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Type N male, Solder-On, Cable End Connector
+ UG-176 Reducer



Technical Data Sheet

This Type N male Solder Connector is one of several thousand RF products available from Max-Gain Systems, Inc. This connector is made from a Solid Brass body that is precision machined and plated with Silver for superior performance and value. This Type N male Solder Connector has a PTFE dielectric and a gold plated brass center pin. The Type N male interface contains a gasket, for shock- / vibration- resistant and waterproof connections. This RF connector, with a UG-176 (7508-S) reducer, fits (but not limited to) LMR-195, LMR-200, RG-142, RG-142B/U, RG-141, RG-141A/U, RG-142A/U, RG-122/U, RG-400, RG-400/U, RG-58, RG-55, RG-55B/U, RG-55A/U, RG-58C/U, RG-223, RG-223/U, 0.195 Inch OD coaxial cable. In order to fit larger coax sizes (0.390 and 0.400 Inch OD coax), do not use a reducer, for 0.240 Inch OD coax, use a 7508-S (UG-176). In order to fit smaller coax diameters, a different reducer can be used. 7506-S (UG-174) for 0.100 diameter coax.

Material Specifications

Type N male, Solder-On, Cable End Connector + UG-176 **Part Number 7303-N-8X**

Description	Material	Plating
Insulator	PTFE	White
Shell	Brass	Silver
Pin	Brass	Silver
Body	Brass	Silver

Mechanical Specifications

Size	Dimension
Length	1.97 in (50 mm)
Width	0.78 in (20 mm)
Height	0.78 in (20 mm)
Weight	1.8 oz (52 g)

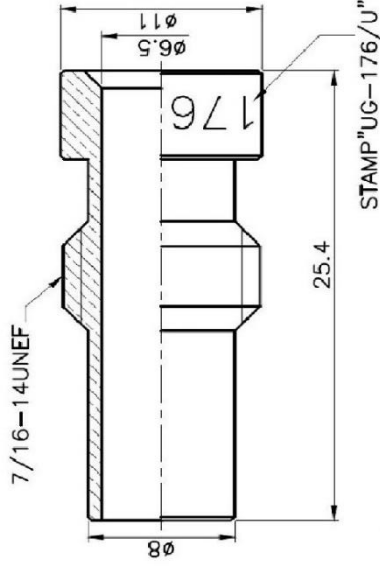
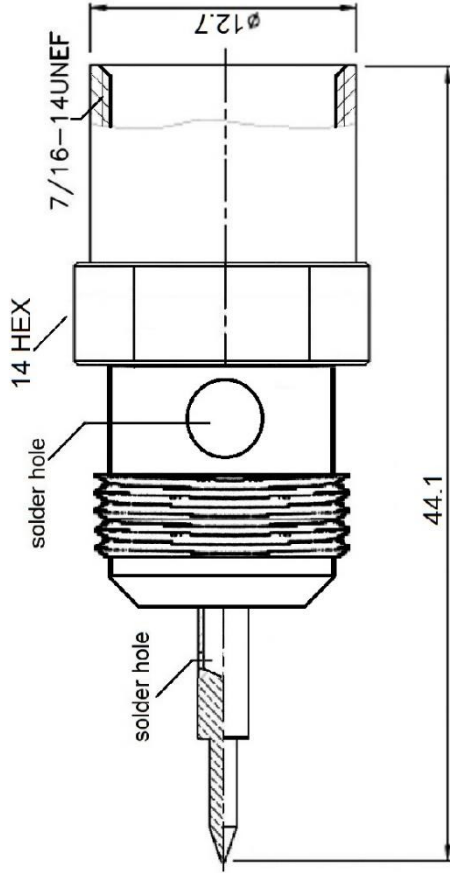
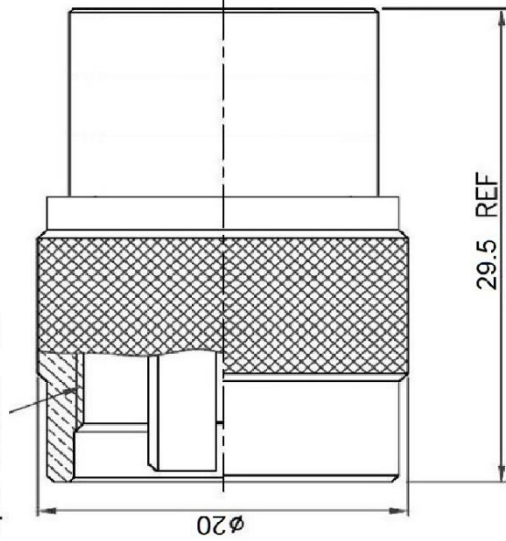
Environmental Specifications

