



Sumitomo Electric Ind., LTD.
Specification No. YZS0923110D

Specification
for
Field Assembly SC type Connector
"Q-SC" for 0.25/0.9mm fiber

Prepared by

T. Miura

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T. Miura / Engineer

Approved by

T. Shitomi

Jan. 30, 2014

T. Shitomi / Manager



SUMITOMO ELECTRIC INDUSTRIES, LTD

Tokyo Japan

1. General

This specification covers the field assembly SC type connector “Q-SC” for 0.25mm and 0.9mm fiber.

2. Ordering information

Table 1 Ordering code

Fiber type	Ordering code
SM	Q-SC-SPC<SM>-025/090-F-T
MM(62.5)	Q-SC-PC<62.5>-025/090-F-T
MM(50)	Q-SC-PC<50>-025/090-F-T
10G	Q-SC-PC<10G>-025/090-F-T

3. Applicable fiber

1) Fiber:

SM fiber complied with ITU-T G.652.B, G.652.D, G.657.A1 and G.657.A2

MM(62.5) fiber complied with IEC60793-2-10 A1b(OM1)

MM(50) and 10G fiber complied with

ITU-T G.651.1, IEC60793-2-10 A1a.1(OM2) and IEC60793-2-10 A1a.2(OM3)

2) Allowable fiber diameter: 0.25+/-0.015 and 0.9+/-0.05mm

3) Configuration: 0.25mm coated fiber and 0.9mm tight buffered fiber

4. Intermateability

SC type connector: IEC61754-4

5. Composition and Construction

Table 2 Composition and Construction (note1)

Item	Qty[pc]	Construction
Connector Plug	1	See attached drawing GE0923110-001-1B GE0923110-001-2B GE0923110-002A
Connector cap	1	
Wedge plate (note3)	1	
Boot	1	
Tube	1	
Assembly guide Jig for “Q-SC”	2pcs per 100 connectors	See attached drawing GE0923110-003B
Fiber Holder for 0.9 mm fiber (note3)	2pcs per 100 connectors	See attached drawing GE0923110-004A

(note1) Sales unit: 100 connectors

(note2) Instruction manual is attached for this component.

(note3)

“Fiber guide” that is a part of the “Fiber Holder” does not comply with UL94 rate.

“Wedge plate” complies with UL94-HB rate.

Other parts comply with UL94-V0 rate.

6. Inserting fiber cleaver

Flat cleaver is required.

7. Operating temperature

Operating temperature depends on the operating temperature range of the fiber.

(Maximum range is -40 °C to 75 °C)

8. Characteristics

Table 3 Characteristics

Item	Fiber Type	Conditions	Specification
Insertion loss	SM	1310 nm	Typical. 0.2dB Max. 0.5dB (note4)
	MM(62.5) MM(50)/10G	1300 nm	Typical. 0.1dB Max. 0.3dB (note4)
Return loss	SM	1310 nm	Typical. 50dB Min. 40dB (note4 and 5)
	MM(62.5) MM(50)/10G	1300 nm	Typical. 35dB Min. 22dB (note4 and 5)
Tensile strength		0.25mm fiber	3N
		0.9 mm fiber	5N
Qualification	SM MM(62.5) MM(50)/10G	TIA/EIA 568-C.3	

(note4)

With Sumitomo Fiber, Sumitomo standard Tools, and Master plug.

These Insertion loss and Return loss are included Mechanical Splice to Built-in-fiber, and Connection portion.

(note5)

Room temperature 23 +/- 5 °C

9. Packing Unit

Each connector is packaged in a Poly-bag individually.

10 connectors are packaged in a middle size of Poly-bag.

10 middle bags, total 100 connectors, and 2 sets of a fiber holder and an assembly guide jig for “Q-SC”, are packaged in a carton.

