# RF 35/09.14/6.2

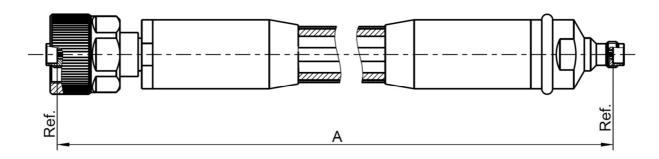
## **Technical Data Sheet**

# Rosenberger

## Cable assembly

RPC-2.40 jack / RPC-2.92 jack - RTK 106 - VA Armour

LU1-045-XXX



All dimensions are in mm; tolerances: ± 3mm for A ≤ 300 mm; ± 1% for A > 300 mm

## Available variants

Type	Insertion loss at max. Frequency	Weight (g) / pce				
LU1-045-XXX	≤ 0.00285 dB/mm * A mm + 0.60 dB	0.216 g/mm * A mm + 197 g				

XXX - length in mm = A

Note: max. Insertion Loss:

First constant = Cable attenuation in dB /mm; Second Constant = Connector left and Connector right +auxiliary Adaptor

Weight

First constant = Cable- and Armour- weight per mm; Second Constant = Connector left and Connector right weight per pce

## Assembly parts

Connector leftRPC-2.40 ruggedized jack09KR123-2U1S3Connector rightRPC-2.92 jack02K123-2U1S3CableRTK 106

Armour Metal tubing with fixed bending rate and protection braid

## Electrical data

Impedance 50  $\Omega$ 

Frequency DC to 40 GHz

Return loss<sup>1</sup>  $\geq$  26 dB, DC to 4 GHz

 $\geq$  17 dB, 4 GHz to 40 GHz

Insertion loss<sup>1</sup> see table "Available variants"

RF-leakage ≥ 100 dB up to 1 GHz

<sup>-</sup> Standard lengths are 600, 800 and 1000mm. The smallest possible length is 400mm. -

<sup>&</sup>lt;sup>1</sup> Return Loss and Insertion Loss includes the measurement adaptor

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## **Technical Data Sheet**

## Rosenberger

## Cable assembly

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LU1-045-XXX

## Stability data

Insertion loss stability:

After 90° bending ≤ 0.03 dB, DC to 4 GHz

 $\leq$  0.08 dB, 4 GHz to 40 GHz

 $\leq$  1.3°, DC to 4 GHz  $\leq$  6.0°, 4 GHz to 40 GHz

Straight after 3x90° bending ≤ 1.0°, DC to 4 GHz

 $\leq$  4.0°, 4 GHz to 40 GHz

Return loss stability:

After 90° bending  $\geq$  45 dB, DC to 4 GHz  $\geq$  35 dB, 4 GHz to 40 GHz

## Individual testing and documentation:

Stability data is tested according to the specification.

Measurement plot with all 4 S-Parameters (S11; S22; S21; S12) and the care and handling instruction are included with the cable assembly. Auxiliary adaptors used are mentioned in the commentary field.

#### Mechanical data

Minimum bend radius:

60 mm

#### **Environmental data**

Operating temperature range<sup>2</sup> +20 °C to +26 °C
Rated temperature range of use<sup>3</sup> 0 °C to +50 °C
Storage temperature range -40 °C to +85 °C
RoHS compliant

- 2 Temperature range over which these specification are valid.
- 3 This range is underneath and above the operating temperature range, within the cable assembly is fully functional and could be used without damage.

## **Recommended accessories**

Wooden case with foam inlay4

VA\_CASE-001

4 Supports two assemblies, for length 600 mm available only.

D-84526 Tittmoning



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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	17.07.06	Roland Neuhauser	14.01.20		100	20-0086	Roland Neuhauser		14.01.20	
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