

Clamp connector SC for 1/2.2mm POF

1 General

This connector, designed for 1/2.2mm POF cable, uses an assembly without crimping and glueing. A patented clamp system integrated into the connector body holds the glass fiber, the strain relief and the cable jacket in place after assembly.

Also, it is possible to disassemble the connector and reuse it several times.

This big advantage makes it easy to repeat an assembly if the demanded optical parameters are failed after finishing.

Additionally, there is no need for expensive tools and an enormous time saving while no crimping, glueing and heat curing is needed.

Depending on the grip plates (housings) the connector can be simplex and duplex SC standard or a duplex SCRJ version.

Fiber endface preparation is done by hand.



Pic. 1 SC clamp connector without grip plate

2 Ordering information

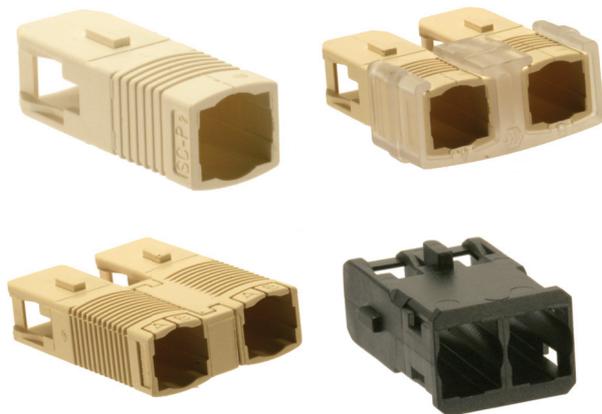
Specification

for cable diameter: 2.2 mm
 including bend protection

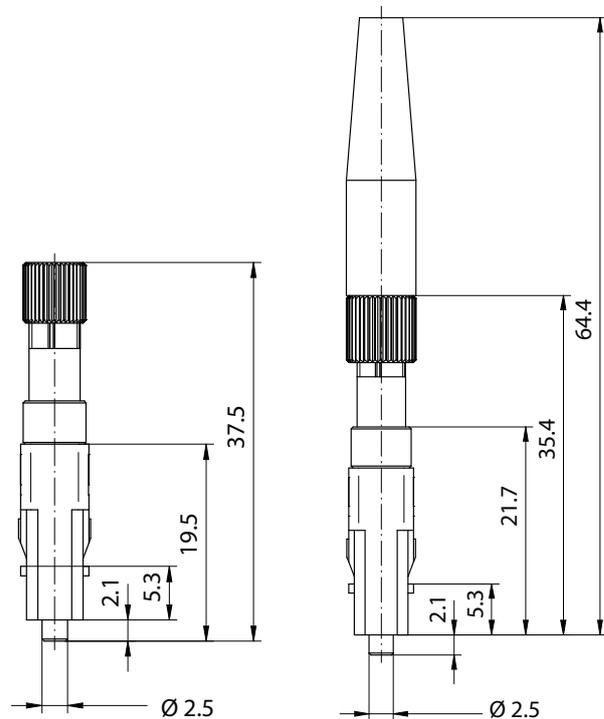
Part number

902SK001SCK01
 902SK001SCK02

Depending on the grip plates (housings) the connector can be simplex and duplex SC standard or a duplex SCRJ version (Product no. upon request).



3 Drawing



Pic. 2 Dimensions SC clamp connector without grip plate

Clamp connector SC for 1/2.2mm POF

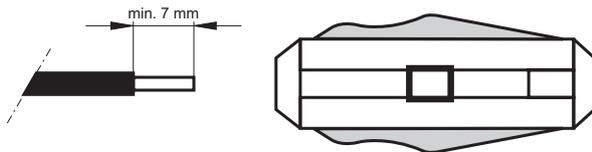
4 Cable assembly _____

The following tools and materials are recommended for easy and reliable 1/2.2 mm POF cable termination:

