

BNC

75 Ω Cable Connectors



NEUTRIK introduces BNC 75 Ω cable connectors in push-pull, rear twist and tiny rear twist versions. Featuring a true 75 Ω design that meets the stringent requirements of HDTV/DVD these connectors sustain consistent impedance at high frequencies up to 3GHz; are easy to handle in high density applications such as video patchbays and switchers; shows excellent return loss and VSWR; consist of machined parts that are precisely made to our high standards; and offer a center pin assembly with a snug fit to provide tactile indication when the contact is snapped into position.

Push-Pull

- Unique push-pull locking system is ideal for ultra high density applications, patching, etc.
- Assembly is fast and easy and requires only a standard center contact crimp after cable prep.
- Use of standard crimp size eliminates the need for different crimp dies and facilitates field repair.
- Innovative screw lock cable retention with the jacket providing superior pull strength.
- Accessories include color coded boots in 10 standard and 3 transparent colors.

Rear Twist/Rear Twist Tiny

- "Rear Twist Principle" locking/unlocking using the easily accessible soft touch boot (patent pending).
- Ideal for recessed bulkheads where access to the "head" of the connector might be an issue. These connectors turn from the back not the front.
- Shield and jacket crimp technology prevents the problem of an exposed grounding braid on cable assemblies.
- Accessories include color coded boots in 10 standard colors, crimp tool and dies.

 **NEUTRIK**[®]
CONNECTING THE WORLD

Neutrik USA, Inc.
195 Lehigh Avenue, Lakewood, NJ 08701-4527
Phone: 732-901-9488 Fax: 732-901-9608
E-Mail: info@neutrikusa.com Web Site: www.neutrikusa.com

TECHNICAL DATA

ELECTRICAL

Impedance:	75Ω	PUSH-PULL X	REAR TWIST X	REAR TWIST-TINY X
Rated voltage:	500 Volts rms	X	X	250 Volts RMS
Insulation resistance:	> 5 • 10 ⁹ Ω	X	X	X
Dielectric withstanding voltage:	1500 V ac	X	X	750 Volts RMS
VSWR / Return Loss:	≤ 1.05 / >32 dB up to 1 GHz	X	X	≤ 1.10 / >26 dB up to 1 GHz
	≤ 1.065 / > 30 dB up to 2 GHz	X	X	≤ 1.14 / >24 dB up to 2 GHz
	≤ 1.10 / > 26 dB up to 3 GHz	X	X	≤ 1.22 / >20 dB up to 3 GHz
Inner contact resistance:	≤ 3mΩ (initial)	X	X	X
Outer contact resistance:	≤ 2mΩ (initial)	X	X	X

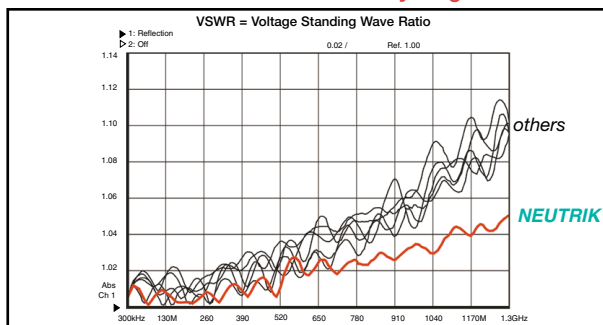
MECHANICAL

Cable Anchoring:	NEUTRIK® chuck principle Crimp ferrule	X	X	X
Durability:	500 cycles minimum	X	X	X
Center contact retention:	> 30 N	X	X	X
Engagement force:	< 20 N	X	X	X
Solderability:	complies with IEC 68-2-20	X	X	X
Contact crimpability:	complies with IEC 60803 & IEC 60352-2	X	X	X
Crimp tool for center contact:	HX-BNC / DIE-BNC-P	X	X	X

