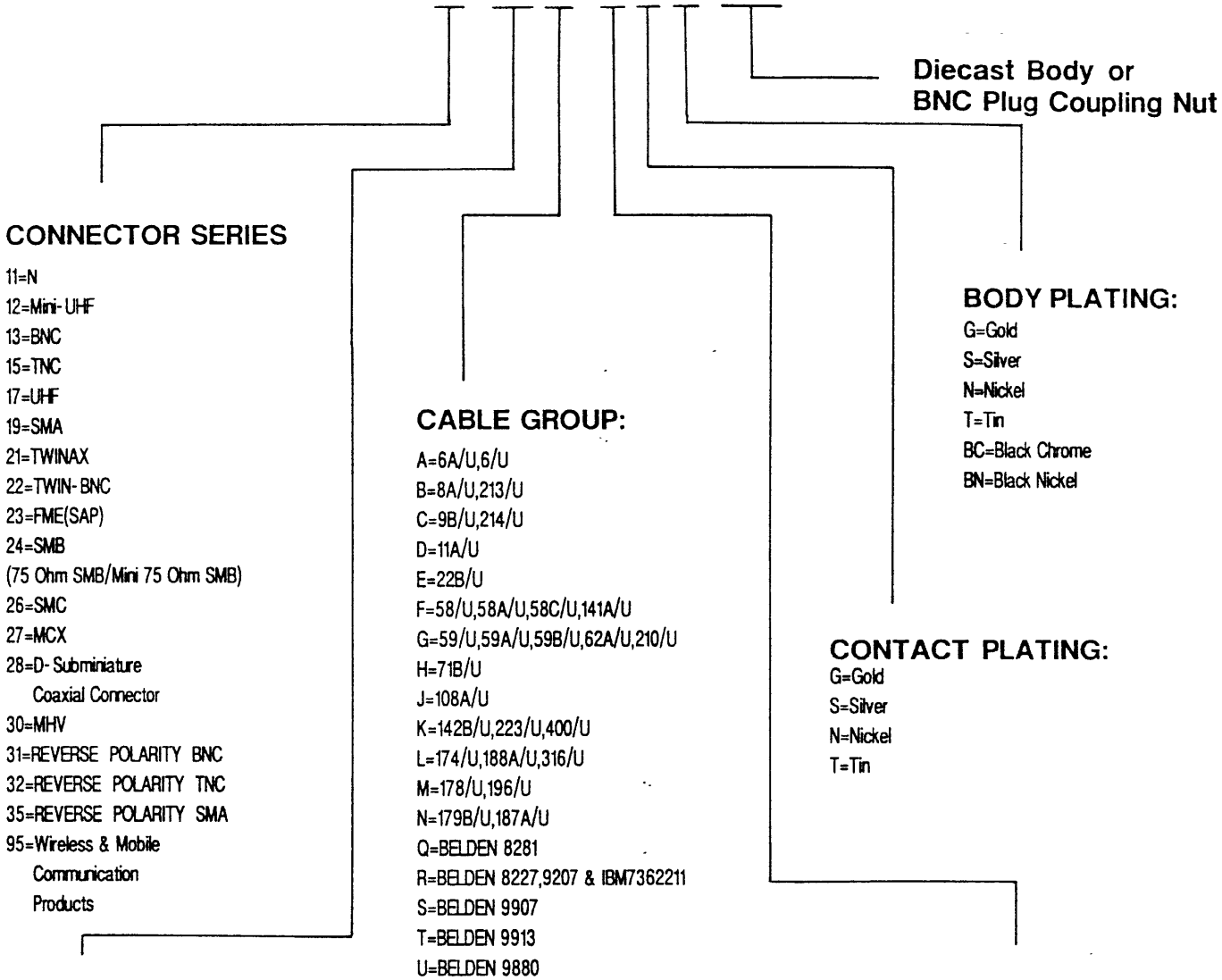
CONNECTOR CODING KEY

11-01B-TGN(/Z)



