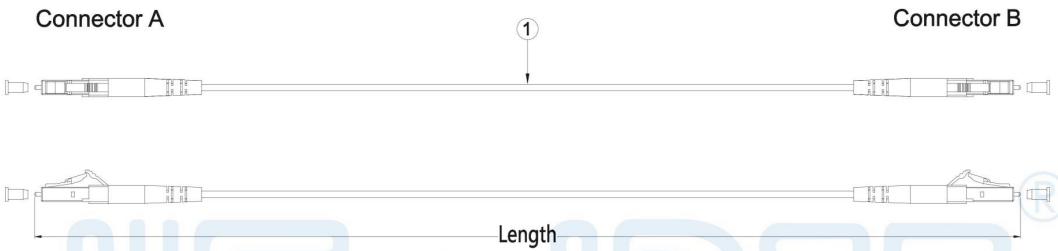
Revision：A/0

PRODUCT SPECIFICATION

SIMPLEX PATCH CORD

Author	Auditor	Approver



Length tolerance table	
Grade	Tolerance range(cm)
Ⅰ	-3.0 ≤ X ≤ +5.0
Ⅱ	-3.0 ≤ X ≤ 0

POS.	Description	Specification	Remark
1	Cable	2.0/3.0mm	
2			

✱ Different types of patch cord will have different components.
Please consult our company for details.

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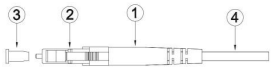
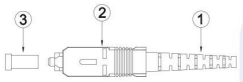
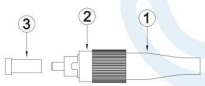
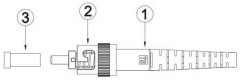
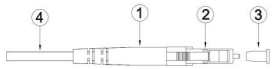
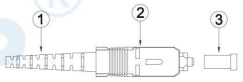
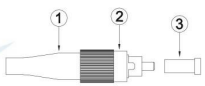
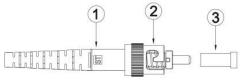
Product Name	Patch Cord		Product Coding		
Design		Material		Date	
Review		Unit	mm	Edition	A
Approval		Scale		Visual	

Connector selection table

Connector A (Optional)		Description
	①	Connector boot
	②	LC connector
	③	LC Dust cover
	④	Heat shrinkable tube (Only 2.0mm cable equipped with)
	①	Connector boot
	②	SC connector
	③	SC Dust cover
	①	Connector boot
	②	FC connector
	③	FC Dust cover
	①	Connector boot
	②	ST connector
	③	ST Dust cover

Description		Connector B (Optional)
Connector boot	①	
LC connector	②	
LC Dust cover	③	
Heat shrinkable tube (Only 2.0mm cable equipped with)	④	
Connector boot	①	
SC connector	②	
SC Dust cover	③	
Connector boot	①	
FC connector	②	
FC Dust cover	③	
Connector boot	①	
ST connector	②	
ST Dust cover	③	

✱ This manual only shows four connectors of LC / SC / FC / ST, and other connectors can be customized according to this standard. Please consult our company for details.

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Product Name	connector		Product Coding		
Design		Material		Date	
Review		Unit	mm	Edition	A
Approval		Scale		Visual	

Reference Standard:

1.YD/T 1272.1《Optical fiber connector part first: LC》
2.YD/T 1272.3《Optical fiber connector part third: SC》
3.YD/T 1272.4《Optical fiber connector part four: FC》
4.IEC 61753-1:2018《Fibre optic interconnecting devices and passive components-Performance standard-Part 1: General and guidance》
5.IEC 61754-4:2013《Fibre optic interconnecting devices and passive components-Fibre optic connector interfaces-Part 4: Type SC connector family》
6.IEC 61754-13:2006《Fibre optic connector interfaces - Part 13: Type FC-PC connector》
7.IEC 61754-20:2012《Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 20: Type LC connector family》
8.IEC 61754-20-100:2012《Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 20-100: Interface standard for LC connectors with protective housings related to IEC 61076-3-106》

* Due to different product requirements and grades, Compliance with differentgrades and requirements of a standard may vary.Please consult our company for details.

