



Specification for QSC55K3-UPC QSC55K3-APC Field Installable Connector (FIC Type 55-3)



Fiber Tension 3N 1mins Passed

Draft	Audit	Approve
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Revision List

Revise Date	Author	Document Rev.	Modification Record
2019-05-10	Xu Jinhai	V1.0	First writing
2020-08-12	Liu Jian	V2.0	Add more detailed description & modify format
2022-08-13	Liu Hongyu	V2.0B	Update LOGO

Chongqing Lixun Communication Device Co., Ltd.

<http://www.lxftth.com>

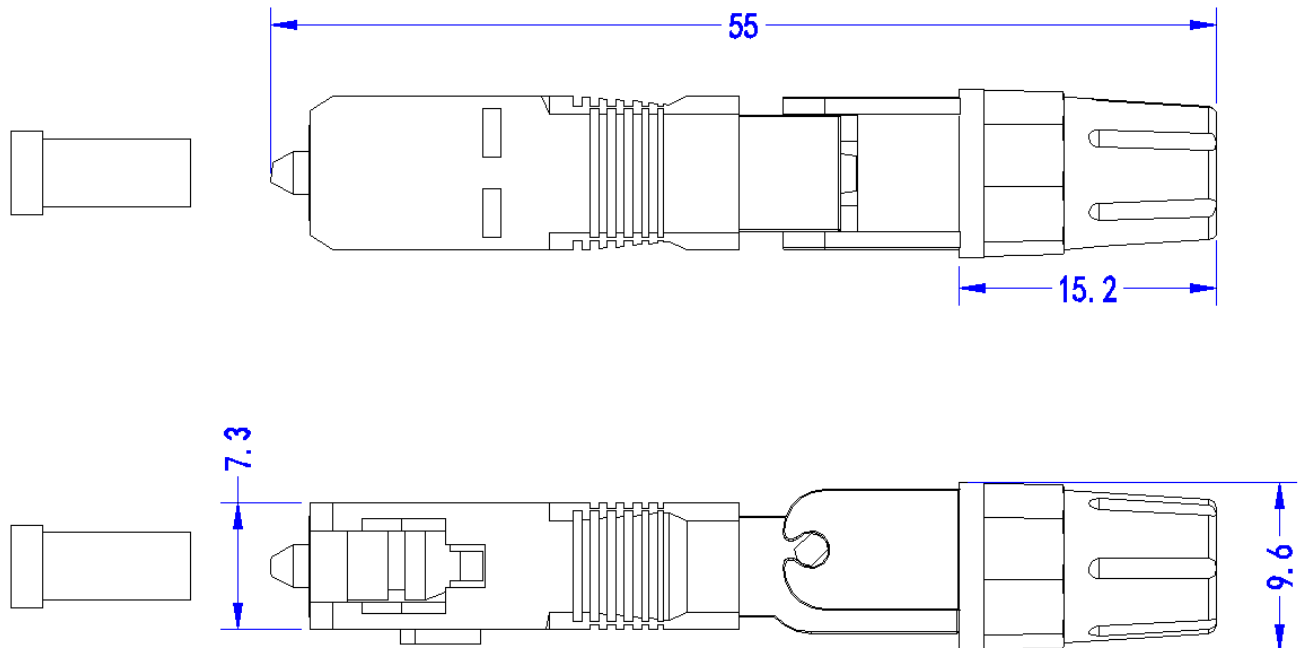


1. Description

This specification defines the characteristics of SC/APC, SC/UPC Field Installable Connector (FIC Type 50-3) with G652D fiber in a pre-polished UPC/APC ferrule. This FIC is produced by Chongqing Lixun Communication Device Co., Ltd. which is designed to be used with drop cable of 3.0mmx2.0mm dimension and 3.0mm patch cable.

