

Male / female inserts for 1/2.2 and 1/2.3 mm POF simplex

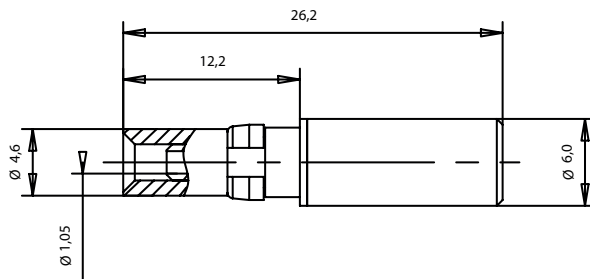
1 General _____

The FO contacts CECC 78001-801 and DIN 41626 part 3 are optimized for applications with 1 mm standard Plastic fiber in combination with connectors DIN EN 60603-2, type M demanding a fast and easy cable assembly with high reliability, very good optical and mechanical characteristics. For hybrid applications, demanding additional electrical power transmission, appropriate contacts are available.

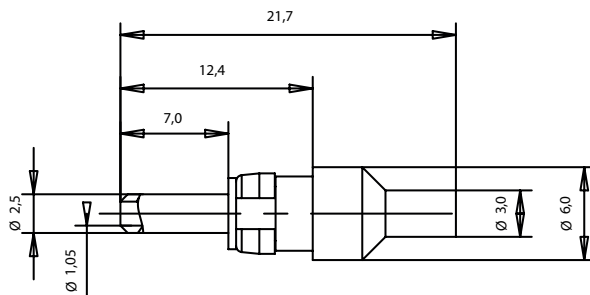
2 Application _____

- optical network
- industry electronics
- power electronics

3 Drawing _____



PIC. 1 Female insert



Pic. 2 Male insert



Pic. 3 DIN 41626 female / male inserts

4 Technical data _____

Material	Body Clip	Metal Plastic
Suitable fiber	POF	1 mm
suitable jacket	PE PA PVC	2.2 mm 2.3 mm
Mating cycles	500	
Insertion loss	POF 1 mm	typ. < 0.6 dB
Thermal properties	Operation Storage	-40 .. +85°C -40 .. +85°C

5 Ordering information _____

Specification	Order number
Female insert	902DI001BU001
Male insert	902DI001ST001



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6 Termination _____

Recommended termination tools:

Ausführung	Bestellnummer
RP _{SIMPLE} CUT	910SW00101
Stripping tool for PE/PVC outer jacket	910AB00100001
Stripping tool for PA outer jacket	910AZ00100PA1
Crimping tool hexagonal	910CZ00100008
Polishing disc	910PSDIN00001
Polishing film, grain size 1000	910PB00100001
Polishing film, grain size 4000	910PB00140250
Adhesive	9102KKPOF0001

6.1 FO cable _____

- Use the RP_{SIMPLE}CUT to cut the cable to required length
- Strip the cable with suitable stripping tool 910AB00100001 or 910AZ00100PA1, see below table for stripping length



Pic. 4 Stripping tools

Insert	Stripping dimensions L
Female insert	min. 15 mm
Male insert	min. 12 mm



Pic. 5 Stripping dimensions

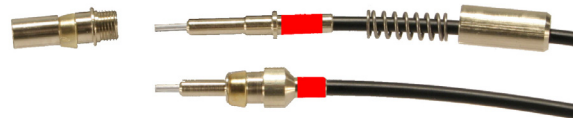
6.2 Inserts _____

- Prepare the adhesive
- Unscrew female insert
- Slip the insert sleeve and spring on the fiber
- Apply adhesive on fiber end and insert the fiber into the ferrule. The fiber end should protrude 1.5 from ferrule end (Pic. 6).



Pic. 6 Preparing the insert

- Put the insert with red marked crimping area (Pic. 7) into the forging die cavity 2.5mm of crimping tool
- Close the crimping tool with light pressure and crimp the insert (Pic. 8)



Pic. 7 Crimping area



Pic. 8 Crimping tool



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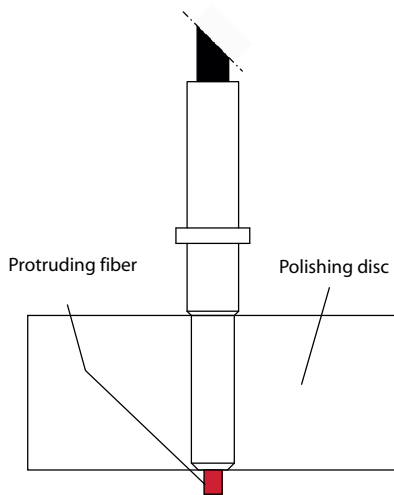
6.3 Adhesive curing _____

The epoxy compound has a pot life of approximately 90 minutes at ambient room temperature. An elevated temperature will advance the initiation of the chemical curing reaction of the epoxy compound. Suggested minimum temperatures and times are listed in the chart. Further treatment of the contacts should be accomplished only after the epoxy compound has cured completely.

Temperature	Time	Resistance
20°C	12 h	1200 N / cm ²
40°C	3 h	1800 N / cm ²
70°C	45 min	2000 N / cm ²

6.4 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. 9 Polishing disc



Pic. 10 Male insert



Pic. 11 Female insert

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