



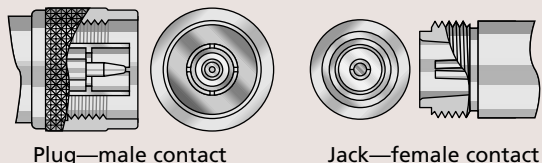
## Introduction

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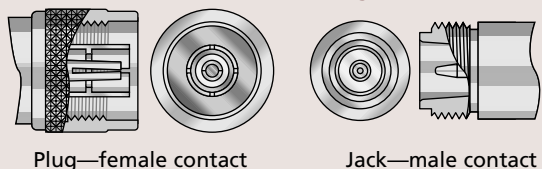
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## N Interface Options

## Standard Mating



## Polarized Mating



## N Coupling Nut Options



**N series connectors** are general-purpose, medium size connectors, with a frequency range of DC–11 GHz and 50Ω impedance, designed to MIL-PRF-39012 requirements.

Their threaded interface provides secure mating and unmating, and prevents accidental disconnection from pulling forces on the cable.

Automatic N cable connectors are available with nine standard cable attachment types for flexible and semi-rigid cable:

- **Standard and Improved Wedge-Lock;** our patented, quick assembly method for flexible cable incorporating a captive center contact, only three parts to handle, and requiring no special tools.
- **V-Groove** clamping with captive or noncaptive contacts for flexible cable, requiring no special tools for assembly.
- **Econo-Crimp** types with captive or noncaptive contacts for flexible cable, providing small size, light weight, and rapid assembly using standard, commercially-available crimp tools.
- **X-Crimp** with captive contacts for flexible cable, providing rugged, high-strength cable attachment and quick assembly.
- **Wedge-Eze** for flexible cable is our unique system featuring quick assembly, color coding by cable size, and field replaceability. Rapidly assembled with hand or automated tooling.
- **Solder-Clamp** assembly for semi-rigid cable requires no special tools and allows for re-orientation of the connector after assembly to easily conform to system layout. Collet type clamping for solderless attachment of semi-rigid cable is also available.

See the glossary pages beginning on page 23 for details on all cable attachment types.

Many of our N connectors are qualified to MIL-PRF-39012, and adapters to MIL-PRF-55339. Most of our M39012 QPL cable connectors are available with your choice of Wedge-Lock, V-Groove, or Econo-Crimp cable attachment. Visit our website for information on our N QPL connectors and adapters.

The versatility of N series RF connectors is enhanced by Automatic's ability to provide a wide range of alternate constructions and configurations to meet virtually any system requirements. Contact us with your requirements for custom configurations, such as:

- **Polarized mating interfaces** with reversed contacts and insulators to prevent accidental mating of incompatible circuits. (see illustration at left).
- Coupling nuts can be provided with **lockwire holes** for safety wiring after mating in high-vibration applications. Hex coupling nuts are also available.
- **75 ohm impedance** versions are available in all N configurations.
- N connectors with **aluminum bodies** can provide significant weight savings.

## Notes:

The standard N connectors in this section have silver-plated bodies and gold-plated center contacts. All are available with other platings if required.

Drawings in this section are approximately actual size; some drawing proportions may be altered to better illustrate details.

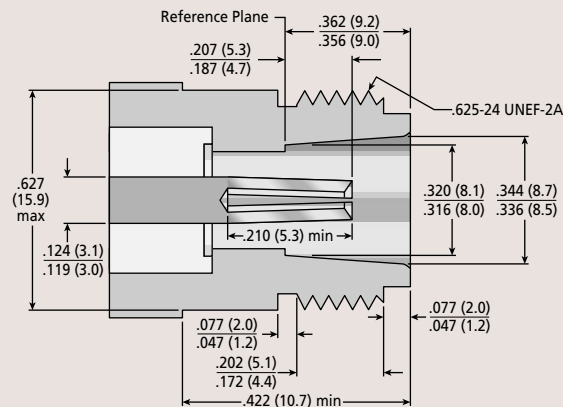
Drawing dimensions are in inches (millimeters), based on one inch = 25.4 mm.



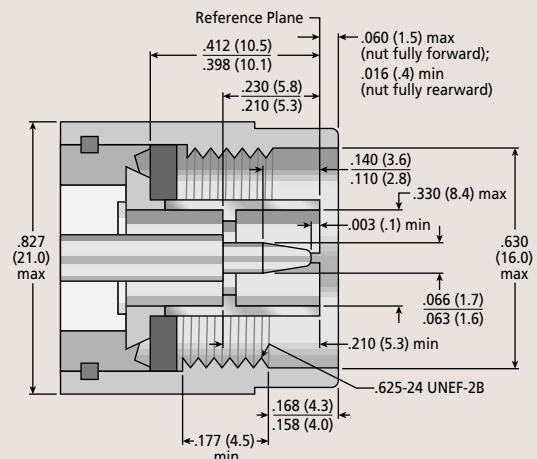
## Interface Dimensions and Specifications

### Interface Dimensions (MIL-STD-348)

#### Jack Interface



#### Plug Interface



### Specifications (MIL-PRF-39012; MIL-STD-202 test methods)

#### Electrical:

**Frequency Range:** DC–11 GHz. **Impedance:** 50 ohms. **Voltage Rating:** 1,000 V RMS

**Insulation Resistance:** 5,000 megohms min. (Method 302, condition B).

**Dielectric Withstanding Voltage:** 2,500 V RMS min. (Method 301).

**Contact Resistance:** Center Contact—1.0 milliohms max. initial; 1.5 milliohms max. after environmental tests. Outer Contact—.2 milliohms max. Braid to Body—.05 milliohms max.

**RF High Potential:** 1,500 V RMS min. @ 5–7.5 MHz.

**VSWR:** Varies with configuration; see MIL-PRF-39012 specification sheets.

**RF Leakage:** -90 dB min. @ 2–3 GHz.

**Insertion Loss:** Varies with configuration; see MIL-PRF-39012 specification sheets.

#### Environmental:

**Vibration:** Method 204, Condition B. **Shock:** Method 213, condition I.

**Corona Level:** 375 V min. @70,000 feet. **Temperature Range:** -65° to 165°C.

**Moisture Resistance:** Method 106; insulation resistance >200 megohms within 5 minutes of removal from humidity.

**Thermal Shock:** Method 107, condition B, high temperature 85° C.

**Corrosion:** Method 101, condition B.

#### Mechanical:

**Force to Engage and Disengage:** Longitudinal force, N/A.

Torque, 6 inch-pounds max.

**Coupling Proof Torque:** 15 inch-pounds, min. **Coupling Nut Retention:** 100 pounds.

**Cable Retention:** Dependent upon cable; see MIL-PRF-39012 specification sheet.

**Mating Characteristics:** Per MIL-STD-348.

**Durability:** 500 mating cycles @ 12 cycles per minute max.

**Center Contact Retention:** 6–15 pounds min. axial force (captive-contact types).

#### Materials (unless otherwise noted):

**Male Center Contacts:** Brass.

**Female Center Contacts, Plug Outer Contacts:** Beryllium copper.

**Bodies and Other Metal Parts:** Brass. **Crimp Sleeves:** Annealed brass or soft copper.

**Insulators:** Teflon (TFE). **Gaskets:** Silicone rubber.

#### Plating:

**Center Contacts:** Gold plated per current MIL-PRF-39012 requirements.

**Other Metal Parts:** Silver plated per current MIL-PRF-39012 or MIL-PRF-55339 requirements.

**Note:** These specifications are typical, and may not apply to all configurations. Specifications may change as MIL specifications are updated.



## Straight Cable Plugs

| Cable Group | Wedge-Lock and V-Groove |                  |                     |                 |        |
|-------------|-------------------------|------------------|---------------------|-----------------|--------|
|             | Wedge-Lock              |                  | V-Groove            |                 | Figure |
|             | Standard                | Improved         | Non-Captive Contact | Captive Contact |        |
| CF-1        | 801-N1800               | 801-N1800B       | 011-N1000           | 011-N1100       | 1      |
| CF-2        | 819-N1800               | 819-N1800B       | 025-N1000           | 025-N1100       | 1      |
| CF-3, 4     | 847-N1800               | 847-N1800B       | 039-N1000           | 039-N1100       | 1      |
| CF-5, 6     | 101-N1800               | 101-N1800B       | 100-N1000A†         | 101-N1100A      | 1      |
| CF-7, 8     | 151-N1800               | 151-N1800B       | 150-N1000A†         | 151-N1100       | 1      |
| CF-13       | 201-N1800               | 201-N1800B       | 200-N1000B†         | 201-N1100A      | 2      |
| CF-22       | 301-N1800D              | 301-N1800Y*      | 300-N1000B†         | 301-N1100A*†    | 2      |
| CF-23       | Contact Factory         | Contact Factory* | 302-N1000B†         | 303-N1100A      | 3      |
| CF-34       | Contact Factory         | Contact Factory* | 700-N1000B†         | 701-N1100A      | 4      |
| CF-37       | Contact Factory         | Contact Factory  | 420-N1000A†         | 421-N1100       | 5      |

| Cable Group | Solder-Clamp (Semi-Rigid Cable) |        |
|-------------|---------------------------------|--------|
|             | Captive Contact                 |        |
|             | Part Number                     | Figure |
| SR-5        | Contact Factory                 | 1      |
| SR-6        | Contact Factory                 | 1      |

- All items have silver-plated bodies and gold-plated contacts. For nickel-plated body, add **K** at beginning of part number. For gold-plated body add **G** at beginning of part number.
- See page 22 for cable groups. Most types available for other cables not shown above.
- See pages 23–27 for complete descriptions and illustrations of cable attachment types.
- \*Available in MIL-PRF-39012/01 QPL version.
- † Available as UG type.

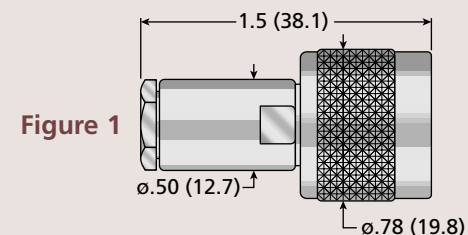


Figure 1

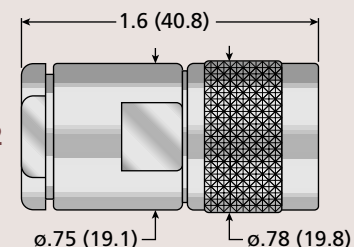


Figure 2

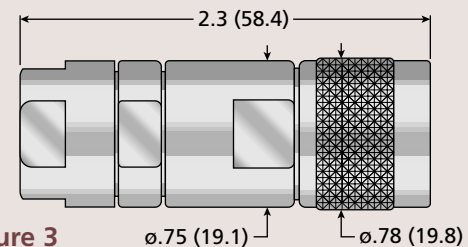


Figure 3

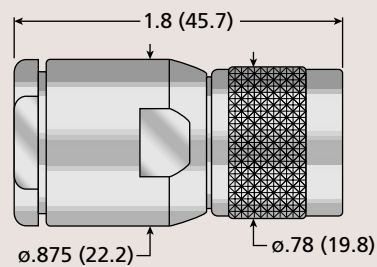


Figure 5

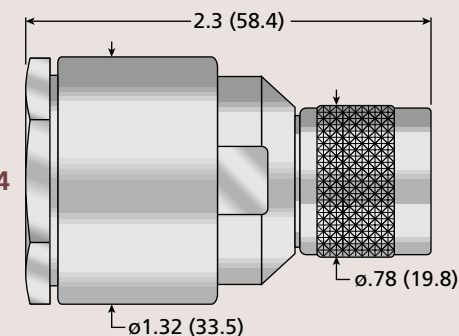


Figure 4



## Straight Cable Plugs

| Cable Group | Econo-Crimp |                 |            |            |        |
|-------------|-------------|-----------------|------------|------------|--------|
|             | Non-Captive | Captive Contact | A          | B          | Figure |
| CF-5        | 980-N1900   | 980-N1908*      | 1.3 (33.0) | .50 (12.7) | 1      |
| CF-6        | 988-N1900   | 988-N1908*      | 1.3 (33.0) | .50 (12.7) | 1      |
| CF-7        | 998-N1900   | 998-N1908       | 1.3 (33.0) | .50 (12.7) | 1      |
| CF-8        | 999-N1900   | 999-N1908       | 1.3 (33.0) | .50 (12.7) | 1      |
| CF-13       | 200-N1900   | 201-N1908       | 1.6 (40.6) | .75 (19.1) | 1      |
| CF-22       | 300-N1900D  | 301-N1908D*     | 1.6 (40.6) | .75 (19.1) | 1      |

| Cable Group | X-Crimp     |        |
|-------------|-------------|--------|
|             | Part Number | Figure |
| CF-1        | 901-N1900F  | 2      |
| CF-2        | 919-N1900F  | 2      |
| CF-3, 4     | 947-N1900F  | 2      |
| CF-5        | 980-N1900F  | 2      |
| CF-6        | 988-N1900F  | 2      |
| CF-7        | 998-N1900F  | 2      |
| CF-8        | 999-N1900F  | 2      |
| CF-13       | 201-N1900F  | 3      |
| CF-22       | 301-N1900F  | 3      |

| Cable Group | Wedge-Eze   |        |
|-------------|-------------|--------|
|             | Part Number | Figure |
| CF-5, 6     | 100-N1600   | 4      |
| CF-7, 8     | 150-N1600   | 4      |
| CF-13       | 200-N1600   | 4      |
| CF-22       | 300-N1600   | 4      |

- All items have silver-plated bodies and gold-plated contacts. For nickel-plated body, add **K** at beginning of part number. For gold-plated body add **G** at beginning of part number.
  - See page 22 for cable groups. Most types available for other cables not shown above.
  - See pages 23–27 for complete descriptions and illustrations of cable attachment types.
- \*Available in MIL-PRF-39012/01 QPL version.