HOW TO ORDER:

1. When placing an order, please identify the part number with the appropriate cable group (if applicable), insulation material and plating. We always supply our standard insulation and plating unless otherwise specified.
2. Besides the listings in this catalogue, we offer expert custom work according to your specifications Please contact our sales staff the details
3 Stainless steel body available, please affix "ss" before part number

TNC

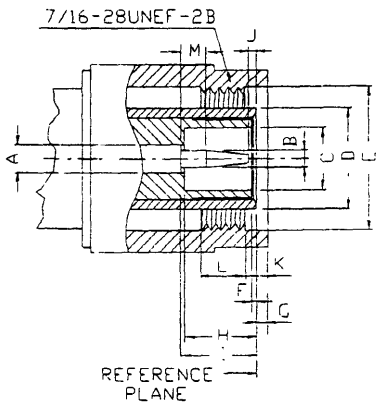
50 ohm 0-11 GHz

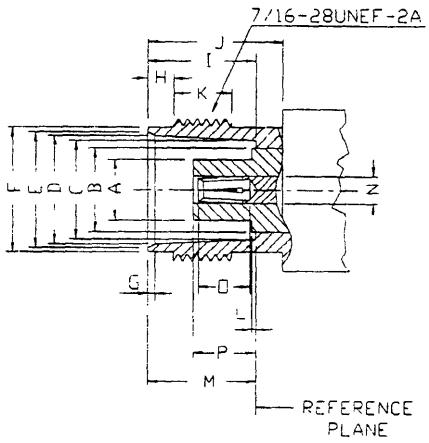
TNC series connectors are similar to BNC connectors except for their mating threaded coupling which is designed to provide low reflection from DC to 11 GHz under extreme environmental conditions, especially shock and vibration

Cable terminations are available in crimp, clamp, twist-on and solder configurations. The 7/16"-28 thread coupling provides positive mating.

Although their rugged design was initially developed for high vibration environments, TNC connectors are widely accepted and used for data transmission, medical equipment, cellular mobile telephones, test equipment, microwave components and aerospace applications.

Interface Dimensions:





PLUG

Letter	Millimeters (Inches)	
	Minimum	Maximum
A	2 06 (081)	2 21 (087)
B	1 32 (.052)	1 37 (054)
C	4 83 (.190)	–
D	–	8.08 (.318)
E	11 18 (440)	–
F	0 15 (006)	–
G	–	1 98 (078)
H	5 28 (.208)	5.79 (.228)
I	5.33 (.210)	5.84 (.230)
J	0.08 (003)	1.02 (.040)
K	1 60 (.063)	–
L	3 96 (.156)	–
M	1.98 (078)	–

JACK

Letter	Millimeters (Inches)	
	Minimum	Maximum
A	–	4.72 (186)
B	–	6.50 (.256)
C	8.10 (.319)	8 15 (.321)
D	8.31 (327)	8 46 (.333)
E	8 79 (.346)	9.04 (356)
F	9 60 (378)	9 68 (381)
G	0 38 (015)	0 77 (030)
H	1 73 (068)	2.24 (.088)
I	8 31 (.327)	8.51 (335)
J	10.52 (.414)	–
K	4 75 (.187)	–
L	–	0 15 (006)
M	4.78 (.188)	5.28 (.208)
N	2.06 (.081)	2.21 (087)
O	4.95 (.195)	–
P	4 72 (186)	5 23 (206)

Electrical:

Impedance	50 ohm	75 ohm
Frequency Range	0 to 11 0 GHz	0 to 1.0 GHz
VSWR	1.3 max	
Voltage Rating	500 volts rms max • RG-58,141,142,223 → 500 volts rms max • RG-174,188,316 → 335 volts rms max	
Dielectric Withstanding Voltage	1,500 volts rms max • RG-58,141,142,223 → 1,000 volts rms max • RG-174,188,316 → 750 volts rms max	
Contact Resistance	center contact=1 5 Milliohms max outer contact=0.2 Milliohms max	
RF Leakage	-55 dB min @3 GHz	
Insertion Loss	.2 dB max @3 GHz	
Insulation Resistance	5,000 Megohms min	

