

The series **Video HDTV** was specially developed for digital Broadcasting, HD-SDI 270 Mbit/s, 1,5 and 6 Gbit/s.

This connector links mechanical Push-Pull-locking, electrical reliability (high insertion depth, detent, gold plated outer conductor etc.) and good 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 3 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 3 GHz (6 Gbit/s)
Return loss.....	≥ 20 dB up tp 3 GHz
Reflection factor.....	≤ 10 % bis 3 GHz

Contact resistance (plug-socket inserted)

Inner conductor	≤ 3 m Ω
Outer conductor	≤ 1 m Ω

Insulation resistance	≥ 5 G Ω
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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
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Operating Temperature Range.....	- 60 °C up to +165 °C
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Mechanical Characteristics

Durability (mating cycles)	≥ 5000
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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
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Insulation parts	Polytetrafluorethylene (PTFE)
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Strain Relief Sleeves	Polyurethane (PUR)
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RoHS	compliant
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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)