

All dimensions are in mm; tolerances according to ISO 2768 m-H  
EMC-screening must be assured by chassis compartment. Control box manufacturer is responsible for EMC-screening.

**Interface**

RF-Connector RN 066-01

**Documents**

PCB layout MB\_323  
 Pinning instruction RN 053-01  
 Blister tray 399V.BL034  
 Tape and Reel packaging VG160.17500

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RF\_35/05.10/6.2

**Material and plating**

**Connector parts**

	<b>Material</b>	<b>Plating</b>
Center contact	Spring bronze	Gold, 0.15 µm (Interface) Tin, 2-6 µm (PCB)
Outer contact 1 (Interface)	Brass	Nickel, 3-6 µm
Outer contact 2 (PCB)	Zinc Alloy	Tin, 2-6 µm, over nickel
Dielectric	LCP	
Plastic housing	HTN	
Power pins	Spring bronze	Tin, 2-6 µm

**Electrical data**

Impedance, even mode	≈ 32 Ω common mode only
Impedance, differential mode	100 Ω differential signalling, for one pair or quad cable shielded
Frequency	DC to 2.0 GHz
Return loss	≥ 20 dB to 1.0 GHz ≥ 17 dB to 2.0 GHz
Insertion loss	≤ 0.1 dB @ 1.0 GHz
Skew (between signal contacts)	≤ 20 psec. (can be reduced by layout)
Nearend-Crosstalk	≤ 30 dB
Farend-Crosstalk	≤ 35 dB
Insulation resistance	≥ 1x10 <sup>3</sup> MΩ
Signal contact resistance	≤ 10 mΩ
Outer contact resistance	≤ 7.5 mΩ
Test voltage	500 V rms
Working voltage	100 V rms
Test current capability at 80°C	≤ 1.5 A DC
Test current capability at 80°C MQS pins	≤ 5.0 A DC (dependent on mating connector and cable)
RF-leakage (shielding effectiveness)	≥ 75 dB up to 1 GHz (IEC 62153-4-7) ≥ 65 dB up to 2 GHz (IEC 62153-4-7)

**Mechanical data**

Mating cycles	≥ 25
Engagement force	≤ 60 N
Disengagement force	≥ 5 N
Retention force latch	≥ 110 N
Coding efficiency	≥ 80 N

**Environmental data**

Temperature range	-40°C to +105°C
Thermal shock	DIN IEC 60068-2-14 (-40°C/+105°C)
Temperature humidity cycling	USCar 2 – 4 – 5.6.2 (test temperature +105°C)
Vibration	DIN IEC 60068-2-64 (class 2)
Mechanical shock	DIN IEC 60068-2-27
Dry Heat	DIN IEC 60068-2-2 (temperature +105°C)
Max. soldering temperature	+260°C for 10 sec.
RoHS	compliant

**Tooling**

N/A

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# Technical Data Sheet

# Rosenberger

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HSD®+2

STRAIGHT PLUG PCB



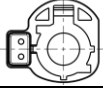

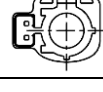
**99S10D-40MA5-Y**

### Packing

Standard 90 pcs in tray (6 trays in one carton)  
 Optional 175 pcs in tape and reel  
 Weight 4.13 g/pce

### Coding

Part number has to be accomplished by codification

	Coding	Plug	Color	RAL	Part-Number
(f)	A		black	sim. 9005	99S10D-40MA5-A
	B		white	sim. 9001	99S10D-40MA5-B
(h)	C		blue	sim. 5005	99S10D-40MA5-C
	D		bordeauxviolet	sim. 4004	99S10D-40MA5-D
	E		green	sim. 6002	99S10D-40MA5-E

### Change History

Rev.	Date	Change
f00	23.06.14	added coding A
g00	27.01.15	shift carrying line
h00	28.11.18	added coding C

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
M. Zebhauser	09.09.08	O. Halmbacher	28.11.18	h00	18-2229	J.Frey	28.11.18

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