MATERIALS

Shell:		Brass CuZn39Pb3, OPTALLOY® coated Polyamid PA Gr50, PVZ 3H	Brass CuZn39Pb3, OPTALLOY® coated Grilon PVZ 15H/PU 95 Sh	Brass CuZn39Pb3, OPTALLOY® coated Grilon PVZ 15H/PU 95 Sh
Ground contact:		Brass CuSn6, 0.2 μm AuCo over 2μm NiP15 (TRIBOR®)	Bronze CuSn6, 0.2 μm AuCo over 2μm NiP15 (TRIBOR®) Brass CuZn39Pb3, OPTALLOY® coated	Bronze CuSn6, 0.2 μm AuCo over 2μm NiP15 (TRIBOR®) Brass CuZn39Pb3, OPTALLOY® coated
Center contact:	Pin 0.6: Brass CuZn35Pb2, 0.2 μm AuCo (Duor®) Pin 0.7: Brass CuZn35Pb2, 0.2 μm AuCo (Tribor®) Pin 0.9: Brass CuZn35Pb2, 0.2 μm AuCo (Redgold) Pin 1.1: Brass CuZn35Pb2, 0.2 μm Palladium Pin 1.2: Brass CuZn35Pb2, 0.2 μm AuCo (Tribor®) Pin 0.4: Brass CuZn35Pb2, 0.2 μm Palladium Pin 0.5: Brass CuZn35Pb2, 0.2 μm AuCo (Redgold)	Coding Ring: Brown/Beige Red Orange Blue Yellow Black Green	See ordering information for specifics. Contacts now available as separate items. Contact factory for details.	
Chuck:	Polyacetal POM	X		
Insulator:	Teflon PTFE	X	X	X
Temperature range:		-30°C to +40°C	-30°C to +85°C	-30°C to +85°C

Technical Data can only be guaranteed for use with cable shown on ordering chart.



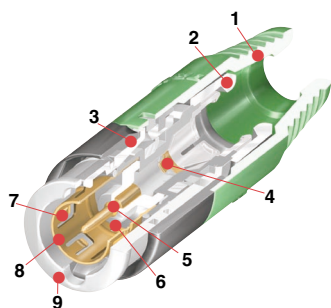
Comparison between NEUTRIK BNC and 5 competitive products

NEUTRIK BNC shows excellent VSWR data of max. 1.05 @ 1.3 GHz. Test results obtained with BNC plugs on each end of 1 m RG59 B/U cable, terminated with 75Ω load.

NOTE: Uncompressed HDTV signals result in data rates of up to 1.5 Gb/s. This corresponds to a serial data stream with fundamental frequency of 750 MHz maximum. Taking into account the third harmonic an effective Bandwidth of 2.4 GHz is specified according to SMPTE 292M.

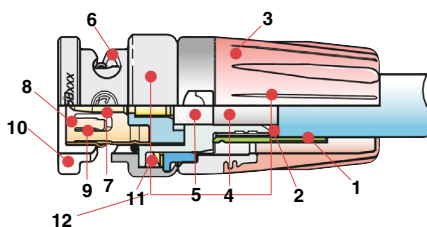
CROSS-SECTION DETAIL

PUSH-PULL



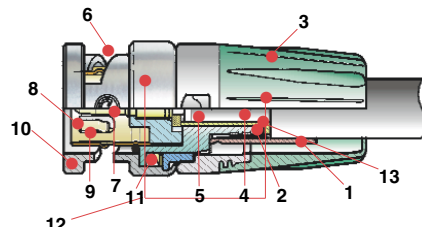
1. Push-Pull Sleeve for easy handling in high density applications and excellent cable protection.
2. Unique strain relief with the proven NEUTRIK chuck principle, no crimping is necessary.
3. Axial spring, accommodates tolerances and assures seal.
4. Rear gold plated screen contact.
5. Machined center contact is gold plated, optimizing contact performance.
6. Gold plated screen contact minimizes electrical resistance.
7. Locking latch allows quick "push-pull" connections.
8. Protruding spring fingers at the ideal contact position are well protected against mechanical damage.
9. Machined brass shell provides outstanding durability.

REAR TWIST



1. Screen and cable jacket - crimp instead of screen crimp. Machined sleeve with grooved inner surface fixes the cable jacket and prevents tearing braids.
2. Specially designed area for foil shielded cables to be easily inserted.
3. Boot in 10 resistor colors acts as "Rear Twist". (9 colors for "Rear Twist Tiny")
4. Cable foil shield.
5. Cable dielectricum.
6. "Bayonet twist" connection.
7. Gold plated machined center contact optimizes contact performance.
8. Gold plated screen contact minimizes electrical resistance.
9. Protruding spring fingers at the ideal contact position are well protected against mechanical damage.
10. Machined brass shell provides outstanding durability.
11. Axial spring compensates tolerances and assures seal.
12. Precise design assures that the continuation of the 75Ω impedance is guaranteed.
13. A leading ferrule.