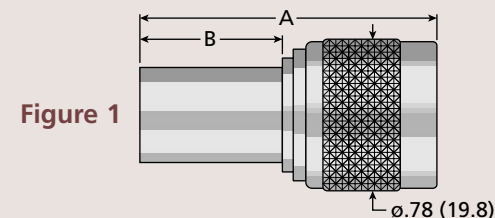


Figure 1

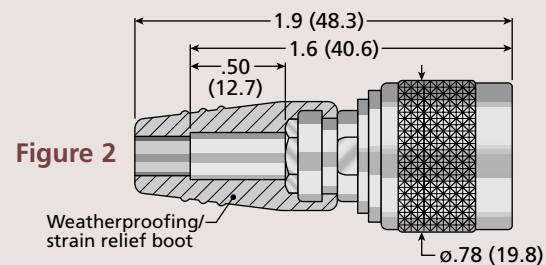


Figure 2

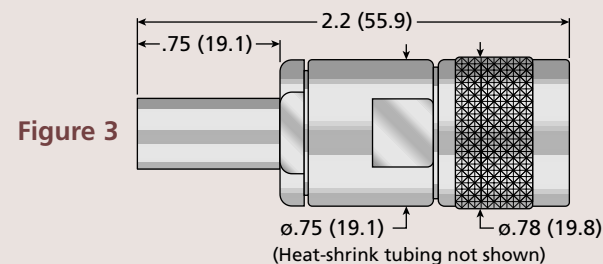


Figure 3

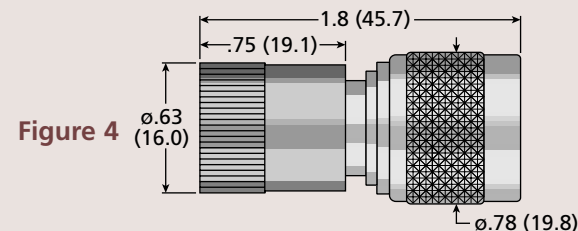


Figure 4



## Right Angle Cable Plugs

| Cable Group | Wedge-Lock (Captive Contact) |                 | Figure |
|-------------|------------------------------|-----------------|--------|
|             | Standard                     | Improved        |        |
| CF-1        | 801-N2800A                   | Contact Factory | 1      |
| CF-2        | 819-N2800A                   | Contact Factory | 1      |
| CF-3, 4     | 847-N2800A                   | Contact Factory | 1      |
| CF-5, 6     | 101-N2800                    | 101-N2800B      | 2      |
| CF-5, 6     | 101-N2800A                   | Contact Factory | 1      |
| CF-7, 8     | 151-N2800                    | 151-N2800B      | 2      |
| CF-7, 8     | 151-N2800A                   | Contact Factory | 1      |
| CF-13       | 201-N2800                    | 201-N2800B      | 4      |
| CF-13       | 201-N2800A                   | Contact Factory | 3      |
| CF-22       | 301-N2800D                   | 301-N2800Y*     | 4      |

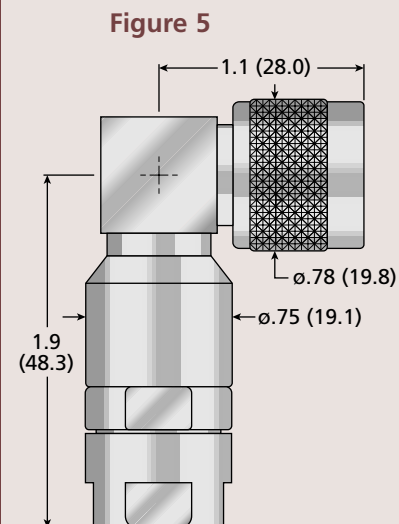
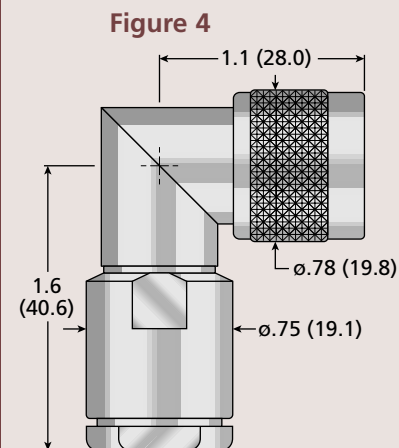
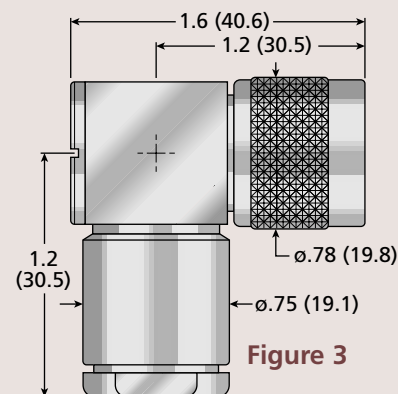
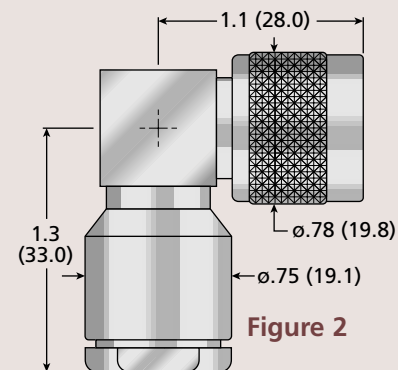
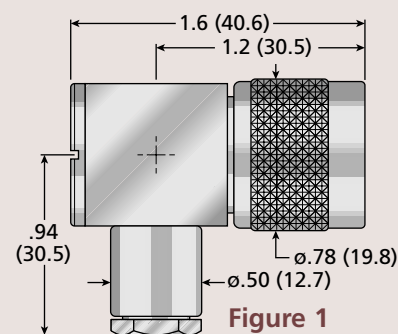
| Cable Group | V-Groove            |                 | Figure |
|-------------|---------------------|-----------------|--------|
|             | Non-Captive contact | Captive Contact |        |
| CF-1        | —                   | 011-N2100A      | 1      |
| CF-2        | —                   | 025-N2100A      | 1      |
| CF-3, 4     | —                   | 039-N2100A      | 1      |
| CF-5, 6     | —                   | 101-N2100A      | 1      |
| CF-7, 8     | —                   | 151-N2100A      | 1      |
| CF-13       | 200-N2000N          | 201-N2100N      | 2      |
| CF-13       | —                   | 201-N2100A      | 3      |
| CF-22       | 300-N2000N*         | 301-N2100N      | 2      |
| CF-22       | —                   | 301-N2100A      | 3      |
| CF-23       | 302-N2000N          | 303-N2100N      | 5      |

| Cable Group | Solder-Clamp (Semi-Rigid Cable) |        |
|-------------|---------------------------------|--------|
|             | Captive Contact                 | Figure |
| SR-5        | Contact Factory                 | 1      |
| SR-6        | Contact Factory                 | 1      |

- All items have silver-plated bodies and gold-plated contacts. For nickel-plated body, add **K** at beginning of part number. For gold-plated body add **G** at beginning of part number.
- See page 22 for cable groups. Most types available for other cables not shown above.
- See pages 23–27 for complete descriptions of cable attachment types.

\*Available in MIL-PRF-39012/05 QPL version.

† Available as UG type.



## Right Angle Cable Plugs

| Cable Group | Econo-Crimp     |        |
|-------------|-----------------|--------|
|             | Captive Contact |        |
|             | Part Number     | Figure |
| CF-5        | 980-N2900       | 1      |
| CF-6        | 988-N2900       | 1      |
| CF-7        | 998-N2900       | 1      |
| CF-8        | 999-N2900       | 1      |
| CF-13       | 201-N2900       | 1      |
| CF-22       | 301-N2900D      | 1      |

| Cable Group | X-Crimp         |        |
|-------------|-----------------|--------|
|             | Captive Contact |        |
|             | Part Number     | Figure |
| CF-1        | 901-N2900F      | 2      |
| CF-2        | 919-N2900F      | 2      |
| CF-3, 4     | 947-N2900F      | 2      |
| CF-5        | 980-N2900F      | 2      |
| CF-6        | 988-N2900F      | 2      |
| CF-7        | 998-N2900F      | 2      |
| CF-8        | 999-N2900F      | 2      |
| CF-13       | 201-N2900F      | 3      |
| CF-22       | 301-N2900F      | 3      |

| Cable Group | Wedge-Eze       |        |
|-------------|-----------------|--------|
|             | Captive Contact |        |
|             | Part Number     | Figure |
| CF-5, 6     | 100-N2600       | 4      |
| CF-7, 8     | 150-N2600       | 4      |
| CF-13       | 200-N2600       | 4      |
| CF-22       | 300-N2600       | 4      |

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Figure 1

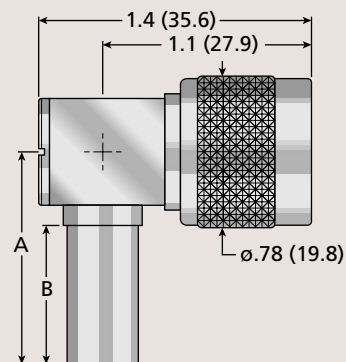


Figure 2

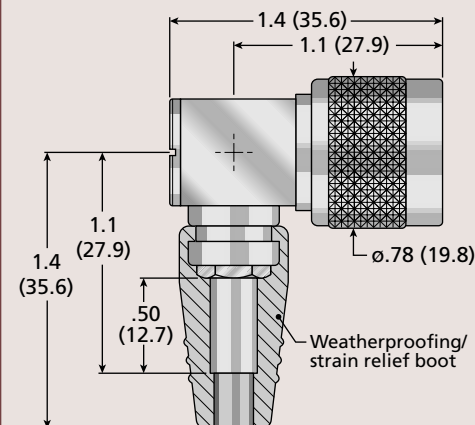


Figure 3

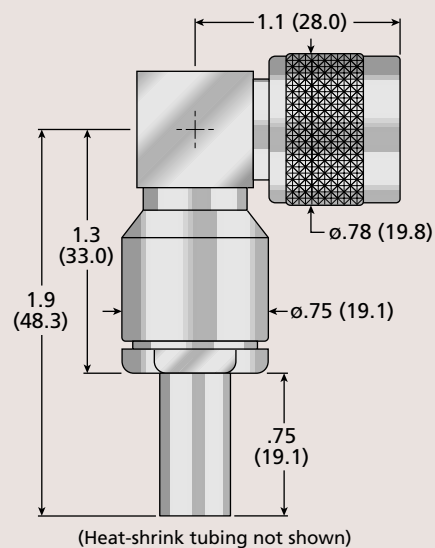
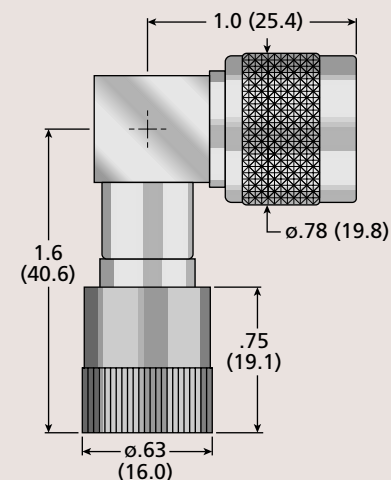


Figure 4





## Straight Cable Jacks

| Cable Group | Wedge-Lock and V-Groove |                         |                         |                         |        |
|-------------|-------------------------|-------------------------|-------------------------|-------------------------|--------|
|             | Wedge-Lock              |                         | V-Groove                |                         | Figure |
|             | Standard                | Improved                | Non-Captive Contact     | Captive Contact         |        |
| CF-1        | 801-N3800               | 801-N3800B              | 011-N3000               | 011-N3100               | 1      |
| CF-2        | 819-N3800               | 819-N3800B              | 025-N3000               | 025-N3100               | 1      |
| CF-3, 4     | 847-N3800               | 847-N3800B              | 039-N3000               | 039-N3100               | 1      |
| CF-5, 6     | 101-N3800               | 101-N3800B              | 100-N3000A              | 101-N3100A              | 1      |
| CF-7, 8     | 151-N3800               | 151-N3800B              | 150-N3000A <sup>†</sup> | 151-N3100               | 1      |
| CF-13       | 201-N3800               | 201-N3800B              | 200-N3000B <sup>†</sup> | 201-N3100A              | 2      |
| CF-22       | 301-N3800D              | 301-N3800Y <sup>*</sup> | 300-N3000B <sup>†</sup> | 301-N3100A <sup>†</sup> | 2      |
| CF-23       | Contact Factory         | Contact Factory         | 302-N3000B <sup>†</sup> | 303-N3100A              | 3      |
| CF-34       | Contact Factory         | Contact Factory         | 700-N3000B              | 701-N3100A              | 4      |
| CF-37       | Contact Factory         | Contact Factory         | 420-N3000A              | 421-N3100               | 5      |

| Cable Group | Solder-Clamp (Semi-Rigid Cable) |        |
|-------------|---------------------------------|--------|
|             | Captive Contact                 |        |
|             | Part Number                     | Figure |
| SR-5        | Contact Factory                 | 1      |
| SR-6        | Contact Factory                 | 1      |

- All items have silver-plated bodies and gold-plated contacts. For nickel-plated body, add **K** at beginning of part number. For gold-plated body add **G** at beginning of part number.
- See page 22 for cable groups. Most types available for other cables not shown above.
- See pages 23–27 for complete descriptions and illustrations of cable attachment types.
- \*Available in MIL-PRF-39012/02 QPL version.
- † Available as UG type.

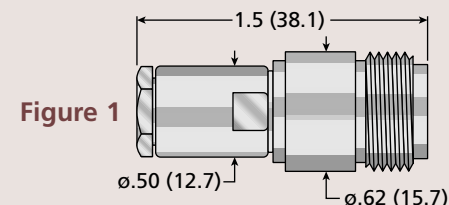


Figure 1

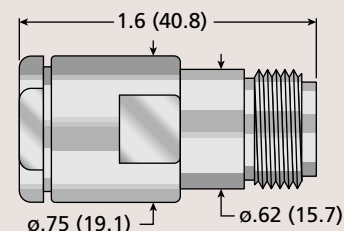


Figure 2

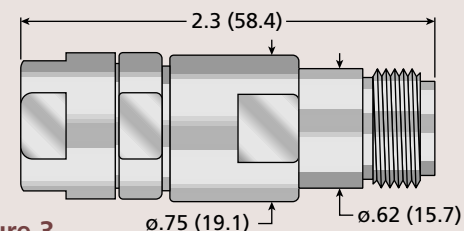


Figure 3

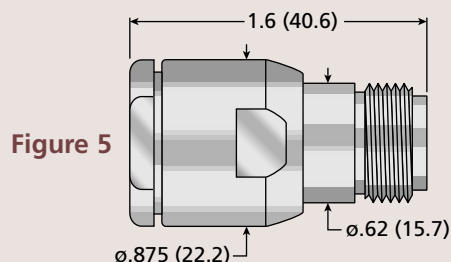


Figure 5

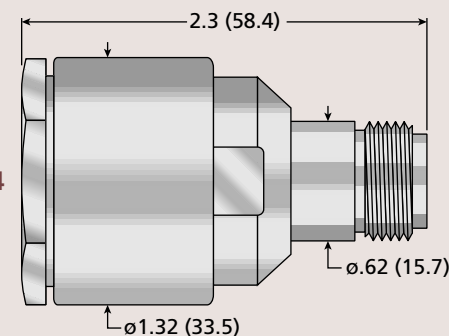


Figure 4



## Straight Cable Jacks

| Cable Group | Econo-Crimp |                 |            |            |        |
|-------------|-------------|-----------------|------------|------------|--------|
|             | Non-Captive | Captive Contact | A          | B          | Figure |
| CF-5        | 980-N3900   | 980-N3908*      | 1.3 (33.0) | .50 (12.7) | 1      |
| CF-6        | 988-N3900   | 988-N3908*      | 1.3 (33.0) | .50 (12.7) | 1      |
| CF-7        | 998-N3900   | 998-N3908       | 1.3 (33.0) | .50 (12.7) | 1      |
| CF-8        | 999-N3900   | 999-N3908       | 1.3 (33.0) | .50 (12.7) | 1      |
| CF-13       | 200-N3900   | 201-N3908       | 1.6 (40.6) | .75 (19.1) | 1      |
| CF-22       | 300-N3900D  | 301-N3908D*     | 1.6 (40.6) | .75 (19.1) | 1      |

| Cable Group | X-Crimp     |        |
|-------------|-------------|--------|
|             | Part Number | Figure |
| CF-1        | 901-N3900F  | 2      |
| CF-2        | 919-N3900F  | 2      |
| CF-3, 4     | 947-N3900F  | 2      |
| CF-5        | 980-N3900F  | 2      |
| CF-6        | 988-N3900F  | 2      |
| CF-7        | 998-N3900F  | 2      |
| CF-8        | 999-N3900F  | 2      |
| CF-13       | 201-N3900F  | 3      |
| CF-22       | 301-N3900F  | 3      |

| Cable Group | Wedge-Eze   |        |
|-------------|-------------|--------|
|             | Part Number | Figure |
| CF-5, 6     | 100-N3600   | 4      |
| CF-7, 8     | 150-N3600   | 4      |
| CF-13       | 200-N3600   | 4      |
| CF-22       | 300-N3600   | 4      |

- All items have silver-plated bodies and gold-plated contacts.  
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For gold-plated body add **G** at beginning of part number.
- See page 22 for cable groups. Most types available for other cables not shown above.
- See pages 23–27 for complete descriptions and illustrations of cable attachment types.
- \*Available in MIL-PRF-39012/02 QPL version.

