



## NBNC75BXU13X

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



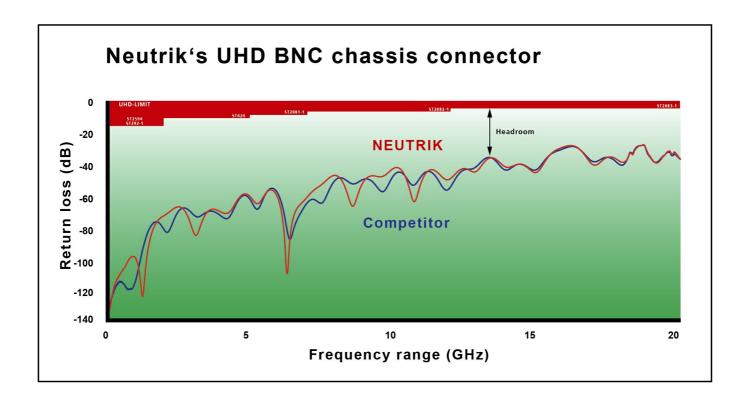
- ① Screen and cable jacket crimp instead of screen crimp only. Grooved inner surface holds the cable jacket to prevent tearing braids.
- ② High frequency optimized insulator design for UHD-transmissions.
- ③ Reduced pin diameter for performance improvement (return loss values).
- Swiss antralog plating
- ⑤ rearTWIST boot for easy access in high density applications.



#### **Optimized Return Loss**

Due to optimized insulator design and adjusted 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 adjusted.

Pin:	1.6 mm
Shield:	7.36 mm
Crimp die:	DIE-R-BNC-PU

#### **Approved Cables**

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

UHD optimized cables:

DRAKA HD PRO 100 UHD



# **Technical Information**

Product	
Title	NBNC75BXU13X
Connection Type	BNC 75 Ω
Gender	male

Electrical	
Contact resistance	$\leq$ 3 m $\Omega$ (inner)
Contact resistance	$\leq$ 2 m $\Omega$ (outer)
Dielectric strength	1.5 kVdc
Impedance	75 Ω
Insulation resistance	> 5 <b>G</b> Ω
Rated voltage	< 50 V
VSWR	≤ 1.6 / > 23 dB up to 6 GHz ≤ 2.3 / > 15 dB up to 12 GHz ≤ 3.9 / > 12 dB up to 18 GHz

Mechanical	
Cable O.D.	7.3 mm
Cable retention	> 30 N (center)
Crimp size	7.36 Hex crimp (shield)
Crimp size (pin)	1.6 crimp
Insertion force	< 25 N
Lifetime	> 1000 mating cycles
Locking device	Bayonett
Cable anchoring	Jacket crimping



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

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