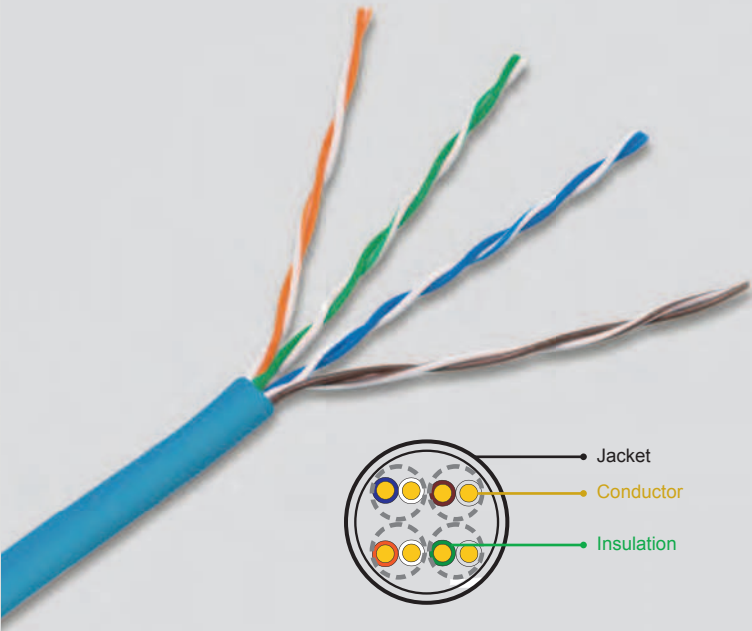
- U/UTP, 24AWG solid bare copper, CAT.5E, CMX outdoor Direct Burial.
- Sunlight resistant, Waterproof, Pressure resistance.
- Gel Filling.

Application

- Structure cabling for horizontal and building backbone cable.
- Transmission of digital and analogue for data, video and audio applications.
- 10 / 100 Base-T IEEE 802.3 i / u.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.

WONDERFUL 350® CATEGORY 5E
350MHz U/UTP SOLID CABLE

Wonderful is a leader in the design and manufacture of cable for communication networks



Product Feature

- High performance of transmission.
- High quality of safety property.
- sweep frequency up to 350 MHz.
- Reelex II carton and easy to pull out.
- Carton with one layer corrugated design providing sufficient strength and saving packaging space.

Product Description

- U/UTP, 22AWG / 24AWG solid bare copper, CAT.5E.

Application

- Structure cabling for horizontal and building backbone cable.
- Transmission of digital and analogue for data, video and audio applications.
- 10 / 100 Base-T IEEE 802.3 i / u.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.

Cable data

TYPE	PRODUCT NO.	AWG	FLAME	DIAMETER	PACKAGING
			RETARDANT	(mm/inch)	Put-Up
			RATING		
Solid	TUX2404PB	24AWG	CMX	5.8 ± 0.2 mm	1,000ft

Cable data

TYPE	PRODUCT NO.	AWG	FLAME	DIAMETER	PACKAGING
			RETARDANT	(mm/inch)	Put-Up
			RATING		
Solid	TUP2204P	22AWG	CMP	5.3 ± 0.2 mm	1,000ft
	TUR2204P	22AWG	CMR	5.7 ± 0.2 mm	1,000ft
	TUM2204P	22AWG	CM	5.7 ± 0.2 mm	1,000ft
	TUL2204P	22AWG	LSOH	5.8 ± 0.2 mm	1,000ft
	TUP2404K	24AWG	CMP	4.5 ± 0.2 mm	1,000ft
	TUP2404P	24AWG	CMP	4.5 ± 0.2 mm	1,000ft
	TUR2404P	24AWG	CMR	4.8 ± 0.2 mm	1,000ft
	TUM2404P	24AWG	CM	4.8 ± 0.2 mm	1,000ft
	TUX2404P	24AWG	CMX	4.9 ± 0.2 mm	1,000ft
	TUX2404P(water-blocking)	24AWG	CMX	5.7 ± 0.2 mm	1,000ft
	TUL2404P	24AWG	FRLSZH	4.9 ± 0.2 mm	1,000ft

Reference electrical characteristics

Frequency	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew
(MHz)	Max.	Min.	Min.	Min.	Min.	Min.	Min.	Min.	Max.	Max.
	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m	ns/100m
100	21.98	35.30	32.30	13.33	10.33	23.80	20.80	20.11	537.60	45.00
350	44.85	27.14	24.14	N.A.	N.A.	12.92	9.92	16.30	535.92	45.00

Reference electrical characteristics

Frequency	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew
(MHz)	Max.	Min.	Min.	Min.	Min.	Min.	Min.	Min.	Max.	Max.
	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m	ns/100m
100	21.98	35.30	32.30	13.33	12.33	23.80	22.80	20.11	537.60	45.00
350	44.85	27.14	24.14	N.A.	N.A.	12.92	9.92	16.30	535.92	45.00

Applicable Standard

- Electrical Transmission
ANSI/TIA-568-C.2 (2009)
ISO/IEC 11801 (Edition 2.2)
IEC 61156-6 (Edition 3.1)
- Flame Test
UL 1581 (CMX)
- Material and Construction
UL 444
UL 13 (Sec.35 & 36)
CSA 22.2 NO.214
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

Physical & Electrical Characteristics (at 20°C)

- Temperature & voltage rating 75°C
- Spark test 2.5 KV DC
- AC leakage current through overall jacket ≤ 10mA (1.5KV AC)
- Cable cold bend -20°C for 4 hr
- Conductor DC resistance ≤ 9.38 Ω/100m
- Resistance unbalance ≤ 5%
- Dielectric strength 1.5 KV ac for 2 s
- Insulation resistance ≥ 5000 MΩ•km
- Mutual capacitance ≤ 5.6 nF/100m
- Capacitance unbalance pair-to-ground ≤ 330 pF/100m

