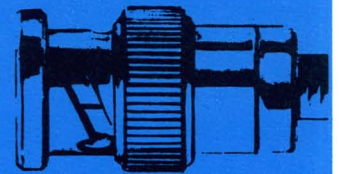
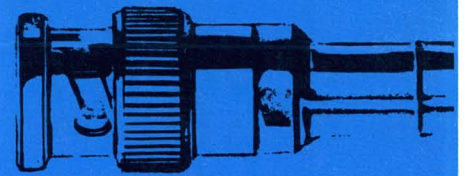




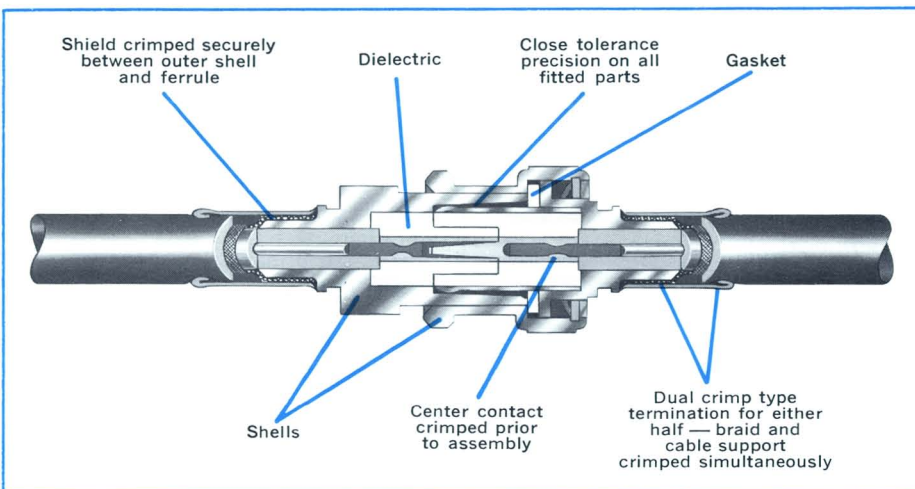
## RF CONNECTORS

A complete series of in-line connectors, ferrules and splices developed especially for use on circuits operating at RF frequencies, and featuring the exclusive AMP crimp technique. RF connectors are available in several series to meet specific application needs. Also special contacts and receptacles for coaxial cable to P.C. board terminations.

BNC Series — Dual and single crimp types with bayonet-lock coupling for quick connect and disconnect .....	17-3
TNC Series — Dual and single crimp types with threaded coupling .....	17-12
N Series per MIL-C-39012, Class II, Category B .....	17-18
C Series 50 ohm connector .....	17-22
SMA Series — Semi-rigid cable .....	17-25
SMA Series — Flexible cable .....	17-29
SMC Series connectors .....	17-33
SHV Series .....	17-35
UHF plug connectors for use at up to 500 MHz, 500 volts .....	17-37
Threaded Series coaxial connectors — Standard and miniature contacts .....	17-40
RF twin conductor types — Twin threaded, twin BNC and twin connector plug .....	17-42
TERMASHIELD Ferrules and Splices for shielded and coaxial wire .....	17-44
Braid-Pic Contacts and Receptacles for coaxial cable to printed circuit board terminations .....	17-51







**BNC Series  
Dual Crimp Type  
MIL-C-39012, Class II  
Category B**

The COAXICON BNC Series Dual Crimp Type Connector features a bayonet-locking coupling for quick connect/disconnect coaxial terminations. This small, lightweight, weatherproof connector is rated for use in applications where voltages do not exceed 500 volts peak and causes very little discontinuity in 50 ohm circuits using such cables as RG-58C, 141A, 142B or 223/U. Where discontinuity is not a major concern, however, it may also be used with other small cables such as RG-59B, 62B, 71B, 180B and 195.

This AMP connector has been redesigned to assure improved

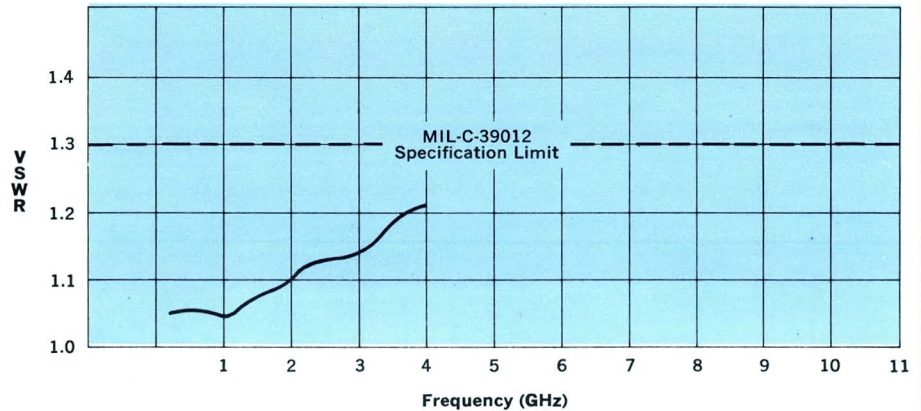
performance. It has a constant 50 ohm impedance and provides excellent operation at frequencies up to 4 GHz. It also features heat treated, beryllium copper inner and outer contacts and labor-saving two crimp assembly with matching AMP tooling.

BNC Series Connectors are fully intermateable with comparable UG/U Series connectors and are available in plug, jack, panel jack, bulkhead jack and right-angle plug configurations. Those with a military designation (M39012/) are furnished in accordance with all requirements of specification MIL-C-39012, Class II, Category B.

**Features**

- Low VSWR
- Low initial cost
- Low applied cost with time-saving, solderless crimp technique
- Fully intermateable with comparable UG/U Series connectors
- Bayonet lock coupling for quick connect/disconnect
- Positive insulation grip with crimped braid ferrule

## Specifications



Test Cable — RG-58 C/U — Connector No. 2-331350-1

### Electrical Characteristics

Nominal Impedance:  
50 ohms  
Working Voltage:  
500 volts, RMS @ sea level  
Frequency Range:  
0 to 4 GHz  
Contact Resistance:  
Outer contact — .2 milliohms,  
center contact — 2.1 milliohms  
Insulation Resistance:  
5000 megohms minimum  
Dielectric Withstanding Voltage:  
1500 volts, RMS @ sea level  
R.F. Leakage:  
-55 db. max. @ 2 to 3 GHz  
R.F. Insertion Loss:  
0.2 db max @ 3 GHz  
Corona Level:  
375 volts min. @ 70,000 ft.

### Mechanical Characteristics

Mating/Unmating  
Bayonet lock — quick connect  
Cable Attachment:  
Crimp type — both center contact  
and braid  
Coupling Nut Retention:  
100 lbs. minimum  
Cable Retention:  
60 lbs. minimum, RG-58 c/u cable  
Durability:  
500 cycles per MIL-C-39012

### Materials

Brass:  
QQ-B-626  
Beryllium Copper:  
QQ-C-530

All dimensions in inches.

Note: Specifications subject to change.  
Consult AMP Incorporated for latest  
design specifications.

‡ Registered Trademark of E. I. duPont, Inc.

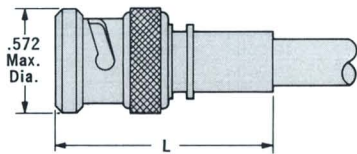
### TEFLON:‡

MIL-P-19468  
Copper, Annealed:  
QQ-C-576  
Phosphorous Bronze:  
QQ-B-750  
Silicone Rubber:  
ZZ-R-765  
Plating:  
Silver — QQ-S-365,  
.0002 minimum or tarnish resistant  
Gold — MIL-G-45204,  
.0001 minimum

### Environmental Characteristics

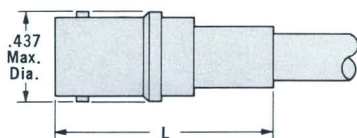
Temperature Range:  
-65°C to +165°C  
(TEFLON cables)  
Vibration:  
MIL-STD-202, Method 204,  
Test Cond. B  
Shock:  
MIL-STD-202, Method 202, 50 G  
Moisture Resistance:  
MIL-STD-202, Method 106  
Salt Spray:  
MIL-STD-202, Method 101,  
Test Cond. B  
Temperature Cycling:  
MIL-STD-202, Method 102,  
Test Cond. C

## Plugs



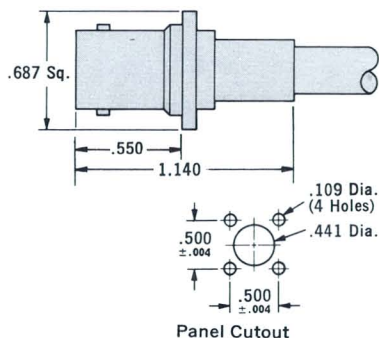
RG/U Cable	"L"	PART NO.		MS 39012/ Designation*	Hand Tool No.	Die Insert No. for Tools Hand—69710 Pneu.—69365
		Tarnish Resistant Finish	Silver Finish			
58, 58B	1.125	225395-1	2-331350-1	16-0004	69478-1	69727
58A, 58C	1.125		2-331350-1	16-0004	69478-3	69726
59, 59A, 59B, 62, 62A, 62B, Belden 8241, 8279	1.125	225395-2	331350	16-0008	69477-1	69669-1
55B, 223 55, 55A,	1.125	225395-3	2-331350-7	16-0005	69478-1	69727
71, 71A, 71B	1.125	225395-4	2-331350-3	16-0012	69477-1	69669-1
141, 141A	1.125	225395-5	2-331350-8	16-0006	69478-3	69726
142, 142A, 142B	1.125	225395-6	2-331350-9	16-0007	69478-3	69726
174, 188	1.125	225395-7	2-331350-4	—	220009-1	220026-1
179, 187	1.125	225395-8	2-331350-5	—	220009-1	220026-1
180, 180A, 195	1.125	225395-9	2-331350-6	—	69477-2	69669-2
Amphenol 21-597, Belden 8218	1.125	1-225395-0	2-331350-2	—	69477-2	69669-2
8, 8A, 213	1.656	2-225395-1	225886-1	—	220015-1	—
9, 9A, 9B, 214	1.656	—	225886-2	—	220015-1	—
11	1.656	—	225886-4	—	220015-1	—
ITT 3474	1.125	—	3-331350-8	—	220029-1	220034-1
Times 90624-96	1.125	—	3-331350-9	—	220029-1	220034-1
P&W EC-220-18	1.125	—	225262-1	—	220009-1	220026-1
P&W 56-220-60	1.125	—	225263-1	—	220009-1	220026-1
Belden 8281, 9231	1.312	—	4-331350-0	—	220043-1	220088-1
Belden 8228	1.125	1-225395-1	4-331350-1	—	69477-3	—
Belden 8212	1.125	2-225395-0	5-331350-3	—	69477-1	69669-1
Belden 8213	1.656	—	5-331350-8	—	220015-1	—
Brand Rex T209A	1.125	—	5-331350-5	—	69477-2	69669-2
Micro Dot 250-4170	1.218	—	225328-1	—	220031-2	—
Micro Dot 250-4171	1.593	—	50529-2	—	220015-3	—
Micro Dot 250-4172	1.593	—	50529-3	—	220015-3	—

## Jacks



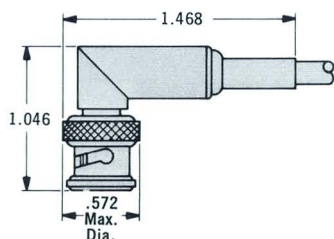
RG/U Cable	"L"	PART NO.		MS 39012/ Designation*	Hand Tool No.	Die Insert No. for Tools Hand—69710 Pneu.—69365
		Tarnish Resistant Finish	Silver Finish			
58, 58B	1.140	225396-1	2-331351-1	17-0004	69478-1	69727
58A, 58C	1.140		2-331351-1	17-0004	69478-3	69726
59, 59A, 59B, 62, 62A, 62B, Belden 8241, 8279	1.140	225396-2	331351	17-0008	69477-1	69669-1
55, 55A, 55B, 223	1.140	225396-3	2-331351-7	17-0005	69478-1	69727
71, 71A, 71B	1.140	225396-4	2-331351-3	17-0012	69477-1	69669-1
141, 141A	1.140	225396-5	2-331351-8	17-0006	69478-3	69726
142, 142A, 42B	1.140	225396-6	2-331351-9	17-0007	69478-3	69726
174, 188	1.140	225396-7	2-331351-4	—	220009-1	220026-1
179, 187	1.140	225396-8	2-331351-5	—	220009-1	220026-1
180, 180A, 195	1.140	225396-9	2-331351-6	—	69477-2	69669-2
Amphenol 21-597, Belden 8218	1.140	1-225396-0	2-331351,2	—	69477-2	69669-2
ITT 3474	1.140	—	3-331351-4	—	220029-1	220034-1
Micro Dot 250-4171	1.687	—	50510-2	—	220015-3	—
Brand Rex T209A	1.140	—	3-331351-6	—	69477-2	69669-2

## Panel Jacks



RG/U Cable	PART NO.		MS 39012/ Designation*	Hand Tool No.	Die Insert No. for Tools Hand—69710 Pneu.—69365
	Tarnish Resistant Finish	Silver Finish			
58, 58B	225397-1	1-331694-0	18-0004	69478-1	69727
58A, 58C		1-331694-0	18-0004	69478-3	69726
59, 59A, 59B, 62, 62A, 62B, Belden 8241, 8279	225397-2	331694	18-0008	69477-1	69669-1
55, 55A, 55B, 223	225397-3	1-331694-6	18-0005	69478-1	69727
71, 71A, 71B	225397-4	1-331694-5	18-0012	69477-1	69669-1
141, 141A	225397-5	1-331694-7	18-0006	69478-3	69726
142, 142A, 142B	225397-6	1-331694-8	18-0007	69478-3	69726
174, 188	225397-7	1-331694-2	—	220009-1	220026-1
179, 187	225397-8	1-331694-3	—	220009-1	220026-1
180, 180A, 195	225397-9	1-331694-4	—	69477-2	69669-2
Amphenol 21-597, Belden 8218	1-225397-0	1-331694-1	—	69477-2	69669-2

## Right Angle Plugs

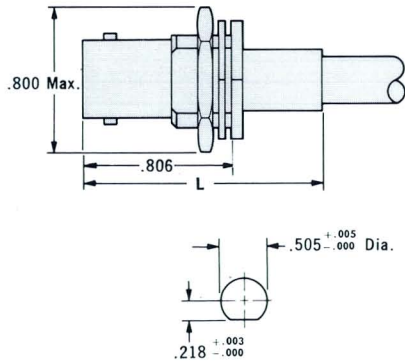


RG/U Cable	PART NO.		MS 39012/ Designation*	Hand Tool No.	Die Insert No. for Tools Hand—69710 Pneu.—69365
	Tarnish Resistant Finish	Silver Finish			
58, 58B	225974-1	225973-1	—	69478-1	69727
58A, 58C		225973-1	—	69478-3	69726
55, 55A, 55B, 223	225974-2	225973-2	—	69478-1	69727
141, 141A	225974-3	225973-3	—	69478-3	69726
142, 142A, 142B	225974-4	225973-4	—	69478-3	69726
59, 59A, 59B, 62, 62A, 62B, Belden 8241, 8279	225974-5	225973-5	—	69477-1	69669-1
71, 71A, 71B	225974-6	225973-6	—	69477-1	69669-1

\*Government designation applies only to silver plated parts.

## BNC Series Dual Crimp Type

### Bulkhead Jacks

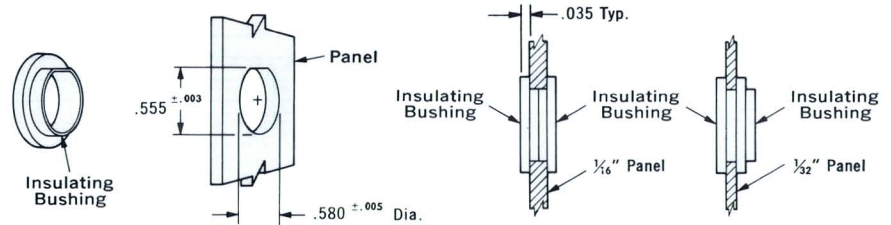


Panel Cutout

Max. Panel Thickness .240

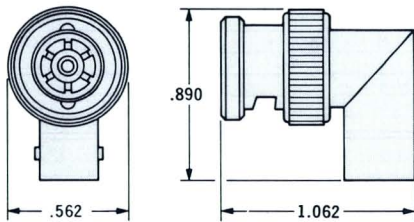
RG/U Cable	"L"	PART NO.		MS 39012/ Designation*	Hand Tool No.	Die Insert No. for Tools Hand—69710 Pneu.—69365
		Tarnish Resistant Finish	Silver Finish			
58, 58B	1.296	225398-1	1-331693-1	19-0003	69478-1	69727
58A, 58C	1.296		1-331693-1	19-0003	69478-3	69726
59, 59A, 59B, 62, 62A, 62B, Belden 8241, 8279	1.296	225398-2	331693	19-0007	69477-1	69669-1
55, 55A, 55B, 223	1.296	225398-3	1-331693-6	19-0004	69478-1	69727
71, 71A, 71B	1.296	225398-4	1-331693-5	19-0012	69477-1	69669-1
141, 141A	1.296	225398-5	1-331693-7	19-0005	69478-3	69726
142, 142A, 142B	1.296	225398-6	1-331693-8	19-0006	69478-3	69726
174, 188	1.296	225398-7	1-331693-2	—	220009-1	220026-1
179, 187	1.296	225398-8	1-331693-3	—	220009-1	220026-1
180, 180A, 195	1.296	225398-9	1-331693-4	—	69477-2	69669-2
Amphenol 21-597, Belden 8218	1.296	1-225398-0	1-331693-0	—	69477-2	69669-2
Brand Rex T209A	1.296	—	2-331693-5	—	69477-2	—

\*Government designation applies only to silver plated parts.

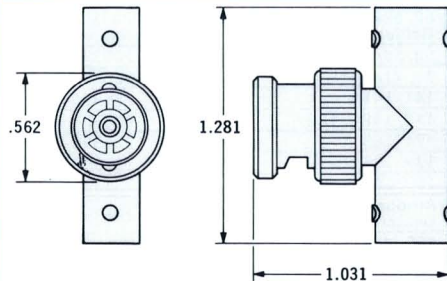


Panel Insulating Bushing for Bulkhead Jacks and Bulkhead Jack Adapters  
Part No. 330620 (Two required)

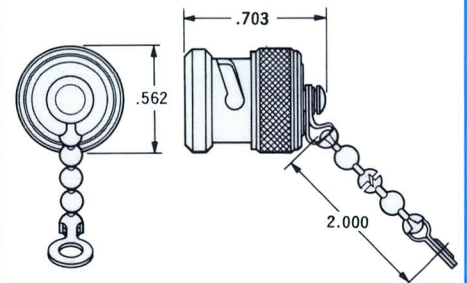
### Adapters



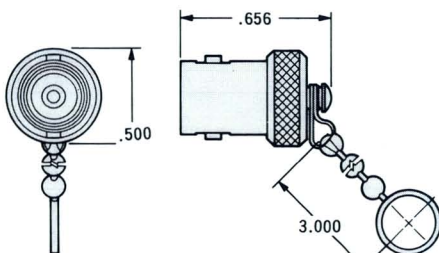
Right Angle Adapter  
Part No. 329517  
Comparable UG/U Connector—306B



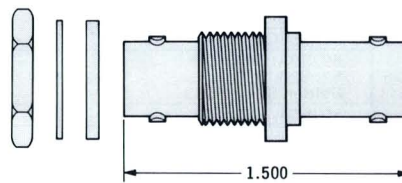
Tee Adapter  
Part No. 329518  
Comparable UG/U Connector 274B



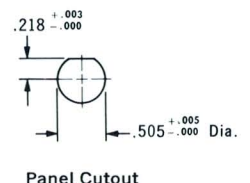
Jack Cover  
Part No. 330022  
Comparable UG/U Connector—CW123A



Plug Cover  
Part No. 330023  
Comparable UG/U Connector—CW282



Bulkhead Jack Adapter  
Part No. 330024  
Comparable UG/U Connector—492D

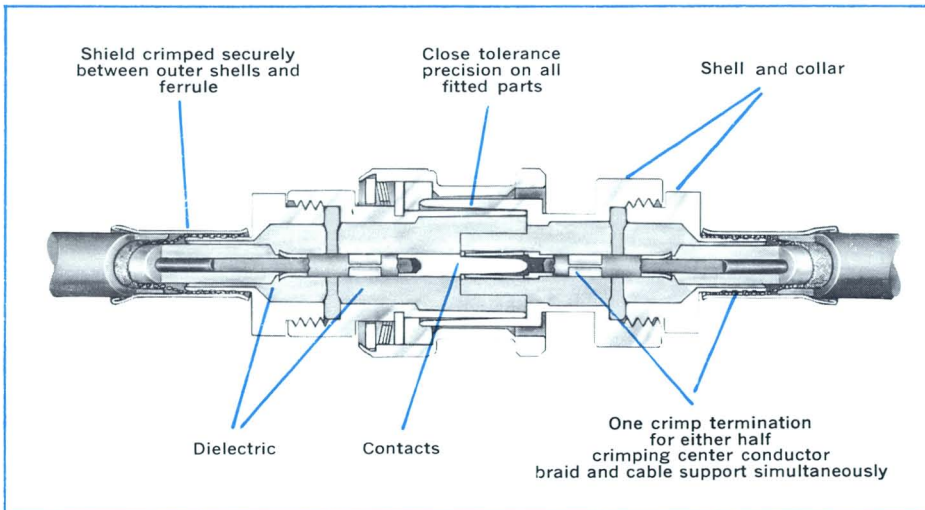


Panel Cutout

### Tooling

For terminating COAXICON BNC Series Connectors, AMP offers a choice of tools to meet your exact production needs. All are designed for fast, trouble-free service and feature matching dies that fully "bottom" to produce uniform, reliable crimp terminations.

In hand tools, AMP's CERTI-CRIMP ratchet device will not release the tool handles until the crimping operation is fully completed. This prevents under-crimping while the dies themselves prevent over-crimping. Bottoming is part of the automatic crimping cycle of pneumatic tools.



The COAXICON BNC Series Single Crimp Type Connector, with bayonet-locking coupling, provides highly reliable, quick connect/disconnect coaxial terminations. This miniature, lightweight connector can be used with a wide range of small size cables such as RG-58C, 59B, 62B, 71, 142B and 188 and features AMP's exclusive one-crimp termination method for lowest overall applied cost. The crimp ends of the connector are designed specifically for the appropriate cable sizes

assuring optimum electrical and mechanical performance. The cable's inner conductor, braid and outer jacket are simultaneously crimped to the connector parts with one controlled stroke of matching A-MP\* application tools.

BNC Series Connectors, too, are fully intermateable with comparable UG/U series connectors and are furnished in a variety of configurations, including plug, jack, panel jack, bulkhead jack and right-angle plug.

## BNC Series Single Crimp Type

### FEATURES

- Fast application — one crimping operation terminates inner conductor, outer braid and cable support
- Two parts make up a complete plug or jack
- No danger of heat damage to coaxial cable
- Fully intermateable with comparable UG/U Series Connectors
- Improved cable retention and insulation grip
- Ease of inspection
- Stabilized inner contacts
- Less critical stripping dimensions than required for solder assemblies
- Low VSWR
- Reduced noise level
- Simplified replacement in field
- Fully responsible for the development and performance of the crimp
- Positive insulation grip with crimped braid ferrule
- Light weight —  $\frac{3}{4}$  ounce (cable plug and cable jack)

**Electrical Characteristics**

Nominal Impedance:  
50 ohms  
Working Voltage:  
500 volts, RMS @ sea level  
Frequency Range:  
0 to 4 GHz  
Contact Resistance:  
Outer contact — .2 milliohms,  
center contact — 2.1 milliohms  
Insulation Resistance:  
5000 megohms minimum  
Dielectric Withstanding Voltage:  
1500 volts, RMS @ sea level  
R.F. Leakage:  
-60 db. min. @ 2 to 3 GHz  
R.F. Insertion Loss:  
0.2 db. max. @ 3 GHz  
Corona Level:  
375 volts min. @ 70,000 ft.

**Mechanical Characteristics**

Mating/Unmating:  
Bayonet lock-quick connect  
Cable Attachment:  
Crimp type — both center contact  
and braid  
Coupling Nut Retention:  
100 lbs. minimum  
Cable Retention:  
60 lbs. minimum, RG-58 c/u cable  
Durability:  
500 cycles per MIL-C-39012

**Materials**

Polypropylene:  
L-P-394  
Brass:  
QQ-B-626  
Beryllium Copper:  
QQ-C-530  
TEFLON.  
MIL-P-19468  
Copper, Annealed:  
QQ-C-576  
Phosphorous Bronze:  
QQ-B-750  
Silicone Rubber:  
ZZ-R-765  
Plating:  
Silver, QQ-S-365, .0002 Minimum  
Gold, MIL-G-45204,  
.0001 Minimum

**All dimensions in inches.**

Note: Specifications subject to change.  
Consult AMP Incorporated for latest  
design specifications.

‡ Registered Trademark of E. I. duPont, Inc.

