Product Description

DIN 1.0/2.3

The Connectors of the series 1.0/2.3 from Damar & Hagen combines established knowledge with the famous quality “Made in Germany”.

Surge Impedance amounts 75 ohm.

Due to the excellent electrical characteristics of these small coaxial connectors, they can be used up to a frequency of 6 GHz easily.

They are eminently suitable for a transfer of data signals with high Bit-Rates.

The small dimension of these connectors enables a fast, easy and reliable connection in confined spaces and a high packing density

The cable assembly is performed by easily crimping of the inner- and outer conductor and this contributes to a maximum of efficiency.

All of these connectors have a groove, so they can be stuck or removed by a socket wrench.

This makes the connector an ideal solution for Digital Broadcast signal formats such as AES-Audio, SDI, HDTV and Ultra HD/4K Video especially in high density mechanical application for Audio and Video Router.

DAMAR & HAGEN

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The series 1.0/2.3 connectors from Damar & Hagen combine proven know-how with outstanding quality, "Made in Germany". The characteristic impedance is 75 Ohm. Thanks to excellent electrical properties, these small, coaxial connectors can be used without problem at frequencies up to 6 GHz.
Thus, they are ideally suited for transmitting data signals with high bit rates (e.g. for HDTV signals).
The small dimensions of these connectors facilitate fast, simple and reliable connection in the tightest of spaces, making possible a high packing density. Cables are assembled through simple crimping, thereby contributing to a high level of efficiency.

Electrical Characteristics

Characteristic impedance	75 Ω
Frequency range	Up to 6 GHz
Return loss*	≥ 29 dB up to 2 GHz
	≥ 26 dB up to 4 GHz
	≥ 25 dB up to 6 GHz
Screening attenuation	≥ 90 d
Contact resistance (connector - socket connected)	
Inner conductor	≤4 mΩ
Outer conductor	≤ 4 mΩ
Test voltage	500 $V_{eff.}$ 50 Hz

Mechanical Characteristics

Contact system	Pin-socket principle
Cable connection - inner and outer conductor	Crimping technique
Cable diameter	2 to 5 mm
Tensile load	Up to max. 100 N, dependent on breaking strength of the used cable
Coupling type (DIN 47297)	Push-Pull System (Self-latching) or Type B (Snap-on)
Mating force	≤ 20 N
Withdrawal force	≤ 30 N
Mating cycles	≥ 500 reliable connection
Operating temperature range	-60 °C to +110 °C

Construction

Contact parts	Hard-gold-plated brass
Insulation material	PTFE
Housing parts	Nickel-plated brass / stainless stee
Crimp sleeve	Nickel-plated copper

*Depending on cable type and/or application, deviations are possible.

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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 custumer-specific solutions by manufacturing individual presicion 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)