Applicable Standard

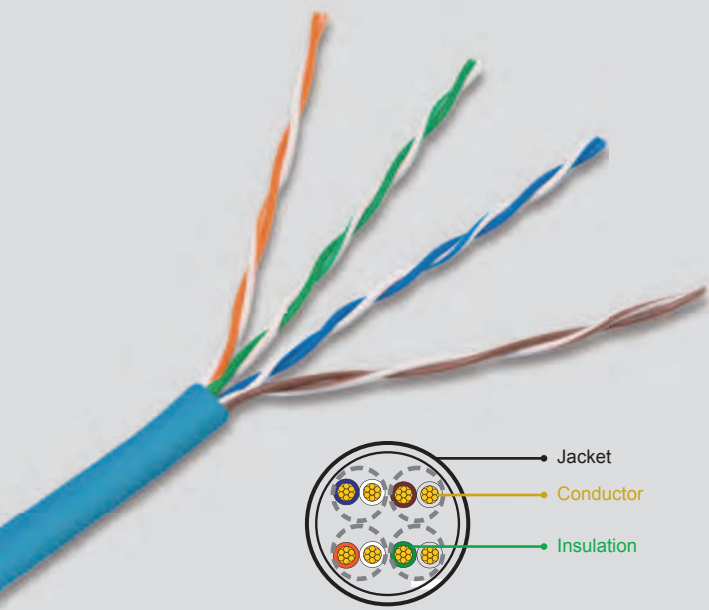
- Electrical Transmission
ANSI/TIA-568-C.2 (2009)
ISO/IEC 11801 (Edition 2.2)
IEC 61156-6 (Edition 3.1)
- Flame Test
NFPA 262 (CMP)
UL 1666 (CMR)
UL 1685 (CM)
UL 1581 (CMX)
IEC 60332-1 (LSZH)
IEC 60332-3-24(C) (FRLSZH)
- Material and Construction
UL 444
CSA 22.2 NO.214
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

Physical & Electrical Characteristics (at 20°C)

- Temperature & voltage rating 75°C
- Spark test 2.5 KV DC
- AC leakage current through overall jacket ≤ 10mA (1.5KV AC)
- Cable cold bend -20°C for 4 hr
- Conductor DC resistance ≤ 9.38 Ω/100m
- Resistance unbalance ≤ 5%
- Dielectric strength 1.5 KV ac for 2 s
- Insulation resistance ≥ 5000 MΩ•km
- Mutual capacitance ≤ 5.6 nF/100m
- Capacitance unbalance pair-to-ground ≤ 330 pF/100m

WONDERFUL 350® CATEGORY 5E
350MHz U/UTP STRANDED CABLE

Wonderful is a leader in the design and manufacture of cable for communication networks



Product Feature

- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 350 MHz.
- Reelex II carton and easy to pull out.
- Carton with one layer corrugated design providing sufficient strength and saving packaging space.

Product Description

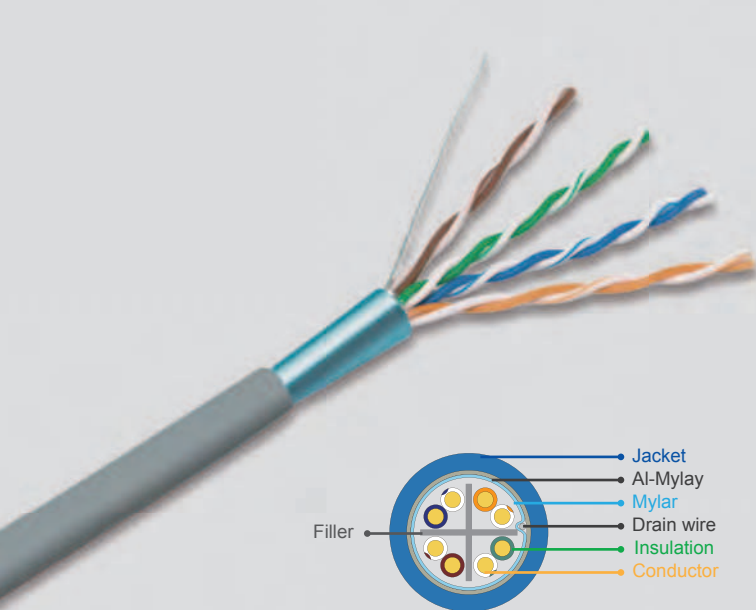
- U/UTP, 24AWG / 26AWG / 28AWG stranded bare copper, CAT.5E.

Application

- Structure cabling for patch cable.
- Transmission of digital and analogue for data, video and audio applications.
- 10 / 100 Base-T IEEE 802.3 i / u.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.

WONDERFUL 350® CATEGORY 5E
350MHz F/UTP SOLID CABLE

Wonderful is a leader in the design and manufacture of cable for communication networks



Product Feature

- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 350 MHz.

Product Description

- F/UTP, 24AWG solid bare copper, CAT.5E.
- Overall metal foil screen with drain wire.

Application

- Structure cabling for horizontal and building backbone cable.
- Transmission of digital and analogue for data, video and audio applications.
- Overall metal shielded providing good protection from EMI noise.
- 10 / 100 Base-T IEEE 802.3 i / u.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.

