

# LWL- Steckverbinder und Zubehör

## Fiber Optical Connectors and Accessories



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# SMA Stecksystem

Für die sogenannten großkernigen Fasern ist der SMA Stecker der gängigste Steckverbinder. Er zeichnet sich durch einfache Montage und Robustheit aus. Neben den bewährten Stecker für Kleben und polieren stehen Crimp & Cleave (C&C) Stecker und wiederverwendbare Schnellmontage-Stecker zur Verfügung.

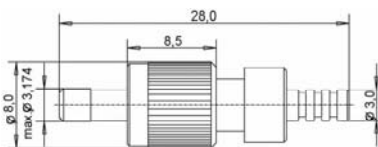


# SMA connector system

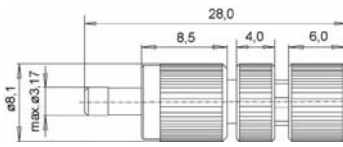
For so called "large core fibers" the SMA connector is the most common one. They are remarkably easy to terminate and robust. Aside from the tried and tested glue and polish technique, we also offer crimp & cleave connectors as well as re-usable clamping connectors.

SMA connectors are mainly used in sensor and medical applications.

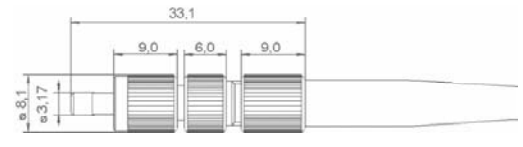
## Stecker



Pic. 1



Pic. 2



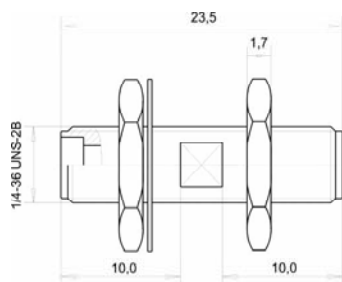
Pic. 3

## Connectors

| Description                            | Part Number | Bore Hole | Mounting      | Note          | Pic |
|----------------------------------------|-------------|-----------|---------------|---------------|-----|
| SMA-B128                               | 7462018     | 128 µm    | Glue & Polish |               | 1   |
| SMA-B146                               | 7462007     | 146 µm    | Glue & Polish |               | 1   |
| SMA-B236                               | 7462004     | 236 µm    | Glue & Polish |               | 1   |
| SMA-B270                               | 7462003     | 270 µm    | Glue & Polish |               | 1   |
| SMA-B340                               | 7462006     | 340 µm    | Glue & Polish |               | 1   |
| SMA-B440                               | 7462001     | 440 µm    | Glue & Polish |               | 1   |
| SMA-B475                               | 7462008     | 475 µm    | Glue & Polish |               | 1   |
| SMA-B530                               | 7462047     | 530 µm    | Glue & Polish |               | 1   |
| SMA-B640                               | 7462002     | 640 µm    | Glue & Polish |               | 1   |
| SMA-B720                               | 7462009     | 720 µm    | Glue & Polish |               | 1   |
| SMA-B880                               | 7462012     | 880 µm    | Glue & Polish |               | 1   |
| SMA-B900                               | 7462010     | 900 µm    | Glue & Polish |               | 1   |
| SMA-B1050                              | 7462005     | 1050 µm   | Glue & Polish |               | 1   |
| SMA-B1060                              | 7462039     | 1060 µm   | Glue & Polish |               | 1   |
| SMA--B236                              | 7462014     | 236 µm    | Clamping      |               | 3   |
| SMA-B1050                              | 7462015     | 1050 µm   | Clamping      |               | 2   |
| SMA-B1050                              | 7462020     | 1050 µm   | Clamping      | MOST          | 3   |
| SMA-B1050                              | 7462021     | 1050 µm   | Clamping      | SERCOS 3,6 mm | 3   |
| SMA-B1050                              | 7462022     | 1050 µm   | Clamping      | SERCOS 6,0 mm | 3   |
| Other versions available upon request. |             |           |               |               |     |

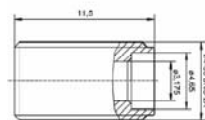
## Zubehör

## Accessories

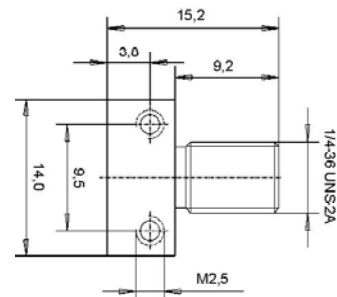


Pic. 1

Montageloch  
Panel cut out



Pic. 2



Pic. 3

| Description                            | Part Number | Note               | Pic |
|----------------------------------------|-------------|--------------------|-----|
| SMA adapter                            | 7467002     | O-Ring with O-seal | 1   |
| Half SMA adapter                       | 7467004     | O-Ring with O-seal | 2   |
| SMA receptacle                         | 7467001     | TO-46, TO-18       | 3   |
| SMA fixing nut                         | 7467005     |                    |     |
| Other versions available upon request. |             |                    |     |

# Crimp & Cleave

Die Crimp & Cleave Technik wurde speziell für die HCS Fasern entwickelt. Die Montagezeiten für einen Stecker sind ca. 1-2 Minuten.