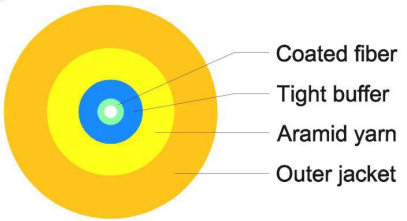
Reference Test Standards:

1.GB/T 7424.2-2008《Optical fibre cable generic specification-Part 2: Basic optical cable test procedures》
2.GB/T 7424.1-2003《Generic specification for optical fibre cables-Part 1:General》
3.IEC 61300-2-17:2010《Fibre optic interconnecting devices and passive components-Basic test and measurement procedures - Part 2-17: Tests-Cold》
4.IEC 61300-2-18:2005《Fibre optic interconnecting devices and passive components-Basic test and measurement procedures - Part 2-18: Tests-Dry heat-High temperature endurance》
5.IIEC 61300-2-19:2012《Fibre optic interconnecting devices and passive components-Basic test and measurement procedures-Part 2-19: Tests-Damp heat (steady state)》
6.IEC 61300-2-21:2009《Fibre optic interconnecting devices and passive components-Basic test and measurement procedures-Part 2-21: Tests-Composite temperature/humidity cyclic test》
7.IEC 61300-2-22:2007《Fibre optic interconnecting devices and passive components-Basic test and measurement procedures-Part 2-22: Tests-Change of temperature》
8.IEC 61300-3-6:2008《Fibre optic interconnecting devices and passive components-Basic test and measurement procedures-Part 3-6: Examinations and measurements-Return loss》
9.IEC 61300-3-34:2009《Fibre optic interconnecting devices and passive components-Basic test and measurement procedures-Part 3-34: Examinations and measurements-Attenuation of random mated connectors》
10.IEC 61300-3-45:2011《Fibre optic interconnecting devices and passive components-Basic test and measurement procedures-Part 3-45: Examinations and measurements-Attenuation of random mated multi-fibre connectors》

Mechanical and Environmental Characteristics

Items		Unite	Parameters
Coupling Force		N	40
Patch Cord Tensile Strength		N	50
2.0mm Cord	Cord Tension (Long Term)	N	60
	Cord Tension (Short Term)	N	100
3.0mm Cord	Cord Tension (Long Term)	N	80
	Cord Tension (Short Term)	N	150
Min. Bend Radius (Dynamic)		mm	60
Min. Bend Radius (Static)		mm	30
Operating Temperature		℃	-25～+70
Storage Temperature		℃	-25～+70

* The above Characteristics are only applicable to grade Ⅰ cable.



Cable Profile View

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Product Name	Characteristics		Product Coding		
Design		Material		Date	
Review		Unit	mm	Edition	A
Approval		Scale		Visual	

End Face Requirement

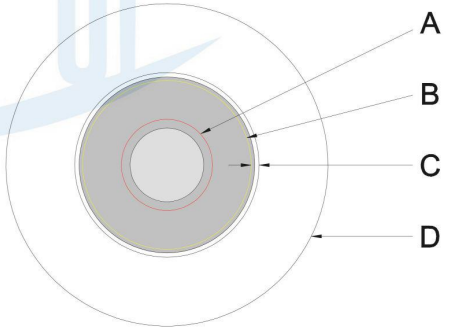
Region	Scratch	Speckle	Other
Region A (0-65um)	None	None	Facula even and round、no crack
Region B (65-120um)	No black scratches allowed, Allow six white scratchs and the width≤2um.	Allow three speckles and the diameter≤2um.	No breakage and crack
Region C (120-130um)	Single Mode: Allow apron which aperture width less than 5um;and the length of the apron is less than 1/3 of the perimeter of the fiber end. Multi mode: Allow apron which aperture width less than 2um;and the length of the apron is less than 1/3 of the perimeter of the fiber end.		No breakage and crack
Region D (130-250um)	Not allow >10um	No loose particles and cavities	No breakage and crack

1.Inspection equipment requirements: Optical fiber end face detector more than 200 times.

2.For scratches (linear), it refers to the width; for speckles, fragments and particles (non linear), it refers to the maximum diameter; there shall be no cracks in the optical fiber area.

3.There shall be no massive piece stains, fragments, grinding residues, etc outside the contact area.

4.The removable dirt and loose particles on the end face of the insert core must be removed as far as possible. All the allowed defect connectors shall not exceed 15% of the total number.



End face

Geometric Dimensions Requirement

Items	PC、UPC				APC	
	SC、FC、ST		LC		SC、FC	LC
	SM	MM	SM	MM	SM	MM
Radius of curvature (mm)	10-25		7-25		5-12	
Apex offset (um)	≤50				≤30	
Fiber Depressed (nm)	±100					
Angle deviation (°)	0				8±0.3	
Bond angle deviation (°)	0				±0.5	
Fiber diameter (um)	123-135					

* This item is optional.
Please consult our company for details.

