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INDUSTRIAL ELECTRONICS

**Higher,  
faster,  
further ...**



**[HD]<sup>3</sup>**  
High Definition  
High Density  
High Durability

Coax

# **BNC EasyGrip HD<sup>3</sup>**

Connectors for HDTV signal transmission  
in professional applications

# 1 Connector. 3 Advantages.

Telegärtner has now developed the BNC EasyGrip HD<sup>3</sup> connector series which specifically addresses the special requirements of HDTV signal transmission in professional applications such as in TV studios, outdoor broadcasting vehicles, and large live events.

The BNC EasyGrip HD<sup>3</sup> series conforms to the IEC Standard (IEC 61 169-8), and as such is fully compatible with all standard BNC 75 Ohm connectors. The series has the following distinguishing features:

**High Definition:** Excellent transmission characteristics up to 3 GHz (Return Loss values of  $< -30$  dB (typical) and, therefore, totally suitable for HDTV).

**High Density:** Special grip features involving an extended and tapered coupling nut to facilitate connecting and disconnecting the connectors to high packing density panels.

**High Durability:** The die-cast zinc housing with integrated strain relief ensures reliable protection against mechanical pressure, knocks, and undue stressing of the cable.

## More Advantageous: Features of the EasyGrip HD<sup>3</sup>



### Easy Grip

Large area for gripping the connector ensures quick and reliable connection.



### Strain relief

Specially designed cable boots guarantee a stress-free bending of the cable at its weakest point - i.e. where it exits the connector, thus ensuring long life of the cable assembly.



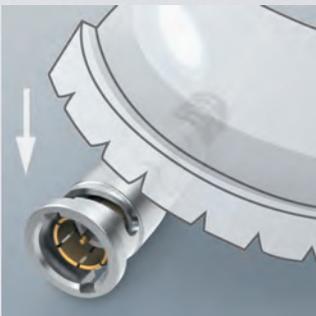
### High Packing Density

The reduced diameter of the knurled area at the rear end of the extended coupling nut allows for secure handling, even with high packing density panels. No special tooling required.



### Reliable Signal Transmission

High contact force and one-piece outer contact ensure low contact resistance.



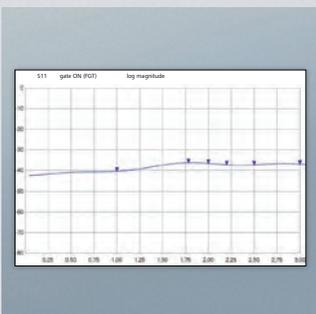
### Crush-Proof

The robust die-cast housing provides complete protection against damage caused by mechanical stress along the whole length of the connector.



### Connector Identification

Large area for individual labelling of the connector.



### HDTV suitable

Excellent Return Loss values guarantee optimum signal transmission up to 4.5 GHz.