Cable data

TYPE	PRODUCT NO.	AWG	FLAME	DIAMETER	PACKAGING
			RETARDANT	(mm/inch)	Put-Up
			RATING		
Stranded	TPM2404P	24AWG	CM	5.3 ± 0.2 mm	1,000ft
	TPL2404P	24AWG	LSZH, E ca	5.3 ± 0.2 mm	1,000ft
	TPP2604P	26AWG	CMP	4.3 ± 0.2 mm	1,000ft
	TPR2604P	26AWG	CMR	4.7 ± 0.2 mm	1,000ft
	TPM2604P	26AWG	CM	4.7 ± 0.2 mm	1,000ft
	TPM2804P	28AWG	CM	3.9 ± 0.2 mm	1,000ft
	TPL2804P	28AWG	LSZH	3.9 ± 0.2 mm	1,000ft

Cable data

TYPE	PRODUCT NO.	AWG	FLAME	DIAMETER	PACKAGING
			RETARDANT	(mm/inch)	Put-Up
			RATING		
Solid	TSP2404P	24AWG	CMP	5.8 ± 0.2 mm	1,000ft
	TSR2404P	24AWG	CMR	6.1 ± 0.2 mm	1,000ft
	TSM2404P	24AWG	CM	6.1 ± 0.2 mm	1,000ft
	TSX2404P	24AWG	CMX	6.8 ± 0.2 mm	1,000ft
	TSX2404E	24AWG	CMX	6.2 ± 0.2 mm	1,000ft
	TSL2404P	24AWG	LSZH, E ca	6.1 ± 0.2 mm	1,000ft

Reference electrical characteristics

Frequency	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew
(MHz)	Max.	Min.	Min.	Min.	Min.	Min.	Min.	Min.	Max.	Max.
	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m	ns/100m
100	26.37	35.30	32.30	8.93	5.93	23.80	20.80	18.99	537.60	45.00
350	53.82	27.14	24.14	N.A.	N.A.	12.92	9.92	14.31	535.92	45.00

Reference electrical characteristics

	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew
(MHz)	Max.	Min.	Min.	Min.	Min.	Min.	Min.	Min.	Max.	Max.
	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m	ns/100m
100	21.98	35.30	32.30	13.33	10.33	23.80	20.80	20.11	537.60	45.00
350	44.85	27.14	24.14	N.A.	N.A.	12.92	9.92	16.30	535.92	45.00

Applicable Standard

- Electrical Transmission
 - ISO/IEC 11801 (Edition 2.2)
 - IEC 61156-6 (Edition 3.1)
- Flame Test
 - NFPA 262 (CMP)
 - UL 1666 (CMR)
 - UL 1685 (CM)
 - IEC 60332-1 (LSZH)
 - EN 60332-1-2 (E ca)
- Material and Construction
 - IEC 61156-6 (Edition 3.1)
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

Physical & Electrical Characteristics (at 20°C)

- Temperature & voltage rating
 - 75°C
- Spark test
 - 2.5 KV DC
- AC leakage current through overall jacket
 - ≤ 10mA (1.5KV AC)
- Cable cold bend
 - 20°C for 4 hr
- Conductor DC resistance
 - ≤ 22.3 Ω/100m
- Resistance unbalance
 - ≤ 5%
- Dielectric strength
 - 1.5 KV ac for 2 s
- Insulation resistance
 - ≥ 5000 MΩ•km
- Mutual capacitance
 - ≤ 5.6 nF/100m
- Capacitance unbalance pair-to-ground
 - ≤ 160 pF/100m

Applicable Standard

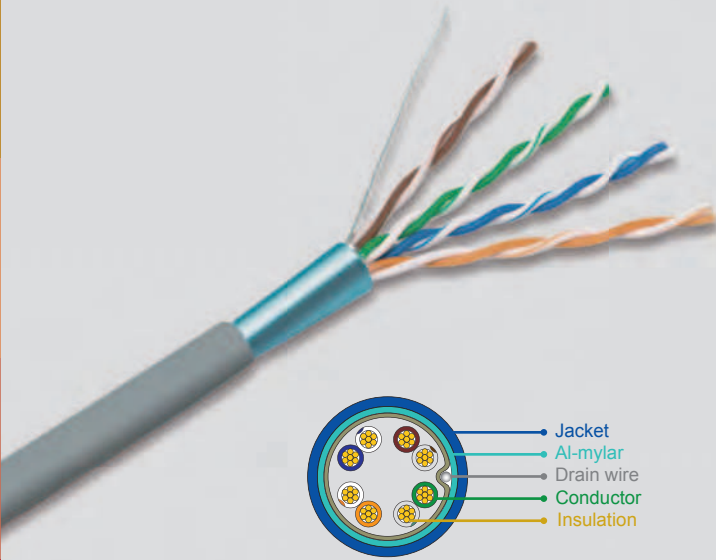
- Electrical Transmission
 - ANSI/TIA-568-C.2 (2009)
 - ISO/IEC 11801 (Edition 2.2)
 - IEC 61156-5 (Edition 2.1)
- Flame Test
 - NFPA 262 (CMP)
 - UL 1666 (CMR)
 - UL 1685 (CM)
 - UL 1581 (CMX)
 - IEC 60332-1 (LSZH)
 - EN 60332-1-2 (E ca)
- Material and Construction
 - UL 444
 - CSA 22.2 NO.214
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

Physical & Electrical Characteristics (at 20°C)

- Temperature & voltage rating
 - 75°C
- Spark test
 - 2.5 KV DC
- AC leakage current through overall jacket
 - ≤ 10mA (1.5KV AC)
- Cable cold bend
 - 20°C for 4 hr
- Conductor DC resistance
 - ≤ 9.38 Ω/100m
- Resistance unbalance
 - ≤ 5%
- Dielectric strength
 - 1.5 KV ac for 2 s
- Insulation resistance
 - ≥ 5000 MΩ•km
- Mutual capacitance
 - ≤ 5.6 nF/100m
- Capacitance unbalance pair-to-ground
 - ≤ 330 pF/100m

WONDERFUL 350[®] CATEGORY 5E
350MHz F/UTP STRANDED CABLE

Wonderful is a leader in the design and manufacture of cable for communication networks



Product Feature

- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 350 MHz.