Mechanical & Environmental:

Mating	7/16"-28 threaded coupling
Cable Retention	RG-58,141,142,223 → 40 lbs min RG-59,62A,210 → 40 lbs min RG-174,188,316 → 20 lbs min
Durability	500 matings
Coupling Nut Retention	100 lbs min
Temperature Range	-65 °C to 85 °C
Vibration	MIL-STD-202 Method 204 Test Cond. B.
Salt Spray	MIL-STD-202 Method 101 Test Cond. B.

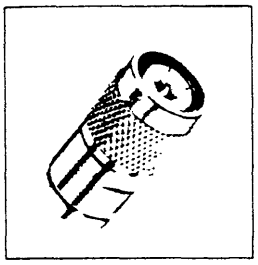
Material:

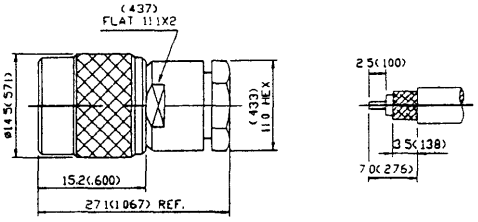
	Material	Plating
Connector Body	Brass	Nickel or Silver
Center Contact	Male:Brass Female:Brass or Phosphor Bronze, Beryllium Copper	Gold Gold
Insulation	Teflon or Delrin	None
Gasket	Silicone Rubber, Rubber	None
Crimp Ferrule	Annealed Copper	Same as Body

TNC

Flexible Cable-Clamp Attachment

Straight Plug Clamp

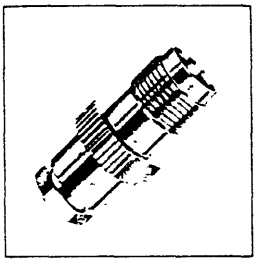


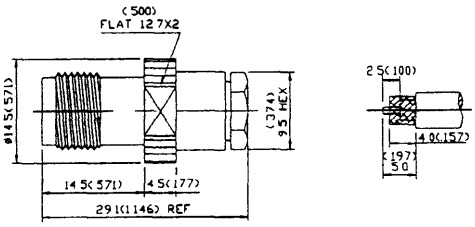


PART NO.	APPLICABLE CABLE RG/U	NOTES
15-03F-DGN	58,58A,141A	1
15-03G-DGN	59,62A,210	1

- Finish:gold plated center contact & nickel plated body
- Insulation Delrin (see Notes)
- Refer to recommended assembly instruction on page 126

Straight Jack Clamp



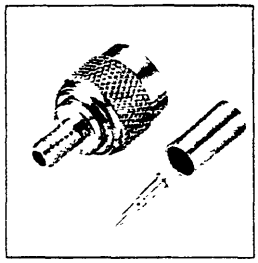


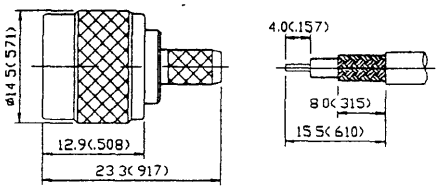
PART NO.	APPLICABLE CABLE RG/U	NOTES
15-07F-DGN	58,58A,141A	1
15-07G-DGN	59,62A,210	1

- Finish:gold plated center contact & nickel plated body
- Insulation:Delrin (see Notes)
- Refer to recommended assembly instruction on page 126

