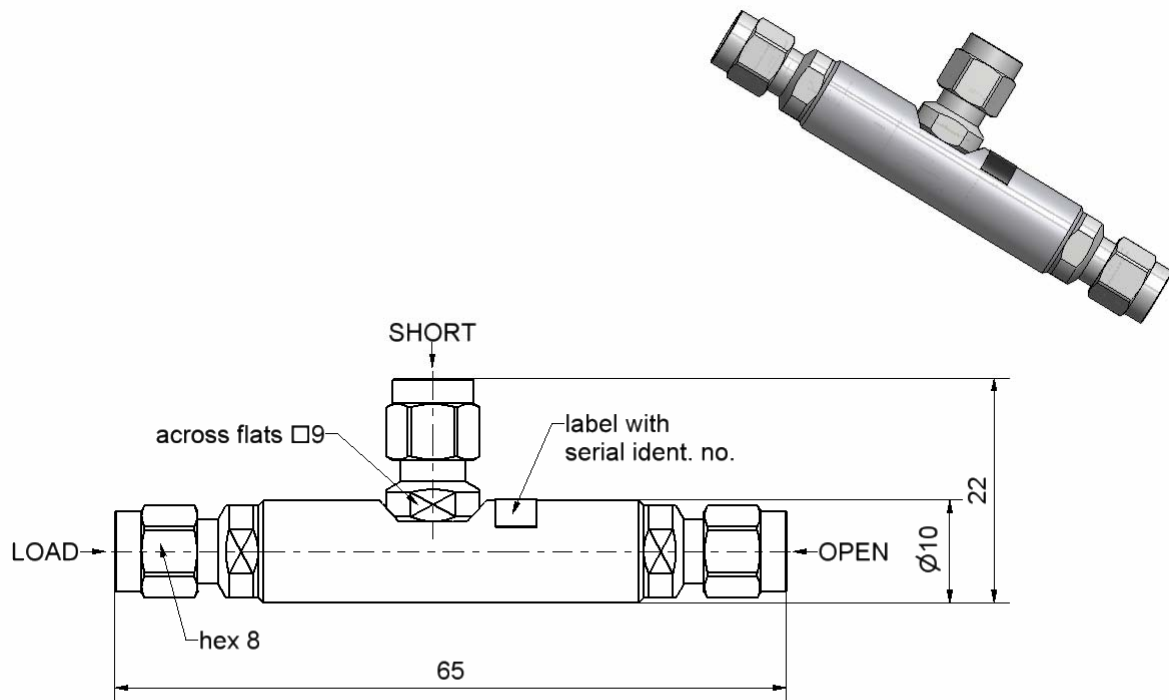




All dimensions are in mm; tolerances according to ISO 2768 m-H

### Interface

According to  
Mechanically compatible with

IEC 60169-23  
RPC-2.92 and SMA

### Documents

N/A

### Material and plating

#### Connector parts

Center contact  
Outer contact  
Body  
Coupling nut  
Dielectric  
Substrate

#### Material

Beryllium copper  
Brass  
Brass  
Brass  
PS  
AL<sub>2</sub>O<sub>3</sub>

#### Plating

Gold, min. 1.27 µm, over chemical nickel  
White bronze(e.g. Optalloy®)  
White bronze(e.g. Optalloy®)  
White bronze(e.g. Optalloy®)

**Electrical data**

|                           |                            |
|---------------------------|----------------------------|
| Impedance                 | 50 $\Omega$                |
| Frequency                 | DC to 26.5 GHz             |
| Center contact resistance | $\leq 3.0 \text{ m}\Omega$ |
| Outer contact resistance  | $\leq 2.0 \text{ m}\Omega$ |

**Open**

|                             |                                                                                                                                                                                            |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Return loss                 | $ S_{11}  \leq 0.15 \text{ dB}$ , DC to 4 GHz<br>$ S_{11}  \leq 0.30 \text{ dB}$ , 4 GHz to 26.5 GHz                                                                                       |
| Fringing capacitance        | $C_0 = 67.700 \times 10^{-15} \text{ F}$<br>$C_1 = 405.900 \times 10^{-27} \text{ F/Hz}$<br>$C_2 = -81.600 \times 10^{-36} \text{ F/Hz}^2$<br>$C_3 = 3.100 \times 10^{-45} \text{ F/Hz}^3$ |
| Resulting phase uncertainty | $ \arg(S_{11})  \leq 1.5^\circ$ , DC to 4 GHz<br>$ \arg(S_{11})  \leq 4.0^\circ$ , 4 GHz to 26.5 GHz                                                                                       |
| Offset length               | 7.00 mm                                                                                                                                                                                    |

**Short**

|                             |                                                                                                      |
|-----------------------------|------------------------------------------------------------------------------------------------------|
| Return loss                 | $ S_{11}  \leq 0.10 \text{ dB}$ , DC to 4 GHz<br>$ S_{11}  \leq 0.20 \text{ dB}$ , 4 GHz to 26.5 GHz |
| Normal phase at short plane | $\varphi = 180^\circ$                                                                                |
| Resulting phase uncertainty | $ \arg(S_{11})  \leq 1.5^\circ$ , DC to 4 GHz<br>$ \arg(S_{11})  \leq 4.0^\circ$ , 4 GHz to 26.5 GHz |
| Offset length               | 7.80 mm $\pm$ 0,02 mm                                                                                |

**Load**

|                |                                                                                    |
|----------------|------------------------------------------------------------------------------------|
| Return loss    | $\geq 40.0 \text{ dB}$ , DC to 4 GHz<br>$\geq 30.0 \text{ dB}$ , 4 GHz to 26.5 GHz |
| DC-Resistance  | 50 $\Omega \pm 0.5 \Omega$                                                         |
| Power handling | $P_{\max} = 0.5 \text{ W}$                                                         |

**Mechanical data**

|                            |                     |
|----------------------------|---------------------|
| Mating cycles              | $\geq 500$          |
| Center contact captivation | $\geq 27 \text{ N}$ |
| Coupling test torque       | 1.70 Nm             |
| Recommended torque         | 0.80 Nm to 1.10 Nm  |
| Gauge                      | 0.00 mm – 0.08 mm   |

**Environmental data**

|                   |              |
|-------------------|--------------|
| Temperature range | 0°C to +50°C |
| 2002/95/EC (RoHS) | compliant    |

**Packing**

|          |                          |
|----------|--------------------------|
| Standard | 1 pce in air cushion bag |
| Weight   | 35.0 g                   |

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          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------|----------|--------------------------------------------------------------------------------------------------------------------|---------------------------|----------------|---------------|
| Kerstin Hobrak                                                                                                                                         | 15/03/08 | Andreas Burkert | 14/08/08 | a00                                                                                                                | 08-s381                   | Kerstin Hobrak | 15/08/08      |
| 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 |