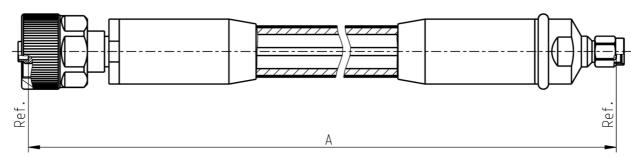
Technical Data Sheet

Rosenberger

Cable assembly

RPC-1.85 Jack / Plug - RTK 092-70 - VA Armour

LU5-107-XXX



All dimensions are in mm; tolerances: \pm 3mm for A \leq 300 mm; \pm 1% for A > 300 mm

Available variants

Type	Insertion loss at max. Frequency	Weight (g) / pce			
LU5-107-XXX	≤ 0.00639 dB/mm * A mm + 0.90 dB	0,2 g/mm * A mm + 190 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 left RPC-1.85 ruggedized jack 08KR123-2U5S3
Connector right RPC-1.85 plug 08S123-2U5S3

Cable RTK 092-70

Armour Metal tubing with fixed bending rate and protection braid

Electrical data

Impedance 50 Ω

Frequency DC to 70 GHz

Return loss¹ \geq 26 dB, DC to 4 GHz

≥ 22 dB, 4 GHz to 20 GHz ≥ 15 dB, 20 GHz to 50 GHz ≥ 14 dB, 50 GHz to 70 GHz

Insertion loss¹ see table "Available variants"

RF-leakage ≥ 100 dB up to 1 GHz

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⁻ Standard lengths are 600, 800 and 1000mm. The smallest possible length is 400mm. -

¹ Return Loss and Insertion Loss includes the measurement adaptor

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Stability data

Insertion loss stability:

After 90° bending \leq 0.03 dB, DC to 4 GHz \leq 0.10 dB, 4 GHz to 20 GHz

 \leq 0.20 dB, 20 GHz to 50 GHz \leq 0.30 dB, 50 GHz to 70 GHz

 \leq 1.0°, DC to 4 GHz \leq 3.0°, 4 GHz to 20 GHz ≤ 7.0°, 20 GHz to 70 GHz

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

> \leq 2.0°, 4 GHz to 20 GHz \leq 4.0°, 20 GHz to 70 GHz

Return loss stability:

After 90° bending \geq 45 dB, DC to 20 GHz

 \geq 35 dB, 20 GHz to 50 GHz \geq 30 dB, 50 GHz to 70 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 range² Rated temperature range of use³ Storage temperature range RoHS

+20 °C to +26 °C 0 °C to +50 °C -40 °C to +85 °C 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.



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
Martin Moder	06.02.17	Roland Neuhauser	15.01.20		d00	20-0086	Roland Neuhaus	er	14.01.20
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