# Dieses Dokument ist urheberrechtlich geschützt • This document is protected by copyright • Rosenberger Hochfrequenztechnik GmbH & Co. KG

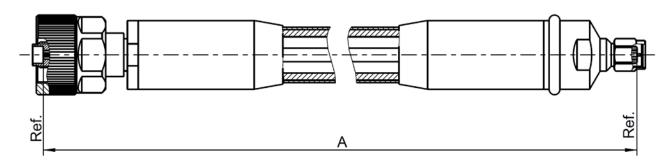
# RF\_35/09.14/6.2

# **Technical Data Sheet**

# Rosenberger

Cable assembly
RPC-2.40 jack / plug – RTK 106 – VA Armour

LU1-003-XXX



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

# **Available variants**

Type	max. Insertion loss at 40 GHz	Weight (g) / pce		
LU1-003-XXX	≤ 0.00285 dB/mm * A mm + 0.6 dB	0.216 g/mm * A mm + 188 g		

XXX - length in mm = A

Note: max. Insertion Loss:

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

Weiaht:

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

# **Assembly parts**

Connector left RPC-2.40 ruggedized jack 09KR123-2U1S3
Connector right RPC-2.40 plug 09S123-2U7S3

Cable RTK 106

Armour Metal tubing with fixed bending rate and protection braid

Rosenberger Hochfrequenztechnik GmbH & Co. KG P.O.Box 1260 D-84526 Tittmoning Germany www.rosenberger.de

Tel.: +49 8684 18-0 Email: info@rosenberger.de Page

1/2

# **Technical Data Sheet**

# Rosenberger

# Cable assembly

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

# LU1-003-XXX

## **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

Phase deviation:

After 90° bending ≤ 1.3°, DC to 4 GHz

≤ 6.0°, 4 GHz to 40 GHz

Straight after  $3x90^{\circ}$  bending  $\leq 1.0^{\circ}$ , DC to 4 GHz  $\leq 4.0^{\circ}$ , 4 GHz to 40 GHz

Amplitude stability  $\leq 0.03 \text{ dB, DC to 4 GHz}$ 

 $\leq 0.08 \text{ dB, 4 GHz to 40 GHz}$  Return loss stability  $\geq 45 \text{ dB, DC to 4 GHz}$ 

≥ 35 dB, 4 GHz to 18 GHz

RF-leakage ≥ 100 dB up to 1 GHz

## Individual testing and documentation:

Phase deviation, Amplitude stability and Return Loss stability is tested according to the specification. Measurement plot with all 4 S-Parameters (S11; S22; S21; S12) is included with the cable assembly and on the backside the care and handling instruction is printed. Measurement adaptors used are mentioned in the commentary field.

### Mechanical data

Minimum bend radius: 60 mm

# **Environmental** data

Temperature range -40°C to +85°C compliant

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
F. Reiner	25.05.16	M. Moder	08.06.16	f00	16-0803	K. Mitterer	08.06.16

Rosenberger Hochfrequenztechnik GmbH & Co. KG P.O.Box 1260 D-84526 Tittmoning Germany www.rosenberger.de

Tel. : +49 8684 18-0 Email : info@rosenberger.de Page 2/2

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