



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

**Interface**

According to  
 Waterproof only guaranteed with

(f) ISO 20860-1; DIN 72594-1  
 59S0WP-FAK

**Remarks**

Available Waterproof plug  
 Waterproof only with injection moulding  
 around plastic housing

59S50E-500A4-Y  
 59S50F-500A4-Y  
 59S50H-500A4-Y

Available Waterproof plug for the  
 Inline connection

59S14B-102A4-Y  
 59S14C-102A4-Y  
 59S14B-1M4A4-Y

Suitable housing

59Z061-AU0-Y (g)

**Documents**

Assembly instruction

MA\_59V050

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**Material and plating**

**Connector parts**

Center contact  
Outer contact  
Contact spring  
Dielectric  
Crimping ferrule  
Sealing ring  
Cable gasket  
Plastic sleeve

**Material**

Spring bronze  
Brass  
Stainless steel  
PA 12-GB30  
Brass  
Silicone  
Silicone  
PA12

**Plating**

Gold, min. 0.8 µm, over nickel  
Nickel, 3-6 µm  
N/A  
Nickel, 2.5-5 µm  
Red  
Red  
Black

(f)

**Electrical data**

Impedance 50 Ω  
Frequency DC to 6 GHz  
Return loss ≥ 30 dB, DC to 1 GHz  
≥ 26 dB, DC to 3 GHz  
≥ 20 dB, DC to 6 GHz  
Insertion loss ≤ 0.1 x √f(GHz) dB  
Insulation resistance ≥ 1x10<sup>3</sup> 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 ≥ 5  
Engagement force ≤ 25 N  
Disengagement force ≥ 2 N

**Environmental data**

Temperature range -40°C to +130°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  
Dry heat DIN 72594-2 clause 8.4  
Water resistant DIN 40050 IPX6K/IPX9K  
Waterproof engine compartment connector LV 214 Test group B,C  
RoHS compliant

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FAKRA - HF

WATERPROOF JACK

**59K14B-102A4**

**Tooling**

Crimping tool 11W150-000  
 Crimp insert 11W15D-102  
 Crimping tool incl. f  
 Crimp insert center contact 11W161-800

**Suitable cables**

Cable type RG 174 or min. Cable Ø 2.7

**Packing**

Standard 1.000 pcs in reusable container  
 Weight 2.57 g/pce

**Change History**

Rev.	Date	Change
f00	26.11.2015	Interface: standard supplemented
f00	26.11.2015	Material and plating: material supplemented
f00	26.11.2015	Environmental data: specification changed from "2002/95/EC (RoHS)" to "RoHS"
f00	26.11.2015	Environmental data: standard updated
f00	26.11.2015	Tooling: "Crimping tool incl." supplemented
g00	18.05.2017	Caption and suitable housing 59Z061-AU0-Y added

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
H. Mühlfellner	20.04.05	A. Eder	23.05.17	g00	17-0867	T. Unterhauser	23.05.17

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