Flexible Cable-Crimp Attachment

Straight Plug Crimp

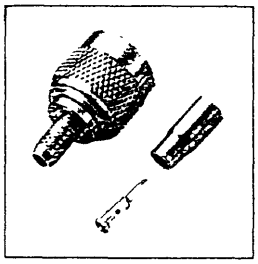


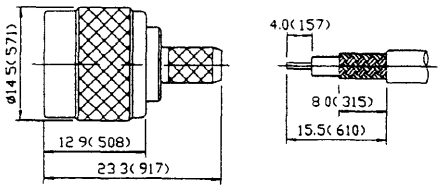


PART NO.	APPLICABLE CABLE RG/U	NOTES
15-10F-4-DGN	58,58A,141A	1
15-10G-4-DGN	59,62A,210	1

- Finish:gold plated center contact & nickel plated body
- Insulation:Delrin (see Notes)
- Captive contact
- Refer to recommended assembly instruction on page 122

Straight Plug Crimp





PART NO.	APPLICABLE CABLE RG/U	NOTES
15-10L-1-TGN	174,188A,316	
15-10N-1-TGN	179B,187A	75 ohm

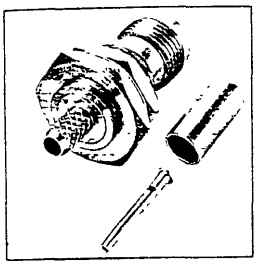
- Finish:gold plated center contact & nickel plated body
- Insulation:Teflon
- Captive contact
- Refer to recommended assembly instruction on page 122

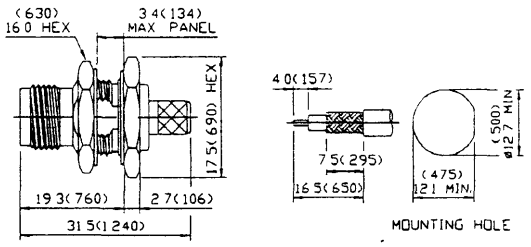
Notes 1. Teflon insulation available, change the part no. suffix from DGN to TGN

TNC

Flexible Cable-Crimp Attachment

Straight Bulkhead Jack Crimp

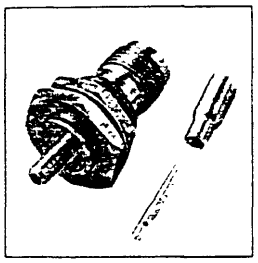


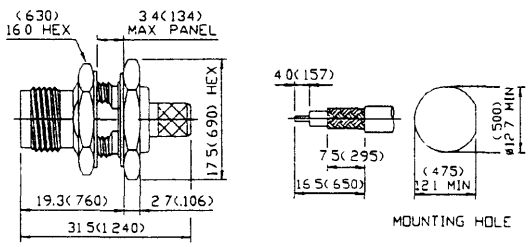


PART NO	APPLICABLE CABLE RG/U	NOTES
15-11F-DGN	58,58A,141A	1
15-11G-DGN	59,62A,210	1

- Finish.gold plated center contact & nickel plated body
- Insulation Delrin (see Notes)
- Captive contact
- Refer to recommended assembly instruction on page 122

Straight Bulkhead Jack Crimp

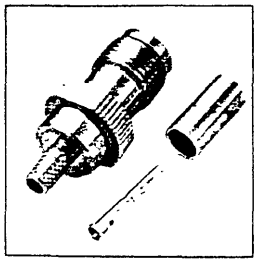


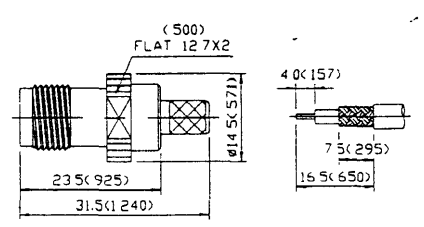


PART NO.	APPLICABLE CABLE RG/U	NOTES
15-11L-TGN	174,188A,316	
15-11N-TGN	179B,187A	75 ohm

- Finish.gold plated center contact & nickel plated body
- Insulation:Teflon
- Captive contact
- Refer to recommended assembly instruction on page 122

