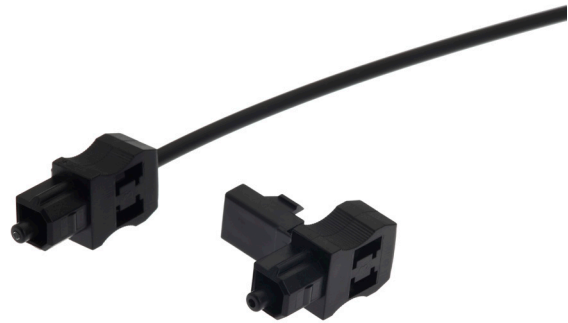


**FO connector RP F-05 for POF cable 1/2.2 mm, simplex**

**1 General**

The FO-connector series RP F-05 is optimized in particular for applications using standard 1mm polymer optical fiber acc. IEC 60793-2-40 A4a and A4d, demanding a fast and easy cable assembly with high reliability, very good optical and mechanical characteristics.

The shown clamp connector can be assembled with the POF cable without special tools.



Pic. 1 RP F-05 connector

**2 Application**

Due to the good optical features and the easy cable assembly, the RP-02 connector is useable in several applications:

- optical networking
- industrial electronics
- power electronics
- consumer electronics

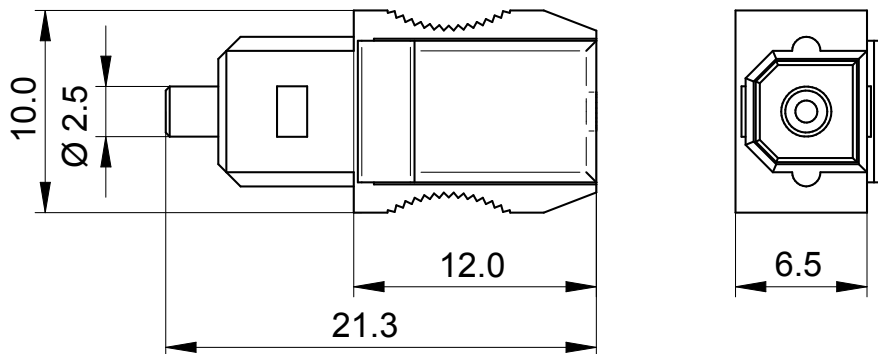
**4 Features**

- single part full plastic connector
- compatible to `Japan`-standard Toshiba TOS-LINK F-05
- useable with PA-, PE-, PVC-jacketed POF cable with 2.2mm outer diameter
- low insertion loss
- easy assembly
- Hot-Plate design available

**3 Ordering information**

Specification	Part number
RP F-05	902SS001DL001

**5 Technical drawing**



Pic. 2 Drawing RP F-05 connector

## FO connector RP F-05 for POF cable 1/2.2 mm, simplex

### 6 Cable assembly \_\_\_\_\_

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

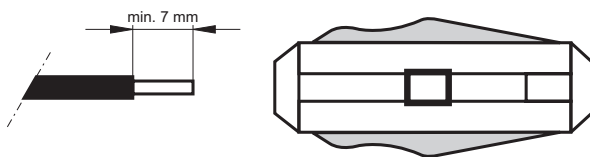
<b>Specification</b>	<b>Part number</b>
Fiber stripper	910AB00100001
Polishing disc	910PSTOC00001
Polishing film, grain size 1000	910PB00100001
Polishing film, grain size 4000	910PB00140250

Turn down the latch cover and snap it into the connector body. When the latch cover snaps audibly into the body, proper connector-to-cable attachment is achieved.



#### 6.1 Fiber stripping \_\_\_\_\_

Remove appr. 7 mm of the outer jacket with the fiber stripper



Pic. 3 Stripping dimensions

Pic. 5 Cable assembly step 2

#### 6.2 Connector termination \_\_\_\_\_

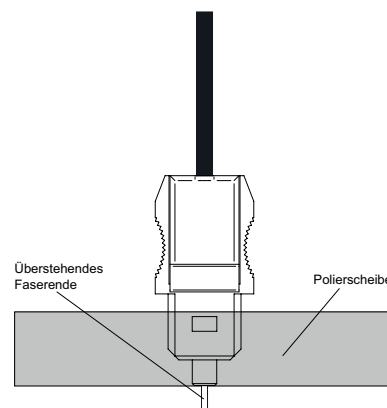
Insert the dismantled POF cable into the connector up to the stop. The fiber should protrude 1-2 mm out of the connector tip.

#### 6.3 Fiber grinding and polishing \_\_\_\_\_

Insert the connector 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). 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. 4 Cable assembly step 1



Pic. 6 Polishing RP F-05 connector



## FO connector RP F-05 for POF cable 1/2.2 mm, simplex

### 7 Technical data \_\_\_\_\_

Parameter	Condition	Value	Unit
Material	Ferrule body Housing	PPE/PS-I	
Insertion loss	Cable with PA-jacket Cable with PE-jacket Cable with PVC-jacket	typ. 0.6 typ. 0.5 typ. 0.7	dB
Retention force POF cable to connector	Cable with PA-jacket Cable with PE-jacket Cable with PVC-jacket	110 60 35	N
Insertion force into receptacle	TOTX / -RX Modul	14	N
Tensile force out of receptacle	TOTX / -RX Modul	13	N
Press force for connector assembly	Cable with PA-jacket Cable with PE-jacket Cable with PVC-jacket	195 175 155	N
Temperature range	Storage and operation	-40 to +80	°C
Mating cycles		≥10	Cycles
Protection class		IP20	

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