

Rubber-Insulated Fiber Flat Drop Cables Specification

Product Ref.	: RT-AC-INT-F-(X)m
File Compiled Version	: V1
Product Name in Spanish	: Acometida interior blanca plana G657A2 SC/APC (X)M
Spanish Descriptions	: Acometida plana de una fibra óptica de (X) Metros preconectorizada, ideal para instalaciones directas desde la caja de distribución hasta la roseta de abonado, perfecto para ser ingresado por conductos eléctricos o de difícil inserción, puede ser grapado en pared.
SN Ref.	: SU1704-0003

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● 1. Scope of application

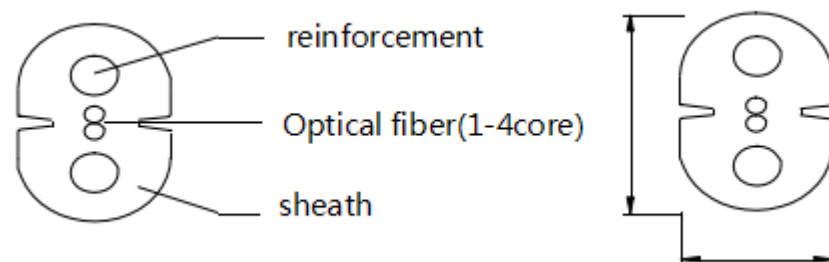
This standard refers to the national, industry standards, combined with the company's actual production and use of the development. This specification applies to the outsourcing procurement of company rubber-insulated fiber cable patch cord, pigtails.

● 2. Reference materials

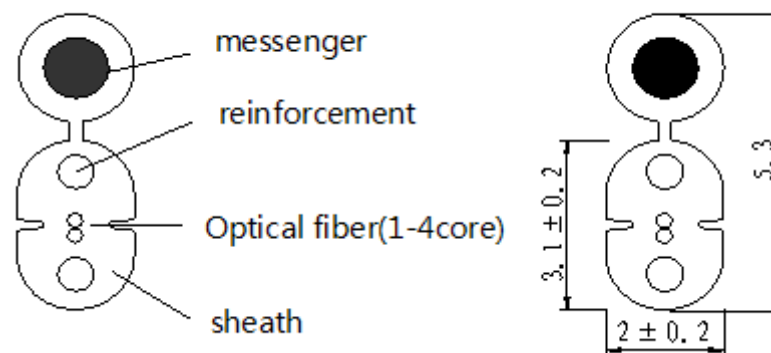
YD/T 1272.3-2005	Fiber optic connector Type SC
YD/T 1272.4-2007	Fiber optic connector Type FC
YD/T 1198-2002	Fiber optic connectors - Technical requirements of pin body

● 3. Material requirements

3.1 The outer structure of the rubber-insulated fiber cable



*Picture1 Schematic diagram of non-self-supporting butterfly cable
(Optical cable model: GJXxxx)*



Schematic diagram of self -supporting butterfly cable
(Optical cable model: GJYXxxx)

3.2 Method of drawing up the model of rubber-insulated fiber cable

Table1 Compilation table of the model of rubber-insulated fiber cable

Structural type	Number of fiber cores	Fiber type	Scope of application
GJXH 《Metal reinforcement member、sheath of LZSH、 Butterfly-shaped introduction of fiber optic cable》	1/2/3/4	G652D/G657A1/G657A2	indoor
GJXFH 《Non-metallic reinforcement member(KFRP、FRP)、sheath of LZSH、 butterfly-shaped introduction of fiber optic cable》	1/2/3/4	G652D/G657A1/G657A2	
GJYXCH《Metal reinforcement member、sheath of LZSH、 self -supporting butterfly-shaped introduction of fiber optic cable》	1/2/3/4	G652D/G657A1/G657A2	Outdoor overhead introduction

GJYXFCH 《Non-metallic reinforcement member(KFRP、FRP)、sheath of LZSH、self-supporting butterfly-shaped introduction of fiber optic cable》	1/2/3/4	G652D/G657A1/G657A2	
butterfly-shaped introduction of fiber optic cable (Commonly known as rubber-insulated fiber cable). According to the rule of YD/T 908, it can be divided into type, specification and model, some symbols are added in the codes: GJX——non- self -supporting butterfly-shaped introduction of fiber optic cable GJYX——self -supporting butterfly-shaped introduction of fiber optic cable			

3.3 Requirements for Single-mode inserted core

Table 2 Technical parameters table of Single-mode inserted core

Items	Requirements	
Insert core model	SC/PC Single mode	SC/APC Single mode (The step type、cone)
Insert core concentricity (um)	≤1.0	≤1.0

3.4 Leather rope bulk requirements

Table 3 Technical parameters table of Single-mode spare parts

Model	Form	Colors of tail set	Colors of shell	Dust cap
SC/UPC	clamping / Pressure welding	blue	blue	Transparent color
FC/UPC	Pressure welding	black	metallic	Transparent color
SC/APC	clamping / Pressure welding	green	green	green

FC/APC	Pressure welding	green	metallic	green
Parts and finished products appearance requirements: Fiber Connector should be smooth, clean, no oil, no scar and crack in appearance. The combination of all parts should be flat. Plug and adapter should be smoothly connected and easy to plug. Dust cap and insert core fit well with the appropriate elastic.				