REAR TWIST TINY



ACCESSORIES

Bushing

Part #: BSB-COLOR
Standard bushing in black
10 coding & 3 translucent colors available

B-Black
BR-Brown
R-Red
O-Orange
Y-Yellow
GN-Green
BL-Blue
V-Violet
GR-Gray
WT-White
TR-Translucent Red
TBL-Translucent. Blue
TGN-Translucent Green



Bushing

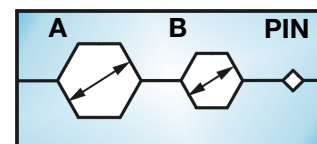
Part #: BST-COLOR
Standard sleeve in black
10 coding colors available

B-Black
BR-Brown
R-Red
O-Orange
Y-Yellow
GN-Green
BL-Blue
V-Violet
GR-Gray
WT-White



Crimp Tool

- Frame HXBNC
- Die DIE-BNC**



** See crimp die column under ordering information on back page.

ORDERING INFORMATION

N	B	N	C	75	P	L	S	9
NEUTRIK	BNC	N=Normal T=Tiny	C=Cable Connector	IMPEDANCE	P=Push- Pull B=Bayonet Rear Twist	A to Z	A to Z	4 to 12

Dimensional drawings are available at
www.neutrik.com (head office) in the PRODUCTS section under CONNECTORS

ORDERING INFORMATION - PUSH-PULL BNC

Part No.	Center Contact Plating	Cable Type							
		Belden	Canare	Cmscpe	Gepco	Nokia/Draka	Sommer	Suhner	Others
NBNC75PDE6	G	1855A		7538					Cordial CVI 4(5...)
NBNC75PFE6	G								Kansai 3C-5S
NBNC75PFE7	G	46899				0.6/2.8AF SDV-S-LFH, SDV-75	600-0101M 600-0104M		Cordial CVI 06-28
NBMNC75PGE7	G		V*-3C						Kansai 0.5M3C-2V
NBNC75PIE9	R	1506A		2065V					
NBNC75PLE9	R		V*-4 CFB						
NBNC75PLS9	R	1505A 1426A	L-4 CFB	5565	VPM2000	0.8/3.7 AF	600-0451	S04263	
NBNC75PNS7	G	8241	LV-61S	5563		0.6/3.7	600-0051(M,L,S) 600-0054(M,L,S)	G04233D	RG59B/U,BBC PSF 1/3 Cordial CVI (CVM) 06-37
NBNC75PNS9	R								Helix 734
NBNC75PQS11	P	1695A		2279V					
NBNC75PTS9	R								Hirschmann KOKA 712Cu
NBNC75PTS11	P	1694A		5765	VSD2001	1.0/4.8 AF		S05133-07 S05163-02	Eupen 705 CRT 5V-HS ELF Inc. Cable
NBNC75PVS9	R		V*-5C						
NBNC75PVS11	P		V*-5 CFB			SDV-L			
NBNC75PVS12									Wisi MK 99 A (ORF)

*(3-5)

ORDERING INFORMATION - REAR TWIST BNC

Part No.:	Center Contact Plating						Inner Conductor			Cable Type								
	Crimp Die:	Cable Jacket Crimp						Insulator	Cable OD	Belden	Canare	Cmscpe	Gepco	Nokia/Draka	Sommer	Suhner	Others	
		A	B	Pin	A	B	Pin											
NBNC75BDD6	G	DIE-BNC-JD	5.41/4.53	1.60 mm	[.213/.178/.063"]	0.6	2.6	4.0 mm	1855A			7538					Cordial CVI 4(5...)	
NBNC75BFG7	G	DIE-BNC-PG	6.47/5.00	1.60 mm	[.255/.197/.063"]	0.6	2.9	4.6 mm	46899					0.6/2.8 AF SDV -S-LFH,SDV-75	600-0101M 600-0104M		Cordial CVI 06-28	
NBNC75BFH6																	Kansai 3C-5S	
NBNC75BGG7	G	DIE-BNC-PG	6.47/5.00	1.60 mm	[.255/.197/.063"]	0.6	2.9	4.6 mm			V*-3C							
NBNC75BIJ9	R	DIE-BNC-JD	5.41/4.53	1.60 mm	[.213/.178/.063"]	0.8	3.4	5.0 mm	1506A			2065V						
NBNC75BIJ9	R	DIE-BNC-JD	5.41/4.53	1.60 mm	[.213/.178/.063"]	0.8	3.7	5.0 mm			LV-4CFB							
NBNC75BLP7	G	DIE-BNC-PG	6.47/5.00	1.60 mm	[.255/.197/.063"]	0.6	3.7	6.1 mm	8241		LV-61S	5563		0.6/3.7	600-0051(M,L,S) 600-0054(M,L,S)		RG59B/U Cordial CVI (CVM) 06-37	
NBNC75BLP9	R	DIE-BNC-PG	6.47/5.00	1.60 mm	[.255/.197/.063"]	0.8	3.7	6.1 mm	1505A 1426A		LV-4CFB	5565	VPM2000	0.8/3.7 AF	600-0451	S04263 S04233	RG59 B/U	
NBNC75BLS7	G	DIE-BNC-CS	4.06/7.01	1.60 mm	[.160/.276/.063"]	0.6	3.7	6.7 mm								G04233D (PTT 6010)	BBC PSF 1/3	
NBNC75BNP9	R	DIE-BNC-PG	6.47/5.00	1.60 mm	[.255/.197/.063"]	0.8	3.8	6.0 mm									Helix 734	
NBNC75BQP11	P	DIE-BNC-PG	6.47/5.00	1.60 mm	[.255/.197/.063"]	1.0	4.3	6.0 mm	1695A			2279V						
NBNC75BRS9	R	DIE-BNC-CS	4.06/7.01	1.60 mm	[.160/.276/.063"]	1.0	4.9	6.8 mm			V*-5C							
NBNC75BTS9	R	DIE-BNC-CS	4.06/7.01	1.60 mm	[.160/.276/.063"]	1.0	4.9	6.8 mm									Hirschmann KOKA 712Cu	
NBNC75BTS11	P	DIE-BNC-CS	4.06/7.01	1.60 mm	[.160/.276/.063"]	1.0	4.9	6.8 mm									Eupen 705 CRT 5V-HS	
NBNC75BTU11	P	DIE-BNC-U	7.36/	/1.60 mm	[.290/ / .063"]	1.0	4.6	7.0 mm	1694A			5765	VSD2001			S05133-07 S05163-02		
NBNC75BUU11	P	DIE-BNC-U	7.36/	/1.60 mm	[.290/ / .063"]	1.0	4.7	7.2 mm						1.0/4.8 AF				
NBNC75BWS11	P	DIE-BNC-CS	4.06/7.01	1.60 mm	[.160/.276/.063"]	1.0	4.9	6.8 mm			V*-5CFB			SDV-L			ELF Inc. Cable	
NBNC75BWS12	G	DIE-BNC-CS	4.06/7.01	1.60 mm	[.160/.276/.063"]	1.0	4.9	6.8 mm									Wisi MK 99 A (ORF)	
NBNC75BXY9	R	DIE-BNC-Y	8.23/	/1.60 mm	[.324/ / .063"]	0.8	5.0	7.8 mm	8281					0.8/4.9DZ				
NBNC75BY11	P	DIE-BNC-Y	8.23/	/1.60 mm	[.324/ / .063"]	1.0	4.9	7.7 mm			L-5CFB							

