



## BNC 75Ω RF CONNECTORS

Within the internationally standardised BNC mating face dimensions, a perfect 75 ohm characteristic impedance cannot be realised. However, at frequencies up to 1000 MHz, the small impedance deviation is negligible for practical applications. Our true 75 ohm connectors with a typical VSWR reading of 1.06:1 at 2000 MHz are identified by an asterisk following the part number.

### Applications

- Broadcast
- High bandwidth video equipment
- D1/D2 serial digital
- Graphic work stations
- Telephony / Workstations

### Options

- Crimp Plugs
- Jack to Jack adapters
- Patch Panels
- 'D' Shell Jacks
- Plug to Plug U-Link connectors
- Crimp Tools

### Ordering Codes

We have listed the more common ordering codes in each section. Amphenol offer an extensive range of RF connectors for most applications.

Please visit [www.amphenolconnex.com](http://www.amphenolconnex.com) for further information. Please contact us if you need any further assistance.

### Simple steps to guide you in using this catalogue

- 1) Identify the product group listed in Contents on Page 1 and go directly to that page number.
- 2) Each product group cover page then details information and options available.
- 3) Refer to the product detail pages and identify the product you require pictorially.
- 4) Read the product description column for the products standard features.
- 5) Use variations column to determine your choice.
- 6) Identify part number.
- 7) In the event the particular option you require is not listed please refer to the part number breakdown page at the end of each section.
- 8) Please contact us directly if you have any further problems.








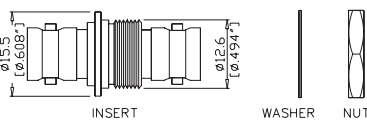

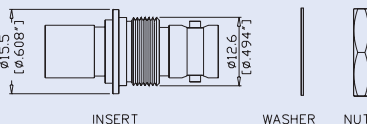

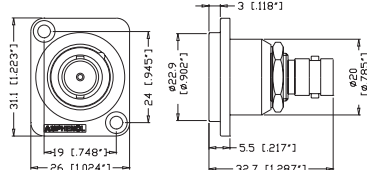

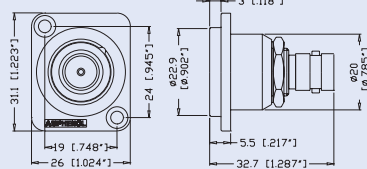

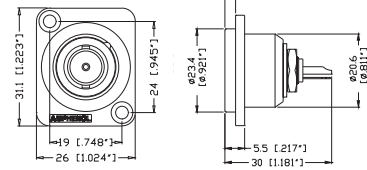

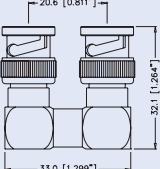
Amphenol manufactures a large range of connectors to suit cables other than those listed below, for example Belden YR23769 and 46899, please contact us to discuss your specific requirements.

The complete Amphenol Connex catalogue featuring a wide range of RF connector products is available on request. Item code CAT-CONNEX-01.



T1 connectors 0-4GHz are available on request.

PRODUCT - FIGURE	DRAWING Dimensions in mm (inches)	CABLE TYPE RG-/U	INSULATION	CRIMP TOOL	PART NUMBER
	<p>Straight Crimp Plug - Captive Contact- Standard Cable</p> <p>RECOMMENDED CABLE STRIPPING DIMS.</p>	59/ 62/ 140/ 210	Delrin	A	112119
			Teflon	A	112952*
		59/ U-20AWG	Delrin	A	112507
			Teflon	A	112956*
		11	Teflon	D	112576
		11/ U-14AWG/ B8213/ B9292/ B7731/ B1859A	Teflon	D	112606
		6/ 143/ 212	Delrin	E	112508
		B1694A/ B9248	Delrin	E	112565
			Teflon	H	112957*
		6 PLENUM/ B1695A	Delrin	E	112519
			Teflon	E	112958*
		B8281/ B9231/ B9141	Delrin	E	112509
			Teflon	E	112953*
		B88281	Delrin	E	112625
B1505A	Teflon	A	112951*		
B735A1	Teflon	B	112950*		
	<p>Straight Crimp Plug – Captive Contact- Miniature Cable (Remark: With Teflon sleeve / Hex crimp size .178")</p> <p>RECOMMENDED CABLE STRIPPING DIMS.</p>	179/ 187/ B9221	Delrin	B	112133
		179/ U DOUBLE BRAIDED	Delrin	B	112644
		180/ 195/ 122/ B8218/ B1865A/ B1855	Delrin	B	112521
			Teflon	B	112955*
		59/ U PLENUM-20AWG	Teflon	B	112975*
Assembly Instruction A - page 65					
Assembly Instruction B - page 65					