Product Description

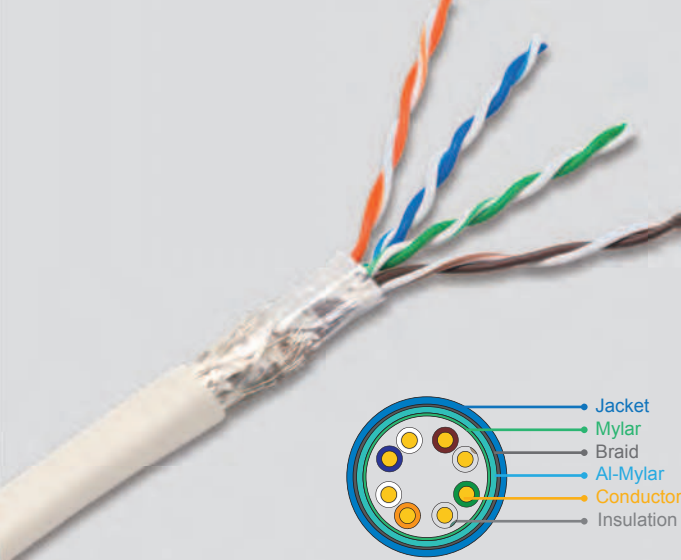
- F/UTP, 24AWG / 26AWG stranded bare copper, CAT.5E.
- Overall metal foil screen with drain wire.

Application

- Transmission of digital and analogue for data, video and audio applications.
- Overall metal shielded providing good protection from EMI noise.
- 10 / 100 Base-T IEEE 802.3 i / u.
- CDDI / FDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.

WONDERFUL 350[®] CATEGORY 5E
350MHz SF/UTP SOLID CABLE

Wonderful is a leader in the design and manufacture of cable for communication networks



Product Feature

- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 350 MHz.

Product Description

- SF/UTP, 24AWG solid bare copper, CAT.5E.

Application

- Transmission of digital and analogue for data, video and audio applications.
- Overall metal shielded and braided providing good protection from EMI noise.
- 10 / 100 Base-T IEEE 802.3 i / u.
- CDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.

Cable data

TYPE	PRODUCT NO.	AWG	FLAME	DIAMETER	PACKAGING
			RETARDANT	(mm/inch)	Put-Up
			RATING		
Stranded	TAM2404P	24AWG	CM	6.0 ± 0.2 mm	1,000ft
	TAL2404P	24AWG	LSZH	6.0 ± 0.2 mm	1,000ft
	TAP2604P	26AWG	CMP	5.2 ± 0.2 mm	1,000ft
	TAR2604P	26AWG	CMR	5.4 ± 0.2 mm	1,000ft
	TAM2604P	26AWG	CM	5.4 ± 0.2 mm	1,000ft

Cable data

TYPE	PRODUCT NO.	AWG	FLAME	DIAMETER	PACKAGING
			RETARDANT	(mm/inch)	Put-Up
			RATING		
Solid	TCX2404P	24AWG	CMX	6.5 ± 0.2 mm	1,000ft
	TCM2404P	24AWG	CM	6.5 ± 0.2 mm	1,000ft
	TCP2404P	24AWG	CMP	6.5 ± 0.2 mm	1,000ft
	TCL2404P	24AWG	LSZH	6.6 ± 0.2 mm	1,000ft

Reference electrical characteristics

Frequency	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew
(MHz)	Max.	Min.	Min.	Min.	Min.	Min.	Min.	Min.	Max.	Max.
	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m	ns/100m
100	26.37	35.30	32.30	8.93	5.93	23.80	20.80	18.99	537.60	45.00
350	53.82	27.14	24.14	N.A.	N.A.	12.92	9.92	14.31	535.92	45.00

Reference electrical characteristics

Frequency	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew
(MHz)	Max.	Min.	Min.	Min.	Min.	Min.	Min.	Min.	Max.	Max.
	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m	ns/100m
100	21.98	35.30	32.30	13.33	10.33	23.80	20.80	20.11	537.60	45.00
350	44.85	27.14	24.14	N.A.	N.A.	12.92	9.92	16.30	535.92	45.00

Applicable Standard

- Electrical Transmission
ANSI/TIA-568-C.2 (2009)
ISO/IEC 11801 (Edition 2.2)
IEC 61156-6 (Edition 3.1)
- Flame Test
NFPA 262 (CMP)
UL 1666 (CMR)
UL 1685 (CM)
IEC 60332-1 (LSZH)
- Material and Construction
UL 444
CSA 22.2 NO.214
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

Physical & Electrical Characteristics (at 20°C)

- Temperature & voltage rating 75°C
- Spark test 2.5 KV DC
- AC leakage current through overall jacket ≤ 10mA (1.5KV AC)
- Cable cold bend -20°C for 4 hr
- Conductor DC resistance ≤ 14.5 Ω/100m
- Resistance unbalance ≤ 5%
- Dielectric strength 1.5 KV ac for 2 s
- Insulation resistance ≥ 5000 MΩ•km
- Mutual capacitance ≤ 5.6 nF/100m
- Capacitance unbalance pair-to-ground ≤ 330 pF/100m