Temperature	Spec
Operating Range	-65 to +165 deg C

Compliance Certifications (see product page for current documentation)

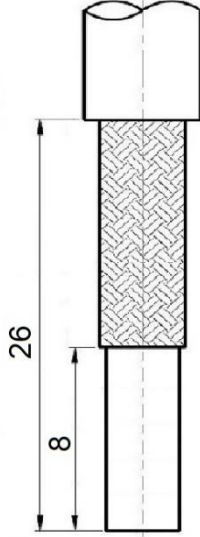
Availability Click the following link (or enter part number in the “SEARCH” bar at the top of any page of the website) to obtain additional part information including price, inventory and certifications: <https://mgs4u.com/product/type-n-male-solder-connector-ug-176-reducer-combo-for-0-240-inch-od-coax-7303-n-8x/>

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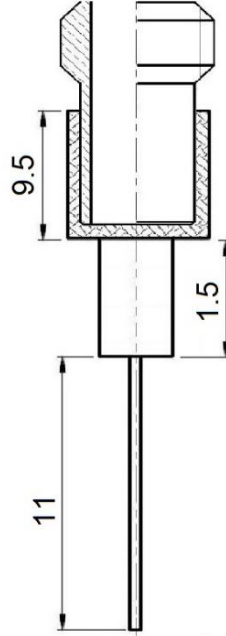


FIT:
 For all 0.390 to 0.400 OD Coax Types including RG-8, RG-213, Belden 9913, LMR-400
w/ 7508-S Reducer
 For all 0.240 OD Coax Types Including RG-8X, mini 8, RG-59, Belden 9258, LMR-240
w/ 507-S Reducer
 For all 0.195 OD Coax Types Including RG-58, RG-142, RG-223, RG-400, LMR-195
w/ 7506-S Reducer
 For all 0.100 OD Coax Types Including RG-174, RG-178, RG-188, RG-196, Belden 8216, LMR-100

STEP 1



STEP 2



Alternate stripping required when NOT using reducers

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TITLE: Type N Male Solder On, w/ Reducer for 0.240 Inch OD Coax
 DRAWING NO: 7303-N-8X
 FILE NO :

UNLESS OTHERWISE SPECIFIED TOLERANCES		PART NO	DATE	
0.5-5	±0.2	APPROVED	DATE	
5-30	±0.4	CHECKED	DATE	
30-120	±0.6	DRAWN	DATE	
120-315	±1			
315-1000	±1.6			
1000-2000	±2.4			
	UNIT: mm			
	SCALE: -			
NO.	DESCRIPTION	MATERIAL	FINISH	QTY
	FERRULE	BRASS	SILVER	
	PIN	BRASS	GOLD	
	SHELL	BRASS	SILVER	1
	GASKET	SILICONE	ORANGE	1
	INSULATOR	TEFLON	WHITE	1
	BODY	BRASS	SILVER	1
	DESCRIPTION	MATERIAL	FINISH	QTY

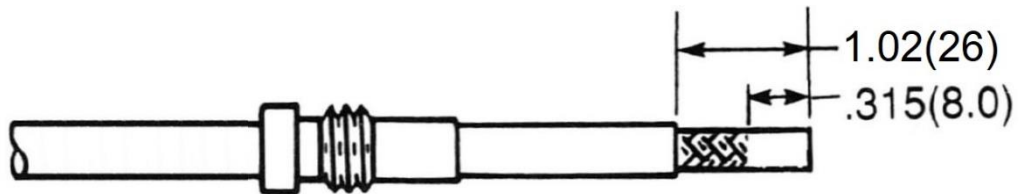
Installation Guide

We will begin by installing the Type N connector on a piece of RG-8X. This process is the same for all the other types of cable that fit the Type N connector with a UG-176 reducer. These connectors fit on a wide range of coax types including: LMR-240, LMR-240 Ultraflex, Mini 8, Micro 8/U, RG-59, RG-8X, Belden 8241, Belden 8221, Belden 9169, Belden 9204, Belden 9228, Belden 9258, Belden 1426A, Belden 1505A, Belden 8212, Belden 8241F, Belden 9100, Belden 9110, Belden 9165, Belden 9171, Belden 9240, Belden 9259, Belden 9265, Belden 9274, Belden 9275, Belden 9659, Belden 8279, Belden 8279A, Belden 9209, Belden 9209A, Belden 82241, Belden 88241, Belden 1506A, Belden 1825A, Belden 1826A, Belden 82108, Belden 89108, Belden 89259, and other 0.240 Inch OD coaxial cable.

