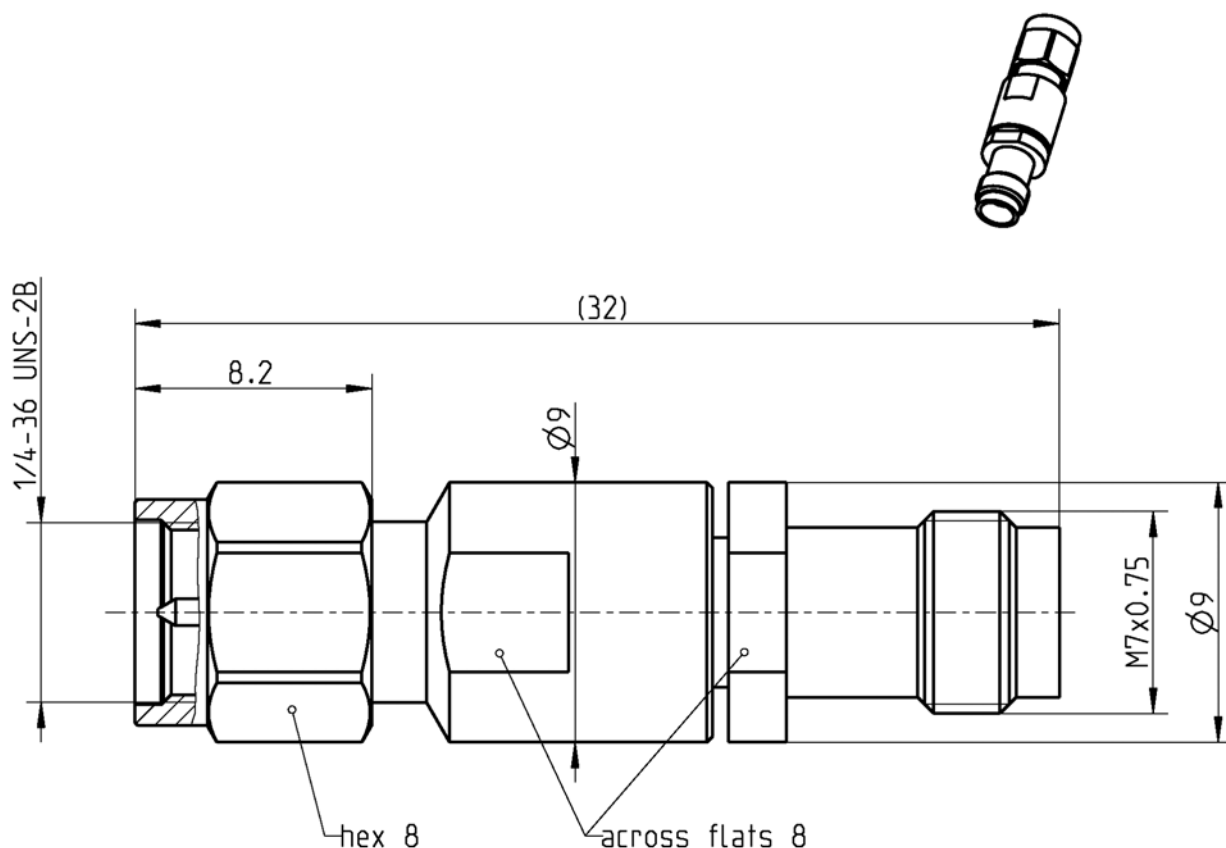




All dimensions are in mm; tolerances according to ISO 2768 m-H

#### Interface

RPC-3.50 according to  
RPC-3.50 mechanically compatible with  
RPC-2.40 mechanically compatible with

IEC 60169-23  
RPC-2.92 and SMA  
RPC-1.85

#### Documents

N/A

#### Material and plating

##### Connector parts

Center contact  
Outer contact  
Coupling nut  
Dielectric 1  
Dielectric 2  
Gasket

##### Material

Beryllium copper  
Stainless steel  
Stainless steel  
PS  
PTFE  
Silicone

##### Plating

Gold, min. 1.27 µm, over chemical nickel  
Passivated  
Passivated

# TECHNICAL DATA SHEET

**Rosenberger®**

ADAPTOR  
RPC-3.50 PLUG – RPC-2.40 JACK

**03S109-K00S3**

## Electrical data

|                                    |                                    |
|------------------------------------|------------------------------------|
| Impedance                          | 50 Ω                               |
| Frequency                          | DC to 26.5 GHz                     |
| Return loss                        | ≥ 23 dB, DC to 26.5 GHz            |
| Insertion loss                     | ≤ 0.05 x $\sqrt{f(\text{GHz})}$ dB |
| Insulation resistance              | ≥ 5 GΩ                             |
| Center contact resistance RPC-3.50 | ≤ 3.0 mΩ                           |
| Outer contact resistance RPC-3.50  | ≤ 2.0 mΩ                           |
| Center contact resistance RPC-2.40 | ≤ 4.0 mΩ                           |
| Outer contact resistance RPC-2.40  | ≤ 2.5 mΩ                           |
| Test voltage                       | 500 V rms                          |
| Working voltage                    | 150 V rms                          |
| RF-leakage                         | ≥ 100 dB up to 1 GHz               |

## Mechanical data

|                               |                    |
|-------------------------------|--------------------|
| Mating cycles                 | ≥ 500              |
| Center contact captivation    | ≥ 27 N             |
| Coupling test torque RPC-3.50 | 1.70 Nm            |
| Recommended torque RPC-3.50   | 0.80 Nm to 1.10 Nm |
| Coupling test torque RPC-2.40 | 1.65 Nm            |
| Recommended torque RPC-2.40   | 0.80 Nm to 1.10 Nm |

## Environmental data

|                     |                                      |
|---------------------|--------------------------------------|
| Temperature range   | -40°C to +85°C                       |
| Thermal shock       | MIL-STD-202, Method 107, Condition B |
| Corrosion           | MIL-STD-202, Method 101, Condition B |
| Vibration           | MIL-STD-202, Method 204, Condition D |
| Shock               | MIL-STD-202, Method 213, Condition I |
| Moisture resistance | MIL-STD-202, Method 106              |
| 2002/95/EC (RoHS)   | compliant                            |

## Tooling

N/A

## Suitable cables

N/A

## Packing

|          |              |
|----------|--------------|
| Standard | 1 pce in box |
| Weight   | 8.3 g/pce    |

While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

| Draft                                                                                                                                                  | Date     | Approved         | Date     | Rev.                                                                                                               | Engineering change number | Name           | Date          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------------------|----------|--------------------------------------------------------------------------------------------------------------------|---------------------------|----------------|---------------|
| Herbert Babinger                                                                                                                                       | 19/05/04 | J. Krautenbacher | 16/10/06 | b00                                                                                                                | 06-0478                   | S. Huber-Siegl | 16/10/06      |
| Rosenberger Hochfrequenztechnik GmbH & Co. KG<br>P.O.Box 1260 D-84526 Tittmoning Germany<br><a href="http://www.rosenberger.de">www.rosenberger.de</a> |          |                  |          | Tel.: +49 8684 18-0<br>Fax: +49 8684 18-499<br>email: <a href="mailto:info@rosenberger.de">info@rosenberger.de</a> |                           |                | Page<br>2 / 2 |