Applicable Standard

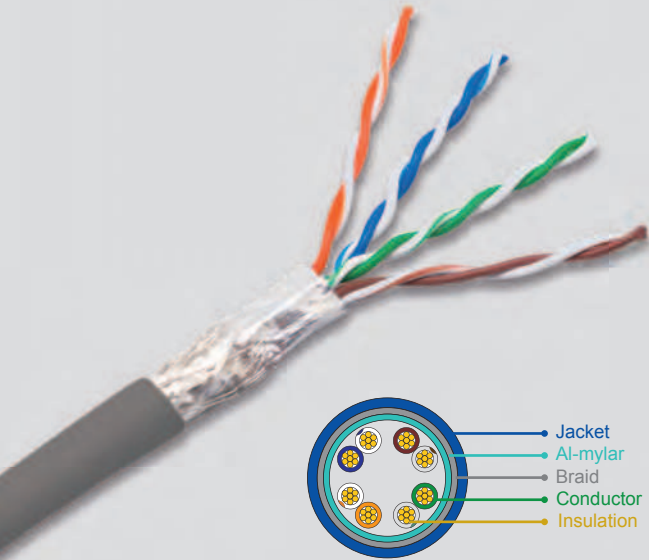
- Electrical Transmission
ISO/IEC 11801 (Edition 2.2)
IEC 61156-5 (Edition 2.1)
- Flame Test
NFPA 262 (CMP)
UL 1685 (CM)
UL 1581 (CMX)
IEC 60332-1 (LSZH)
- Material and Construction
UL 444
CSA 22.2 NO.214
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

Physical & Electrical Characteristics (at 20°C)

- Temperature & voltage rating 75°C
- Spark test 2.5 KV DC
- AC leakage current through overall jacket ≤ 10mA (1.5KV AC)
- Cable cold bend -20°C for 4 hr
- Conductor DC resistance ≤ 9.38 Ω/100m
- Resistance unbalance ≤ 5%
- Dielectric strength 1.5 KV ac for 2 s
- Insulation resistance ≥ 5000 MΩ•km
- Mutual capacitance ≤ 5.6 nF/100m
- Capacitance unbalance pair-to-ground ≤ 330 pF/100m

WONDERFUL 350[®] CATEGORY 5E
350MHz SF/UTP STRANDED CABLE

Wonderful is a leader in the design and manufacture of cable for communication networks



Product Feature

- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 350 MHz.

Product Description

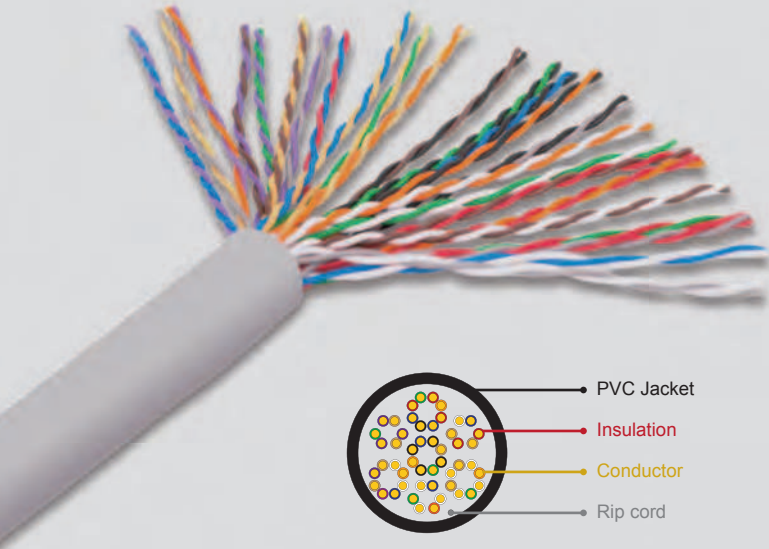
- SF/UTP, 24AWG / 26AWG stranded bare copper, CAT.5E.

Application

- Transmission of digital and analogue for data, video and audio applications.
- Overall metal shielded and braided providing good protection from EMI noise.
- 10 / 100 Base-T IEEE 802.3 i / u.
- CDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.

WONDERFUL 100[®] CATEGORY 5
100MHz U/UTP 25PAIR SOLID CABLE

Wonderful is a leader in the design and manufacture of cable for communication networks



Product Feature

- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 100 MHz.

Product Description

- UTP, 24AWG / 25pair solid bare copper, CAT.5.

Application

- Structure cabling for horizontal and building backbone cable.
- Transmission of digital and analogue for data, video and audio applications.
- 10 / 100 Base-T IEEE 802.3 i / u.
- CDDI / ATM / Token Ring.
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)
- Limit Power -LP UL POE Safety standard.
- HDBaseT 2.0 standard.
- EtherCAT Industrial standard.

Cable data

TYPE	PRODUCT NO.	AWG	FLAME	DIAMETER	PACKAGING
			RETARDANT	(mm/inch)	Put-Up
			RATING		
Stranded	TBR2404P	24AWG	CMR	5.8 ± 0.2 mm	1,000ft
	TBM2604E	26AWG	CM	5.2± 0.2 mm	1,000ft
	TBL2604E	26AWG	LSZH	5.2± 0.2 mm	1,000ft

Cable data

TYPE	PRODUCT NO.	FLAME	DIAMETER	PACKAGING	
		RETARDANT	(mm/inch)	Put-Up	
		RATING			
Solid	TUR2425N	CMR	13.0 ± 0.3 mm	1,000ft	25 Pair
	TUM2425N	CM	13.0 ± 0.3 mm	1,000ft	25 Pair
	TUL2425N	LSZH	13.0 ± 0.3 mm	1,000ft	25 Pair

