

# Type N Specifications

The specifications below are general specifications for Type N connectors. Specific data is available from the factory upon request. The General, Electrical, Mechanical and Environmental Specifications in the following table are recommended for any procurement documents or drawings.

In the event of any conflict between requirements of the text specifications, General Specification MIL-PRF-39012 and the details of this table, the latter shall govern. These specifications are subject to change according to the latest revision of Specification MIL-PRF-39012.

Requirement	Specifications
<b>General</b>	
Material	Steel corrosion resistant per ASTM A-582, 300 Series, ASTM A-743, ASTM A-744 Brass Alloy per ASTM B-16 Beryllium copper per ASTM B-196 or B-197 PTFE Fluorocarbon per ASTM D-1457 Silicone Rubber per MIL-R-5847 and ZZ-R-765.
Finish	Center contacts shall be gold plated to a minimum thickness of .00005-inch in accordance with ASTM B-488, Type 2, Code C over nickel underplate. All other metal parts shall be finished so as to provide a connector which meets the corrosion requirements of this table.
Design	The design shall be such that the outline dimensions in this catalog are met. In addition, the assembled connector shall meet the interface dimensions. Dimensions are reference only unless stated.
<b>Electrical</b>	
Insulation Resistance	The insulation resistance shall not be less than 5,000 megaohms.
Dielectric Withstanding Voltage	Refer to applicable military slash sheet or consult factory.
RF High Potential Withstanding Voltage	Refer to applicable military slash sheet or consult factory.
Contact Resistance	Refer to applicable military slash sheet or consult factory.
Voltage Standing Wave Ratio (VSWR)	Refer to applicable military slash sheet or consult factory.
RF Leakage	Refer to applicable military slash sheet or consult factory.
Insertion Loss	Refer to applicable military slash sheet or consult factory.
Corona Level	Refer to applicable military slash sheet or consult factory.
<b>Mechanical</b>	
Force to Engage and Disengage	The torque required to engage and disengage shall not exceed 6 inch-pounds. The longitudinal force is not applicable.
Coupling Nut Retention Force	100 lbs. minimum. Applicable to male connectors only.
Coupling Proof Torque	30 in.-lbs. minimum. Applicable to male connectors only.
Cable Retention Force	See specific connector data sheet.
Mating Characteristics	See interface dimensions shown. Applicable to females only: oversize pin .0670 +.0001/-.0000 diameter .125 deep; Insertion force 2 lbs. maximum with .0658 minimum diameter pin; withdrawal force 2 oz. minimum with .0645 maximum diameter pin.
Connector Durability	The connector to be tested and its mating connector shall be subjected to 500 insertion and withdrawal cycles at 12 cycles per minute max. The connector shall show no evidence of mechanical failure and the connector shall meet the mating characteristic requirements.
Recommended Mating Torque	15 inch-pounds minimum
<b>Environmental</b>	
Vibration	Specification MIL-STD-202, Method 204, Test Condition B
Shock	Specification MIL-STD-202, Method 213, Test Condition I.
Thermal Shock	Refer to applicable military slash sheet or consult factory.
Corrosion (Salt Spray)	Specification MIL-STD-202, Method 101, Test Condition B. The salt solution shall be five percent
Moisture Resistance	Specification MIL-STD-202, Method 106. No measurement at high humidity. Insulation resistance shall be 200 megaohms min. within 5 minutes after removal from humidity.

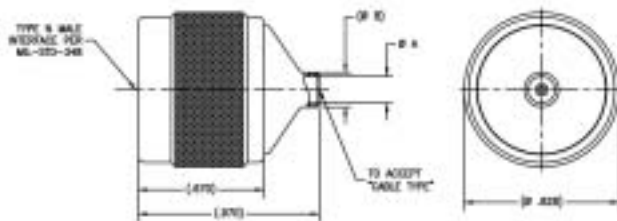
Complete specifications on every connector in this catalog are available from the factory.

