



# SUHNER® QUICK-FIT COAXIAL CONNECTORS

## Description

SUHNER QUICK-FIT connectors are worldwide approved N and 7/16 connectors for foam dielectric corrugated copper tube cables. They offer a greatly simplified and economic approach to cable preparation and assembly. The product line meets the requirements of multi-carrier, high-channel-count transceivers such as base stations of today's mobile communication infrastructure networks.

The cable entries support standard foam dielectric corrugated copper tube cables  $3/8"$ ,  $1/2"$ ,  $7/8"$ ,  $1 1/4"$  and  $1 5/8"$  and  $1/2"$  highflex SUCOFEEED as well as equivalent products from Andrew, Kabelmetal and NK-Cables.

## Features

- **low, stable and reproducible PIM (Passive Intermodulation Product)**
  - typical -165 dBc
  - excellent performance under mechanical stress and severe environmental conditions
- **safe assembly process**
  - in-field termination with reproducible electrical performance
- **quick and easy assembly**
  - 2 main connector parts, 4 steps in less than 4 minutes
- **moisture protection**
  - IP 68
- **one design per cable size simplifies logistics**

## Applications

- antenna links and internal connections of mobile phone base stations
- jumper cables and feeder lines
- Radio in the Local Loop (RLL) base stations
- in general radio transceivers with high requirements for low attenuation, PIM and VSWR

## Technical Data

ELECTRICAL DATA	REQUIREMENTS
Impedance	50 $\Omega$
Frequency range (for connector interface)	N: DC ... 11 GHz 7/16: DC ... 7.5 GHz
VSWR	$\leq 1.06$ (RL $\geq 30$ dB); $f \leq 2.5$ GHz
VSWR for types marked with (R)	$\leq 1.06$ (RL $\geq 30$ dB); $f \leq 2.0$ GHz
PIM <sup>1)</sup>	better than -155 dBc

<sup>1)</sup> Carrier to 3rd order intermodulation product ratio with 2 x 25 W carrier power,  $f \leq 1.88$  GHz

MECHANICAL DATA	REQUIREMENTS
Durability (matings)	$\geq 500$
Centre contact	captivated
Coupling nut torque	N: 0.68 ... 1.13 Nm / 0.49 ... 0.82 ft lb. 7/16: 25 ... 30 Nm / 18.05 ... 21.66 ft lb.
Coupling nut retention force	N: $\geq 450$ N / 101.2 lbs. 7/16: $\geq 1000$ N / 225.0 lbs.
Recommended coupling nut torque	N: 3 Nm / 2.2 ft lb. with 100 matings max

ENVIRONMENTAL DATA	REQUIREMENTS
Temperature range	-40°C ... +85°C / -40°F... +185°F
Moisture resistance	IP 68 (acc. to IEC 60529)

MATERIAL DATA		
CONNECTOR PART	MATERIAL	PLATING
Cable entry	Brass	SUCOPLATE®
Connector head	Brass	silver
Outer contact	Brass	
Center contact	Spring bronze	
Insulators	PTFE/PFA	
Gaskets	Rubber	