The RF-coaxial connector BNC 75 Ohm for flexible coaxial transmission line from 3 up to 11 mm external diameter used for installations and equipment by the telecommunication and measurement engineering with a frequency range up to 4 GHz.

It is a small, light and moisture-proof coaxial connector with bayonet catch and pin-socket-principle. This connectors are produced for the two mating compatible series 50 Ohm or 75 Ohm<sup>1</sup>. There are both designs with crimp connection or a combined solder- and clamp connection for the cable assembly available.

## Additional Cable strain relief for the solder/clamp version

The version with solder/clamp connection can be equipped with additional clamping of the cable sheath and so provide a more effective cable strain relief <sup>2</sup>.



Cable Plug solder/clamp connection with additional clamping of the cable sheath



<sup>2</sup> Additional clamping of the cable sheath on request









<sup>&</sup>lt;sup>1</sup> Notice the increase of the reflection coefficient at higher frequencies.

| Electrical Characteristics (at 20°C and 65 % rel. humidity)                                     |                                             |
|-------------------------------------------------------------------------------------------------|---------------------------------------------|
| Surge Impedance                                                                                 | 75 Ω                                        |
| Frequency range                                                                                 | 0 up to 4 GHz                               |
| Return loss (plug-socket inserted)                                                              | ≥ 18 dB                                     |
| Contact resistor (plug-socket inserted)                                                         |                                             |
| Inner conductor                                                                                 | ≤ 3 mΩ                                      |
| Outer conductor                                                                                 | ≤ 1 mΩ                                      |
| Insulation resistance                                                                           | ≥ 5 GΩ                                      |
| Test voltage U <sub>eff</sub>                                                                   |                                             |
| Connectors for cable diameter                                                                   | ≤ 4 mm 1000 V                               |
| Connectors for cable diameter                                                                   | ≥ 5 mm 1500 V                               |
| Operating voltage U <sub>eff</sub> Connectors for cable diameter  Connectors for cable diameter |                                             |
| Operating Temperature range                                                                     | 65 °C up to +165 °C                         |
| Mechanical Characteristics                                                                      |                                             |
| Durability (mating cycles)                                                                      | ≥ 1000                                      |
| RoHS                                                                                            | compliant                                   |
|                                                                                                 |                                             |
| Construction                                                                                    |                                             |
| Inner conductor                                                                                 | Brass/Beryllium copper, hard gold-plated    |
| Dielectric                                                                                      | PTFE                                        |
| Outer conductor                                                                                 |                                             |
| Suspension parts                                                                                |                                             |
| Bracket parts                                                                                   | Brass/Copper wit corrosion resistant finish |

The specified data serve only to describe the product and should not be considered legally binding, guaranteed properties. Depending on the application, design, type of cable and assembly method the specified values may differ. We reserve the right to make constructional changes, determine delivery and are not responsible for any errors and omissions.

Gasket ....... Silicon

Strain Relief Sleeve......Polyurethane (PUR)





## **Individual customized High Performance Cable Connectors**

On the basis of our 90 years of experience as Developer and Producer of high quality cable connectors we are able to provide custumer-specific solutions by manufacturing individual presicion cable connectors from Damar & Hagen.

## **Options**

| <del></del>                            |                                                            |
|----------------------------------------|------------------------------------------------------------|
| Surface                                |                                                            |
|                                        | for the layer structure and also for the layer thicknesses |
| Cable connections                      | halogen-free cables,                                       |
|                                        | two braids cable,                                          |
|                                        | multi-wire cable,                                          |
|                                        | unusual cable diameter,                                    |
|                                        | different cable length,                                    |
|                                        | additional clamping of the cable sheath,                   |
|                                        | Assembly by our company,                                   |
| Dimensions                             | all dimensions, distances, nuts, tread length              |
|                                        | mounting holes, insulation bases etc.                      |
|                                        | are variable according to customers requirement            |
| Electrically variable                  | special resistors, circuits, contacts are possible         |
| ·                                      | According to customers requirement                         |
| Insulating parts, gaskets and contacts | other colours and materials are possible                   |
| - · · · · ·                            | (e. g. Beryllium bronze for outer conductor contact)       |



