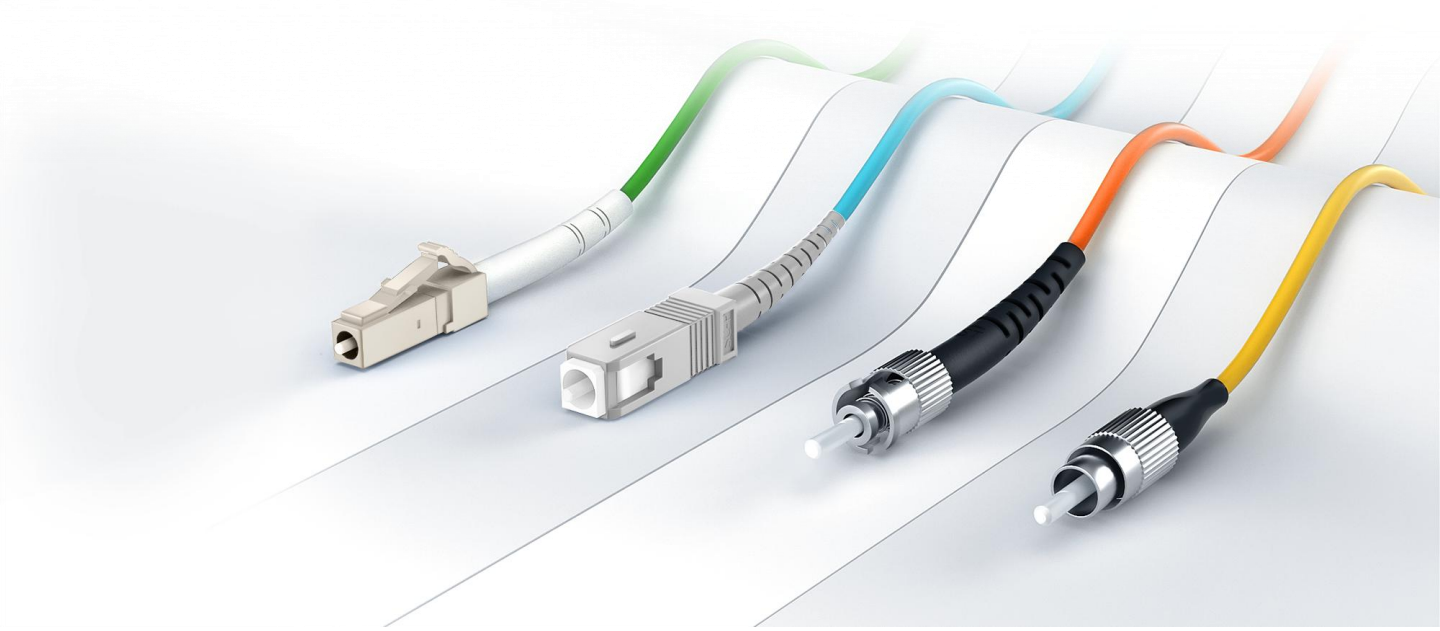
Standard Fiber Patch Cables Datasheet

MAKE HIGH-SPEED ETHERNET NETWORK EQUIPMENT CONNECTIONS

Designed for data center, enterprise, FTTx, LAN and WAN, CATV network, telecom network applications , etc. requiring quick infrastructure deployment such as main, horizontal, and zone distribution areas.



Standard Fiber Patch Cables

Fiber optic patch cables are ideal for supporting high speed telecommunication network fiber applications. They are manufactured and tested in compliance with TIA 604 (FOCIS), IEC 61754 and YD/T industry standards. OM1, OM2, OM3, OM4, OM5 or OS2 fiber types are available to meet the demand of Gigabit Ethernet, 10 Gigabit Ethernet and high speed Fiber Channel. Every termination is through rigorous parameter test to ensure the highest network performance.

Standards Compliance

- RoHS, ISO 9001, CE, REACH, WEEE Compliant
- TIA 604 (FOCIS)
- TIA/EIA 492AAAE
- IEC 61754
- IEC 60793-2-10
- IEC 61300-3-35
- YD/T1272.1-2003

Features

- High quality zirconia ferrules.
- Good repeatability and interchangeability.
- LC/SC/ST/FC/LSH/MTRJ/MU connectors with standard boots are available.
- LC connectors with12mm/18mm and SC connectors with 25mm short boots are available.
- Flame-retardant, rugged and durable jacket.
- OS2/OM5/OM4/OM3/OM2/OM1 are available.
- Factory terminated and tested for insertion loss, return loss and end face.