Note: \*Centre contact .053" diameter, 30u" Au. True 75 ohm. Use .044 hex or 12 indent crimp part 47009.

PRODUCT - FIGURE	DRAWING Dimensions in mm (inches)	DESCRIPTION & CABLE TYPE RG-/U	INSULATION	CRIMP TOOL	PART NUMBER
		<b>Bulkhead Adapter -Isolated</b> Jack to Jack - Straight Bayonet Lock to Bayonet Lock	Teflon	N/A	AC-BNC-JJA-75
		<b>Bulkhead Adapter -Isolated</b> Jack to Jack - Straight Push on to Bayonet Lock	Teflon	N/A	AC-BNC-PJA-75
		<b>Bulkhead Adapter -Isolated, 'D' Shell Housing</b> Jack to Jack, Bayonet Lock to Bayonet Lock, Nickel Finish	Teflon	N/A	AC - BNC - JJ - 75
		<b>Bulkhead Adapter -Isolated, 'D' Shell Housing</b> Jack to Jack, Bayonet Lock to Bayonet Lock, Black Finish	Teflon	N/A	AC - BNC - JJ - 75B
		<b>Bulkhead Adapter -Isolated, 'D' Shell Housing</b> Jack to Jack, Push on to Bayonet Lock, Nickel Finish	Teflon	N/A	AC - BNC - PJ - 75
		<b>Bulkhead Adapter -Isolated, 'D' Shell Housing</b> Jack to Jack, Push on to Bayonet Lock, Black Finish	Teflon	N/A	AC - BNC - PJ - 75B
		<b>Bulkhead Receptacle - Isolated, 'D' Shell Housing</b> Jack to Solder Bucket with Ground Tag, Nickel Finish	Nylon	N/A	AC - BNC - JS-75
		<b>Bulkhead Receptacle - Isolated, 'D' Shell Housing</b> Jack to Solder Bucket with Ground Tag, Black Finish	Nylon	N/A	AC - BNC - JS-75B
		<b>U - Link</b> Centre to Centre - 20.6 mm  <b>Note:</b> Custom Sizes available please contact factory.	Teflon	N/A	BNC - U-LINK 75*1

## BNC 75Ω RF ACCESSORIES AND TOOLING

PRODUCT - FIGURE	DESCRIPTION	DIE CAVITIES	CABLE TYPE RG-/U	CONNECTOR GUIDE	PART NUMBER
	Crimp tool with Die Set	.255 / .213 / .068	59 / 62	A	47-10070
		.178 / .128 / .068	179 / 187 / 180 / 195	B	47-10150
		.429 / .100 / .080	11	D	47-10090
		.324 / .255 / .068 / .042	6 / 59 / B8281	E	47-10110
		.350 / .320 / .255	RG59	H	47-10100
		.324 / .178 / .068	6 / 179 / 187	K	47-10200
		.255 / .178 / .068 / .052	59 / 62 / 179 / 187	M	47-10220
		.278 / .255 / .068 / .042	B1505A / B1694A	N	47-10240
	12-Way indent crimp tool	This 12 point, full ratchet crimp tool terminates precision BNC, .053 diameter, 75Ω centre contacts, as specified in this catalogue. Tool is designed for Telco/Broadcast applications and is built to M22520 specifications.		True 75 ohm	47009