# Type N Connectors

Type N Connectors

## 8009

Straight cable male  
(frequency range:  
DC-18 GHz)



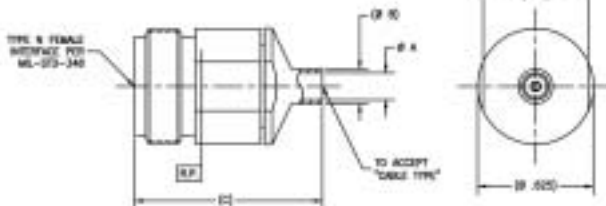
Tensolite Part No.	"A"	"B"	"C"	Semi-Rigid Cable Type
8009-1SF	.143 min.	.185	.970	.141
8009-2SF	.088 min.	.185	.970	.085
8009-3SF	.143 min.	.185	.970	.141*
8009-4SF	.253 min.	.340	1.000	.250

\*Microporous.  
Standard finish is passivated.  
Note: 4SF, utilizes center contact of cable for male pin

P8009-1, 2, 3, Refer to Assembly Instruction 102 on page 177  
P8009-4, Refer to Assembly Instruction 125 on page 200

## 8010

Straight cable female



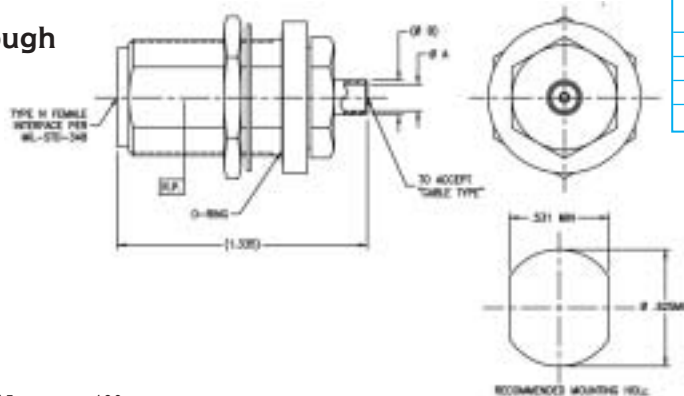
Tensolite Part No.	"A"	"B"	"C"	Semi-Rigid Cable Type
8010-1SF	.143 min.	.185	1.035	.141
8010-2SF	.088 min.	.185	1.035	.085
8010-3SF	.143 min.	.185	1.035	.141*
8010-4SF	.253 min.	.340	1.100	.250

\*Microporous.  
Standard finish is passivated.

Refer to Assembly Instruction 114 on page 189

## 8011

Bulkhead feedthrough cable female



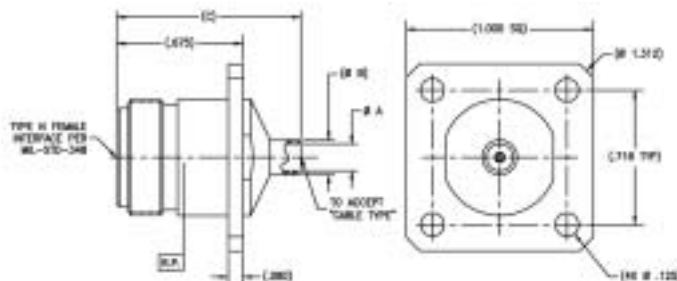
Tensolite Part No.	"A"	"B"	"C"	Semi-Rigid Cable Type
8011-1SF	.143 min.	.185	1.335	.141
8011-2SF	.088 min.	.185	1.335	.085
8011-3SF	.143 min.	.185	1.335	.141*
8011-4SF	.253 min.	.340	1.335	.250

\*Microporous.  
Standard finish is passivated.

Refer to Assembly Instruction 115 on page 190

## 8012

Flange mount cable female



Tensolite Part No.	"A"	"B"	"C"	Semi-Rigid Cable Type
8012-1SF	.143 min.	.185	1.000	.141
8012-2SF	.088 min.	.185	1.000	.085
8012-3SF	.143 min.	.185	1.000	.141*
8012-4SF	.253 min.	.340	1.065	.250

\*Microporous.  
Standard finish is passivated.

