



All dimensions are in mm; tolerances according to ISO 2768 m-H

Interface

According to DIN 72594-1

Documents

Assembly instruction MA_59V058

Material and plating

Connector parts

- Center contact
- Outer contact
- Dielectric
- Crimping ferrule

Material

- Spring bronze
- Brass
- PA12-GB30 (f)
- Copper

Plating

- Gold, min. 0.8 µm, over nickel
- Nickel, 3-6 µm
- Nickel, 2.5-5 µm

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RF_35/09_14/6.2

FAKRA -
HF

STRAIGHT PLUG

59S100-102A4

Electrical data

Impedance	50 Ω
Frequency	DC to 6 GHz
Return loss	≥ 30 dB, DC to 1 GHz ≥ 24 dB, DC to 3 GHz ≥ 15 dB, DC to 6 GHz
Insertion loss	≤ 0.1 x √f(GHz) dB
Insulation resistance	≥ 1x10 ³ MΩ
Center contact resistance	≤ 5 mΩ
Outer contact resistance	≤ 5 mΩ
Test voltage	750 V rms
Working voltage	335 V rms
Power current	≤ 1 A DC
RF-leakage	≥ 65 dB up to 1 GHz

- Limitations are possible due to the used cable type -

Mechanical data

Mating cycles	≥ 25
Engagement force	≤ 25 N
Disengagement force	≥ 2 N

Environmental data

Temperature range	-40°C to +105°C
Thermal shock	DIN 72594-2 clause 8.2
Temperature and humidity	DIN 72594-2 clause 8.3
Vibration and mechanical shock	DIN 72594-2 clause 8.1 (f)
Dry heat	DIN 72594-2 clause 8.4
RoHS (f)	compliant

- Limitations are possible due to the used cable type -

Tooling

Crimping tool	11W150-000
Crimp insert outer contact	11W150-302
Crimping tool - Incl. Crimp insert center contact	11W161-800

Suitable cables

Cable type	RG 174; RG 316
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Packing

Standard	10 / 500 / 5.000 / 20.000 pcs in box; center contact on reel
Weight	2.0 g/pce

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Change History

Rev.	Date	Change
f00/f01	14.03.17	-Dielectric material data: Added GB30 to PA12-GB30 according to precise material specification and delivery situation -DIN 72594-2 clause 6... to clause 8... -RoHS from "2002/95/EC (RoHS)" to "RoHS"

While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
T. Höfling	12.01.05	C. Anfang	14.03.17	f01	17-0384	R. Gnodtke	14.03.17

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