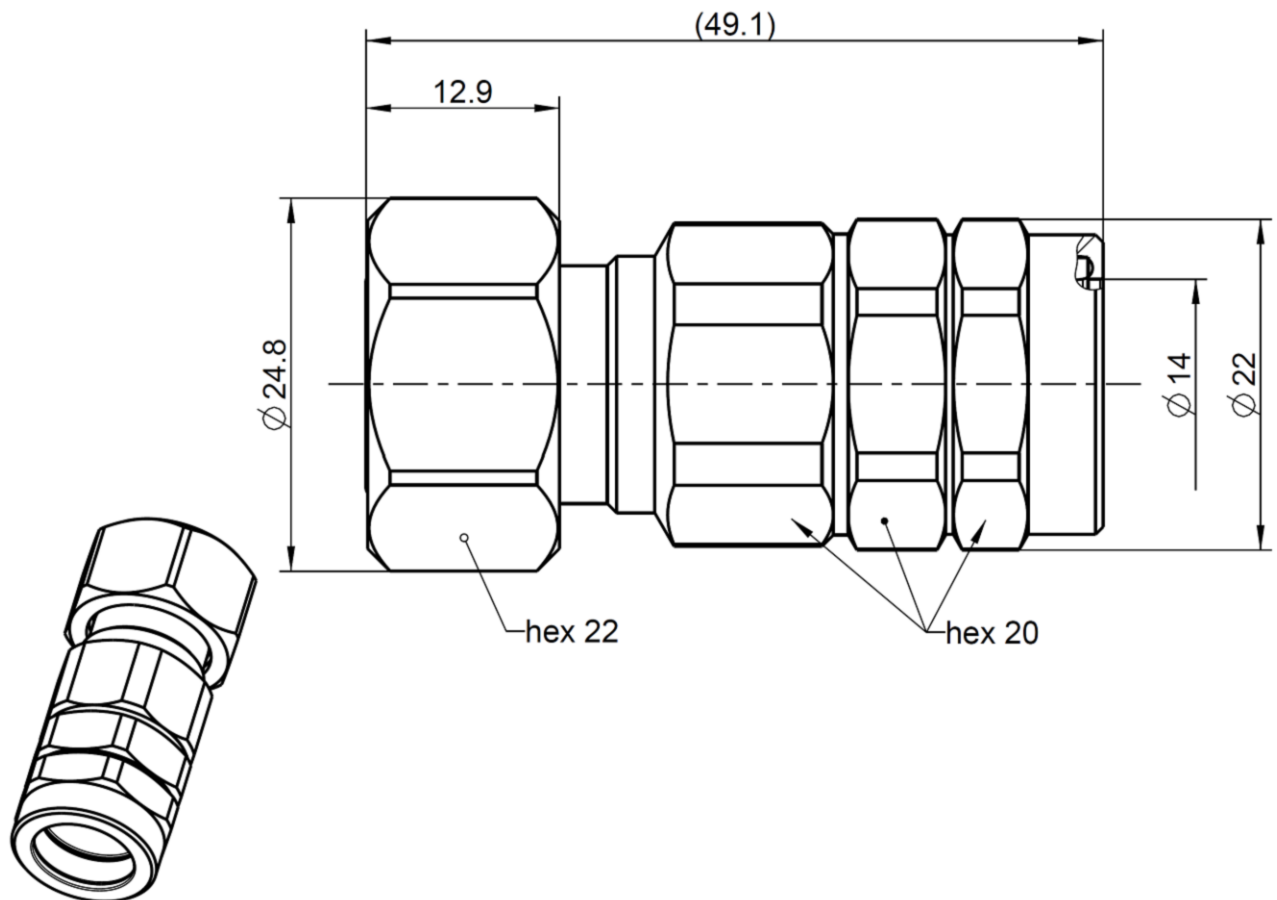




All dimensions are in mm; tolerances according to ISO 2768 m-H

#### Interface

According to IEC 61169-54

#### Documents

Assembly instruction 60 I38

#### Material and plating

##### Connector parts

Center contact  
Outer contact  
Body  
Dielectric  
Gasket

##### Material

CuBe  
Brass  
Brass  
PTFE  
Silicone

##### Plating

Silver, 3-6 µm  
Flash white bronze over silver(e.g. Optargen®)  
Flash white bronze over silver(e.g. Optargen®)

### Electrical data

|                                           |                                        |
|-------------------------------------------|----------------------------------------|
| Impedance                                 | 50 Ω                                   |
| Frequency                                 | DC to 12 GHz                           |
| Return loss                               | ≥ 35 dB @ DC to 3 GHz                  |
|                                           | ≥ 30 dB @ 3 GHz to 4 GHz               |
|                                           | ≥ 28 dB @ 4 GHz to 6 GHz               |
| Insertion loss                            | ≤ 0.05 x $\sqrt{f[\text{GHz}]}$ dB     |
| Insulation resistance                     | ≥ 5 GΩ                                 |
| Center contact resistance                 | ≤ 1.0 mΩ                               |
| Outer contact resistance                  | ≤ 1.0 mΩ                               |
| Test voltage                              | 2500 V rms                             |
| Working voltage                           | 500 V rms                              |
| RF-leakage                                | ≥ 110 dB @ DC to 6 GHz                 |
| Power handling (at 90 °C, altitude 3000m) | 500 W @ 2.0 GHz                        |
| Intermodulation (3 <sup>rd</sup> order)   | ≥ 160 dBc (2 x 46 dBm) @ 0.4 – 4.0 GHz |
|                                           | ≥ 166 dBc (2 x 43 dBm) @ 0.4 – 4.0 GHz |

- Limitations are possible due to the used cable type -

### Mechanical data

|                                   |            |
|-----------------------------------|------------|
| Mating cycles                     | ≥ 100      |
| Center contact captivation: axial | > 30 N     |
| radial                            | > 5 Ncm    |
| Center contact retention force    | 1.5 - 20 N |
| Outer contact retention force     | 4 - 35 N   |
| Recommended torque                | 5 Nm       |

### Environmental data

|                                   |                                        |
|-----------------------------------|----------------------------------------|
| Temperature range                 | -55 °C to +90 °C operating temperature |
| Thermal shock                     | IEC 61169-1 9.4.4                      |
| Corrosion resistance              | ISO 21207 method B                     |
| Vibration                         | IEC 61169-1 9.3.3 and IEC 60068-2-64   |
| Shock                             | IEC 61169-1 9.3.14                     |
| Degree of protection (mated pair) | IEC 60529, IP68 1h / 25m               |
| RoHS                              | compliant                              |

### Tooling

N/A

### Suitable cables

Flexline 1/2"S and similar

### Weight

|        |           |
|--------|-----------|
| Weight | 75.5g/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     |
|---------------|------------|--------------|----------|------|---------------------------|-----------|----------|
| F. Fraunhofer | 15.07.2013 | F.Fraunhofer | 08.03.17 | a00  | 17-s038                   | A_Wallner | 08.03.17 |

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Page  
2 of 2