Coax Stripping:

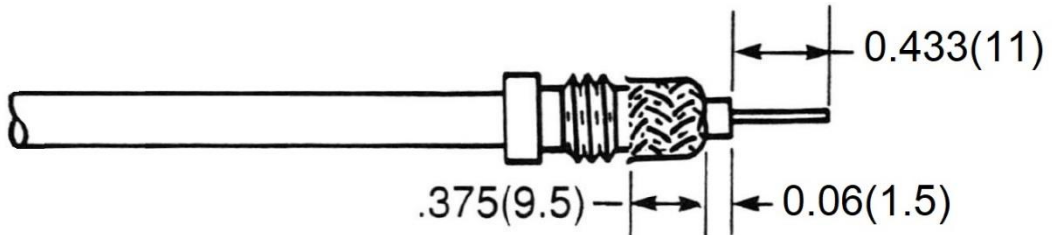
First cut your cable to the desired length and place the reducer onto the coax. Strip the black jacket back approximately 1.02 inches. When the jacket is stripped cut the braid/foil back 0.315 of an inch from the fresh cut end.

Step 1



Move the reducer up to the end of the black jacket and fold back the braid onto the reducer. If there are any strands of the braid, that make contact with the threads, trim them with small diagonal cutters. Finally, cut back the dielectric 0.433 of an inch from the fresh end down to the center conductor.

Step 2



Main Body Install:

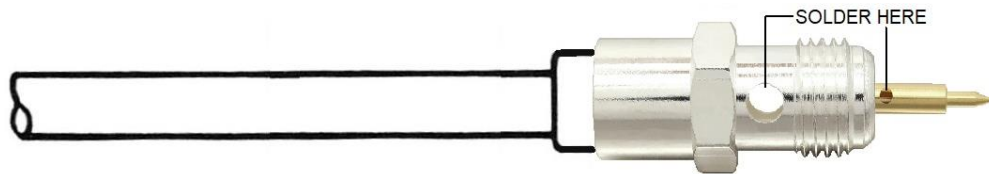
Put the main body on the end of the cable and grip it with a pair of pliers and begin screwing it to the right (clockwise) till you see the center conductor inside the solder hole of the center pin of the Type N connector itself.

FAQ #1: Why wont the center conductor go into the connector?

Answer 1: The center is bent off of center. Ensure the center conductor is perfectly straight before screwing the connector body onto the coax.

Answer 2: The tip of the center conductor was flattened by diagonal cutters when cutting the coax. To fix this, use a pair of pliers to round back out the tip of the center conductor.

Step 3

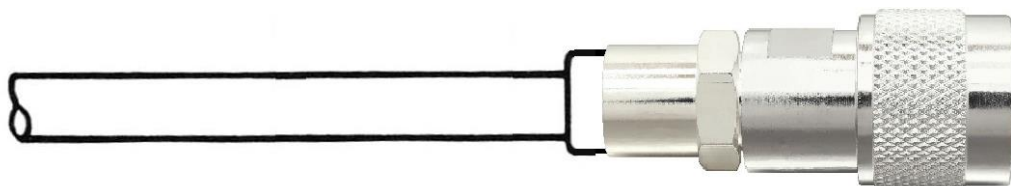


Soldering Guide:

Begin by positioning the solder hole, in the center pin, facing up. Turn on your soldering iron and 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. Apply heat to the center pin of the Type N connector with your soldering iron by placing the “flat” of the iron underneath the pin. This allows maximum heat transfer to the pin and center conductor. Be sure the soldering iron is on the bottom side of the center pin. When the pin is heated, apply the solder to the tip of the center conductor. Allow sufficient solder to flow to seal the center conductor inside the center pin.

Once the center pin is sealed with solder, move the soldering iron to the holes on the body. Make sure to fill both of the holes with solder flush with the top of each hole. Once both holes of the connector are filled with solder let the connector cool down. When the connector is cool, screw on the other portion of the connector to complete your install.

Step 4



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).



Click the following link to obtain additional part information including price, inventory and certifications: <https://mgs4u.com/product/type-n-male-solder-connector-ug-176-reducer-combo-for-0-240-inch-od-coax-7303-n-8x/>