

5G

**Tomorrow's
Connectivity Today.**



IEC

Designed for small cell,
DAS and MIMO applications

Coax

2.2-5 Series Connectors

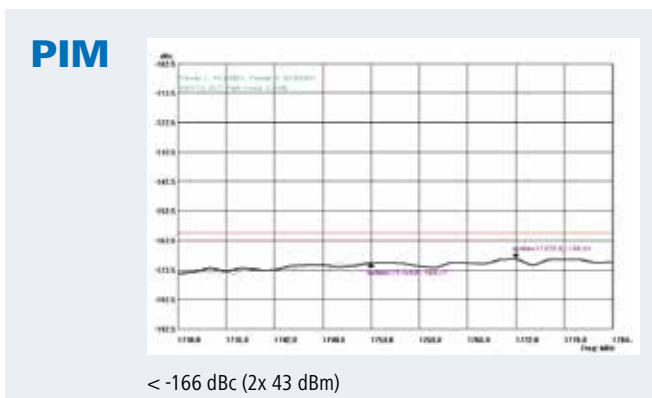
Small. Robust. PIM Stable.

Compact Design

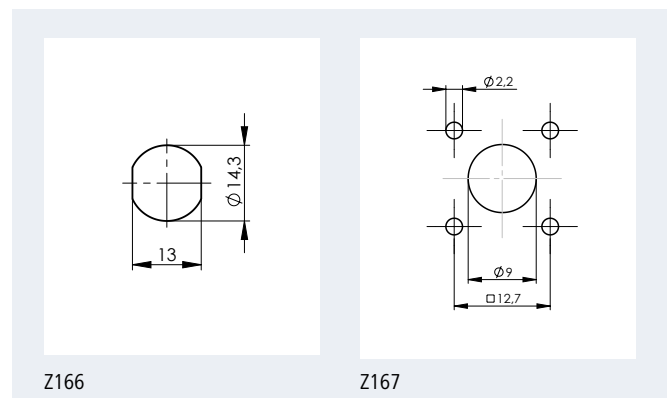


The 2.2-5 series enables a robust and PIM stable design in the smallest space. The space requirements for a typical 4 hole flange jack are only 17.4 x 17.4 mm. This is the same as the usual mounting surface for the TNC series. Therefore the 2.2-5 requires around 53 % less space than the 4.3-10 series and 70 % less space than the 7-16 series. Hand in hand with the size and material reduction, there is also a cost and weight reduction, meaning this series is ideal for small cell applications. Despite the small size, relatively thick and therefore low loss cables up to 1/2" can be used.

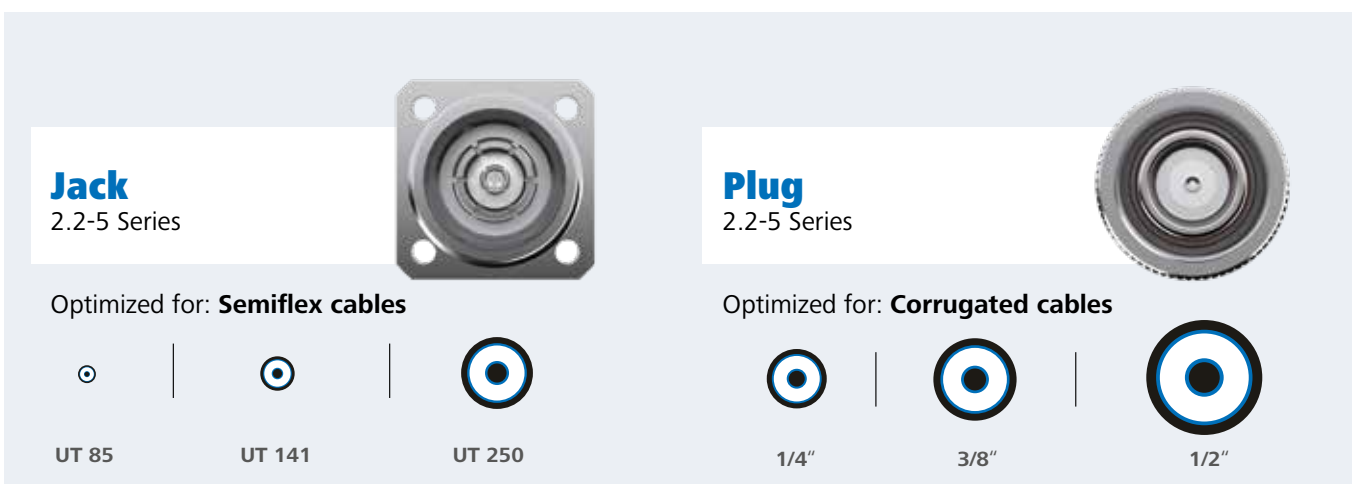
Electrical Performance



Mounting Dimension




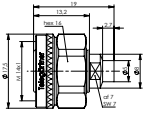

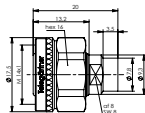

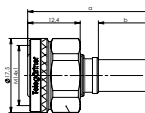
Cable Type


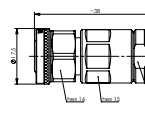



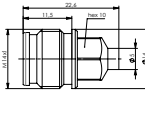
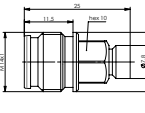
Advantages