Bold print indicates die size.

*(3-5)

ORDERING INFORMATION - REAR TWIST TINY

Part No.:	Center Contact Plating						Inner Conductor			Cable Type							
	Crimp Die:	Cable Jacket Crimp						Insulator	Cable OD	Belden	Canare	Cmscpe	Nokia/Draka	Sommer	Suhner	Others	
		A	B	Pin	A	B	Pin										
NBTC75BFI4	P	DIE-BNC-CS	4.06/7.01	1.60 mm	[.160/.276/.063"]	0.3-35	1.55	2.55 mm	1520A, 1521A, 1522A				0.23/1.5		G 02233		
NBTC75BLI4	P	DIE-BNC-CS	4.06/7.01	1.60 mm	[.160/.276/.063"]	0.3	1.42	2.59 mm		L-1.5C2VS				600-025*-03(05)	S 02223	CM14B kroschu (341 270, 341 280)	
NBTC75BLI5	R	DIE-BNC-CS	4.06/7.01	1.60 mm	[.160/.276/.063"]	0.45	1.8	2.7 mm						600-0701 600-020*-03(05), 600-025*-03(05)		Procom	
NBTC75BNN5	R	DIE-BNC-JD	5.41/4.53	1.60 mm	[.213/.178/.063"]	0.45	1.95	2.8 mm				755-1103				Extron (BNC 5HR (P) Bulp)	
NBTC75BSS5	R	DIE-BNC-JD	5.41/4.53	1.60 mm	[.213/.178/.063"]	0.42	2.1	3.22 mm								AT&T 735, Comm-tech RGBHV	
NBTC75BVV5	R	DIE-BNC-PG	6.47/5.00	1.60 mm	[.255/.197/.063"]	0.48	2.29	3.71 mm	1406A, 1407B, 1417B								
NBNC75BVX6	G	DIE-BNC-PG	6.47/5.00	1.60 mm	[.255/.197/.063"]	0.51	2.3	3.7 mm					755-1001				
NBTC75BXX5	R	DIE-BNC-PG	6.47/5.00	1.60 mm	[.255/.197/.063"]	0.53	2.34	3.81 mm	8218								
NBTC75BXX6	G	DIE-BNC-PG	6.47/5.00	1.60 mm	[.255/.197/.063"]	0.43	2.39	3.81 mm	1865A			7536**					

Chart is constantly updated. Go to www.neutrik.com (head office). Look in the PRODUCTS section under CONNECTORS for BNC CONNECTORS. There you will find a section for CABLE OVERVIEW.