



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

**Available variants**

Type	max. Insertion loss at 18 GHz	Marking	Weight (g) / pce
LU7-042-XXX	$\leq 0.00164 \text{ dB/mm} * A \text{ mm} + 0.5 \text{ dB}$	ROSENBERGER YYY- LU7-042-XXX FAC-RRRRRRR ssss	$0,2456 \text{ g/mm} * A \text{ mm} + 181 \text{ g}$

XXX – length in mm = A  
 WW – week                      YYYY – year                      ssss – serial no.                      FAC – Factory Code                      RRRRRRR – lot nr.

Note: max. Insertion Loss:  
 First constant = Cable attenuation in dB / mm; Second Constant = Connector left and Connector right +needed 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-N 50 Ω plug	05S123-2U7S3
Connector right	RPC-N 50 Ω plug	05S123-2U7S3
Cable	RTK 162	
Armour	Metal tubing with fixed bending rate and protection braid	

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**Cable assembly**

RPC-N 50 Ω plug / plug – RTK 162 – VA Armour

**LU7-042-XXX**

**Electrical data**

Impedance	50 Ω
Frequency	DC to 18 GHz
Return loss <sup>1</sup>	≥ 28 dB, DC to 4 GHz ≥ 20 dB, 4 GHz to 18 GHz
Insertion loss <sup>1</sup>	see table available variants
Phase deviation:	
After 90° bending	≤ 0.5°, DC to 4 GHz ≤ 2.0°, 4 GHz to 18 GHz
Straight after 3x90° bending	≤ 0.5°, DC to 4 GHz ≤ 1.5°, 4 GHz to 18 GHz
Amplitude stability	≤ 0.03 dB, DC to 4 GHz ≤ 0.05 dB, 4 GHz to 18 GHz
Return loss stability	≥ 48 dB, DC to 4 GHz ≥ 40 dB, 4 GHz to 18 GHz
RF-leakage	≥ 90 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.

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

**Mechanical data**

Minimum bend radius:	60 mm
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**Environmental data**

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

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