In unserem Crimp & Cleave Service Center können alle Werkzeuge bei Bedarf schnell gewartet werden.



Pic. 1

# Crimp & Cleave

The Crimp & Cleave technique has been specifically developed for HCS fibers. The termination takes less than 2 minutes per end.

Maintenance of all tools can quickly be carried out at LASER COMPONENTS.



Pic. 2

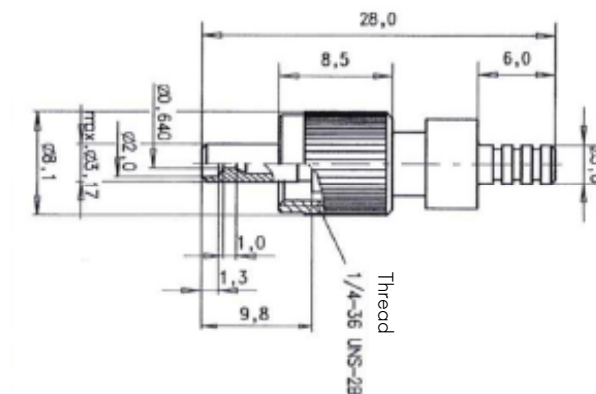
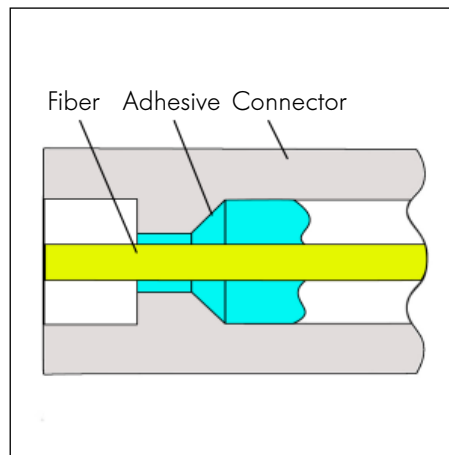
| Description                            | Part Number | Bore Hole | Mounting       | Note            | Pic |
|----------------------------------------|-------------|-----------|----------------|-----------------|-----|
| TK7-Kit SMA                            | 2580159     |           | Crimp & Cleave | Termination Kit | 1   |
| CC2-230-2.2                            | 2580352     | 236 µm    | Crimp & Cleave | Cable Ø 2.2 mm  | 2   |
| CC2-230-2.5                            | 2580353     | 236 µm    | Crimp & Cleave | Cable Ø 2.5 mm  | 2   |
| CC2-230-3.0                            | 2580354     | 236 µm    | Crimp & Cleave | Cable Ø 3.0 mm  | 2   |
| Other versions available upon request. |             |           |                |                 |     |

# SMA Stecksystem (freistehende Faser)

Diese SMA Stecker werden hauptsächlich bei der Laserein-  
kopplung von hohen Leistungen und in der Medizintechnik  
verwendet. Mit einem speziellen Verfahren aus der Feinoptik  
werden die Stecker vor dem Polieren behandelt. Durch dieses  
Verfahren wird erreicht, dass beim fertig konfektionierten  
Stecker kein Kleber im Bereich der Faserstirnfläche ist.

# SMA connector system (free-standing fiber)

These connectors are mainly used in medical applications  
where high power levels have to be fiber coupled. The  
connectors are treated with a special process from the field of  
precision optics before they are polished. Due to this process,  
the ready assembled connector will be free of adhesive on  
the fiber front facet.



Pic. 1

| Description                            | Part Number | Bore Hole          | Mounting      | Pic |
|----------------------------------------|-------------|--------------------|---------------|-----|
| SMA-B236                               | 7462038     | 236 $\mu\text{m}$  | Glue & Polish | 1   |
| SMA-B260                               | 7462053     | 260 $\mu\text{m}$  | Glue & Polish | 1   |
| SMA-B270                               | 7462037     | 270 $\mu\text{m}$  | Glue & Polish | 1   |
| SMA-B440                               | 7462019     | 440 $\mu\text{m}$  | Glue & Polish | 1   |
| SMA-B520                               | 7462041     | 520 $\mu\text{m}$  | Glue & Polish | 1   |
| SMA-B640                               | 7462023     | 640 $\mu\text{m}$  | Glue & Polish | 1   |
| SMA-B650                               | 7462055     | 650 $\mu\text{m}$  | Glue & Polish | 1   |
| SMA-B1560                              | 7462040     | 1560 $\mu\text{m}$ | Glue & Polish | 1   |
| Other versions available upon request. |             |                    |               |     |

# ST® Stecksystem

Neben den Anwendungen für großker-  
nigen Fasern wird der ST® Stecker  
auch häufig in der Telekommunikation  
eingesetzt. Schnelle Verriegelung der  
Stecker ist durch den Bajonettverschluss  
möglich.

