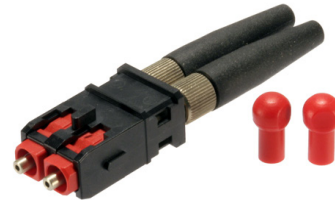


SC-RJ clamp connector for 1/2.2 mm POF

1 General

The FO connector style SC-RJ is optimized in particular for applications using standard 1 mm polymer optical fiber demanding a fast and easy cable assembly with high reliability, very good optical and mechanical characteristics. Especially the shown clamp connector can be reused and connected to the POF cable without special tools.



Pic. 1 SC-RJ clamp connector

2 Application

Due to the good optical features and the easy cable assembly, the SC-RJ clamp connector is useable in several applications:

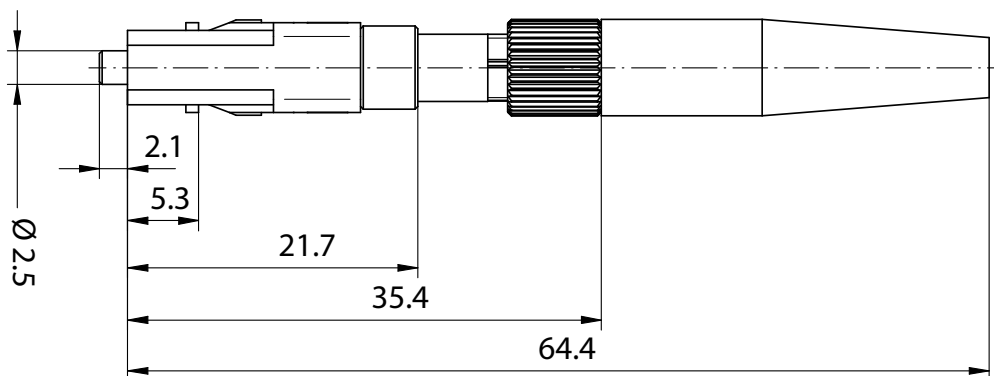
- • optical networking
- • Industrial electronics
- • Power electronics
- • Consumer electronics

4 Ordering information

SC-RJ clamp connector for POF 1/2.2mm with bend protection:

Specification	Part number
with bend protection (black)	902SS001SRK02

3 Technical drawing



Pic. 2 Dimensions SC clamp connector contact without grip plate

SC-RJ clamp connector for 1/2.2 mm POF

4 Cable assembly

The following tools and materials are recommended for easy and reliable 1 mm POF cable termination with SC clamp connector contacts:

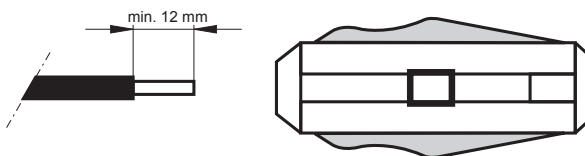
Specification	Part number
Fiber stripper	910AB00100001
Polishing disc	910PS0SC00001
Polishing film, grain size 1000	910PB00100001
Polishing film, grain size 4000	910PB00140250
RPSimpleCut	910SW00101
Cutting tool automatic infeed	910SZ00100A01
Cutting tool manual infeed	910SZ00100001

There are two alternative methods for 1/2.2 mm POF cable termination with the SC clamp connector contacts:

Method a)

4.1 FO cable:

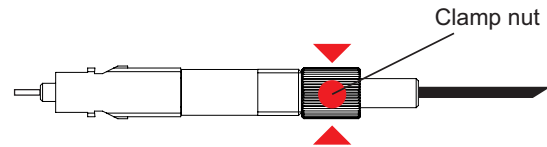
- Remove min. 12 mm of outer jacket 2.2 mm by using the fiber stripper (Pic. 3).



Pic. 3 Stripping dimensions

4.2 Clamping of POF cable:

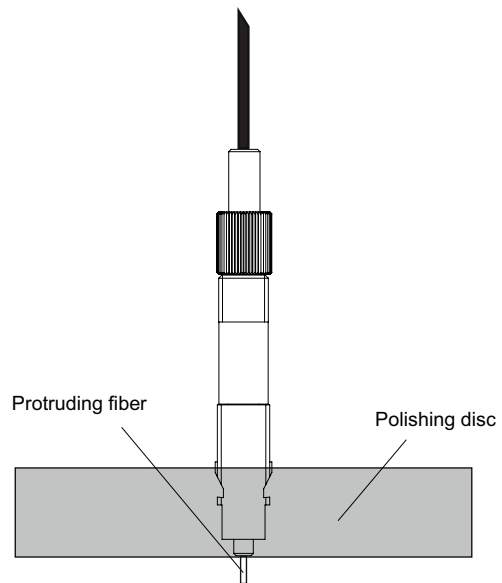
- Ensure that the rear clamping nut is not fixed on the thread.
- For types including bend protection, place first the bend protection on the cable.
- Insert the dismantled POF cable into the connector up to the stop. The fiber should protrude 1-2 mm out of the connector tip.
- Due to tightening the rear clamping nut (by hand as strong as possible) the POF cable is fixed within the connector (Pic. 4).



Pic. 4 Clamping are SC clamp connector contact

4.3 Fiber endface treatment:

- Insert the SC clamp connector contact fully into the appropriate polish disc.
- Press the tool on the polish paper (grid P1000) and polish the fiber until the fiber is flush with the connector. Use a hard and plain support plate (e.g. glass plate) (Pic. 5).
- Wipe the connector with a clean tissue. Best attenuation values are achieved applying wet polishing.
- Repolishing on polish paper with grid P4000 may improve attenuation about 1dB. Best attenuation values are achieved applying wet polishing, too.



Pic. 5 Polishing disc SC clamp connector contact

SC-RJ clamp connector for 1/2.2 mm POF

4 Cable assembly (continue) _____

5 Connector assembly _____

Method b)

As last step insert the SC clamp connector contacts into the SC-RJ retainer until they snap in. Please note the keying of the housing (Pic. 6).

4.4 Fiber endface treatment:

- To achieve a plain cut surface use the cutting tool RPSimpleCut and cutting pliers 910SZ00100A01 or 910SZ00100001 and cut the cable to the required length.
- Insert the cable into the SC clamp connector contact and adjust the fiber to the required position by pressing the protruding fiber end onto a hard and plain support plate (e.g. glass plate)
- Tighten the rear clamping nut (by hand as strong as possible) to fix POF cable within the connector.



Pic. 6 SC-RJ clamp connector

Better attenuation results can be achieved by using method a) for POF cable termination with SC clamp connector contacts! This method b) is recommended for time-saving cable assemblies!

6 Technical data _____

Parameter	Condition	Value	Unit
Retention force cable cable clamping	Ambient room temperature	40	N
Insertion loss		< 4,0	dB
Thermal property	-	-40 to +85	°C

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