Refer to Assembly Instruction 112 on page 187

# Type N Connectors

## 8041-ISF

Straight cable male  
(Frequency range:  
DC - 18 GHz)

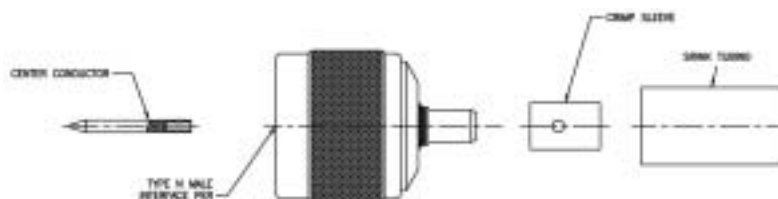


Figure 1

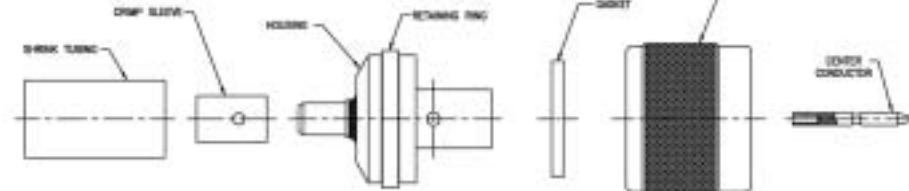


Figure 2

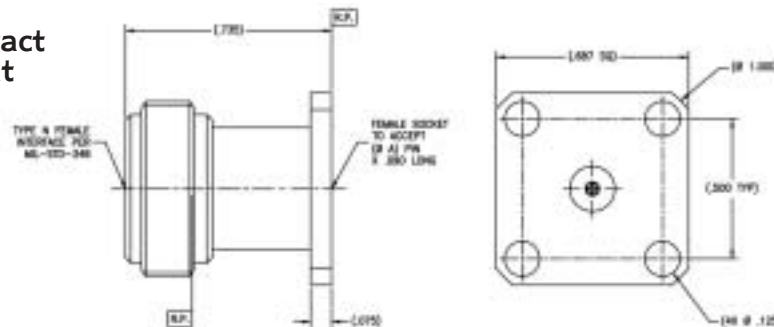
Tensolite Part No.	Flexible Cable Type
8041-1SF	RG 55/U, 58,141, 142, 223, 303, 400

Add suffix CC to part no. for captivated center contact.  
Standard finish is passivated.

Refer to Assembly Instruction 119 on page 194

## 8080

Panel mount female contact  
termination flange mount  
field replaceable

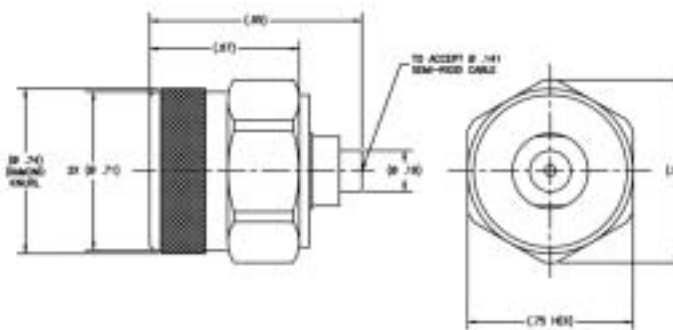


Tensolite Part No.	"A" ± .0005
8080-1CCSF	.0360
8080-2CCSF	.0200
8080-3CCSF	.0100
8080-4CCSF	.0120
8080-5CCSF	.0150
8080-6CCSF	.0180

Center contact is captivated.  
Standard finish is passivated.

## 8089-1SF

Type N male (hex nut)  
straight to Ø .141  
Semi-Rigid cable

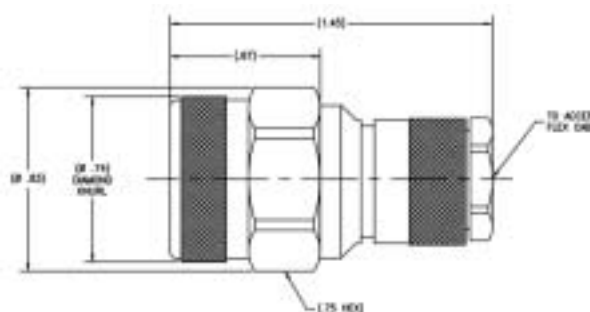


Standard finish is passivated.

Consult factory for Assembly Instructions

## 8090

Type N male (hex nut)  
straight to flex cable



Tensolite Part No.	Flexible Cable Type
8090-1SF	7-1112-301-11 (Ø .190)
8090-2SF	HFF2108 (Ø .120)

Standard finish is passivated.

Consult factory for Assembly Instructions