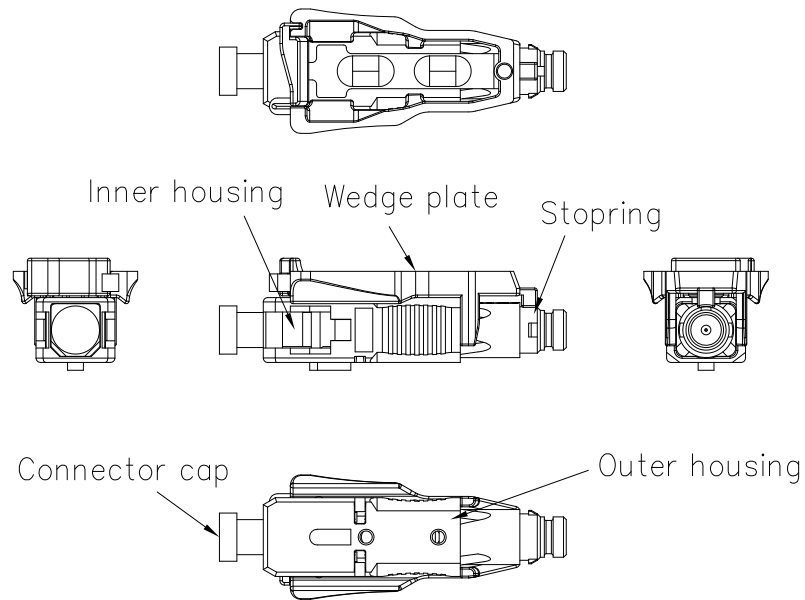
End of specification



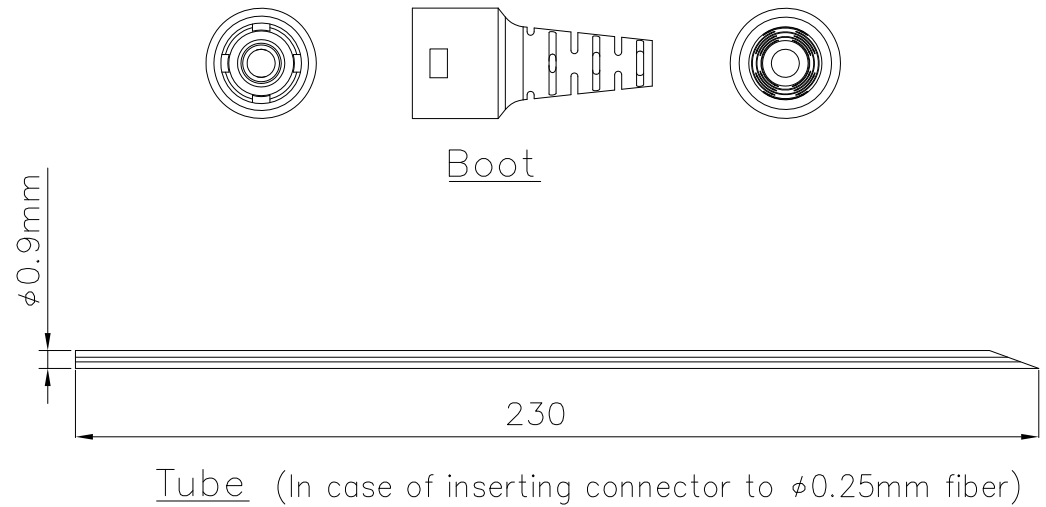
Drawing No.GE0923110-001-1B

Q-SC-P1-025/090-F-T
("Q-SC" for 0.25/0.9mm fiber)

[Before assembly]



Q-SC Connector for 0.25/0.9mm fiber



		Color			
Fiber	P1	Outer housing	Inner housing	Stopring	boot
SM	SPC<SM>	Blue	White	White	White
MM(62.5)	PC<62.5>	Beige	Black	White	White
MM(50)	PC<50>	Black	Black	White	White

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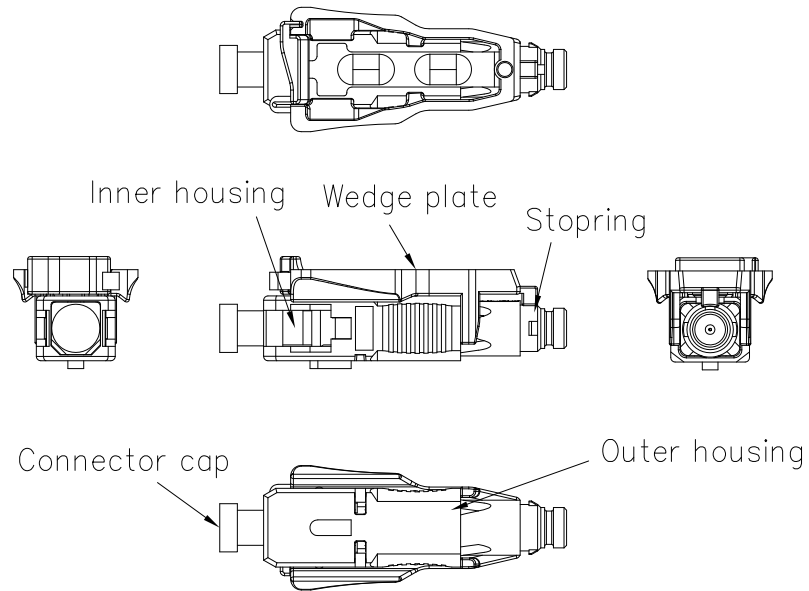
UNIT:mm
Not to scale



