

The series **Video HDTV** was specially developed for digital Broadcasting, HD-SDI 270 MB, 1.5 and 3G.

This connector links mechanical Push-Pull-locking, electrical reliability (high insertion depth, detent, gold plated outer conductor etc.) and excellent characteristics (low loss, high return loss, low reflection, high screen attenuation due to RF-density housing).

Due to the exactly fitting to the surge impedance of 75 Ohm, the series Video HDTV can be used up to 12.5 GHz and higher – important for the harmonics transfer and digital signals.

The reliable pin-socket principle is used for the contact system. The cable assembly takes place with a crimp connection. The connectors are suitable for flexible coaxial cables, 3 up to 11 mm.



## Electrical Characteristics (at 20 °C and 65 % relative humidity)

Impedance..... 75 Ω  
 Frequency range ..... 0 up to 12 GHz (24 Gbit/s)

### Contact resistance (plug-socket inserted)

Inner conductor ..... ≤ 3 mΩ  
 Outer conductor ..... ≤ 1 mΩ

Insulation resistance..... ≥ 5 GΩ

### Test voltage $U_{eff}$

Connectors for cable diameter ..... ≤ 4 mm 1000 V  
 Connectors for cable diameter ..... ≥ 5 mm 1500 V

### Operating voltage $U_{eff}$

Connectors for cable diameter ..... ≤ 4 mm 400 V  
 Connectors for cable diameter ..... ≥ 5 mm 500 V

Operating current..... ≤ 1.5 A

**Operating Temperature Range**..... - 60 °C up to +165 °C

## Mechanical Characteristics

Durability (mating cycles) ..... ≥ 5000  
 RoHS ..... compliant

## Construction Plug

Inner conductor..... Brass hard gold-plated  
 Outer conductor..... Brass hard gold-plated

## Construction Socket

Inner conductor..... Beryllium copper hard-gold plated  
 Outer conductor..... Brass hard gold-plated

Other material parts..... Brass chrome-plated, nickel-plated  
 Copper nickel-plated

Insulation parts ..... Polytetrafluorethylene (PTFE)

Strain Relief Sleeves ..... Polyurethane (PUR)

The specified data serve only to describe the product and should not be considered legally binding, guaranteed properties. Depending on the application, design, type of cable and assembly method the specified values may differ. We reserve the right to make constructional changes, determine delivery and are not responsible for any errors and omissions.

### Individual customized High Performance Cable Connectors

On the basis of our 90 years of experience as Developer and Producer of high quality cable connectors we are able to provide customer-specific solutions by manufacturing individual precision cable connectors from Damar & Hagen.

#### Options

Surface .....	special surfaces according to customers requirement, for the layer structure and also for the layer thicknesses
Cable connections.....	halogen-free cables, two braids cable, multi-wire cable, unusual cable diameter, different cable length, additional clamping of the cable sheath, Assembly by our company,
Dimensions.....	all dimensions, distances, nuts, tread length mounting holes, insulation bases etc. are variable according to customers requirement
Electrically variable.....	special resistors, circuits, contacts are possible According to customers requirement
Insulating parts, gaskets and contacts .....	other colours and materials are possible (e. g. Beryllium bronze for outer conductor contact)