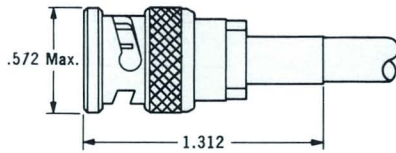
**Environmental Characteristics**

Temperature Range:  
-55°C to +85°C (Polypropylene)  
-65°C to +165°C  
(TEFLON cables)  
Vibration:  
MIL-STD-202, Method 204,  
Test Cond. B  
Shock:  
MIL-STD-202, Method 202, 50G  
Moisture Resistance:  
MIL-STD-202, Method 106  
Salt Spray:  
MIL-STD-202, Method 101,  
Test Cond. B  
Temperature Cycling:  
MIL-STD-202, Method 102,  
Test Cond. C



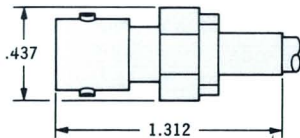
# BNC Series Single Crimp Type

## Plugs



RG/U Cable	PART NO.		Comparable UG/U Connector	Hand Tool No.	Die Insert No. for Tools— Hand—69710 Pneu.—69365
	Polypropylene Dielectric	TEFLON Dielectric			
58, 58A, 58B, 58C	2-329066-1 2-329082-1	2-329544-1 2-329444-1	88 88C	69140-1	69223-1
59, 59A, 59B, 62, 62A, 62B, 124, 140, 210	2-329064-1 2-329083-1 —	2-329548-1 2-329445-1 331050	260 260B 260D	69141-1	69224-1
161, 179, 187	2-329084-1 —	2-329446-1 331053	— —	69245-1	69408
180, 180A, 195	2-329085-1 —	2-329447-1 331054	— —	69246-1	69423
55, 55A, 55B, 223	2-329082-2	2-329444-2	88C	69140-2	69424
71, 71A, 71B	2-329083-2 —	2-329445-2 331051	260B 260D	69141-2	69425
174, 188	2-330058-1 —	2-330061-1 331052	— —	69245-2	69422
Amphenol #21-597	2-330000-1 —	2-330018-1 331055	— —	69246-2	69423-1
141, 141A	2-330381-1	2-330358-1	—	69331	69429
142, 142A, 142B	2-330381-2	2-330358-2	—	69331-1	69429-1
178, 196	—	330876	—	69245-4	69471
122	330832 —	331259 331056	— —	69246-1	69423
Belden 8281, Western Elec. 724 & 3049	330878	—	—	69652	220000
Raychem 22-704	329819	—	—	69246-2	69423-1
Raychem 82-050	331444	—	—	69489	69682

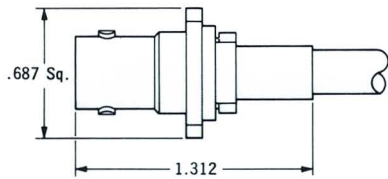
## Jacks



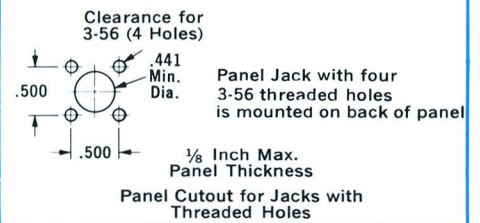
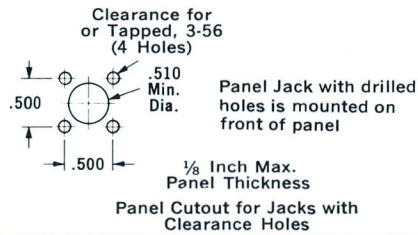
RG/U Cable	PART NO.		Comparable UG/U Connector	Hand Tool No.	Die Insert No. for Tools— Hand—69710 Pneu.—69365
	Polypropylene Dielectric	TEFLON Dielectric			
58, 58A, 58B, 58C	2-329546-1 2-329065-1	2-329545-1 2-329452-1	89 89B	69140-1	69223-1
59, 59A, 59B, 62, 62A, 62B, 124, 140, 210	2-329547-1 2-329063-1 —	2-329549-1 2-329453-1 331075	261 261B 261B	69141-1	69224-1
161, 179, 187	2-329094-1 —	2-329454-1 331078	— —	69245-1	69408
180, 180A, 195	2-329095-1 —	2-329455-1 331079	— —	69246-1	69423
55, 55A, 55B, 223	2-329065-2	2-329452-2	89B	69140-2	69424
71, 71A, 71B	2-329063-2 —	2-329453-2 331076	261B 261C	69141-2	69425
174, 188	2-330059-1 —	2-330062-1 331077	— —	69245-2	69422
Amphenol #21-597	2-330019-1 —	2-330001-1 331080	— —	69246-2	69423-1
141, 141A	2-329065-3	2-329452-3	89B	69331	69429
142, 142A, 142B	2-329065-2	2-329452-2	89B	69331-1	69429-1
178, 196	—	330877	—	69245-4	69471
122	330831 —	331261 331081	— —	69246-1	69423
Belden 8281, Western Elec. 724 & 3049	330879	—	—	69652	220000
Raychem 22-704	329818	—	—	69246-2	69423-1
Raychem 82-050	331445	—	—	69489	69682

## BNC Series Single Crimp Type

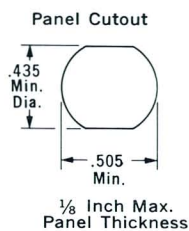
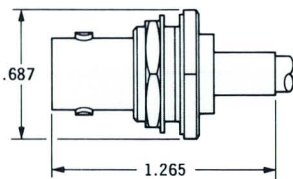
### Panel Jacks



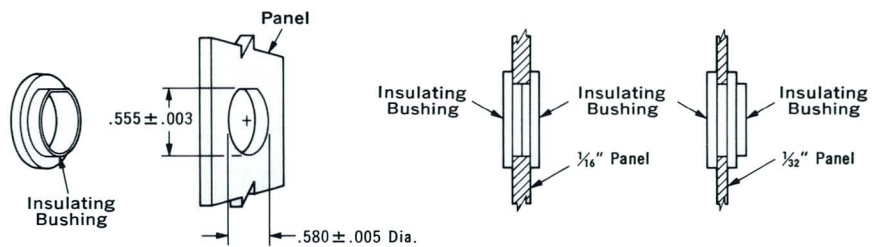
RG/U Cable	Part No. TEFLON Dielectric	Mounting Provision	Comparable UG/U Connector	Hand Tool No.	Die Insert No. for Tools— Hand—69710 Pneu.—69365
58, 58A, 58B, 58C	330991	Clearance Holes	291A	69140-1	69223-1
	330996	Threaded Holes	291B		
59, 59A, 59B 62, 62A, 62B, 124, 140, 210	2-330726-1	Clearance Holes	262 A/U	69141-1	69224-1
	2-330787-1	Threaded Holes	262 B/U		
161, 179, 187	330992	Clearance Holes	—	69245-1	69408
	330997	Threaded Holes	—		
180, 180A, 195	330994	Clearance Holes	—	69246-1	69423
	330999	Threaded Holes	—		
55, 55A, 55B, 223	331004	Clearance Holes	291 A/U	69140-2	69424
	331001	Threaded Holes	291 B/U		
71, 71A, 71B	331480	Clearance Holes	262A	69141-2	69425
	331600	Threaded Holes	262B		
174, 188	330993	Clearance Holes	—	69245-2	69422
	330998	Threaded Holes	—		
Amphenol #21-597	330995	Clearance Holes	—	69246-2	69423-1
	331000	Threaded Holes	—		
141, 141A	331006	Clearance Holes	—	69331	69429
	331003	Threaded Holes	—		
142, 142A, 142B	331004	Clearance Holes	—	69331-1	69429-1
	331001	Threaded Holes	—		
178, 196	331700	Clearance Holes	—	69245-4	69471
	331002	Threaded Holes	—		
122	331481	Clearance Holes	—	69246-1	69423
	331601	Threaded Holes	—		
Belden 8281, Western Elec. 724 & 3049	225153-1	Threaded Holes	—	69652	220000



### Bulkhead Jacks



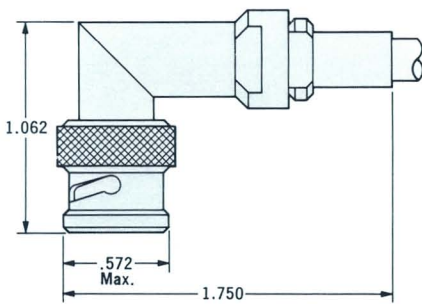
RG/U Cable	PART NO.		Comparable UG/U Connector	Hand Tool No.	Die Insert No. for Tools— Hand—69710 Pneu.—69365
	Polypropylene Dielectric	TEFLON Dielectric			
58, 58A, 58B, 58C	2-329090-1	2-329456-1	909A	69140-1	69223-1
	2-329091-1	2-329457-1	910A		
59, 59A, 59B 62, 62A, 62B, 124, 140, 210	2-329092-1	2-329458-1	—	69245-1	69408
	2-329093-1	2-329459-1	—		
161, 179, 187	2-329090-2	2-329456-2	909A	69140-2	69424
	2-329091-2	2-329457-2	910A		
174, 188	2-330060-1	2-330063-1	—	69245-2	69422
	2-330020-1	2-330002-1	—		
Amphenol #21-597	2-329090-3	2-329456-3	—	69246-2	69423-1
	2-329090-2	2-329456-2	—		
141, 141A	—	331974	—	69331	69429
	2-329090-2	2-329456-2	—		
142, 142A, 142B	—	331260	—	69331-1	69429-1
	—	331260	—		
178, 196	—	331974	—	69245-4	69471
122	330833	331260	—	69246-1	69423
Belden 8281, Western Elec. 724 & 3049	331300	—	—	69652	220000
Raychem 82-050	50619	—	—	69489	69682



Panel Insulating Bushing for Bulkhead Jacks and Bulkhead Jack Adapters  
Part No. 330620 (Two required)

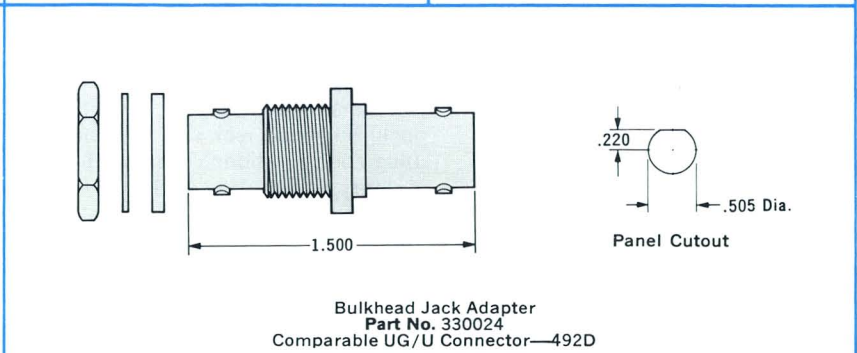
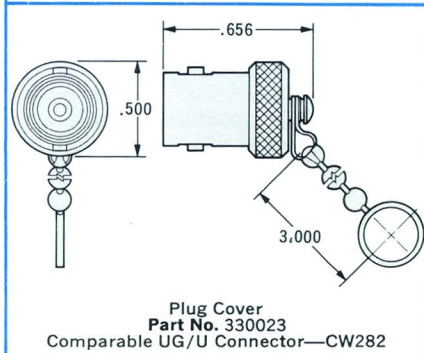
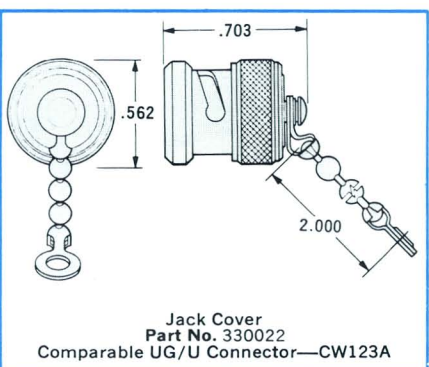
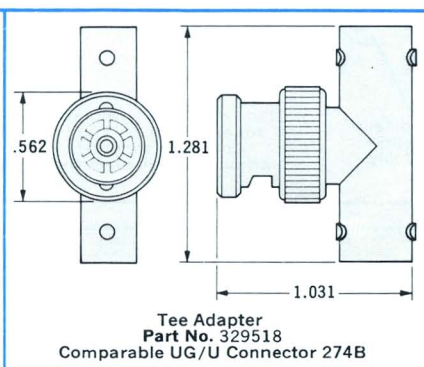
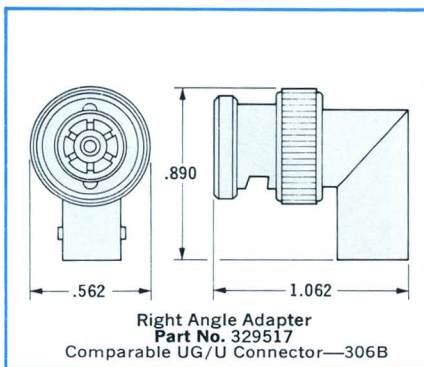
**BNC Series  
Single Crimp Type**

**Right Angle Plugs**



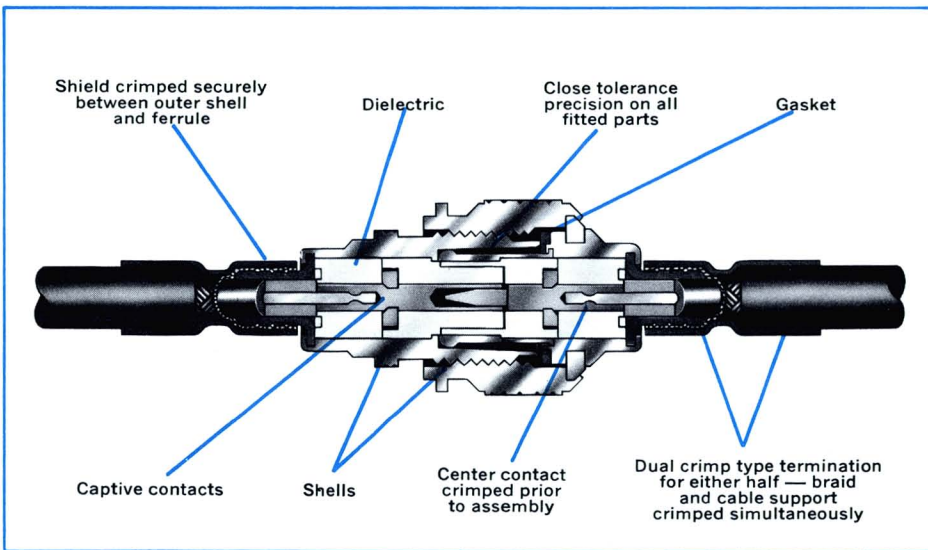
RG/U Cable	Part No. TEFLON Dielectric	Comparable UG/U Connector	Hand Tool No.	Die Insert No. for Tools— Hand—69710 Pneu.—69365
58, 58A, 58B, 58C	331175	913 A/U	69140-1	69223-1
59, 59A, 59B, 62, 62A, 62B, 124, 140, 210	331176	—	69141-1	69224-1
161, 179, 187	331179	—	69245-1	69408
180, 180A, 195	331180	—	69246-1	69423
55, 55A, 55B, 223	331182	913 A/U	69140-2	69424
71, 71A, 71B	331177	—	69141-2	69425
174, 188	331178	—	69245-2	69422
Amphenol #21-597	331181	—	69246-2	69423-1
141, 141A	331183	—	69331	69429
142, 142A, 142B	331182	—	69331-1	69429-1
178, 196	331185	—	69245-4	69471
122	331184	—	69246-1	69423
Belden 8281, 724 & 3049	50635	—	69652	220000

**Adapters**



# 17 AMP

## R F Connectors



### TNC Series Dual Crimp Type MIL-C-39012, Class II Category B

The COAXICON TNC Series Connectors are highly suited for use in critical applications and environments. These small, lightweight connectors are equipped with a  $\frac{1}{8}$ -28 threaded coupling for optimum stability and can withstand shock and vibration to assure a low noise level. They also feature captive center contacts and provide excellent performance at frequencies up to 11 GHz, with voltages to 500 volts peak.

These AMP connectors offer the added benefits of low overall applied cost with a labor-saving two crimp

assembly. The contact is simply crimped to the cable's center conductor, then both braid and cable support are simultaneously crimped to complete the termination.

TNC Series Connectors are available in standard and weatherproof versions as well as plug, jack, panel jack, bulkhead jack and right-angle plug configurations. Those with a military designation (M39012/) are furnished in accordance with all requirements of specification MIL-C-39012, Class II, Category B.

### Features

- Captive center contacts
- Lower applied cost with time-saving crimp technique
- Low VSWR
- TEFLON<sup>†</sup> dielectric
- Fully intermateable with comparable UG/U Series Connectors
- AMP matched tooling for positive terminations
- Gold plated center contacts
- No danger of heat damage to coaxial cable
- Positive insulation grip and cable support with crimped braid ferrule

Specifications

ELECTRICAL CHARACTERISTICS

Nominal Impedance:  
50 ohms  
Working Voltage:  
500 volts, RMS at sea level  
Frequency Range:  
0 to 11 GHz  
Contact Resistance:  
Outer contact — .2 milliohms;  
center contact — 2.1 milliohms  
Insulation Resistance:  
5000 megohms minimum  
Dielectric Withstanding Voltage:  
1500 volts, RMS at sea level  
R.F. Leakage:  
- 60 db. min. @ 2 to 3 GHz  
R.F. Insertion Loss:  
.18 db. max. @ 9 GHz  
Corona Level:  
375 volts min. @ 70,000 ft.

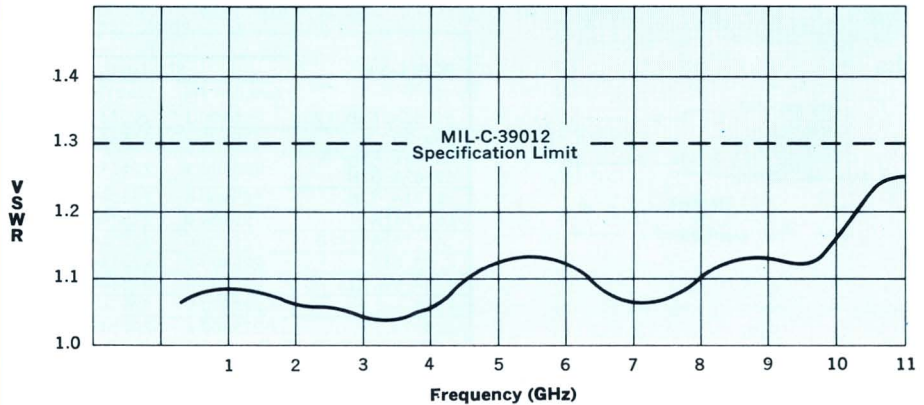
MECHANICAL CHARACTERISTICS

Mating/Unmating:  
Threaded coupling  
Cable Attachment:  
Crimp type — both center contact  
and braid  
Coupling Nut Retention:  
100 lbs. minimum  
Cable Retention:  
60 lbs. minimum, RG-58C/U cable  
Durability:  
500 cycles per MIL-C-39012

All dimensions in inches.

Note: Specifications subject to change.  
Consult AMP Incorporated for latest  
design specifications.

‡ Registered Trademark of E. I. duPont, Inc.



Test Cable — RG-58C/U — Connector No. 225345-2

MATERIALS

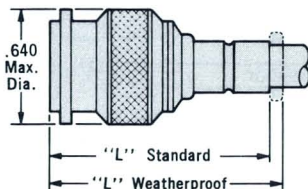
Brass:  
QQ-B-626  
Beryllium Copper:  
QQ-C-530  
TEFLON:  
MIL-P-19468  
Copper, Annealed:  
QQ-C-576  
Phosphorous Bronze:  
QQ-B-750  
Silicone Rubber:  
ZZ-R-765  
Plating:  
Silver — QQ-S-365,  
.0002 minimum  
Gold — MIL-G-45204,  
.0001 minimum

ENVIRONMENTAL CHARACTERISTICS

Temperature Range:  
- 65°C to +165°C  
(TEFLON cables)  
Vibration:  
MIL-STD-202, Method 204,  
Test Cond. B  
Shock:  
MIL-STD-202, Method 202, 100 G  
Moisture Resistance:  
MIL-STD-202, Method 106  
Salt Spray:  
MIL-STD-202, Method 101,  
Test Cond. B  
Temperature Cycling:  
MIL-STD-202, Method 102,  
Test Cond. C

TNC Series  
Dual Crimp Type

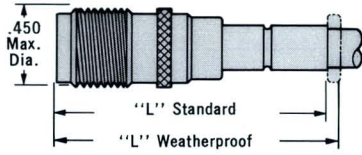
Plugs



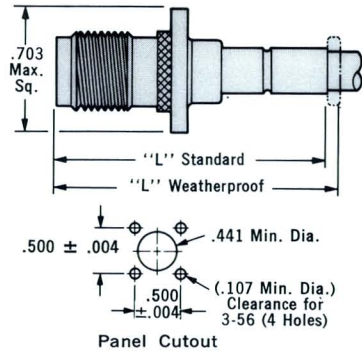
RG/U Cable	PART NO.						M39012/ Desig.*	Hand Tool No.
	STANDARD			WEATHERPROOF				
	Tarn. Rest. Fin.	Silver Fin.	L	Tarn. Rest. Fin.	Silver Fin.	L		
55, 55A, 55B, 223	225399-1	225345-1	1.343	225555-1	225550-1	1.375	26-0016	220045-2
58A, 58C	225399-2	225345-2	1.343	225555-2	225550-2	1.375	26-0005	220045-2
59, 59A, 59B, 62, 62A, 62B	225399-3	225345-3	1.187	225555-3	225550-3	1.375	26-0007	220045-3
71, 71A, 71B	225399-4	225345-4	1.187	225555-4	225550-4	1.375	26-0009	220045-3
141, 141A	225399-5	225345-5	1.343	225555-5	225550-5	1.375	26-0015	220045-2
142, 142A, 142B	225399-6	225345-6	1.343	225555-6	225550-6	1.375	26-0006	220045-2
8, 8A, 213	225399-7	225345-7	1.843	225555-7	225550-7	2.000	—	220015-1
9, 9A, 9B, 214	225399-8	225345-8	1.843	225555-8	225550-8	2.000	—	220015-1
115A	225399-9	225345-9	1.843	225555-9	225550-9	2.000	—	220015-1
225	1-225399-2	1-225345-2	1.843	1-225555-2	1-225550-2	2.000	—	220015-1
393	—	—	—	—	1-225550-3	1.995	—	220015-1
ITT 3474	—	1-225345-4	1.187	—	—	—	—	220045-3
Microdot 250-4171, 250-4207	—	1-225345-5	1.843	—	1-225550-7	—	—	220015-3
Microdot 250-4172, 250-4208	—	1-225345-6	1.843	—	1-225552-3	—	—	220015-3

## TNC Series Dual Crimp Type

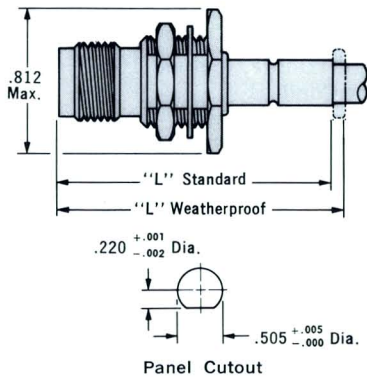
### Jacks



### Panel Jacks



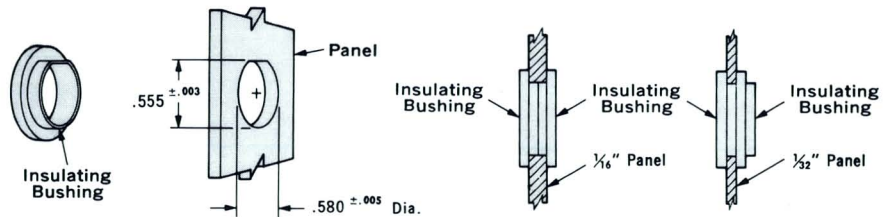
### Bulkhead Jacks



RG/U Cable	PART NO.						M39012/ Desig.*	Hand Tool No.
	STANDARD			WEATHERPROOF				
	Tarn.	Rest. Fin.	Silver Fin.	L	Tarn.	Rest. Fin.		
55, 55A, 55B, 223	225400-1	225346-1	1.375	225556-1	225551-1	1.406	27-0016	220045-2
58A, 58C	225400-2	225346-2	1.375	225556-2	225551-2	1.406	27-0005	220045-2
59, 59A, 59B, 62, 62A, 62B	225400-3	225346-3	1.218	225556-3	225551-3	1.406	27-0007	220045-3
71, 71A, 71B	225400-4	225346-4	1.218	225556-4	225551-4	1.406	27-0009	220045-3
141, 141A	225400-5	225346-5	1.375	225556-5	225551-5	1.406	27-0015	220045-2
142, 142A, 142B	225400-6	225346-6	1.375	225556-6	225551-6	1.406	27-0006	220045-2
8, 8A, 213	225400-7	225346-7	1.875	225556-7	225551-7	2.031	—	220015-1
9, 9A, 9B, 214	225400-8	225346-8	1.875	225556-8	225551-8	2.031	—	220015-1
115A	225400-9	225346-9	1.875	225556-9	225551-9	2.031	—	220015-1
225	1-225400-2	1-225346-2	1.875	1-225556-2	1-225551-2	2.031	—	220015-1

RG/U Cable	PART NO.						M39012/ Desig.*	Hand Tool No.
	STANDARD			WEATHERPROOF				
	Tarn.	Rest. Fin.	Silver Fin.	L	Tarn.	Rest. Fin.		
55, 55A, 55B, 223	225402-1	225348-1	1.375	225558-1	225553-1	1.406	29-0016	220045-2
58A, 58C	225402-2	225348-2	1.375	225558-2	225553-2	1.406	29-0005	220045-2
59, 59A, 59B, 62, 62A, 62B	225402-3	225348-3	1.218	225558-3	225553-3	1.406	29-0007	220045-3
71, 71A, 71B	225402-4	225348-4	1.218	225558-4	225553-4	1.406	29-0009	220045-3
141, 141A	225402-5	225348-5	1.375	225558-5	225553-5	1.406	29-0015	220045-2
142, 142A, 142B	225402-6	225348-6	1.375	225558-6	225553-6	1.406	29-0006	220045-2
8, 8A, 213	225402-7	225348-7	1.875	225558-7	225553-7	2.031	—	220015-1
9, 9A, 9B, 214	225402-8	225348-8	1.875	225558-8	225553-8	2.031	—	220015-1
115A	225402-9	225348-9	1.875	225558-9	225553-9	2.031	—	220015-1
225	1-225402-0	1-225348-0	1.875	1-225558-0	1-225553-0	2.031	—	220015-1

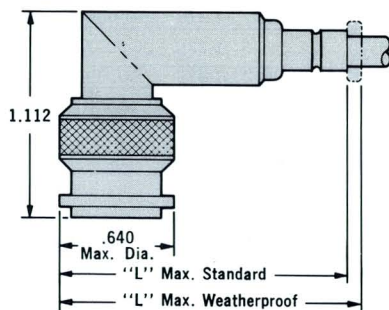
RG/U Cable	PART NO.						M39012/ Desig.*	Hand Tool No.
	STANDARD			WEATHERPROOF				
	Tarn.	Rest. Fin.	Silver Fin.	L	Tarn.	Rest. Fin.		
55, 55A, 55B, 223	225401-1	225347-1	1.500	225557-1	225552-1	1.531	28-0016	220045-2
58A, 58C	225401-2	225347-2	1.500	225557-2	225552-2	1.531	28-0005	220045-2
59, 59A, 59B, 62, 62A, 62B	225401-3	225347-3	1.343	225557-3	225552-3	1.531	28-0007	220045-3
71, 71A, 71B	225401-4	225347-4	1.343	225557-4	225552-4	1.531	28-0009	220045-3
141, 141A	225401-5	225347-5	1.500	225557-5	225552-5	1.531	28-0015	220045-2
142, 142A, 142B	225401-6	225347-6	1.500	225557-6	225552-6	1.531	28-0006	220045-2
8, 8A, 213	225401-7	225347-7	1.875	225557-7	225552-7	2.031	—	220015-1
9, 9A, 9B, 214	225401-8	225347-8	1.875	225557-8	225552-8	2.031	—	220015-1
115A	225401-9	225347-9	1.875	225557-9	225552-9	2.031	—	220015-1
225	1-225401-0	1-225347-0	1.875	1-225557-0	1-225552-0	2.031	—	220015-1
ITT 3474	—	1-225347-1	1.343	—	—	—	—	220045-3
Microdot 250-4171, 250-4207	—	1-225347-2	1.875	—	—	—	—	220015-3
Microdot 250-4172, 250-4208	—	1-225347-3	1.875	—	—	—	—	220015-3



Panel Insulating Bushing for Bulkhead Jacks and Bulkhead Jack Adapters  
Part No. 330620 (Two required)

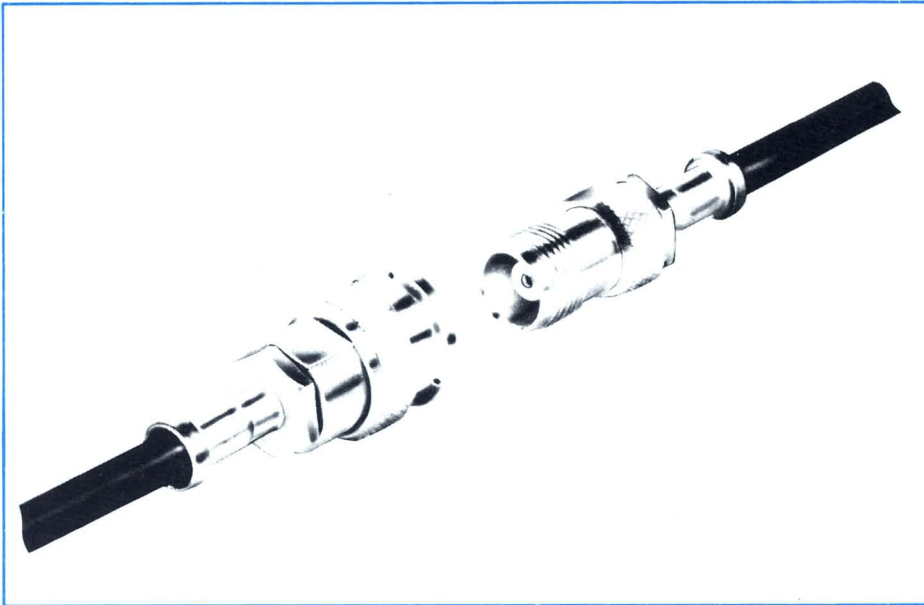
\*Government designation applies only to silver plated parts.