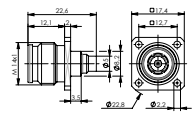
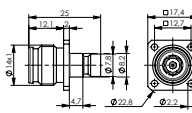
- ✓ Space and weight savings due to compact design
- ✓ Optimized for 1/4", 3/8", 1/2" corrugated cables
- ✓ Very low PIM values independent from torque and coupling mechanism
- ✓ Contact areas protected from damage even when not mated
- ✓ Screw, Handscrew and Push Pull options with same jack


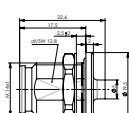
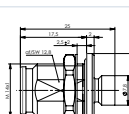
Order Information


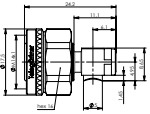

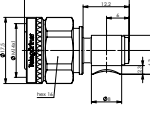
| 2.2-5 Straight Plug | | Order no. | Cable group | Type | Remark |
|---|---|-------------|-----------------------------|-----------|---------------|
|  |  | J01460A0005 | G11 (UT-85) | Screw | Solder/Solder |
| | | J01460A2005 | G11 (UT-85) | Handscrew | Solder/Solder |
| | | J01460A3005 | G11 (UT-85) | Push Pull | Solder/Solder |
| | | J01460A0003 | G10 (UT-141) | Screw | Solder/Solder |
| | | J01460A2003 | G10 (UT-141) | Handscrew | Solder/Solder |
| | | J01460A3003 | G10 (UT-141) | Push Pull | Solder/Solder |
|  |  | J01460A0006 | G9 (UT-250) / G20 1/4" Flex | Screw | Solder/Solder |
| | | J01460A2006 | G9 (UT-250) / G20 1/4" Flex | Handscrew | Solder/Solder |
| | | J01460A3006 | G9 (UT-250) / G20 1/4" Flex | Push Pull | Solder/Solder |
|  |  | J01460A0010 | G30 (1.5/3.8) | Screw | Crimp/Crimp |
| | | J01460A2010 | G30 (1.5/3.8) | Handscrew | Crimp/Crimp |
| | | J01460A3010 | G30 (1.5/3.8) | Push Pull | Crimp/Crimp |


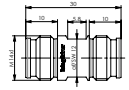

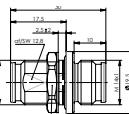

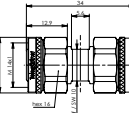

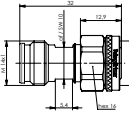

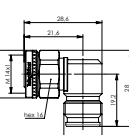
| 2.2-5 Straight Plug SIMFix | | Order no. | Cable group | Type | Remark |
|--|--|-------------|-----------------|-----------|-----------------|
|  |  | J01460A0011 | G20 (1/4" Flex) | Screw | SIMFix IP68 |
| | | J01460A2011 | G20 (1/4" Flex) | Handscrew | SIMFix IP68 |
| | | J01460A3011 | G20 (1/4" Flex) | Push Pull | SIMFix IP68 |
| | | J01460A0012 | G23 (1/2" Flex) | Screw | SIMFix Pro IP68 |
| | | J01460A2012 | G23 (1/2" Flex) | Handscrew | SIMFix Pro IP68 |
| | | J01460A3012 | G23 (1/2" Flex) | Push Pull | SIMFix Pro IP68 |

| 2.2-5 Straight Jack | | Order no. | Cable group |
|---|---|-------------|--------------|
|  |  | J01461A0008 | G11 (UT-85) |
| | | J01461A0007 | G10 (UT-141) |
| |  | J01461A0009 | G9 (UT-250) |

| 2.2-5 Panel Jack | | Order no. | Cable group | Mount. dim. |
|---|---|-------------|--------------|-------------|
|  |  | J01461A0006 | G11 (UT-85) | Z167 |
| | | J01461A0005 | G10 (UT-141) | Z167 |
| |  | J01461A0011 | G9 (UT-250) | Z167 |

