



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

Available variants

Type	Insertion loss at max. Frequency	Weight (g) / pce
LU1-005-XXX	$\leq 0.00285\text{ dB/mm} * A\text{ mm} + 0.60\text{ dB}$	$0.216\text{ g/mm} * A\text{ mm} + 206.4\text{ g}$

XXX – length in mm = A

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

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-2.92 ruggedized jack	02KR123-2U1S3
Connector right	RPC-2.92 plug	02S123-2U1S3
Cable	RTK 106	
Armour	Metal tubing with fixed bending rate and protection braid	

Electrical data

Impedance	50 Ω
Frequency	DC to 40 GHz
Return loss ¹	$\geq 26\text{ dB}$, DC to 4 GHz $\geq 17\text{ dB}$, 4 GHz to 40 GHz
Insertion loss ¹	see table “Available variants”
RF-leakage	$\geq 100\text{ dB}$ up to 1 GHz

¹ Return Loss and Insertion Loss includes the measurement adaptor

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RF_35/09:14/6:2

Technical Data Sheet

Rosenberger

Cable assembly

RPC-2.92 jack / plug – RTK 106 – VA Armour

LU1-005-XXX

Stability data

Insertion loss stability:

After 90° bending
 ≤ 0.03 dB, DC to 4 GHz
 ≤ 0.08 dB, 4 GHz to 40 GHz

$\leq 1.3^\circ$, DC to 4 GHz
 $\leq 6.0^\circ$, 4 GHz to 40 GHz

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

Return loss stability:

After 90° bending
 ≥ 45 dB, DC to 4 GHz
 ≥ 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 range² +20 °C to +26 °C
Rated temperature range of use³ 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.



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