### Right Angle Plugs

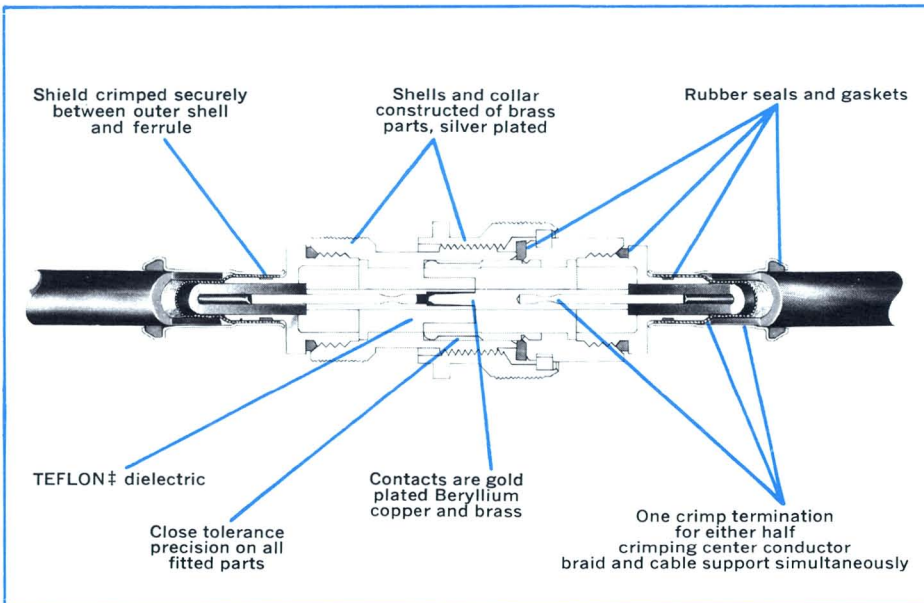


RG/U Cable	PART NO.						M39012/ Desig.*	Hand Tool No.
	STANDARD			WEATHERPROOF				
	Tarn.	Rest. Fin.	Silver Fin.	L	Tarn.	Rest. Fin.		
55, 55A, 55B, 223	225403-1	225349-1	1.843	225559-1	225554-1	1.875	30-0016	220045-2
58A, 58C	225403-2	225349-2	1.843	225559-2	225554-2	1.875	30-0005	220045-2
59, 59A, 59B, 62, 62A, 62B	225403-3	225349-3	1.687	225559-3	225554-3	1.875	30-0007	220045-3
71, 71A, 71B	225403-4	225349-4	1.687	225559-4	225554-4	1.875	30-0009	220045-3
141, 141A	225403-5	225349-5	1.843	225559-5	225554-5	1.875	30-0015	220045-2
142, 142A, 142B	225403-6	225349-6	1.843	225559-6	225554-6	1.875	30-0006	220045-2
8, 8A, 213	225403-8	225349-8	2.343	225559-8	225554-8	2.500	—	220015-1
9, 9A, 9B, 214	225403-9	225349-9	2.343	225559-9	225554-9	2.500	—	220015-1
115A	1-225403-0	1-225349-0	2.357	1-225559-0	1-225554-0	2.515	—	220015-1
225	225403-7	225349-7	2.343	225559-7	225554-7	2.500	—	220015-1
393	—	—	—	—	1-225554-1	2.500	—	220015-1

\*Government designation applies only to silver plated parts.



### TNC Series Single Crimp Type (Weatherproof)



A-MP\* TNC Series Plugs are available with knurled or hex coupling nuts. The TNC Cable Jacks, Bulkhead Jacks and Panel Jacks are standard mounting types and mate with other TNC Series components. Crimp ends are designed specifically

for appropriate cable sizes to permit maximum electrical performance and high reliability. One stroke crimping with A-MP tooling, both hand tools and power tools, simultaneously crimps the center conductor, braid and cable jacket.

#### FEATURES

- AMP's crimping technique reduces noise level
- Low application costs with time-saving, one-stroke crimping of inner conductor, outer braid and cable support
- Bell-mouth entry design facilitates easy insertion of cable center conductor and shield
- Positive insulation grip with crimped braid ferrule
- No danger of heat damage to coaxial cable
- Complete intermatibility with comparable TNC series connectors
- Easy inspection
- Low VSWR

### ELECTRICAL CHARACTERISTICS

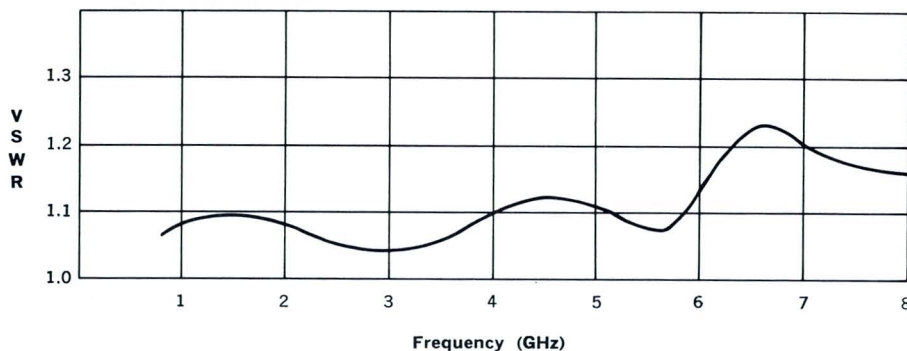
Nominal Impedance:  
50 ohms  
Working Voltage:  
500 volts, RMS at sea level  
Frequency Range:  
0 to 7 GHz  
Contact Resistance:  
Outer contact — .2 milliohms;  
center contact — 2.1 milliohms  
Insulation Resistance:  
5000 megohms minimum  
Dielectric Withstanding Voltage:  
1500 volts, RMS at sea level  
R.F. Leakage:  
— 60 db. min. @ 2 to 3 GHz  
R.F. Insertion Loss:  
0.2 db. max. @ 3 GHz  
Corona Level:  
375 volts min. @ 70,000 ft.

### MECHANICAL CHARACTERISTICS

Mating/Unmating:  
Threaded coupling  
Cable Attachment:  
Crimp type — both center contact  
and braid  
Coupling Nut Retention:  
100 lbs. minimum  
Cable Retention:  
60 lbs. minimum, RG-58 c/u cable  
Durability:  
500 cycles per MIL-C-39012

### MATERIALS

Brass:  
QQ-B-626  
Beryllium Copper:  
QQ-C-530



Test Connector 330953 on RG 58C/U Cable

### TEFLON:

MIL-P-19468  
Copper, Annealed:  
QQ-C-576  
Phosphorous Bronze:  
QQ-B-750  
Silicone Rubber:  
ZZ-R-765  
Plating:  
Silver — QQ-S-365, .0002  
Gold — MIL-G-45204, .0001  
Tarnish resistant finish available  
upon request

### ENVIRONMENTAL CHARACTERISTICS

Temperature Range:  
— 65°C to +165°C  
(TEFLON cables)  
Vibration:  
MIL-STD-202, Method 204,  
Test Cond. B  
Shock:  
MIL-STD-202, Method 202, 100 G  
Moisture Resistance:  
MIL-STD-202, Method 106  
Salt Spray:  
MIL-STD-202, Method 101,  
Test Cond. B  
Temperature Cycling:  
MIL-STD-202, Method 102,  
Test Cond. C

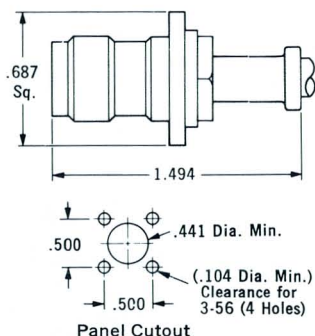
All dimensions in inches.

Note: Specifications subject to change.  
Consult AMP Incorporated for latest  
design specifications.

‡ Registered Trademark of E. I. duPont, Inc.

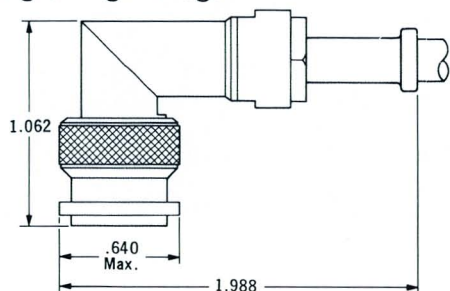
## TNC Single Crimp Type

### Panel Jacks



RG/U Cable	Part No.	Hand Tool No.	Die Insert No. for Tools — Hand — 69710 Pneu. — 69365
58, 58B	331310	69376-3	69815
58C	331310	69376-1 or 69376-3	69493 or 69815
55, 55A, 55B, 223	1-331310-3	69376-3	69815
141, 141A	1-331310-1	69376-1	69493
142, 142A, 142B	1-331310-2	69376	69493-1

### Right Angle Plugs

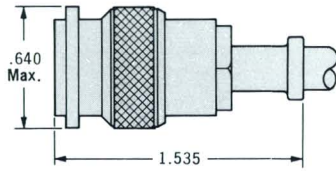


RG/U Cable	Part No.	Hand Tool No.	Die Insert No. for Tools — Hand — 69710 Pneu. — 69365
58, 58B	1-332292-3	69376-3	69815
58C	1-332292-3	69376-1 or 69376-3	69493 or 69815
55, 55A, 55B, 223	1-332292-1	69376-3	69815
141, 141A	1-332292-5	69376-1	69493
142, 142A, 142B	332292	69376	69493-1



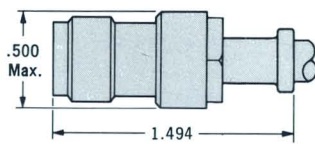
# TNC Single Crimp Type (Weatherproof)

## Plugs



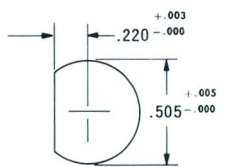
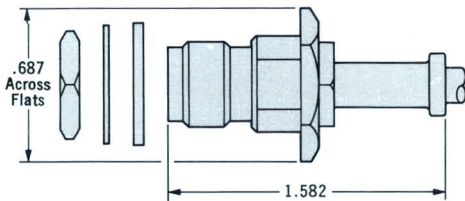
RG/U Cable	Part No.	Plug Body Configuration	Hand Tool No.	Die Insert No. for Tools — Hand — 69710 Pneu. — 69365
58, 58B	330953	Knurled	69376-3	69815
	330886	Hex		
58C	330953	Knurled	69376-1 or 69376-3	69493 or 69815
	330886	Hex		
55, 55A, 55B, 223	2-330953-3	Knurled	69376-3	69815
	2-330886-3	Hex		
141, 141A	2-330953-1	Knurled	69376-1	69493
	2-330886-1	Hex		
142, 142A, 142B	2-330953-2	Knurled	69376	69493-1
	2-330886-2	Hex		

## Jacks



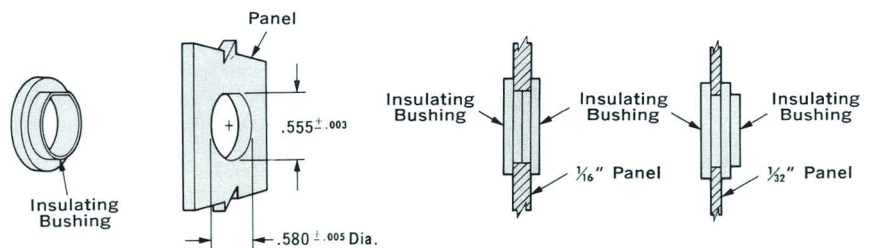
RG/U Cable	Part No.	Hand Tool No.	Die Insert No. for Tools — Hand — 69710 Pneu. — 69365
58, 58B	330887	69376-3	69815
58C	330887	69376-1 or 69376-3	69493 or 69815
55, 55A, 55B, 223	2-330887-3	69376-3	69815
141, 141A	2-330887-1	69376-1	69493
142, 142A, 142B	2-330887-2	69376	69493-1

## Bulkhead Jacks

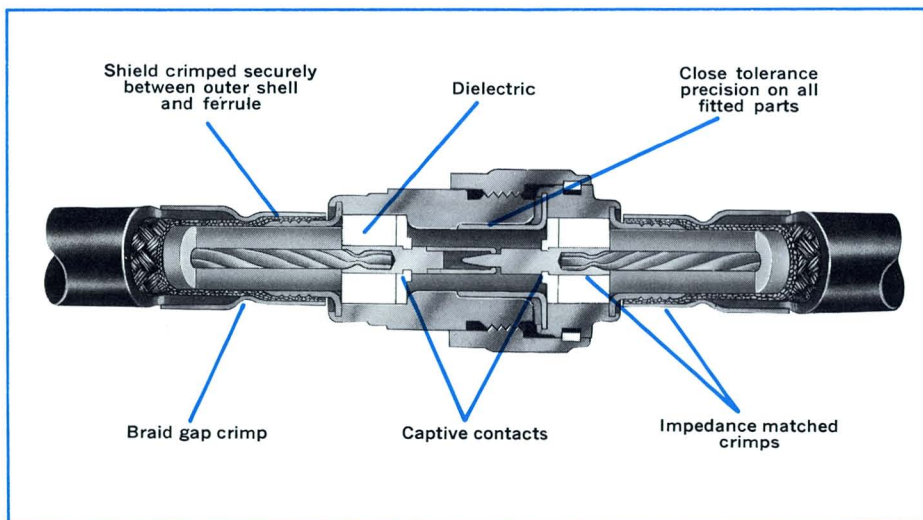


1/8" Max. Panel Thickness  
Panel Cutout

RG/U Cable	Part No.	Hand Tool No.	Die Insert No. for Tools — Hand — 69710 Pneu. — 69365
58, 58B	331325	69376-3	69815
58C	331325	69376-1 or 69376-3	69493 or 69815
55, 55A, 55B, 223	1-331325-3	69376-3	69815
141, 141A	1-331325-1	69376-1	69493
142, 142A, 142B	1-331325-2	69376	69493-1



Panel Insulating Bushing for Bulkhead Jacks  
Part No. 330620 (Two required)



N Series  
50-Ohm Dual  
Crimp Type  
MIL-C-39012,  
Class II  
Category B

The COAXICON\* N Series Connector, featuring a  $\frac{5}{8}$ -24 threaded coupling for optimum stability, is highly suited for critical applications and environments. This medium sized connector can withstand shock and vibration to assure a low noise level and has a constant impedance of 50 ohms. It also features a captive center contact and provides excellent performance at frequencies up to 11 GHz, with voltages up to 1000 volts peak.

This A-MP\* connector offers the added benefits of low overall applied cost with a labor-saving two crimp

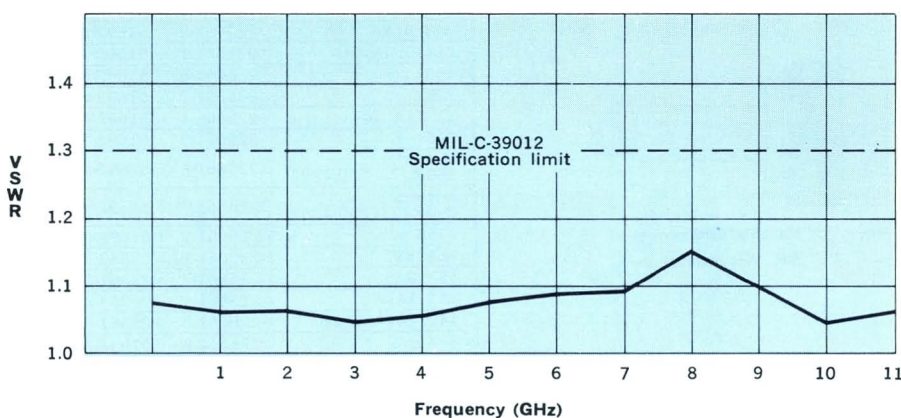
assembly. The contact is simply crimped to the cable's center conductor, then both braid and cable support are simultaneously crimped to complete the termination.

N Series Connectors are available in standard and weatherproof versions as well as plug, jack, panel jack, bulkhead jack and right-angle plug configurations. Those with a military designation (M39012 /) are furnished in accordance with all requirements of specification MIL-C-39012, Class II, Category B.

### FEATURES

- MIL-C-39012 performance
- Captive center contacts
- Completely crimpable application — one hand tool crimps all cables with single or double-braided shields of a given size
- Impedance matching crimps
- Broad band performance — low VSWR
- Superior cable retention

## Specifications



Test Cable RG-214/U; Connector No. 51692-1

### Electrical Characteristics

Nominal Impedance:  
50 ohms  
Working Voltage:  
1000 volts, RMS at sea level  
Frequency Range:  
0 to 11 GHz  
Contact Resistance:  
Outer contact — .2 milliohms;  
center contact — 1.0 milliohms  
Insulation Resistance:  
5000 megohms minimum  
Dielectric Withstanding Voltage:  
2500 volts, RMS at sea level  
R.F. Leakage:  
90 db min. @ 2 to 3 GHz  
R.F. Insertion Loss:  
0.15 db max. @ 10 GHz  
Corona Level:  
500 volts min. @ 70,000 ft.

### Mechanical Characteristics

Mating/Unmating:  
Threaded coupling  
Cable Attachment:  
Crimp type — center contact  
and braid  
Coupling Nut Retention:  
100 lbs. minimum  
Cable Retention:  
90 lbs. minimum, RG 214/U cable  
Durability:  
500 cycles per MIL-C-39012  
Captive Contact:  
6 lbs. minimum axial retention,  
either direction

Note: All data pertains to use with MIL-C-39012 specified cables only.

#### All dimensions in inches.

Note: Specifications subject to change. Consult AMP Incorporated for latest design specifications.

‡ Registered Trademark of E. I. duPont, Inc.

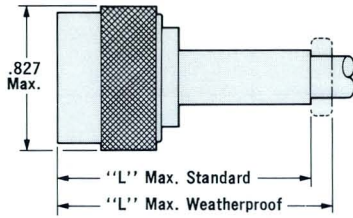
### Materials

Brass:  
QQ-B-626  
Beryllium Copper:  
QQ-C-530  
TEFLON:‡  
MIL-P-19468  
Copper, Annealed:  
QQ-C-576  
Phosphorous Bronze:  
QQ-B-750  
Silicone Rubber:  
ZZ-R-765  
Plating:  
Silver — QQ-S-365,  
.0002 minimum  
Gold — MIL-G-45204,  
.0001 minimum

### Environmental Characteristics

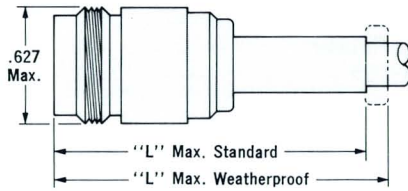
Temperature Range:  
-65°C to +165°C (TEFLON  
cables)  
Vibration:  
MIL-STD-202, Method 204,  
Test Cond. B  
Shock:  
MIL-STD-202, Method 202,  
100 G's  
Moisture Resistance:  
MIL-STD-202, Method 106  
Salt Spray:  
MIL-STD-202, Method 101,  
Test Cond. B  
Temperature Cycling:  
MIL-STD-202, Method 102,  
Test Cond. C

## Plugs



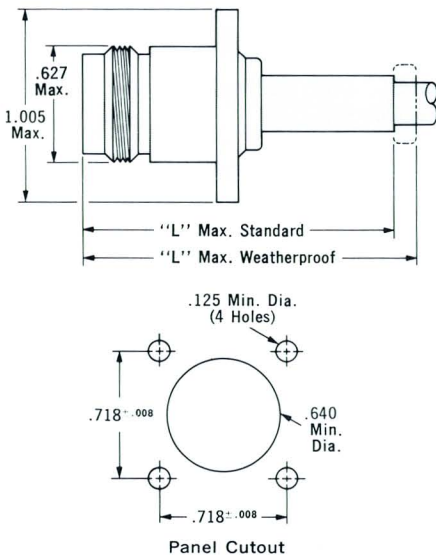
RG/U Cable	PART NO.						M39012/ Desig.*	Hand Tool No.
	STANDARD			WEATHERPROOF				
	Tarn.	Rest. Fin.	Silver Fin.	L	Tarn.	Rest. Fin.		
212, 143A, 5, 5A, 5B	225661-3	51692-3	1.687	225662-3	—	1.859	01-0006	220015-2
213, 8, 8A	225661-2	51692-2	1.687	225662-2	225092-2	1.859	01-0007	220015-1
214, 9, 9A, 9B	225661-1	51692-1	1.687	225662-1	225092-1	1.859	01-0008	220015-1
165	225661-6	51692-6	1.687	225662-6	225092-6	1.859	01-0011	220015-1
225	225661-7	51692-7	1.687	225662-7	225092-7	1.859	01-0012	220015-1
11, 11A, 144	225661-4	51692-4	1.687	225662-4	225092-4	1.859	01-0013	220015-1
216	225661-5	51692-5	1.687	225662-5	225092-5	1.859	01-0014	220015-1
Microdot 250-4172, 250-4208	225661-8	51692-8	1.687	225662-8	1-225092-0	1.828	—	220015-3
Microdot 250-4171, 250-4207	225661-9	51692-9	1.687	225662-9	225092-9	1.828	—	220015-3
115A	1-225661-0	1-51692-0	1.687	1-225662-0	225092-8	1.859	—	220015-1
58A, 58C	1-225661-2	225361-1	1.687	1-225662-2	225392-7	1.687	—	220045-2
55A, 223	1-225661-3	225361-2	1.687	1-225662-3	225392-1	1.687	—	220045-2
141, 141A	1-225661-4	225361-3	1.687	1-225662-4	225392-6	1.687	—	220045-2
142, 142A, 142B	1-225661-5	225361-4	1.687	225699-1	225392-2	1.687	—	220045-2
393	225661-7	51692-7	1.687	1-225662-1	1-225092-1	1.859	—	220015-1
F.E.P.-115A (Times MI5164)	—	—	1.687	1-225662-6	1-225092-3	1.859	—	220015-1
226 Modified (Times A-A2368)	—	—	1.687	1-225662-7	1-225092-4	2.406	—	220065-1
10A, 215 Armor Cable	—	225276-1	1.887	—	—	—	—	220015-1**
12A Armor Cable	—	225276-2	1.887	—	—	—	—	220015-1**
217	—	1-51692-1	2.275	—	—	—	—	220065-1

## Jacks



RG/U Cable	PART NO.						M39012/ Desig.*	Hand Tool No.
	STANDARD			WEATHERPROOF				
	Tarn.	Rest. Fin.	Silver Fin.	L	Tarn.	Rest. Fin.		
212, 143A, 5, 5A, 5B	225663-3	51693-3	1.765	225664-3	—	1.937	02-0007	220015-2
213, 8, 8A	225663-2	51693-2	1.765	225664-2	225093-2	1.937	02-0008	220015-1
214, 9, 9A, 9B	225663-1	51693-1	1.765	225664-1	225093-1	1.937	02-0009	220015-1
165	225663-6	51693-6	1.765	225664-6	225093-6	1.937	02-0012	220015-1
225	225663-7	51693-7	1.765	225664-7	225093-7	1.937	02-0013	220015-1
11, 11A, 144	225663-4	51693-4	1.765	225664-4	225093-4	1.937	02-0014	220015-1
216	225663-5	51693-5	1.765	225664-5	225093-5	1.937	02-0018	220015-1
Microdot 250-4172, 250-4208	225663-8	51693-8	1.765	225664-8	1-225093-2	1.906	—	220015-3
Microdot 250-4171, 250-4207	225663-9	51693-9	1.765	225664-9	1-225093-3	1.906	—	220015-3
115A	1-225663-0	1-51693-0	1.765	1-225664-0	225093-8	1.937	—	220015-1
58A, 58C	1-225663-2	225362-1	1.765	1-225664-2	225723-4	1.765	—	220045-2
55A, 223	1-225663-3	225362-2	1.765	1-225664-3	225723-1	1.765	—	220045-2
141, 141A	1-225663-4	225362-3	1.765	1-225664-4	225723-3	1.765	—	220045-2
142, 142A, 142B	1-225663-5	225362-4	1.765	225700-1	225723-2	1.765	—	220045-2
393	225663-7	51693-7	1.765	1-225664-1	225093-9	1.937	—	220015-1
F.E.P.-115A (Times MI5164)	—	—	—	1-225664-6	1-225093-0	1.937	—	220015-1
226 Modified (Times A-A2368)	—	—	—	1-225664-7	1-225093-1	2.500	—	220065-1
10A, 215 Armor Cable	—	225277-1	1.965	—	—	—	—	220015-1**
12A Armor Cable	—	225277-2	1.965	—	—	—	—	220015-1**
217	—	1-51693-3	2.375	—	—	—	—	220065-1

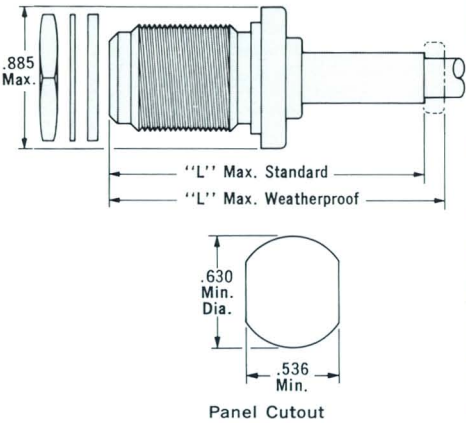
## Panel Jacks



RG/U Cable	PART NO.						M39012/ Desig.*	Hand Tool No.
	STANDARD			WEATHERPROOF				
	Tarn.	Rest. Fin.	Silver Fin.	L	Tarn.	Rest. Fin.		
212, 143A, 5, 5A, 5B	225665-3	51689-3	1.765	225666-3	—	1.937	02-0015	220015-2
213, 8, 8A	225665-2	51689-2	1.765	225666-2	225089-2	1.937	02-0016	220015-1
214, 9, 9A, 9B	225665-1	51689-1	1.765	225666-1	225089-1	1.937	02-0017	220015-1
165	225665-6	51689-7	1.765	225666-6	225089-5	1.937	—	220015-1
225	225665-7	51689-5	1.765	225666-7	225089-4	1.937	—	220015-1
11, 11A, 144	225665-4	—	1.765	225666-4	—	1.937	—	220015-1
216	225665-5	—	1.765	225666-5	—	1.937	—	220015-1
Microdot 250-4172, 250-4208	225665-8	51689-6	1.765	225666-8	225089-8	1.906	—	220015-3
Microdot 250-4171, 250-4207	225665-9	—	1.765	225666-9	—	1.906	—	220015-3
115A	1-225665-0	51689-4	1.765	1-225666-0	225089-3	1.937	—	220015-1
58A, 58C	1-225665-2	225364-1	1.765	1-225666-2	225606-4	1.937	—	220045-2
55A, 223	1-225665-3	225364-2	1.765	1-225666-3	225606-1	1.765	—	220045-2
141, 141A	1-225665-4	225364-3	1.765	1-225666-4	225606-3	1.765	—	220045-2
142, 142A, 142B	1-225665-5	225364-4	1.765	225701-1	225606-2	1.765	—	220045-2
393	225665-7	51689-5	1.765	1-225666-1	225089-6	1.937	—	220015-1
F.E.P.-115A (Times MI5164)	—	—	—	1-225666-6	225089-7	1.937	—	220015-1
226 Modified (Times A-A2368)	—	—	—	—	—	—	—	220065-1
10A, 215 Armor Cable	—	225322-1	1.965	—	—	—	—	220015-1**
12A Armor Cable	—	225322-2	1.965	—	—	—	—	220015-1**
217	—	51689-8	2.375	—	—	—	—	220065-1

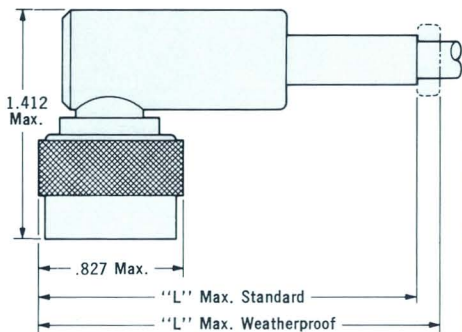
\*Government designation applies only to silver plated parts.  
\*\*Use Tool No. 220042-1 for Armored Ferrule.

