



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	Weight (g) / pce
LU7-039-XXX	$\leq 0.00203\text{ dB/mm} * A\text{ mm} + 0.4\text{ dB}$	$0.2456\text{ g/mm} * A\text{ mm} + 206\text{ g}$

XXX – length in mm = A

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

Documents

Technical data sheet connector left	RPC-3.50 plug	03S123-2U7S3
Technical data sheet connector right	RPC-3.50 ruggedized jack	03KR123-2U7S3
Technical data sheet cable	RTK 162	
Calibration of measuring equipment for electrical quantities - Characterisation of HF measuring cables	VDI/VDE/DGQ/DKD 2622 Part 19	

Assembly parts

Connector left	RPC-3.50 plug	03S123-2U7S3
Connector right	RPC-3.50 ruggedized jack	03KR123-2U7S3
Cable	RTK 162	
Armour	Metal tubing with fixed bending rate and protection braid	

Cable assembly

RPC-3.50 Plug / Jack– RTK 162 - VA Armour

LU7-039-XXX

Electrical data

Impedance	50 Ω
Frequency	DC to 26.5 GHz
Return loss ¹	≥ 26 dB, DC to 4 GHz ≥ 20 dB, 4 GHz to 26.5 GHz
Insertion loss ¹	see table “Available variants”
RF-leakage	≥ 100 dB up to 1 GHz

¹ Return Loss and Insertion Loss includes the measurement adaptor

**Stability data
(acc. VDI/VDE/DGQ/DKD 2622 part 19)**

Insertion loss stability:	
After 90° bending	≤ 0.03 dB, DC to 4 GHz ≤ 0.05 dB, 4 GHz to 26.5 GHz ≤ 1.0°, DC to 4 GHz ≤ 3.0°, 4 GHz to 26.5 GHz
Straight after 3x90° bending	≤ 0.5°, DC to 4 GHz ≤ 1.5°, 4 GHz to 26.5 GHz
Return loss stability:	
After 90° bending	≥ 48 dB, DC to 4 GHz ≥ 40 dB, 4 GHz to 26.5 GHz

Individual testing and documentation:

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
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Environmental data

Operating temperature range ²	+20 °C to +26 °C
Rated temperature range of use ³	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.

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.

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