

Clamp connector SC for 200/230 PCF

1 General

This connector acc. IEC 61754-4/IEC61754-24, designed for 200/230µm polymer cladded fiber acc. IEC 60793-2-30 A3c and A3d, uses an assembly without crimping and glueing. A patented clamp system integrated into the connector body holds the 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 like heat oven or crimp pincers and an enormus time saving while no crimping, glueing and heat cureing is needed. Depending on the grip plates (housings) the connector can be simplex and duplex SC standard or a duplex SCRJ version.

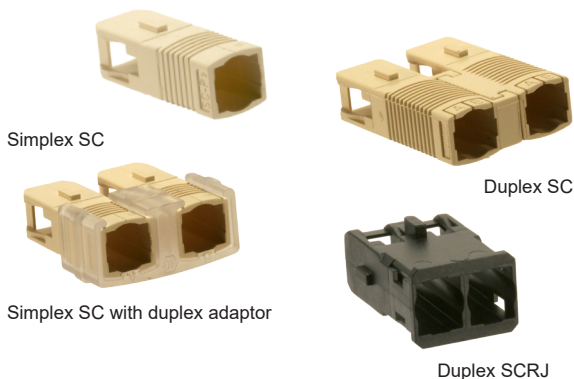
Fiber endface preparation is done by hand thru scribing and breaking or, to get repeatable results, using the special designed fiber cleaving tool for 200/230µm fiber from Ratioplast-Optoelectronics.

2 Ordering Information

The 200/230µm fiber SC connector is available for 3 different cable jacket outer diameter:

Item	Product-Nr.
Outer diameter: 2.2 mm	902SK201SCK01
Outer diameter: 2.5 mm	902SK202SCK01
Outer diameter: 3.0 mm	902SK203SCK01

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 (Product no. upon request)

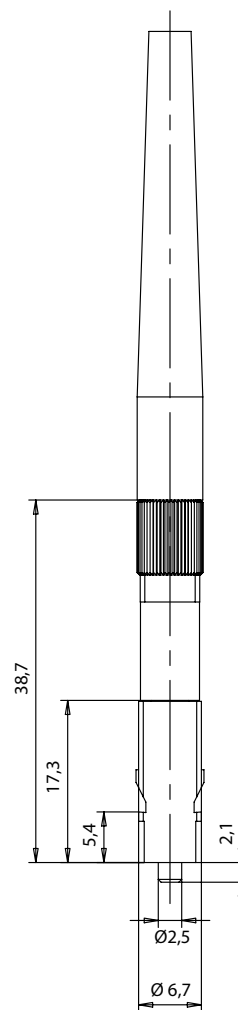


Pic. 2 Examples of grip housing



Pic. 1 SC clamp contacts without grip plate

3 Dimensioned drawing



Pic. 3 Dimensions SC clamp contacts without grip plate

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4 Connector assembly

Cut fiber optic cable to length and dismantle fiber according to dimensions in Pic. 4.

Unscrew clamp nut and remove cable jacket-/strengthening yarn-holder insert from connector body (Pic. 5).

Slip bent protection boot and clamp nut onto the cable.

Slip cable jacket-/strengthening yarn-holder onto cable until it butts against the outer jacket.

Make sure that the strengthening yarn is fully passed through the holder.

Insert the fiber into the connector. Rotate the connector carefully feeling for the opening in the tip. When the fiber is seated, pull it back slightly and watch for movement at the tip to make sure the fiber has not been broken.

Reseat the fiber into the connector so the jacket-/strengthening yarn-holder butts against the connector body. The fiber should now protrude the tip by 20mm (for manual cleaving) or by 50mm (using Ratioplast-Optoelectronics cleaving tool).

Manual tighten the clamp nut onto the connector body using gentle force. Doing this the glass fiber, the strengthening yarn and the cable jacket will be locked in place.

Fiber end face preparation can be done by manual cleaving or using the special designed cleaving tool for 200/230µm fiber from Ratioplast (Ord. No.: 910FW230ST001).

Refer to cleaving tool data sheet E10FE230SM001.

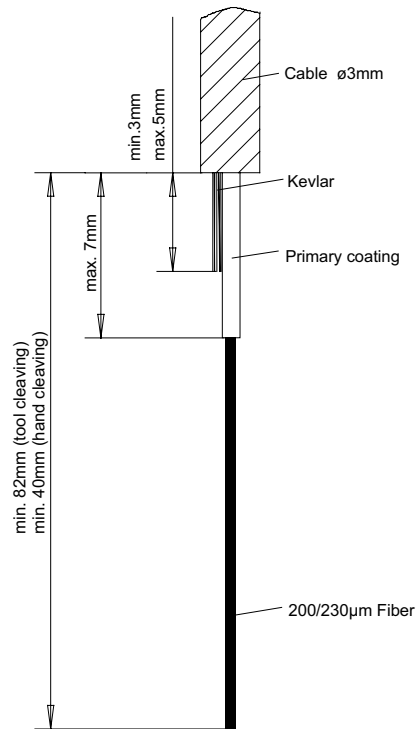
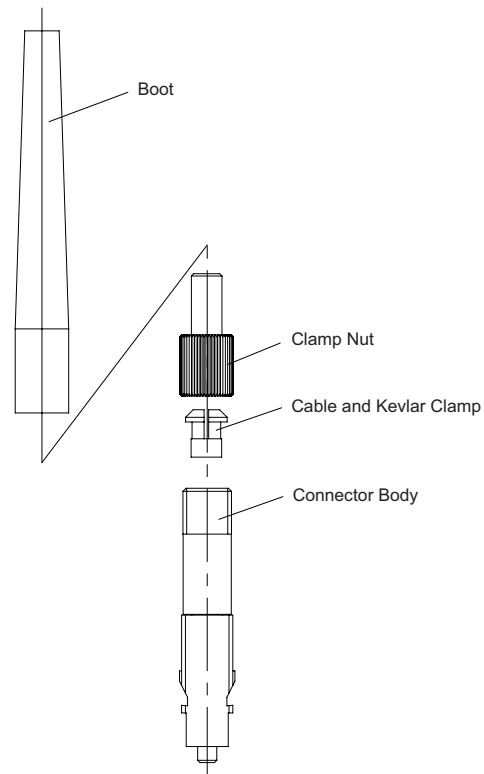


Figure 4 F/O cable and dimensions for deinsulation



Pic. 5 Pieceparts of the SC clamp connector contact



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5 Technical Data _____

Parameter	Condition	Value	Unit
Material	Ferrule Case Bend protection	German silver PA TPE	
Insertion loss	each contact	≤ 0.5	dB
Retention force cable (room ambient temperature)	cable clamping	≥ 40	N
Thermal properties	Storage and operation	-40 to +85	°C
Mating cycles		≥ 500	Cycles
Protection class	IP20		

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