## Bulkhead Jacks



RG/U Cable	PART NO.							M39012/ Desig. <sup>a</sup>	Hand Tool No.
	STANDARD			WEATHERPROOF					
	Tarn.	Rest. Fin.	Silver Fin.	L	Tarn.	Rest. Fin.	Silver Fin.		
212, 143A, 5, 5A, 5B	225667-3	51694-3	1.953	225668-3	—	1.937	03-0003	220015-2	
213, 8, 8A	225667-2	51694-2	1.953	225668-2	225094-2	2.125	03-0004	220015-1	
214, 9, 9A, 9B	225667-1	51694-1	1.953	225668-1	225094-1	2.125	03-0005	220015-1	
165	225667-6	51694-6	1.953	225668-6	225094-6	2.125	03-0008	220015-1	
225	225667-7	51694-7	1.953	225668-7	225094-7	2.125	03-0009	220015-1	
11, 11A, 144	225667-4	51694-4	1.953	225668-4	225094-4	2.125	03-0010	220015-1	
216	225667-5	51694-5	1.953	225668-5	225094-5	2.125	03-0011	220015-1	
Microdot 250-4172, 250-4208	225667-8	51694-8	1.953	225668-8	1-225094-2	2.093	—	220015-3	
Microdot 250-4171, 250-4207	225667-9	51694-9	1.953	225668-9	1-225094-3	2.093	—	220015-3	
115A	1-225667-0	1-51694-0	1.953	1-225668-0	225094-8	2.125	—	220015-1	
58A, 58C	1-225667-2	225363-1	1.953	1-225668-2	225393-4	1.953	—	220045-2	
55A, 223	1-225667-3	225363-2	1.953	1-225668-3	225393-1	1.953	—	220045-2	
141, 141A	1-225667-4	225363-3	1.953	1-225668-4	225393-3	1.953	—	220045-2	
142, 142A, 142B	1-225667-5	225363-4	1.953	225702-1	225393-2	1.953	—	220045-2	
393	225667-7	51694-7	1.953	1-225668-1	225094-9	2.125	—	220015-1	
F.E.P.-115A (Times MI5164)	—	—	1.953	1-225668-6	1-225094-1	2.125	—	220015-1	
226 Modified (Times A-A2368)	—	—	1.953	—	—	—	—	220065-1	
10A, 215 Armor Cable	—	225323-1	2.153	—	—	—	—	220015-1**	
12A Armor Cable	—	225323-2	2.153	—	—	—	—	220015-1**	
217	—	1-51694-2	2.546	—	—	—	—	220065-1	

## Right Angle Plugs



RG/U Cable	PART NO.							M39012/ Desig. <sup>a</sup>	Hand Tool No.
	STANDARD			WEATHERPROOF					
	Tarn.	Rest. Fin.	Silver Fin.	L	Tarn.	Rest. Fin.	Silver Fin.		
212, 143A, 5, 5A, 5B	225669-3	—	2.275	225670-3	—	2.453	—	220015-2	
213, 8, 8A	225669-2	225014-2	2.275	225670-2	225389-2	2.453	05-0002	220015-1	
214, 9, 9A, 9B	225669-1	225014-3	2.275	225670-1	225389-4	2.453	05-0003	220015-1	
165	225669-6	225014-8	2.275	225670-6	225389-8	2.453	—	220015-1	
225	225669-7	225014-5	2.275	225670-7	225389-3	2.453	—	220015-1	
11, 11A, 144	225669-4	—	2.275	225670-4	—	2.453	—	220015-1	
216	225669-5	—	2.275	225670-5	—	2.453	—	220015-1	
Microdot 250-4172, 250-4208	225669-8	225014-6	2.275	225670-8	225389-9	2.421	—	220015-3	
Microdot 250-4171, 250-4207	225669-9	225014-1	2.275	225670-9	1-225389-0	2.421	—	220015-3	
115A	1-225669-0	225014-4	2.275	1-225670-0	225389-1	2.453	—	220015-1	
58A, 58C	1-225669-2	225365-1	2.275	1-225670-2	225394-4	2.275	—	220045-2	
55A, 223	1-225669-3	225365-2	2.275	1-225670-3	225394-1	2.275	—	220045-2	
141, 141A	1-225669-4	225365-3	2.275	1-225670-4	225394-5	2.275	—	220045-2	
142, 142A, 142B	1-225669-5	225365-4	2.275	225703-1	225394-2	2.275	—	220045-2	
393	225669-7	225014-5	2.275	1-225670-1	225389-6	2.453	—	220015-1	
F.E.P.-115A (Times MI5164)	—	—	—	1-225670-6	225389-7	2.453	—	220015-1	
10A, 215 Armor Cable	—	225324-1	2.475	—	—	—	—	220015-1**	
12A Armor Cable	—	225324-2	2.475	—	—	—	—	220015-1**	
217	—	225014-7	2.859	—	—	—	—	220065-1	

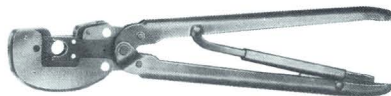
<sup>a</sup>Government designation applies only to silver plated parts.  
<sup>\*\*</sup>Use Tool No. 220042-1 for Armored Ferrule.

### Tooling

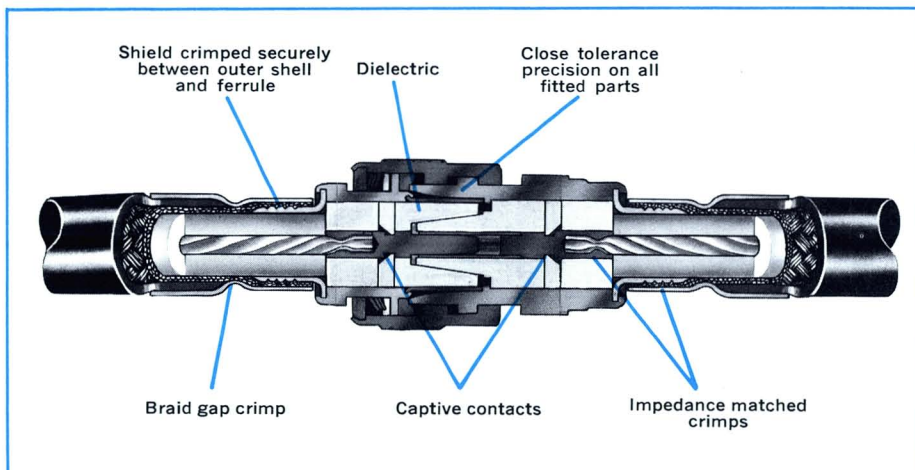
The A-MP CERTI-CRIMP Hand Tool is precision engineered for easy application of the patented, impedance matching circular crimps to both the center conductor and shield connections. This hand tool features the CERTI-CRIMP Ratchet Device which prevents over and under crimping.



Tool No. 220045



Tool No. 220015



The COAXICON \* C Series Connector, featuring a bayonet-locking coupling for quick connect/disconnect terminations, is rated for use in applications where voltages do not exceed 1000 volts peak. Having a constant impedance of 50 ohms, this medium size connector is intended for use with medium size cables such as RG-5B, 8A, 9B, 213 and 214 but can be used with 75 ohms cables where impedance matching is not critical. It also provides excellent performance at frequencies up to 11 GHz.

The connector is also designed to

assure optimum mechanical and RF performance at the lowest overall applied cost. It features a captivated center contact and is fully crimpable to coaxial cable using matching A-MP\* tooling. Only one hand tool is required to completely terminate a given size cable with either a single- or double-braided shield.

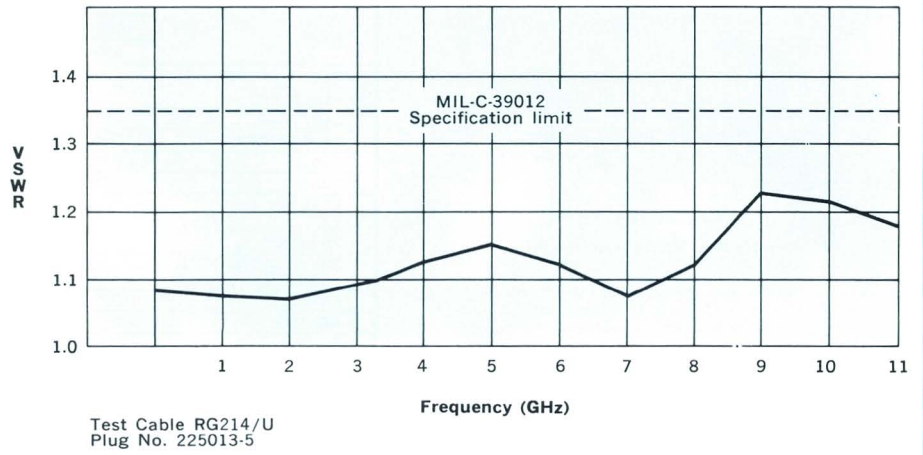
C Series Connectors are available in both standard and weather-proof versions and can be furnished in a variety of configurations, including plug, jack, panel jack, bulkhead jack and right-angle plug.

### C Series 50-Ohm

#### FEATURES

- Captive center contacts
- TEFLON<sup>†</sup> dielectrics
- Completely crimpable application — one hand tool crimps both center conductor and braid for maximum savings in time and labor
- Precision matched tooling applies impedance matching crimps
- No danger of heat damage to coaxial cable
- Low VSWR
- Superior cable retention

Specifications



Test Cable RG214/U  
Plug No. 225013-5

**Electrical Characteristics**

- Nominal Impedance:  
50 ohms
- Working Voltage:  
1500 volts, RMS max. at sea level
- Frequency Range:  
0 to 11 GHz
- Contact Resistance:  
Outer contact — 0.15 milliohm (max.)  
center contact — 1 milliohm (max.)
- Insulation Resistance:  
5000 megohms (min.)
- Dielectric Withstanding Voltage:  
3000 volts, RMS min. at sea level
- RF Leakage:  
- 55 db min. (2 to 3 GHz)
- RF Insertion Loss:  
0.15 db max. @ 10 GHz
- Corona Level:  
500 volts min. @ 70,000 ft.

**Mechanical Characteristics**

- Mating/Unmating:  
Bayonet coupling
- Cable Attachment:  
Crimp type — center conductor and braid
- Coupling Nut Retention:  
100 lbs. min.
- Cable Retention:  
125 lbs. min., RG-214/U cable
- Durability:  
500 cycles, per MIL-C-39012

Note: All data pertains to use with MIL-C-39012 specified cables only.

**Materials**

- Brass:  
QQ-B-626
- Beryllium Copper:  
QQ-C-530
- TEFLON:  
MIL-P-19468
- Copper, Annealed:  
QQ-C-576
- Phosphor Bronze:  
QQ-B-750
- Silicone Rubber:  
ZZ-R-765
- Plating:  
Silver — QQ-S-365  
.0002" minimum  
gold — MIL-G-45204  
.0001" minimum

**Environmental Characteristics**

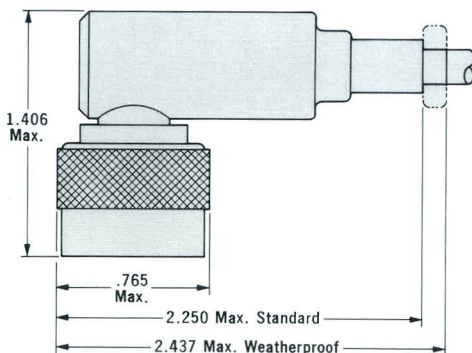
- Temperature Range:  
- 65°C to + 165°C (TEFLON cables)
- Vibration:  
MIL-STD-202, Method 204, Test Cond. B
- Shock:  
MIL-STD-202, Method 213, 50 G's
- Moisture Resistance:  
MIL-STD-202, Method 106
- Salt Spray:  
MIL-STD-202, Method 101, Test Cond. B
- Temperature Cycling:  
MIL-STD-202, Method 102, Test Cond. C

**ALL DIMENSIONS IN INCHES.**

Note: Specifications subject to change. Consult AMP Incorporated for latest design specifications.

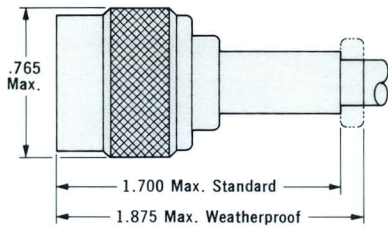
‡ Registered trademark of the E. I. duPont Company.

Right Angle Plugs



RG/U Cable	PART NO.				Hand Tool No.
	TARNISH RESISTANT FINISH		SILVER FINISH		
	Standard	Weatherproof	Standard	Weatherproof	
214, 9, 9A, 9B	225679-3	225680-1	225078-3	225411-1	220015-1
213, 8, 8A	225679-6	225680-2	225078-6	225411-2	220015-1
225	225679-5	225680-3	225078-5	225411-3	220015-1
115A	225679-4	225680-4	225078-4	225411-4	220015-1
Microdot 250-4172, 250-4208	225679-2	225680-6	225078-2	225411-6	220015-3
58A, 58C	225679-1	225680-5	225078-1	225919-1	220045-2

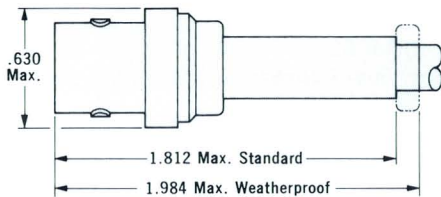
## Plugs



RG/U Cable	PART NO.				Hand Tool No.
	TARNISH RESISTANT FINISH		SILVER FINISH		
	Standard	Weatherproof	Standard	Weatherproof	
214, 9, 9A, 9B	225671-5	225672-5	225013-5	225407-1	220015-1
213, 8, 8A	225671-6	225672-6	225013-6	225407-2	220015-1
212, 143A, 5, 5A, 5B	225671-7	—	225013-7	—	220015-2
11, 11A, 144	225671-8	225672-8	225013-8	225407-3	220015-1
165	1-225671-0	1-225672-0	1-225013-0	225407-4	220015-1
225	1-225671-1	1-225672-1	1-225013-1	225407-5	220015-1
115A	225671-4	225672-4	225013-4	225407-6	220015-1
Microdot 250-4172, 250-4208	225671-1	225672-1	225013-1	225407-8	220015-3
Microdot 250-4171, 250-4207	225671-2	225672-2	225013-2	225407-9	220015-3
58A, 58C	225671-3	225672-3	—	225830-2	220045-2
RG-216	225671-9	225672-9	225013-9	1-225407-1	220015-1
RG-55A, 223	—	—	—	225830-1	220045-2
RG 12, 12A Armor Cable	—	—	225949-1	—	220015-1*

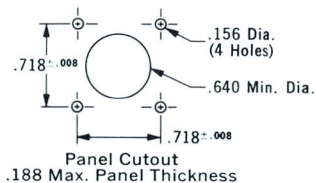
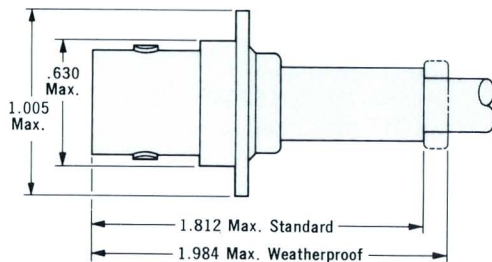
\*Use Tool No. 220042-1 for armored ferrule.

## Jacks



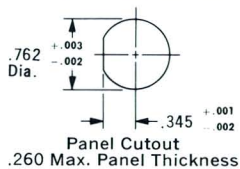
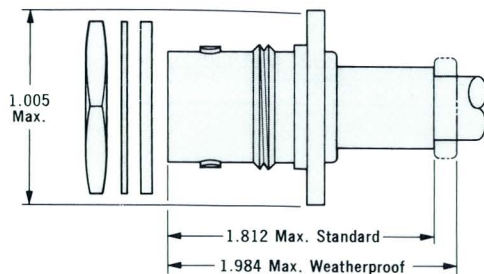
RG/U Cable	PART NO.				Hand Tool No.
	TARNISH RESISTANT FINISH		SILVER FINISH		
	Standard	Weatherproof	Standard	Weatherproof	
214, 9, 9A, 9B	225673-1	225674-1	225320-1	225408-1	220015-1
213, 8, 8A	225673-2	225674-2	225320-2	225408-2	220015-1
212, 143A, 5, 5A, 5B	225673-3	—	225320-3	—	220015-2
11, 11A, 144	225673-4	225674-3	225320-4	225408-3	220015-1
165	225673-6	225674-4	225320-6	225408-4	220015-1
225	225673-7	225674-5	225320-7	225408-5	220015-1
115A	225673-8	225674-6	225320-8	225408-6	220015-1
216	225673-5	225674-7	225320-5	225408-7	220015-1

## Panel Jacks



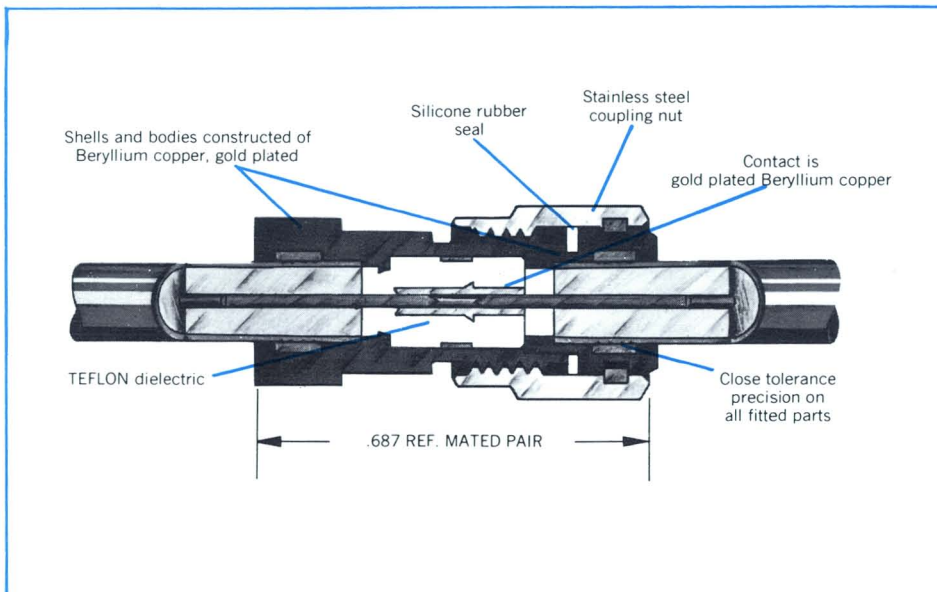
RG/U Cable	PART NO.				Hand Tool No.
	TARNISH RESISTANT FINISH		SILVER FINISH		
	Standard	Weatherproof	Standard	Weatherproof	
214, 9, 9A, 9B	225677-1	225678-1	225321-1	225409-1	220015-1
213, 8, 8A	225677-2	225678-2	225321-2	225409-2	220015-1
212, 143A, 5, 5A, 5B	225677-3	—	225321-3	—	220015-2
165	225677-4	225678-3	225321-4	225409-3	220015-1
225	225677-5	225678-4	225321-5	225409-4	220015-1
115A	225677-6	225678-5	225321-6	225409-5	220015-1

## Bulkhead Jacks



RG/U Cable	PART NO.				Hand Tool No.
	TARNISH RESISTANT FINISH		SILVER FINISH		
	Standard	Weatherproof	Standard	Weatherproof	
214, 9, 9A, 9B	225675-2	225676-1	225295-2	225410-1	220015-1
213, 8, 8A	225675-3	225676-2	225295-3	225410-2	220015-1
212, 143A, 5, 5A, 5B	225675-4	—	225295-4	—	220015-2
11, 11A, 144	225675-5	225676-3	225295-5	225410-3	220015-1
165	225675-7	225676-4	225295-7	225410-4	220015-1
225	225675-8	225676-5	225295-8	225410-5	220015-1
115A	225675-1	225676-6	225295-1	225410-6	220015-1
216	225675-6	225676-8	225295-6	225410-9	220015-1





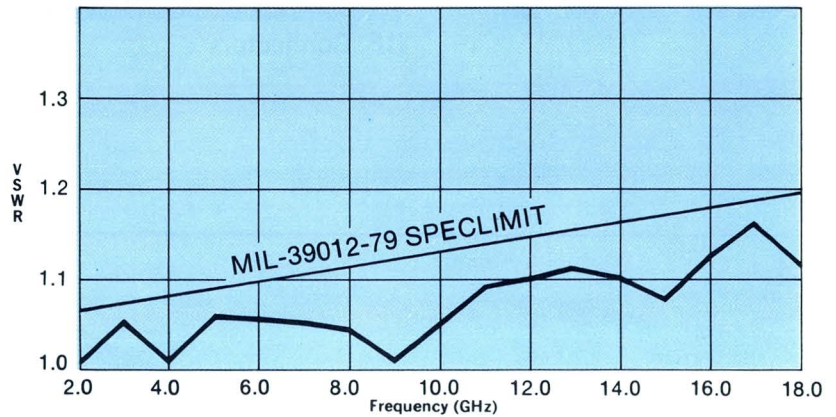
AMP SMA Series R.F. Connectors are designed, manufactured, and tested to the requirements of MIL-C-39012. Although completely interchangeable with other SMA type connectors, the AMP designs offer greatest advantages in cable attachment techniques where application tooling controls and maintains consistent SMA connector performance.

Where a right angle connector is required AMP recommends forming the cable with the AMP bending fixture. This procedure takes full advantage of the consistent electrical characteristics of the coaxial cable and eliminates the need for a special right angle connector.

## SMA Series Coaxial Connectors

### Features

- Meets or exceeds performance requirements of MIL-C-39012
- No special skills required
- Completely pre-assembled plug—minimal components for additional strength
- High strength beryllium copper used in critical components to prevent interface damage
- Speed of assembly—plug half and jack half terminated in less than one minute
- Intermateable with all SMA Series Connectors presently available



Test Cable .141 Semi-rigid Cable—Connector No. 225422-5

**Electrical Characteristics**

Nominal Impedance:  
50 Ohms

VSWR:  
Less than  $1.05 + .008F$   
(Frequency to 18 GHz)

R F Leakage:  
-78db at 2.5 GHz

Dielectric Withstanding Voltage:  
1000 v RMS, at 60 cps, at Sea  
Level

Contact Resistance:  
Center Contact - 2.0 Milliohms Max.  
Outer Contact - 1.0 Milliohms Max.

Insulation Resistance:  
5000 Megohms Min.

R. F. Insertion Loss:  
.06db Max. at 6 GHz

**Mechanical Characteristics**

Cable Retention:  
65 lbs. Min.

Mating/Unmating:  
Threaded Coupling

Cable Attachment:  
Crimp or Press fit

Coupling Nut Retention:  
60 lbs. Min.

Durability:  
500 cycles per MIL-C-39012

**Materials**

Beryllium Copper:  
Per QQ-C-530

Teflon‡ :

TFE Per MIL-P-19468

Copper, Annealed:  
QQ-C-576

Brass:  
QQ-B-626

Silicone Rubber:  
22-R-765

Stainless Steel:  
QQ-S-764, Class 303, Condition A

Plating:  
Gold per MIL-G-45204  
Silver per QQ-S-365

**Environmental Characteristics**

Temperature Range:  
-65°C to +125°C

Vibration:  
MIL-STD-202, Method 204, Test  
Cond. D

Shock:  
MIL-STD-202, Method 213, Test  
Cond. 1 (100 g's)

Moisture Resistance:  
MIL-STD-202, Method 106,  
200 Megohms Min.

Corrosion (Salt Spray):  
MIL-STD-202, Method 101,  
Test Cond. B

Temperature Cycling:  
MIL-STD-202, Method 102,  
Test Cond. B Except High Temp.  
to be 135°C

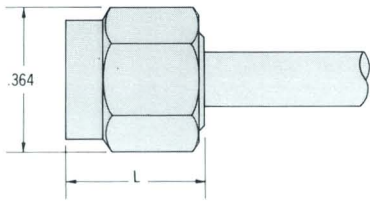
**All dimensions in inches.**

Note: Specifications subject to change.  
Consult AMP Incorporated for latest  
design specifications.

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Rights Reserved. AMP Incorporated products  
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‡ Registered Trademark of E. I. duPont, Inc.

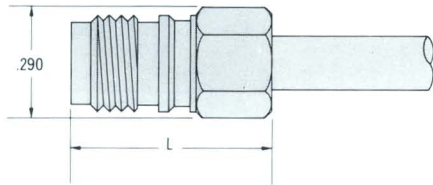
## Plugs



RG/U Cable	L	Wt.	Part Number	Hand Tool No.
402 (.141 OD)	.365	.070 oz.	225422-5	220130-1**
402 (.141 OD)	.365	.070 oz.	*225422-8	

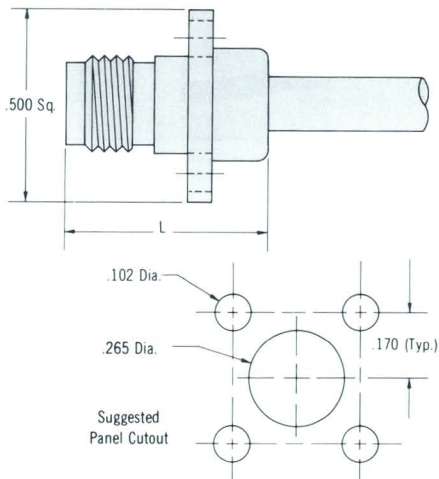
\* Same as -5 except with retractable coupling nut

## Jacks



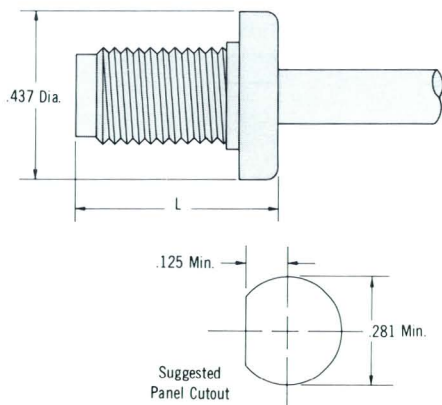
RG/U Cable	L	Wt.	Part Number	Hand Tool No.
402 (.141 OD)	.527	.070 oz.	51677-3	220130-1**

## Panel Jacks



RG/U Cable	L	Wt.	Part Number	Hand Tool No.
402 (.141 OD)	.527	.120 oz.	51717-3	220130-1**

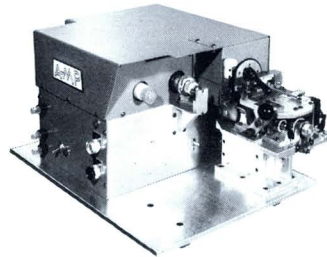
## Bulkhead Jacks



RG/U Cable	L	Wt.	Part Number	Hand Tool No.
402 (.141 OD)	.527	.130 oz.	51716-3	220130-1**

\*\* Use Applicator Kit #220131-1 with hand tool.