Figure 1

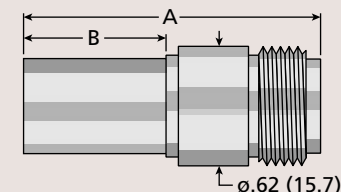


Figure 2

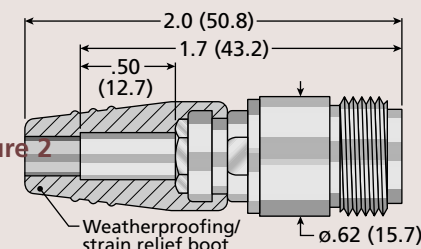


Figure 3

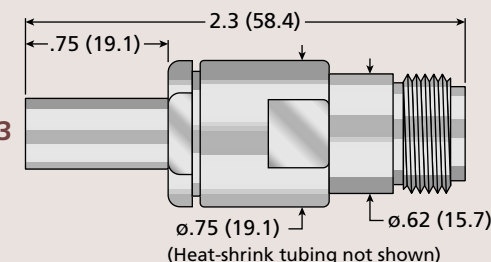
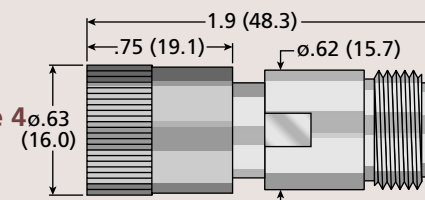


Figure 4





## Right Angle Cable Jacks

| Cable Group | Wedge-Lock (Captive Contact) |                 |        |
|-------------|------------------------------|-----------------|--------|
|             | Standard                     | Improved        | Figure |
| CF-1        | 801-N4800                    | Contact Factory | 1      |
| CF-2        | 819-N4800                    | Contact Factory | 1      |
| CF-3, 4     | 847-N4800                    | Contact Factory | 1      |
| CF-5, 6     | 101-N4800                    | 101-N4800B      | 2      |
| CF-7, 8     | 151-N4800                    | 151-N4800B      | 2      |
| CF-13       | 201-N4800                    | 201-N4800B      | 3      |
| CF-22       | 301-N4800D                   | 301-N4800Y      | 3      |

| Cable Group | V-Groove        |        |
|-------------|-----------------|--------|
|             | Captive Contact | Figure |
| CF-1        | 011-N4100A      | 1      |
| CF-2        | 025-N4100A      | 1      |
| CF-3, 4     | 039-N4100A      | 1      |
| CF-5, 6     | 101-N4100A      | 1      |
| CF-7, 8     | 151-N4100A      | 1      |
| CF-13       | 201-N4100N      | 4      |
| CF-22       | 301-N4100N      | 4      |
| CF-23       | 303-N4100N      | 5      |

| Cable Group | Solder-Clamp (Semi-Rigid Cable) |        |
|-------------|---------------------------------|--------|
|             | Captive Contact                 |        |
|             | Part Number                     | Figure |
| SR-5        | Contact Factory                 | 1      |
| SR-6        | Contact Factory                 | 1      |

- All items have silver-plated bodies and gold-plated contacts. For nickel-plated body, add K at beginning of part number. For gold-plated body add G at beginning of part number.
- See page 22 for cable groups. Most types available for other cables not shown above.
- See pages 23–27 for complete descriptions and illustrations of cable attachment types.

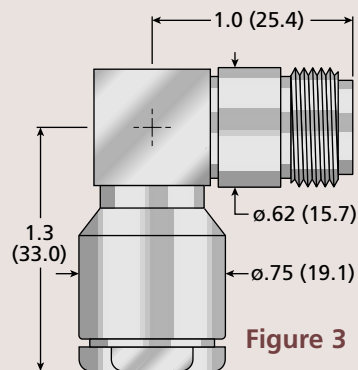
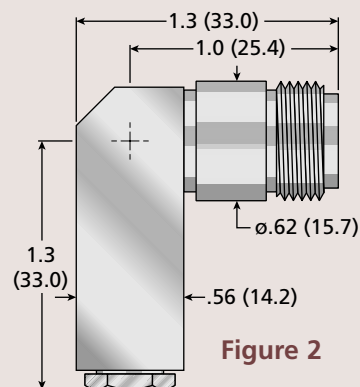
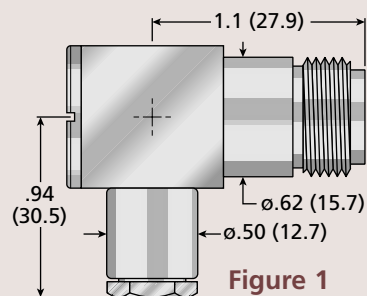


Figure 4

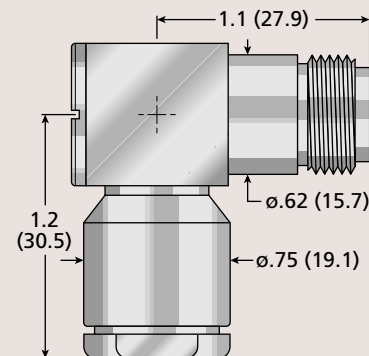
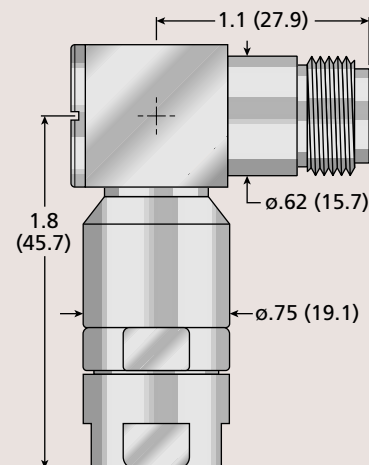


Figure 5





## Straight Bulkhead Mounted Cable Jacks—Rear Mount

| Cable Group | Wedge-Lock (Captive Contact) |                | Figure |
|-------------|------------------------------|----------------|--------|
|             | Standard                     | Improved       |        |
| CF-1        | 801-N3800-85                 | 801-N3800B-85  | 1      |
| CF-2        | 819-N3800-85                 | 819-N3800B-85  | 1      |
| CF-3, 4     | 847-N3800-85                 | 847-N3800B-85  | 1      |
| CF-5, 6     | 101-N3800-85                 | 101-N3800B-85  | 1      |
| CF-7, 8     | 151-N3800-85                 | 151-N3800B-85* | 1      |
| CF-13       | 201-N3800-85                 | 201-N3800B-85  | 2      |
| CF-22       | 301-N3800D-85                | 301-N3800Y-85* | 2      |

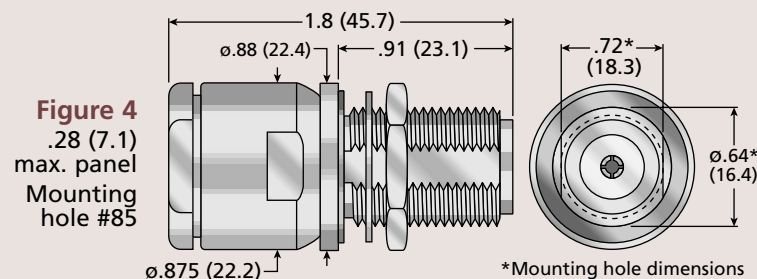
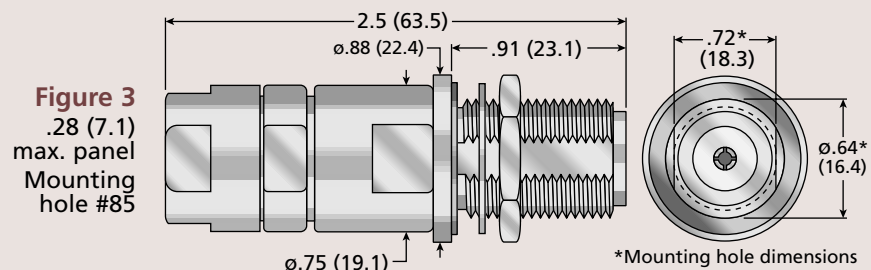
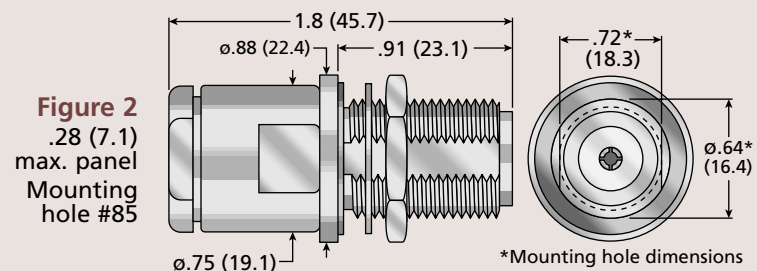
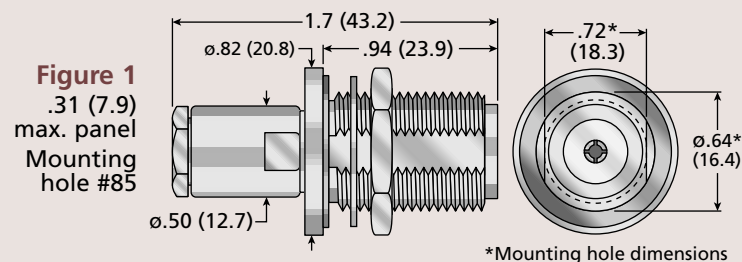
| Cable Group | V-Groove            |                 | Figure |
|-------------|---------------------|-----------------|--------|
|             | Non-Captive contact | Captive Contact |        |
| CF-1        | 011-N3000A-85       | 011-N3100A-85   | 1      |
| CF-2        | 025-N3000A-85       | 025-N3100A-85   | 1      |
| CF-3, 4     | 039-N3000A-85       | 039-N3100A-85   | 1      |
| CF-5, 6     | 100-N3000A-85†      | 101-N3100A-85   | 1      |
| CF-7, 8     | 150-N3000A-85       | 151-N3100A-85   | 1      |
| CF-13       | 200-N3000A-85†      | 201-N3100A-85   | 2      |
| CF-22       | 300-N3000A-85†      | 301-N3100A-85   | 2      |
| CF-23       | 302-N3000A-85†      | 303-N3100A-85   | 3      |
| CF-37       | 420-N3000A-85       | 421-N3100A-85   | 4      |

| Cable Group | Solder-Clamp (Semi-Rigid Cable) |        |
|-------------|---------------------------------|--------|
|             | Captive Contact                 |        |
|             | Part Number                     | Figure |
| SR-5        | Contact Factory                 | 1      |
| SR-6        | Contact Factory                 | 1      |

- All items have silver-plated bodies and gold-plated contacts. For nickel-plated body, add **K** at beginning of part number. For gold-plated body add **G** at beginning of part number.
- See page 22 for cable groups. Most types available for other cables not shown above.
- See pages 23–27 for complete descriptions and illustrations of cable attachment types.

\*Available in MIL-PRF-39012/01 QPL version.

† Available as UG type.





