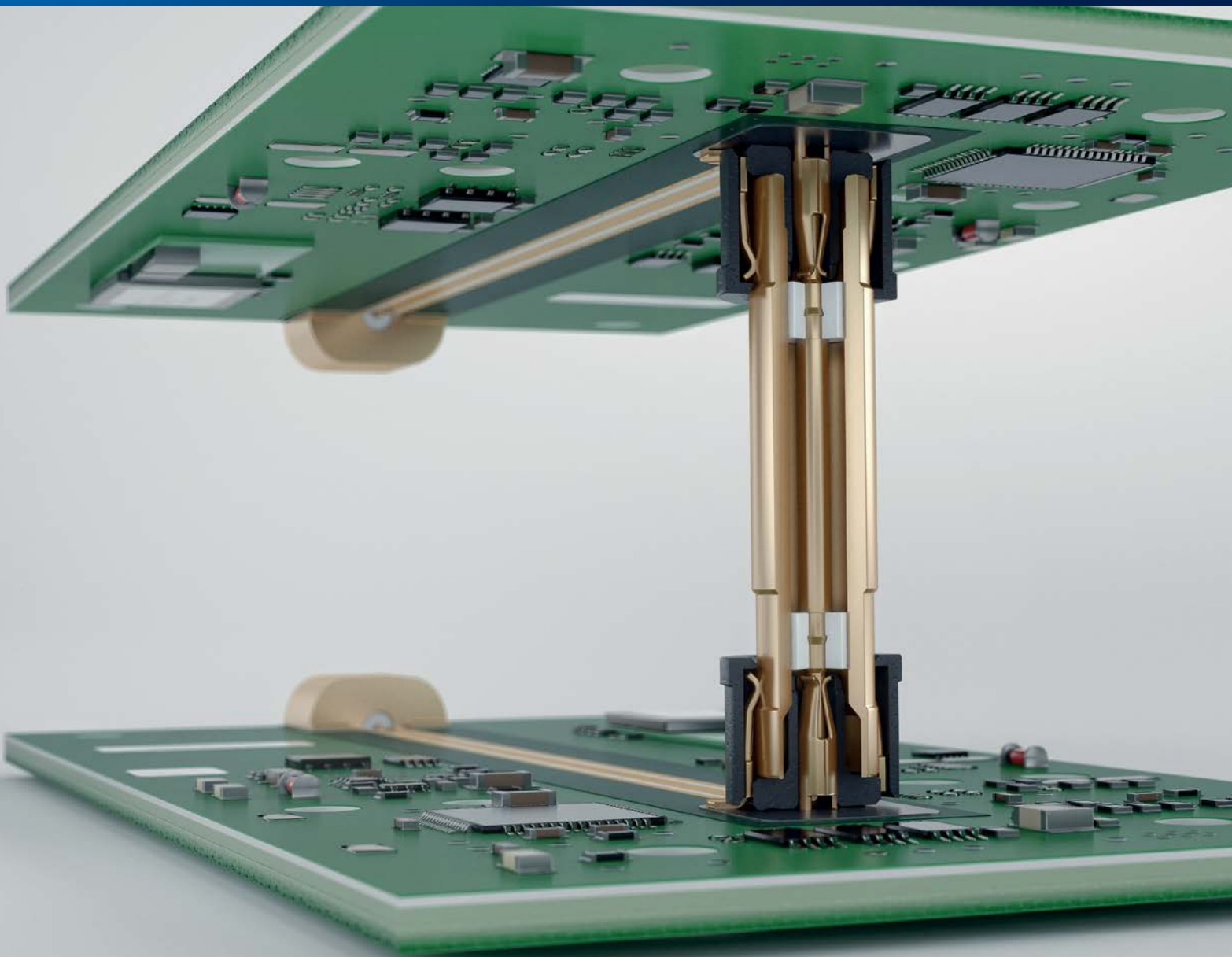


Advanced Board-to-Board Connector

## VIA® – Variable Interface Adaptor

COMMUNICATION





## Company Profile

### About Rosenberger

Rosenberger is one of the worldwide leading suppliers of controlled impedance and optical connectivity solutions, system components for mobile communications networks, data centers and test & measurement as well as high voltage contact systems. The Rosenberger Group operates manufacturing and assembly locations in over 10 countries as well as a global sales network.

### Rosenberger Communication

The Rosenberger Communication Business Area designs, manufactures and provides solutions for the communication market. In close cooperation with our customers our offering is the complete product development from the first idea to volume production.

