

## BNC 75 RF CONNECTORS

Amphenol offers a complete range of highperformance BNC plugs for use in digital/ HD video applications. Amphenol's True 75 Ohm BNC connectors perform well up to and beyond 3GHz and are designed to terminate to a variety of popular coaxial cable types. We can also offer custom connectors to suit non-standard cables on request. Plugs feature a precision machined brass body and coupling nut plated with cost effective nickel plating.

## **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 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.
- 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.



## BNC 75 $\Omega$ RF CONNECTORS



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.

PRODUCT - FIGURE	DRAWING Dimensions in mm (inches)	CABLE TYPE RG-/U	INSULATION	CRIMP TOOL	PART NUMBER
	Straight Crimp Plug - Captive Contact- Standard Cable  24.5 [.965"]  3.7 [.146"]  4.0 [.157"]  RECOMMENDED CABLE STRIPPING DIMS.	59/ 62/ 140/ 210	Delrin	Α	112119
			Teflon	Е	112952*
63		59/ U-20AWG	Delrin	Α	112507
-			Teflon	Е	112956*
		11/ U-14AWG/ B8213/ B9292/ B7731/ B1859A	Teflon	D	112606
		6/ 143/ 212	Delrin	Е	112508
		B1694A/ B9248	Delrin	Е	112565
			Teflon	Е	112957*
		6 PLENUM/ B1695A	Delrin	Е	112519
		B8281/ B9231/ B9141	Delrin	Е	112509
			Teflon	Е	112953*
		B1505A	Teflon	Е	112951*
	Assembly Instruction A - page 89	B735A1	Teflon	F	112950*
	Straight Crimp Plug-Captive Contact-Miniature Cable (Remark: With Teflon sleeve / Hex crimp size .178")	179/ 187/ B9221	Delrin	В	112133
	5.2 [.205"] 6.8 [.268"] 3.0 [.118"] 2.0 [.079"]  RECOMMENDED CABLE STRIPPING DIMS.  Assembly Instruction B - page 89	180/ 195/ 122/ B8218/ B1865A/ B1855	Delrin	В	112521
			Teflon	F	112955*

Note: \*True 75 ohm.



PRODUCT - FIGURE	DRAWING	Dimensions in mm (inches)	DESCRIPTION & CABLE TYPE RG-/U	INSULATION	CRIMP TOOL	PART NUMBER
	015.5 (10.608') 012.6 (0.494')	Bulkhead Adapter -Isolated	Teflon	N/A	AC-BNC-JJA-75T*	
	INSERT WASHER NUT		Jack to Jack - Straight Bayonet Lock to Bayonet Lock			
	INSERT WASHER NUT	Bulkhead Adapter -Isolated	Teflon	N/A	AC-BNC-PJA-75T*	
		Jack to Jack - Straight Push on to Bayonet Lock				
10	3 (.118°)  1 (.558/g)  1 (.578)  1 (.578)  2 (.187)  2 (.1887)	Bulkhead Adapter -Isolated, 'D' Shell Housing Jack to Jack,Bayonet Lock to Bayonet Lock, Nickel Finish	Teflon	N/A	AC-BNC-JJ-75*	
		Bulkhead Adapter -Isolated, 'D' Shell Housing Jack to Jack,Bayonet Lock to Bayonet Lock, Black Finish	Teflon	N/A	AC-BNC-JJ-75B*	
	3 (118°)  19 (748°)  26 (1024′)  327 (1287′)	Bulkhead Adapter -Isolated, 'D' Shell Housing Jack to Jack, Push on to Bayonet Lock, Nickel Finish	Teflon	N/A	AC-BNC-PJ-75*	
		Bulkhead Adapter -Isolated, 'D' Shell Housing Jack to Jack,Push on to Bayonet Lock, Black Finish	Teflon	N/A	AC-BNC-PJ-75B*	
	19 [748]) -26 [1024] -30 [1187]	Bulkhead Receptacle -Iso- lated, 'D' Shell Housing Jack to Solder Bucket with Ground Tag, Nickel Finish	Nylon	N/A	AC-BNC-JS-75	
		Bulkhead Receptacle -Iso- lated, 'D' Shell Housing Jack to Solder Bucket with Ground Tag, Black Finish	Nylon	N/A	AC-BNC-JS-75B	
	20.6 [0.811] -		U - Link Centre to Centre - 20.6 mm	Teflon	N/A	BNC-U-LINK 75*1
FO			<b>Note:</b> Custom Sizes available please contact factory.			

