



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 26.5 GHz | Weight (g) / pce |
|-------------|--|---|
| LU7-055-XXX | $\leq 0.00203\text{ dB/mm} * A\text{ mm} + 0.40\text{ dB}$ | $0.2456\text{ g/mm} * A\text{ mm} + 190\text{ g}$ |

XXX – length in mm = A
- Standard lengths are 600, 800 and 1000mm. The smallest possible length is 400mm. -

Assembly parts

| | | |
|-----------------|---|--------------|
| Connector left | RPC-3.50 plug | 03S123-2U7S3 |
| Connector right | RPC-3.50 jack | 03K123-2U7S3 |
| Cable | RTK 162 | |
| Armour | Metal tubing with fixed bending rate and protection braid | |

Electrical data

| | |
|------------------------------|--|
| Impedance | 50 Ω |
| Frequency | DC to 26.5 GHz |
| Return loss | $\geq 26\text{ dB}$, DC to 4 GHz $\geq 20\text{ dB}$, 4 GHz to 26.5 GHz |
| Insertion loss | see table available variants |
| Phase deviation: | |
| After 90° bending | $\leq 1.0^\circ$, DC to 4 GHz $\leq 3.0^\circ$, 4 GHz to 26.5 GHz |
| Straight after 3x90° bending | $\leq 0.5^\circ$, DC to 4 GHz $\leq 1.5^\circ$, 4 GHz to 26.5 GHz |
| Amplitude stability | $\leq 0.03\text{ dB}$, DC to 4 GHz $\leq 0.05\text{ dB}$, 4 GHz to 26.5 GHz |
| Return loss stability | $\geq 48\text{ dB}$, DC to 4 GHz $\geq 40\text{ dB}$, 4 GHz to 26.5 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-3.50 PLUG – RTK 162 Cable – RPC-3.50 JACK

LU7-055-XXX

Mechanical data

Minimum bend radius: 60 mm

Environmental data

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

Packing

Standard 1 pce in box

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 |
|--------------|----------|------------------|----------|------|---------------------------|------------|----------|
| Martin Moder | 29.09.14 | Herbert Babinger | 07.10.14 | f00 | 14-s342 | Maik Knoll | 07.10.14 |

| | | |
|--|--|---------------|
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