Reference electrical characteristics

Frequency	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew
(MHz)	Max.	Min.	Min.	Min.	Min.	Min.	Min.	Min.	Max.	Max.
	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m	ns/100m
100	26.37	35.30	32.30	8.93	5.93	23.80	20.80	18.99	537.60	45.00
350	53.82	27.14	24.14	N.A.	N.A.	12.92	9.92	14.31	535.92	45.00

Reference electrical characteristics

Frequency	IL	NEXT	ACR	ACRF	SRL
(MHz)	Max.	Min.	Min.	Min.	Min.
	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m
100	22.0	32.3	10.3	20.8	16.0

Applicable Standard

- Electrical Transmission
ISO/IEC 11801 (Edition 2.2)
IEC 61156-5 (Edition 2.1)
- Flame Test
UL 1666 (CMR)
UL 1685 (CM)
IEC 60332-1 (LSZH)
- Material and Construction
UL 444
CSA 22.2 NO.214
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

Physical & Electrical Characteristics (at 20°C)

- Temperature & voltage rating 75°C
- Spark test 2.5 KV DC
- AC leakage current through overall jacket ≤ 10mA (1.5KV AC)
- Cable cold bend -20°C for 4 hr
- Conductor DC resistance ≤ 14.5 Ω/100m
- Resistance unbalance ≤ 5%
- Dielectric strength 1.5 KV ac for 2 s
- Insulation resistance ≥ 5000 MΩ•km
- Mutual capacitance ≤ 5.6 nF/100m
- Capacitance unbalance pair-to-ground ≤ 330 pF/100m

Applicable Standard

- Electrical Transmission
TIA-568-C.2
- Flame Test
UL 1666 (CMR)
UL 1685 (CM)
IEC 60332-1 (LSZH)
- Material and Construction
UL 444
CSA 22.2 NO.214
- EU Directive 2011/65/EU (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

Physical & Electrical Characteristics (at 20°C)

- Temperature & voltage rating 75°C
- Spark test 2.5 KV DC
- AC leakage current through overall jacket ≤ 10mA (1.5KV AC)
- Cable cold bend -20°C for 4 hr
- Conductor DC resistance ≤ 9.38 Ω/100m
- Resistance unbalance ≤ 5%
- Dielectric strength 1.5 KV ac for 2 s
- Insulation resistance ≥ 5000 MΩ•km
- Mutual capacitance ≤ 5.6 nF/100m
- Capacitance unbalance pair-to-ground ≤ 330 pF/100m

Wonderful Product Packaging

Wonderful is a leader in the design and manufacture of cable for communication networks

Wonderful LAN cable offers variable customized package for customer choices.

•Each pallet is well-packed and delivered with cellophane packing Tape.

Upper Pallet

Lower Pallet

BSD1

BSD2

BSD3/4

BSD5/6

•Each pallet is well-packed and delivered with cellophane packing Tape.

Upper Pallet

Lower Pallet

RSD1

RSD2

RSD3

RSD4

Order Information

Example	T	U	P	23	04	S	XX	1	9	I	09	00305	
													Length per unit(m)
Cable Type													Color Index
U:U/UTP SOLID													Color code
P:U/UTP STRANDED cable													
F:S/FTP SOLID													
G:S/FTP STRANDED cable													
C:SF/UTP SOLID													
B:SF/UTP STRANDED cable													
S:F/UTP SOLID													
A:F/UTP STRANDED cable													
H:F/FTP SOLID													

Please note that product specifications and features are for reference only and are subject to change without notice.

Wonderful Fiber Cable Products

Wonderful is a leader in the design and manufacture of cable for communication networks

TBF (Tight Buffer Cable)	
Part No.	0.9 S
Product	Simplex 900um
Cores	1
Jack Diameter (mm)	0.9
UL 1651	OFNP/OFNR/OFN (1-12C)

TBF (Tight Buffer Cable)	
Part No.	S
Product	Simplex Round Cable
Cores	1
Jack Diameter (mm)	1.6/2.0/3.0
UL 1651	OFNP/OFNR/OFN (1-12C)

TBF (Tight Buffer Cable)	
Part No.	T
Product	Distribution Cable
Cores	2
Jack Diameter (mm)	3.5/4.0/5.0/6.0
UL 1651	OFNP/OFNR/OFN (1-12C)

TBF (Tight Buffer Cable)	
Part No.	D
Product	Duplex Zipcord Cable
Cores	2
Jack Diameter (mm)	1.6 x 3.3 2.0 x 4.1
UL 1651	OFNP/OFNR/OFN (1-12C)

TBF (Tight Buffer Cable)	
Part No.	B
Product	Duplex Flat Cable
Cores	2
Jack Diameter (mm)	3.0 x 5.0
UL 1651	OFNP/OFNR/OFN (1-12C)

Drop Cable	
Part No.	E
Product	Self Support 3-Circle PE Indoor-Outdoor Drop Cable
Cores	2
Jack Diameter (mm)	1.0

Drop Cable	
Part No.	E
Product	Self Support Drop Cable
Cores	2
Jack Diameter (mm)	2.2 x 5.3

Drop Cable	
Part No.	F
Product	Drop Cable
Cores	2
Jack Diameter (mm)	2.0 x 3.1

Mini(Micro) Bundle for MTP MPO Cable	
Part No.	L
Product	Mini Bundle Cable
Cores	8/12
Jack Diameter (mm)	3.0
UL1651	OFNP/OFNR/OFN (1-12C)

Indoor/outdoor Cable	
Part No.	DW
Product	Gel-Free Loose Tube Cable
Cores	4/6/8/12
Jack Diameter (mm)	6.50 mm