**Features:**

- Amphenol 75Ω connectors
- Bayonet lock or Push-on types
- Supplied with adhesive strip ID labels

**Options:**

- 1RU, 20 BNC connectors or 2RU, 40 BNC connectors
- Aluminium in Clear or Black anodised
- Steel in Black powder coat
- Customised versions available on request

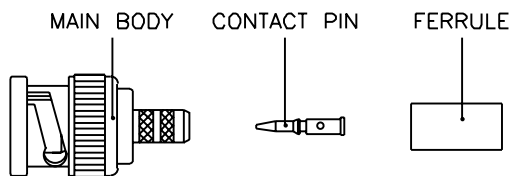
PRODUCT - FIGURE DRAWING	Dimensions in mm (inches)	DESCRIPTION	MATERIAL / FINISH	LOADED WITH <small>(refer to page 63 for specifications)</small>	PART NUMBER
	<p>1RU 1X20 Patch Panel, Supplied with 1 ID label</p>	Steel / Black	Empty Panel	AC-BNC20M	
		Steel / Black	AC-BNC-JJA-75	AC-BNC20MJ75	
		Steel / Black	AC-BNC-PJA-75	AC-BNC20MP75	
		Aluminium / Clear	Empty Panel	AC-BNC20A	
		Aluminium / Clear	AC-BNC-JJA-75	AC-BNC20AJ75	
		Aluminium / Clear	AC-BNC-PJA-75	AC-BNC20AP75	
		Aluminium / Black	Empty Panel	AC-BNC20B	
		Aluminium / Black	AC-BNC-JJA-75	AC-BNC20BJ75	
		Aluminium / Black	AC-BNC-PJA-75	AC-BNC20BP75	
	<p>2RU 2X20 Patch Panel, Supplied with 2 ID labels</p>	Steel / Black	Empty Panel	AC-BNC40M	
		Steel / Black	AC-BNC-JJA-75	AC-BNC40MJ75	
		Steel / Black	AC-BNC-PJA-75	AC-BNC40MP75	
		Aluminium / Clear	Empty Panel	AC-BNC40A	
		Aluminium / Clear	AC-BNC-JJA-75	AC-BNC40AJ75	
		Aluminium / Clear	AC-BNC-PJA-75	AC-BNC40AP75	
		Aluminium / Black	Empty Panel	AC-BNC40B	
		Aluminium / Black	AC-BNC-JJA-75	AC-BNC40BJ75	
		Aluminium / Black	AC-BNC-PJA-75	AC-BNC40BP75	
	Panel ID label	Plastic	Not Applicable	AC-BNC-LABEL	



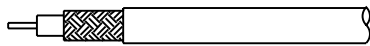
## BNC 75Ω RF ASSEMBLY INSTRUCTIONS

### ASSEMBLY A

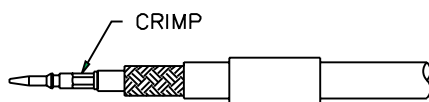
#### STEP 1



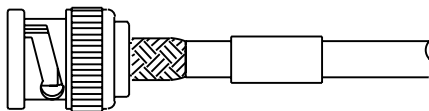
#### STEP 2



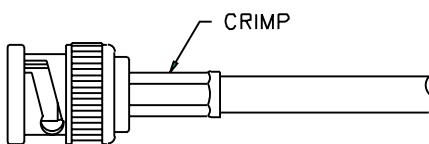
#### STEP 3



#### STEP 4



#### STEP 5



STEP 1. All parts of the connector are shown. A crimp tool is necessary to complete the connection.

STEP 2. Strip the cable inner conductor, dielectric, braid, and jacket as per "RECOMMENDED CABLE STRIPPING DIM'S" in catalogue.

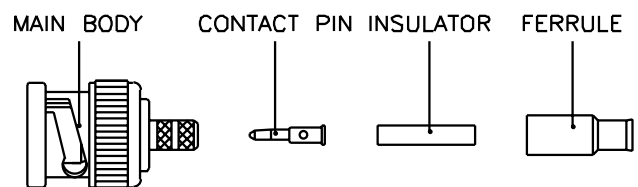
STEP 3. Insert inner conductor into the CONTACT PIN, crimp it with the crimp tool as shown. Then slide the FERRULE onto cable.