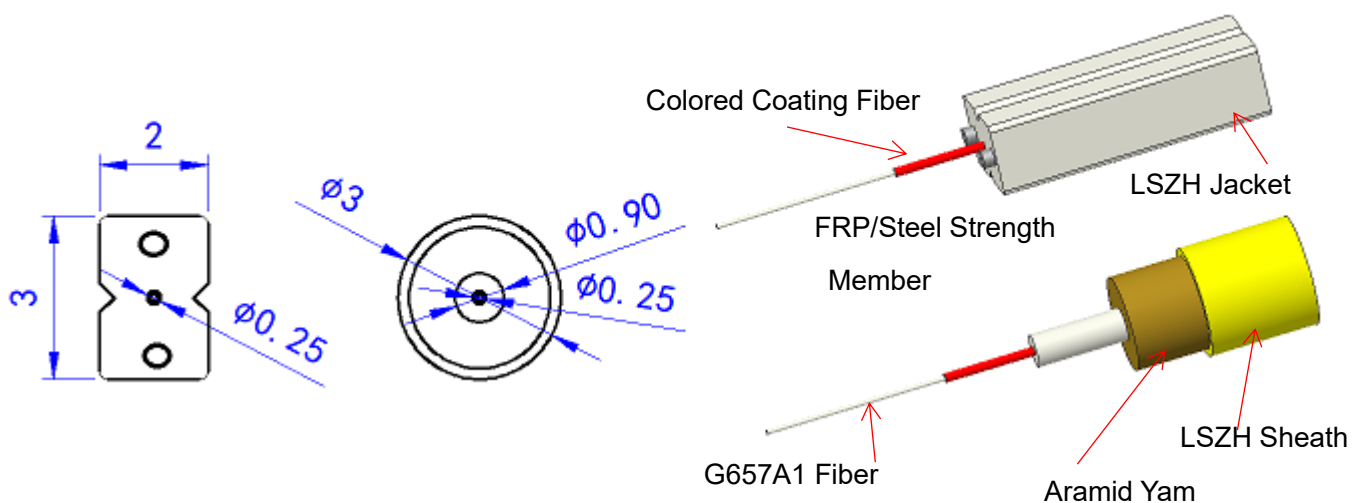
2. Outline Drawing of FIC

The outline of the FIC is as follows:



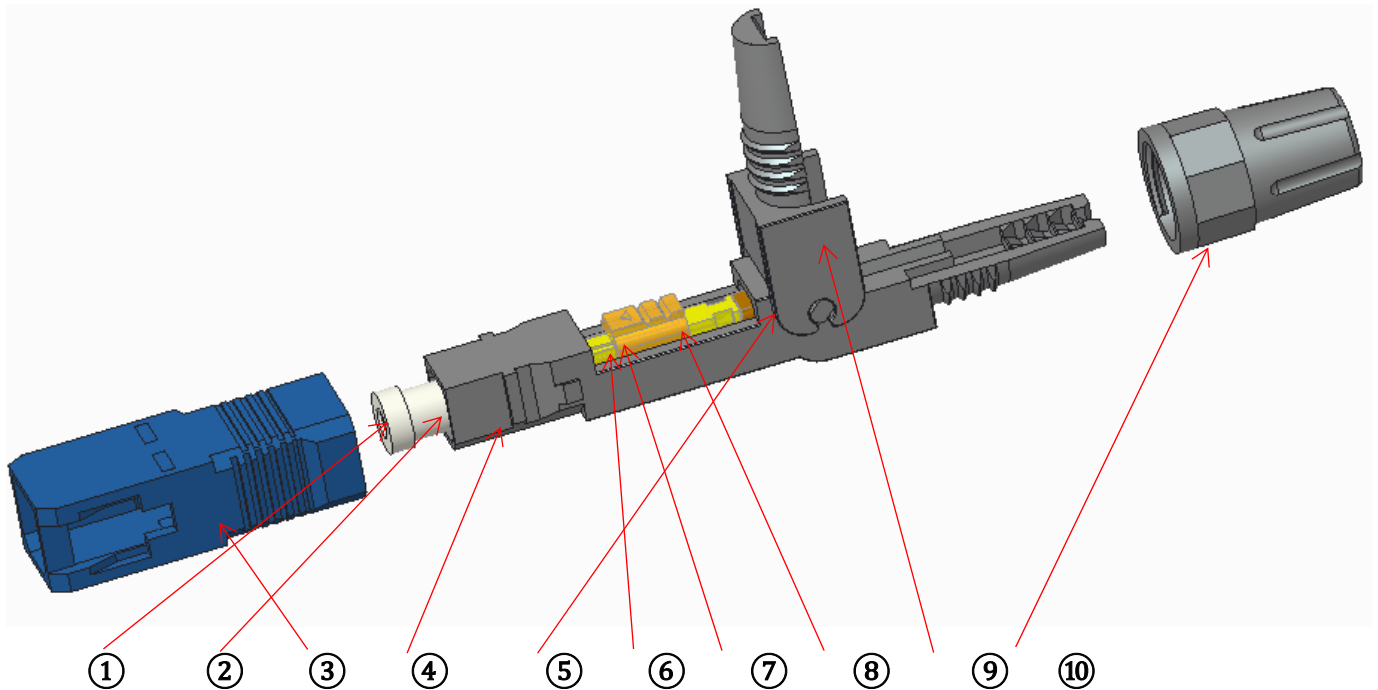
3. Outline Drawing of Cables

The outline of the fitted butterfly flat drop cable and 3.0mm simplex cable are as follows:



