Rev. A03



Data sheet Fiber Optic Connector HFBR Clamp Connector PCF

## HFBR/V-Pin Clamp Connector for 200/230µm PCF Fiber

#### 1 General

This connector, designed for  $200/230\mu m$  PCF-fiber 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.

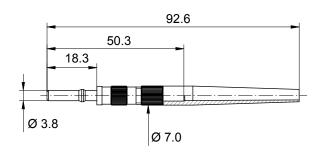
It is possible to disassemble the connector and reuse it several times. This big advantage makes it easy to repeat an assembly if the demanded optical parameters are failed after finishing.

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.

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

This Clamp Connector is suitable for applications with  $200/230 \mu m$  PCF cables acc. IEC 60793-2-30 and is compatible to Broadcom Versatile Link Series

#### 2 Technical drawing \_\_\_\_\_



Pic. 2 HFBR Clamp Connector



### 3 Application

Due to the very good optical characteristics and easy termination technique, the HFBR/V-PinF-SMA Clamp Connector is suitable for different applications:

- optical networks
- industry electronics
- power electronics
- consumer electronics

#### 4 Features \_

- HFBR/V-Pin clamp connector
- suitable for 200/230µm fiber
- epoxy free assembly
- no crimp tool needed
- patented clamp system
- reusable for several times
- fast assembly

#### 5 Ordering information \_\_\_\_\_

The  $200/230\mu m$  fiber HFBR/V-Pin connector is available for cable jacket outer diameter:

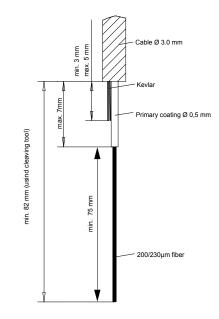
Specification	Part number		
Cable diameter: 3.0 mm	902SS230H4K01		



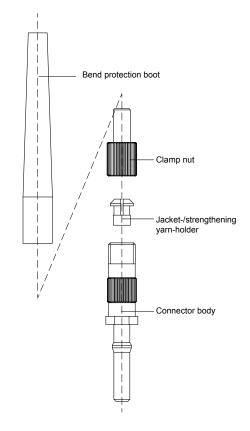
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#### 6 Cable assembly \_

- Cut the fiber optic cable to length and dismantle the fiber according to dimensions in Pic. 3.
- Unscrew clamp nut and remove cable jacket-/ strengthening yarn-holder insert from connector body (Pic. 4).
- 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 and 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-/ strengthning yarn-holder butts against the connector body. The fiber should now protrude the tip by 75mm (using Ratioplast-Optoelectronics cleaving tool).
- Manually tighten the clamp nut onto the connector body using gentle force. Doing this the glas 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 from Ratioplast (Ord. Nr.: 910FW230SM001).
- Refer to cleaving tool data sheet E10FW230SM001 for operating instructions.



Pic. 3 Stripping dimensions



Pic. 4 HFBR/V-Pin Clamp Connector



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

Parameter	Condition	Value	Unit
Material	Clamp nut, Kevlar clamping, body Ferrule Anti-kink sleeve Dust cap	German silver Plastic TPE PVC	
Insertion loss		≤ 1.25	dB
Retention force cable to connector	Cable clamping	≥ 80	Ν
Temperature range	Storage and operation	-40 to +85	°C
Mating cycles		≥ 50	Cycles
Protection class	IP20		

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