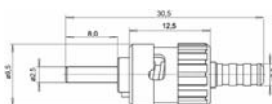


# ST® connector system

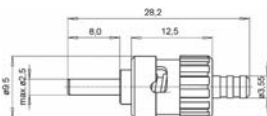
Apart from multimode applications,  
ST® connectors are also often used in  
telecommunications. Quick fastening of  
the connector by bayonet joint.

## Stecker

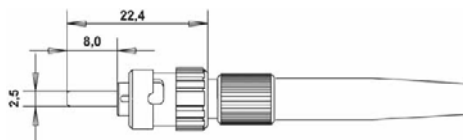
## Connectors



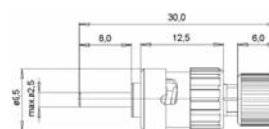
Pic. 1



Pic. 2



Pic. 3

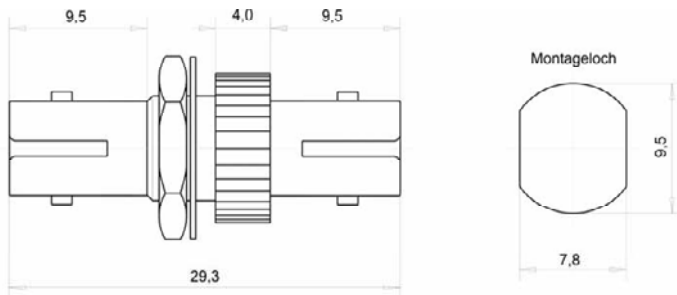


Pic. 4

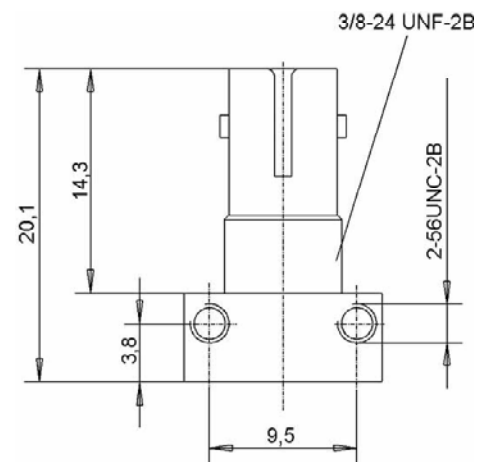
| Description                            | Part Number | Bore Hole | Mounting      | Note | Pic. |
|----------------------------------------|-------------|-----------|---------------|------|------|
| ST-B127                                | 7461004     | 127 µm    | Glue & Polish |      | 1    |
| ST-B146                                | 7461007     | 146 µm    | Glue & Polish |      | 1    |
| ST-B235                                | 7461001     | 235 µm    | Glue & Polish |      | 1    |
| ST-B270                                | 7461014     | 270 µm    | Glue & Polish |      | 1    |
| ST-B280                                | 7461011     | 280 µm    | Glue & Polish |      | 1    |
| ST-B340                                | 7461019     | 340 µm    | Glue & Polish |      | 1    |
| ST-B436                                | 7461002     | 436 µm    | Glue & Polish |      | 1    |
| ST-B470                                | 7461012     | 470 µm    | Glue & Polish |      | 1    |
| ST-B641                                | 7461003     | 641 µm    | Glue & Polish |      | 1    |
| ST-B1050                               | 7461008     | 1050 µm   | Glue & Polish |      | 2    |
| ST-B1060                               | 7461021     | 1060 µm   | Glue & Polish |      | 1    |
| ST-B236                                | 7461010     | 236 µm    | Clamping      |      | 3    |
| ST-B1050                               | 7461009     | 1050 µm   | Clamping      |      | 4    |
| Other versions available upon request. |             |           |               |      |      |

## Zubehör

## Accessories



Pic. 1



Pic. 2

| Description                            | Part Number | Note           | Pic |
|----------------------------------------|-------------|----------------|-----|
| ST adapter                             | 7467008     | Ceramic sleeve | 1   |
| ST diode housing                       | 7467003     | TO-46, TO-18   | 2   |
| Other versions available upon request. |             |                |     |

## Crimp & Cleave

Die Crimp & Cleave Technik wurde speziell für die HCS Fasern entwickelt. Die Montagezeiten für einen Stecker sind ca. 1-2 Minuten.

