



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

**Interface**

According to IEC 61169-35  
Mechanically compatible with RPC-3.50 and SMA

**Documents**

Application note AN001 "Calibration Services"

**Documentation**

This Part is delivered with:

- **USB Stick**  
with S2p data file of the reference measurement values. Calibration Certificate as PDF file.
- **Calibration Certificate**  
Details see "Declaration of calibration" options.

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**Material and plating**

**Connector parts**

Center conductor  
Outer conductor  
Coupling nut

**Material**

CuBe  
Brass  
Stainless steel

**Plating**

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

**Mechanical data**

Mating cycles	≥ 500
Maximum torque	1.70 Nm
Recommended torque	0.90 Nm
Nominal Airline dimensions at 23 °C:	
- Diameter outer conductor	2.9235 mm
- Diameter inner conductor 50 Ω section	1.270 mm
- Diameter inner conductor 25 Ω section	1.927 mm
- Length outer conductor	75.00 mm
- Length inner conductor	75.00 mm
- Length difference (outer conductor – inner conductor)	≤ 0.04 mm
- Length 25 Ω section	50.00 mm

**Electrical verification standard**

This Mismatch Airline is designed as an electrical verification standard. Reference measurement values (calibration results) for transmission and reflection are included. Connected to a calibrated VNA the actual measured transmission and reflection values can be compared to the reference measurement values and the quality of the VNA calibration can be evaluated.

**Environmental data**

Operating temperature range <sup>1</sup>	+20 °C to +26 °C
Storage temperature range	0 °C to +50 °C
RoHS	compliant

1. This range is a recommendation. However, the mismatch airline can be used in a wider range. Any temperature change from 23 °C results in dimensional changes.

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RPC-2.92

Mismatch Airline  
Plug / Jack

**02S102-K075**

**Declaration of calibration options**

**Factory Calibration**

Standard delivery for this calibration standard includes a Factory Calibration. The Calibration Certificate issued reports individual calibration results. Reflection results are traceable to national / international standards. A S2p data file with the reference measurement values is included.

**Accredited Calibration**

Not available.

*For further, more detailed information see application note AN001 on the Rosenberger homepage.*

**Calibration interval**

Recommendation 12 months

**Packing**

Standard 1 pce in box  
Weight 21.2 g/pce  
Center conductor loose in an acrylic glass tube

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
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