Technical Specification

Physical Characteristics	Description
Connector Types	LC/SC/ST/FC/LSH/MTRJ/MU with Standard Boots; LC 12mm/18mm with Short Boots; SC 25mm with Short Boots
Polish Type	SMF: UPC-UPC; UPC-APC; APC-APC; MMF: UPC-UPC
Connector Ferrule	Zirconia Ceramic
Cable Outside Diameter	Duplex: 1.6/2.0/3.0mm, Simplex: 0.9/2.0/3.0mm
Interchangeability	≤0.2dB
Vibration	≤0.2dB

Mechanical Characteristics	Description
Fiber Type	Standard Boots: OS2/OM5/OM4/OM3/OM2/OM1; Short Boots: OS2/OM4/OM3
Fiber Count	Duplex/Simplex
Cable Jacket	PVC (Riser/OFNR)/LSZH/Plenum (OFNP)
Fiber Grade	SMF: G.657.A1 / G.657.A2; OM5/OM4/OM3/OM2: Bend Insensitive; OM1: G.651

Fiber Mode	Connector Type	Connector Color	Jacket Color
OS2	LC	Blue/Green	Yellow
	SC		
	ST	Black	
	FC		
OM1/OM2	LC	Beige	Orange
	SC		
	ST	Black	
OM3	LC	Beige	Aqua
	SC	Aqua	
	ST	Black	
OM4	LC	Beige	Aqua
	SC	Beige	Aqua
OM5	LC	Beige	Lime Green

Minimum Bend Radius		SMF	MMF
Fiber Cable (Dynamic/Static)	OD 2.0/3.0mm	10/5D	20/10D
	OD 1.6mm	10/5D	-
	OD 0.9mm	10mm	OM1: 15mm Others: 7.5mm
Fiber Core	OD 0.9/2.0/3.0mm	G.657.A1: 10mm G.657.A2: 7.5mm	OM1: 15mm Others: 7.5mm
	OD 1.6mm	G.657.A1: 10mm	-

Tensile Strength (Long Term/Short Term)	Duplex	Simplex
OD 3.0mm	120/225N	80/150N
OD 2.0mm	90/150N	60/100N
OD 1.6mm	90/150N	-
OD 0.9mm	-	3/6N

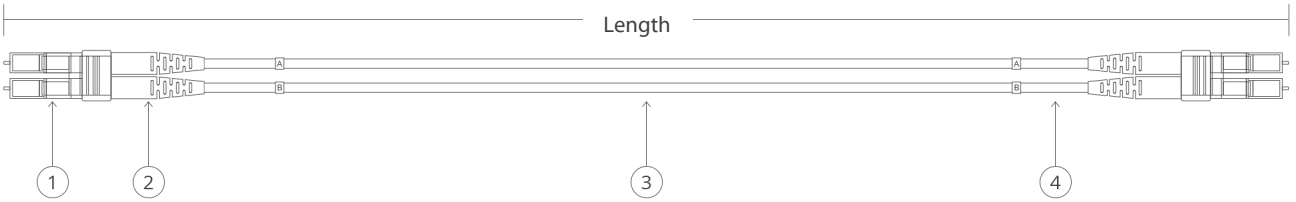
Optical Characteristics	Description
Connector Insertion Loss	LC/SC/ST/FC/LSH/MU/MTRJ≤0.3dB
Connector Return Loss	SMF: UPC≥50, APC≥60 (LC/SC/ST/FC/MU/MTRJ), UPC≥55, APC≥75 (LSH) MMF: UPC≥30 (LC/SC/ST/FC/LSH/MU), UPC≥35 (MTRJ)
Attenuation at 1310nm	G.657.A1: 0.36dB/km G.657.A2: 0.4dB/km
Attenuation at 1550nm	G.657.A1: 0.22dB/km G.657.A2: 0.25dB/km
Attenuation at 850nm	3.0dB/km
Attenuation at 1300nm	1.0dB/km

Environmental Characteristics	Description
Operating Temperature	-20~70℃
Storage Temperature	-40~80℃