Cable Preparation Machine  
Part Number 220085-2



Pneumatic Application Tool  
Part Number 220127-1



Hand Tool Part Number 220130-1  
with Applicator Kit Part Number 220131-1

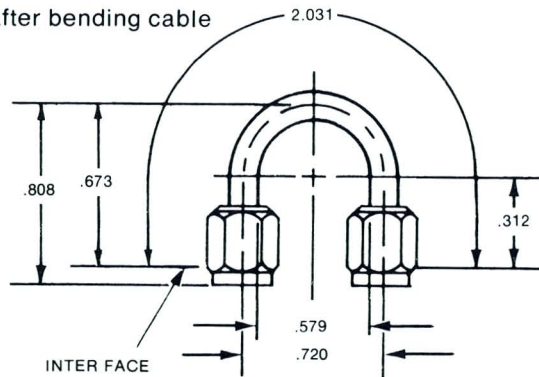


AMP Bending Fixture—Part Number 220049-1

Minimum Bend Configurations

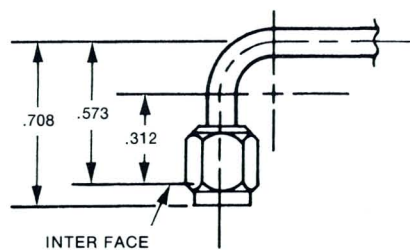
180° Bend Plug Assembly

Plug applied after bending cable

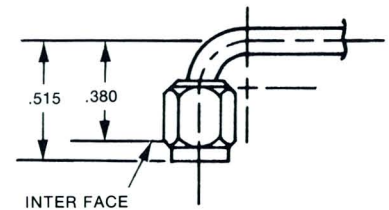


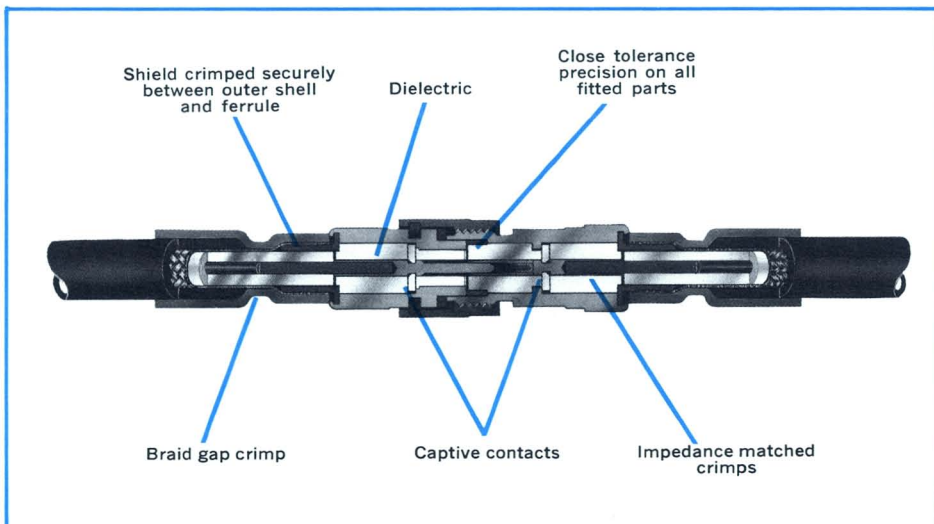
90° Bend Plug Assemblies

Plug applied after bending cable



Plug applied before bending cable





### AMP SMA Series RF connectors

are designed, manufactured, and qualified to MIL-C-39012. Although completely interchangeable with other SMA type connectors, the AMP design offers greater advantages in cable attachment techniques

because the application tooling controls and maintains consistent SMA connector performance. Both the center conductor and the shield of the cable are joined to the connector through precision crimping.

**COAXICON**  
SMA Series Connectors  
Dual Crimp Type  
For Flexible Cables  
MIL-C-39012, Class II  
Category B

### Features

- Low VSWR
- Captive center conductor contacts
- Solderless application to the cable—no heat damage
- Crimped application to cable gives consistent electrical and mechanical performance
- Rapid assembly to cable—no special skills required
- Qualified to MIL-C-39012

### Electrical Characteristics

Nominal Impedance:  
50 ohms

Working Voltage:  
Connectors for RG 142/U size cable 335 volts RMS @ sea level.  
Connectors for RG 316/U size cable 250 volts RMS @ sea level

Frequency Range:  
0 to 12.4 GHz

Contact Resistance:  
Outer Contact—2.0 milliohms max.  
Center Contact—3.0 milliohms max.

Insulation Resistance:  
5000 Megohms min.

Dielectric Withstanding Voltage:  
Connectors for RG 142/U size cable—1000 volts RMS @ sea level.  
Connectors for RG 316/U size cable: 750 volts RMS @ sea level

R. F. Leakage:  
-60 db minimum @ 2-3 GHz

R. F. Insertion Loss:  
.06 x  $\sqrt{\text{freq. in GHz}}$  tested @ 6 GHz

Corona Level:  
Connectors for RG 142/U size cable—250 volts @ 70,000 ft.  
Connectors for RG 316/U size cable: 190 volts @ 70,000 ft.

### Mechanical Characteristics

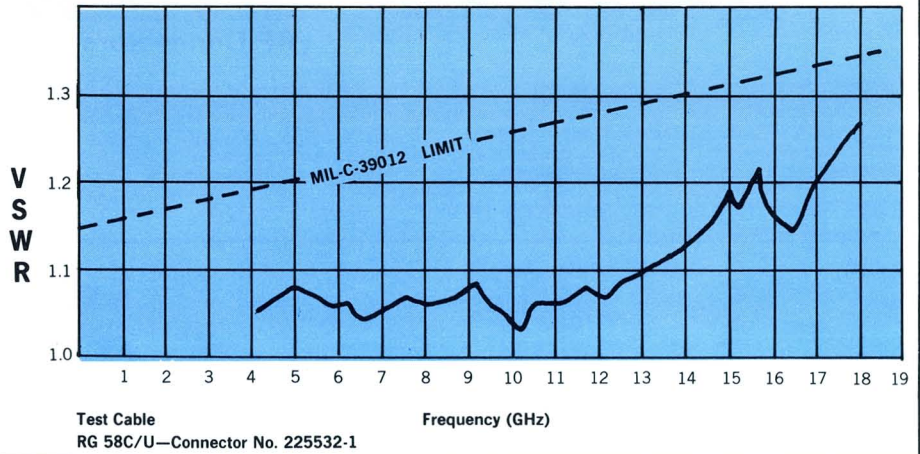
Mating/Unmating:  
threaded coupling

Cable Attachment:  
Crimp both center contact and outer conductor

Coupling Nut Retention:  
60 lbs. min.

Cable Retention:  
Connectors for RG 142/U size cable—45 lbs. min. Connectors for RG 316/U size cable—20 lbs. min.

Durability:  
500 cycles per MIL-C-39012



### Materials

Beryllium Copper:  
QQ-C-530

Stainless Steel:  
QQ-S-764, Class 303, Cond. A

Teflon\*:  
MIL-P-19468

Copper, Annealed:  
QQ-S-764, Class 303, Cond. A

Commercial Bronze (Alloy B):  
ASTM B140

Silicone Rubber:  
ZZ-R-765

Plating:  
Gold—MIL-G-45204, .0001 min.  
Silver—QQ-S-365, .0002 min.

### Environmental Characteristics

Temperature Range:  
-65°C to +165°C

Vibration, High Frequency:  
MIL-STD-202, Method 204, Test Cond. D

Shock:  
MIL-STD-202, Method 213, Test Cond. 1 (100 G's)

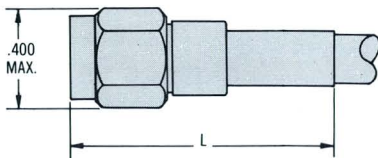
Moisture Resistance:  
MIL-STD-202, Method 106, 200 Megohms Min.

Corrosion (Salt Spray):  
MIL-STD-202, Method 101, Test Cond. B

Temperature Cycling:  
MIL-STD-202, Method 102, Test Cond. C except high temperature to be 200°C with Teflon\* cables

\*Teflon is a trademark of E. I. duPont, Inc.

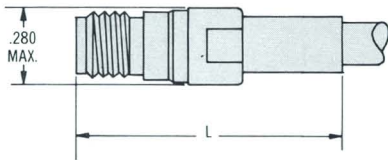
### Plugs



RG/U Cable	L Max.	Gov't. Desig. (M39012/)	AMP Part No.
58A, 58C	1.030	55-3021	225532-1
142, 142A, 142B	1.030	55-3022	225532-3
174, 188A, 316	.950	55-3019	225532-4
180B, 195A	1.030	—	225532-7
179B, 187A	.950	—	225532-8
141, 141A, 303	1.030	55-3024	225532-9
55A, 223	1.030	55-3023	1-225532-0

All connector assemblies can be terminated with:  
Hand Tool No. 220061-1, or  
Pneumatic Tool No. 69365 (Die No. 220091-1).

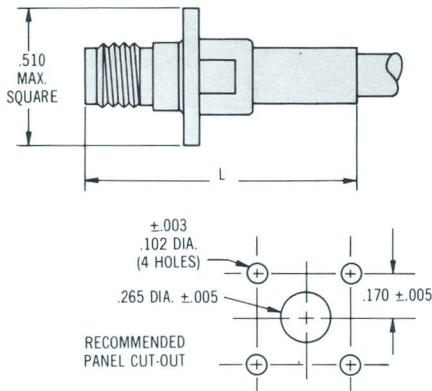
## Jacks



RG/U Cable	L Max.	Gov't. Desig. (M39012/)	AMP Part No.
58A, 58C	1.140	57-3021	225542-1
142, 142A, 142B	1.140	57-3022	225542-3
174, 188A, 316	1.060	57-3019	225542-4
180B, 195A	1.140	—	225542-7
179B, 187A	1.060	—	225542-8
141, 141A, 303	1.140	57-3024	225542-9
55A, 223	1.140	57-3023	1-225542-0

All connector assemblies can be terminated with:  
Hand Tool No. 220061-1, or  
Pneumatic Tool No. 69365 (Die No. 220091-1).

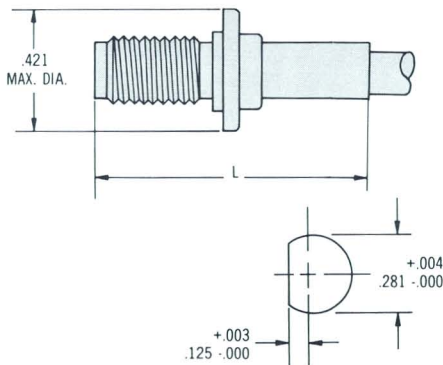
## Panel Jacks



RG/U Cable	L Max.	Gov't. Desig. (M39012/)	AMP Part No.
58A, 58C	1.140	58-3021	225607-1
142, 142A, 142B	1.140	58-3022	225607-3
174, 188A, 316	1.060	58-3019	225607-4
180B, 195A	1.140	—	225607-7
179B, 187A	1.060	—	225607-8
141, 141A, 303	1.140	58-3024	225607-9
55A, 223	1.140	58-3023	1-225607-0

All connector assemblies can be terminated with:  
Hand Tool No. 220061-1, or  
Pneumatic Tool No. 69365 (Die No. 220091-1).

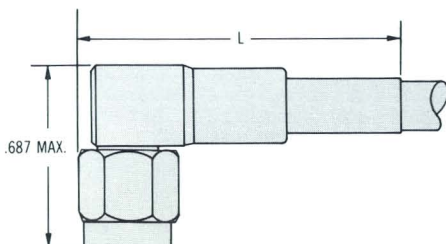
## Bulkhead Jacks



RG/U Cable	L Max.	Gov't. Desig. (M39012/)	AMP Part No.
58A, 58C	1.140	59-3021	225608-1
142, 142A, 142B	1.140	59-3022	225608-3
174, 188A, 316	1.060	59-3019	225608-4
180B, 195A	1.140	—	225608-7
179B, 187A	1.060	—	225608-8
141, 141A, 303	1.140	59-3024	225608-9
55A, 223	1.140	59-3023	1-225608-0

All connector assemblies can be terminated with:  
Hand Tool No. 220061-1, or  
Pneumatic Tool No. 69365 (Die No. 220091-1).

## Right Angle Plugs



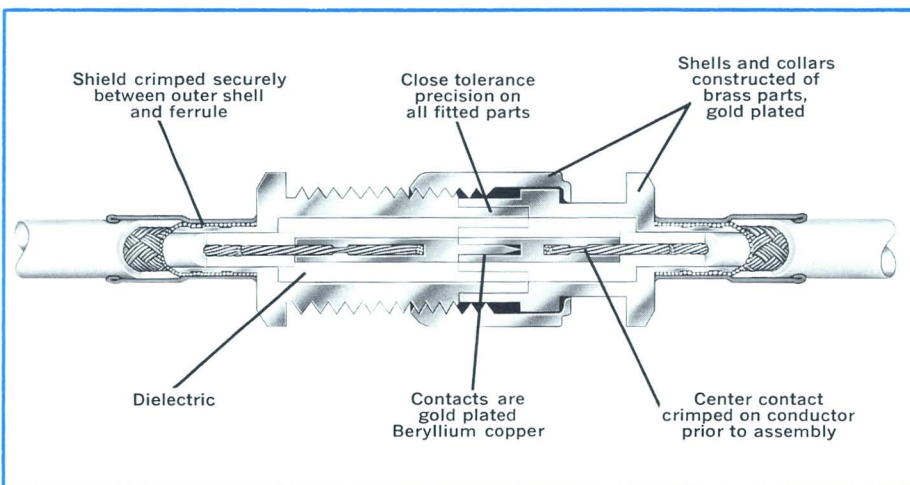
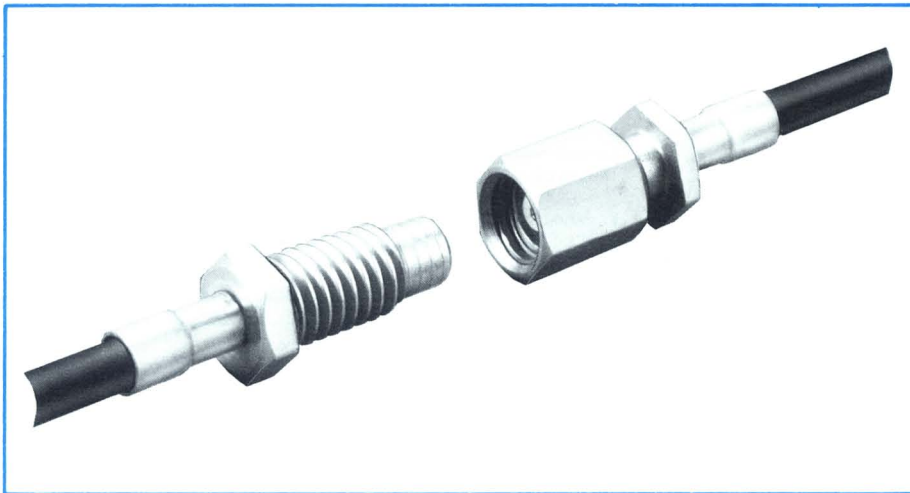
RG/U Cable	L Max.	Gov't. Desig. (M39012/)	AMP Part No.
58A, 58C	1.250	56-3021	225609-1
142, 142A, 142B	1.250	56-3022	225609-3
174, 188A, 316	1.187	56-3019	225609-4
180B, 195A	1.250	—	225609-7
179B, 187A	1.187	—	225609-8
141, 141A, 303	1.250	56-3024	225609-9
55A, 223	1.250	56-3023	1-225609-0

All connector assemblies can be terminated with:  
Hand Tool No. 220061-1, or  
Pneumatic Tool No. 69365 (Die No. 220091-1).





### SMC Series Connectors



The COAXICON SMC Series Connector is a miniature, lightweight connector especially designed for use in critical applications where limited space and vibration are of a major concern.

This AMP connector meets the requirements of specification MIL-C-39012, Class II, Category B to assure the highest standards of electrical and mechanical performance. It has a constant impedance of 50 ohms, a voltage rating of 350 volts peak and provides excellent operation at

frequencies up to 10 GHz. It also has a screw-threaded coupling and can be used with a wide range of miniature coaxial cable sizes such as RG-174, 179, 187 and 188.

To reduce the difficulties of assembly inherent in this type of connector, the connector's polarized center contacts are tape-mounted for easy assembly and termination. This outstanding feature of the COAXICON SMC Series Connector assures savings in both time and labor, resulting in the lowest overall applied cost.

#### Features

- Fast, clean cable assembly
- Center contacts mounted on tape for ease of handling
- Connector bodies pre-assembled
- Solderless termination — no danger of heat damage
- Center conductor and braid terminated with same tool
- Reduced noise level
- Miniature screw-on coupling

# Specifications

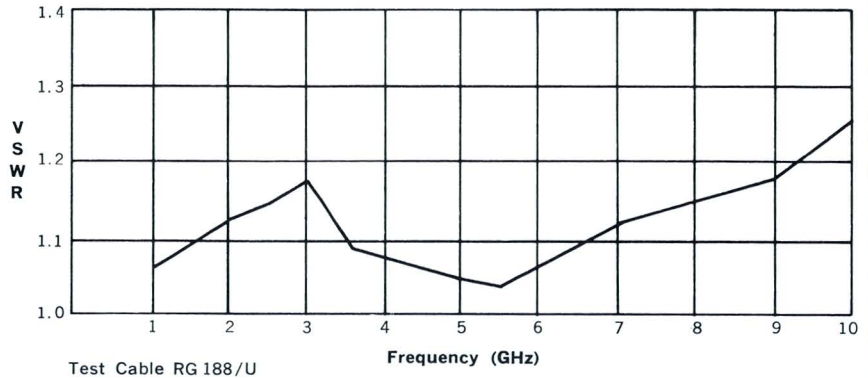
## Electrical Characteristics

Nominal Impedance:  
50 ohms  
Working Voltage:  
335 volts rms  
Frequency Range:  
0 to 10 GHz  
Contact Resistance:  
Center contact—6.0 milliohms max.  
Insulation Resistance:  
MIL-STD-202, Method 302,  
Cond. B, 1000 megohms min.  
Dielectric Withstanding Voltage:  
1000 volts rms  
R.F. Leakage:  
-60 db min., between 2 and 3 GHz  
R.F. Insertion Loss:  
.25 db max. @ 4 GHz  
Corona Level:  
250 volts min. @ 70,000 ft.

## Mechanical Characteristics

Mating/Unmating:  
10-32 threaded coupling  
Cable Attachment:  
Crimp type, both center contact  
and braid  
Coupling Nut Retention:  
35 lbs. min.

†Registered Trademark of E. I. duPont, Inc.



Cable Retention:  
25 lbs. min., RG-174 cable  
Durability:  
500 cycles per MIL-C-39012

## Materials

Brass:  
QQ-B-626  
Beryllium Copper:  
QQ-C-530  
Copper:  
QQ-C-576

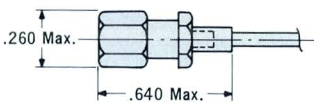
Teflon† Insulation:  
MIL-P-19468A  
Gold Plating:  
MIL-G-45204

## Environmental Characteristics

Temperature Range:  
-65°C to +165°C  
Vibration:  
MIL-STD-202, Method 204,  
Cond. D

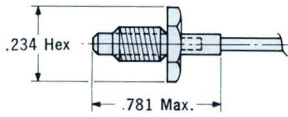
Shock:  
MIL-STD-202, Method 213,  
Cond. C  
Salt Spray:  
MIL-STD-202, Method 101,  
Cond. B  
Temperature Cycling:  
MIL-STD-202, Method 102,  
Cond. C

## Plugs



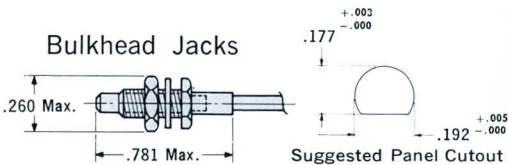
RG/U Cable	Connector No.	MS 39012/ Designation	Connector Body No.	Contact No.	Contact On Tape	Ferrule No.	Hand Tool No.	Die Insert No. For Tool No. 69118-1	Die Insert No. For Tool No. 69365
174, 188	51749-1	73-0006	51738-1	51746-5	51746-4	1-332056-0	220020-1	220019-1	220018-1
178, 196	51749-2	73-0005	51738-2	51748-5	51748-4	51744-2	220020-1	220019-1	220018-1
179	51749-5	73-0007	51738-1	51748-5	51748-4	1-332056-0	220020-1	220019-1	220018-1

## Jacks



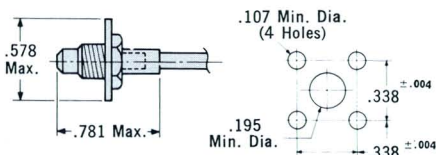
RG/U Cable	Connector No.	MS 39012/ Designation	Connector Body No.	Contact No.	Contact On Tape	Ferrule No.	Hand Tool No.	Die Insert No. For Tool No. 69118-1	Die Insert No. For Tool No. 69365
174, 188	51750-1	74-0006	51739-1	51745-4	51745-3	1-332056-0	220020-1	220019-1	220018-1
178, 196	51750-2	74-0005	51739-2	51747-4	51747-3	51744-2	220020-1	220019-1	220018-1
179	51750-3	74-0007	51739-1	51747-4	51747-3	1-332056-0	220020-1	220019-1	220018-1

## Bulkhead Jacks

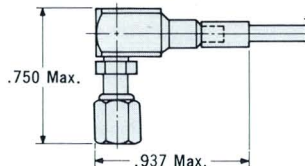


RG/U Cable	Connector No.	MS 39012/ Designation	Connector Body No.	Contact No.	Contact On Tape	Ferrule No.	Hand Tool No.	Die Insert No. For Tool No. 69118-1	Die Insert No. For Tool No. 69365
174, 188	51751-1	76-0006	51740-1	51745-4	51745-3	1-332056-0	220020-1	220019-1	220018-1
178, 196	51751-2	76-0005	51740-2	51747-4	51747-3	51744-2	220020-1	220019-1	220018-1
179	51751-3	76-0007	51740-1	51747-4	51747-3	1-332056-0	220020-1	220019-1	220018-1

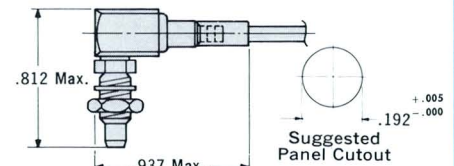
## Panel Jacks



## Right Angle Plugs



## Right Angle Bulkhead Jacks

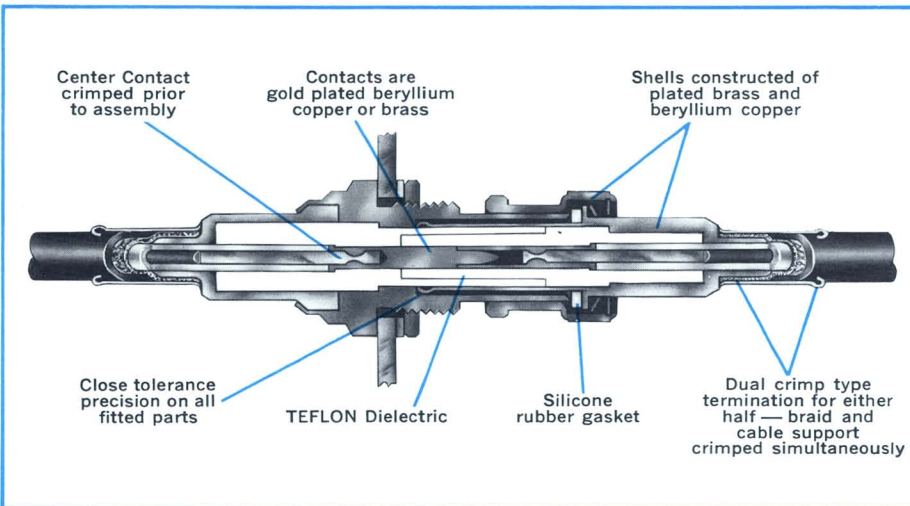
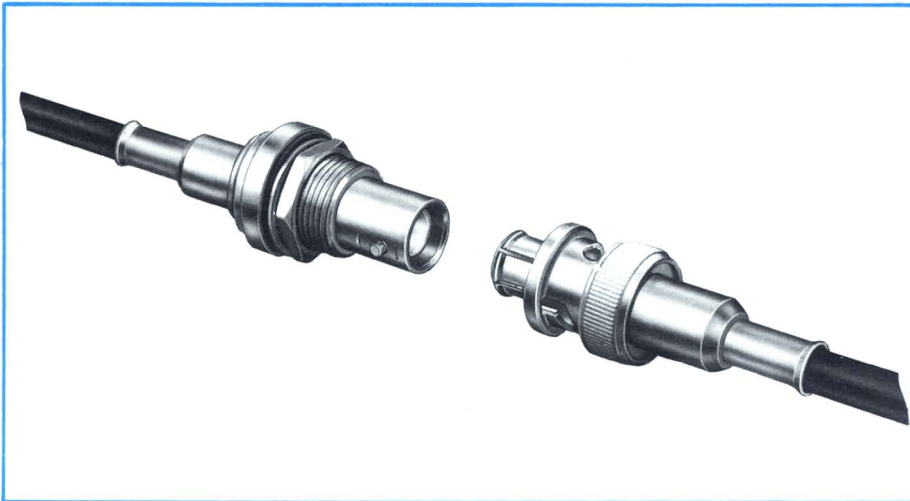


RG/U Cable	Connector Description	Connector No.	MS 39012/ Designation	Connector Body No.	Contact No.	Contact On Tape	Ferrule No.	Hand Tool No.	Die Insert No. For Tool No. 69118-1	Die Insert No. For Tool No. 69365
174, 188	Panel Jack	51752-1	—	51741-1	51745-4	51745-3	1-332056-0	220020-1	220019-1	220018-1
	Rt. Angle Plug	51753-1	75-0006	51742-1						
	Rt. Angle Blkhd. Jack	51754-1	—	51743-1						
178, 196	Panel Jack	51752-2	—	51741-2	51747-4	51747-3	51744-2	220020-1	220019-1	220018-1
	Rt. Angle Plug	51753-2	75-0005	51742-2						
	Rt. Angle Blkhd. Jack	51754-2	—	51743-2						
179	Rt. Angle Plug	51753-4	75-0007	51742-1	51747-4	51747-3	1-332056-0			

## Tooling

For terminating COAXICON SMC Series Connectors, AMP offers a choice of three tools to meet your exact production requirements and physical location. All are designed for fast, trouble-free operation and feature matching dies that fully

“bottom” produce uniform, reliable crimp terminations. In the hand tools, this is accomplished by the CERTI-CRIMP ratchet device located between the handles; bottoming is part of the automatic crimping cycle of pneumatic tools.



### SHV Series Standard High Voltage Connector (Dual Crimp Type)

The COAXICON SHV Series Connector is a small, lightweight, weatherproof connector designed to provide a shielded disconnect for high voltage applications up to 5,000 volts D.C. It can be used with a wide range of small coaxial cables such as RG-58C, 59B, 62B, 71, 214 and 188.