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

4.1 Fiber stripping _____

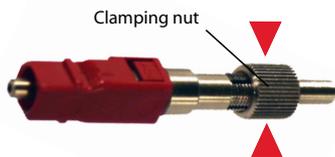
Remove appr. 7 mm of the outer jacket from 2.2 mm POF cable with the fiber stripper



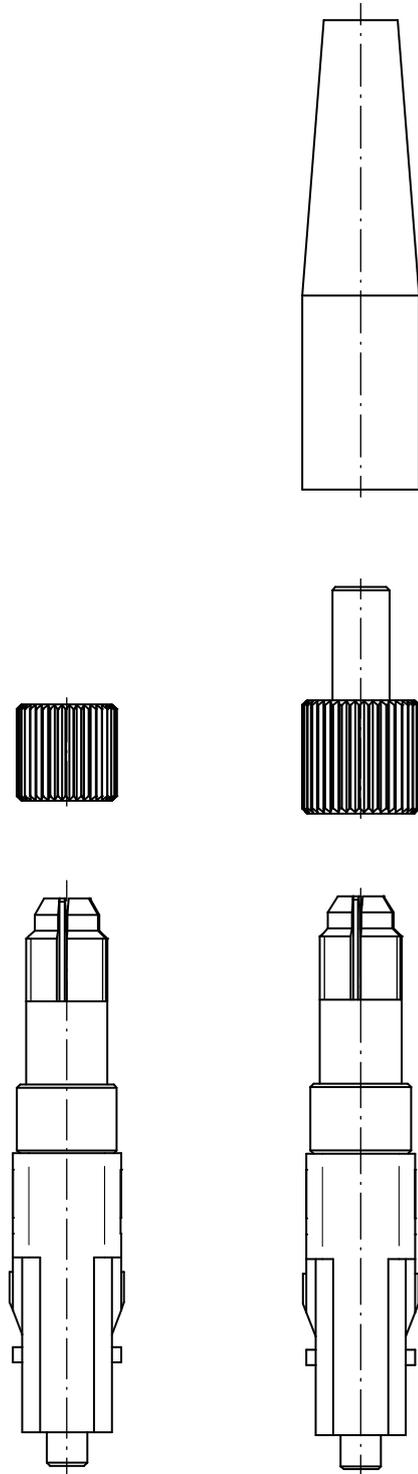
Pic. 3 Stripping dimensions

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 nut for POF cable jacket



Pic. 5 Components SC clamp connector POF



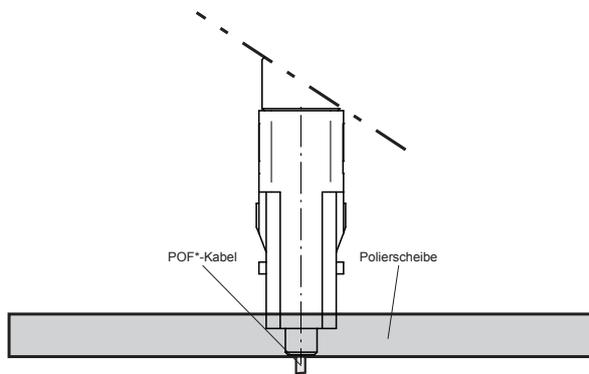
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4.3 Fiber end face treatment _____

- Insert the connector into polishing disc (Pic. 6) and grind the protruding fiber by using the polishing film, grain size 1000 placed on a smooth pad (e.g. glass plate).
- Press the polishing disc down on the polishing film and grind the fiber until the connector is flush with the bottom of the disc.
- Wipe the connector with a clean tissue. Best insertion loss results are achieved by wet grinding.
- If the connector is not to be used immediately,
- cover the end with the dust cap.

4.4 Alternative treatment methode _____

- 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 connector 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 Polishing of POF fiber

5 Technical data _____

Parameter	Condition	Value	Unit
Retention force, clamped cable	Ambient room temperature	40	N
Insertion loss		< 4.0	dB
Thermal properties	-	-40 to +85	°C

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