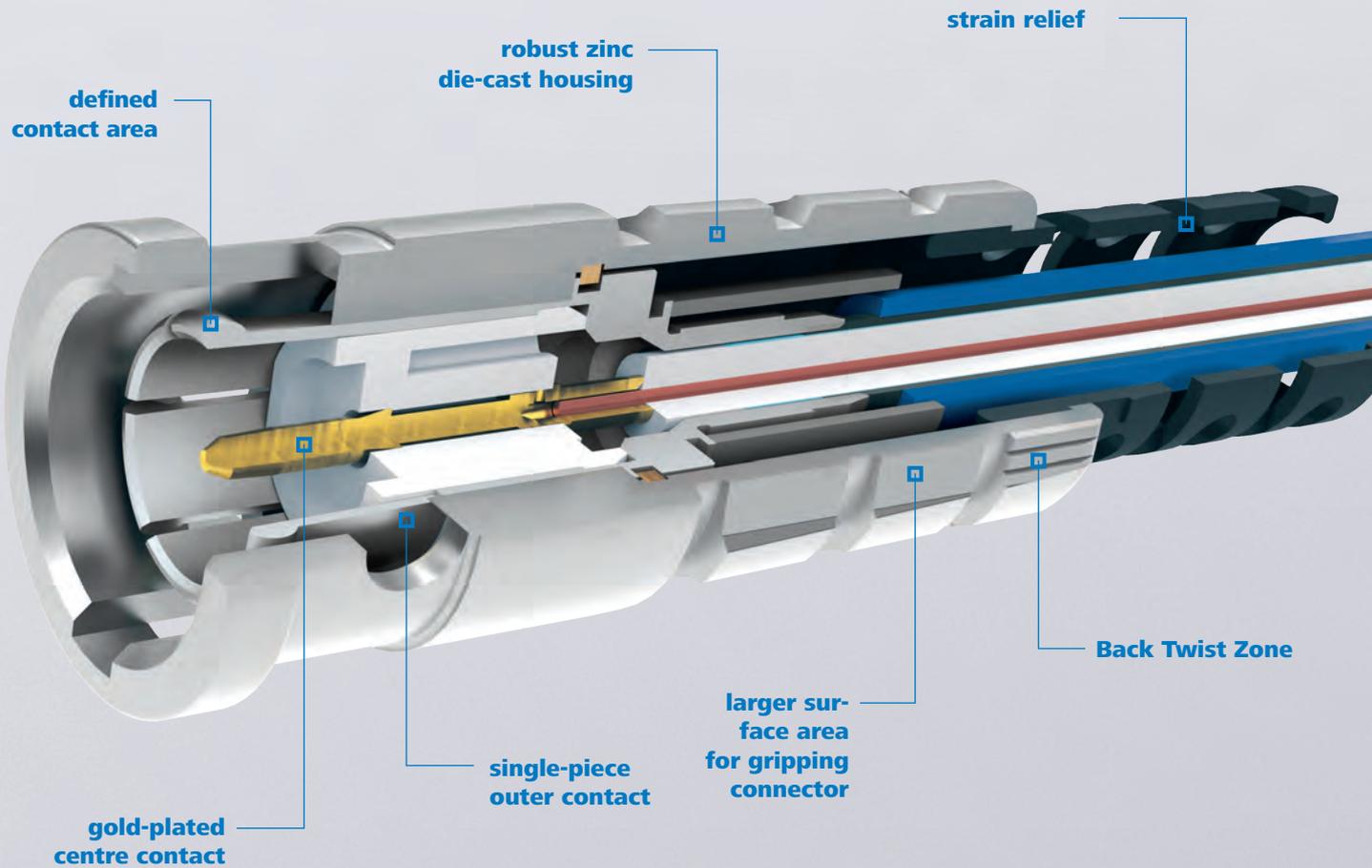


### Water- and Dust-Proof

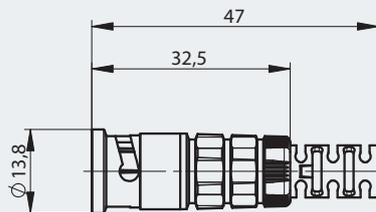
The special design guarantees IP 67 protection in the mating face. Using self-adhesive shrink-sleeving to protect the crimp ferrule makes the connector completely protected against water ingress.

## Better Thought-Through: EasyGrip HD<sup>3</sup> Elements

The BNC HD<sup>3</sup> series is Telegärtner's solution for the special requirements involved in the transmission of HDTV signals, and sets itself apart thanks to a number of well-thought-out product features:



### Technical Data



Technical Data			Assembly		Electrical Characteristics		
Pierce-Part	Material	Finish	Pierce-Part	Style	impedance	75 Ohm	
centre contact	brass	Au-plated	centre contact	Crimp	return-loss (typ)	1 GHz	36 dB
outer contact	brass	Ni-plated	outer contact	Crimp		2 GHz	31 dB
crimp sleeve	copper	Ni-plated				3 GHz	29 dB
insulator	PE				frequency	bis 4,5 GHz	
gasket	MVQ				ROHS conformity	2002/95/EC	
					standard	IEC 61 169-8	

## Connector



Order no.	Cable group	Inner cond. Ø [mm]	Dielectric Ø [mm]	Outer cond. Ø [mm]	Cable Sheath Ø [mm]	Belden	Draka	Bedeá
J01002A0080	G4	0,30 +/- 0,05	1,50* +/- 0,20	2,00 +/- 0,20	2,70 +/- 0,30	179 DT		
J01002A0081	G41	0,60 +/- 0,03	2,90* +/- 0,15	3,50 +/- 0,10	4,70 +/- 0,50	1855 A	0,6 / 2,8 AF	0,6 / 2,8C
J01002A0082	G39	0,80 +/- 0,05	3,80* +/- 0,10	4,50 +/- 0,10	5,90 +/- 0,40	1505 A	0,8 / 3,7 AF	0,83,7C
J01002A0083	G27	1,00 +/- 0,02	4,65* +/- 0,10	5,15 +/- 0,10	6,75 +/- 0,25	1694 A	1,0 / 4,8 AF	1,0 / 4,8C