For maximum operating performance, this AMP connector has been designed to comply with the National Bureau of Standards specification ND-545 and meets all specifications for the Atomic Energy Commission's NIM standard high voltage connector. It has non-constant impedance characteristics and features polarized

center contacts which are recessed in the dielectric. Also, it has a bayonet-locking coupling similar to BNC connectors; however, it will not intermate with the standard bayonet-type connector.

To reduce unit cost, the center contact of the plug is crimped to the center conductor prior to assembly. With the crimped contact inserted into the plug, a ferrule is simply dressed over the braid then crimped to complete the assembly. Also, panel or bulkhead receptacles can be pre-positioned in a panel, since no crimping operation is required.

#### Features

- Safe-tested at 5,000 volts D.C.
- Polarized center contacts
- Heat resistant TEFLON‡ insulators
- Crimp contacts for low applied cost
- Quick connect/disconnect bayonet coupling
- Positive insulation grip

## Specifications

### Electrical Characteristics

Working Voltage:  
5,000 volts D.C., 3,500 volts A.C.  
Contact Resistance:  
Center Contact — 2.1 milliohms;  
Outer Contact — 1.5 milliohms  
Insulation Resistance:  
1 x 10<sup>6</sup> megohms min.  
Dielectric Withstanding Voltage:  
5,000 volts A.C.

### Mechanical Characteristics

Mating/Unmating:  
Bayonet-Lock coupling  
Cable Attachment:  
Crimp type — center contact and braid

Coupling Nut Retention:  
100 lbs. min.  
Cable Retention:  
60 lbs. min. (RG-58 c/u Cable)  
Durability:  
500 cycles per MIL-C-39012

### Materials

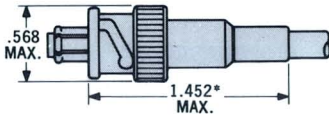
Beryllium Copper:  
QQ-C-530  
Silicone Rubber:  
ZZ-R-765  
Brass:  
QQ-B-626  
Copper:  
QQ-C-576

TEFLON Insulation:  
MIL-P-19468  
Plating:  
Silver — QQ-S-365

### Environmental Characteristics

Temperature Range:  
-65°C to +165°C  
Vibration:  
MIL-STD-202, Method 204A  
Shock:  
MIL-STD-202, Method 202  
Salt Spray:  
MIL-STD-202, Method 101,  
Test Cond. B  
Temperature Cycling:  
MIL-STD-202, Method 102,  
Test Cond. D

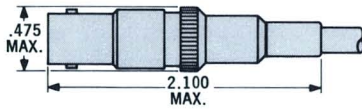
### Plugs



\*2.143 for Part Numbers 51595-1 and 51595-2

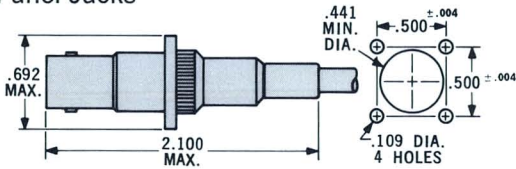
RG/U Cable	Part Number		Hand Tool No.	Die for Pneumatic Tool No. 69365
	Silver Pl.	Tarnish Res. Pl.		
58A, 58C	51426-1	51426-4	220022-1	220028-1
59, 59A, 59B, 62, 62A, 62B	51426-2	51426-5	220022-2	220028-2
71	51426-3	51426-6	220022-2	220028-2
174, 188	51426-7	51426-8	220009-1	220026-1
9, 214	51595-1	51595-2	69646	—

### Jacks



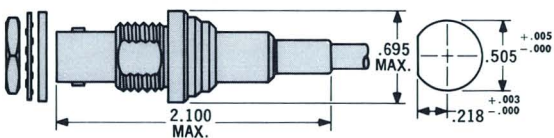
RG/U Cable	Part Number		Hand Tool No.	Die for Pneumatic Tool No. 69365
	Silver Pl.	Tarnish Res. Pl.		
58A, 58C	225087-1	225087-4	220022-1	220028-1
59, 59A, 59B, 62, 62A, 62B	225087-2	225087-5	220022-2	220028-2
71	225087-3	225087-6	220022-2	220028-2

### Panel Jacks

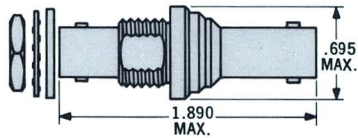


RG/U Cable	Part Number		Hand Tool No.	Die for Pneumatic Tool No. 69365
	Silver Pl.	Tarnish Res. Pl.		
58A, 58C	225080-1	225080-4	220022-1	220028-1
59, 59A, 59B, 62, 62A, 62B	225080-2	225080-5	220022-2	220028-2
71	225080-3	225080-6	220022-2	220028-2

### Bulkhead Jacks



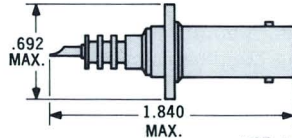
RG/U Cable	Part Number		Hand Tool No.	Die for Pneumatic Tool No. 69365
	Silver Pl.	Tarnish Res. Pl.		
58A, 58C	225058-1	225058-2	220022-1	220028-1
59, 59A, 59B, 62, 62A, 62B	225059-1	225059-3	220022-2	220028-2
71	225059-2	225059-4	220022-2	220028-2



### Adapter

PART NO. 225064-1 — SILVER PLATING  
PART NO. 225064-2 — TARNISH RESISTANT PL.

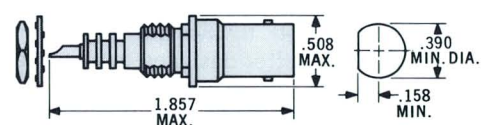
USE BULKHEAD JACK CUTOUT



### Panel Receptacle

PART NO. 51421-1 — SILVER PLATING  
PART NO. 51421-2 — TARNISH RESISTANT PL.

USE PANEL JACK CUTOUT



### Bulkhead Receptacle

PART NO. 51494-1 — SILVER PLATING  
PART NO. 51494-2 — TARNISH RESISTANT PL.

### Tooling

For terminating COAXICON SHV Series Connectors, AMP offers a choice of tools to meet your exact production requirements and physical location. All are designed for fast, trouble-free operation and feature matching dies that fully "bottom" to

produce uniform, reliable crimp terminations. In the hand tools, this is accomplished by the CERTI-CRIMP, ratchet device located between the handles; bottoming is part of the automatic crimping cycle of pneumatic tools.



The AMP UHF Series Connector has found wide acceptance, particularly in the mobile communications field. Low initial cost and low applied cost, coupled with quality terminations and performance capabilities up to 500 MHz are a few of the benefits this connector offers. Three types of connectors are available:

- (1) Solderless UHF Plug is available for cable sizes 58, 58A, 58B, 58C, 59, 59A, 59B, Belden 8281, 8, 8A, 9, 9A, 9B, 213, 214, 11 and 11A. This is the standard plug which features solderless crimp termination of the inner conductor and outer braid. For high production application, the AMP Bench Press automatically terminates center conductor and braid simultaneously. For limited production the AMP CERTI-CRIMP Hand Tool terminates the center conductor then the braid.
- (2) Co-Phased Solderless UHF Plug will handle two coaxial cables as easily as one. It has the same

quality features as the single-wire connector except it accommodates two cables.

- (3) Field Applicable UHF Plug accepts RG 58 cable and can be hand assembled by your customer with a simple pair of pliers. This eliminates assembly time—just package the plug kit and send with each unit. Your customer simply slips the collar and shell over the cable, then strips the cable as directed. The braid is then flared and the dielectric removed. The center conductor is inserted into the contact assembly, the braid is formed over the assembly and the shell is pushed over the braid. To complete the assembly a pair of pliers is used to seat the dielectric in the shell. Using the pliers, pressure should be applied at intervals around the circumference of the assembly. Finally, crimp the center conductor with the pliers and cut off excess conductor.

### Features

#### Single and Co-Phased Plugs

- Solderless crimp connection
- Low initial and applied costs
- Resists vibration, shock and other hostile environments
- High cable retention

- Low attenuation

#### Field Applicable Plug

- No special tools
- Eliminates manufacturers assembly time and cost
- Provides reliable connection

### UHF Series Connector Plug

#### Specifications

##### Electrical Characteristics

- Nominal Impedance:  
Non-constant
- Working Voltage:  
500 volts, RMS at sea level
- Frequency Range:  
To .5 GHz
- Insulation Resistance:  
5000 megohms minimum
- Dielectric Withstanding Voltage:  
1500 volts, RMS at sea level

##### Mechanical Characteristics

- Mating/Unmating  
Threaded coupling
- Cable Attachment:  
Crimp type—center contact and braid
- Cable Retention:  
RG-58 C/U 60 lbs. min.  
RG-59 B/U 75 lbs. min.  
RG-213, 214 150 lbs. min.

##### Materials

- Brass:  
QQ-B-626  
Olefil
- Plating:  
Center contact silver plate or tin plate (MIL-T-10727)  
(QQ-S-365) .0002" min.
- Other metal parts:  
Bright ni. pl. (QQ-N-290),  
.00004" avg.

##### Environmental Characteristics

- Vibration:  
MIL-STD-202, Method 204,  
Test Cond. A
- Shock:  
MIL-STD-202, Method 213,  
Test Cond. 1
- Salt Spray:  
MIL-STD-202, Method 101,  
Test Cond. B
- Temperature Cycling:  
MIL-STD-202, Method 102,  
Test Cond. B
- Temperature Operating:  
-55°C to +85°C

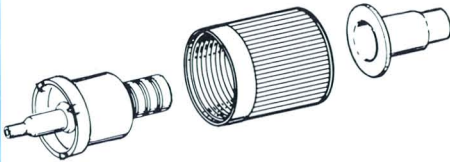
ALL DIMENSIONS IN INCHES.

Note: Specifications subject to change. Consult AMP Incorporated for latest design specifications.

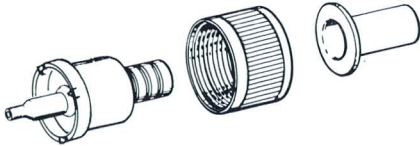
### Solderless UHF Series Plugs



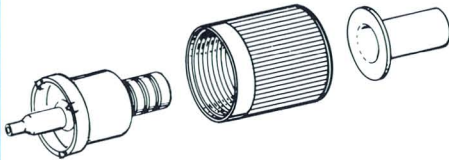
Style 1



Style 2



Style 3

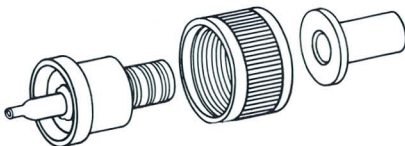


Style 4



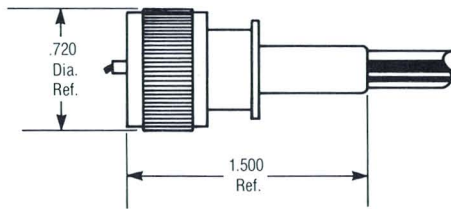
Style 5

### Co-Phased Solderless UHF Plug (Two Wire Application)



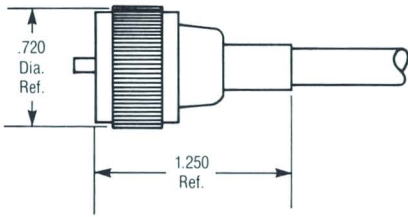
Connectors			Hand Tool Part No.	Crimping Dies for Bench Press No. 220152-1	
Cable Size	Part No.	Config.		Part No.	Braid Ferrule Crimp
RG- 58, 58A 58B, 58C	226208-3	Style 1	220094-1	220157-2	Hex Crimp Over Insulation
	1-226208-3*	Style 2			
	226279-1†	Style 1			
RG- 59, 59A, 59B	226208-6	Style 3	220094-1	220157-3	Hex Crimp Over Insulation
	1-226208-6*	Style 4			
	226279-3†	Style 3			
BELDEN 8281	226208-2	Style 3	220094-1	220154-3	Hex Crimp Over Insulation
	1-226208-2*	Style 4			
	226279-5†	Style 3			
RG- 8, 8A, 213	226208-1	Style 3	220095-1 Mod. B	220154-1	Hex Crimp Over Insulation
	1-226208-1*	Style 4			
	RG- 9, 9A, 9B, 214	226208-5			
	1-226208-5*	Style 4			
RG- 8, 8A, 213	226279-2†	Style 5	220095-1 Mod. B	220153-1	Hex Crimp Over Insulation
RG- 11, 11A	226208-4	Style 3	220095-2	220154-2	Hex Crimp Over Insulation
	1-226208-4*	Style 4			

† Tin plated center contacts; all other center contacts are silver plated and all other components nickel plated.  
\*These plugs are crimped with Hand Tools only.

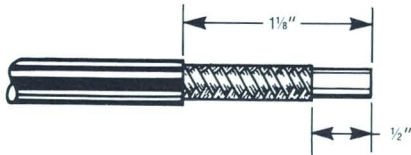


Connectors		Crimping Dies for Bench Press 220152-1
Cable Size	Part No.	
ONE RG 62 & ONE RG 58C	226208-4	220154-4
TWO RG 58C		
TWO RG 58B	226279-4	
TWO RG 59, 59A, 59B	226279-6	

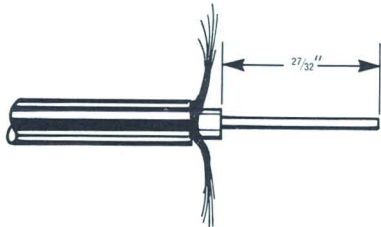
for RG 58/U Cable  
Part Number: 226548-1



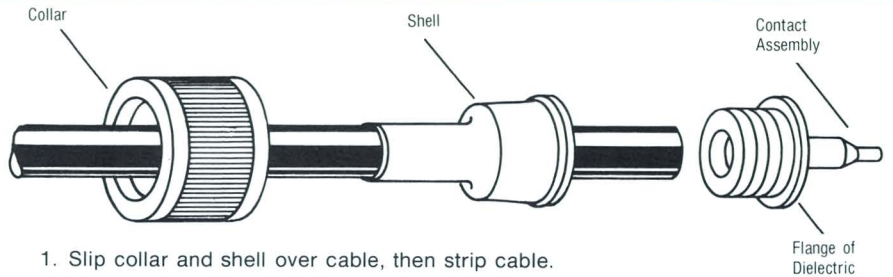
Cable preparation



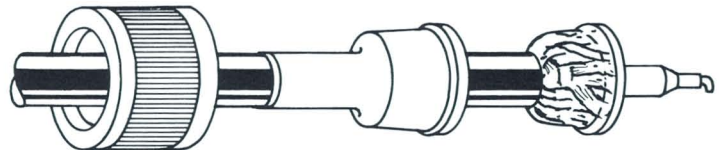
Remove outer jacket and braid. Care should be taken not to cut strands of coax braid.



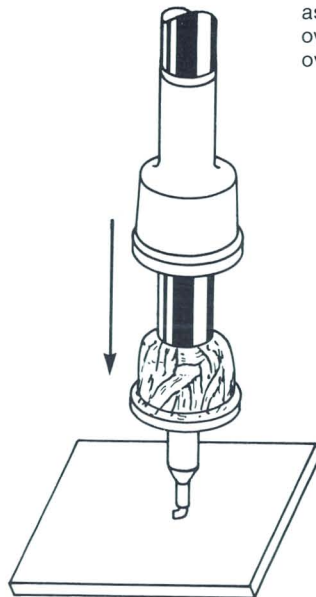
Flare braid and remove dielectric. Do not nick center conductor.



1. Slip collar and shell over cable, then strip cable.

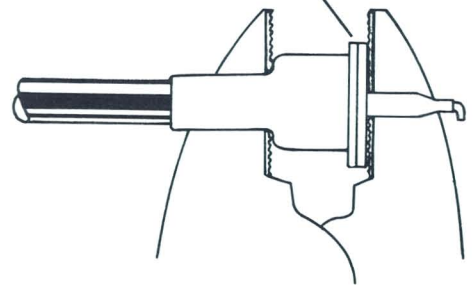


2. Insert center conductor of coax cable into contact assembly. Protruding end of conductor should be bent over end of contact. Braid is then formed uniformly over contact assembly.

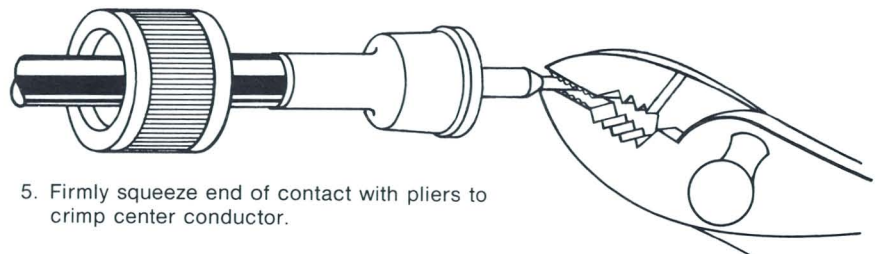


3. Butt end of contact against firm surface and push shell over braid.

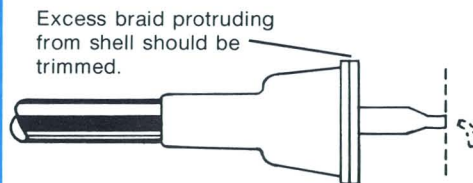
Flange of dielectric should butt against shell, although some gap is permissible.



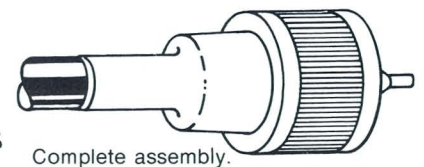
4. Complete assembly by using pliers to press dielectric into shell as shown. Apply pressure at intervals around circumference of assembly. Flange of dielectric should butt against shell.



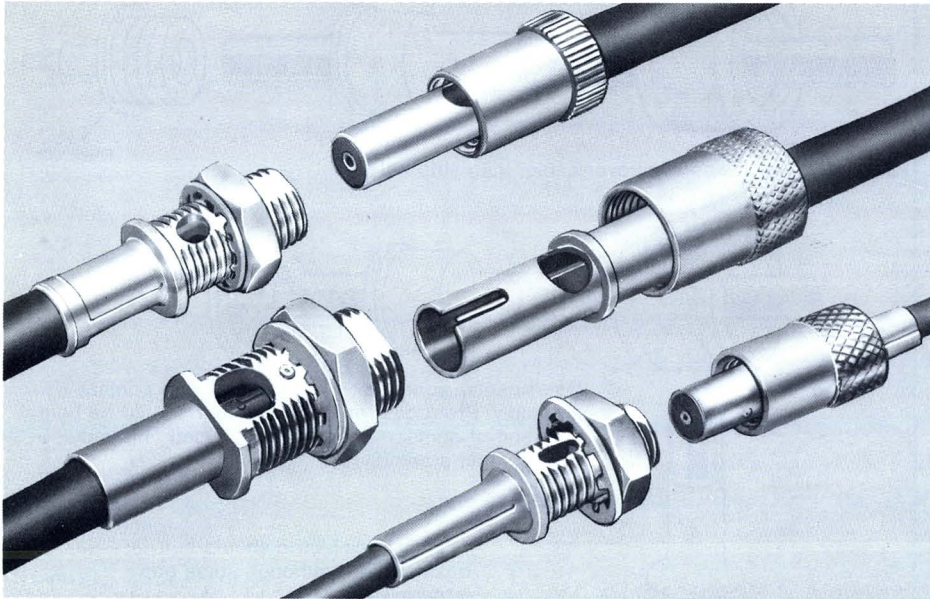
5. Firmly squeeze end of contact with pliers to crimp center conductor.



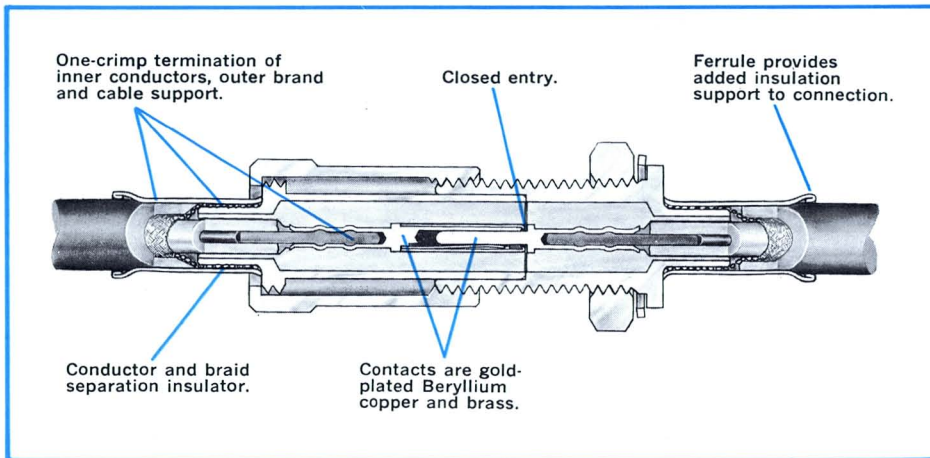
6. Cut off excess center conductor which extends beyond end of contact.



7. For optimum performance, firmly torque collar to mating jack. NOTE: A periodic check to be sure collar is tightly threaded onto jack is suggested.



**COAXICON Connectors**  
**Threaded Series**  
**Standard**  
**Miniature**  
**Twin Standard**



**Features:**

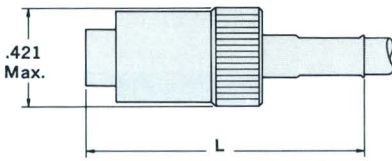
- Reduced noise level because of AMP's solderless crimping techniques.
- Low application cost with time-saving, one-stroke crimping of inner conductor, outer braid and cable support.
- Conductor and shield insertion facilitated by bell-mouth entry design in insulators and wire barrels.
- Positive insulation grip with crimped braid ferrule.
- No danger of heat damage to coaxial cable.
- Two parts make up a complete plug or receptacle.
- Ease of inspection.
- Stabilized inner contacts.
- Low VSWR.
- Improved cable retention and insulation grip.

COAXICON threaded series connectors, in standard, twin standard and miniature models, are a unique development of AMP which has resulted in the production of minimum size components capable of high levels of performance. In this type, termination of connector to cable is made with AMP's exclusive one-crimp method—simultaneous termination of inner conductor, outer braid and cable support with one stroke of the matching AMP tool.

These rugged plugs and receptacles accommodate a wide range of coaxial cables as indicated in the accompanying tabular data. Configurations presently available include the straight plugs and receptacles, plus right angle and "T" adapters. The advanced design features of this coaxial connector have been developed specifically for crimping techniques and incorporate a one-piece assembly of center contacts stabilized in a dielectric.



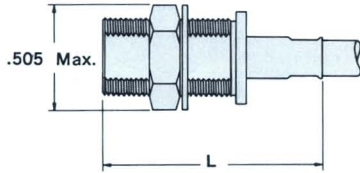
## Plugs



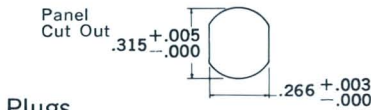
## Standard

RG/U Cable	Plug No.	Crimping Tool No.	Die Insert No. for Tools Hand — 69710 Pneu. — 69365-2	"L" Max.
141	2-329030-4	45740	69220-1	1.046
55, 55A, 55B, 142, 223	2-329030-2	69248-1	69315-1	1.046
58, 58A, 58B, 58C	2-329030-1	45740	69220-1	1.046
59, 59A, 59B, 62, 62A, 62B, 124, 140, 210	2-329032-1	69126	69225-1	1.046
180, 180A, 195, 21-597	2-329024-1	45639	69222-1	1.078

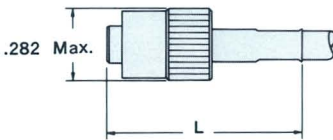
## Receptacles



RG/U Cable	Receptacle No.	Crimping Tool No.	Die Insert No. for Tools Hand — 69710 Pneu. — 69365-2	"L" Max.
141	2-329031-4	45740	69220-1	1.062
55, 55A, 55B, 142, 223	2-329031-2	69248-1	69315-1	1.062
58, 58A, 58B, 58C	2-329031-1	45740	69220-1	1.062
59, 59A, 59B, 62, 62A, 62B, 124, 140, 210	2-329033-1	69126	69225-1	1.062
180, 180A, 195, 21-597	2-329023-1	45639	69222-1	1.062



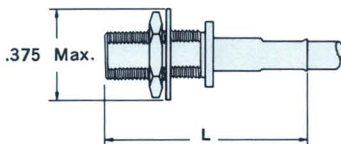
## Plugs



## Miniature

RG/U Cable	Plug No.	Crimping Tool No.	Die Insert No. for Tools Hand — 69710 Pneu. — 69365-2	"L" Max.
174, 188, 21-596, 21-598	2-329036-1	45609	69226-1	.890
	2-330311-1*	45609		.890
179A, 187	2-329036-1	69142	69228-1	.890
	2-330311-1*	69142		.890
180, 180A, 195	2-329047-1	69143	69229-1	.812
	1-330723-0*	69143	69229-1	.812
161, 178, 178A, 196	2-329036-2	69188-1		.859
	2-330311-2*	69188-1	69372	.890

## Receptacles



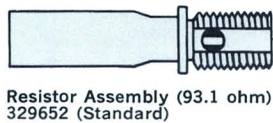
RG/U Cable	Receptacle No.	Crimping Tool No.	Die Insert No. for Tools Hand — 69710 Pneu. — 69365-2	"L" Max.
174, 188, 21-596, 21-598	2-329037-1	45609	69226-1	.921
	2-330312-1*	45609	69226-1	.921
179A, 187	2-329037-1	69142	69228-1	.921
	2-330312-1*	69142	69228-1	.921
180, 180A, 195	2-329048-1	69143	69229-1	.812
	1-330599-0*	69143	69229-1	.812
161, 178, 178A, 196	2-329037-2	69188-1	69372	.875
	2-330312-2*	69188-1	69372	.921



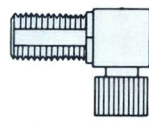
\*These contacts contain TEFLON† dielectric; All others contain polypropylene.

## Adapter Parts and Part Numbers

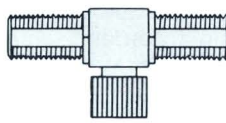
## Panel Insulating Bushings



Resistor Assembly (93.1 ohm) 329652 (Standard)



Angle Adapter 329523 (Standard) 329097 (Miniature)



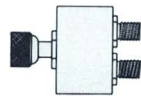
Tee Adapter 329081 (Standard) 329096 (Miniature)



Feed-Thru Adapter 330117 (Standard) 330118 (Miniature)



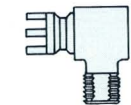
Printed Circuit Board Adapter 330119 (Standard) 331899 (Miniature)



"Y" Adapter 331478 (Miniature)



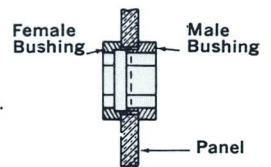
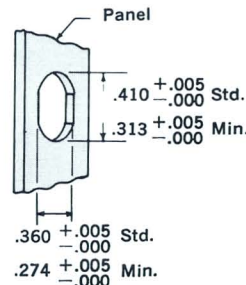
End Cap 329840 (Standard) 331625 (Miniature)



Right Angle Printed Circuit Board Adapter 330732 (Miniature)



Solder Adapter 329852 (Miniature)



Female Bushing No. 328803 Std. No. 329487 Min.

Male Bushing No. 328801 Std. No. 329486 Min.