3.5 Specifications

SC/APC SM Simplex Leather rope tail fiber

● 4. Product technical requirements

4.1 Performance requirements

Table 4 Technical parameters table of Finished product performance index

The performance specifications		
Items	Specifications	
Insertion loss Return loss	SC	The insertion loss of any plug through a standard adapter with a standard plug $\leq 0.30\text{dB}$ (Contain repetitive) ; Return loss $> 50\text{dB}$ (SC/UPC) , $> 60\text{dB}$ (SC/APC) 。
	FC	The insertion loss of any plug through a standard adapter with a standard plug $\leq 0.2\text{dB}$ (Contain repetitive) ; Return loss $> 50\text{dB}$ (FC/UPC) , $> 60\text{dB}$ (FC/APC) 。
Cable length	Length according to the requirements of customer orders.	

4.2 Mechanical and environmental performance requirements (Unit: dB)

Table 5 Technical parameters table of the connectors' mechanical and environmental performance

Serial number	Name of test	Conditions	Insertion loss variation	Return loss variation
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			FC	SC	FC、SC
a	low temperature	Low temperature: -25°C; duration : 96h; Temperature change rate: ≤1°C/min (Not more than 5min average); For on-line monitoring of the sample;	≤0.2	≤0.2	<5
b	High temperature	High temperature: + 70°C; duration: 96h; Temperature change rate: ≤1°C/min (Not more than 5min average) For on-line monitoring of the sample;	≤0.2	≤0.2	<5
c	Temperature cycle	Low temperature: Ta=-10°C; High temperature: Tb= + 60°C; The duration of the limit temperature: T1=T2=30min; Temperature change rate: ≤1°C/min (Not more than 5min average) cycles: 5; On-line optical properties of the sample is not monitored	≤0.2	≤0.2	<5
d	Hot and humid (steady state)	Temperature: + 40°C; Relative humidity: 90%~95%; duration: 96h; Temperature change rate: ≤1°C/min (Not more than 5min average) On-line optical properties of the sample is not monitored	≤0.2	≤0.2	<5
e	vibration	Frequency range: 10~55HZ; Frequency sweep requirements: the sweep rate shall be one octave per minute with a tolerance of ± 10%; Amplitude : 0.75mmSingle amplitude; The duration of each direction : 30min; For on-line monitoring of the sample	≤0.1	≤0.1	<5

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f	fall	Drop height: H=1m; Free oscillation of cable length: L=2.25m; The number of drops: 5 times; On-line optical properties of the sample is not monitored;	≤ 0.1	≤ 0.1	<5
g	repetitive	The number of plug: 10 times; For on-line monitoring of the sample	≤ 0.1	≤ 0.1	<5
h	Mechanical durability	The number of plug: 500 times; For on-line monitoring of the sample	≤ 0.2	≤ 0.2	<5
i	cable tensile	Load: 50N; Load time: 10min; Apply the load rate : 50N/min<rate<250N/min; Apply a load from point A to the connector plug: L=22cm~28cm; On-line optical properties of the sample is not monitored;	≤ 0.1	≤ 0.1	<5
j	Cable twist	Load weight: 14.7N; Load A distance from the plug: L=22cm~28cm; Torsional rate: 10time/min; Number of turns: 200times; On-line optical properties of the sample is not monitored;	≤ 0.1	≤ 0.1	<5
k	cable separability	The minimum tear force is not less than 3N, the maximum value is not more than 10N. The cable can be separated from the cable port easily by 200mm; after separation, the optical fiber should be completely exposed and the colored layer did not peel off. The separated fibers should not be torn from the remaining cables by hand; the sheath at the reinforcement member shall be intact and free from cracks			

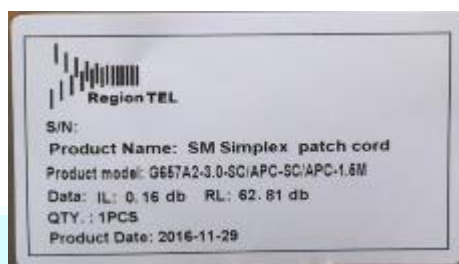
● 5. Packaging, identification

5.1 Product identification

- Label size: Valve bag tag 70 mm * 40 mm; Material: coated paper.

Carton identification 100mm * 50mm; Material: coated paper.

- The label name should clearly reflect the material name, specification model, product serial number, fiber performance parameters, the number of production and packaging



Valve bag tag



Carton identification

5.2 Packaging requirements

- The dimensions of the box are external dimensions.
- Carton size: 470mm*470mm*400mm. Paper strong.
- The size of valve bag tag: 28mm*28mm*6um, selecting the corresponding box according to the length of the cable. Each cord is individually packaged with a Rubber-insulated Fiber Cable patch cord inside a self-contained bag.

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Package diagram



outer box