Straight Jack Crimp

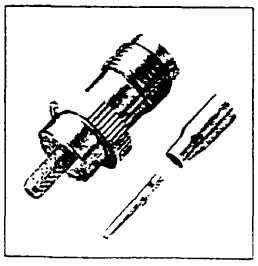


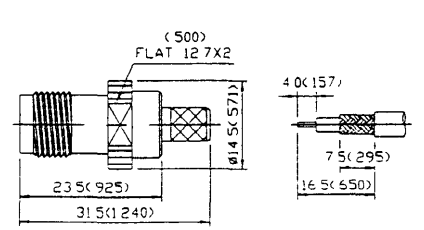


PART NO.	APPLICABLE CABLE RG/U	NOTES
15-15F-1-DGN	58,58A,141A	1
15-15G-1-DGN	59,62A,210	1

- Finish gold plated center contact & nickel plated body
- Insulation Delrin (see Notes)
- Captive contact
- Refer to recommended assembly instruction on page 122

Straight Jack Crimp





PART NO.	APPLICABLE CABLE RG/U	NOTES
15-15L-1-TGN	174,188A,316	
15-15N-1-TGN	179B,187A	75 ohm

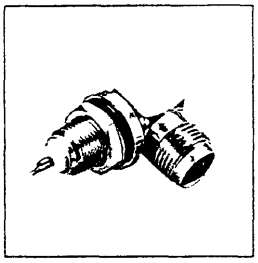
- Finish gold plated center contact & nickel plated body
- Insulation Teflon
- Captive contact
- Refer to recommended assembly instruction on page 122

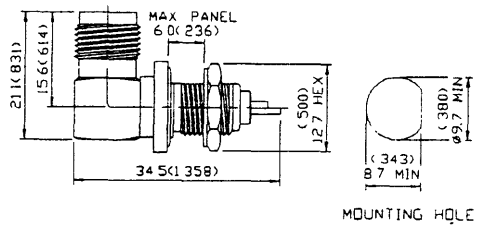
Notes. 1. Teflon insulation available, change the part no suffix from DGN to TGN

TNC

Bulkhead, Panel, PCB Mount Receptacles

Right Angle Bulkhead Jack Receptacle

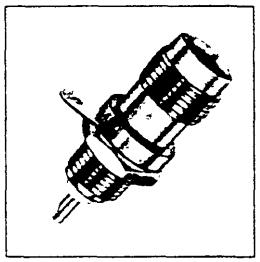


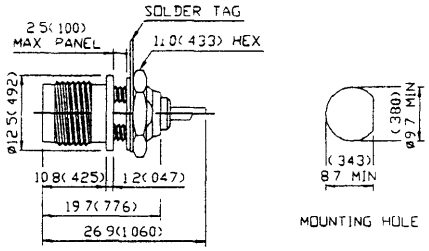


PART NO:15-28-TGN

- Finish gold plated center contact & nickel plated body
- Insulation Teflon

Straight Bulkhead Jack Receptacle

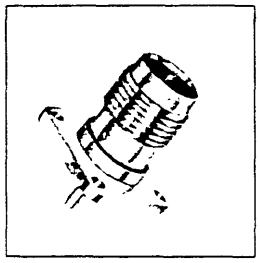


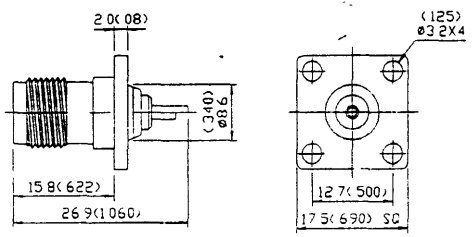


PART NO:15-29-1-DGN

- Finish gold plated center contact & nickel plated body
- Insulation Delrin (see Notes)