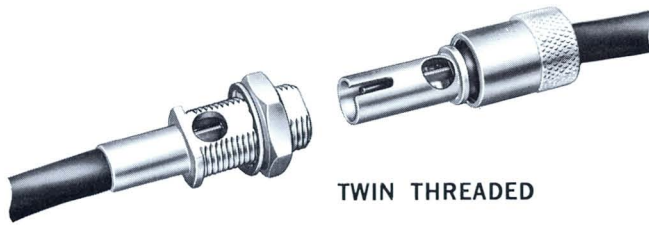
Note: Bushings may be attached to Panels from 1/16" Min. to 1/8" Max. Thick.

NOTE: In some cases, either the Standard or the Miniature Threaded Series may be used for a given wire size.

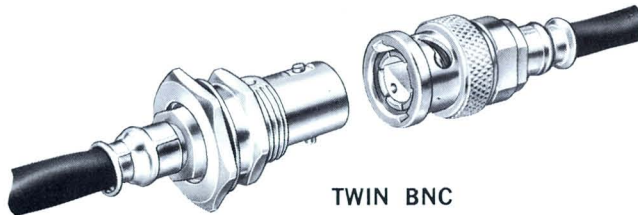
ALL DIMENSIONS IN INCHES.

Note: Specifications subject to change. Consult AMP Incorporated for latest design specifications.

## RF Connectors



TWIN THREADED



TWIN BNC



TWIN CONNECTOR PLUG

COAXICON twin conductor type connectors and plugs are a unique development by AMP which has resulted in the production of RF components capable of a high level of performance. In this type, termination of connector to twin conductor cable is made with AMP's exclusive one crimp method which simultaneously terminates inner conductors, outer braid and cable support with one stroke of the matching AMP tool.

These rugged connectors and plugs accommodate today's most commonly used twin conductor cable sizes as indicated in the accompanying tabular data. The advanced design features of these connectors and plugs have been developed specifically for crimping techniques and incorporate a one-piece assembly of center-contacts stabilized in a dielectric.

**Twin Threaded**—A threaded series twin conductor connector which has resulted in a minimum sized component capable of a high level of performance.

**Twin BNC**—A quick connect/disconnect, weather-proof connector designed in accordance with MIL-C-39012 and MIL-C-23329A and will meet the most stringent military and commercial requirements.

**Twin Connector Plug**—Developed for 95 ohm dual coaxial cable, RG 22, this ultra-high frequency dual coaxial cable plug is a non-constant impedance type and is generally satisfactory at frequencies up to 200 MHz, and may be used with caution up to 500 MHz. It has a peak voltage of up to 500 volts. Designed to meet most requirements of MIL-C-3655A.

### RF Twin Conductor Types:

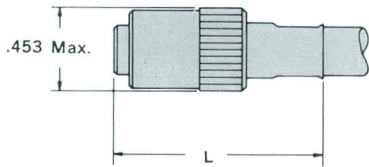
**Twin Threaded,  
Twin BNC,  
Twin Connector Plug**

### Features

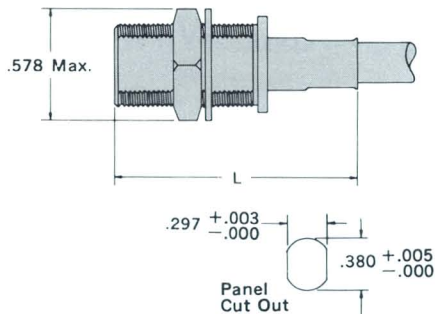
- One-stroke crimping of both conductors, plus braid and cable support.
- Lower installed cost with one-stroke crimp.
- Captive inner contact stability.
- No danger of heat damage to coaxial cable.
- Reduced noise levels because of AMP's solderless crimping techniques.
- Ease of inspection.
- Exclusive AMP matched tooling.

## Twin Threaded Series

### Plugs



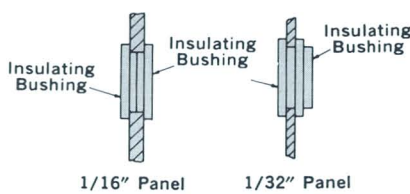
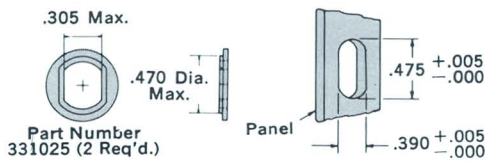
### Receptacles



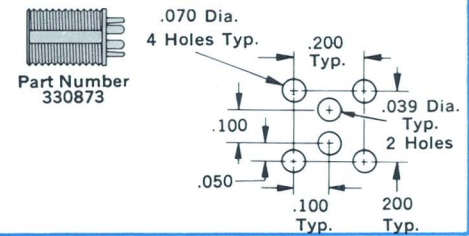
RG/U Cable	Part No.		Crimping Tool No.	Die Insert No. for Tools Hand — 69710 Pneu. — 69365-2	"L" Max.
	Silver Finish	Tarnish Resistant Finish			
108/U & 108A/U (Ctr. Cond. 7/0126)	2-329945-1	225687-2			1.109
2-3932 Microdot 2-3934 Microdot	2-329943-1	225687-3			1.122
Belden 8451, 8641 & 8761	2-329944-3	225687-4	69311-1	69410-1	1.109
Belden 8762	2-329945-3	225687-5			1.109
Belden 8737 (Spiral Wrapped Shld.)	2-329944-1	225687-1			1.109
Belden 8759	2-329945-1	225687-2			1.109

RG/U Cable	Recept. No.		Crimping Tool No.	Die Insert No. for Tools Hand — 69710 Pneu. — 69365-2	"L" Max.
	Silver Finish	Tarnish Resistant Finish			
108/U & 108A/U (Ctr. Cond. 7/0126)	2-329942-1	225689-2			1.125
2-3932 Microdot 2-3934 Microdot	2-329940-1	225689-3			1.125
Belden 8451, 8641 & 8761	2-329941-3	225689-4	69311-1	69410-1	1.125
Belden 8762	2-329942-3	225689-5			1.125
Belden 8737 (Spiral Wrapped Shld.)	2-329941-1	225689-1			1.125
Belden 8759	2-329942-1	225689-2			1.125

### Panel Insulating Bushings

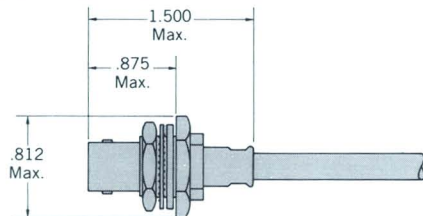


### Printed Circuit Board Adapter

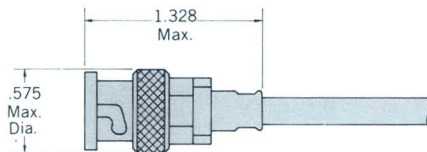


## Twin BNC Series

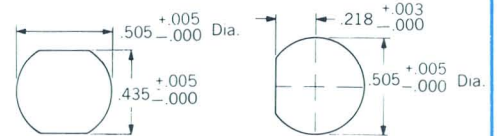
### Bulkhead Jack



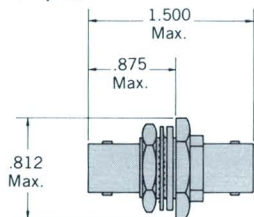
### Plugs



### Panel Cutout for Bulkhead Jacks



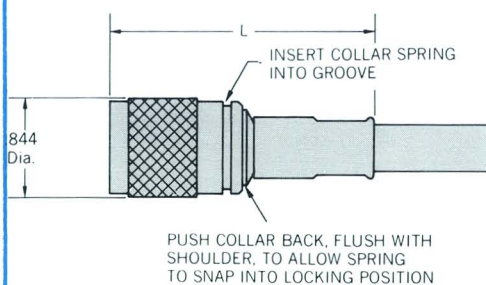
### Adapter



Part Number 332215

RG/U Cable No.	Plug No.	Bulkhead Jack No.	Hand Tool No.	Die Insert No. for Tools Hand-69710 Pneu.-69365-2
108 & 108 A	332225	332342	69667	69708
Raychem 7824 D0130	332225-1	332342-1	69667	69708

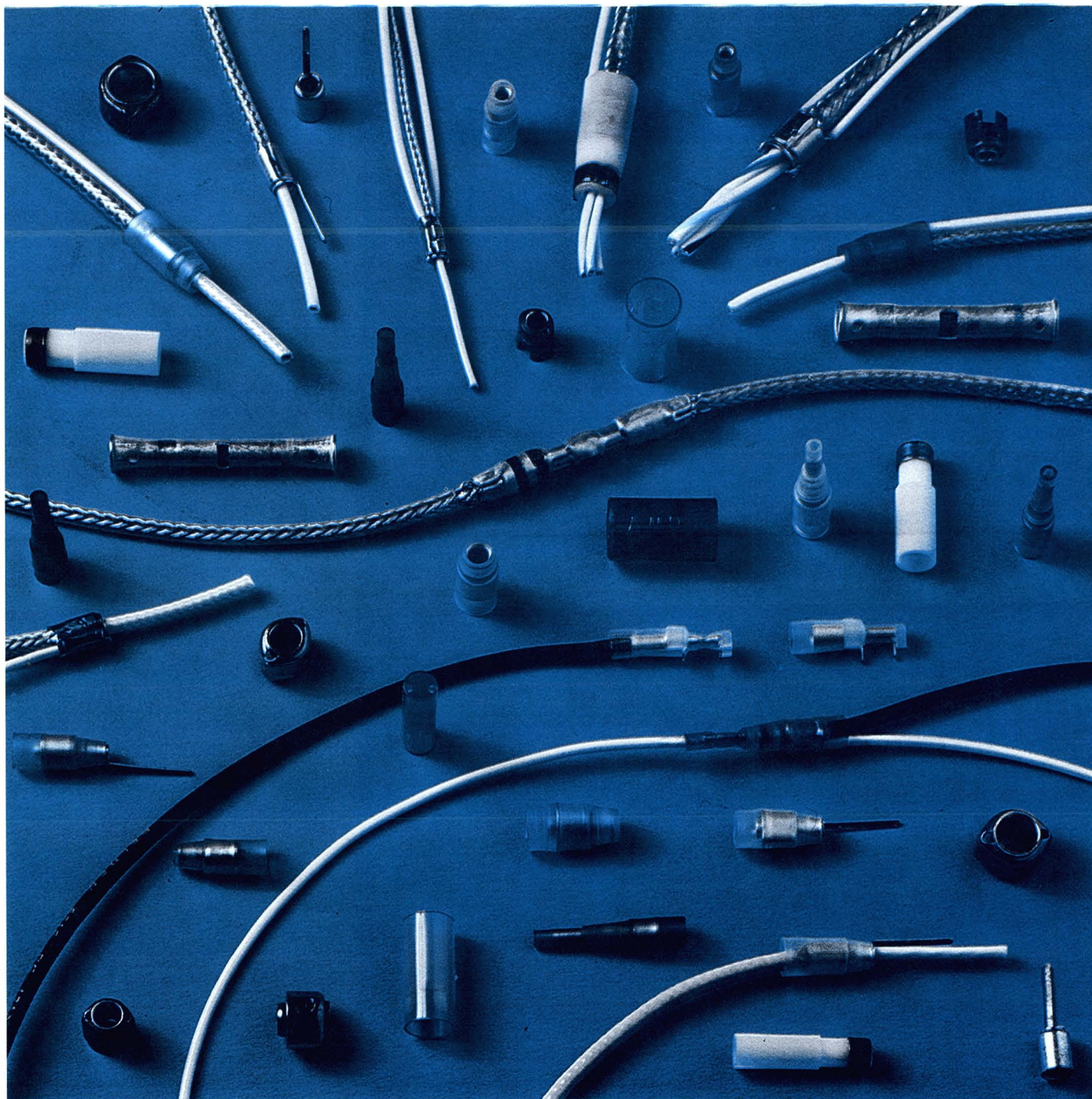
## Twin Connector Plug



Cable Size	Polarization	Ferrule Material and Finish	Part Number	Hand Tool Number	"L" Max.
W.E. 754	90°	Copper (QQ-C-576)	1-331495-0	69600-1	2.218
			1-331495-5*	69600-1	2.218
			1-331495-6	69600-1	2.350
W.E. 760A	90°	Silver Plated	1-331495-1	69600-1	2.218
			1-331495-4*	69600-1	2.218
RG 22 B/U	Parallel		1-331495-2	69600-2	2.218
Surprenant R10429-P1			1-331495-7*	69600-1	2.850
Type V-I-AL	90°	Copper (ASTM-B-188) Tin Plated	1-331495-3	69600-4	2.850

\*Contains 2 gold plated contacts with coding dot on face of dielectric. Includes a plastic sleeve to compensate for small diameter of cable dielectric.

## TERMASHIELD FERRULES AND SPLICES FOR SHIELDED AND COAXIAL WIRE



**The method.** Basically, the AMP solderless termination method consists of a carefully designed product (splice or shielded wire ferrule), uniformly attached by a matching compression tool of the highest precision.

This compression crimping eliminates heat, fluxes and other agents which have deleterious effect on conductors and insulation. All attachments made by this method are identical and give superior performance . . . at much faster application rates . . . with a lower total installed cost.

**Selecting the right product.** This catalog describes the TERMASHIELD brand product line and is a buyer's guide and reference manual in one.

You'll notice that a choice of product types is provided

for certain applications. However, there is no real overlapping. The choices are intended for different application and production conditions. Only your requirements can determine which is right for you.

There is absolutely no gradation of quality among these products—all offer you the highest reliability you'll find anywhere. This assurance of quality in the finished termination is the result of AMP's matching tool concept . . . a tool and terminal perfectly matched to do the job.

One last comment: If you have an unusual shielded-wire problem, we welcome the opportunity to help you solve it. Our store of knowledge is unique and is as readily available to industry as our solderless termination technique.

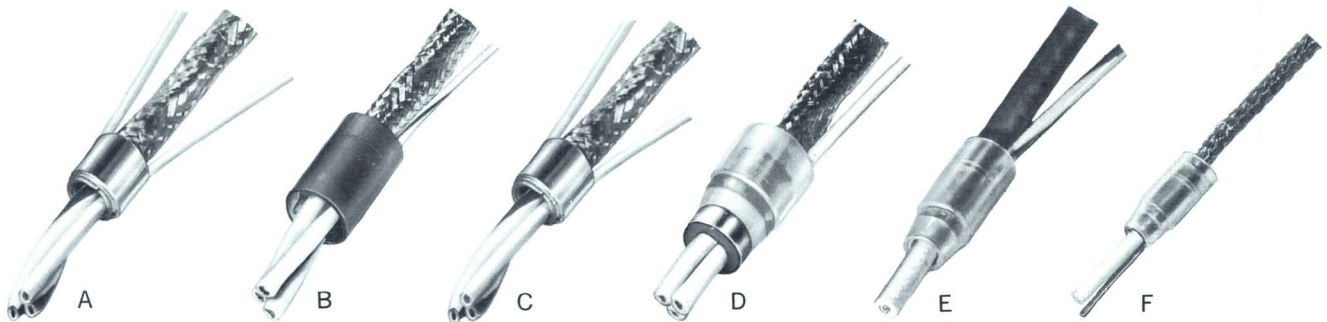
## TERMASHIELD FERRULES

The TERMASHIELD Ferrule offers the fastest, most reliable method on the market for attaching one or more ground taps to shielded wire and/or terminating the braid of shielded wire. Crimped with matching AMP tooling, assembly is fast and positive and the resulting ferrule is only slightly larger in outside diameter than the original wire O.D.

The TERMASHIELD ferrule line consists of a basic shielded wire ferrule with options for insulation or for environmental conditions.

The entire line consists of the following which are detailed on these and succeeding pages:

- (A) an un-insulated ferrule (standard type)
- (B) a post-insulated ferrule (standard type)
- (C) a 650° heat resistant ferrule un-insulated
- (D) a 550° heat resistant ferrule post-insulated
- (E) a pre-insulated ferrule (standard type)
- (F) a pre-insulated ferrule for printed circuits



### MULTIPLE CONDUCTOR SHIELDED WIRE FOR TERMASHIELD FERRULES

Use the following formula to determine which die, ferrule and insulating sleeve (if applicable) to use with shielded wire having two or more conductors:

Multiply the insulation diameter of one primary conductor by the factor listed opposite the total number of conductors in the wire from the table shown to the right. The resulting diameter should be used to select components by using the primary insulation diameter range columns in tables on pages 1 through 3.

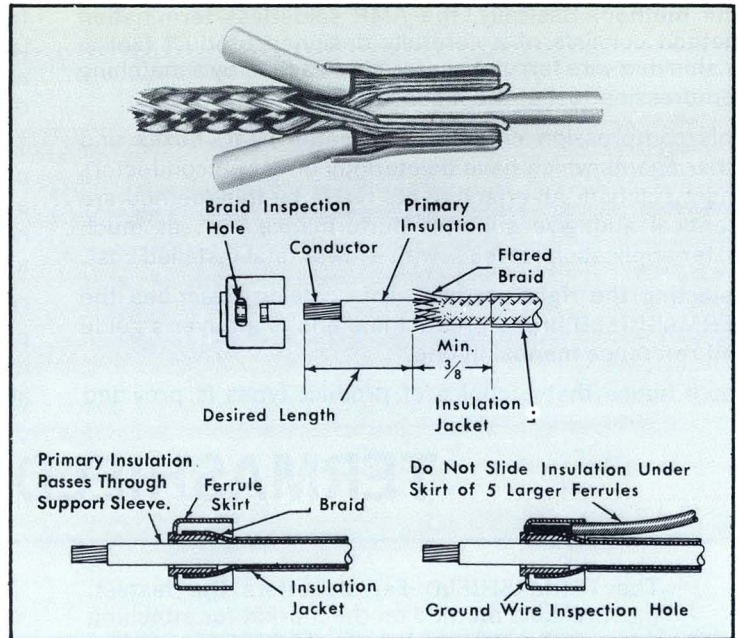
**EXAMPLE:** A shielded wire having 3 primary conductors, each having an insulation diameter of .065.

$$.065 \times 2.17 = .14105$$

NUMBER OF CONDUCTORS IN WIRE	MULTIPLYING FACTOR	NUMBER OF CONDUCTORS IN WIRE	MULTIPLYING FACTOR
2	2.00	14	4.30
3	2.17	15	4.45
4	2.42	16	4.60
5	2.57	17	4.75
6	2.82	18	4.88
7	3.04	19	5.01
8	3.25	20	5.14
9	3.45	21	5.27
10	3.64	22	5.39
11	3.81	23	5.52
12	3.98	24	5.63
13	4.15	25	5.75

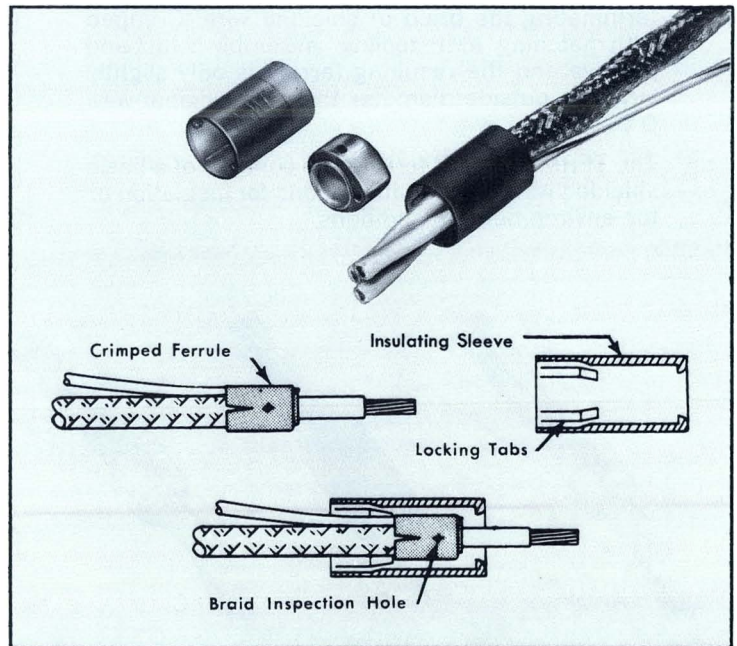
## UN-INSULATED FERRULES

The basic un-insulated ferrule is attached with one stroke of the matching AMP crimping tool. The outer ferrule body is color coded by insulation diameter range; this coding also aids in identification of loose piece pick up in assembly line operations.



## POST-INSULATED FERRULES

The post-insulated ferrule is the same as the basic un-insulated ferrule with the addition of a nylon insulating sleeve which is snapped in place over the ferrule **after** crimping. The nylon sleeve is color coded to match the ferrule.



UN-INSULATED FERRULE NUMBER		PRIMARY INSUL. DIA. RANGE	POST-INSULATION SLEEVE NYLON	COLOR CODE	DIE INSERT NO. FOR TOOL 59500	DIE INSERT NO. FOR TOOL 69270-1	DIE INSERT NO. FOR TOOL 69365	PACKAGE ASSEMBLY NO.**
ZINC PLATED	TIN PLATED							
327192‡	2-327192-1‡	.033-Max.	327768	Green	45061-3	45061-3	46610-3†	330297
323930	2-323930-2	.033-.059	325009	Violet	45062-3	45062-3	47810-3†	330298
323931	2-323931-2	.059-.085	325010	Tin*	45063-3	45063-3	47816-3†	330228
323932	2-323932-2	.085-.095	325011	Brown	45064-3	45064-3	47817-3†	330229
323933	2-323933-2	.095-.115	325012	Orange	45065-3	45065-3	47818-3†	330230
323934	2-323934-2	.115-.130	325013	Green	45066-3	45066-3	47819-3†	330231
327137	2-327137-2	.130-.145	328224	Violet	45238-2		45316-2▲	330232
327138	2-327138-2	.145-.184	328225	Tin*	45239-2		45317-2▲	330293
327139	2-327139-2	.184-.220	328226	Brown	45240-2		45318-2▲	330294
327140	2-327140-2	.220-.245	328227	Orange	45241-2		45319-2▲	330295
327141	2-327141-2	.245-.270	328228	Green	45158-2		45320-2▲	330296

‡Ferrule does not have Braid Inspection Hole.

\*\*Ferrule and Post-insulating sleeve are available in a package form catalogued under a single number.

†These inserts may be used with either tool 69710, 69319-1 or 69365.

▲These inserts used only with 69365 or 69710.

For stripping lengths of ground lead, refer to table on page 17-49.

\*Color code of insulating sleeve is natural.

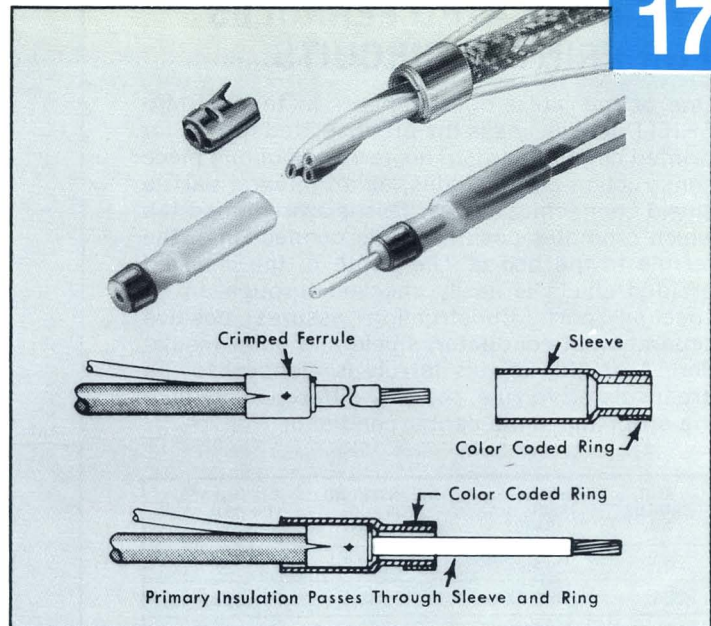
## HEAT RESISTANT FERRULES

Available in un-insulated and post-insulated versions where elevated temperatures are a factor.

Heat resistance is provided by nickel plating over base metal. The un-insulated version is recommended for temperatures up to 650°F.

Insulation for heat resistant post-insulated ferrules is provided by TEFLON† insulation sleeves which have a recommended application temperature (continuous) of 550°F.

Assembly procedure for heat resistant ferrules is basically the same as the standard ferrule. However the TEFLON insulation sleeve is crimped to the finished assembly to provide the post-insulated version.



For stripping lengths of ground lead, refer to table on page 17-49.

HEAT RESISTANT FERRULE NUMBER	PRIMARY INSUL. DIA. RANGE	COLOR CODE	DIE INSERT NO. FOR TOOL 59500	DIE INSERT NO. FOR TOOL 69270-1	DIE INSERT NO. FOR TOOL 69365	TEFLON POST-INSULATION SLEEVE**
328051*	.033-Max.	White	45061-3	45061-3	46610-3‡	328938
328052	.033-.059	Violet	45062-3	45062-3	47810-3‡	2-328938-1
328053	.059-.085	Blue	45063-3	45063-3	47816-3‡	2-328938-2
328054	.085-.095	Brown	45064-3	45064-3	47817-3‡	2-328938-3
328055	.095-.115	Orange	45065-3	45065-3	47818-3‡	2-328938-4
328056	.115-.130	Green	45066-3	45066-3	47819-3‡	2-328938-5
328057	.130-.145	Violet	45238-2		45316-2▲	2-328938-6
328058	.145-.184	Blue	45239-2		45317-2▲	2-328938-7
328059	.184-.220	Brown	45240-2		45318-2▲	2-328938-8
328060	.220-.245	Orange	45241-2		45319-2▲	2-328938-9
328061	.245-.270	Green	45158-2		45320-2▲	3-328938-1

\*Ferrule does not have Braid Inspection Hole.

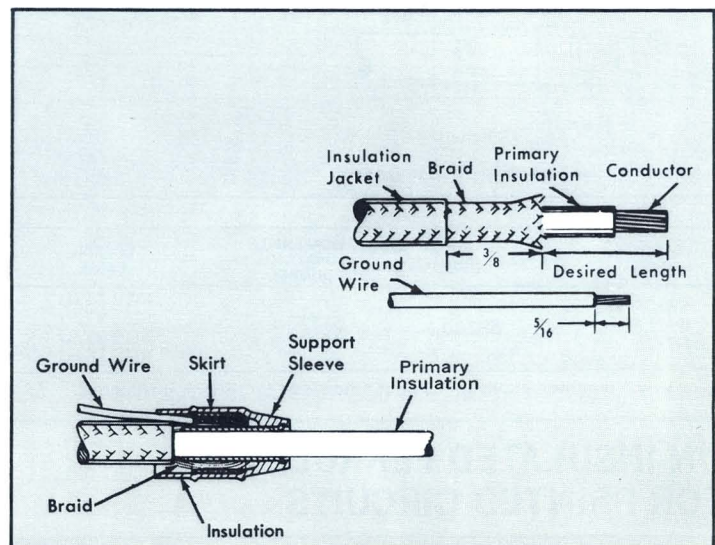
\*\*The same dies that crimp the TERMASHIELD Ferrule also crimp the TEFLON Insulating Sleeve Ring.

‡These inserts may be used with either tool 69710, 69319-1 or 69365.

▲These inserts used only with Tool No. 69365 or 69710.

## PRE-INSULATED FERRULES

The third member of the TERMASHIELD Ferrule family is of the pre-insulated variety. It is similar to the standard ferrule except for the addition of an insulating nylon cap. The ferrule is one-piece construction and crimping is accomplished with one stroke of the matching crimping tool. One other advantage of this particular ferrule is the see-through qualities of the nylon insulation which permits easy inspection of the attachment of the ground wire and braid. The metal portion of this ferrule is color coded by insulation diameter range.