In unserem Crimp & Cleave Service Center können alle Werkzeuge bei Bedarf schnell gewartet werden.

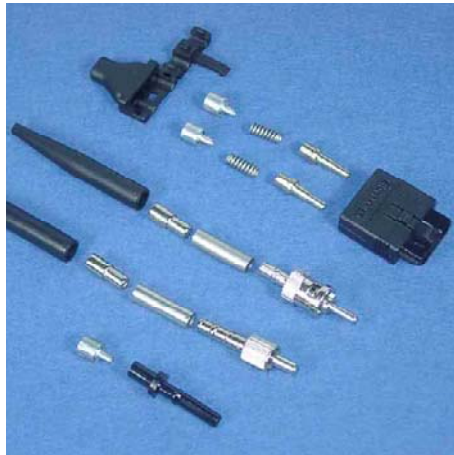


Pic. 1

## Crimp & Cleave

The Crimp & Cleave technique has been specifically developed for HCS fibers. The termination takes less than 2 minutes per end.

Maintenance of all tools can quickly be carried out at LASER COMPONENTS.



Pic. 2

| Description                            | Part Number | Bore Hole | Mounting       | Note            | Pic. |
|----------------------------------------|-------------|-----------|----------------|-----------------|------|
| TK7-Kit-ST                             | 2580160     |           | Crimp & Cleave | Termination Kit | 1    |
| CC2-ST-230-2.2                         | 2580302     | 236 µm    | Crimp & Cleave | Cable Ø 2.2 mm  | 2    |
| CC2-ST-230-2.5                         | 2580303     | 236 µm    | Crimp & Cleave | Cable Ø 2.5 mm  | 2    |
| CC2-ST-230-3.0                         | 2580304     | 236 µm    | Crimp & Cleave | Cable Ø 3.0 mm  | 2    |
| Other versions available upon request. |             |           |                |                 |      |

# FC Stecksystem

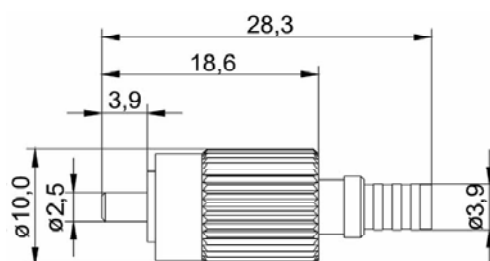
Der FC Stecker hat einen axial gefederten Stift, um die Anpresskraft der Stirnfläche zu begrenzen. Haupteinsatzgebiete sind Netzwerke für Telekommunikation.



The connector is equipped with a pin which is axially spring-loaded. The main field of application is in telecommunication networks.

## Stecker

## Connector

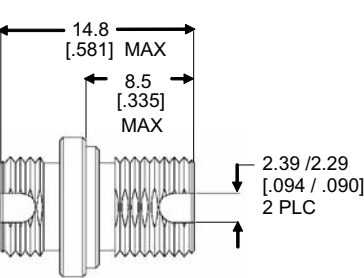


Pic. 1

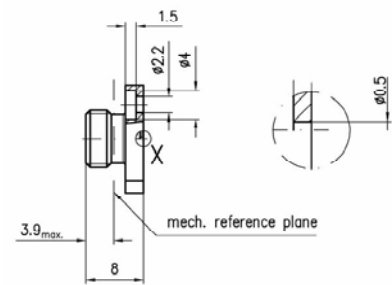
| Description                            | Part Number | Bore Hole          | Mounting      | Note | Pic. |
|----------------------------------------|-------------|--------------------|---------------|------|------|
| FC-B127                                | 7464016     | 127 $\mu\text{m}$  | Glue & Polish |      | 1    |
| FC-B146                                | 7464002     | 146 $\mu\text{m}$  | Glue & Polish |      | 1    |
| FC-B235                                | 7464004     | 235 $\mu\text{m}$  | Glue & Polish |      | 1    |
| FC-B260                                | 7464005     | 260 $\mu\text{m}$  | Glue & Polish |      | 1    |
| FC-B270                                | 7464010     | 270 $\mu\text{m}$  | Glue & Polish |      | 1    |
| FC-B340                                | 7464008     | 340 $\mu\text{m}$  | Glue & Polish |      | 1    |
| FC-B440                                | 7464009     | 440 $\mu\text{m}$  | Glue & Polish |      | 1    |
| FC-B620                                | 7464006     | 620 $\mu\text{m}$  | Glue & Polish |      | 1    |
| FC-B640                                | 7464011     | 640 $\mu\text{m}$  | Glue & Polish |      | 1    |
| FC-B1050                               | 7464015     | 1050 $\mu\text{m}$ | Glue & Polish |      | 1    |
| FC-B1060                               | 7464018     | 1060 $\mu\text{m}$ | Glue & Polish |      | 1    |
| Other versions available upon request. |             |                    |               |      |      |

