



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 $\Omega$
Frequency	DC to 40 GHz
Return loss <sup>1</sup>	$\geq 26\text{ dB}$ , DC to 4 GHz $\geq 17\text{ dB}$ , 4 GHz to 40 GHz
Insertion loss <sup>1</sup>	see table “Available variants”
RF-leakage	$\geq 100\text{ dB}$ up to 1 GHz

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

**Stability data**

Insertion loss stability:

After 90° bending  $\leq 0.03$  dB, DC to 4 GHz  
 $\leq 0.08$  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  $\geq 45$  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

<sup>2</sup> Temperature range over which these specification are valid.

<sup>3</sup> 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 inlay<sup>4</sup> VA\_CASE-001

<sup>4</sup> Supports two assemblies, for length 600 mm available only.



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