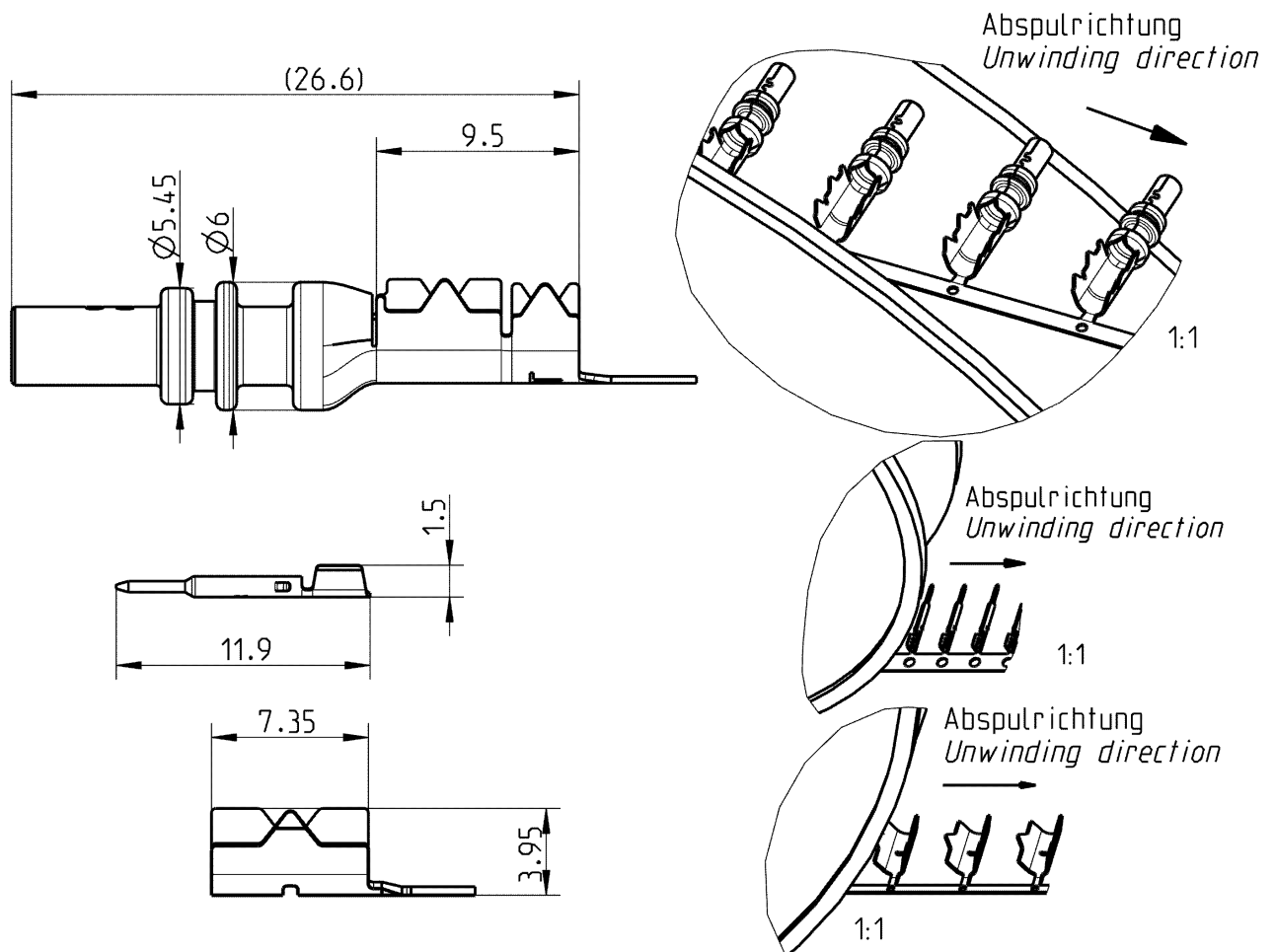


FAKRA -
HF

STRAIGHT PLUG

59S16A-102T4



All dimensions are in mm; tolerances according to ISO 2768 m-H
Y = Part number has to be accomplished by codification

Interface

According to

ISO 20860-1; USCAR 18-4



Documents

Assembly instruction

MA_59V046 and subordinate documents




Material and plating

Connector parts

- Center contact
- Outer contact
- Dielectric
- Crimping sleeve

Material

- Spring bronze
- Spring bronze
- PA12-GB30 
- Spring bronze

Plating

- Gold, min. 0.8 µm, over chemical nickel
- Tin, 1,5-3 µm
- Tin, 1,5-3 µm

Dieses Dokument ist urheberrechtlich geschützt • This document is protected by copyright • Rosenberger Hochfrequenztechnik GmbH & Co. KG

RF_35/09.14/6.2

Electrical data

Impedance 50 Ω
 Frequency DC to 3 GHz
 Returnloss depending on assembly instruction:

Acc. assembly instruction MA_59V046:

Frequency	Returnloss
DC to 1 GHz	≤ -23 dB
1 GHz to 2 GHz	≤ -18 dB
2 GHz to 3 GHz	≤ -15 dB

g

Acc. assembly instruction MA_59V046_VW_LH:

Frequency	Returnloss, cable length 6m, ungated
DC to 1 GHz	≤ -17 dB
1 GHz to 2 GHz	≤ -17 dB +3.00 dB/GHz • (f - 1 GHz)
2 GHz to 4 GHz	≤ -14 dB +1.50 dB/GHz • (f - 2 GHz)
4 GHz to 6 GHz	≤ -11 dB +0.75 dB/GHz • (f - 4 GHz)

Insertion loss ≤ 0.1 x dB
 Insulation resistance ≥ 1x10³ 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 (optional) ≥ 60 dB up to 1 GHz

g

- Limitations are possible due to the used cable type -

Mechanical data

Mating cycles min. 25 g
 Engagement force ≤ 25 N
 Disengagement force ≥ 2 N

Environmental data

Temperature range -40°C to +105°C
 Thermal shock ISO 20860-2 clause 9.2
 Temperature and humidity ISO 20860-2 clause 9.3 f
 Vibration and mechanical shock ISO 20860-2 clause 9.1
 Dry heat ISO 20860-2 clause 9.4 g
 RoHS f compliant

- Limitations are possible due to the used cable type -

Dieses Dokument ist urheberrechtlich geschützt • This document is protected by copyright • Rosenberger Hochfrequenztechnik GmbH & Co. KG

RF_35/09.14/6.2

FAKRA -
HF

STRAIGHT PLUG

59S16A-102T4

Tooling

Crimp dimension acc. to assembly instruction (g)

Suitable cables

Cable type see assembly instruction (g)

Packing

Standard not packed (g)
Weight 1.48 g/pce

Change History

Rev.	Date	Change
f00	28.11.16	Dielectric material data from PA 12 to PA12-GB30 DIN 72594-2 clause 6... to clause 8... RoHS from "2002/95/EC (RoHS)" to "RoHs"
g00	04.11.20	-Added USCAR18 and ISO 20860-1 -Added subordinate documents -Mating cycles changed from ≤ to min. -Conversion to the ISO standards -Cable types and Crimp dimension are listed in the installation instructions. -Changed in to not packed -Electrical data updated

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
R. Bippus	18.09.06	F. Danzl	04.11.20	g00	20-2270	T. Unterhauser	04.11.20