



**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 GHz
Return loss	≥ 20 dB, DC to 1 GHz ≥ 17 dB, to 2 GHz
Insertion loss	≤ 0.1 dB @ 1.0 GHz
Skew (between signal contacts)	≤ 25 psec. (can be reduced by layout)
Nearend-Crosstalk	≤ -30 dB (1 GHz)
Farend-Crosstalk	≤ -35 dB (1 GHz)
Insulation resistance	≥ 1 x10 <sup>3</sup> MΩ
Signal contact resistance	≤ 10 mΩ
Outer contact resistance	≤ 7.5 mΩ
Test voltage (at sea level)	500 V rms
Working voltage (at sea level)	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 each contact	≤ 30 N
Disengagement force each contact	≥ 5 N
Retention force latch	≥ 110 N
Polarization feature effectiveness	≥ 80 N

**Environmental data**

Temperature range	-40°C to +105°C
Thermal shock	IEC 60068-2-14
Vibration (Random)	IEC 60068-2-64
Mechanical Shock	IEC 60068-2-27
Temperature and humidity	SAE/USCar-2, Rev.4, 5.6.2
Dry heat	IEC 60068-2-2
Maximum soldering temperature	acc. to IEC 60068-2-58 Group3 (250 °C/30 s)
RoHS	compliant

**Packing**

Standard	200 pcs in tape & reel
Weight	14.2 g/pce

**Preliminary**

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RF\_35/09.14/6.2

# Technical Data Sheet

# Rosenberger

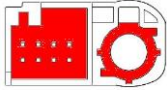
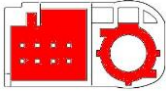
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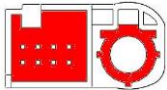
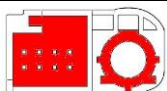
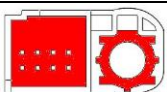
RIGHT ANGLE PLUG FOR  
PCB WITH MQS CONTACTS

## 99S219-40MA5-Y

### Coding

Part Number has to be accomplished by codification

Standard coding	Plug	Colour	RAL	Part-Number
B		natural	sim. 9001	99S219-40MA5-B
C		light blue	sim. 5012	99S219-40MA5-C

Additional coding	Plug	Colour	RAL	Part-Number
A		graphite black	sim. 9011	99S219-40MA5-A
D		claret violet	sim. 4004	99S219-40MA5-D
Z		waterblue	sim. 5021	99S219-40MA5-Z

# Preliminary

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
P. Schroeder	12.10.16	S. Murr	19.12.18	400	18-2376	J. Frey	19.12.18

Rosenberger Hochfrequenztechnik GmbH & Co. KG  
P.O.Box 1260 D-84526 Tittmoning Germany  
[www.rosenberger.de](http://www.rosenberger.de)

Tel. : +49 8684 18-0  
Email : [info@rosenberger.de](mailto:info@rosenberger.de)

Page

3 / 3