Zubehör

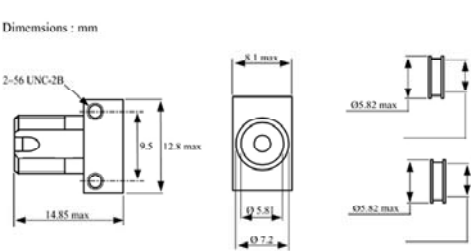
Accessories



Pic. 1



Pic. 2



Pic. 3

| Description      | Part Number | Note           | Pic. |
|------------------|-------------|----------------|------|
| FC adapter       | 7467010     | Ceramic sleeve | 1    |
| FC adapter       | 7420232     | With Z-stop    | 2    |
| FC diode housing | 74733004    | TO-46, TO-18   | 3    |

Other versions available upon request.

# F05 und F07 Stecksystem

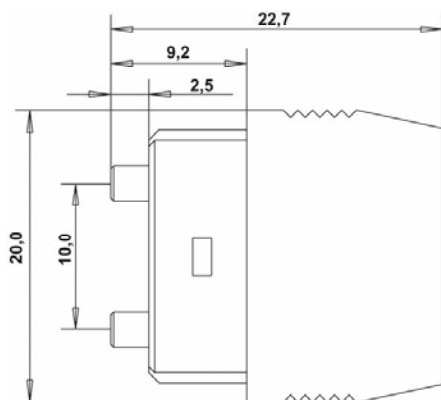
F05 und F07 sind auch unter dem Namen JIS (Japan Industrie Standard) Stecker bzw. TOSLINK Stecker bekannt. HCP 200/230 und Plastikfasern sind die wichtigsten Fasertypen für diesen Steckertyp. Typische Einsatzgebiete sind optische Netzwerke, Industrieelektronik und Consumer Elektronik.



F05 and F07 are also known as JIS (Japanese Industrial Standard) TOSLINK connectors.

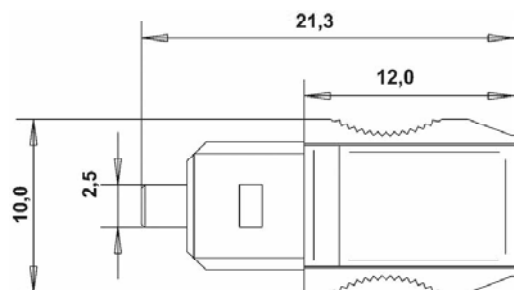
HCP 200/230 and POF fibers are the most important types used with these connectors. Typical applications include optical networks, industry and consumer electronics.

## Stecker



Pic. 1

## Connectors

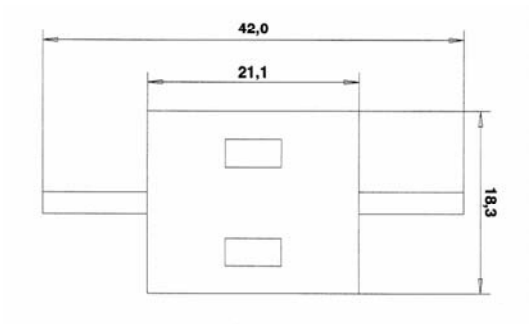


Pic. 2

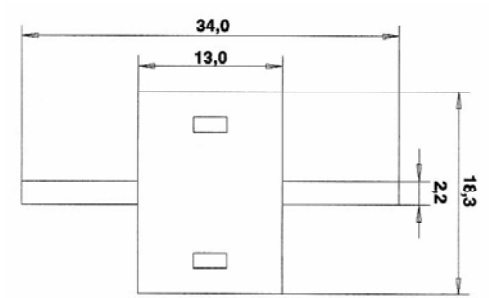
| Description                            | Part Number | Bore Hole | Mounting       | Note | Pic. |
|----------------------------------------|-------------|-----------|----------------|------|------|
| F07 Stecker                            | 7463001     | 1050 µm   | Crimp & Cleave |      | 1    |
| F05 Stecker                            | 7463002     | 1050 µm   | Crimp & Cleave |      | 2    |
| Other versions available upon request. |             |           |                |      |      |

