



## NBNC75BFG7X

The rearTWIST UHD BNC connectors are specifically designed for high resolution video signal transmissions. Due to the unique insulator and contact pin design, the connectors feature low return loss values for 4K and 8K signals.

### Features & Benefits

- Optimized contact pin and insulator design for UHD-data transmissions
- Swiss antraloy plating
- Improved return loss values at high frequencies
- Proven rearTWIST technology
- Fully compatible with conventional BNC chassis connectors

### Optimized Return Loss

Due to optimized insulator design and reduced crimp diameter from center pin the Neutrik rearTWIST UHD BNC connector achieves increased headroom compared to conventional BNC connectors and offers additional return loss reserve for potential impedance deviations resulting from cable bending, incorrect connector assembly or faulty connection interfaces without signal interruption.

For more details see Neutrik UHD BNC White Paper.

## Crimp Dimensions

In order to achieve optimum return loss values at high frequencies the crimp dimension of the contact pin has been reduced.

Pin:	1.07 mm
Shield:	5.00 mm
Crimp die:	DIE-R-BNCX-PDG

## Approved Cables

To guarantee high performance for each cable-connector combination at high frequencies Neutrik measured common COAX cables which are specifically designed for ultra high definition transmission (UHD). Find all approved cables listed below.

Suitable cables:

Bryant BD SD01, CAE HD0628LSZH, Canford SDV, Cordial CVI 06-28, Cordial CVI 06-28HD, Cordial CVI 06-28HD-FRNC, Cordial CVI 3-7, Draka 0.6/2.8 AF, Draka 0.6 L/2.8 AF, Extron BNC-5RC, Fuzion SD-1, Klotz V06/28, Klotz VMXx75Y, Kabeltronik HFV 0.6/2.8 AF- FRNC, Kabeltronik MVP 5x 0.6/2.8 AF-FRNC, Nexans HF 75 0,6/2,9 02YS(ST)CH, Percon VK5, Sommer 600-0101M, Sommer 600-0104M, Tesca Supra

UHD optimized cables:

Argosy Image 360, Belden 1855ENH, Belden 1855ECH, Belden 1855EFN, Belden 1855DNH, Belden 70080, Belden 70080NH, Belden 70080CH, Canford SDV-X-LFH, DirectCable 301-351 Evolution XPC, DirectCable 360-031 Evolution XPC, DirectCable 360-036 Evolution XPC, Draka HD Pro 0.6/2.8 AF, Draka Ultra HD PRO 50 UHD, Klotz V062SH

**Technical Information**

Product	
<b>Title</b>	NBNC75BFG7X
<b>Connection Type</b>	BNC 75 $\Omega$
<b>Gender</b>	male

Electrical	
<b>Contact resistance</b>	$\leq 3$ m $\Omega$ (inner)
<b>Contact resistance</b>	$\leq 2$ m $\Omega$ (outer)
<b>Dielectric strength</b>	1.5 kVdc
<b>Impedance</b>	75 $\Omega$
<b>Insulation resistance</b>	$> 5$ G $\Omega$
<b>Rated voltage</b>	$< 50$ V
<b>VSWR</b>	$\leq 1.06$ / $>30$ dB up to 6 GHz $\leq 1.13$ / $>24$ dB up to 12 GHz $\leq 1.22$ / $>20$ dB up to 18 GHz

Mechanical	
<b>Cable O.D.</b>	4.7 mm
<b>Cable retention</b>	$> 30$ N (center)
<b>Crimp size</b>	5.0 Hex crimp (shield)
<b>Crimp size (pin)</b>	1.07 crimp
<b>Insertion force</b>	$< 25$ N
<b>Lifetime</b>	$> 1000$ mating cycles
<b>Wiresize</b>	
<b>Locking device</b>	Bayonett
<b>Cable anchoring</b>	Jacket crimping

Material	
<b>Contacts</b>	Brass (CuZn35Pb2), 0.2 µm AuCo (center contact)
<b>Shell</b>	Brass (CuZn39Pb3)
<b>Shell plating</b>	Antraloy
<b>Insert</b>	PP

Environmental	
<b>Temperature range</b>	-30 °C to +85 °C
<b>Contact crimpability</b>	Complies with IEC 60803 and IEC 60352-2