| 2.2-5 Bulkhead Jack | | Order no. | Cable group | Mount. dim. |
|---|---|-------------|--------------|-------------|
|  |  | J01461A0004 | G11 (UT-85) | Z166 |
| | | J01461A0003 | G10 (UT-141) | Z166 |
| |  | J01461A0010 | G9 (UT-250) | Z166 |

| 2.2-5 Angle Plug | | Order no. | Cable group | Type | Remark |
|---|---|-------------|-----------------------|-----------|---------------|
|  |  | J01460A0008 | G10 (UT-141) | Screw | Solder/Solder |
| | | J01460A2008 | G10 (UT-141) | Handscrew | Solder/Solder |
| | | J01460A3008 | G10 (UT-141) | Push Pull | Solder/Solder |
|  |  | J01460A0009 | G9 (UT-250)/1/4" Flex | Screw | Solder/Solder |
| | | J01460A2009 | G9 (UT-250)/1/4" Flex | Handscrew | Solder/Solder |
| | | J01460A3009 | G9 (UT-250)/1/4" Flex | Push Pull | Solder/Solder |

| 2.2-5 Adaptor | | Order no. | Type / Mounting Dimensions | Remark |
|---|---|-------------|----------------------------|--------|
|  |  | J01462A0000 | | f-f |
|  |  | J01462A0001 | Z166 | f-f |
|  |  | J01462A0002 | Screw / Screw | m-m |
| | | J01462A0003 | Screw / Push Pull | m-m |
|  |  | J01462A0004 | Screw | m-f |
|  |  | J01462A0005 | Screw | m-f |


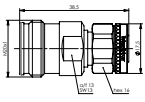

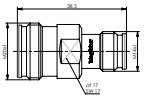

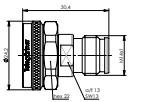

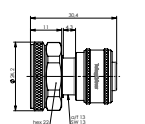

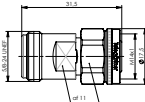

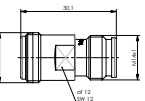

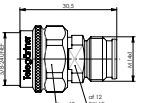

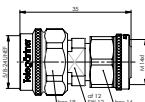

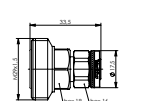

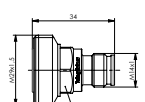

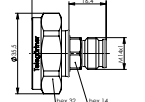

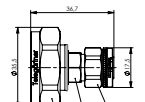
Downsized Low PIM Performance

Connectors play a decisive role in the good performance in transmission of RF signals between base stations or remote radio heads and antennas. In the future, mobile networks will require RF signal transmission to be implemented with tighter and tighter space constraints, less losses and the lowest interferences with regard to passive intermodulation. These market requirements led in the last few years to the introduction of the 4.3-10, of which Telegärtner was one of the co-developers.