As part of the Rosenberger Group we use the synergies of research and development, purchasing, production and sales know-how and resources around the world.

The Rosenberger Group is used to handle small and large production volumes utilizing our global manufacturing infrastructure.

### Quality and Environment

Rosenberger's quality philosophy is not just to optimize components and products, but to continuously improve and optimize all processes to ensure customer satisfaction: From product development, planning, procurement, production, sales, logistics and services to environmental policy. In summary, to offer maximum benefits to our customers all over the world.

Our quality responsibility includes being proactive in protecting our environment and natural resources. We endeavour to avoid any environmental pollution, even beyond the requirements of legal regulations whenever possible.



## VIA® – Variable Interface Adaptor

### The Efficient Board-to-Board Connection Solution

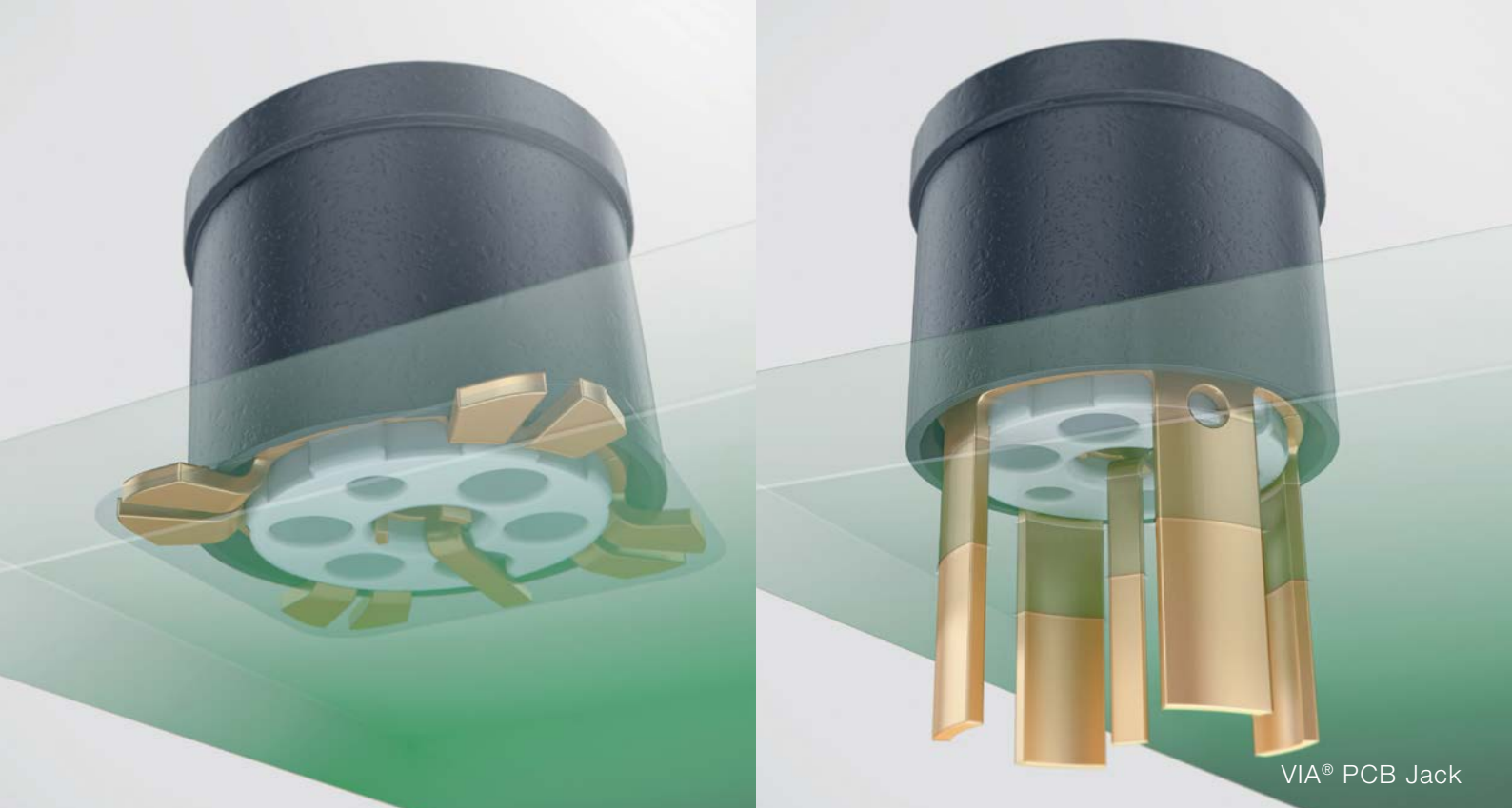
Rosenberger series VIA® is designed for board-to-board and board-to-module RF interconnections. The enhancement of the mechanical design is outstanding: limited detent and smooth bore interfaces are integrated into the adaptor – one side of the bullet is responsible for limited detent, the other side for smooth bore.