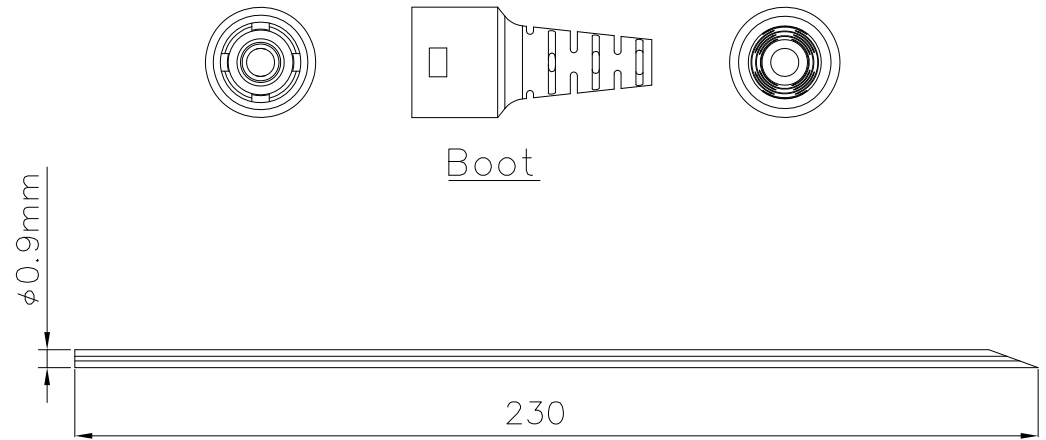
Drawing No.GE0923110-001-2B

Q-SC-P1-025/090-F-T
("Q-SC" for 0.25/0.9mm fiber)

[Before assembly]



Q-SC Connector for 0.25/0.9mm fiber



Tube (In case of inserting connector to $\phi 0.25\text{mm}$ fiber)

		Color			
Fiber	P1	Outer housing	Inner housing	Stopring	boot
10G	PC<10G>	Aqua	Black	White	White

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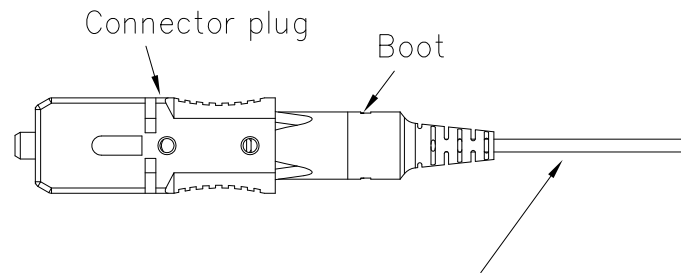
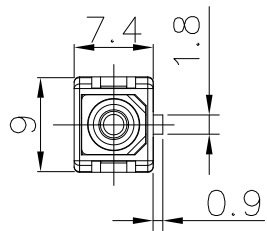
UNIT:mm
Not to scale



Drawing No. GE0923110-002A

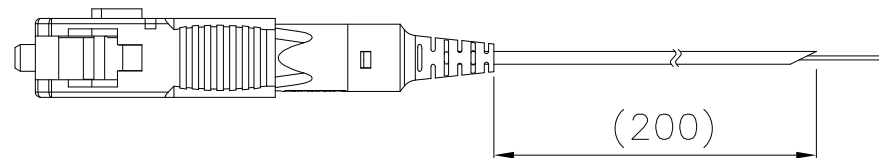
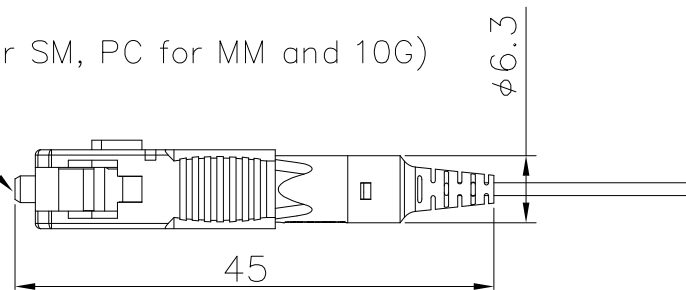
Q-SC-P1-025/090-F-T
("Q-SC" for 0.25/0.9mm fiber)

[After assembly]