Transmission Distance Comparison

Data Rate	Interface Type	Fiber Mode	Wavelength	Maximum Distance
1G	1000BASE-LX	OM5	850nm	550m
		OM4	1300nm	550m
		OM3	1300nm	550m
		OM2	1300nm	550m
		OM1	1300nm	550m
		SMF	1310nm	10km
	1000BASE-SX	OM4	850nm	550m
		OM3	850nm	550m
		OM2	850nm	550m
		OM1	850nm	275m
10G	10GBASE-SR	OM4	850nm	400m
		OM3	850nm	300m
		OM2	850nm	82m
		OM1	850nm	33m
	10GBASE-LRM	OM5	850nm	220m
		OM3	1300nm	220m
		OM2	1300nm	220m
		OM1	1300nm	220m
	10GBASE-LR	SMF	1310nm	10km
	10GBASE-ER	SMF	1550nm	30-40km
	10GBASE-ZR	SMF	1550nm	80-100km
40G	40G-BIDI	OM5	850nm	200m
		OM4	850nm	150m
		OM3	850nm	100m
	40GBASE-SR4	OM5	850nm	150m
		OM4	850nm	150m
		OM3	850nm	100m
	40G-SWDM4	OM5	850nm	440m
		OM4	850nm	350m
		OM3	850nm	240m
	40GBASE-LR4	SMF	1310nm	10km
100G	100GBASE-SR4	OM5	850nm	100m
		OM4	850nm	100m
		OM3	850nm	70m
	100G-SWDM4	OM5	850nm	150m
		OM4	850nm	100m
		OM3	850nm	75m
	100GBASE-SR10	OM4	850nm	125m
		OM3	850nm	100m
	100GBASE-LR4	SMF	1310nm	10km
	100GBASE-ER4	SMF	1310nm	40km

Technical Drawing



① LC Connector ② Connector Boot ③ Cable Jacket 2.0mm OD ④ Heat Shrink Tub

* The total length of this cable is the distance from the connector ferrule at one end to the ferrule at the other end.

Cable Length Tolerances

Cable Length	Duplex/Simplex	Multifiber
L≤0.5m	+5cm/-0cm	+8cm/-0cm
0.5m＜L≤5m	+10cm/-0cm	+12cm/-0cm
5m＜L≤10m	+15cm/-0cm	+15cm/-0cm
10m＜L≤30m	+20cm/-0cm	+20cm/-0cm
30m＜L≤100	+1%m/-0cm	+1%m/-0cm
L＞100m	+1.5%m/-0cm	+1.5%m/-0cm

Fiber Optic Connectors Guidance

1. LC



Long Form

- Lucent Connector/Little Connector/Local Connector

Typical Applications

- High-density connections, SFP and SFP+ transceivers, XFP transceivers

2. SC



Long Form

- Subscriber Connector/Square Connector/Standard Connector

Typical Applications

- Datacom and telecom; GPON; EPON; GBIC

3. FC



Long Form

- Ferrule Connector or Fiber Channel

Typical Applications

- Datacom, telecom, measurement equipment, single mode lasers

4. ST



Long Form

- Straight Tip

Typical Applications

- Datacom

5. LSH



Typical Applications

- Telecom, DWDM systems

6. MU



Long Form

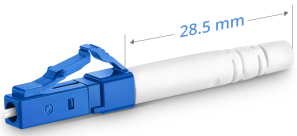
- Miniature Unit

Typical Applications

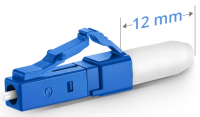
- LANs and telecommunication networks

Connectors Boot Type Introduction

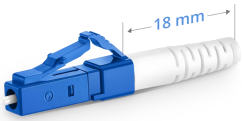
1. LC Boot Type



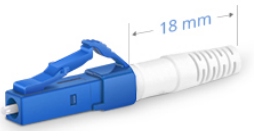
- Standard Boot (28.5mm)



- Short Boot (12mm)

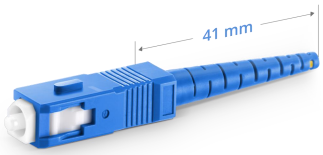


- Short Boot (18mm)
  OD: 1.6/2.0mm

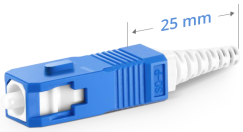


- Short Boot (18mm)
  OD: 3.0mm

2. SC Boot Type



- Standard Boot (41mm)



- Short Boot (25mm)

Hot Products

ID	Description
#40191	1m (3ft) LC UPC to LC UPC Duplex OS2 Single Mode PVC (OFNR) 2.0mm
#40446	1m (3ft) LC UPC to LC UPC Simplex OS2 Single Mode PVC (OFNR) 2.0mm
#43134	1m (3ft) LC UPC to LC UPC Duplex OM2 Multimode PVC (OFNR) 2.0mm
#41730	1m (3ft) LC UPC to LC UPC Duplex OM3 Multimode PVC (OFNR) 2.0mm
#40180	1m (3ft) LC UPC to LC UPC Duplex OM4 Multimode PVC (OFNR) 2.0mm
#141727	1m (3ft) LC UPC to LC UPC Short Boot Duplex OM4 Multimode PVC (OFNR) 2.0mm
#130953	1m (3ft) LC UPC to LC UPC Short Boot Duplex OS2 Single Mode PVC (OFNR) 2.0mm
#130973	Customized OS2 Single Mode LC/SC Short Boot
#141842	Customized OM3 Multimode LC/SC Short Boot