

### Product Benefits



- Modular Integration in Hybrid Connectors
- High Frequency Applications

### Pages

|                                       |   |
|---------------------------------------|---|
| Products and Recommended Cables.....  | 1 |
| Dimensional Data .....                | 2 |
| Environmental & Mechanical Data ..... | 3 |
| Material & Surface Treatments .....   | 3 |
| Electrical Data .....                 | 3 |
| Tooling .....                         | 3 |

Information provided herein is believed to be accurate at time of publishing. Fischer Connectors reserves the right to make modifications on products for continuous improvement without prior notice.

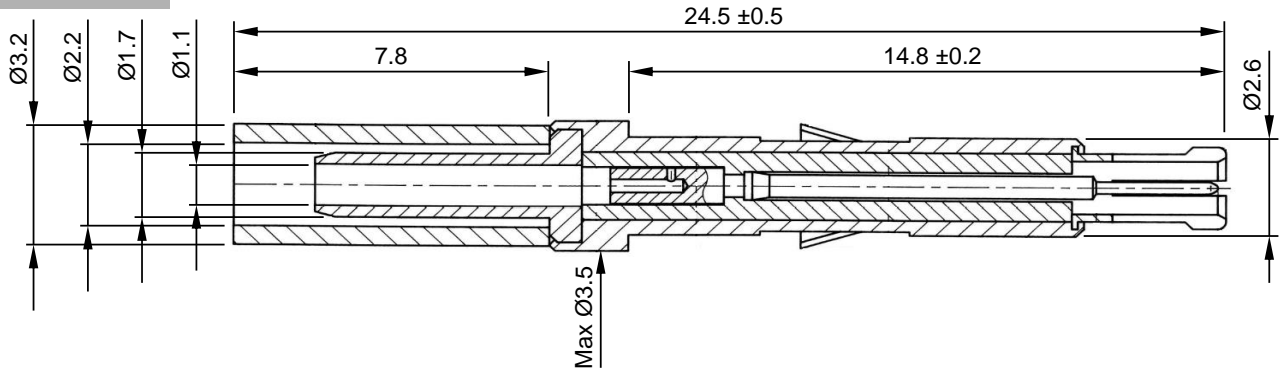
## Products and Recommended Cables

| Plug  | Jack  | Recommended Cables                                 |
|---|---|--|
|  |  |  |
| <b>E22.200.48</b>   | <b>E22.200.49</b>   | RG-178 B/U, RG-196 A/U                             |
| <b>E22.200.55</b>   | <b>E22.200.56</b>   | RG-174 B/U, RG-188 A/U, RG-316/U<br>RG-179 B/U (1) |

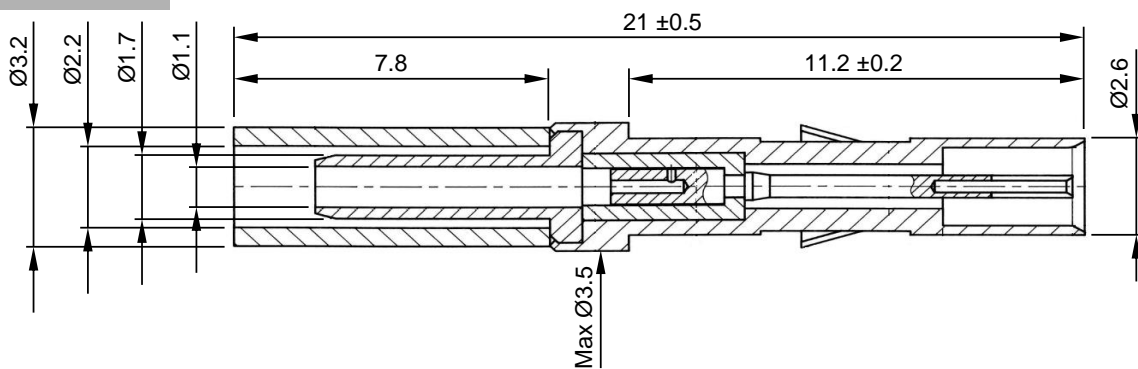
(1) RG-179 B/U (75 Ω) only up to typ. 400 MHz in a 75 Ω impedance system.  
**The center conductor shall be soldered and not crimped.**

