

HFBR4501 metal connector for 1/2.2 mm POF

1 General _____

The FO connector style HFBR4501 metal connector is optimized in particular for applications using standard 1 mm polymer optical fiber demanding a fast and easy cable assembly with high reliability, very good optical and mechanical characteristics.



Pic. 1 HFBR connector POF

2 Application _____

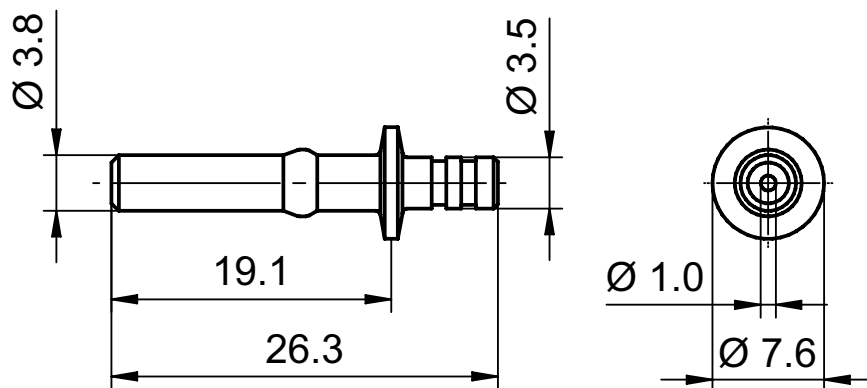
Due to the good optical features and the easy cable assembly, the HFBR4501 metal connector is useable in several applications:

- optical networking
- industrial electronics
- power electronics

3 Ordering information _____

Type	Order number
HFBR4501 metal connector	902SS001H4502

4 Drawing _____



Pic. 2 Drawing HFBR connector

HFBR metal connector for 1/2.2 mm POF

5. Cable assembly _____

Required tools for FO cable assembly of HFBR4501 metal connector with 1/2.2mm POF cable:

Type	Order number
Crimping tool hexagonal	910 CZ 001 00 008
Fiber stripper	910 AZ 001 00 PA1
Polishing disc	910 PS H45 01 001
Polishing film, grain size 1000	910 PB 001 00 001
Polishing film, grain size 4000	910 PB 001 40 250



Pic. 4 Crimping tool hexagonal for jacket crimping

5.1 Fiber optic cable

- Remove app. 10 mm of outer jacket 2.2 mm by using the fiber stripper (Pic. 3)

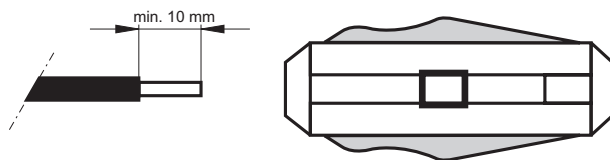


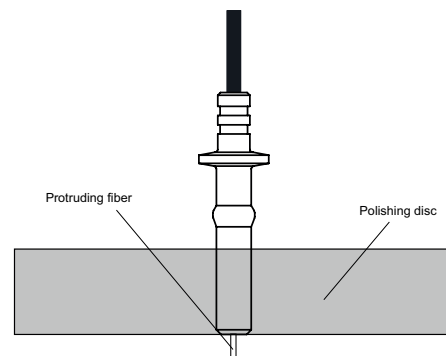
Bild 3 Fiber stripper

5.2 Crimping of 2.2mm jacket:

- Align the connector anchor (rear end of connector) with the hexagonal cavity, wrench size 3.0 mm of the crimping tool (910CZ00100008, Pic. 4) and squeeze the crimping tool handles until they release
- Alternative to jacket crimping, pasting of jacket is also possible simultaneously with fiber pasting.

5.3 Fiber end face processing:

- After crimping insert connector into polishing disc (Pic. 5) and grind the protruding fiber by using the polish film, grain size 1000 placed on a smooth pad (e.g. glass plate). Press the polishing disc down on the polish 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.



Pic. 5 Polishing disc

6 Technical data _____

Parameter	Condition	Value	Unit
Retention force, fiber pasting	Ambient temperature	50	N
Retention force, jacket crimping		50	N
Retention force, fiber pasting and jacket crimping		80	N
Temperature range	---	-40 to +85	°C

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