

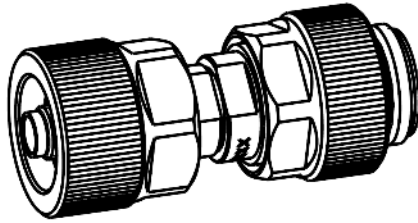
# Technical Data Sheet

# Rosenberger

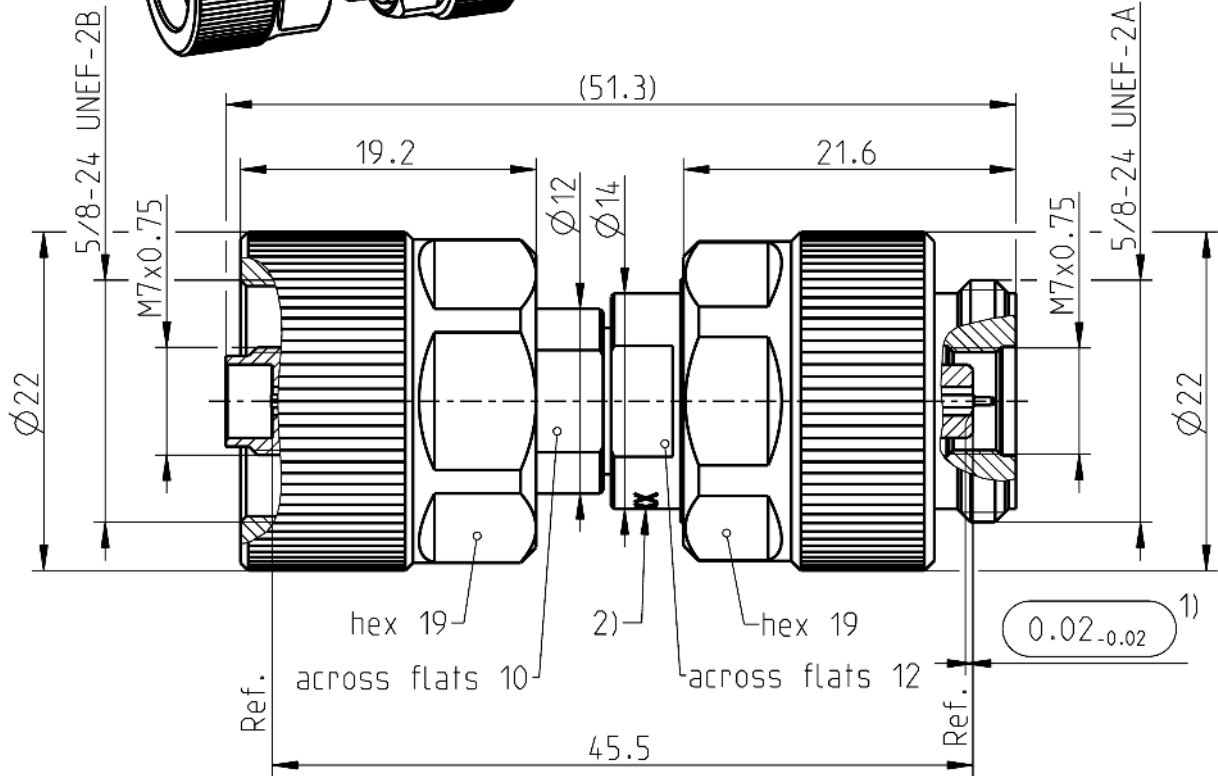
RPC-1.85

ADAPTOR  
JACK – PLUG

08KR121-SR00S3



1) Restricted connection dimension.  
2) Marking: DC to 70 GHz



All dimensions are in mm; tolerances according to ISO 2768 m-H

## Interface

According to  
Mechanically compatible with

IEC 61169-32  
RPC-2.40

## Documents

N/A

## Material and plating

### Connector parts

Center contact  
Outer contact  
Coupling nut  
Dielectric

### Material

CuBe  
Stainless steel  
Stainless steel  
PEEK

### Plating

Gold, min. 1.27  $\mu\text{m}$ , over chemical nickel  
Passivated  
Passivated

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## Electrical data

Impedance	50 Ω
Frequency	DC to 70 GHz
Return loss	≥ 28 dB, DC to 18 GHz ≥ 21 dB, 18 GHz to 50 GHz ≥ 17 dB, 50 GHz to 70 GHz
Insertion loss	≤ 0.05 x $\sqrt{f(\text{GHz})}$ dB
Insulation resistance	≥ 5 GΩ
Center contact resistance	≤ 4.0 mΩ
Outer contact resistance	≤ 2.5 mΩ
Test voltage	500 V rms
Working voltage	150 V rms
RF-leakage	≥ 100 dB up to 1 GHz

## Mechanical data

Mating cycles	≥ 500
Center contact captivation	≥ 20 N
Coupling test torque	1.65 Nm
Recommended torque	0.80 Nm to 1.10 Nm
Recommended torque ruggedized nut	1.36 Nm

## Environmental data

Temperature range	-40°C to +85°C
Thermal shock	IEC 61169-1, Subclause 9.4.4
Corrosion	IEC 61169-1, Subclause 9.4.6
Vibration	IEC 61169-1, Subclause 9.3.3
Shock	IEC 61169-1, Subclause 9.3.14
Moisture resistance 2002/95/EC (RoHS)	IEC 61169-1, Subclause 9.4.3 compliant

## Tooling

N/A

## Suitable cables

N/A

## Packing

Standard	1 pce in box
Weight	94.3 g/pce

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
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