Square Flange Jack Receptacle

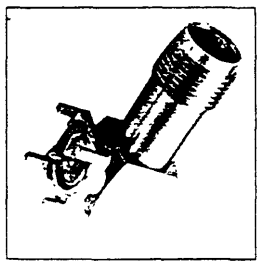


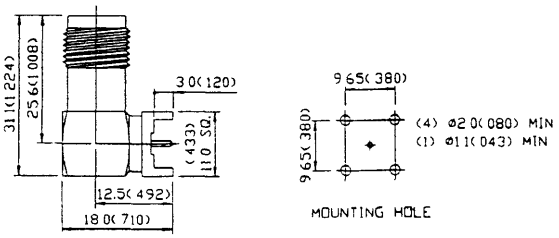


PART NO:15-30-DGN

- Finish gold plated center contact & nickel plated body
- Insulation:Delrin (see Notes)

Right Angle PCB Mount Jack Receptacle





PART NO:15-53-TGN

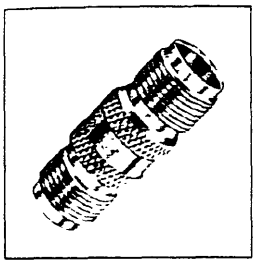
- Finish gold plated center contact & nickel plated body
- Insulation Teflon

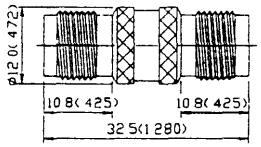
Notes 1. Teflon insulation available, change the part no. suffix from DGN to TGN

TNC

In-Series Adapters

Jack-Jack

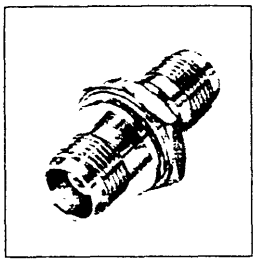


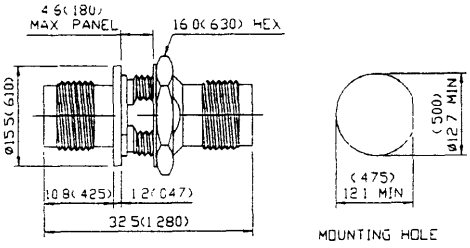


PART NO:15-33-DGN

- Finish gold plated center contact & nickel plated body
- Insulation Delrin (see Notes)

Bulkhead Jack-Jack

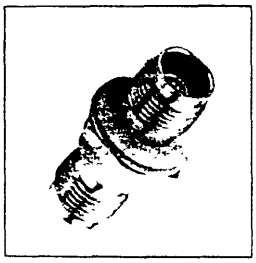


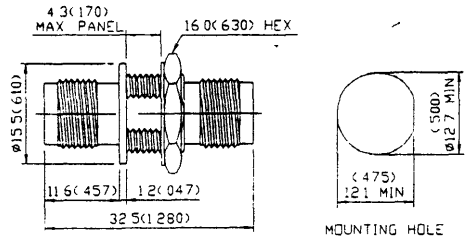


PART NO:15-34-DGN

- Finish gold plated center contact & nickel plated body
- Insulation Delrin (see Notes)

Isolated Bulkhead Jack-Jack

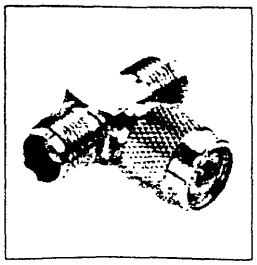


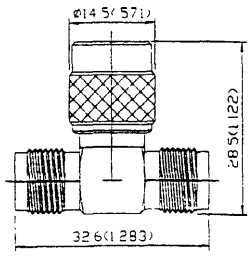


PART NO:15-34-7-DGN

- Finish gold plated center contact & nickel plated body
- Insulation Delrin (see Notes)

