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BNC female Crimp On for RG-174, RG-188, RG-188A/U, RG-316, RG-316/U Double Shield, LMR-100A, Belden 7805R, Belden 8216, Belden 83269, Belden 83284, Belden 84316, and other 0.100 Inch OD Coax



## **Technical Data Sheet**

This BNC female Crimp Connector is one of several thousand RF products available from Max-Gain Systems, Inc. This connector has a crimp on interface with the coax selected.

This connector is made from a Solid Brass body that is precision machined and plated with Silver for superior performance and value. This BNC female Crimp Connector has a PTFE dielectric and a gold plated brass center pin. The BNC female interface accepts the BNC male tabs or "bayonets" for quick and reliable connections and disconnections. This RF connector fits (but not limited to) RG-174, RG-188, RG-188A/U, RG-316, RG-316/U Double Shield, LMR-100A, Belden 7805R, Belden 8216, Belden 83269, Belden 83284, Belden 84316, and other 0.100 Inch OD Coax.

## **Material Specifications**

BNC female Crimp Connector for 0.100 Inch OD Coax		Part Number 7006-BNC-174
Description	Material	Plating
Ferrule	Brass	Silver
Pin	Brass	Gold
Insulator	PTFE	White
Body	Brass	Silver

## **Mechanical Specifications**

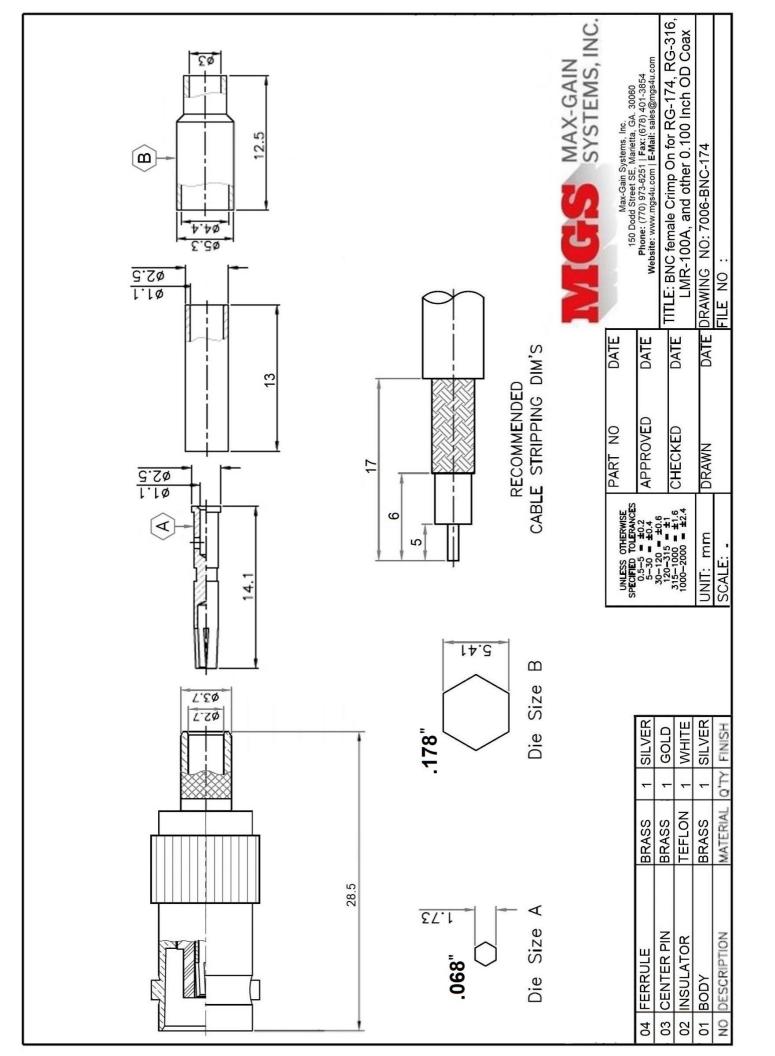
Size	Dimension
Length	1.129 in (28.7 mm)
Width	0.57 in (14.5 mm)
Height	0.57 in (14.5 mm)
Weight	0.4 oz (10 g)

## **Environmental Specifications**

Temperature	Spec
Operating Range	-65 to +165 deg C

## Compliance Certifications (see product page for current documentation)

**Availability** Click the following link (or enter part number in the "SEARCH" bar at the top of any page of the website) to obtain additional part information including price, inventory and certifications: <u>https://mgs4u.com/product/bnc-female-crimp-connector-for-0-100-inch-od-coax-7006-bnc-174/</u>

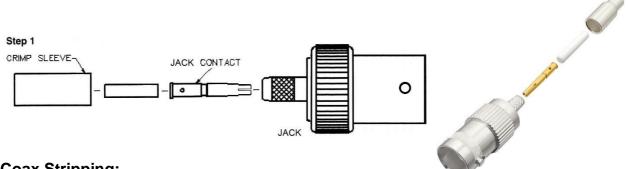


# **Installation Guide**

We will begin by installing the BNC female crimp-on connector on a piece of coax. This process is the same for all the types of coaxial cable that fit this BNC female crimp-on connector. These connectors fit on a wide range of coax types, including: RG-174, RG-188, RG-188A/U, RG-316, RG-316/U Double Shield, LMR-100A, Belden 7805R, Belden 8216, Belden 83269, Belden 83284, Belden 84316, and other 0.100 Inch OD Coax.