## Straight Bulkhead Mounted Cable Jacks—Rear Mount

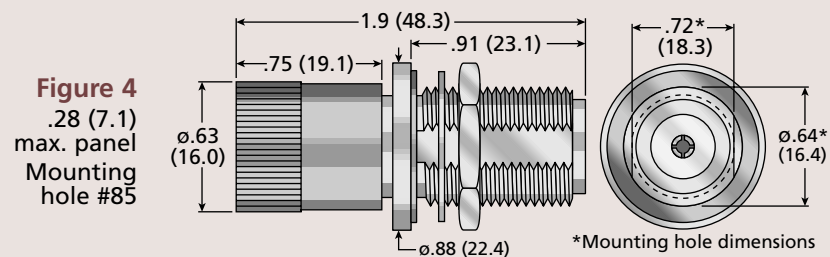
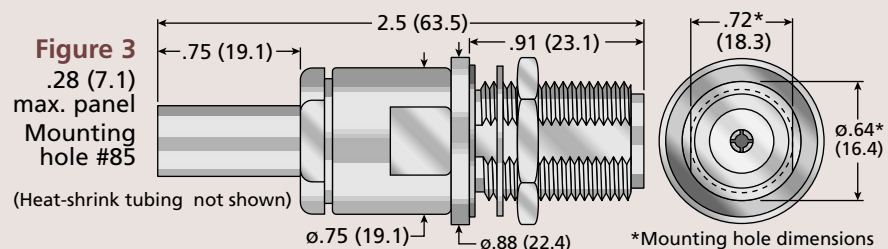
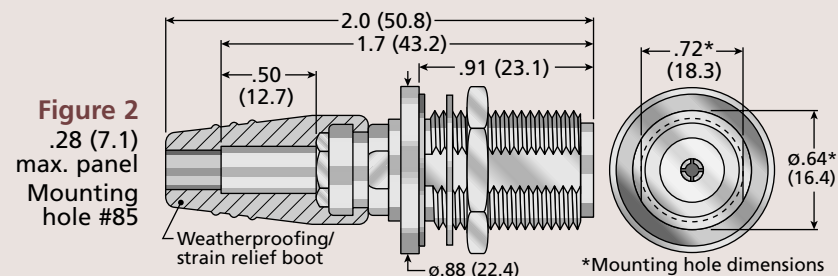
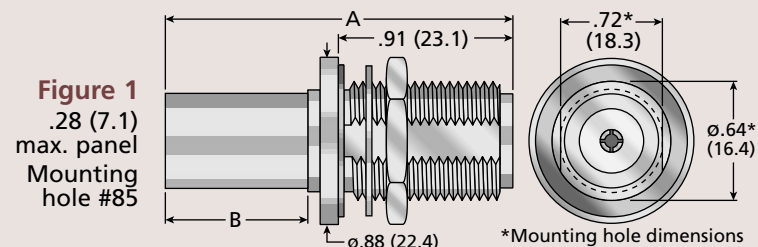
| Cable Group | Econo-Crimp   |                 |            |            |        |
|-------------|---------------|-----------------|------------|------------|--------|
|             | Non-Captive   | Captive Contact | A          | B          | Figure |
| CF-5        | 980-N3900-85  | 980-N3908-85*   | 1.3 (33.0) | .50 (12.7) | 1      |
| CF-6        | 988-N3900-85  | 988-N3908-85*   | 1.3 (33.0) | .50 (12.7) | 1      |
| CF-7        | 998-N3900-85  | 998-N3908-85    | 1.3 (33.0) | .50 (12.7) | 1      |
| CF-8        | 999-N3900-85  | 999-N3908-85    | 1.3 (33.0) | .50 (12.7) | 1      |
| CF-13       | 200-N3900-85  | 201-N3908-85    | 1.6 (40.6) | .75 (19.1) | 1      |
| CF-22       | 300-N3900D-85 | 301-N3908D-85*  | 1.6 (40.6) | .75 (19.1) | 1      |

| Cable Group | X-Crimp       |        |
|-------------|---------------|--------|
|             | Part Number   | Figure |
| CF-1        | 901-N3900F-85 | 2      |
| CF-2        | 919-N3900F-85 | 2      |
| CF-3, 4     | 947-N3900F-85 | 2      |
| CF-5        | 980-N3900F-85 | 2      |
| CF-6        | 988-N3900F-85 | 2      |
| CF-7        | 998-N3900F-85 | 2      |
| CF-8        | 999-N3900F-85 | 2      |
| CF-13       | 201-N3900F-85 | 3      |
| CF-22       | 301-N3900F-85 | 3      |

| Cable Group | Wedge-Eze    |        |
|-------------|--------------|--------|
|             | Part Number  | Figure |
| CF-5, 6     | 100-N3600-85 | 4      |
| CF-7, 8     | 150-N3600-85 | 4      |
| CF-13       | 200-N3600-85 | 4      |
| CF-22       | 300-N3600-85 | 4      |

- All items have silver-plated bodies and gold-plated contacts. For nickel-plated body, add **K** at beginning of part number. For gold-plated body add **G** at beginning of part number.
- See page 22 for cable groups. Most types available for other cables not shown above.
- See pages 23–27 for complete descriptions and illustrations of cable attachment types.

\*Available in MIL-PRF-39012/03 QPL version.





## Straight Bulkhead Mounted Cable Jacks—Front Mount

| Cable Group | Wedge-Lock (Captive Contact) |               |        |
|-------------|------------------------------|---------------|--------|
|             | Standard                     | Improved      | Figure |
| CF-1        | 801-N3800-86                 | 801-N3800B-86 | 1      |
| CF-2        | 819-N3800-86                 | 819-N3800B-86 | 1      |
| CF-3, 4     | 847-N3800-86                 | 847-N3800B-86 | 1      |
| CF-5, 6     | 101-N3800-86                 | 101-N3800B-86 | 1      |
| CF-7, 8     | 151-N3800-86                 | 151-N3800B-86 | 1      |

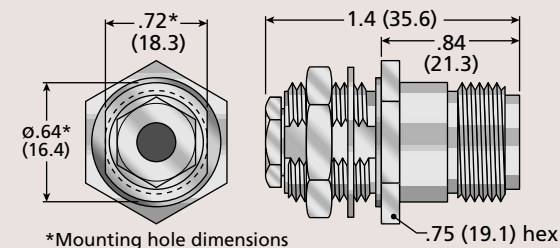
| Cable Group | V-Groove            |                 |        |
|-------------|---------------------|-----------------|--------|
|             | Non-Captive contact | Captive Contact | Figure |
| CF-1        | 011-N3000A-86       | 011-N3100A-86   | 1      |
| CF-2        | 025-N3000A-86       | 025-N3100A-86   | 1      |
| CF-3, 4     | 039-N3000A-86       | 039-N3100A-86   | 1      |
| CF-5, 6     | 100-N3000A-86       | 101-N3100A-86   | 1      |
| CF-7, 8     | 150-N3000A-86       | 151-N3100A-86   | 1      |

| Cable Group | Solder-Clamp (Semi-Rigid Cable) |        |
|-------------|---------------------------------|--------|
|             | Captive Contact                 |        |
|             | Part Number                     | Figure |
| SR-5        | Contact Factory                 | 1      |
| SR-6        | Contact Factory                 | 1      |

| Cable Group | X-Crimp         |        |
|-------------|-----------------|--------|
|             | Captive Contact |        |
|             | Part Number     | Figure |
| CF-1        | 901-N3900F-86   | 2      |
| CF-2        | 919-N3900F-86   | 2      |
| CF-3, 4     | 947-N3900F-86   | 2      |
| CF-5        | 980-N3900F-86   | 2      |
| CF-6        | 988-N3900F-86   | 2      |
| CF-7        | 998-N3900F-86   | 2      |
| CF-8        | 999-N3900F-86   | 2      |

- All items have silver-plated bodies and gold-plated contacts. For nickel-plated body, add K at beginning of part number. For gold-plated body add G at beginning of part number.
- See page 22 for cable groups. Most types available for other cables not shown above.
- See pages 23–27 for complete descriptions and illustrations of cable attachment types.

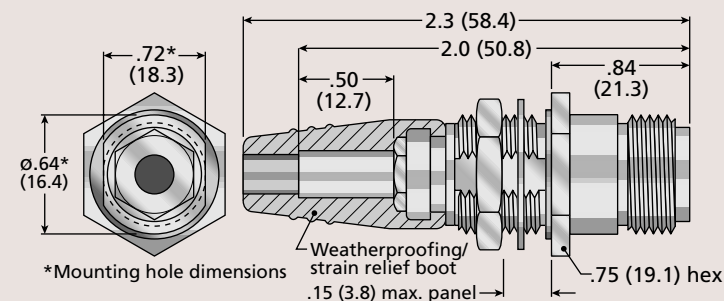
**Figure 1**  
Mounting hole #86



### Maximum Panel Thickness

Wedge-Lock, Improved Wedge-Lock: .09 (2.3)  
V-Groove and Solder-Clamp: .16 (4.1)

**Figure 2**  
Mounting hole #86





## Right Angle Bulkhead Mounted Cable Jacks

| Cable Group | Wedge-Lock (Captive Contact) |               |        |
|-------------|------------------------------|---------------|--------|
|             | Standard                     | Improved      | Figure |
| CF-1        | 801-N4800-85                 | 801-N4800B-85 | 1      |
| CF-2        | 819-N4800-85                 | 819-N4800B-85 | 1      |
| CF-3, 4     | 847-N4800-85                 | 847-N4800B-85 | 1      |
| CF-5, 6     | 101-N4800-85                 | 101-N4800B-85 | 1      |
| CF-7, 8     | 151-N4800-85                 | 151-N4800B-85 | 1      |
| CF-13       | 201-N4800-85                 | 201-N4800B-85 | 2      |
| CF-22       | 301-N4800D-85                | 301-N4800Y-85 | 2      |

| Cable Group | V-Groove        |        |
|-------------|-----------------|--------|
|             | Captive Contact | Figure |
| CF-1        | 011-N4100A-85   | 3      |
| CF-2        | 025-N4100A-85   | 3      |
| CF-3, 4     | 039-N4100A-85   | 3      |
| CF-5, 6     | 101-N4100A-85   | 3      |
| CF-7, 8     | 151-N4100A-85   | 3      |
| CF-13       | 201-N4100N-85   | 4      |
| CF-22       | 301-N4100N-85   | 4      |

| Cable Group | Solder-Clamp (Semi-Rigid Cable) |        |
|-------------|---------------------------------|--------|
|             | Captive Contact                 | Figure |
| SR-5        | Contact Factory                 | 3      |
| SR-6        | Contact Factory                 | 3      |

Front View Typical

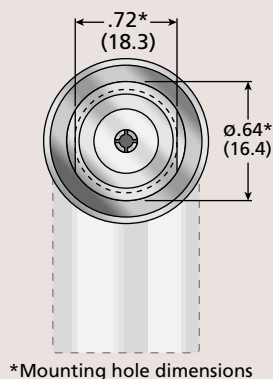


Figure 1 Mounting hole #85

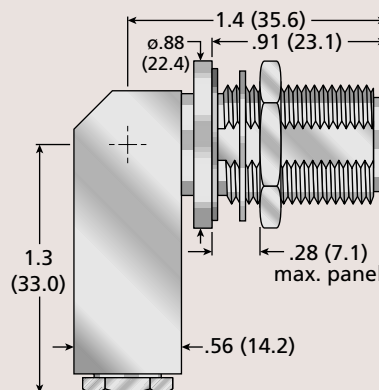


Figure 2 Mounting hole #85

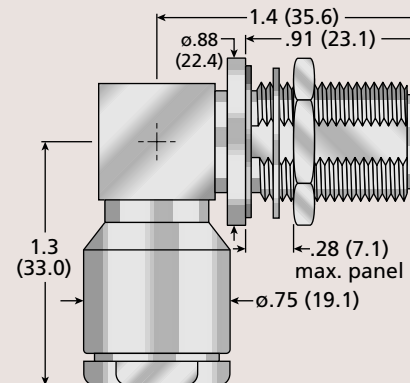


Figure 3 Mounting hole #85

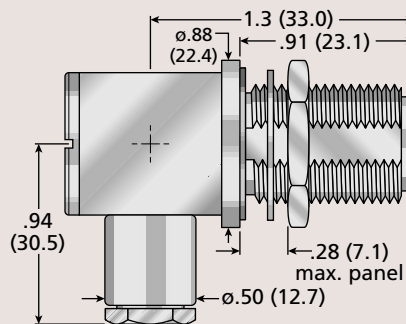
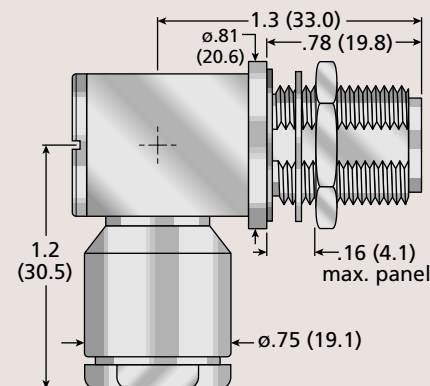


Figure 4 Mounting hole #85



- All items have silver-plated bodies and gold-plated contacts. For nickel-plated body, add **K** at beginning of part number. For gold-plated body add **G** at beginning of part number.
- See page 22 for cable groups. Most types available for other cables not shown above.
- See pages 23–27 for complete descriptions and illustrations of cable attachment types.



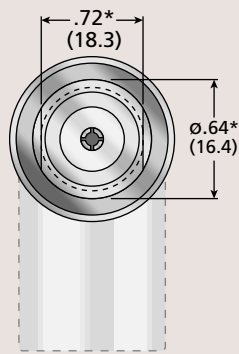
## Bulkhead Mounted Cable Jacks—Pressurized

| Cable Group | Straight Wedge-Lock (Captive Contact) |               |        |
|-------------|---------------------------------------|---------------|--------|
|             | Standard                              | Improved      | Figure |
| CF-5, 6     | 101-N3801-85                          | 101-N3801B-85 | 1      |
| CF-7, 8     | 151-N3801-85                          | 151-N3801B-85 | 1      |
| CF-13       | 201-N3801-85                          | 201-N3801B-85 | 2      |
| CF-22       | 301-N3801D-85                         | 301-N3801Y-85 | 2      |

| Cable Group | Straight V-Groove |                 |        |
|-------------|-------------------|-----------------|--------|
|             | Non-Captive       | Captive contact | Figure |
| CF-5, 6     | 101-N3001-85      | 101-N3101-85    | 1      |
| CF-7, 8     | 151-N3001-85      | 151-N3101-85    | 1      |
| CF-13       | 201-N3001-85      | 201-N3101-85    | 2      |
| CF-22       | 301-N3001-85      | 301-N3101-85    | 2      |

| Cable Group | Right Angle—Wedge-Lock and V-Groove |               |      |                 |      |  |
|-------------|-------------------------------------|---------------|------|-----------------|------|--|
|             | Wedge-Lock                          |               |      | V-Groove        |      |  |
|             | Standard                            | Improved      | Fig. | Captive Contact | Fig. |  |
| CF-5, 6     | 101-N4801-85                        | 101-N4801B-85 | 3    | 101-N4101A-85   | 5    |  |
| CF-7, 8     | 151-N4801-85                        | 151-N4801B-85 | 3    | 151-N4101A-85   | 5    |  |
| CF-13       | 201-N4801-85                        | 201-N4801B-85 | 4    | 201-N4101A-85   | 6    |  |
| CF-22       | 301-N4801D-85                       | 301-N4801Y-85 | 4    | 301-N4101A-85   | 6    |  |

Front View Typical



\*Mounting hole dimensions

- All items have silver-plated bodies and gold-plated contacts. For nickel-plated body, add K at beginning of part number. For gold-plated body add G at beginning of part number.
- See page 22 for cable groups. Most types available for other cables not shown above.
- See pages 23–27 for complete descriptions and illustrations of cable attachment types.