STEP 4. Insert the MAIN BODY into braid and dielectric.

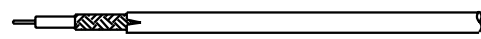
STEP 5. Slide the FERRULE over braid, crimp it with the crimp tool as shown.

### ASSEMBLY B

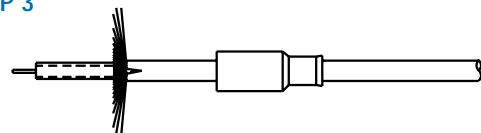
#### STEP 1



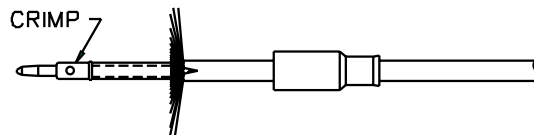
#### STEP 2



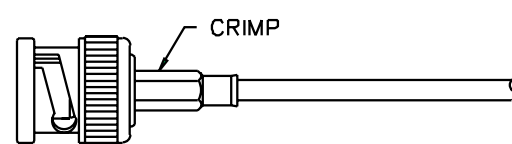
#### STEP 3



#### STEP 4



#### STEP 5



STEP 1. All parts of the connector are shown. A crimp tool is necessary to complete the connection.

STEP 2. Strip the inner conductor, dielectric, and jacket as per "RECOMMENDED CABLE STRIPPING DIM'S" in catalogue.

STEP 3. Slide the FERRULE on to cable, then fold back braid wire and slide the INSULATOR on to dielectric as shown.

STEP 4. Insert inner conductor into the CONTACT PIN, crimp it with crimp tool as shown.

STEP 5. Push cable and parts into the MAIN BODY until it stops. Then slide the FERRULE over braid wire and against the MAIN BODY, crimp it with the crimp tool as shown.



## STANDARD DATA BNC 75Ω RF CONNECTORS

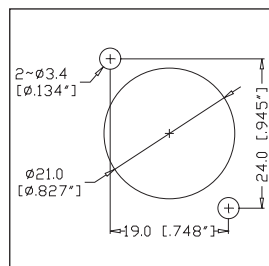
		VALUE		
GENERAL CHARACTERISTICS	Mating	Bayonet Lock		
	Cable Attachment	Crimp - Crimp		
	Environmental	Complies with RoHS Directive 2002/95/EC		
ELECTRICAL CHARACTERISTICS	Impedance	75Ω		
	Frequency Range	0 - 1 GHz		
	Voltage Rating	500V RMS		
	Dielectric withstanding voltage	1500 Volts RMS		
	VSWR	1.05 + 0.1f(GHz) DC to 1 GHz		
	Contact Resistance			
	Centre Contact	1.5 milliohm		
	Outer Contact	1.0 milliohm		
Insulation Resistance	5000 MΩ (min.)			
MATERIALS		Part	Material	Finish
		Body, Coupling sleeves	Brass	Nickel
		Crimp Ferrule	Annealed Copper	Nickel
		Male Contact	Brass	Gold
		Female Contact	Beryllium Copper or Phosphor Bronze	Gold
		XLR Housing	Diecast Zinc Alloy	Satin Nickel or Black Polyester
		Insulators	Teflon or Delrin	Natural

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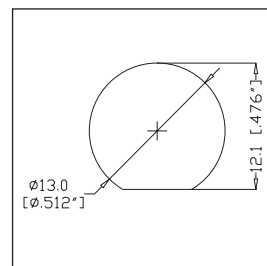
**NOTE:** These characteristics are typical and may not apply to all connectors.

## PANEL CUTOUTS - FRONT VIEW

AC-BNC-PJ-75  
AC-BNC-JJ-75



AC-BNC-PJA-75  
AC-BNC-JJA-75



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