Indoor/outdoor Cable	
Part No.	SMF-28E
Product	Gel-Filled Multi-Loose Tube Cable 4+1 T
Cores	48C
Jack Diameter (mm)	10.2 mm

Indoor/outdoor Cable	
Part No.	2C A2
Product	HYBRID +U-UTP #23 Solid CAT 6 LSZH
Cores	*
Jack Diameter (mm)	7.4 mm

Indoor/outdoor Cable	
Part No.	WW
Product	Gel-Filled Loose Tube Cable
Cores	4/6/8/12
Jack Diameter (mm)	6.5-6.7

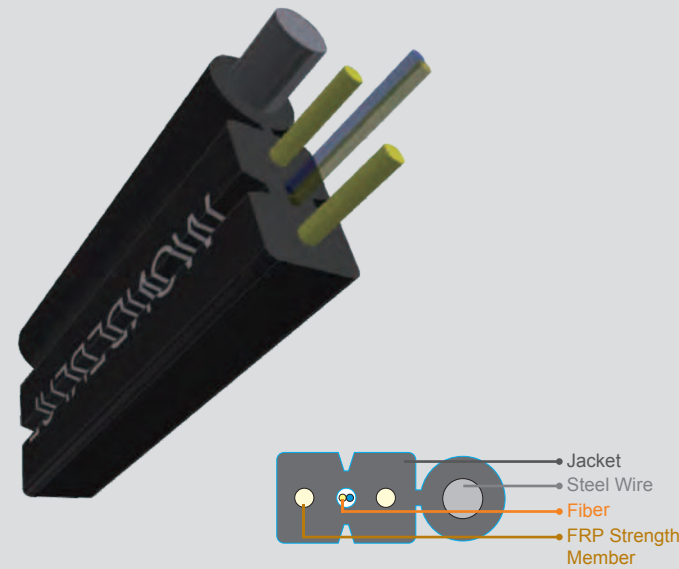
Indoor/outdoor Cable	
Part No.	WW
Product	Gel-Filled Loose Tube Cable
Cores	4/6/8/12
Jack Diameter (mm)	8.0

Indoor/outdoor Cable	
Part No.	WW
Product	Gel-Filled Loose Tube Cable-Mini Tube
Cores	4/6/8/12
Jack Diameter (mm)	1.0

Indoor/outdoor Cable	
Part No.	DV
Product	Gel-Free Dual Loose Tube Cable
Cores	16/24
Jack Diameter (mm)	8.00

Self- supporting Drop Cable

Wonderful is a leader in the design and manufacture of cable for communication networks



Applications

- FTTX, Outdoor and aerial use.
- Suitable for introducing cables in building.
- Suitable for standard single ferrule mechanical connectors (LC, SC, ST, etc.) via a furcation kit.
- IEEE 802.3z 10GBase, 40GBase, 100GBase Ethernet and legacy speeds.
- FDDI / ATM

Features

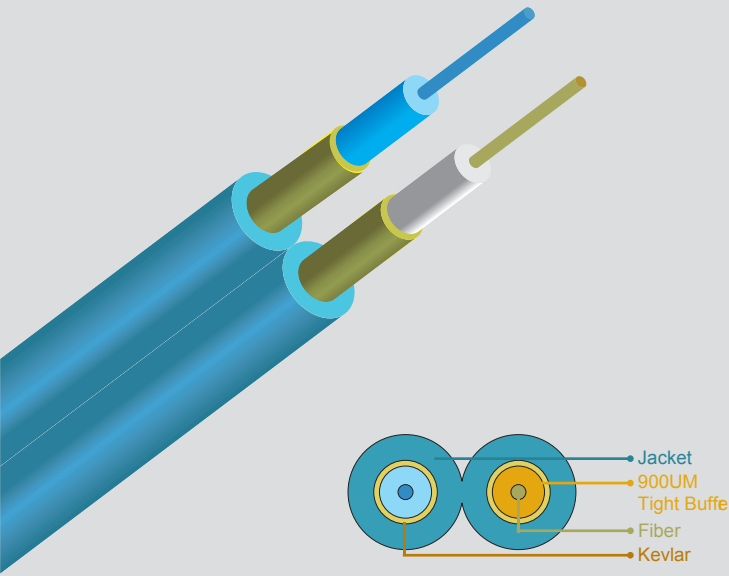
- High performance of bending insensitive.
- Self-supporting steel wire make aerial installation more convenient.
- Easily strip of jacket to expose fiber core.
- Customized service fit various requirements from clients.

Customization

- Fiber Type: G.652.D 、 G.657.A1 、 G.657.A2 、 OM2 、 OM3 、 OM4
- Dimension: As specification or per client's request.
- Delivery Length: 1km, 2km or per client's request.

Duplex Zip Interconnect Cable

Wonderful is a leader in the design and manufacture of cable for communication networks



Applications

- Indoor use.
- Suitable for pigtails, patch cords and interconnection between optical instruments.
- Suitable for standard single ferrule mechanical connectors (LC, SC, ST, etc.) via a furcation kit.
- IEEE 802.3z 10GBase, 40GBase, 100GBase Ethernet and legacy speeds.
- FDDI / ATM

Features

- High performance of bending insensitive.
- Customized service fit various requirements from clients.

Customization

- Fiber Type: G.652.D 、 G.657.A1 、 G.657.A2 、 OM2 、 OM3 、 OM4
- Dimension: As specification or per client's request.
- Delivery Length: 1km, 2km or per client's request.