Figure 1 .19 (4.8) max. panel

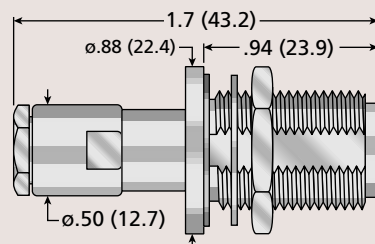


Figure 2 .19 (4.8) max. panel

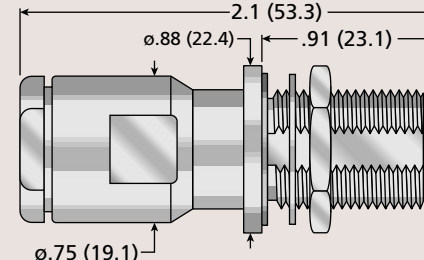


Figure 3

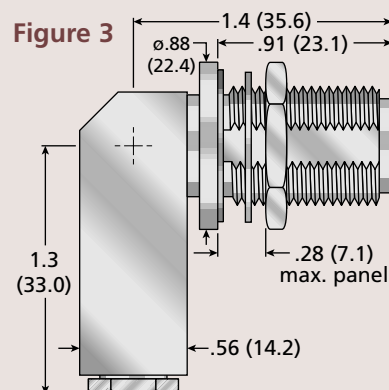


Figure 4

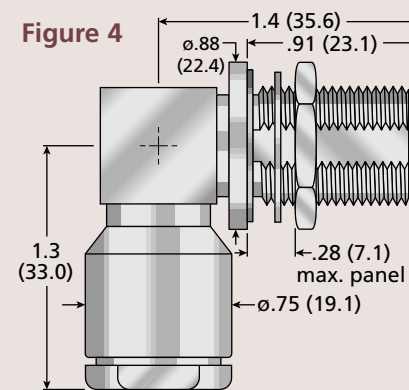


Figure 5

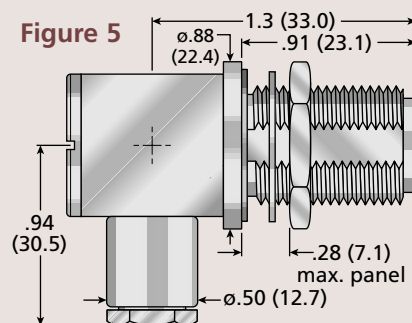
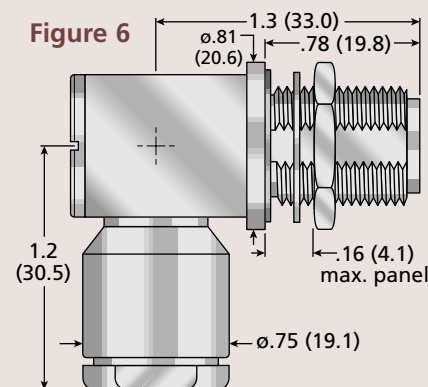


Figure 6





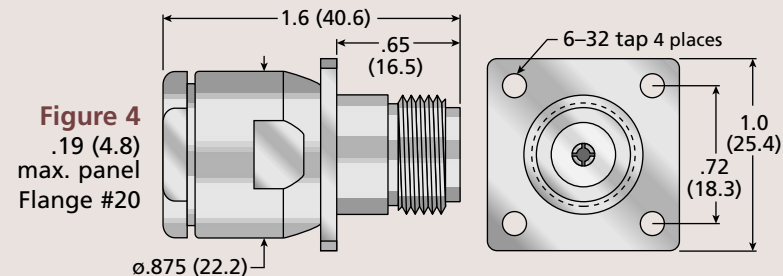
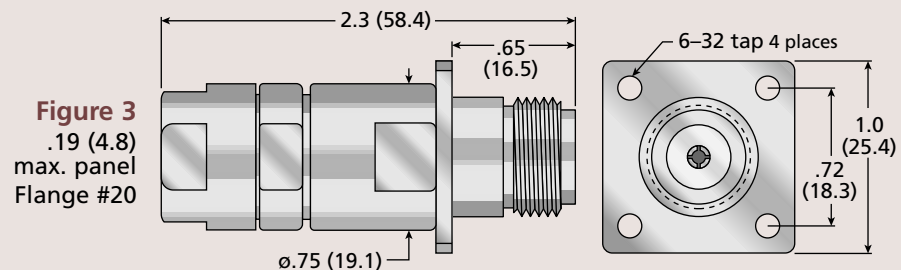
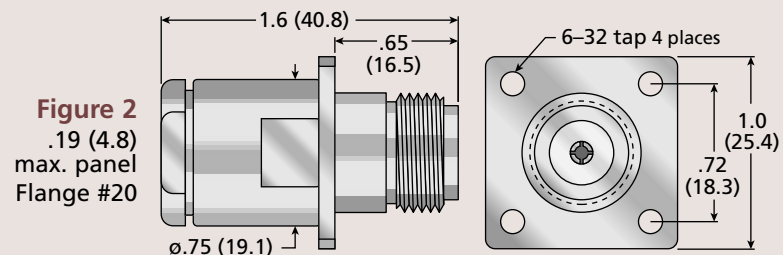
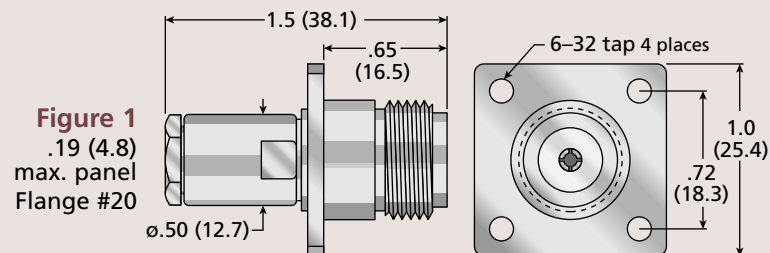
## Straight Panel Mounted Cable Jacks

| Cable Group | Wedge-Lock (Captive Contact) |                | Figure |
|-------------|------------------------------|----------------|--------|
|             | Standard                     | Improved       |        |
| CF-1        | 801-N3800-20                 | 801-N3800B-20  | 1      |
| CF-2        | 819-N3800-20                 | 819-N3800B-20  | 1      |
| CF-3, 4     | 847-N3800-20                 | 847-N3800B-20  | 1      |
| CF-5, 6     | 101-N3800-20                 | 101-N3800B-20  | 1      |
| CF-7, 8     | 151-N3800-20                 | 151-N3800B-20  | 1      |
| CF-13       | 201-N3800-20                 | 201-N3800B-20  | 2      |
| CF-22       | 301-N3800D-20                | 301-N3800Y-20* | 2      |

| Cable Group | V-Groove            |                 | Figure |
|-------------|---------------------|-----------------|--------|
|             | Non-Captive contact | Captive Contact |        |
| CF-1        | 011-N3000A-20       | 011-N3100A-20   | 1      |
| CF-2        | 025-N3000A-20       | 025-N3100A-20   | 1      |
| CF-3, 4     | 039-N3000A-20       | 039-N3100A-20   | 1      |
| CF-5, 6     | 100-N3000A-20†      | 101-N3100A-20   | 1      |
| CF-7, 8     | 150-N3000A-20†      | 151-N3100-20    | 1      |
| CF-13       | 200-N3000B-20†      | 201-N3100A-20   | 2      |
| CF-22       | 300-N3000B-20†      | 301-N3100A-20†  | 2      |
| CF-23       | 302-N3000A-20       | 303-N3100A-20   | 3      |
| CF-37       | 420-N3000A-20†      | 421-N3100A-20   | 4      |

| Cable Group | Solder-Clamp (Semi-Rigid Cable) |        |
|-------------|---------------------------------|--------|
|             | Captive Contact                 |        |
|             | Part Number                     | Figure |
| SR-5        | Contact Factory                 | 1      |
| SR-6        | Contact Factory                 | 1      |

- All items have silver-plated bodies and gold-plated contacts. For nickel-plated body, add K at beginning of part number. For gold-plated body add G at beginning of part number.
- For flange with .125 (3.2) clearance holes, change last two digits of part number to -25.
- See page 22 for cable groups. Most types available for other cables not shown above.
- See pages 23–27 for descriptions of cable attachment types.
- All items available with other flange sizes.
- \*Available in MIL-PRF-39012/02 QPL version.
- † Available as UG type.





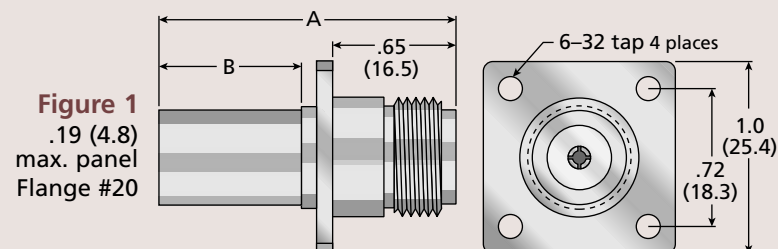
## Straight Panel Mounted Cable Jacks

| Cable Group | Econo-Crimp   |                 |            |            | Figure |
|-------------|---------------|-----------------|------------|------------|--------|
|             | Non-Captive   | Captive Contact | A          | B          |        |
| CF-5        | 980-N3900-20  | 980-N3908-20*   | 1.3 (33.0) | .50 (12.7) | 1      |
| CF-6        | 988-N3900-20  | 988-N3908-20*   | 1.3 (33.0) | .50 (12.7) | 1      |
| CF-7        | 998-N3900-20  | 998-N3908-20    | 1.3 (33.0) | .50 (12.7) | 1      |
| CF-8        | 999-N3900-20  | 999-N3908-20    | 1.3 (33.0) | .50 (12.7) | 1      |
| CF-13       | 200-N3900-20  | 201-N3908-20    | 1.6 (40.6) | .75 (19.1) | 1      |
| CF-22       | 300-N3900D-20 | 301-N3908D-20*  | 1.6 (40.6) | .75 (19.1) | 1      |

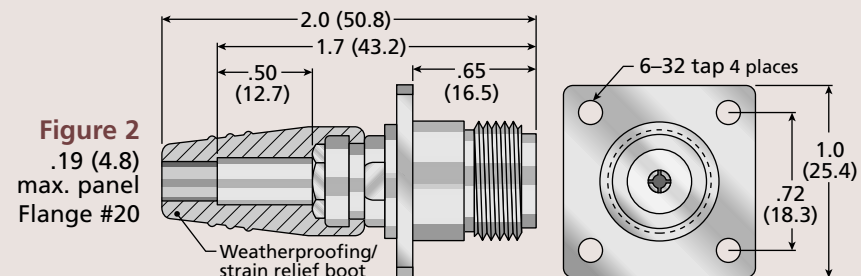
| Cable Group | X-Crimp         |        |
|-------------|-----------------|--------|
|             | Captive Contact | Figure |
| CF-1        | 901-N3900F-20   | 2      |
| CF-2        | 919-N3900F-20   | 2      |
| CF-3, 4     | 947-N3900F-20   | 2      |
| CF-5        | 980-N3900F-20   | 2      |
| CF-6        | 988-N3900F-20   | 2      |
| CF-7        | 998-N3900F-20   | 2      |
| CF-8        | 999-N3900F-20   | 2      |
| CF-13       | 201-N3900F-20   | 3      |
| CF-22       | 301-N3900F-20   | 3      |

| Cable Group | Wedge-Eze           |        |
|-------------|---------------------|--------|
|             | Non-Captive Contact | Figure |
| CF-5, 6     | 100-N3600-20        | 4      |
| CF-7, 8     | 150-N3600-20        | 4      |
| CF-13       | 200-N3600-20        | 4      |
| CF-22       | 300-N3600-20        | 4      |

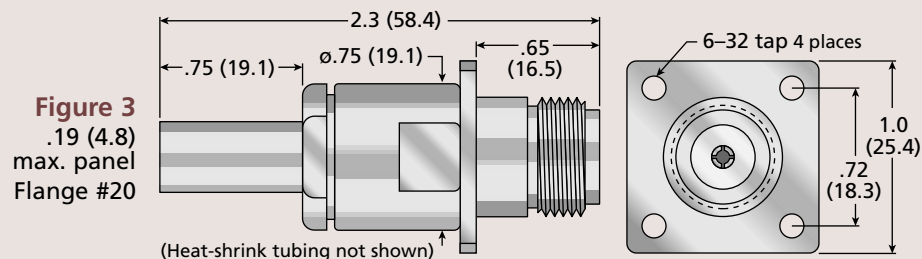
- All items have silver-plated bodies and gold-plated contacts. For nickel-plated body, add K at beginning of part number. For gold-plated body add G at beginning of part number.
- For flange with .125 (3.2) clearance holes, change last two digits of part number to -25.
- See page 22 for cable groups. Most types available for other cables not shown above.
- See pages 23–27 for complete descriptions and illustrations of cable attachment types.
- All items available with other flange sizes.
- \*Available in MIL-PRF-39012/02 QPL version.



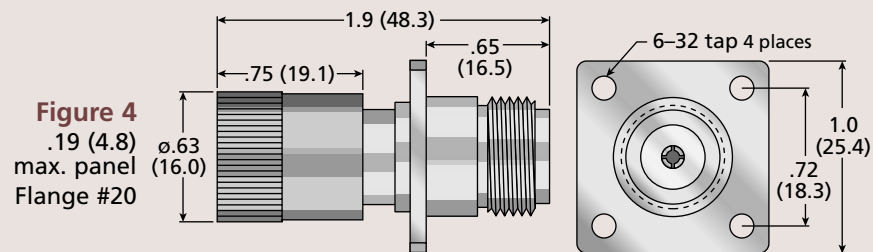
**Figure 1**  
.19 (4.8)  
max. panel  
Flange #20



**Figure 2**  
.19 (4.8)  
max. panel  
Flange #20



**Figure 3**  
.19 (4.8)  
max. panel  
Flange #20



**Figure 4**  
.19 (4.8)  
max. panel  
Flange #20



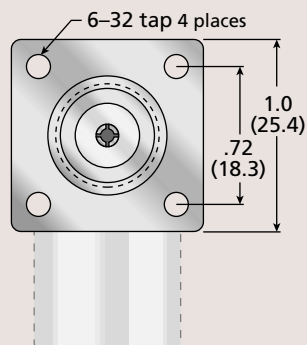
## Right Angle Panel Mounted Cable Jacks

| Cable Group | Wedge-Lock (Captive Contact) |               |        |
|-------------|------------------------------|---------------|--------|
|             | Standard                     | Improved      | Figure |
| CF-1        | 801-N4800-20                 | 801-N4800B-20 | 1      |
| CF-2        | 819-N4800-20                 | 819-N4800B-20 | 1      |
| CF-3, 4     | 847-N4800-20                 | 847-N4800B-20 | 1      |
| CF-5, 6     | 101-N4800-20                 | 101-N4800B-20 | 1      |
| CF-7, 8     | 151-N4800-20                 | 151-N4800B-20 | 1      |
| CF-13       | 201-N4800-20                 | 201-N4800B-20 | 2      |
| CF-22       | 301-N4800D-20                | 301-N4800Y-20 | 2      |

| Cable Group | V-Groove        |        |
|-------------|-----------------|--------|
|             | Captive Contact | Figure |
| CF-1        | 011-N4100A-20   | 3      |
| CF-2        | 025-N4100A-20   | 3      |
| CF-3, 4     | 039-N4100A-20   | 3      |
| CF-5, 6     | 101-N4100A-20   | 3      |
| CF-7, 8     | 151-N4100A-20   | 3      |
| CF-13       | 201-N4100N-20   | 4      |
| CF-22       | 301-N4100A-20   | 4      |

| Cable Group | Solder-Clamp (Semi-Rigid Cable) |        |
|-------------|---------------------------------|--------|
|             | Part Number                     | Figure |
| SR-5        | Contact Factory                 | 3      |
| SR-6        | Contact Factory                 | 3      |

Front View Typical



- All items have silver-plated bodies and gold-plated contacts. For nickel-plated body, add K at beginning of part number. For gold-plated body add G at beginning of part number.
- For flange with .125 (3.2) clearance holes, change last two digits of part number to -25.
- See page 22 for cable groups. Most types available for other cables not shown above.
- See pages 23-27 for complete descriptions and illustrations of cable attachment types.