#### Identify all connector parts (3 Parts):

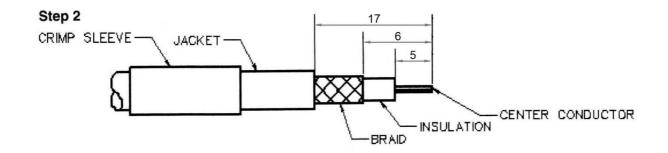
Each connector consists of one body assembly (jack), one rear ferrule (crimp sleeve), and one center pin (jack contact).



#### **Coax Stripping:**

First cut your coaxial cable to the desired length and then strip the black jacket back approximately 17mm (0.67"). When the jacket is stripped cut the braid/foil back 6mm (0.236") from the fresh cut end. Finally, cut back the dielectric 5mm (0.196") from the fresh end down to the center conductor. The braid needs to be cut back further than the dielectric to insure that none of the braid or foil is touching the center conductor which could cause a short.

Once the cable is prepped, make sure to put the ferrule (crimp sleeve) of the connector on the coaxial cable before you proceed.



#### **Crimping and Soldering Install:**

(Place the insulator sleeve on the coax if using a coax with an extremely small dielectric that it will fit over. If the insulator sleeve is used, be sure it goes under the braid.) Place the center pin onto the conductor of the coaxial cable.

#### Soldering Guide (preferred):

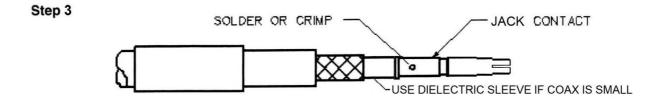
This soldering guide is for soldering Max-Gain Systems, Inc. BNC crimp-on connectors. These are approximate measurements for our BNC crimp-on connectors, which adhere to industry standards for this type connector. If you choose to use this guide for connectors sold by others who do NOT adhere to these standards, the measurements could be off and result in a poor installation.

#### Now we begin soldering the center pin onto the center conductor of the coax.

Begin by applying heat to the center pin of the BNC connector with your soldering iron. Before proceeding, allow sufficient time for the soldering iron tip to reach full operating temperature and clean the tip of the iron by wiping it with a damp sponge. Place the soldering iron UNDER the center pin and, with the solder hole of the center pin facing up, apply the solder into the hole. The heat rises and heats up the pin faster. When the pin is heated the solder will start to flow into the pin. Allow sufficient solder to flow into the center pin to make a good connection, but not too much that it begins to leak out and potential start to melt the dielectric of the coax.

#### **Crimping Guide:**

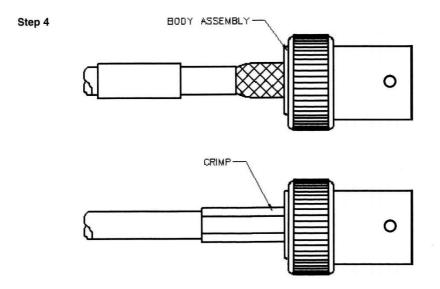
Use the 0.068" hex die from your 7505-DIE-174 ratcheting crimper die to crimp the center pin above the small lip of the center pin right on top of the "solder hole".





## **Crimping The Ferrule:**

Flare out the braid of the coax and slide the body assembly over the center pin and under the braid. Then seat the body assembly firmly onto the center contact. Arrange braid uniformly around the knurled portion of the body assembly. Slide the ferrule (crimp sleeve) forward and make sure it is in contact with the body assembly. Using the 0.178" hex die from the 7505-DIE-174 ratcheting crimper die to crimp the ferrule (crimp sleeve) right up next to the main body assembly. This crushes the metal sleeve around the braid and knurling to make it difficult for the connector to be removed. Trim any braid that extends out from crimp sleeve, against the body assembly, so not have any strays sticking out.



### **Final Testing:**

When this is completed, as a final test, you should always check resistance from the center pin to the body with an ohmmeter in a low resistance scale. After verifying that there are no braid – to – center pin shorts on the other end of the coaxial cable, you should see infinite resistance (open). This completes your BNC female crimp-on connector installation, and the connector is ready for use!