Our Rosenberger Online Catalog contains the current VIA® product range with specific details, including data sheets, assembly instructions and panel piercings.

### VIA® Advantages

- VIA® combines all advantages of board-to-board connections (SMP, Longwipe-SMP, P-SMP, MBX)
- Reliable, advanced & secure connection due to catch mechanism inside the board-to-board connection
- Blind mateable – assembling of modules is fast and save
- PCB-connector is available with pre-assembled enhanced funnel or the enhanced funnel can easily be field assembled by the customer
- Detent or smooth bore side is defined by the adaptor, due to identically constructed PCB-connectors
- Short board-to-board distance
- Compensating misalignment
- Available as SMD / THT



VIA® PCB Jack

# VIA® – Covering all the Board-to-Board Requirements

## VIA® – Board-to-Board Connection

### Product Range

The Rosenberger VIA® is covering all the requirements for multiple connections and complex mobile communication solutions in remote radio heads (RRHs) as well as in various other applications.

## VIA® Performance

### Electrical Performance

- Frequency range: DC to 6 GHz
- Power: 100 W @ 2.2 GHz @ 25 °C
- Return Loss:  $\geq 32$  dB (typ.) depending on axial misalignment
- RF leakage:  $\geq 70$  dB @ DC to 6 GHz

### Mechanical Performance

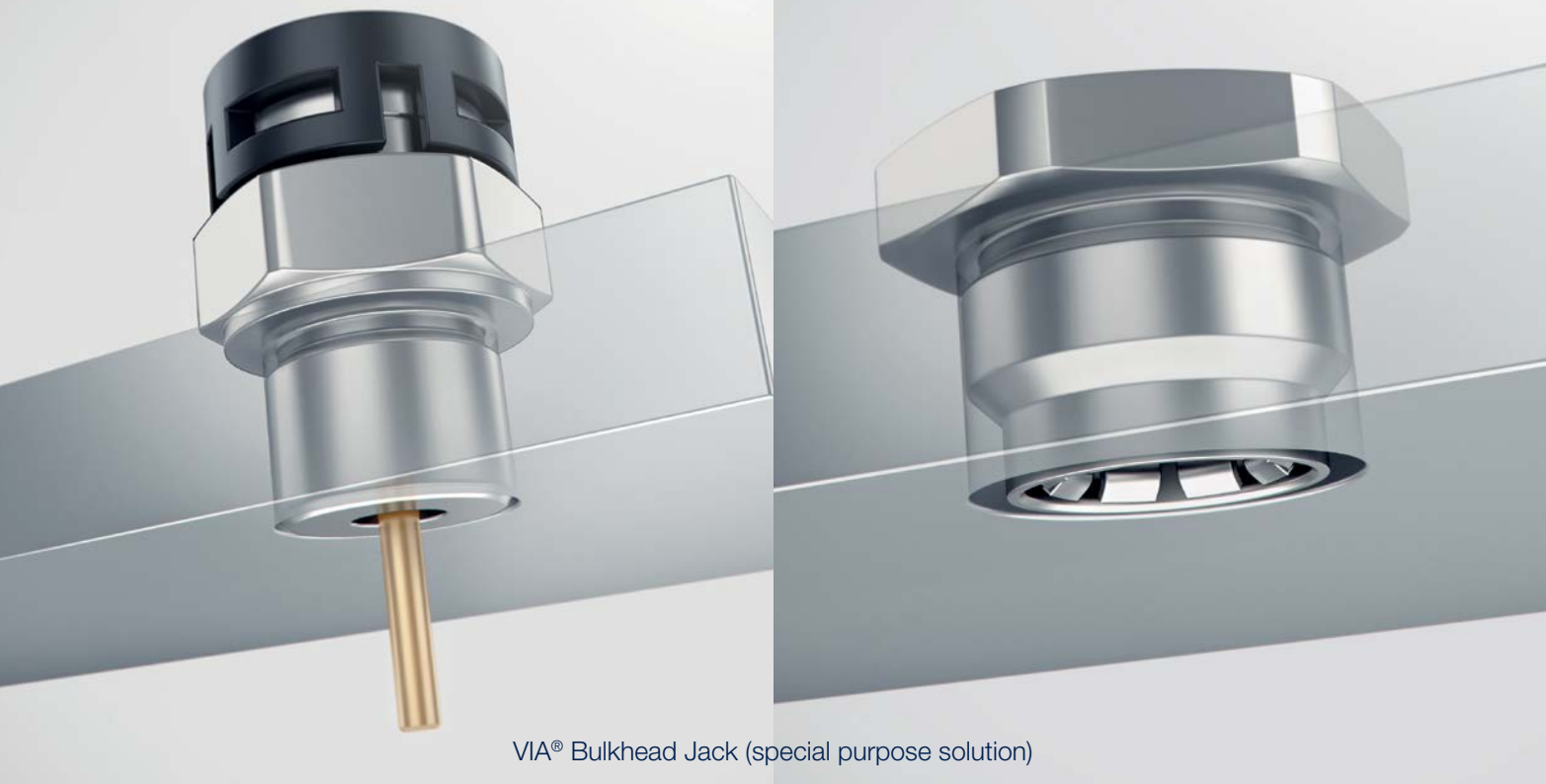
- Minimum board-to-board distance: 12 mm
- Pitch:  $> 6.5$  mm
- Axial tolerance:  $\pm 1$  mm
- Radial tolerance:
  - 4°: board-to-board distance  $< 16.5$  mm
  - 0.6 mm: board-to-board distance  $> 16.5$  mm