\*incl. foil

## Tooling



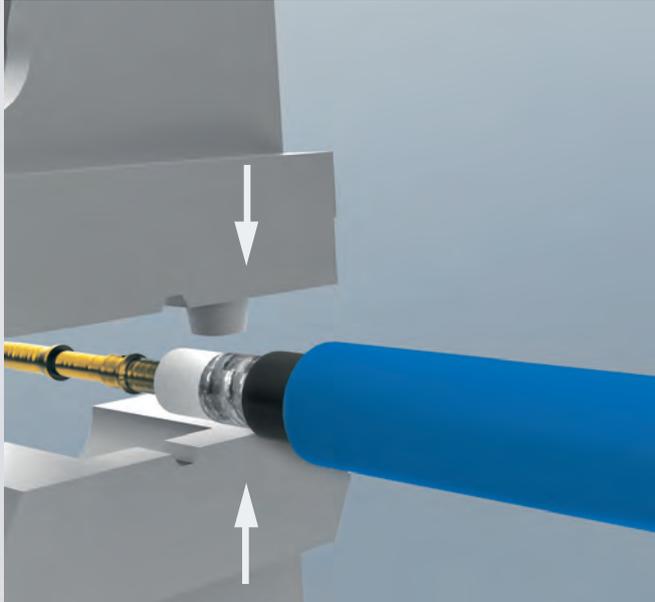
Order no.	Product description	Cable group	Crimp-Die dimensions (hex)	
			Inner conductor	outer conductor
N00000A0017	XM crimping tool			
N01003A0009	interchangeable crimp-die for J01002A0080	G4	0,80 x 1,50	3,25 x 8,0
N01003A0039	interchangeable crimp-die for J01002A0081	G41	1,25 x 2,50	5,41 x 8,0
N01003A0056	interchangeable crimp-die for J01002A0082	G39	1,25 x 2,50	6,48 x 8,0
N01003A0004	interchangeable crimp-die for J01002A0083	G27	1,69 x 2,50	7,01 x 8,0

## Coloured strain reliefs

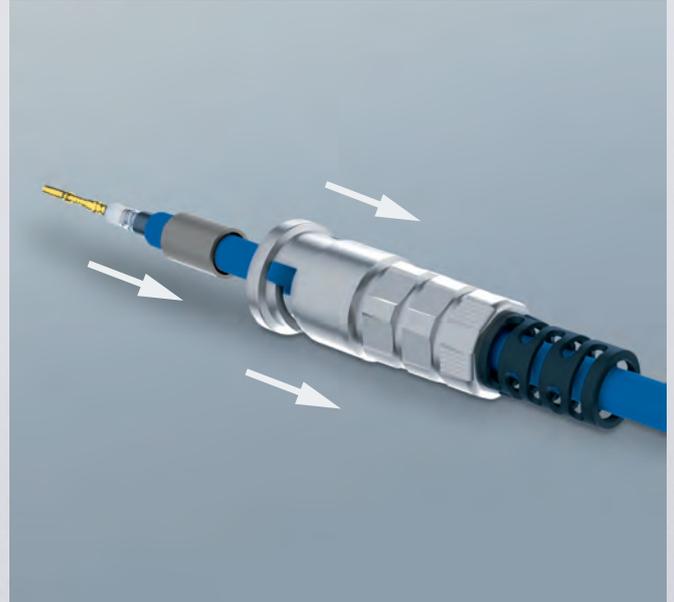


For cable group	for connector	red	blue	yellow	lilac	green
G4	J01002A0080	B00080B0116	B00080C0116	B00080D0116	B00080F0116	B00080E0116
G41 + G39	J01002A0081/82	B00080B0117	B00080C0117	B00080D0117	B00080F0117	B00080E0117
G27	J01002A0083	B00080B0118	B00080C0118	B00080D0118	B00080F0118	B00080E0118

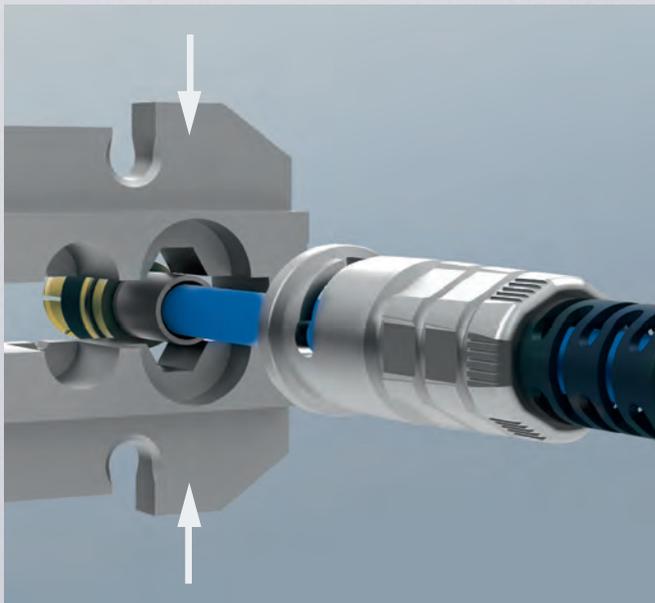
## Simpler: Assembling the EasyGrip HD<sup>3</sup>



