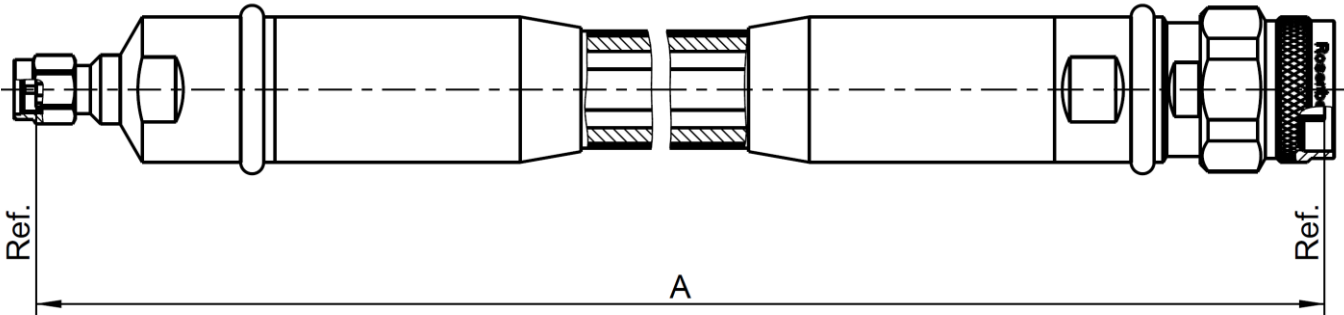


Cable assembly  
 RPC-3.50 Plug / RPC-N 50 Ω Plug – RTK 162  
 VA Armour

**LU7-120-XXX**



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

**Available variants**

Type	Insertion loss at max. Frequency	Weight (g) / pce
LU7-120-XXX	≤ 0.00164 dB/mm * A mm + 0.30 dB	0.265 g/mm * A mm + 165 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-3.50 plug	03S123-2U7S3
Connector right	RPC-N 50 Ω plug	05S123-2U7S3
Cable	RTK 162	
Armour	Metal tubing with fixed bending rate and protection braid	

**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”
RF-leakage	≥ 100 dB up to 1 GHz

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

# Technical Data Sheet

# Rosenberger

Cable assembly  
RPC-3.50 Plug / RPC-N 50 Ω Plug – RTK 162  
VA Armour

## LU7-120-XXX

### Stability data

Insertion loss stability:

After 90° bending  $\leq 0.03$  dB, DC to 4 GHz  
 $\leq 0.05$  dB, 4 GHz to 18 GHz

$\leq 0.5^\circ$ , DC to 4 GHz  
 $\leq 2.0^\circ$ , 4 GHz to 18 GHz

Straight after 3x90° bending  $\leq 0.5^\circ$ , DC to 4 GHz  
 $\leq 1.5^\circ$ , 4 GHz to 18 GHz

Return loss stability:

After 90° bending  $\geq 48$  dB, DC to 4 GHz  
 $\geq 40$  dB, 4 GHz to 18 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.



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
Herbert Babinger	31.07.07	Roland Neuhauser	27.01.20	e00	20-s032	M. Knoll	27.01.20
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