

Amphenol® RF

Global RF Solutions

FEATURES & BENEFITS

Operates at the same electrical performance as Type N up to 11 GHz

Snap-on interface for quick and easy installation

Rotatable 360° after connection for flexibility with installation

APPLICATIONS

Base Stations

Cable Assemblies

Components (Filters, Amplifiers, Combiners)

Datacom

Routers

Switching Equipment



QN Connectors

*Amphenol® RF is a member of the Quick Lock Formula® Alliance.
For further information on the QLF®, visit www.qlf.info.*

QN Connectors

Amphenol RF's QN connector is a quick disconnect version of the N connector with similar internal construction, which enables fast and easy matings with minimum space requirements. The innovative alternative to N connectors, the QN line is perfect for indoor and outdoor applications including base stations and cable assemblies. These connectors have the same benefits over threaded connectors and can be terminated to larger cables and are designed to handle higher power requirements.

The Snap-on interface makes the QN connector 10 times faster than a threaded connector and gives increased reliability with no torque or tooling required. The 360° rotatable interface makes routing of cable assembly easy, with no mechanical stress or electrical performance degradation.

Specifications

Electrical

Impedance	50 Ω
Frequency	DC - 11GHz (optimized DC - 6GHz)
Dielectric Withstanding Voltage	2500 Vrms, 50 Hz (sea level)
Working Voltage	\leq 1000 Vrms, 50 Hz (sea level)
Insulation Resistance	5 x 10 ³ M Ω min.
Power Handling	300 W @ 2.5 GHz typical
Contact Resistance	center contact: 1.5 m Ω max. (initial) outer contact: 1.5 m Ω max. (initial)
Passive Intermodulation	-155 dBc @ 1.8 GHz (2x 43 dBm carrier)
Screening Effectiveness 100 MHz to 3 GHz	-90 dB min.

Mechanical

Mating Characteristics	engagement force: 30 N typical disengagement force: 30 N typical
Interface Retention Force	450 N min.
Durability	100 mating cycles min.
Connector pitch	20 mm min. center to center

Environmental

Temperature Range	-40°C to +125°C
Climatic Category	IEC 60169-1 16.2 40/125/21
Rapid Temperature Change	IEC 60169-1 16.4 (-40°C/+125°C)
Corrosion	Saltspray test acc. to MIL-STD-202 F, method 101 D, condition B
Moisture Resistance	MIL-STD-202 F, method 106 F
Vibration	IEC-1169-1 paragraph 9.3.3 (10-500 Hz;5g)
Dust & Moisture protection	IEC 60529
IP Rating interface	IP68