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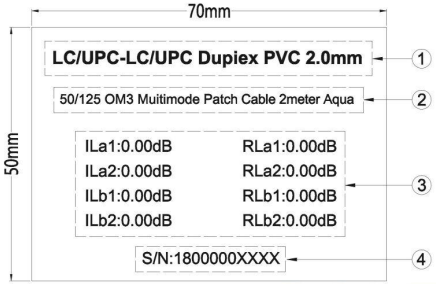
Product Name	end face		Product Coding		
Design		Material		Date	
Review		Unit	mm	Edition	A
Approval		Scale		Visual	

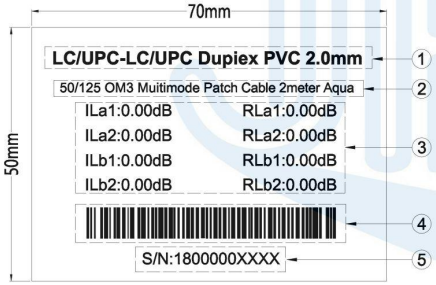
Inner packaging bag label Ⅰ (without barcode label)



Inner packaging bag label Ⅰ	
①	Connector
②	Cable
③	Insertion loss and return loss
④	Serial number

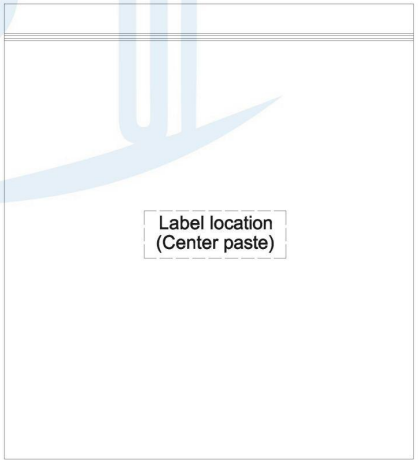
Inner packaging bag

Inner packaging bag label Ⅱ (barcode label)

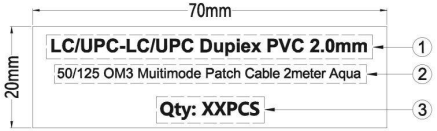


Inner packaging bag label Ⅱ	
①	Connector
②	Cable
③	Insertion loss and return loss
④	Barcode
⑤	Serial number

outer packaging bag



Outer packaging bag label



Outer packaging bag label	
①	Connector
②	Cable
③	Inner packaging bag quantity

✱ Other types of labels, please consult our company for details.

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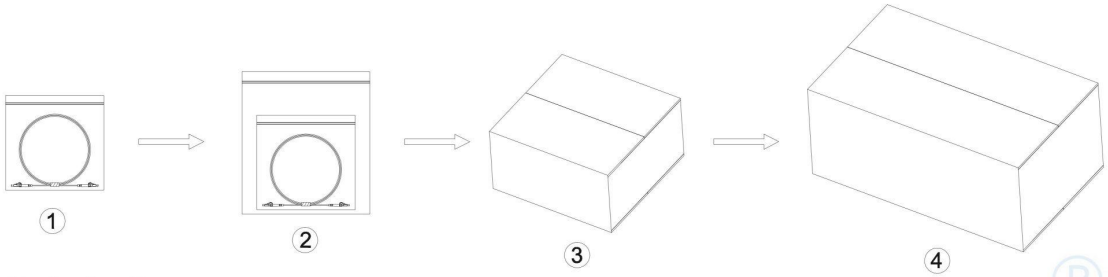
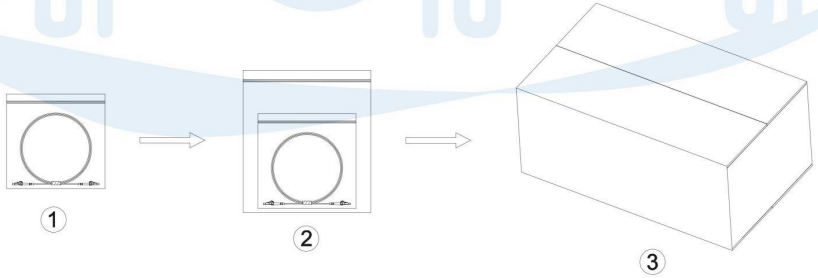
Product Name	packaging method		Product Coding		
Design		Material		Date	
Review		Unit	mm	Edition	A
Approval		Scale		Visual	

Packaging Grade Ⅰ



Packaging Ⅰ
1.Optical fiber jumper packed in Inner packaging bag.
2.Multiple Inner packaging bags packed in outer packaging bag.
3.Multiple outer packaging bags packed in inner carton.
4.Multiple inner cartons packed in outer carton.

Packaging Grade Ⅱ



Packaging Ⅱ
1.Optical fiber jumper packed in Inner packaging bag.
2.Multiple Inner packaging bags packed in outer packaging bag.
3.Multiple outer packaging bags packed in outer carton.

✱ Different types of patch cord, the packaging will be different.
Please consult our company for details.

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Product Name	packaging method		Product Coding		
Design		Material		Date	
Review		Unit	mm	Edition	A
Approval		Scale		Visual	