Figure 1

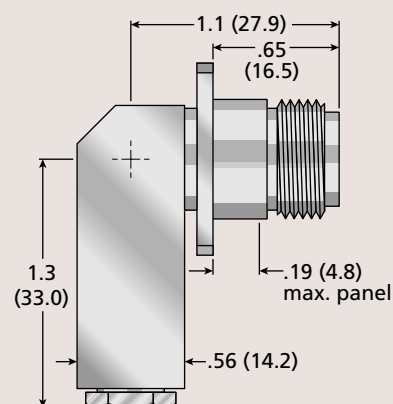


Figure 2

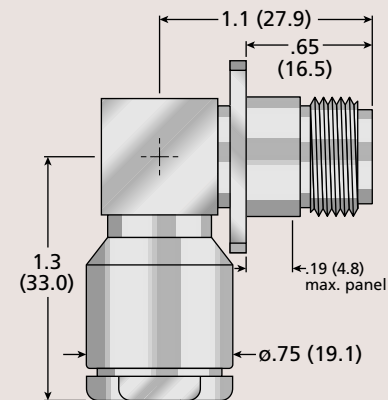


Figure 3

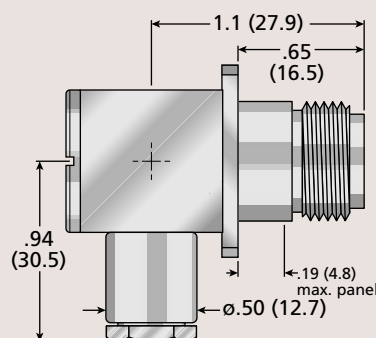
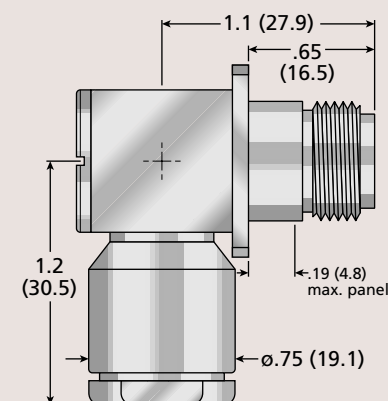


Figure 4





## Bulkhead Mounted Receptacles

### Jack Receptacles

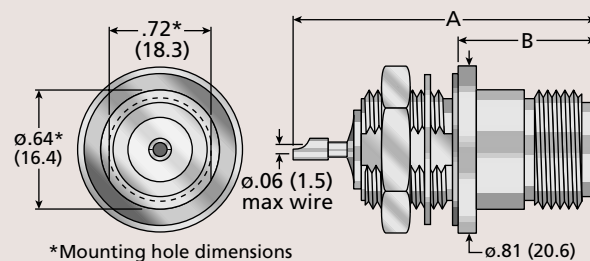
| Figure | Mounting | Dim. A     | Dim. B     | Max. Panel | Part Number |
|--------|----------|------------|------------|------------|-------------|
| 1      | 85       | 1.3 (33.0) | .92 (23.4) | .25 (6.4)  | 85-N3000*   |
| 2      | 85       | 1.2 (30.5) | .78 (19.8) | .16 (4.1)  | 85-N3001    |
| 3      | 85       | 1.2 (30.5) | .78 (19.8) | .16 (4.1)  | 85-N3501    |
| 4      | 86       | 1.6 (40.5) | .75 (19.1) | .09 (2.3)  | 86-N3001†   |
| 5      | 75       | 1.2 (30.5) | .60 (15.2) | .09 (2.3)  | 75-N3101    |

- All items have silver-plated bodies and gold-plated contacts. For nickel-plated body, add **K** at beginning of part number. For gold-plated body add **G** at beginning of part number.

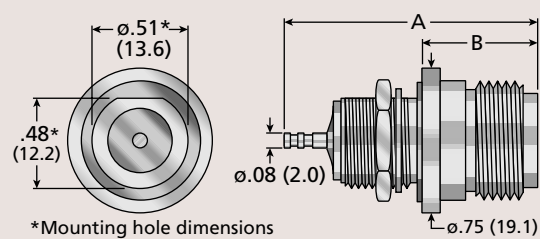
\*Available in MIL-PRF-39012/04 QPL version.

† Available as UG type.

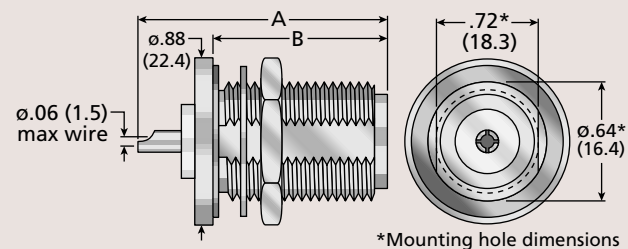
**Figure 4 (Hermetic Seal, Front Mount)**



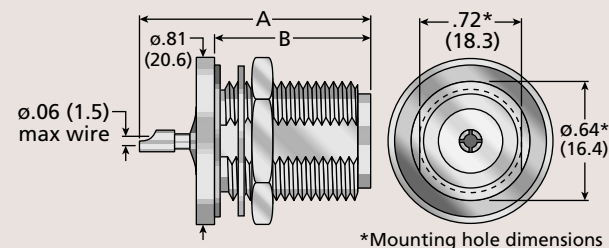
**Figure 5 (Hermetic Seal, Front Mount)**



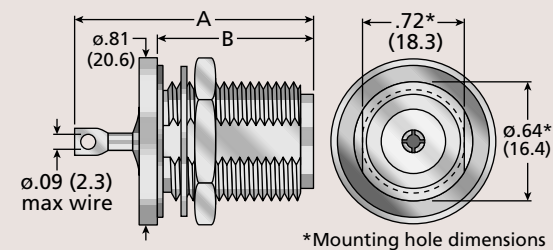
**Figure 1 (Rear Mount)**



**Figure 2 (Hermetic Seal, Rear Mount)**



**Figure 3 (Hermetic Seal, Rear Mount)**





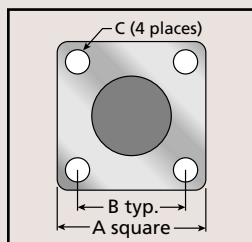
## Panel Mounted Receptacles

## Panel Jack Receptacles

| Figure | Flange | Max. Panel | Part Number |
|--------|--------|------------|-------------|
| 1      | 20     | .19 (4.8)  | 20-N3000    |
| 1      | 25     | .19 (4.8)  | 25-N3000*†  |
| 2      | 20     | .12 (3.0)  | 20-N4000    |
| 2      | 25     | .12 (3.0)  | 25-N4000†   |

## Panel Plug Receptacles

| Figure | Flange | Max. Panel | Part Number |
|--------|--------|------------|-------------|
| 3      | 20     | .12 (3.0)  | 20-N1000    |
| 3      | 25     | .12 (3.0)  | 25-N1000    |



## Flange Sizes

| Flange # | A          | B          | C          |
|----------|------------|------------|------------|
| 20       | 1.0 (25.4) | .72 (18.3) | 6-32 tap   |
| 25       | 1.0 (25.4) | .72 (18.3) | ø.13 (3.3) |

- All items have silver-plated bodies and gold-plated contacts. For nickel-plated body, add **K** at beginning of part number. For gold-plated body add **G** at beginning of part number.
- All are available with other flange sizes.
- \*Available in MIL-PRF-39012/04 QPL version.
- † Available as UG type.

Figure 1 (Straight Jack)

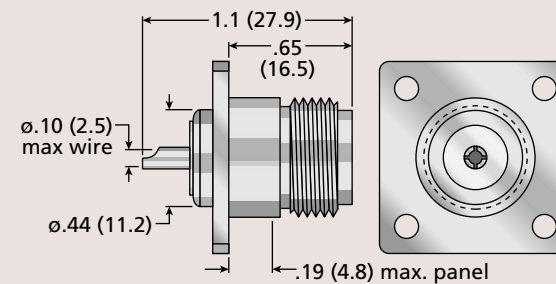


Figure 2 (Right Angle Jack)

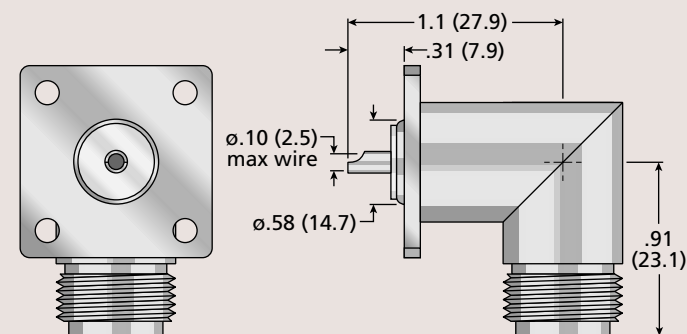
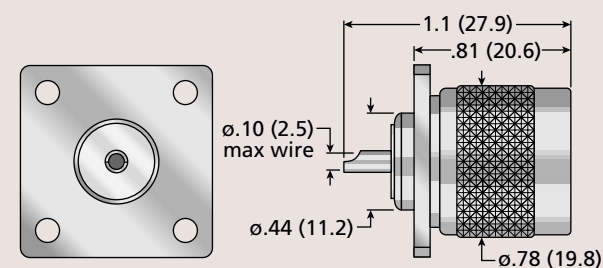


Figure 3 (Straight Plug)





## Dust Caps and Resistor Terminations

| Dust Caps |        |            |            |             |       |             |
|-----------|--------|------------|------------|-------------|-------|-------------|
| Figure    | Mating | Dim. A     | Dim. B     | Dim. C      | Chain | Part Number |
| 1         | Plug   | .66 (57.2) | .144 (3.7) | 2.25 (57.2) | Bead  | 1-N722      |
| 1         | Plug   | .66 (57.2) | —          | —           | None  | 1-N700      |
| 1         | Plug   | 1.0 (24.4) | .190 (4.8) | 2.50 (63.5) | Bead  | 2-N733†     |
| 1         | Plug   | 1.0 (24.4) | —          | —           | None  | 2-N700†     |
| 2         | Jack   | .78 (19.8) | .144 (3.7) | 2.25 (57.2) | Bead  | 3-N722      |
| 2         | Jack   | .78 (19.8) | —          | —           | None  | 3-N700      |
| 2         | Jack   | .78 (19.8) | .144 (3.7) | 2.25 (57.2) | Bead  | 4-N722†     |
| 2         | Jack   | .78 (19.8) | —          | —           | None  | 4-N700†     |

- All items have silver-plated bodies.  
For nickel-plated body, add K at beginning of part number.  
For gold-plated body add G at beginning of part number.

† Shorting type.

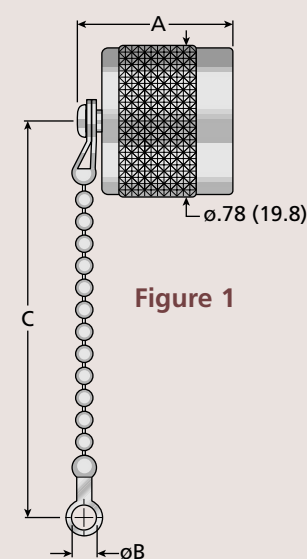


Figure 1

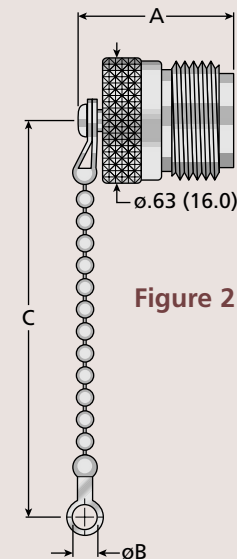


Figure 2

| Resistor Terminations |        |                   |             |       |             |
|-----------------------|--------|-------------------|-------------|-------|-------------|
| Figure                | Mating | Resistor          | Dim A       | Chain | Part Number |
| 3                     | Plug   | 51 ohm, 1/2W, 5%  | 3.50 (88.9) | Bead  | 5-N062-51   |
| 3                     | Plug   | 51 ohm, 1/2W, 5%  | —           | None  | 5-N000-51   |
| 3                     | Plug   | 100 ohm, 1/2W, 5% | 3.50 (88.9) | Bead  | 5-N062-100  |
| 3                     | Plug   | 100 ohm, 1/2W, 5% | —           | None  | 5-N000-100  |

Also available with other resistances.

