

DESCRIPTION/SPECIFICATIONS/INTERFACE DIMENSIONS

N series RF connectors are high quality medium size connectors for coaxial cables from .350" to .450" OD, however designs accommodate .078" to .875" cables. The N connector is a 50 ohm constant impedance connector. VSWR is consistently low across its frequency range of 0 to 11 GHz. The mating face uses an air dielectric section. There is a 70 ohm constant impedance version (noted in the listings). The 70 ohm connector will not mate with the 50 ohm connector.

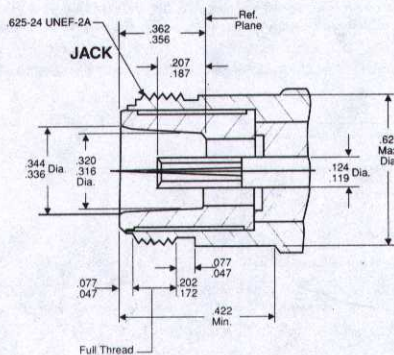
The N connector is a weatherproof unit and with its threaded coupling incurs low noise and withstands shock and vibration.

The N connector is the most popular medium size connector, widely used in test equipment. Items qualified to MIL-PRF-39012 are included in the listings and also appear in the latest QPL list for MIL-PRF-39012.

CABLE GROUPS - RG/U, M17		
D		58", 58A", 58C, 141, 141A, M17/28-RG58, M17/111-RG303
E	E-1	55A, 142, 142A, 223, 400, M17/84-RG223, M17/60-RG142, M17/128-RG400
	E-2	55", 55B", 142B, M17/84-RG223, M17/60-RG142
G	G-1	59, 59A, 59B, 62, 62A, 62B, 62C, 210, M17/29-RG59, M17/30-RG62, M17/97-RG210
	G-2	71, 71A, 71B, M17/90-RG71
K	K-1	5, 5A, 5B, 21, 21A, M17/73-RG212, M17/162-00001
	K-2	6, 6A, M17/2-RG6
	K-3	143, 143A, 212, 222, M17/112-RG304, M17/73-RG212, M17/162-00001
M	M-1	8, 8A, 213, M17/74-RG213
	M-2	11, 11A, M17/6-RG11
N	N-1	9, 9A, 9B, 214, M17/75-RG214
	N-2	13A, 216, M17/77-RG216
	N-3	225, M17/127-RG393
P		393, M17/127-RG393
R		14, 14A, 217, (224)†, M17/78-RG217, M17/165-00002
T		17A, 218, (219)†, M17/79-RG218, M17/79-RG219
U†		10, 12, 215, M17/74-RG215, M17/6-RG12

*For these cables, crimping the center contact is not recommended when crimp contact is indicated.

†Armored.



SPECIFICATIONS

ELECTRICAL

Nominal Impedance	50 ohms
Frequency Range	0 to 11 GHz
Voltage Rating	1000 volts rms
Dielectric Withstanding Voltage	2500 volts rms
Insulation Resistance	5000 megohms
VSWR (MIL-PRF-39012 cable connectors)	1.30 max. .5-11 GHz
Contact Resistance (MIL-PRF-39012 cable connectors)	
Center Contacts	1.0 milliohms
Outer Contacts (silver plate)	.2 milliohms
Insertion Loss (MIL-PRF-39012 cable connectors)	.15 dB max. at 9 GHz

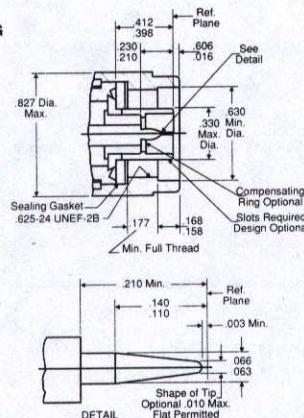
ENVIRONMENTAL

Temperature Range	PTFE Insulators: -85°F to +329°F (-65°C to +165°C) Rexolite Insulators: -67°F to +185°F (-55°C to +85°C)
Vibration	MIL-STD-202 Method 204, test condition B
Shock	MIL-STD-202 Method 213, test condition I
Corrosion (salt spray)	MIL-STD-202 Method 101, test condition B
Moisture Resistance	MIL-STD-202 Method 106
Hermetic Seals	Leakage shall not exceed 1 x 10 ⁻⁷ cc/sec of tracer gas at atmospheric pressure.
Compression Seals	Gasketed units show no leakage at 50 psi.

INTERFACE

Per MIL-PRF-39012 or MIL-STD-348 as applicable

PLUG



MECHANICAL

Mating	.625-24 threaded coupling per MIL-PRF-39012 or MIL-STD-348 as applicable
Cable Retention	
Non-crimp	75 pounds min.
Crimp	50 to 90 lbs. depending on cable size.
Center Contact Retention	15 lbs. min. axial force except 6 lbs. min. RG400 and RG142. Applicable to captivated center contact connectors only.
Connector Durability	500 cycles min.

MATERIAL

Except as noted in connector listings

Bodies & Fittings	1. Brass, ASTM-B-16 2. Stainless Steel, ASTM-A-582
Crimp Sleeves	Commercial Bronze, Alloy 220
Male Center Contacts	Brass, ASTM-B-16
Female Center Contacts	Beryllium Copper, ASTM-B-196
Male Outer Contacts	Phosphor Bronze ASTM-B-139
Insulators	PTFE, ASTM D1457
Gaskets & Seals	Silicone Rubber, ZZ-R-765a, Class IIa, Grade 50

FINISHES

Contacts	1. Standard finish on all MIL-PRF-39012 items .00005 (.0012mm) min. hard gold plate per MIL-G-45204 over .00005 (.0012mm) min. nickel plate per QQ-N-290. 2. All other items .00005" (.0012mm) min. hard gold plate per MIL-G-45204 over copper, unless otherwise specified.
Bodies & Fittings	1. Standard finish .0002" (.005mm) min. silver plate, electro-deposited per QQ-S-365A plus Kings TR-4® electrolytic chromate treatment. 2. TR-5® - Kings tarnish resistant alloy electrodeposit finish.

Specifications are typical for straight plug configurations designed to MIL-PRF-39012 and may not apply to all connectors.