Tee Adapter Jack-Plug-Jack





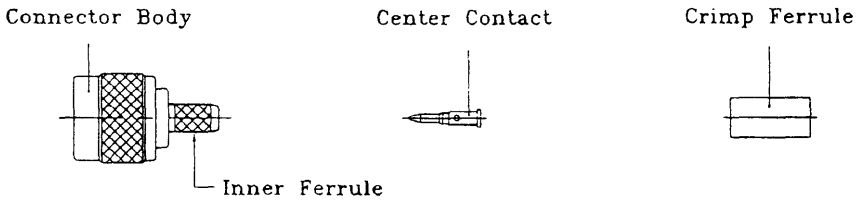
PART NO:15-38-1-DGN

- Finish gold plated center contact & nickel plated body
- Insulation Delrin (see Notes)

Notes 1 Teflon insulation available, change the part no suffix from DGN to TGN

Cable Mounting Instructions

CM-03 for Crimp Type Connectors (1)



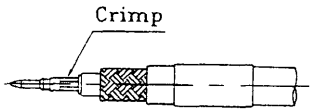
1.

Preparation of Cable

(1).Slide crimp ferrule onto cable.

(2).Strip cable to recommended dimensions shown in catalogue.

2.

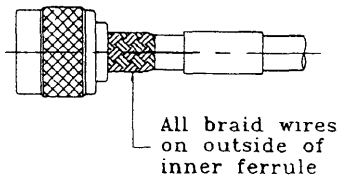


Crimp Center Contact to Cable Center Conductor

(1).Insert cable center conductor into center contact until it butts against cable dielectric.

(2).Crimp (or solder) center contact.

3.

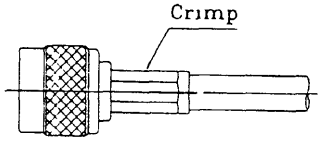


Attach Cable to Connector Body

(1).Insert cable assembly into rear of connector body, with all braid wires on outside of inner ferrule.

(2) Push cable assembly forward until contact snaps into place in insulator.

4.

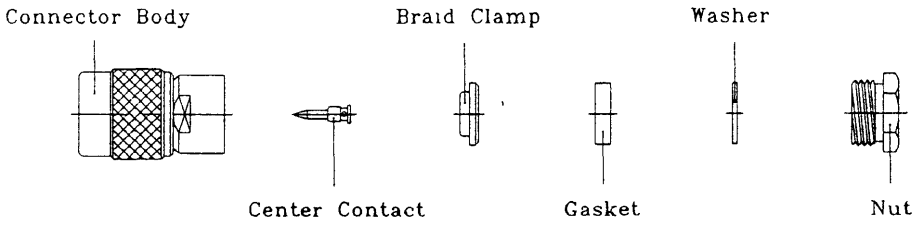


Final Assembly

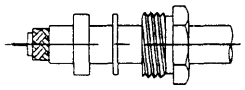
(1) Slide crimp ferrule forward until flush with connector body and crimp.

Cable Mounting Instructions

CM-07 for Clamp Type Connectors (1)



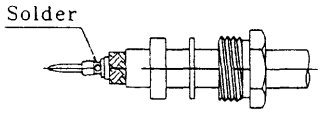
1.



Preparation of Cable

(1) Slide nut, washer and gasket onto cable.
(2) Strip cable to recommended dimensions shown in catalogue

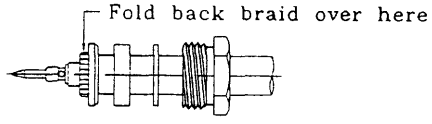
2.



Solder Center Contact to Cable Center Conductor

(1) Insert cable center conductor into center contact until it butts against cable dielectric.
(2) Solder center contact.

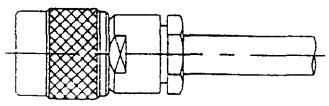
3.



Install Braid Clamp

(1).Place braid clamp over cable braid.
(2) Comb braid wires out straight and fold back over front shoulder of braid clamp.
(3) Trim braid wires flush with edge of braid clamp

4.



Final Assembly

(1) Mount cable assembly and hardware into connector body
(2) Screw and tighten nut.