



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



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 h

Documents

Assembly instruction

MA_59V050

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RF_35/09_14/6.2

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
PA 12

Plating

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



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 ≥ 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 ≥ 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-1M4A4

Tooling

Crimping tool	11W150-000
Crimp insert	11W15D-104
Crimping tool -Incl.	
Crimp insert center contact	11W161-8M4

Suitable cables

Cable type	RTK 031 or min. Cable Ø 3.1
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Packing

Standard	1.000 pcs in reusable container
Weight	2.59 g/pce

Change History

Rev.	Date	Change
g00	26.11.2015	Interface: standard supplemented
g00	26.11.2015	Material and plating: material supplemented
g00	26.11.2015	Environmental data: specification changed from "2002/95/EC (RoHS)" to "RoHS"
g00	26.11.2015	Environmental data: standard updated
h00	23.05.2017	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	h00	17-0867	T. Unterhauser	23.05.17

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