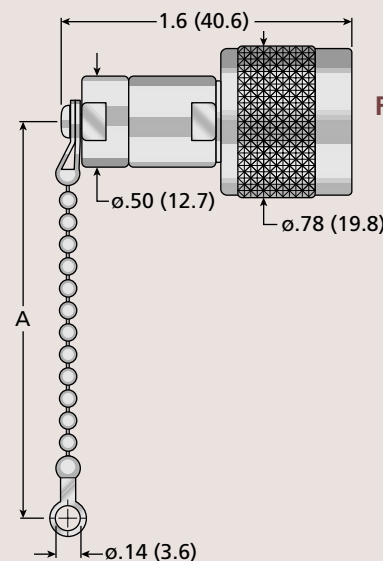
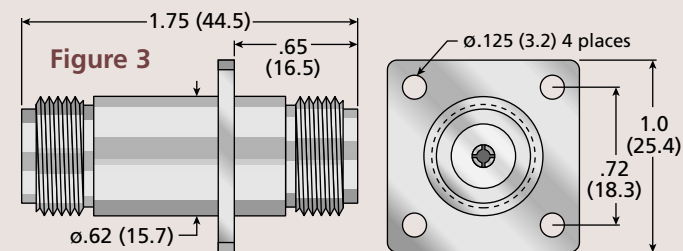
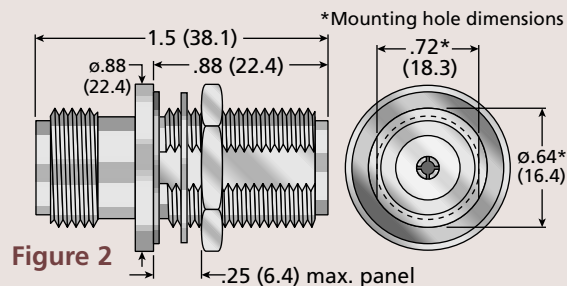
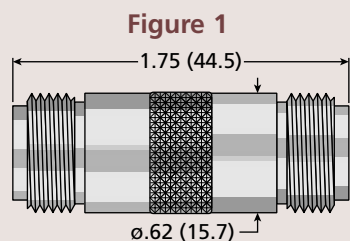


Figure 3



## Adapters Within Series



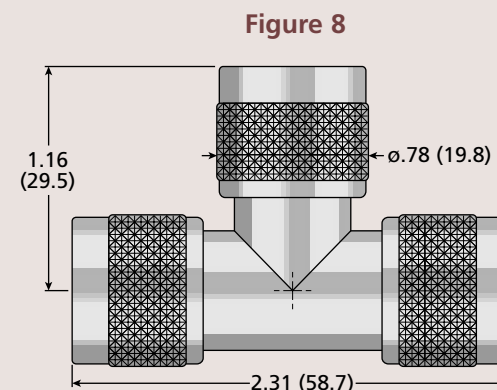
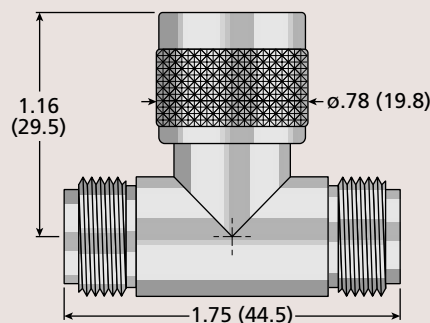
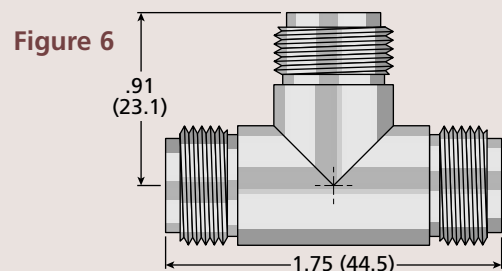
| Straight Adapters             |        |             |
|-------------------------------|--------|-------------|
| Type                          | Figure | Part Number |
| Jack-Jack                     | 1      | N3000†      |
| Jack-Jack, bulkhead, hermetic | 2      | N3071A-85†  |
| Jack-Jack, panel mounted      | 3      | N3000-25    |
| Plug-Plug                     | 4      | N1500A†     |

| Right Angle Adapters |        |             |
|----------------------|--------|-------------|
| Type                 | Figure | Part Number |
| Jack-Plug            | 5      | N2100†      |

| Tee Adapters   |        |             |
|----------------|--------|-------------|
| Type           | Figure | Part Number |
| Jack-Jack-Jack | 6      | N7600†      |
| Jack-Plug-Jack | 7      | N7200†      |
| Plug-Plug-Plug | 8      | N7400       |

- All items have silver-plated bodies and gold-plated contacts. For nickel-plated body, add **K** at beginning of part number. For gold-plated body add **G** at beginning of part number.

† Available as UG type (see index)





## Cable Groups Listed by Cable Type

### RG Cables\*

| Type  | Group | Type  | Group | Type  | Group | Type    | Group | Type     | Group | Type     | Group | Type     | Group |
|-------|-------|-------|-------|-------|-------|---------|-------|----------|-------|----------|-------|----------|-------|
| RG-5  | CF-13 | RG-21 | CF-13 | RG-58 | CF-5  | RG-94   | CF-33 | RG-148   | CF-26 | RG-180   | CF-3  | RG-215   | CF-23 |
| RG-6  | CF-14 | RG-22 | TW-2  | RG-59 | CF-7  | RG-108  | TW-1  | RG-149   | CF-26 | RG-187   | CF-2  | RG-216   | CF-26 |
| RG-7  | CF-17 | RG-30 | CF-15 | RG-62 | CF-7  | RG-115  | CF-14 | RG-150   | CF-28 | RG-188   | CF-2  | RG-217   | CF-34 |
| RG-8  | CF-22 | RG-31 | CF-22 | RG-63 | CF-29 | RG-115A | CF-18 | RG-156   | CF-25 | RG-188DS | CF-36 | RG-222   | CF-13 |
| RG-9  | CF-22 | RG-32 | CF-23 | RG-65 | CF-32 | RG-116  | CF-23 | RG-161   | CF-2  | RG-195   | CF-4  | RG-223   | CF-6  |
| RG-10 | CF-23 | RG-38 | CF-13 | RG-71 | CF-8  | RG-122  | CF-9  | RG-166   | CF-23 | RG-196   | CF-1  | RG-226   | CF-35 |
| RG-11 | CF-26 | RG-39 | CF-14 | RG-79 | CF-29 | RG-140  | CF-7  | RG-174   | CF-2  | RG-210   | CF-7  | RG-227   | CF-23 |
| RG-12 | CF-28 | RG-41 | CF-19 | RG-83 | CF-20 | RG-141  | CF-5  | RG-174DS | CF-36 | RG-212   | CF-13 | RG-229   | CF-23 |
| RG-13 | CF-26 | RG-54 | CF-15 | RG-87 | CF-14 | RG-142  | CF-6  | RG-178   | CF-1  | RG-213   | CF-22 | RG-235   | CF-18 |
| RG-14 | CF-34 | RG-55 | CF-6  | RG-90 | CF-16 | RG-144  | CF-26 | RG-179   | CF-2  | RG-214   | CF-22 | RG-302   | CF-11 |
|       |       |       |       |       |       |         |       |          |       |          |       | RG-303   | CF-10 |
|       |       |       |       |       |       |         |       |          |       |          |       | RG-304   | CF-12 |
|       |       |       |       |       |       |         |       |          |       |          |       | RG-307   | TR-1  |
|       |       |       |       |       |       |         |       |          |       |          |       | RG-316   | CF-2  |
|       |       |       |       |       |       |         |       |          |       |          |       | RG-316DS | CF-36 |
|       |       |       |       |       |       |         |       |          |       |          |       | RG-393   | CF-21 |
|       |       |       |       |       |       |         |       |          |       |          |       | RG-400   | CF-6  |
|       |       |       |       |       |       |         |       |          |       |          |       | RG-402   | SR-6  |
|       |       |       |       |       |       |         |       |          |       |          |       | RG-404   | CF-1  |
|       |       |       |       |       |       |         |       |          |       |          |       | RG-405   | SR-5  |

### M17 Cables\*\*

| Type         | Group | Type         | Group | Type    | Group | Type    | Group | Type    | Group |
|--------------|-------|--------------|-------|---------|-------|---------|-------|---------|-------|
| M17/2        | CF-14 | M17/74-RG215 | CF-23 | M17/119 | CF-2  | M17/164 | CF-22 | M17/184 | CF-7  |
| M17/6-RG11   | CF-26 | M17/75       | CF-22 | M17/127 | CF-21 | M17/165 | CF-34 | M17/185 | CF-7  |
| M17/6-RG12   | CF-28 | M17/77       | CF-26 | M17/128 | CF-6  | M17/167 | CF-6  | M17/186 | TW-1  |
| M17/15-RG22  | TW-2  | M17/78       | CF-34 | M17/130 | SR-6  | M17/168 | CF-17 | M17/187 | CF-9  |
| M17/28       | CF-5  | M17/84       | CF-6  | M17/132 | CF-1  | M17/169 | CF-1  | M17/188 | CF-13 |
| M17/29       | CF-7  | M17/90       | CF-8  | M17/133 | SR-5  | M17/170 | CF-10 | M17/189 | CF-23 |
| M17/30       | CF-7  | M17/92       | CF-17 | M17/138 | CF-2  | M17/171 | CF-12 | M17/190 | CF-22 |
| M17/31       | CF-29 | M17/93       | CF-1  | M17/151 | SR-2  | M17/172 | CF-2  | M17/191 | CF-26 |
| M17/45       | TW-1  | M17/94       | CF-2  | M17/152 | CF-36 | M17/173 | CF-2  | M17/194 | CF-6  |
| M17/54       | CF-9  | M17/95       | CF-3  | M17/154 | SR-1  | M17/174 | CF-21 | M17/195 | CF-8  |
| M17/60       | CF-6  | M17/97       | CF-7  | M17/155 | CF-5  | M17/175 | CF-6  | M17/196 | CF-2  |
| M17/62       | CF-26 | M17/110      | CF-11 | M17/157 | CF-9  | M17/180 | CF-14 | M17/197 | CF-6  |
| M17/65       | CF-23 | M17/111      | CF-10 | M17/158 | CF-6  | M17/181 | CF-26 | M17/198 | CF-9  |
| M17/73       | CF-13 | M17/112      | CF-12 | M17/162 | CF-13 | M17/182 | TW-2  | M17/199 | CF-13 |
| M17/74-RG213 | CF-22 | M17/113      | CF-2  | M17/163 | CF-22 | M17/183 | CF-6  | M17/200 | CF-6  |

### Semi-Rigid Cables by Jacket Diameter

| Size  | Group | Size  | Group | Size  | Group | Size  | Group | Size  | Group | Size  | Group |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| .034" | SR-1  | .047" | SR-2  | .056" | SR-3  | .070" | SR-4  | .086" | SR-5  | .141" | SR-6  |

\*Unless otherwise noted, cable groups include all variants (A/U, B/U, etc.) of RG types. 'DS' indicates double-shielded version of RG cable.

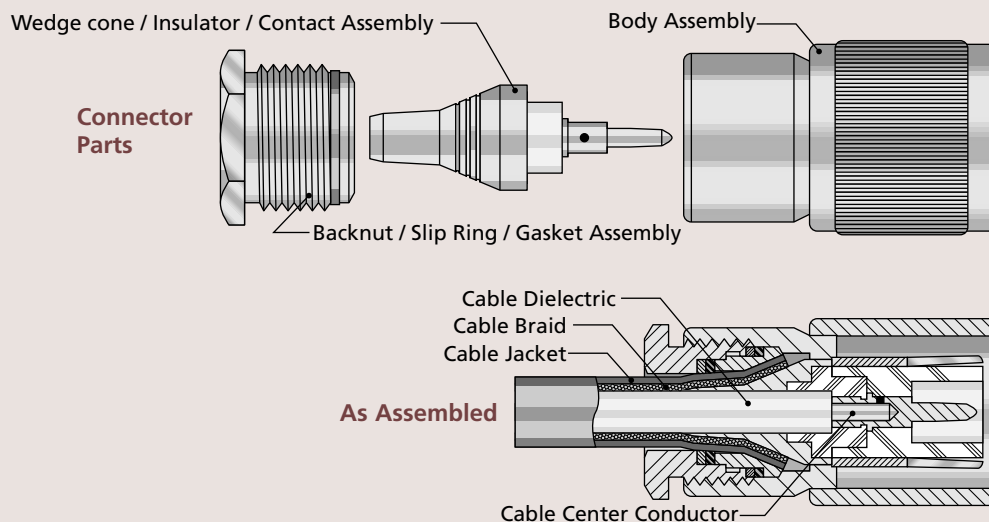
\*\*Unless otherwise noted, cable groups include all variants of M17 slash sheet indicated.

Construction codes: CF = Coaxial, Flexible; SR = Semi-Rigid; TR = Triaxial; TW = Twinaxial



## Cable Attachment Types—Flexible Cable

## Standard Wedge-Lock

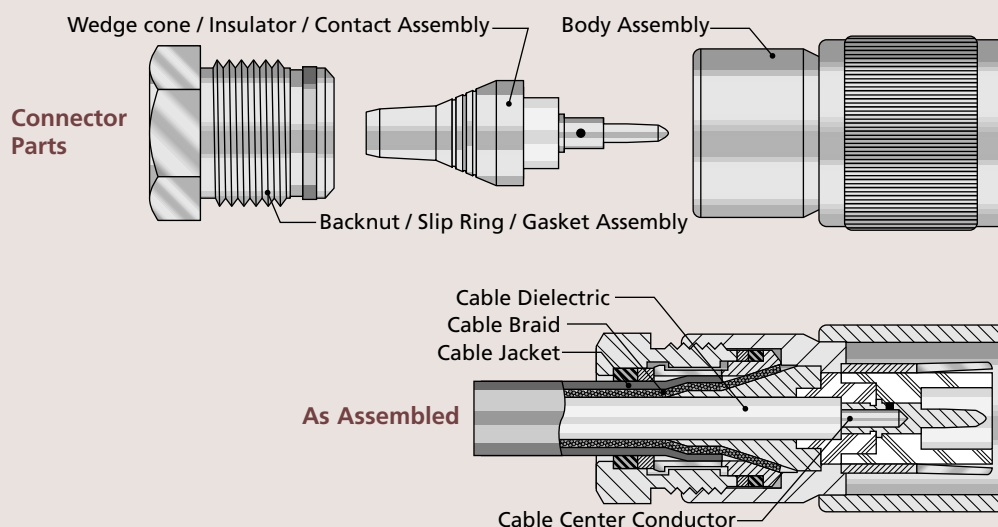


This patented attachment system features a captive contact, quick assembly, and secure cable retention. The cable braid and jacket are flared over the cone-shaped wedge, and the backnut captures the braid and jacket when screwed into the body assembly. Unlike some similar constructions, the backnut incorporates a slip ring to prevent twisting of the cable during assembly.

Gaskets in the backnut provide weatherproofing of the cable attachment. The cable center conductor is soldered to the contact.

Many connectors with Wedge-Lock cable attachment are qualified to MIL-PRF-39012, Category A (field replaceable, no special tools required for assembly).

## Improved Wedge-Lock



This patented attachment system features a captive contact, quick assembly, and secure cable retention. The cable braid and jacket are flared over the cone-shaped wedge, and the backnut captures the braid and jacket when screwed into the body assembly.

This construction differs from standard Wedge-Lock in that the braid is clamped directly by the nut and wedge, providing metal-to-metal contact. The cable jacket is secured in an adjacent area of the backnut assembly for weatherproofing.

Unlike some similar constructions, the backnut incorporates a slip ring to prevent twisting of the cable during assembly.