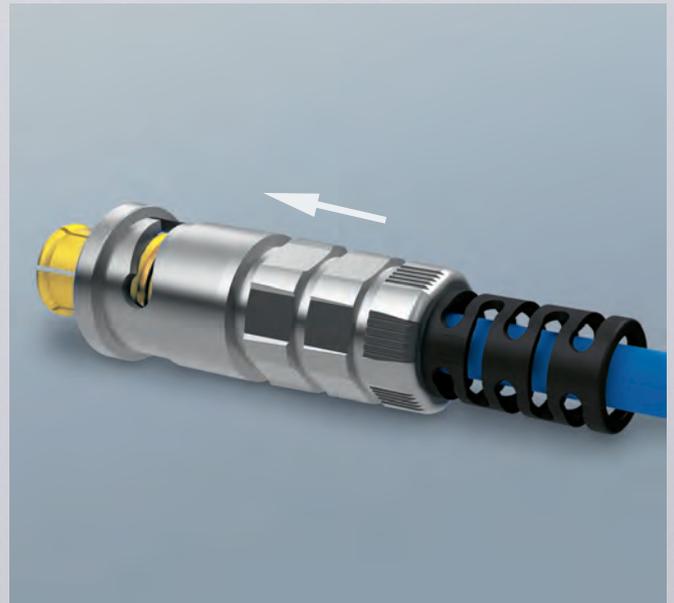
**1 Crimp centre contact onto the cable**



**2 Feed bayonet coupling nut, strain relief and crimp sleeve over the cable**



**3 Crimp the outer conductor**



**4 Snap-in the bayonet coupling nut**

### **BNC EasyGrip HD<sup>3</sup>: the 3rd dimension in signal transmission**

- ✓ Developed specifically for HDTV signal transmission in professional applications
- ✓ High packing-density and simple assembly
- ✓ Heavy duty: withstands 130 kg weight
- ✓ Large „EasyGrip“ area for reliable and fast connection
- ✓ Reliable signal transmission up to 4.5 GHz

## More Customised: assembling RF cables online

Do you want to assemble RF cables with coaxial connectors individually and add strain relief, labelling and cable length according to your requirements? Then the COAX configurator developed by Telegärtner is just what you need:

... **simple**, and is available to you around the clock

... **fast**, and allows you to configure your customised assembly with just a few clicks, thanks to a logical and easy-to-understand user-guidance

... **user-orientated**, and offers you exactly the information you require in order to configure your individual cable assembly



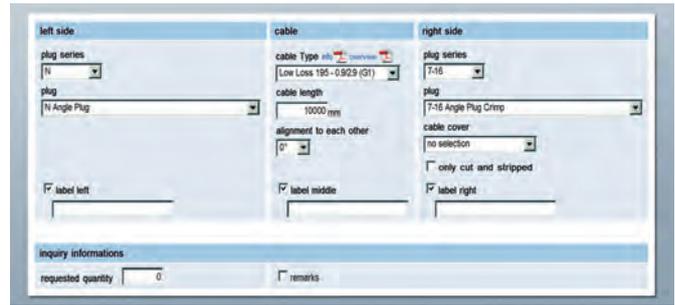
you can find all the COAX products in the overview in our

**COAX  
ONLINE CATALOGUE**

[www.telegaertner.com](http://www.telegaertner.com)

The banner features a blue background with a white mouse cursor pointing to the website URL. On the right side, there is a small image of a TNC connector and a list of connector types: TNC, BNC, and TNC.

## User-friendly input mask ...



The screenshot shows a web-based configuration interface for RF cables. It is divided into three main sections: 'left side', 'cable', and 'right side'. The 'left side' section includes a 'plug series' dropdown menu set to 'N' and a 'plug' dropdown menu set to 'N Angle Plug'. The 'cable' section includes a 'cable Type' dropdown menu set to 'Low Loss 195-0929 (G1)', a 'cable length' input field set to '10000 mm', and an 'alignment to each other' dropdown menu set to '0'. The 'right side' section includes a 'plug series' dropdown menu set to '7-16', a 'plug' dropdown menu set to '7-16 Angle Plug Crimp', and a 'cable cover' dropdown menu set to 'no selection'. There are also checkboxes for 'label left', 'label middle', and 'label right'. At the bottom, there is an 'inquiry informations' section with a 'requested quantity' input field set to '0' and a 'remarks' text area.

## ... and creation of a clear specification (PDF)



## ⇒ for individually assembled RF cables



**Telegärtner  
Karl Gärtner GmbH**

Lerchenstr. 35  
D-71144 Steinenbronn

Telefon: +49 (0) 71 57/1 25-100  
Telefax: +49 (0) 71 57/1 25-120

E-Mail: [info@telegaertner.com](mailto:info@telegaertner.com)  
Web: [www.telegaertner.com](http://www.telegaertner.com)

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