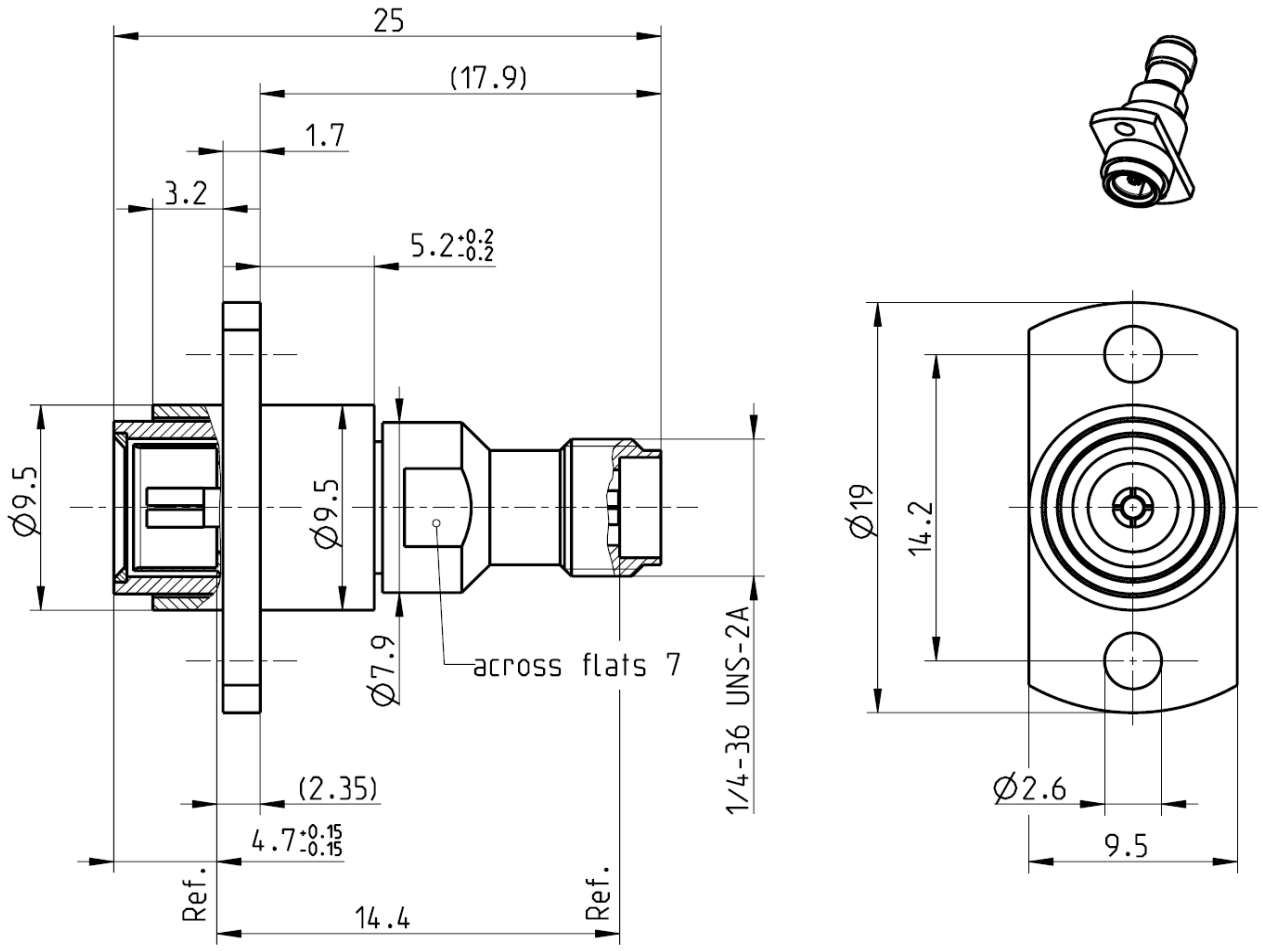
# Technical Data Sheet

Rosenberger

## Floating Adaptor
RPC-3.50 jack – RPC-SP jack

## 03K710-K22S3




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

### Interface

| | |
|---|---|
| RPC-3.50 according to | IEC 60169-23 |
| RPC-3.50 mechanically compatible with | RPC-2.92 and SMA |
| RPC-SP according to | MIL-STD 348A and IEC 61169-33 |
| RPC-SP mechanically compatible with | OSP and BMA |

### Documents

N/A

### Material and plating

| Connector parts | Material | Plating |
|---|---|---|
| Center contact | CuBe | Gold, min. 1.27 µm, over chemical nickel |
| Outer contact RPC-3.50 | Stainless steel | Passivated |
| Outer contact RPC-SP | Brass | Flash white bronze over silver(e.g. Optargen®) |
| Body | Stainless steel | Passivated |
| Flange | Stainless steel | Passivated |
| Dielectric | PS | |





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### Electrical data

| | |
|---|---|
| Impedance | 50 Ω |
| Frequency | DC to 22 GHz |
| Return loss | ≥ 26 dB, DC to 18 GHz<br>≥ 23 dB, 18 GHz to 22 GHz |
| Insertion loss | ≤ 0.05 x $\sqrt{f(GHz)}$ dB |
| Insulation resistance | ≥ 5 GΩ |
| Test voltage (at sea level) | 1000 V rms |
| Working voltage (at sea level) | 335 V rms |
| RF-leakage | ≥ 85 dB up to 1 GHz |

### Mechanical data

| | |
|---|---|
| Mating cycles RPC-3.50 | ≥ 500 |
| Mating cycles RPC-SP | ≥ 1000 |
| Center contact captivation | ≥ 27 N |
| Coupling test torque RPC-3.50 | 1.70 Nm |
| Recommended torque RPC-3.50 | 0.80 Nm to 1.10 Nm |
| Engagement force RPC-SP | ≤ 13.5 N |
| Disengagement force RPC-SP | ≥ 2 N |
| Misalignment | radial 0.15 mm min. |
| Spring force | min. 13 N at rest<br>max. 20 N at max. spring travel |
| Spring travel | 1.5 mm max |

### Environmental data

| | |
|---|---|
| Temperature range | -40°C to +85°C |
| Thermal shock | MIL-STD-202, Method 107, Condition B |
| Corrosion | MIL-STD-202, Method 101, Condition B |
| Vibration | MIL-STD-202, Method 204, Condition D |
| Shock | MIL-STD-202, Method 213, Condition I |
| Moisture resistance | MIL-STD-202, Method 106 |
| RoHS | compliant |

### Tooling

N/A

### Suitable cables

N/A

### Weight

8.9 g/pce



| Draft | Date | Approved | Date |
|---|---|---|---|
| H. Babinger | 09.04.09 | F. Reiner | 26.06.18 |

| Rev. | Engineering change number | Name | Date |
|---|---|---|---|
| b01 | 18-1026 | M. Ruf | 25.06.18 |

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