4. Construction:

The FIC comprises several parts as shown in the following drawing

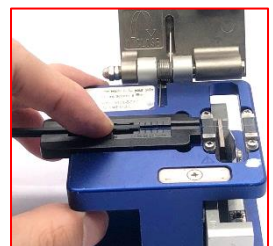
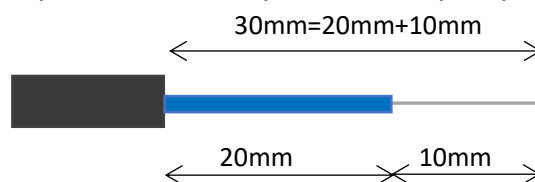


Part No.	Part Name	Description
1	Dust Cap	PE, UPC: Transparent, APC: Green
2	Ferrule	Zirconia ceramic, embedding with G657A1/G657A2/G62D/MM fiber or as ordered
3	SC Housing	PBT/PC, UPC: Blue, APC: Green
4	Long Shell	PBT/PC, Black
5	Spring	SUS304/201
6 7 8	V Groove-Cover-Lock	PEI, V Groove/Cover/Lock
9	FIC End Flip	PBT/PC, Black Color
10	Screw End	PBT/PC, Black

It is acceptable for customer to label their company logo or name, etc., by laser marking on the surface of FIC. It is also negotiable to change the color of FIC per customer's request. The standard color of main body of FIC is black.

5. Fiber length

The Length guide tool is a specially designed tool to help user to strip the fiber coating to the preset length. It has a clamp on itself to help user to strip to preset length effectively.



0.250mm Primary Coating: 20mm, 0.125mm Bare Fiber: 10 mm, total: 30mm \pm 0.3mm

6. Overall Performance

The FIC fulfills the following specification and insertion loss is tested 100%. The return loss is



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produced to be almost low as patch cord, so the FIC could bring lowest disturbance to the FTTx system.

No.	Item Name	Description
1	Insertion Loss (dB)	$\leq 0.3\text{dB}$, Max. $\leq 0.5\text{dB}$
2	Return Loss (dB)	APC $\leq -55 \sim -60\text{dB}$ UPC $\leq -45 \sim -50\text{dB}$
3	Ferrule End Face	A Zone no scratches at 400X
4	3D Interferometry	Complies to IEC 2009
5	Average Assembling Time	≤ 3 min
6	First-Time Done Yield Rate	$\geq 95\%$
7	Re-Operation Times	Max. 5 times
8	Repeatability ($\pm 0.2\text{dB}$)	$\geq 90\%$
9	Appearance	No Defects
10	Tensile Strength	$> 50\text{N}$
11	Fiber Tension Test	3N 1mins passed

6.1 Polished connector surface

Class A Endface Test (400x)			File No.	WI-P3-02			
			Page	Page 1 (Total 1 Page)			
Client	Applicable Range	Product Type	Procedure				
All	SC/LC Endface	UPC/APC	Connector Endface Test				
			Detailed requirement (can be customized)				
			Zone	Acceptable characteristic			Unacceptable characteristic
				Type	Size	Quantity	
			A	Any defects such as visible dirty, fragment concave, scratch are not allowable			
			B	Scratch	<2um width	2pcs	Fracture
				Other unerascable defects	<5um width	3pcs	
			Glue circle	No requirement, Not control			
			C	Scratch	<5um width	1pcs	Fracture
				Other unerascable defects	<10um	few pcs	
			D	Scratch	---	---	Fracture
				Other unerascable defects:	≤30um 30-50um	--- 5pcs	
			Remarks: 1. Special requirements: Can be customized 2. Environment production requirements: No hazardous wastes is generated during production. 3. Safety requirements: Work protection is required during production process, etc. 4. Related files: Work instructions on Endface Test.				
By Liu Jian		Inspect: Liu Hongyu	Approval: Huang Xiayu				
Date: 2020-10-11		Date: 2020-10-11	Date: 2020-10-11				

7. Material – Zirconia UPC/APC Ferrule

The Zirconia UPC/APC ferrule used in FIC shall meet the dimension and performance of GR-326.



9. Material – Matching Gel

10. Working Conditions

Item Name	Spec. Value
Operating Temperature	-20°C~+75°C
Storage Temperature	-40°C~+85°C



11. Packing

The FIC shall be packed according to the followings:


- 1) 10pcs in a small blister box, 10 blisters in an inner box.



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		Blister Size (cm)	14.7x7x1.5
		Q'ty (pcs/blister)	10
		N.W. (g/pcs)	3.2
		Inner box size (cm)	15x12x7.6
		Inner box Q'ty (pcs)	100

2) 1,000pcs in a big carton (10 inner boxes per carton)

	Size(cm)	40x16.3x24.8
	Q'ty (inner boxes/carton)	10
	Q'ty (pcs/carton)	1000
	N.W. (kg/carton)	3.2
	G.W. (kg/carton)	4.87

12. Warranty

If defective products are found and could be proved to be the responsibility of QingYing, then all the defectives will be replaced free of charge, within 1 month.

13. Product Drawing :



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