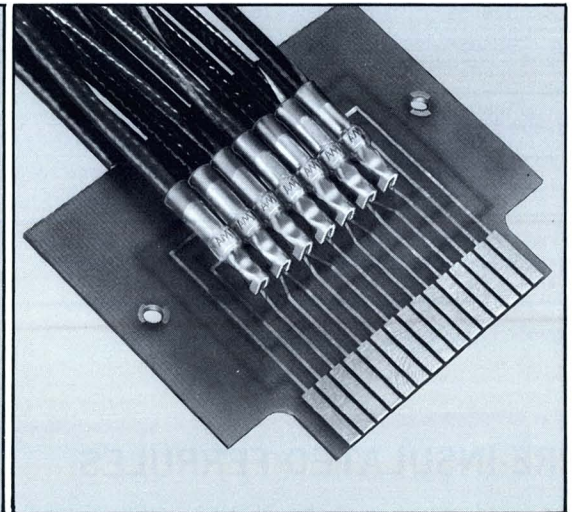
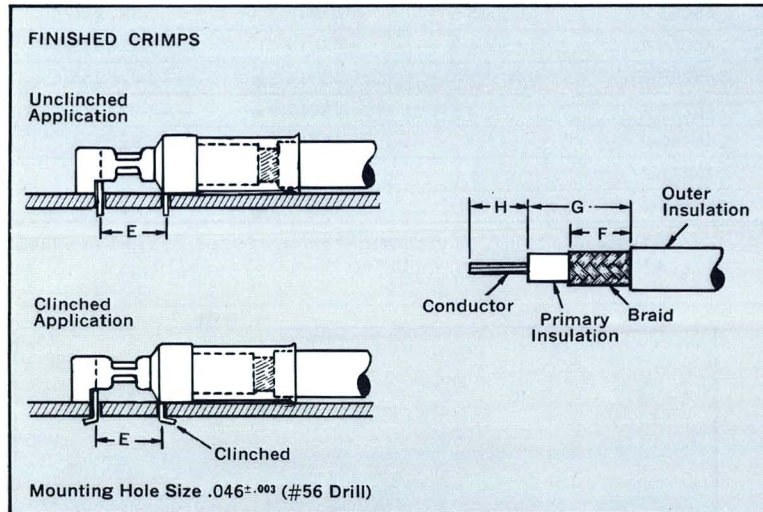
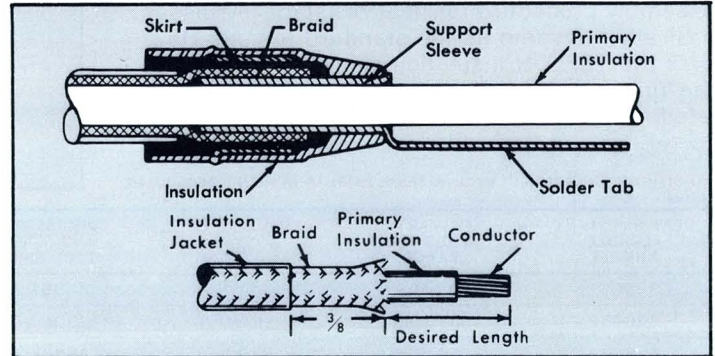
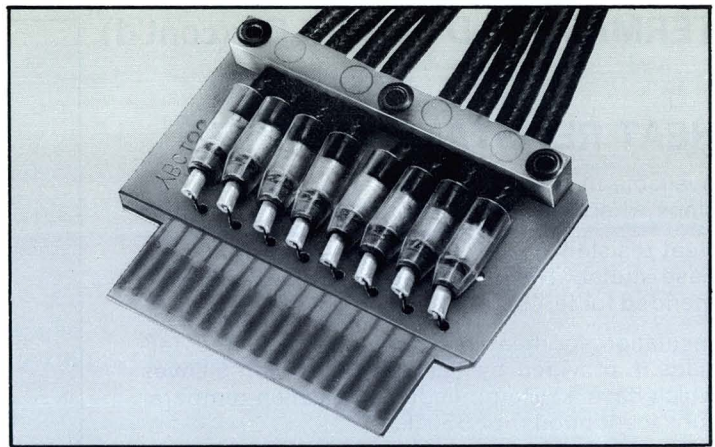
AMP CATALOG NO.	COLOR CODE	PRIMARY INSUL. DIA. RANGE	DIE INSERT NO. FOR TOOL 59500 OR 69270-1	DIE INSERT NO. FOR TOOLS 69319-1, 69710, 69365
329331	Violet	.033-.059	69204-1	69860
329332	Tin	.059-.085	69205-1	
329333	Brown	.085-.095	69206-1	69861
51824	Orange	.095-.115	69865	
51824-1	Green	.115-.130	69866	68072-1

# PRE-INSULATED FERRULES FOR PRINTED CIRCUITS

One of the latest developments in the TERMA-SHIELD ferrule line is the pre-insulated ferrule for printed circuit boards. This ferrule is of one piece construction and includes, as an integral part, a shield connecting device. This is a pre-tinned tab which promotes positive solder connection of the ferrule to the board. The depth of the inserted braided shield is easily checked through an inspection port. Construction assures positive separation of conductor, shield and outer insulation. Assembly of this ferrule is identical to the pre-insulated ferrule, the only difference being in the stripping of the center conductor.

AMP CATALOG NO.	PRIMARY INSUL. DIA. RANGE	DIE INSERT NO. FOR TOOL 59500 OR 69270-1	DIE INSERT NO. FOR TOOL 69365 69710 OR 69319-1
50948	.033-.059	69204-1	—
328436	.059-.085	45555-1	45556-1
328839*	.085-.095	45555-1	45556-1
330494	.085-.095	45555-1	45556-1

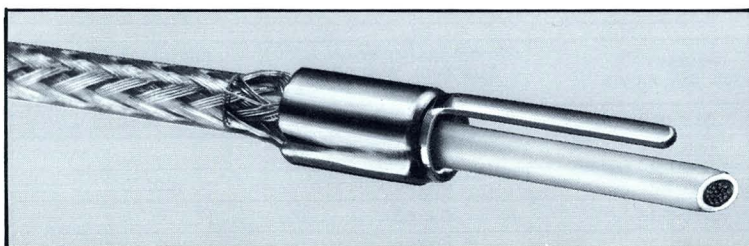
\*Does not have a solder tab.



TOOL NO.	DIE NUMBER	TERMASHIELD CONNECTOR NUMBER	COAXIAL CABLE	AFTER CRIMP DIM. 'E	ALL STRIP LENGTHS ± 1/4"		
					F	G	H
69319-1 69365 69710	68180-1	53230-1 53230-3 ▲	RG 174/U RG 187/U RG 188/U RG 316/U	.250" Ref.	7/32"	23/64"	7/32"

▲ For clinch mounted applications on 1/8" Board or 1/16" Board, unclinched.

# UN-INSULATED FERRULE FOR PRINTED CIRCUITS



AMP CATALOG NO.	PRIMARY INSUL. DIA. RANGE	DIE INSERT NO. FOR TOOL 59500 OR 69270-1
50859	.085-.095	69204-1



TERMASHIELD FERRULES (cont'd)

MIL-F-21608 CLASS 2

GOVERNMENT DESIGNATION	FERRULE ZINC PLATED	SLEEVE	PACKAGE NUMBER	FERRULE TIN PLATED	SLEEVE	PACKAGE NUMBER	PRE-INSULATED FERRULE TIN PLATED
MS-21981-046	323930	325009	330298	2-323930-2	325009	2-330298-1	329331
MS-21981-058	323930	325009	330298	2-323930-2	325009	2-330298-1	329331
MS-21981-063	323930	325009	330298	2-323930-2	325009	2-330298-1	329331
MS-21981-071	323931	325010	330228	2-323931-2	325010	2-330228-1	329332
MS-21981-080	323931	325010	330228	2-323931-2	325010	2-330228-1	329332
MS-21981-090	323931	325010	330228	2-323931-2	325010	2-330228-1	329332
MS-21981-096	323933	325012	330230	2-323933-2	325012	2-330230-1	51824
MS-21981-101	323933	325012	330230	2-323933-2	325012	2-330230-1	51824
MS-21981-109	323933	325012	330230	2-323933-2	325012	2-330230-1	51824
MS-21981-115	323933	325012	330230	2-323933-2	325012	2-330230-1	51824
MS-21981-124	323933	325012	330230	2-323933-2	325012	2-330230-1	51824
MS-21981-128	323933	325012	330230	2-323933-2	325012	2-330230-1	51824
MS-21981-134	323934	325013	330231	2-323934-2	325013	2-330231-1	51824-1
MS-21981-149	323934	325013	330231	2-323934-2	325013	2-330231-1	51824-1
MS-21981-156	323934	325013	330231	2-323934-2	325013	2-330231-1	51824-1
MS-21981-165	327138	328225	330293	2-327138-2	328225	2-330293-1	
MS-21981-175	327138	328225	330293	2-327138-2	328225	2-330293-1	
MS-21981-187	327138	328225	330293	2-327138-2	328225	2-330293-1	
MS-21981-194	327139	328226	330294	2-327139-2	328226	2-330294-1	
MS-21981-205	327139	328226	330294	2-327139-2	328226	2-330294-1	
MS-21981-219	327139	328226	330294	2-327139-2	328226	2-330294-1	
MS-21981-225	327139	328226	330294	2-327139-2	328226	2-330294-1	
MS-21981-232	327139	328226	330294	2-327139-2	328226	2-330294-1	
MS-21981-250	327139	328226	330294	2-327139-2	328226	2-330294-1	

MIL-F-21608 CLASS 2  
TYPE I NON-INSULATED

MS 21981 and 21980

CABLE SIZE	FERRULE ZINC PLATED	FERRULE TIN PLATED	COLOR	INSULATION DIA. RANGE	GROUND WIRE
RG-196 A/U	323930	2-323930-2	Violet	.033-.059	20
RG-174/U	323931	2-323931-2	Tin	.059-.085	20
RG-122/U RG-195 A/U	323933	2-323933-2	Orange	.095-.115	22-20
RG-58 C/U, RG-141 A/U, RG-223/U	323934	2-323934-2	Green	.115-.130	22-20
RG-59 B/U, RG-71 B/U	327138	2-327138-2	Tin	.145-.184	22-20
RG-143 A/U, RG-212/U	327139	2-327139-2	Brown	.184-.220	22-20

MIL-F-21608 CLASS 2  
TYPE II INSULATED

MS 18121 and 21980

CABLE SIZE	POST INSULATED FERRULE ZINC PLATED	POST INSULATED FERRULE TIN PLATED	PRE-INSULATED FERRULE TIN PLATED	COLOR	INSULATION DIA. RANGE	GROUND WIRE
RG-196 A/U	330298	2-330298-1	329331	Violet	.033-.059	22-20
RG-174/U	330228	2-330228-1	329332	Tin	.059-.085	22-20
RG-122/U, RG-195/U	330230	2-330230-1	51824	Orange	.095-.115	22-20
RG-58 C/U RG-141 A/U, RG-223/U	330231	2-330231-1	51824-1	Green	.115-.130	22-20

GROUND WIRE STRIPPING CHART

For standard un-insulated and heat resistant Ferrules



Strip wire to length shown at right

UN-INSULATED FERRULE NUMBER		HEAT RESISTANT FERRULE NUMBER	RECOMMENDED GROUND WIRE		STRIPPING LENGTH X
ZINC PLATED	TIN PLATED		NO. OF WIRES	MAX. INSUL. DIA.	
327192	2-327192-1	328051	One (1) No. 24	.063	¼ Min.
			Two (2) No. 24	.055	
323930 Thru 323934	2-323930-2 Thru 2-323934-2	328052 Thru 328056	One (1) No. 22	.068	
			One (1) No. 20	.078	
327137 Thru 327141	2-327137-2 Thru 2-327141-2	328057 Thru 328061	One (1) No. 22	.078	¼ Min.
			Two (2) No. 22	.068	
			One (1) No. 18	No Limit On Insulation Diameter*	
			One (1) No. 20		
			Two (2) No. 20		
			Two (2) No. 22		

\*Do not slide insulation of ground wire under skirt on the five larger sizes.

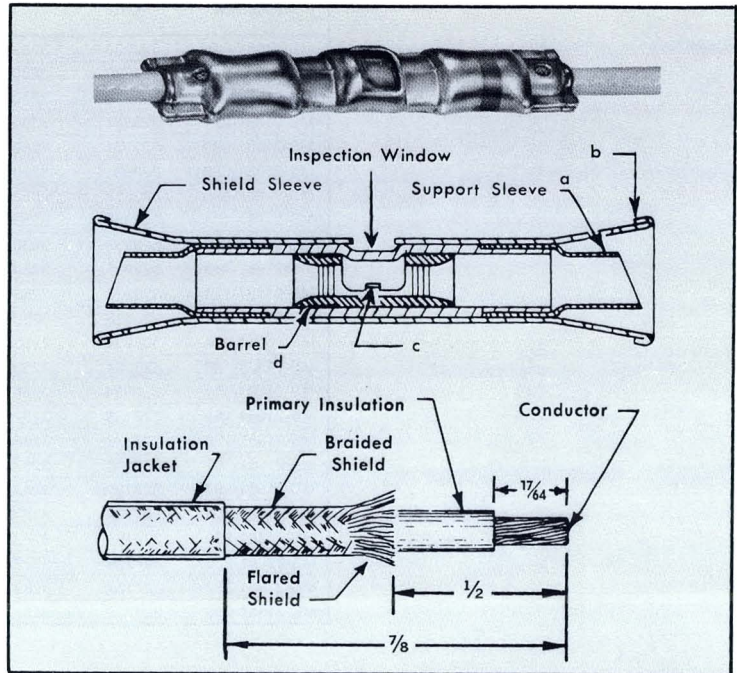
# TERMASHIELD SPLICES

## SINGLE CONDUCTOR SPLICES UN-INSULATED

Attachment of the standard TERMASHIELD Splice is accomplished in an easy two step method. In two short operations, you have a firm splice between the conductors and between the shield braids, with positive insulation between them. To assure complete quality control, without error, each wire size is designated by color code bands on the barrel.

**1. INSERTION OF CONDUCTOR:** Cable is stripped to proper length and inserted in end of splice. The inner sleeve (a) slides **under** the braided shield while the outer sleeve (b) slides **over** the braided shield. The inspection window shows proper positioning of the conductor against the wire stops (c).

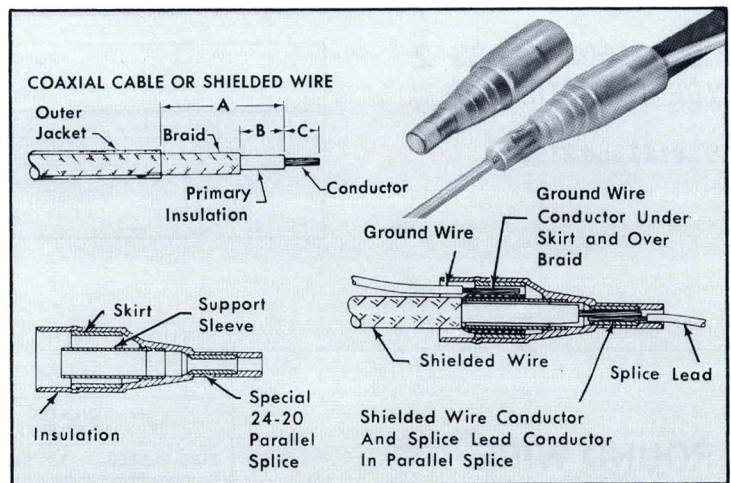
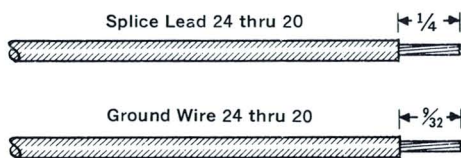
**2. CRIMPING:** Two crimps are performed simultaneously at each end of the splice with a single motion of the crimping tool. The inner barrel (d) crimps over the stripped portion of the conductor. The outer sleeve (b) crimps over the braided shield. This connection alternates layers of conductor members and insulation—and secures them in a permanent electrical and mechanical splice.



WIRE SIZE RANGE	AMP CATALOG NUMBER	MAX. CONDUCTOR INS. DIA.	COLOR CODE	HAND TOOL
24-20	327628	.062	One White Band	59459
24-20	327630	.090	Two White Bands	59459
22-18	321837	.085	One Red Band	69352
22-18	321807	.115	Two Red Bands	69352
16-14	322721	.120	One Blue Band	59255
16-14	322722	.150	Two Blue Bands	59255

## PRE-INSULATED TERMASPLICE SPLICES

The Pre-insulated TERMASPLICE Splice provides a quick, convenient method of splicing the center conductor of coaxial cables to a conventional AWG wire (Range 475 to 1186 CMA) while simultaneously terminating the braid of the coaxial cable. This compression crimp technique assures identical, trouble-free connections time after time. The resultant spliced lead can accommodate a wide variety of AMP termination products.

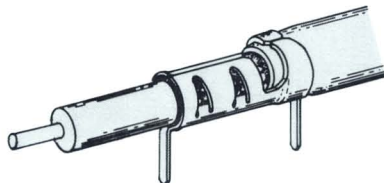


SPLICE NO.	WIRE STRIPPING			COLOR CODE	RECOMMENDED FOR USE WITH COAXIAL CABLE	PRIMARY INSUL. DIA. RANGE	HAND TOOL	DIE INSERT FOR TOOL #69365, #69710, OR #69319-1
	A	B	C					
330592	3/16	3/16	1/4	Green	RG-178-U RG-196-U	.033-Max.	69366-1	69361-1
329413	3/16	3/16	1/4	Violet	RG-174-U RG-187-U	.033-.059	69241-1	69266-1
1-329413-0	3/16	3/16	1/4	Blue		.059-.085	69241-1	69266-1
328812	3/16	3/32	3/32	Tin	RG-180-U RG-195-U	.085-.095	69156-1	69149-2

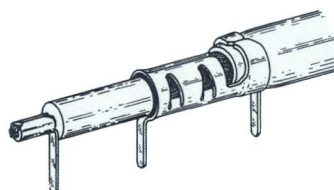
**STYLE I: Permanent Mount Contact**

(for braid termination)—During completion of the braid crimp two rectangular tabs are automatically bent to a 90° angle to be inserted into the board.

The center conductor is then manually bent to a similar 90° angle and inserted into the board. Both tabs and the center conductor are flow soldered or hand soldered for permanent board attachment.

**STYLE II: Permanent Mount Contact**

(for braid and center conductor termination)—this terminal provides simultaneous crimp termination of the braid and stranded center conductor. At the same time the applicator automatically forms three rectangular tabs at 90° angles for quick, easy insertion into the board. As with STYLE I, all three tabs are soldered for permanent contact.

**STYLE III: Vertical Disconnect—**

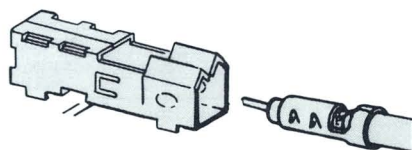
Designed specifically for applications requiring vertical connection to the board with the option of connect/disconnect. This assembly, using the solid center conductor as the center contact, consists of three basic elements:

- The Braid-Pic Contact with cable support.
- The vertical P.C. board disconnect which is soldered to the P.C. board and carries the ground circuit from the cable to the P.C. board.
- The AMP miniature spring socket which also is soldered to the P.C. board and acts as the receptacle contact for the center conductor.

**STYLE IV: Horizontal Disconnect—**

Designed specifically for applications requiring horizontal connection to the board with the option of connect/disconnect. This assembly, using the solid center conductor as the center contact, consists of two basic elements:

- The Braid-Pic Contact with cable support.
- The horizontal mount receptacle with integral polypropylene dielectric insert and receptacle contact.

**AMP Braid-Pic Contacts and Receptacles for Coaxial Cable to Printed Circuit Board Terminations**

The AMP Braid-Pic Contact represents an entire new approach to braided shield termination. This precision formed contact features four integral lances in the wire barrel. During the crimping operation, these lances penetrate the braid providing redundant electrical contact. Mechanical stability is maintained by the weaving of the braid through and around the terminal lances and the adjacent sidewalls of the wire barrel. The finished crimp captures the braid in a 360° termination for maximum mechanical strength in the braid area. The built-in insulation support provides additional mechanical integrity on the outer jacket of the coaxial cable.

The AMP Braid-Pic Contact is available in tin-plated brass and is supplied in strip form, reel fed for AMP-O-LECTRIC Automatic Machine application that provides the highest possible production rates and the lowest applied cost. For limited production or maintenance and repair, Braid-Pic Contacts are available in loose piece for CERTI-CRIMP hand tool termination.

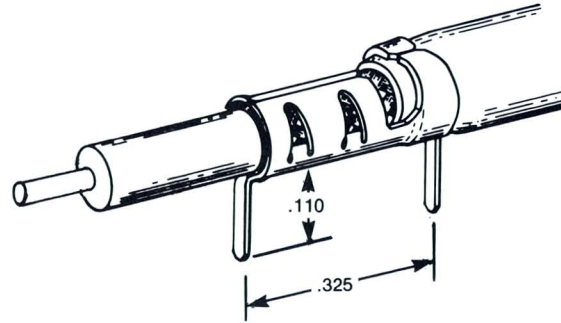
To meet your specific application the AMP Braid-Pic Contact and Receptacle Assemblies are available in four distinct configurations.

**Features**

- Four styles to suit your application
- Braid-Pic Contacts terminated by automatic machine for high speed production—low applied cost
- Cable can be pre-stripped in AMP automatic coaxial cable stripper
- Minimum inventory required
- Precision formed contacts—low component price
- Accepts a variety of coaxial cable sizes (see specifications)
- Loose piece terminals available for CERTI-CRIMP hand tool application
- 360° termination with built-in cable support for mechanical stability
- Four point braid contact for excellent electrical continuity

### Braid Termination

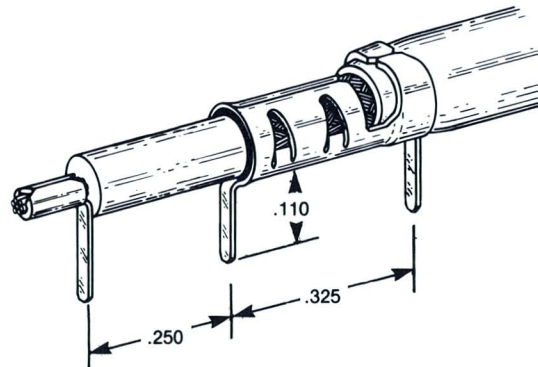
### Braid and Center Conductor Termination



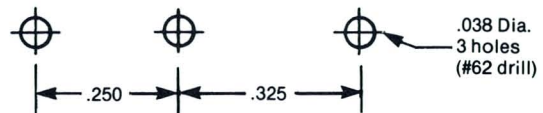
**Mounting Hole Layout**



PC board thickness - 1/16"



**Mounting Hole Layout**



PC board thickness - 1/16"

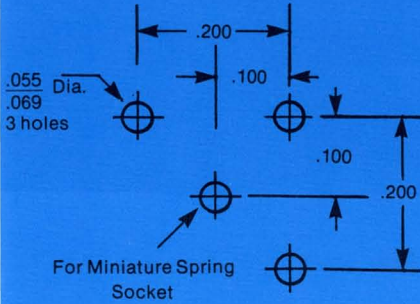
Cable Size	Braid and Center Conductor Termination Part Number	Braid Termination Part Number	Hand Tool	Standard Applicator for AMP-O-LECTRIC Machine 1-471273-2
RG-174, 179, 187, 188,316 Brand Rex T-57				
(50 ohm) Berk-Tek BTX-019-10050 Surprenant SCX-14	226177-2	226176-2	220141-1	566133-1
(75 ohm) Berk-Tek BTPE 7C8X-28-10075 Surprenant SCX-16				
RG-180,195	226174-2	226175-2	220150-1	566132-1

**Note:** All dimensions in inches  
Specifications subject to change. Consult AMP  
Incorporated for latest design specifications.

Vertical and Horizontal Disconnects

Vertical Disconnect

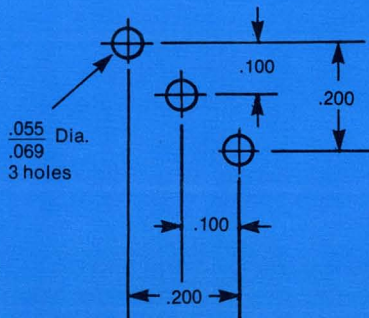
Mounting Hole Layout



Hand insertion -  $.039 \pm .003$  Dia.  
 Automatic staking -  $.040 \pm .003$  Dia.  
 PC board thickness - 1/16"

Horizontal Disconnect

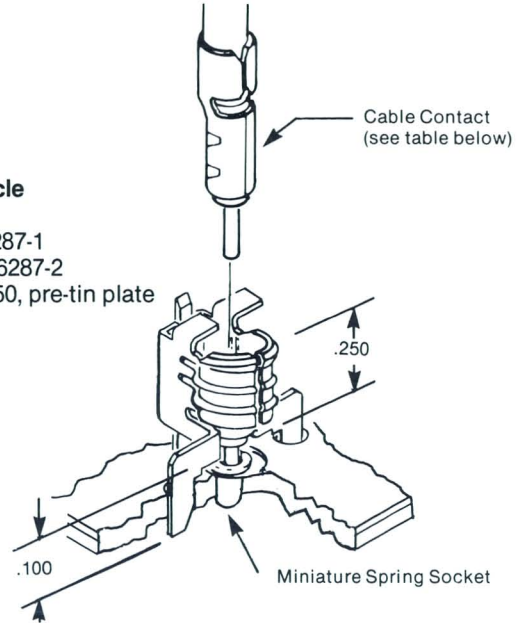
Mounting Hole Layout



PC board thickness - 1/16"

Vertical Receptacle

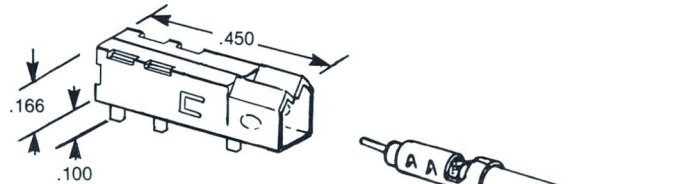
Part Number:  
 Strip Form - 226287-1  
 Loose Piece - 226287-2  
 Brass per MIL-C-50, pre-tin plate



Miniature Spring Socket

Eyelet - Tin plated copper  
 Spring - Gold plated beryllium copper

Cable Size	Miniature Spring Socket Part No.
Brand Rex T-57 (50 ohm) Berk-Tek BTX-019-10050 Surprenant SCX-14	2-332095-4
(75 ohm) Berk-Tek BTPE 7C8X-28-10075 Surprenant SCX-16	2-332095-7



Horizontal Receptacle

Part Number: 226469-1  
 Phos. bronze per QQ-B-750,  
 tin plate per MIL-T-10727,  
 gold plate per MIL-G-45204  
 (center conductor contact),  
 polypropylene dielectric.

Cable Contact

Brass per MIL-C-50, tin plated per MIL-T-10727

Cable Size	Terminal Part Number	Hand Tool	Miniature Applicator for AMP-O-LECTRIC Machine 565435-5
Brand Rex T-57 (50 ohm) Berk-Tek BTX-019-10050 Surprenant SCX-14	226286-2	220141-1	466172-1
(75 ohm) Berk-Tek BTPE 7C8X-28-10075 Surprenant SCX-16			