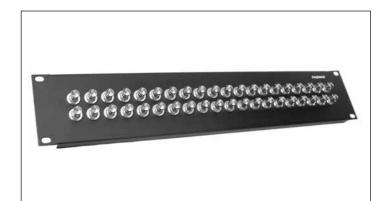


## **BNC 75 RF ACCESSORIES AND TOOLING**

PRODUCT - FIGURE	DESCRIPTION	DIE CAVITIES	CABLE TYPE RG-/U	CONNECTOR GUIDE	PART NUMBER
	Crimp tool with Die Set	.255 / .213 / .068	59 / 62	Α	47-10070
		.178 / .128 / .068	179 / 187 / 180 / 195	В	47-10150
		.429 / .100 / .080	11	D	47-10090
//\		.324/.255/ .068/.042	6 / 59 / B8281	Е	47-10110
11 4		.213/.178 /.068/.042	AT&T 735A, B1855A, B8218	F	47-10120

Note: \*True 75 ohm.

## **BNC PATCH PANELS**



#### Features:

- Amphenol True 75 Ohm 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 (refer to page 84 for specifications)	PART NUMBER
1RU 1X20 Patch Panel, Supplied with 1 ID label	Steel / Black	Empty Panel	AC-BNC20M
• 8666666666666666	Steel / Black	AC-BNC-JJA-75	AC-BNC20MJ75
•	Steel / Black	AC-BNC-PJA-75	AC-BNC20MP75
	Aluminium / Clear	Empty Panel	AC-BNC20A
482 [18.976"] ————————————————————————————————————	Aluminium / Clear	AC-BNC-JJA-75	AC-BNC20AJ75
00000000000000000000000000000000000000	Aluminium / Clear	AC-BNC-PJA-75	AC-BNC20AP75
20.50 [.807"] TYP 20.50 [1.283"]	Aluminium / Black	Empty Panel	AC-BNC20B
	Aluminium / Black	AC-BNC-JJA-75	AC-BNC20BJ75
	Aluminium / Black	AC-BNC-PJA-75	AC-BNC20BP75
2RU 2X20 Patch Panel, Supplied with 2	Steel / Black	Empty Panel	AC-BNC40M
ID labels	Steel / Black	AC-BNC-JJA-75	AC-BNC40MJ75
	Steel / Black	AC-BNC-PJA-75	AC-BNC40MP75
	Aluminium / Clear	Empty Panel	AC-BNC40A
<b>~</b> ————482 [18.976"]———⊶	Aluminium / Clear	AC-BNC-JJA-75	AC-BNC40AJ75
464.5 [18.287"] TYP 13.70 [.539"]	Aluminium / Clear	AC-BNC-PJA-75	AC-BNC40AP75
00000000000000000000000000000000000000	Aluminium / Black	Empty Panel	AC-BNC40B
20.50 [.807"] TYP	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

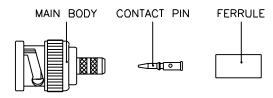


## **BNC 75 RF ASSEMBLY INSTRUCTIONS**

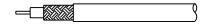
## **ASSEMBLY A**

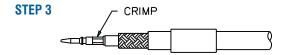
## **ASSEMBLY B**

## STEP 1

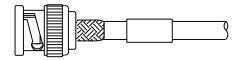


### STEP 2

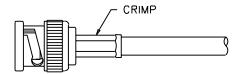




### STEP 4

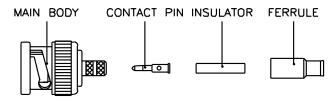


### STEP 5

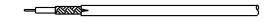


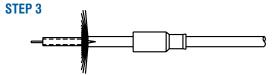
- STEP 1. All parts of the connector are shown. A crimp tool is necessary to complete the connection.
- STEP 2. Strip the cable inner conductor, dielectric, braid, and jacket as per "RECOMMENDED CABLE STRIPPING DIM'S" in catalogue.
- STEP 3. Insert inner conductor into the CONTACT PIN, crimp it with 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.

## STEP 1

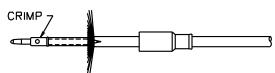


## STEP 2

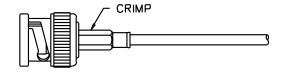




### STEP 4



#### 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.





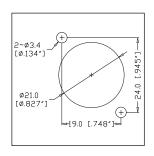
## STANDARD DATA BNC 75 RF CONNECTORS

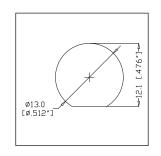
		VAI	.UE	
GENERAL	Mating	Bayonet Lock		
CHARACTERISTICS	Cable Attachment	Crimp -	Crimp	
	Environmental	Complies with EU RoHS 2 Directive 2011/65/EU		
ELECTRICAL	Impedance	75Ω		
CHARACTERISTICS	Frequency Range - Standard	0 - 1 GHz		
	- True 75 Ohm	0 - 4	GHz	
	Voltage Rating	500V	RMS	
	Dielectric withstanding voltage	1500 Vo	olts RMS	
	VSWR - Standard	1.05+0.1f(GHz) DC to 1 GHz 1.5+0.1f(GHz) DC to 4 GHz		
	- True 75 Ohm			
	Contact Resistance			
	Centre Contact	1.5 milliohm  1.0 milliohm  5000 MΩ (min.)		
	Outer Contact			
	Insulation Resisance			
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	

**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