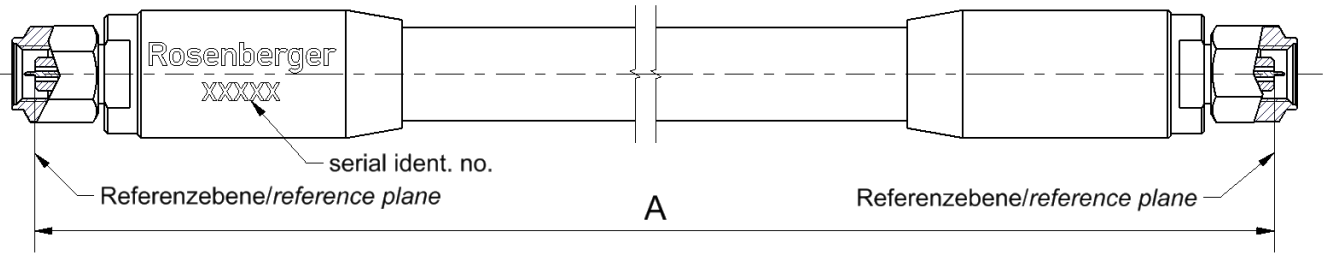


# Technical Data Sheet

# Rosenberger

Cable assembly  
RPC-1.00 Plug / Plug – UT-047-LL

## L70-281-XXX



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                                | Weight (g) / pce                                     |
|-------------|--|--|
| L70-281-XXX | $\leq 0.0013 * \sqrt{f[\text{GHz}]} \text{ dB/mm}$ | $0.0710 \text{ g/mm} * A \text{ mm} + 8.9 \text{ g}$ |

XXX – length in mm = A      Maximum possible length = 6000mm

Note:      Weight:  
First constant = Cable- and Armour- weight per mm; Second Constant = Connector left and Connector right weight per pce

### Assembly parts

|                 |  |
|-----------------|--|
| Connector left  | RPC-1.00 plug  |
| Connector right | RPC-1.00 plug  |
| Cable           | UT-047-LL  |
| Armour          | silicone rubber jacket over glass fiber braid / stainless steel spiral |

### Electrical data

|                |   |
|----------------|---|
| Impedance      | 50 $\Omega$   |
| Frequency      | DC to 110 GHz   |
| Return loss    | $\geq 17 \text{ dB}$ , DC to 50 GHz<br>$\geq 14 \text{ dB}$ , 50 to 110 GHz |
| Insertion loss | see table available variants  |

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.

### Mechanical data

|                      |         |
|----------------------|---------|
| Minimum bend radius: |         |
| Single               | 20.0 mm |

### Environmental data

|                   |                    |
|-------------------|--------------------|
| Temperature range | - 40 °C to +125 °C |
| RoHS              | compliant          |

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 | 10.06.15 | Markus Müller | 04.08.16 | b00  | 16-1330                   | Marcel Panicke | 04.08.16 |

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