

## QLS GENERAL DATASHEET

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### Applicable Standards

Interface according to

Standard: IMS Connector Systems, Germany

### Electrical characteristics

Characteristic impedance		50	$\Omega$	
Frequency range		DC to 18	GHz	
Return loss (typical)	DC - 3 GHz	$\geq 35$	dB	straight, semi-rigid cable
	3 - 6 GHz	$\geq 30$	dB	straight, semi-rigid cable
	6 - 10 GHz	$\geq 20$	dB	straight, semi-rigid cable
	10 - 18 GHz	$\geq 15$	dB	straight, semi-rigid cable
Insertion loss		0,25	dB max.	
Insulation resistance		$\geq 5$	$G\Omega$	
Center contact resistance		$\leq 3$	$m\Omega$	
Outer contact resistance		$\leq 0,25$	$m\Omega$	
Working current		$\leq 2$	A DC	
Test voltage		1500	V rms	
Working voltage		$\leq 500$	V max.	
Intermodulation 3rd order	@ 2x43dBm	$\geq 145$	dBc	
Power handling	@1.0GHz	220	W	@ T= 23°
	@2,2GHz	125	W	@ T= 23°

### Mechanical characteristics

Durability (matings)		$\geq 200$		
Interface retention force		$> 200$	N	
Engagement force		30	N typ.	
Disengagement force		20	N typ.	
Connector pitch		12,4	mm min. center to center	
IP rating		-	Data on request	

### Materials

Housing // Housing for soldering	CuZn
Outer contact	CuBe / CuZn
Center contact	CuBe / CuZn
Crimp ferrule	Cu / CuZn
Spring basket	Nirosta
Dielectric	PTFE

### Standard plating

Housing // Housing for soldering	White bronze / Au or NiP + Au // Au
Outer contact	White bronze / Au or NiP + Au
Centre contact	Au / Ag / white bronze
Spring basket	passivated
Crimp ferrule	White bronze / Au or NiP + Au

### Environmental influences

Temperature range	-40°C up to +85°C
Relative humidity	IEC 60169-1 16,3 (96h)
Thermal shock	IEC 60169-1 16,4 (-40°C / +85°C)
Vibration	IEC 68-2-64 random
Corrosion	IEC 60169-1 16,7 (48h)

RoHS

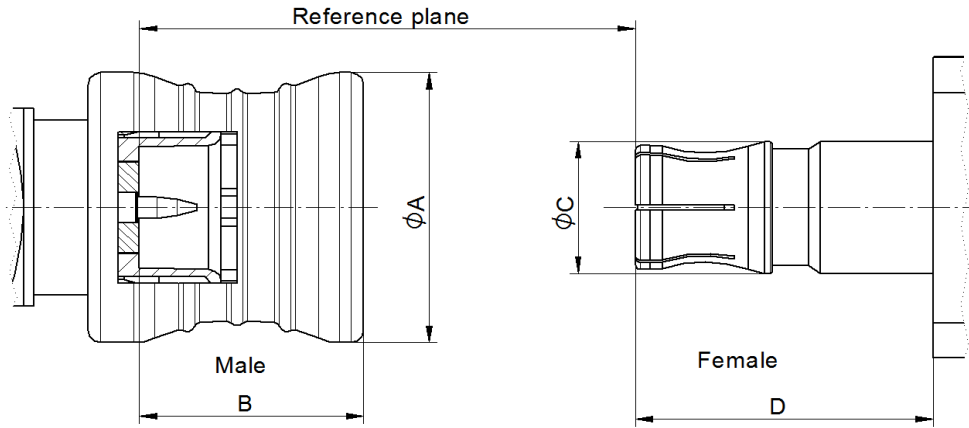
compliant

Date: 05.12.2019 U. Mayer

Revision:

Approved: 18.12.2019 P. Schuh

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	Male		Female	
	min.	max.	min.	max.
A	10,5 nom.			
B		9,085		
C			5,57 nom.	
D			9,1	

Dimension in mm

Some connectors may have a specification that differs from the above mentioned data.

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		

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