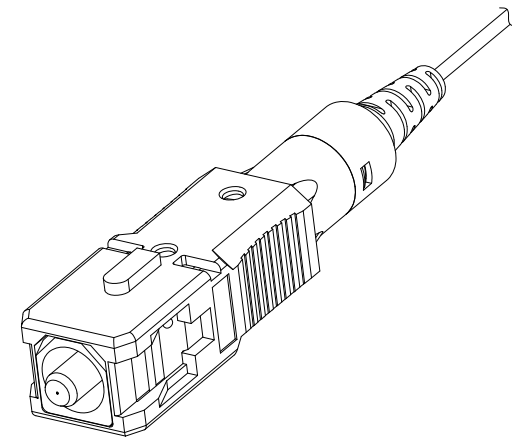


φ0.25mm Fiber (inserted to tube) or φ0.9mm Fiber

Ferrule
(Polished: SPC for SM, PC for MM and 10G)



When using the tube for φ0.25mm Fiber



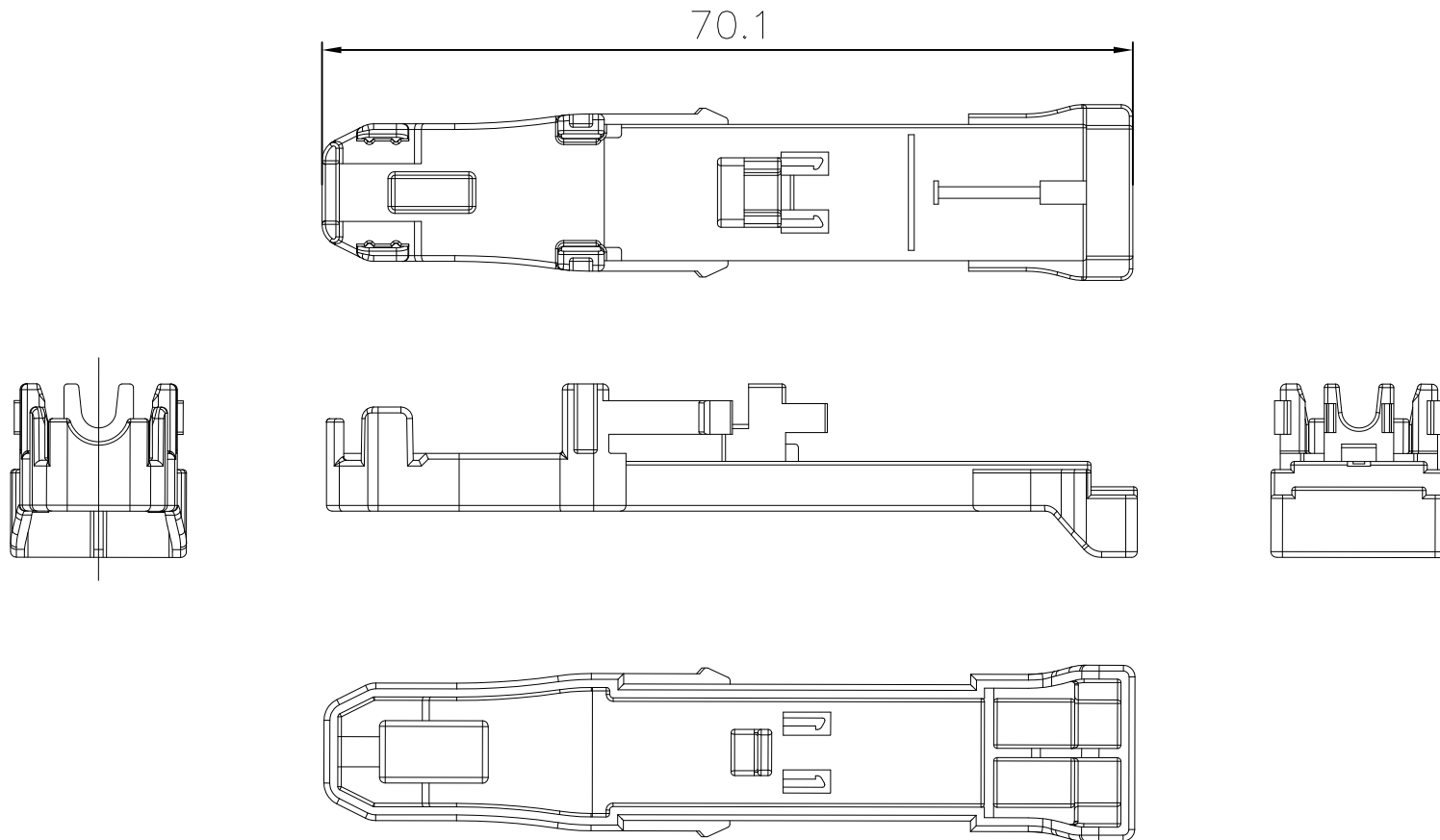
SUMITOMO ELECTRIC INDUSTRIES, LTD

UNIT: mm
Not to scale



Drawing No.GE0923110-003B

Assembly guide jig for "Q-SC"



