



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	max. Insertion loss at 50 GHz	Weight (g) / pce
LU8-005-XXX	$\leq 0.00397\text{ dB/mm} * A\text{ mm} + 0.70\text{ dB}$	$0.206\text{ g/mm} * A\text{ mm} + 150\text{ g}$

XXX – length in mm = A

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

**Assembly parts**

Connector left	RPC-2.40 ruggedized jack	09KR123-2U8S3
Connector right	RPC-2.40 plug	09S123-2U8S3
Cable	RTK 125	
Armour	Metal tubing with fixed bending rate and protection braid	

**Electrical data**

Impedance	50 $\Omega$
Frequency	DC to 50 GHz
Return loss	$\geq 26\text{ dB}$ , DC to 4 GHz $\geq 17\text{ dB}$ , 4 GHz to 50 GHz
Insertion loss	see table available variants
After 90° bending	$\leq 1.3^\circ$ , DC to 4 GHz $\leq 7.0^\circ$ , 4 GHz to 50 GHz
Straight after 3x90° bending	$\leq 1.0^\circ$ , DC to 4 GHz $\leq 4.5^\circ$ , 4 GHz to 50 GHz
Amplitude stability	$\leq 0.03\text{ dB}$ , DC to 4 GHz $\leq 0.08\text{ dB}$ , 4 GHz to 50 GHz
Return loss stability	$\geq 45\text{ dB}$ , DC to 4 GHz $\geq 35\text{ dB}$ , 4 GHz to 50 GHz
Shielding Effectiveness	$\geq 100\text{ dB}$ up to 1 GHz

Individual testing and documentation:

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.

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# Technical Data Sheet

# Rosenberger

Cable assembly  
RPC-2.40 JACK – RTK 125 Cable – RPC-2.40 PLUG

## LU8-005-XXX

### Mechanical data

Minimum bend radius: 60 mm

### Environmental data

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

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Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
Martin Moder	18.08.14	Herbert Babinger	08.06.16	g00	16-0803	K. Mitterer	08.06.16

  

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