# Zubehör

# Accessories



Pic. 1



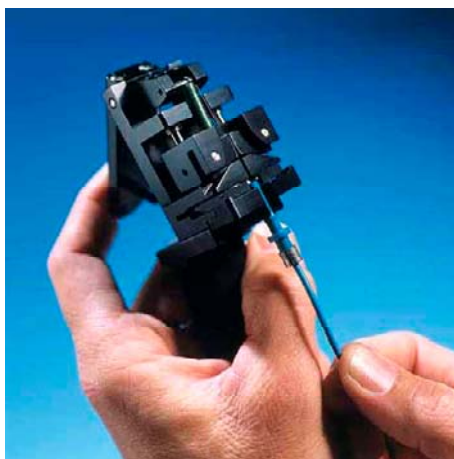
Pic. 2

| Description                            | Part Number | Note | Pic. |
|----------------------------------------|-------------|------|------|
| F07 adapter                            | 7467007     |      | 1    |
| F05 adapter                            | 259TOCA150  |      | 2    |
| Other versions available upon request. |             |      |      |

## Crimp & Cleave

Die Crimp & Cleave Technik wurde speziell für die HCS Fasern entwickelt. Die Montagezeiten für einen Stecker sind ca. 1-2 Minuten.

In unserem Crimp & Cleave Service Center können alle Werkzeuge bei Bedarf schnell gewartet werden.



Pic. 1

## Crimp & Cleave

The Crimp & Cleave technique has been specifically developed for HCS fibers. The termination takes less than 2 minutes per end.

Maintenance of all tools can quickly be carried out at LASER COMPONENTS.



Pic. 2

| Description                            | Part Number | Bore Hole | Mounting       | Note            | Pic. |
|----------------------------------------|-------------|-----------|----------------|-----------------|------|
| F07-Kit                                | 2580167     |           | Crimp & Cleave | Termination Kit | 1    |
| CC2-F07-230-2.2                        | 2580401     | 236 µm    | Crimp & Cleave | Cable Ø 2.2 mm  | 2    |
| Other versions available upon request. |             |           |                |                 |      |

## V-PIN Stecksystem

Dieses Stecksystem ist die Anbindung zu den schnellen Versatile Link Modulen von Agilent.

Die Stecker zeichnen sich durch einfache Montage und geringe Kosten aus. Sie sind sowohl für HCP 200 als auch für Plastikfasern erhältlich.

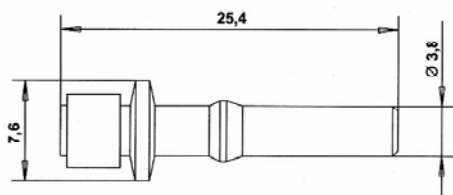


## V-PIN connector system

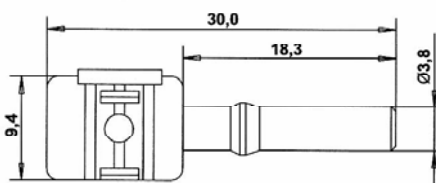
Vertical integration takes the product from fiber through cabling connectorization to create a plug-and-play assembly into Agilent's Versatile Link transceivers. Benefits:

- Cost competitive interconnections
- Quick and easy termination and installation process.
- Available for both HCP 200 and POF fibers

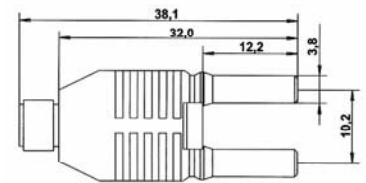
## Stecker



Pic. 1



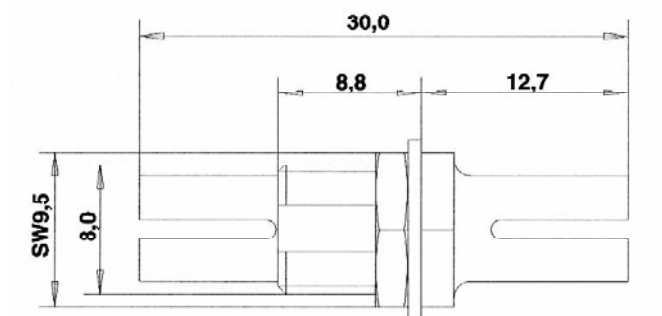
Pic. 2



Pic. 3

## Connectors

| Description                            | Part Number | Bore Hole | Mounting | Note                  | Pic. |
|----------------------------------------|-------------|-----------|----------|-----------------------|------|
| HFBR-4501Z                             | 2594501Z    | 1050 µm   | Crimp    | Simplex grey          | 1    |
| HFBR-4511Z                             | 2594511Z    | 1050 µm   | Crimp    | Simplex blue          | 1    |
| HFBR-4503Z                             | 2594503Z    | 1050 µm   | Crimp    | Simplex grey, latch   |      |
| HFBR-4513Z                             | 2594513Z    | 1050 µm   | Crimp    | Simplex blue, latch   |      |
| HFBR-4506Z                             | 2594506Z    | 1050 µm   | Crimp    | Duplex grey           | 3    |
| HFBR-4516Z                             | 2594516Z    | 1050 µm   | Crimp    | Duplex grey, latch    |      |
| HFBR-4531Z                             | 2594531Z    | 1050 µm   | Clamping | Simplex / Duplex grey | 2    |
| HFBR-4532Z                             | 2594532Z    | 1050 µm   | Clamping | Simplex black, latch  |      |
| Other versions available upon request. |             |           |          |                       |      |



