



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 (e)
- 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

59S100-1M4A4

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 (e)
Vibration and mechanical shock	DIN 72594-2 clause 8.1
Dry heat	DIN 72594-2 clause 8.4
RoHS (e)	compliant

- Limitations are possible due to the used cable type -

Tooling

Crimping tool	11W150-000
Crimp insert outer contact	11W150-104
Crimping tool - Incl. Crimp insert center contact	11W161-8M4

Suitable cables

Cable type	RTK 031
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Packing

Standard	10 / 500 / 5.000 / 20.000 pcs in box; center contact on reel
Weight	2.20 g/pce

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Change History

Rev.	Date	Change
e00/e01	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‘

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Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
T. Höfling	10.02.05	C. Anfang	14.03.17	e01	17-0384	R. Gnodtke	14.03.17