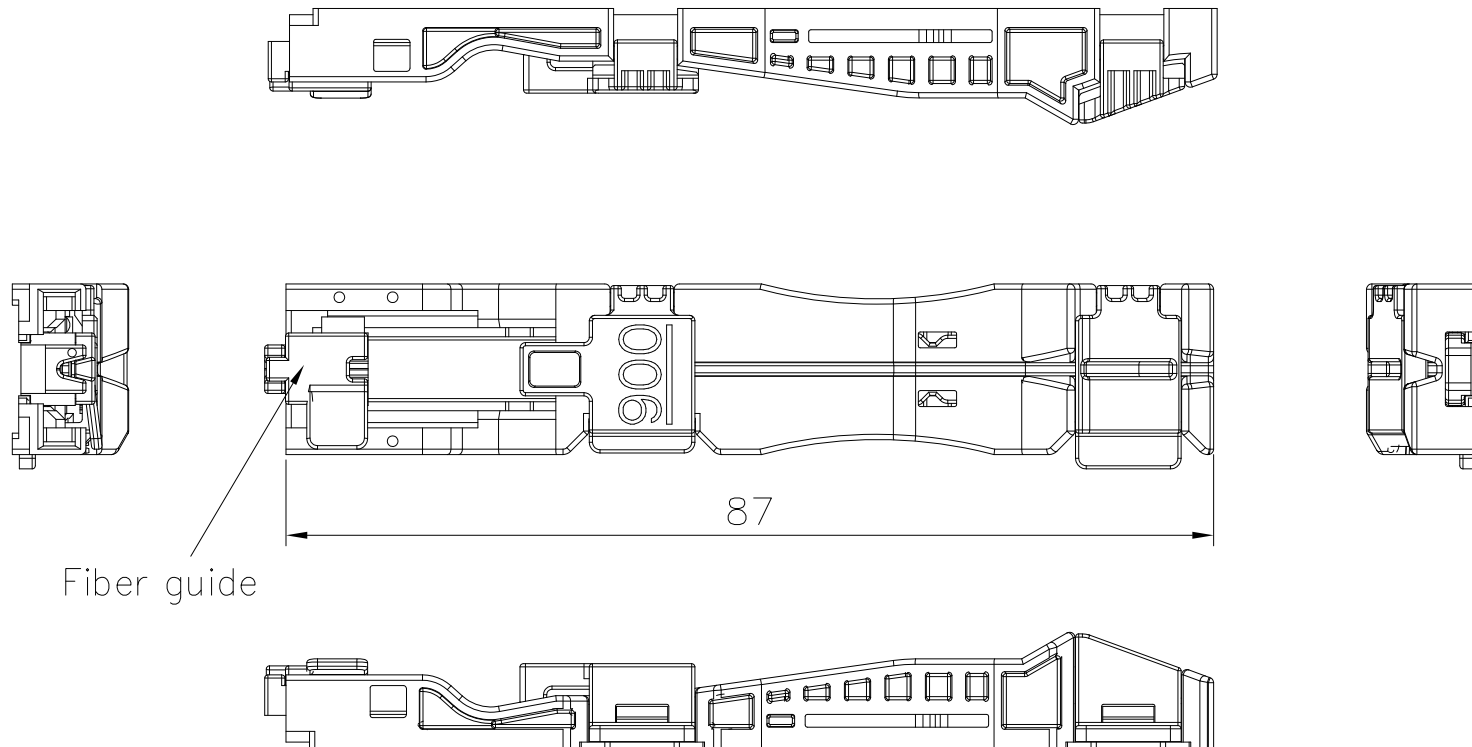
SUMITOMO ELECTRIC INDUSTRIES, LTD

UNIT:mm
Not to scale



Drawing No.GE0923110-004A

Fiber holder for 0.9 mm fiber



(Note) Applicable to $\phi 0.25\text{mm}$ fiber with the tube and $\phi 0.9\text{mm}$ fiber

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UNIT:mm
Not to scale