Pic. 1

| Description                            | Part Number | Note  | Pic. |
|----------------------------------------|-------------|-------|------|
| V-PIN adapter HCP 200                  | 2580043     | Black | 1    |
| HFBR-4505Z, V-PIN adapter POF          | 2594505Z    | Grey  | 1    |
| HFBR-4515Z, V-PIN adapter POF          | 2594515Z    | Blue  | 1    |
| Duplex latch housing kit               | 2580243     | Grey  |      |
| Polishing set for POF V-PIN            | 2594593Z    |       |      |
| Other versions available upon request. |             |       |      |

# Crimp & Cleave

Die Crimp & Cleave Technik wurde speziell für die HCS Fasern entwickelt. Die Montagezeiten für einen Stecker sind ca. 1-2 Minuten.

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# Crimp & Cleave

The Crimp & Cleave technique has been specifically developed for HCS fibers. The termination takes less than 2 minutes per end.

Maintenance of all tools can quickly be carried out at LASER COMPONENTS.



Pic. 1



Pic. 2

| Description                            | Part Number | Bore Hole | Mounting       | Note                  | Pic. |
|----------------------------------------|-------------|-----------|----------------|-----------------------|------|
| VK6-Kit 200                            | 2580157     |           | Crimp & Cleave | Termination Kit       | 1    |
| VK6-Kit 400                            | 2580161     |           | Crimp & Cleave | Termination Kit       | 1    |
| V-PIN 200S                             | 2580242     | 236 µm    | Crimp & Cleave | Cable Ø 2.2 mm, black | 2    |
| V-PIN 200S                             | 2580244     | 236 µm    | Crimp & Cleave | Cable Ø 2.2 mm, blue  |      |
| V-PIN 400S                             | 2580241     | 236 µm    | Crimp & Cleave | Cable Ø 2.2 mm, black |      |
| V-PIN 400S                             | 2580245     | 236 µm    | Crimp & Cleave | Cable Ø 2.2 mm, blue  |      |
| Other versions available upon request. |             |           |                |                       |      |

# Montagezubehör

Alle benötigten Werkzeuge und Verbrauchsmaterialien zur Steckermontage können bei LASER COMPONENTS bezogen werden.



All assembly tools and accessories needed for connectorization can be obtained from LASER COMPONENTS.

## Werkzeuge



Pic. 1



Pic. 2



Pic. 3

## Tools

| Description                                            | Part Number | Note | Pic. |
|--------------------------------------------------------|-------------|------|------|
| Polishing disc SMA                                     | 74690001    |      | 1    |
| Polishing disc ST                                      | 74690007    |      | 1    |
| Polishing disc POF 2.2                                 | 74690008    |      | 1    |
| Polishing disc FO5                                     | 74690006    |      | 1    |
| Polishing disc FC                                      | 74690036    |      | 1    |
| Polishing disc V-PIN                                   | 74690021    |      | 1    |
| Polishing disc for ferrule POF                         | 74690020    |      | 1    |
| Polishing disc for V-PIN (200/230 µm)                  | 74690037    |      | 1    |
| Polishing disc for MOST inserts male (stainless steel) | 74690038    |      | 1    |
| Polishing set POF V-PIN                                | 2594593     |      |      |
| Cutting tool for POF                                   | 74690017    |      |      |
| Kevlar scissors                                        | 2580108     |      | 2    |
| Cable stripper                                         | 2580106     |      | 2    |
| Other versions available upon request.                 |             |      |      |

