



All dimensions are in mm; tolerances according to ISO 2768 m-H

Interface

RPC-3.50 according to	IEC 60169-23
RPC-3.50 Mechanically compatible with	RPC-2.92 and SMA
EBC® according to	Rosenberger EBC®

Documents

N/A

Material and plating

Connector parts

Center contact
Outer contact
Flange
Dielectric RPC-3.50 side
Dielectric EBC® side

Material

CuBe or equiv.
Stainless steel
Stainless steel
COP
PEEK

Plating

Gold, min. 1.27 µm, over chemical nickel
Passivated
Passivated

Electrical data

Impedance	50 Ω
Frequency	DC to 6 GHz
Return loss	≥ 25 dB, DC to 2.5 GHz ≥ 20 dB, 2.5 GHz to 6 GHz
Insertion loss	≤ 0.1 x $\sqrt{f(\text{GHz})}$ dB
Insulation resistance	≥ 5 GΩ
Proof voltage (at sea level)	500 V rms
Working voltage (at sea level)	335 V rms

Mechanical data

Mating cycles RPC-3.50	≥ 500
Mating cycle EBC®	≥ 10.000
Center contact captivation	≥ 27 N
Coupling test torque RPC-3.50	1.70 Nm
Coupling torque recommended RPC-3.50	0.80 Nm to 1.10 Nm
Engagement force EBC®	≤ 12 N
Disengagement force EBC®	≤ 5 N
Misalignment radial	0.35 mm min.
Spring force	min. 3.35 N at rest max. 7 N at max. spring travel
Spring travel	3.7 mm max.

Environmental data

Temperature range	-40 °C to +85 °C
Thermal shock	MIL-STD-202, Meth. 107, Cond. B
Corrosion	MIL-STD-202, Meth. 101, Cond. B
Vibration	MIL-STD-202, Meth. 204, Cond. D
Shock	MIL-STD-202, Meth. 213, Cond. I
Moisture resistance	MIL-STD-202, Meth. 106
RoHS	compliant

Tooling

N/A

Suitable cables

N/A

Weight

14.9 g/pce

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.

For the installation of the electrotechnical equipment, particular electrotechnical expertise is required.



Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
F. Reiner	18.11.19	H. Babinger	10.06.21	a00	21-s111	M.Ruf	10.06.21

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