

NEX10 GENERAL DATASHEET

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Applicable Standards

Interface according to NEX10 standard

Electrical characteristics

Characteristic impedance		50	Ω
Frequency range		DC to 20	GHz
Return loss (typical)	DC -6 GHz	≥ 36	dB
	6 -10 GHz	≥ 30	dB
	10 -20 GHz	≥ 20	dB
RF-Leakage	DC -6 GHz	≥ 110	dB
Insertion loss		$\leq 0.05 \times \sqrt{f[\text{GHz}]}$	dB
Insulation resistance		≥ 5	G Ω
Center contact resistance		$\leq 1,5$	m Ω
Outer contact resistance		$\leq 1,5$	m Ω
Working current		≤ 2	A DC
Test voltage		1000	V rms
Working voltage		500	V max.
Intermodulation 3rd order	(2x43dBm)	≥ 166	dBc
Power handling	@2.0GHz and 85°C	typ. 100	W
	@2.0GHz and 105°C	typ. 50	W

Mechanical characteristics

Durability (matings)	≥ 100		
Coupling nut retention	≥ 500	N	(Screw version)
Coupling recommended torque	5	Nm	(Screw version)
Engagement force	typ. 50	N	(Quick-Lock version)
Disengagement force	typ. 35	N	(Quick-Lock version)
Retention force of coupling mechanism	> 150	N	(Quick-Lock version)

Materials

Outer contact	CuBe / CuZn
Center contact	CuBe / CuZn
Dielectric	PTFE

Standard plating

Outer contact	NiP+Au / CuZnSn
Centre contact	NiP+Au

Environmental influences

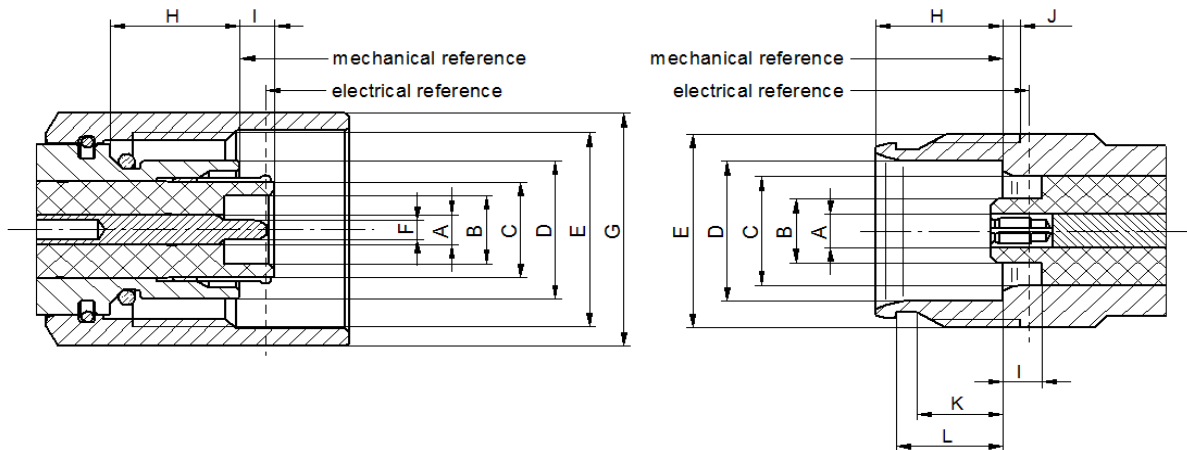
Temperature range	-55°C up to +125°C
Thermal shock	IEC 61169-1 9.4.4
Vibration	IEC 61169-1 9.3.3 and IEC 60068-2-64
Shock	IEC 61169-1 9.3.14
Degree of protection (mated pair)	IEC 60529, IP68 24h / 1m
RoHS	compliant

Date: 28.08.2019 R. Schwär

Revision:

Approved: 12.09.2019 P. Schuh

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	Male		Female	
	min.	max.	min.	max.
A	1,56 nom.		1,74 nom.	
B	3,45	3,55	3,23	3,33
C	5 nom.		5,6 nom.	
D	7,17	7,21	7,11	7,15
E	M10x0,75		M10x0,75	
F	0,975	1,025	-	-
G	-	-	Ø12	
H	6,25	6,35	6,15	6,25
I	1,56	1,8	1,8	1,96
J	-	-	0,3 min.	
K	-	-	4,1	4,3
L	-	-	5,17	5,23

Dimension in mm

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.

Date	Alteration	Signature		