| Description                            | Part Number | Note | Pic. |
|----------------------------------------|-------------|------|------|
| Fiber stripper blue 0.18/0.30          | 541001      |      | 3    |
| Fiber stripper red 0.20/0.65           | 541010      |      | 3    |
| Fiber stripper red 0.25/0.65           | 541006      |      | 3    |
| Fiber stripper red 0.30/0.90           | 541002      |      | 3    |
| Fiber stripper red 0.40/1.10           | 541003      |      | 3    |
| Fiber stripper red 0.50/1.20           | 541004      |      | 3    |
| Fiber stripper red 0.60/1.30           | 541009      |      | 3    |
| Fiber stripper red 0.80/1.40           | 541005      |      | 3    |
| Fiber stripper red 1.00/2.20           | 541007      |      | 3    |
| Fiber stripper red 0.70/1.20           | 541012      |      | 3    |
| Fiber stripper red 1.30/2.40           | 541020      |      | 3    |
| Fiber stripper red 1.10/2.20           | 541021      |      | 3    |
| Fiber stripper yellow 0.12/0.40        | 541019      |      | 3    |
| Fiber stripper yellow 0.30 – 1.00      | 541008      |      | 3    |
| Fiber stripper yellow 0.75 – 2.50      | 541011      |      | 3    |
| MediStrip 03/06                        | 7428001     |      | 3    |
| MediStrip 05/09                        | 7428002     |      | 3    |
| MediStrip 07/12                        | 7428003     |      | 3    |
| MediStrip 035/05                       | 7428004     |      | 3    |
| MediStrip 04/08                        | 7428005     |      | 3    |
| MediStrip 06/12                        | 7428009     |      | 3    |
| MediStrip 065/12                       | 7428010     |      | 3    |
| Other versions available upon request. |             |      |      |

## Fasertrenngeräte

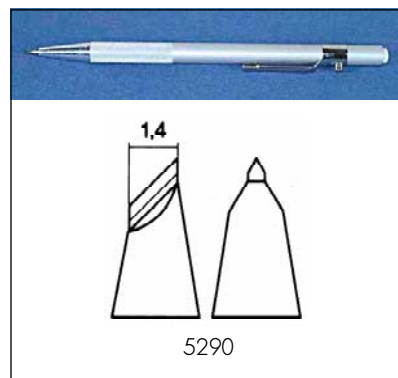
## Fiber Cleave Tools



Pic. 1



Pic. 2



Pic. 3

| Description                            | Part Number | Note                                                     | Pic. |
|----------------------------------------|-------------|----------------------------------------------------------|------|
| HSTC-2001 / Fiber Optic Cleaver        | 241001      | 80 $\mu\text{m}$ / 125 $\mu\text{m}$ / 200 $\mu\text{m}$ | 1    |
| Fiber Optic Cleaver AFC-2008           | 241003      | 125 $\mu\text{m}$                                        | 1    |
| Fiber Optic Cleave INFOCUT I.200.3     | 01741010    | 200 $\mu\text{m}$ – 1500 $\mu\text{m}$                   | 2    |
| Cleaving Knife 5290                    | 2400102     | 60° and 45°                                              | 3    |
| Other versions available upon request. |             |                                                          |      |

## Verbrauchsmaterial

## Consumables



Pic. 1

| Description                                         | Part Number | Note                               | Pic. |
|-----------------------------------------------------|-------------|------------------------------------|------|
| Epotek 353 ND                                       | 74690009    | Two components / heat curing epoxy |      |
| Polishing film 15 $\mu\text{m}$ (10 pcs)            | 542001      | Silizium Carbid / SiC              | 1    |
| Polishing film 12 $\mu\text{m}$ yellow (10 pcs)     | 542002      | AlO2                               | 1    |
| Polishing film 5 $\mu\text{m}$ brown (10 pcs)       | 542003      | AlO2                               | 1    |
| Polishing film 3 $\mu\text{m}$ pink (10 pcs)        | 542004      | AlO2                               | 1    |
| Polishing film 1 $\mu\text{m}$ light green (10 pcs) | 542005      | AlO2                               | 1    |
| Polishing film 0.3 $\mu\text{m}$ white (10 pcs)     | 542006      | AlO2                               | 1    |
| Grinding paste                                      | 74690035    | Graining size 1000                 | 1    |
| Other versions available upon request.              |             |                                    |      |

Laser Components GmbH (Germany)  
Laser Components UK Ltd. (UK)  
Laser Components IG Inc. (USA)  
Laser Components S.A.S. (France)



[www.lasercomponents.com](http://www.lasercomponents.com)

Germany:  
LASER COMPONENTS GmbH  
fon: +49 8142 2864-0  
fax: +49 8142 2864-11  
[info@lasercomponents.com](mailto:info@lasercomponents.com)

Great Britain:  
LASER COMPONENTS UK Ltd.  
Phone: +44 1245 491 499  
Fax: +44 1245 491 801  
[info@lasercomponents.co.uk](mailto:info@lasercomponents.co.uk)

USA:  
LASER COMPONENTS IG Inc.  
Phone: +1 603 821 7040  
Fax: +1 603 821 7041  
[info@laser-components.com](mailto:info@laser-components.com)

France:  
LASER COMPONENTS S.A.S.  
fon: +33 1 3959 5225  
fax: +33 1 3959 5350  
[info@lasercomponents.fr](mailto:info@lasercomponents.fr)