

**F-ST Clamp Connector for POF Cable 1/2.2 mm simplex**

**1 General**

The fiber optic connector style F-ST is optimized in particular for applications using standard 1 mm polymer optical fiber acc. IEC 60792-2-40 A4a and A4d, 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. The connector complies with IEC 61754-2 standard.



Design without boot



Design with boot

**2 Application**

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

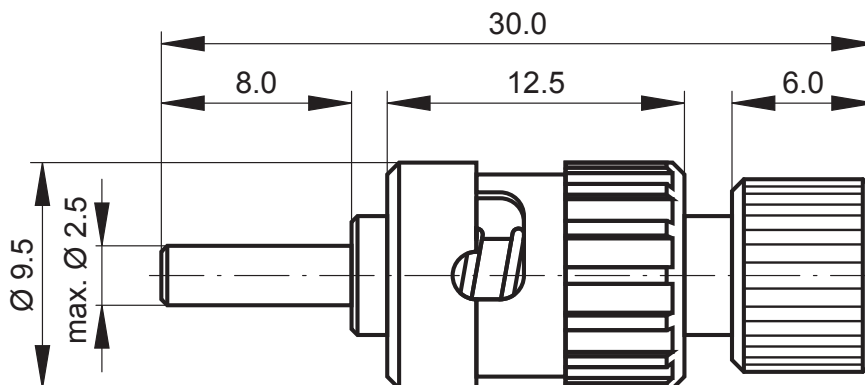
- Optical networking
- Industrial electronics
- Power electronics
- Consumer electronics

Pic. 1 and 2 F-ST clamp connector POF

**4 Ordering information**

Specification	Part number
Without boot	902SS001STK01
Boot 29 mm (red)	902SS001STK10
Boot 29 mm (black)	902SS001STK11
Boot 50 mm (black)	902SS001STK21

**3 Technical drawing**



Pic. 3 F-ST clamp connector



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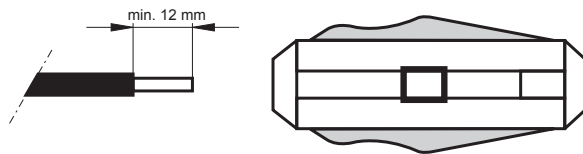
### 5. Cable assembly

Required tools for cable assembly of F-ST connector with 1/2.2mm POF cable:

Specification	Part number
Fiber stripper	910AB00100001
Polishing disc	910PS0ST00001
Polishing film, grain size 1000	910PB00100001

#### 5.1 FO cable:

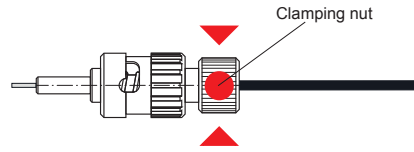
- Remove min. 12 mm of outer jacket 2.2 mm by using the fiber stripper (Pic. 4)



Pic. 4 Fiber stripper

#### 5.2 Clamping of POF cable:

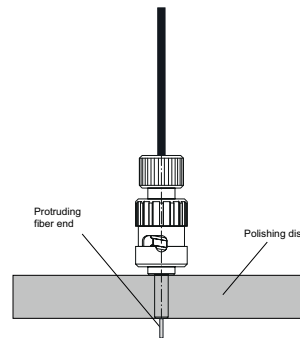
- Ensure that the rear clamping nut is not fixed on the thread.
- For designs with boot, push at first the bend protection boot over the cable.
- Insert the dismantled POF cable into the connector up to the stop. The fiber should protrude min. 1 mm out of the connector tip.
- Tighten the rear clamping nut (only hand-tight) to fix the POF cable with the connector (Pic. 5).



Pic. 5 Clamping area

#### 5.3 Fiber endface processing:

- 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 off 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.



Pic. 6 Polishing disc with connector guidance

### 6 Technical data

Parameter	Condition	Value	Unit
Material	Ferrule, Clamping nut Spring Bayonet nut Dust cap Anti-kink sleeve	German silver Steel PBT HD-PE TPE	
Insertion loss		≤ 2.0	dB
Retention force cable to connector (ambient temperature)	Fiber clamping	40	N
Temperature range	Storage and operation	-40 to +85	°C
Mating cycles		≥ 500	Cycles
Protection class	IP20		

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