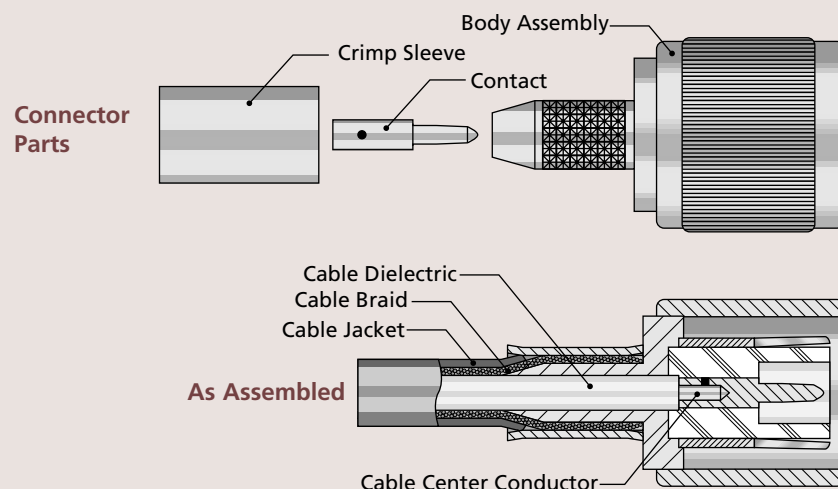
The cable conductor is soldered to the contact.

Many connectors with Improved Wedge-Lock cable attachment are qualified to MIL-PRF-39012, Category A (field replaceable, no special tools required for assembly).



## Cable Attachment Types—Flexible Cable

### Econo-Crimp—Non-Captive Contact



This inexpensive cable attachment method features quick assembly and small connector size and weight.

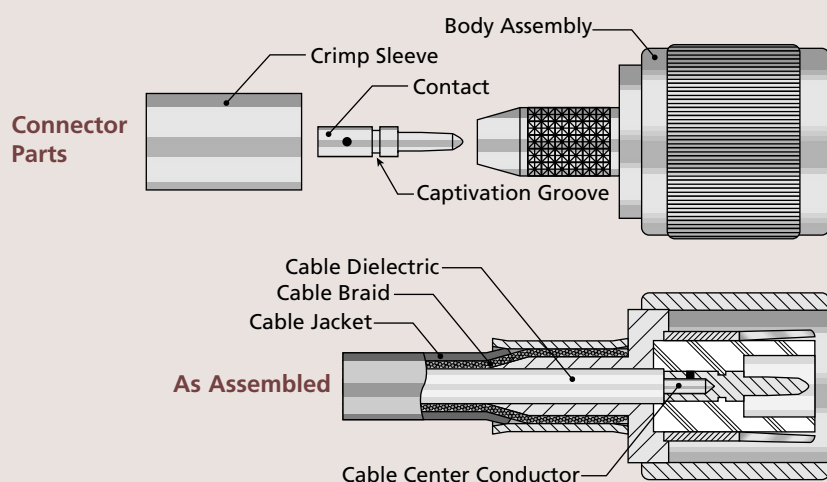
The cable is stripped and the connector contact soldered to the cable center conductor. The tail of the body is inserted under the cable braid, and the crimp sleeve moved into position and crimped.

For additional savings in assembly time, some Econo-Crimp connectors have contacts that can be crimped to the conductor instead of being soldered.

All Econo-Crimp connectors use readily-available commercial crimp tools and dies for assembly.

Econo-Crimp connectors can be ordered with heat-shrinkable tubing for weatherproofing.

### Econo-Crimp—Captive Contact



These connectors offer quick assembly time and small size, and feature a captive contact which snaps into place in the insulator when assembled. This provides consistent axial contact location within the interface, and prevents movement of the contact from cable flexure or temperature changes after assembly.

The cable is stripped and the connector contact soldered to the cable center conductor. The tail of the body is inserted under the cable braid, and the crimp sleeve moved into position and crimped.

For additional savings in assembly time, some Econo-Crimp connectors have contacts that can be crimped to the conductor instead of being soldered. All Econo-Crimp connectors use readily-available commercial crimp tools and dies for assembly.

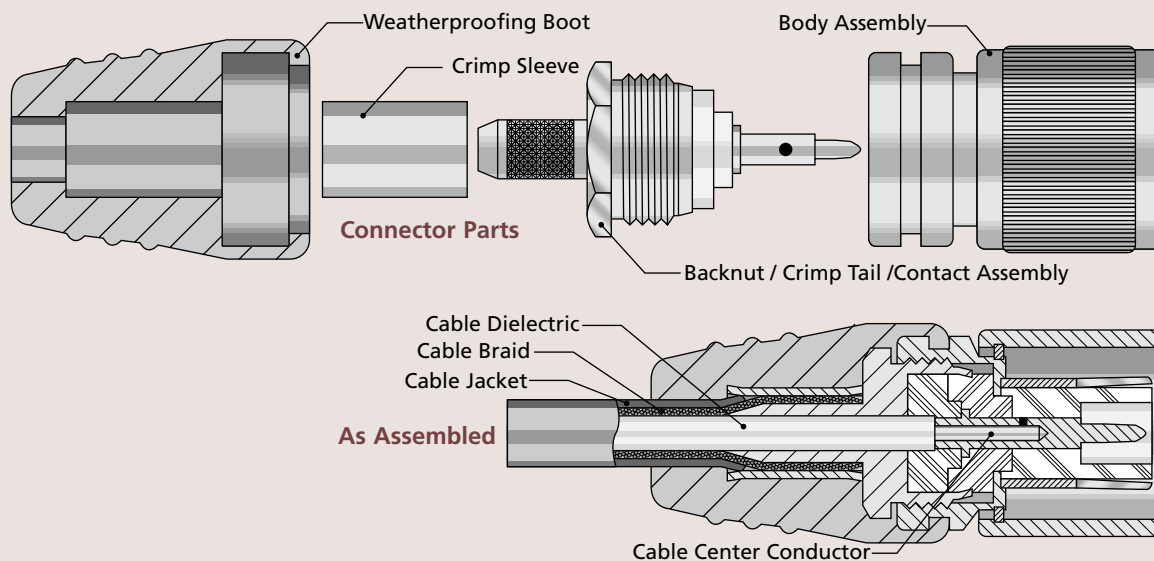
Econo-Crimp connectors can be ordered with heat-shrinkable tubing for weatherproofing.

Many connectors with Captive Contact Econo-Crimp cable attachment are qualified to MIL-PRF-39012, Category B (non-field replaceable), Category C (MIL-defined crimp tools and cable strip dimensions), and Category D (MIL-defined contact and crimp-sleeve dimensions).



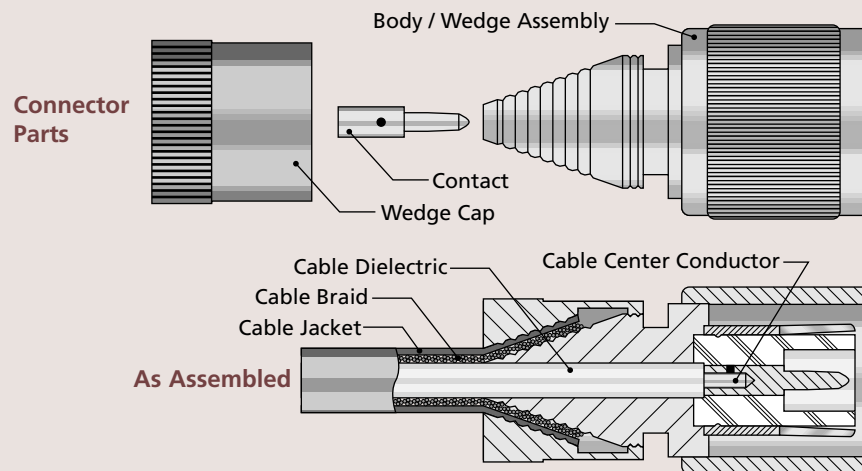
## Cable Attachment Types—Flexible Cable

## X-Crimp



X-Crimp cable attachment combines ease of assembly with a captivated contact and a silicone-rubber boot\* for weatherproofing. The captive contact is held rigidly in place to prevent movement from cable flexure or temperature changes after assembly. The cable is trimmed, and the tail of the backnut assembly is pushed under the braid. The contact is soldered to the cable conductor, the braid crimped within the crimp sleeve, and the backnut assembly screwed into the body. The boot slides forward and snaps into place. The boots can be supplied in a variety of colors for identification. Some connectors with X-Crimp cable attachment are qualified to MIL-PRF-39012, Category B (non-field replaceable), and Category C (MIL-defined crimp tools and cable stripping dimensions). \*SMA and smaller size connectors use heat-shrink tubing instead of silicone-rubber boots.

## Wedge-Eze



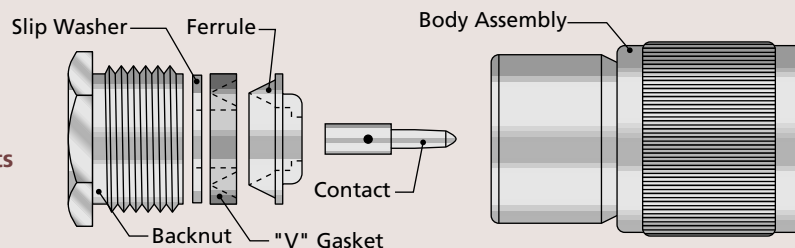
This unique attachment system provides very fast assembly and is field replaceable. The cable is stripped, and the connector contact soldered to the center conductor. The prepared cable is pushed into the body assembly, and the wedge flares the braid. The plastic wedge cap is pushed forward over the cable braid, where it locks into place. The cap can be assembled with an inexpensive hand tool or using automated equipment for large production runs. The plastic caps can be supplied in a variety of colors for identification.



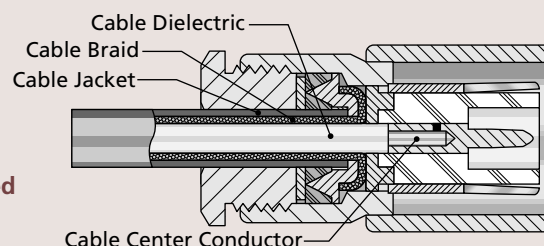
## Cable Attachment Types—Flexible Cable

### V-Groove—Non-Captive Contact

#### Connector Parts



#### As Assembled



V-Groove cable attachment is the standard for military UG-type connectors, and is field-replaceable with no special tools.

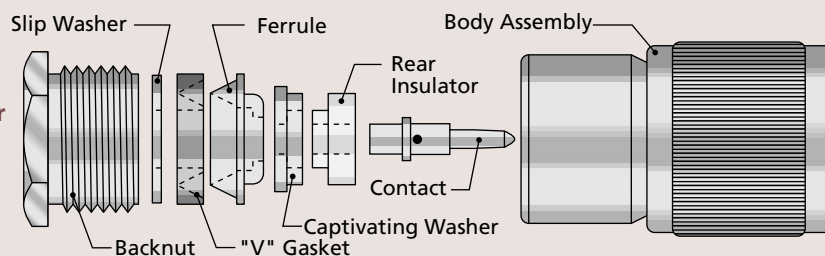
The cable is stripped, and the braid is combed out and folded back over the ferrule. The connector contact is soldered to the cable conductor.

The prepared cable, the V-gasket, and the slip washer are secured in the body assembly by tightening the backnut.

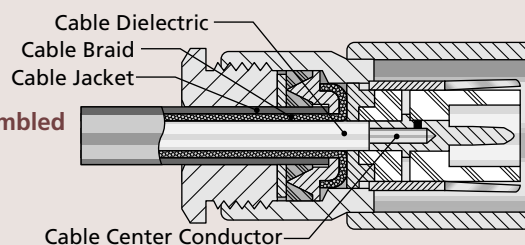
The slip washer prevents twisting the cable while the nut is being tightened, and the rear surface of the ferrule cuts through the V-gasket, providing metal-to-metal braid clamping as well as weatherproofing.

### V-Groove—Captive Contact

#### Connector Parts



#### As Assembled



V-Groove clamping with a captive contact provides consistent axial contact location within the interface, and prevents movement of the contact from cable flexure or temperature changes after assembly.

The cable is stripped, and the braid is combed out and folded back over the ferrule. The connector contact is soldered to the cable conductor.

The prepared cable, the rear insulator and captivating washer, the V-gasket, and the slip washer are secured in the body assembly by tightening the backnut.

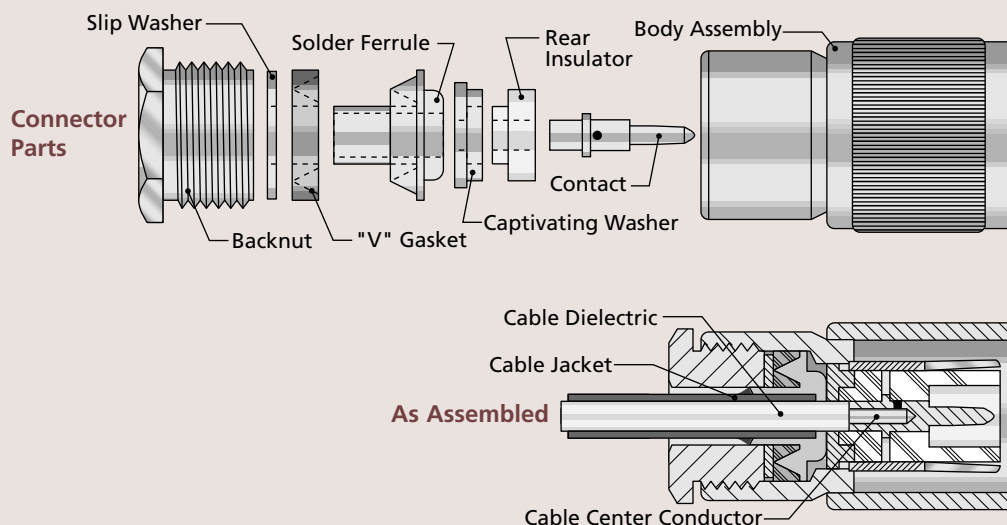
The slip washer prevents twisting the cable while the nut is being tightened, and the rear surface of the ferrule cuts through the V-gasket, providing metal-to-metal braid clamping as well as weatherproofing.

Many connectors with Captive Contact V-Groove cable attachment are qualified to MIL-PRF-39012, Category A (Field replaceable, no special tools required for assembly).



## Cable Attachment Types—Semi-Rigid Cable

### Solder-Clamp (Used on BNC and larger connectors)



This attachment method is similar to the V-Groove type used for flexible cable, but is adapted to use with semi-rigid cable by replacing the braid-clamp ferrule with a ferrule designed to be soldered to the jacket (outer conductor) of semi-rigid cable.

This design allows right-angle or chassis-mounted connectors to be re-oriented after cable attachment to easily conform to system layout.

The cable is stripped, and the ferrule is soldered to the cable jacket before soldering the contact to the cable conductor. This allows for trimming the cable dielectric after soldering the jacket, eliminating any dielectric extrusion that may occur during jacket soldering.

Captive contacts (as shown) are highly recommended for connectors used with semi-rigid cable.