Specifications

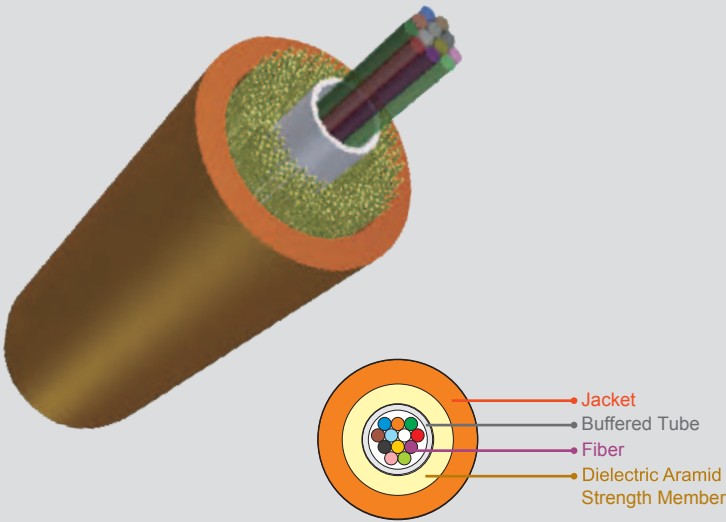
Fiber Core Count	2	4
Fiber Core Color	Blue, Yellow, Green, Black	
FRP Strength Members	E-Glass FRP 0.4 mm Tensile Strength 140 Kg/mm2	
Self Support Wire	Zinc Steel 1.2 mm Tensile Strength 125 Kg/mm2	
Jacket Material / Flame Retardant	LSZH / IEC 60332-1-2 LSFRZH / IEC 60332-3-24	
Jacket Color	Black	
Jacket Diameter (mm)	5.3 x 2.0	
Jacket Thickness (mm)	0.4~0.8	
Cable Weight (Kg/Km)	19.4	19.5
Tensile Loading (Short Term)	600 N	
Tensile Loading (Long Term)	300 N	
Crush Load (Short Term)	2000 N/100mm	
Crush Load (Long Term)	1000 N/100mm	
Bend Radius (Short Term)	20 Times of Cable Diameter	
Bend Radius (Long Term)	10 Times of Cable Diameter	

Specifications

Fiber Core Count	2					
Fiber Core Color	Blue & Yellow or Per Client's Request					
Tight Buffer Diameter (mm)	0.6	0.6	0.9	0.9	0.9	0.9
Jacket Material / Flame Retardant	PVC / OFN 、 FRPVC / OFNR 、 FRLSPVC / OFNP LSZH / IEC 60332-1-2 、 LSFRZH / IEC 60332-3-24					
Jacket Color	Standard Colors or Per Client's Request.					
Jacket Diameter (mm)	1.6x3.3	1.8x3.7	2.0x4.1	2.4x4.9	2.8x5.7	3.0x6.1
Jacket Thickness (mm)	0.4	0.4	0.45	0.65	0.80	0.85
Cable Weight (Kg/Km)	5.7	6.4	8.8	12.8	17.1	19.3
Tensile Loading (Short Term)	150 N					
Tensile Loading (Long Term)	90 N					
Crush Load (Short Term)	1000 N/100mm					
Crush Load (Long Term)	200 N/100mm					
Bend Radius (Short Term)	20 Times of Cable Diameter					
Bend Radius (Long Term)	10 Times of Cable Diameter					

Indoor Distribution Cable

Wonderful is a leader in the design and manufacture of cable for communication networks



Applications

- Indoor distribution.
- IEEE 802.3z 10GBase, 40GBase, 100GBase Ethernet and legacy speeds.
- FDDI
- ATM

Features

- High performance of bending insensitive.
- Suitable for standard single ferrule mechanical connectors (LC, SC, ST, etc.) via a furcation kit.

Customization

- Fiber Type: G.652.D、G.657.A1、G.657.A2、OM2、OM3、OM4
- Dimension: As specification or per client's request.
- Delivery Length: 1km, 2km or per client's request.

Specifications

Item	Value				
Fiber Core Count	2	4	6	8	12
Buffer Tube Material	Same as Jacket				
Buffer Tube Diameter (mm)	1.7				
Buffer Tube Thickness (mm)	0.25				
Each Buffer Tube Fiber Core Count	2	4	6	8	12
Dielectric Aramid Strength Members	4 Clusters of Kevlar 1500D Tensile Strength 350 N				
Jacket Material / Flame Retardant	PVC、OFN FRPVC、OFNR FRLSPVC、OFNP LSZH / IEC 60332-1-2、LSFRZH / IEC 60332-3-24				
Jacket Color	According to Customer Request				
Jacket Diameter (mm)	3.5				
Jacket Thickness (mm)	0.65				
Cable Weight (Kg/Km)	10.7	10.8	10.9	11.1	11.3
Tensile Loading (Short Term)	600 N				
Tensile Loading (Long Term)	200 N				
Crush Load (Short Term)	1000 N/100mm				
Crush Load (Long Term)	200 N/100mm				
Bend Radius (Short Term)	20 Times of Cable Diameter				
Bend Radius (Long Term)	10 Times of Cable Diameter				

Network Connector Total Solution

Our mission is to be active, innovative and the best. Armed with our high speed international communication network, we are highly active in developing and promoting resolutions to the world's data center solution market demands.



Keystone Jack



Coupler



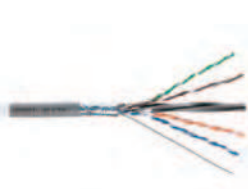
Modular Plug



Coaxial Adaptor



Inline Coupler



LAN Cable



Network Patch Cord



Fiber Patch Cord



Fiber Enclosure



Faceplate



Install Tools



Cable Management



19 inch Modular Panel



19 inch Wall Rack



Cabinet & Wall Racks



Led Panel Intelligent System



19 inch Patch Panel



Vercital Cable Manager



Bracket Manager