Dimensional Data

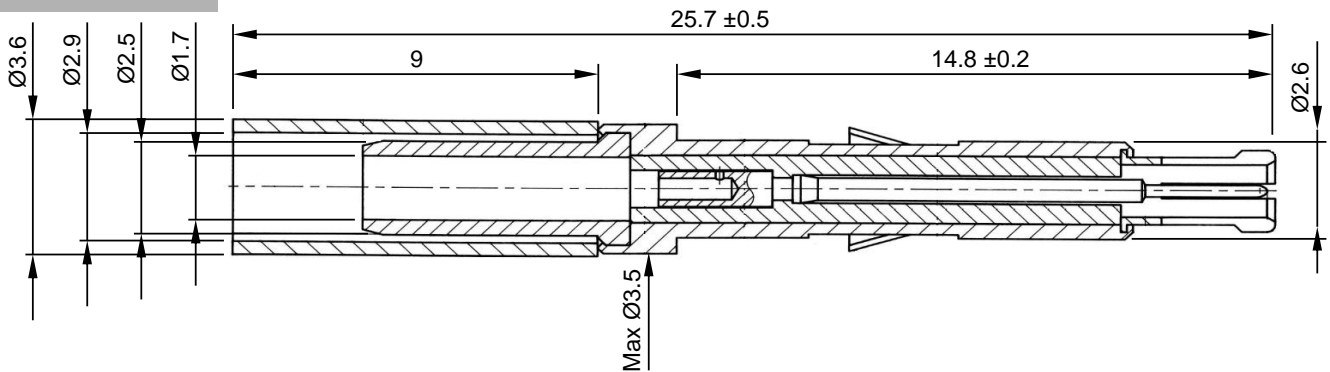
E22.200.48



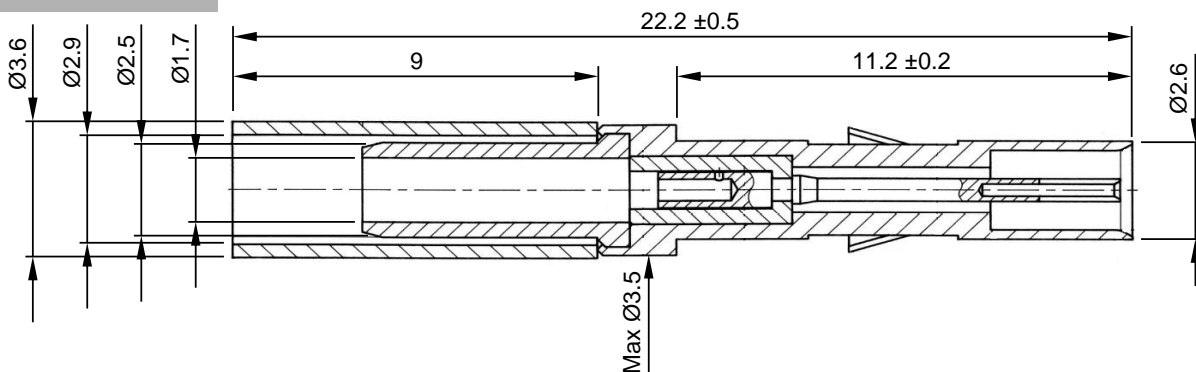
E22.200.49



E22.200.55



E22.200.56



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

### Environmental & Mechanical Data

| Characteristic                     | Value  |
|------------------------------------|--|
| <b>Operating Temperature Range</b> | -40°C to +85°C   |
| <b>Mating Cycles (durability)</b>  | >500   |
| <b>Mechanical Shock</b>            | IEC 60068-2-27<br>50 g halfsinus, 2 shocks/axis during 11 sec. |
| <b>Insertion/Extraction Force</b>  | 1 N to 4 N   |

### Electrical Data

| Characteristic               | Value  |
|------------------------------|--|
| <b>Impedance</b>             | 50 Ω <b>(1)</b>  |
| <b>Frequency</b>             | DC to 6 GHz  |
| <b>Return Loss</b>           | ≥ 32 dB, DC to 1 GHz<br>≥ 23 dB, 1 to 3 GHz<br>≥ 16 dB, 3 to 6 GHz |
| <b>Insertion Loss</b>        | ≤ 0.1 x √f(GHz) dB   |
| <b>Contact Resistance</b>    | Center Contact: ≤ 10 mΩ<br>Outer Contact: ≤ 3 mΩ                   |
| <b>Max. Current at 20°C</b>  | 500 mA   |
| <b>Operating Voltage</b>     | 500 V rms  |
| <b>Test Voltage</b>          | 750 V rms  |
| <b>RF-leakage</b>            | ≥ 80 dB up to 1 GHz<br>≥ 60 dB up to 4 GHz                         |
| <b>Insulation Resistance</b> | ≥ 1 x 10 <sup>3</sup> MΩ   |

(1) E22.200.55 and E22.200.56 can be used in a 75 Ω impedance system with cable RG-179 B/U but only up to typ. 400 MHz.


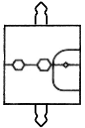

### Material & Surface Treatments

| Parts                   | Material      | Finish           |
|-------------------------|---------------|------------------|
| <b>Center Contact</b>   | CuBe          | Gold over Nickel |
| <b>Outer Contact</b>    | <b>- Plug</b> | Gold over Nickel |
|                         | <b>- Jack</b> |                  |
| <b>Body</b>             | Brass         | Gold over Nickel |
| <b>Clip</b>             | CuBe          | Nickel           |
| <b>Insulator</b>        | PTFE          | -                |
| <b>Crimping Ferrule</b> | Copper        | Gold             |

Our products are RoHS compliant and conform with the EC Directive 2002/95/EC



### Tooling

|   | Designation  | Part Number |
|---|--|-------------|
|  <p>Standards<br/>MIL-C-22520,<br/>Class I, Type 2</p> | <b>Open-End Spanners</b><br>ERMA 29020 precision crimp tool without dies for hexagon and square crimping. A light weight tool with handle span of only 130 mm.<br><b>Weight (without dies): 0.75 kg.</b><br><b>For crimping dies not larger than 8.23 mm across flats.</b><br><b>Maximum crimping dies:</b><br><b>IEC 60803-G; BSI size G.</b> | TX00.241    |
|    | <b>Crimping Dies (2)</b>   | TX00.257    |
|    | <b>Contact Extraction Tool</b>   | TX00.275    |

(2) Not usable for crimping center contact of E22.200.55 and E22.200.56 with cable RG-179 B/U. This contact shall be soldered.