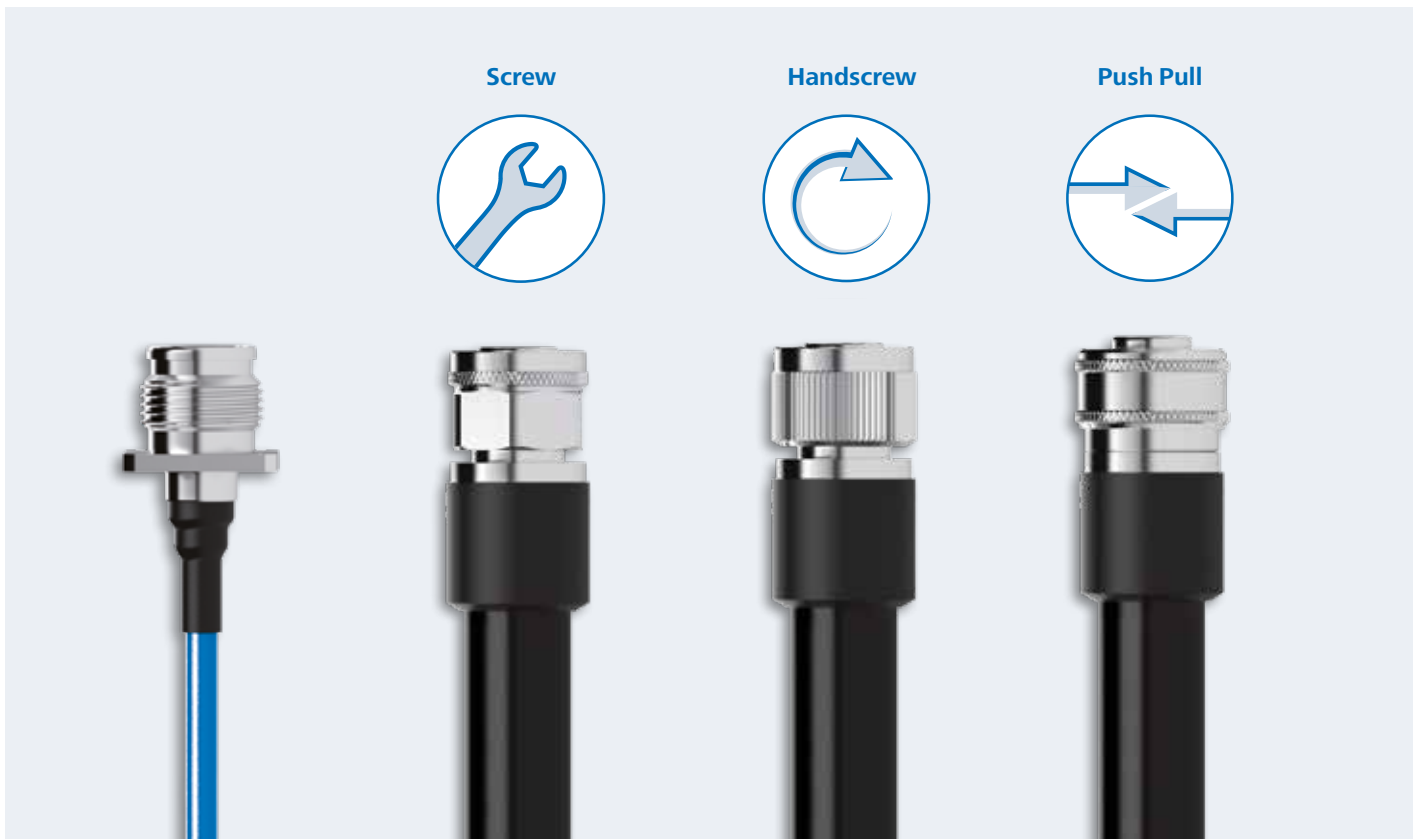
This connector is now preparing to replace the 7-16 series which has long since been seen as the market standard. However, at the same time as this, and bearing in mind small cells and 5G

requirements, the trend towards further miniaturization is pushing ahead at full pace.

The 2.2-5 series has taken the successful concept of the 4.3-10 and turned it into a smaller design. Whilst the 4.3-10 typically requires the same space as a classic N connector, the 2.2-5 only has the standard space requirements of the TNC series. Despite the clear reduction in size and weight, the 2.2-5 series possesses comparable electrical and thermo-climatic properties to the 4.3-10 series and can be used with cables up to 1/2" corrugated cable both indoors and outdoors.

| Inter Series Adaptors 4.3-10 to 2.2-5 | | Order no. | Type | Remark |
|---|---|-------------|-----------------------|--------|
|  |  | J01443A0004 | Screw | f-m |
| | | J01443A0005 | Push Pull | f-m |
|  |  | J01443A0006 | | f-f |
|  |  | J01443A0007 | Screw | m-f |
| | | J01443A0008 | Push Pull | m-f |
|  |  | J01443A0000 | Screw / Screw | m-m |
| | | J01443A0001 | Screw / Push Pull | m-m |
| | | J01443A0002 | Push Pull / Screw | m-m |
| | | J01443A0003 | Push Pull / Push Pull | m-m |
| Inter Series Adaptors N to 2.2-5 | | Order no. | Type | Remark |
|  |  | J01027A0032 | Screw | f-m |
| | | J01027A0035 | Push Pull | f-m |
|  |  | J01027A0033 | | f-f |
|  |  | J01027A0034 | | m-f |
|  |  | J01027A0036 | Screw | m-m |
| | | J01027A0037 | Push Pull | m-m |
| Inter Series Adaptors 7-16 to 2.2-5 | | Order no. | Type | Remark |
|  |  | J01122A0018 | Screw | f-m |
| | | J01122A0021 | Push Pull | f-m |
|  |  | J01122A0019 | | f-f |
|  |  | J01122A0020 | | m-f |
|  |  | J01122A0030 | Screw | m-m |
| | | J01122A0031 | Push Pull | m-m |

1 Jack. 3 Plugs.



Technical Data

| | |
|---------------------------------|--------------------------------|
| IP classification | IP68 |
| Passive intermodulation | - 166 dBc @ 2 x 43 dBm |
| Mating cycles | 100 |
| Voltage proof | 1.5 kV @ 50 Hz |
| Frequency range | up to 20 GHz (Special Version) |
| Return Loss (typ.) | up to 6 GHz - 36 dB |
| Impedance | 50 Ω |
| RoHS-conform | 2002/95/EC |
| Working temperature | -40°C to +85°C |
| Power handling | 250 W (2 GHz) |
| Recommended torque (Screw Type) | 3 Nm |

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