### Materials

- Center contact: Berylco 14 – AuroDur®
- Outer contact: Berylco 14 – AuroDur®
- Dielectric: Grivory XE 4063  
Sumikasuper  
PTFE

### VIA® PCB Jack

| Rosenberger No. | Order No. | Description       |
|-----------------|-----------|-------------------|
| B2BK101-40ML5   | 300764    | Straight Jack PCB |
| B2BK102-40ML5   | 314194    | Straight Jack PCB |
| B2BK103-40ML5   | 314880    | Straight Jack PCB |
| B2BK141-40ML5   | 315523    | Straight Jack PCB |
| B2BK101-400L5   | 311364    | Straight Jack PCB |



VIA® Bulkhead Jack (special purpose solution)

## VIA® – Unique Catch Mechanism Inside the Adaptor

### VIA® Bulkhead Jack (special purpose solution)

| Rosenberger No. | Order No. | Description              |
|-----------------|-----------|--------------------------|
| B2BK601-500L5   | 309200    | Bulkhead Jack – screw in |
| B2BK602-500L5   | 319894    | Bulkhead Jack – press in |

### Adaptor VIA® – VIA®

| Rosenberger No. | Order No. | Length [mm] | Board-to-Board-Distance [mm] |
|-----------------|-----------|-------------|------------------------------|
| B2BS101-S07L5   | 319902    | 8.50        | 12.00                        |
| B2BS101-S02L5   | 309201    | 10.00       | 13.50                        |
| B2BS101-S04L5   | 311945    | 11.00       | 14.50                        |
| B2BS101-S03L5   | 311369    | 18.80       | 22.30                        |
| B2BS101-S01L5   | 300750    | 20.25       | 23.75                        |

### Adaptor VIA® – SMA

| Rosenberger No. | Order No. | Description                          |
|-----------------|-----------|--------------------------------------|
| B2BS132-K00L5   | 319060    | Adaptor VIA® (male) – SMA (female)   |
| B2BK132-K00L5   | 319061    | Adaptor VIA® (female) – SMA (female) |

### VIA® Cable Connector

| Rosenberger No. | Order No. | Description   |
|-----------------|-----------|---|
| B2BS101-271L5   | 318626    | Straight Cable Connector Cable Flex 405 (Rosenberger Cable Group 71)    |
| B2BS201-271L5   | 318633    | Right Angle Cable Connector Cable Flex 405 (Rosenberger Cable Group 71) |



## Communication Website

For further information refer to our website:  
[www.rosenberger.com/communication](http://www.rosenberger.com/communication)

### **Rosenberger**

#### **Hochfrequenztechnik GmbH & Co. KG**

Hauptstraße 1 | 83413 Fridolfing

P.O. Box 1260 | 84526 Tittmoning

Germany

Phone +49 8684 18-0

[info@rosenberger.com](mailto:info@rosenberger.com)

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

Certified by IATF 16949 · DIN EN 9100 · ISO 9001 · ISO 14001

Order No.  
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