

## QLS Advanced GENERAL DATASHEET

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### Electrical characteristics

Characteristic impedance	50	$\Omega$	
Frequency range	DC to 6	GHz	optimized
	DC to 18	GHz	working range [interface]
Return loss (typical)	DC -3 GHz $\geq$ 32dB;	3 to 6 GHz $\geq$ 25 dB	
RF-Leakage	DC -3 GHz: $\geq$ -80dB;	3 to 6 GHz $\geq$ -70 dB	
Insulation resistance	$\geq$ 5	$G\Omega$	
Center contact resistance	$\leq$ 3	$m\Omega$	
Outer contact resistance	$\leq$ 2.5	$m\Omega$	
Working current	$\leq$ 2	A DC	
Test voltage	1000	V rms	
Working voltage	480	V max.	

### Mechanical characteristics

Engagement force (typical)	25	N
Disengagement force (typical)	20	N
Retention force for interface	$\geq$ 140	N
Durability (matings)	100 cycles	

### Materials

Male:	
Outer contact	Brass
Centre contact	Brass
Female:	
Outer contact	Brass
Centre contact	CuBe / spring bronze
Other metals	Brass / stainless steel
Push ferrule	PARA (HDTA 1,8 Mpa 230°C)
Insulator	PTFE / PEEK
Crimp ferrule	Copper / Brass

### Standard plating

Male:	
Outer contact	Au / Ni / White bronze
Centre contact	Au
Female:	
Outer contact	Au / Ni / White bronze
Centre contact	Au
Other metals	Au / Ni / White bronze
Crimp ferrule	Au / Ni / White bronze

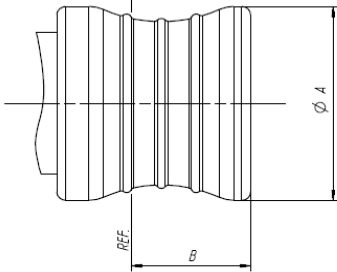
### Environmental influences

Temperature range	-40°C up to +85°C / -40°F up to 185°F
Vibration	IEC-68-2-64 random, 5-20 Hz: 1.29(m/s <sup>2</sup> )/Hz 20-500 Hz: -3dB/octave
Corrosion	IEC 60169-1 16.7 (48 hrs)
Humidity	IEC 60169-1 16.3 (96 hrs)
Thermal shock	IEC 60169-1 16.4 (-40°C / + 85°C)

**QLS Advanded GENERAL DATASHEET**

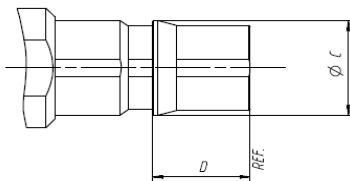
**Interface dimensions**

Plug

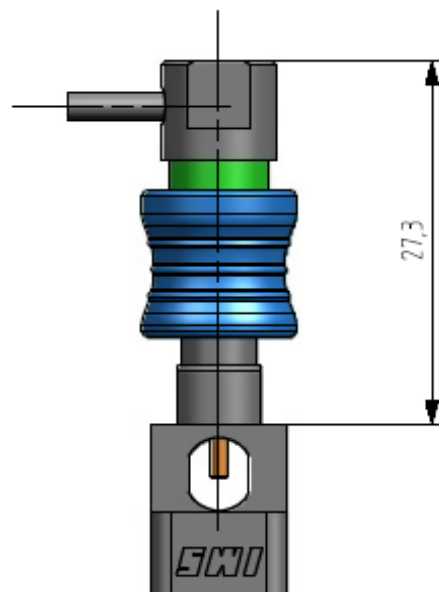
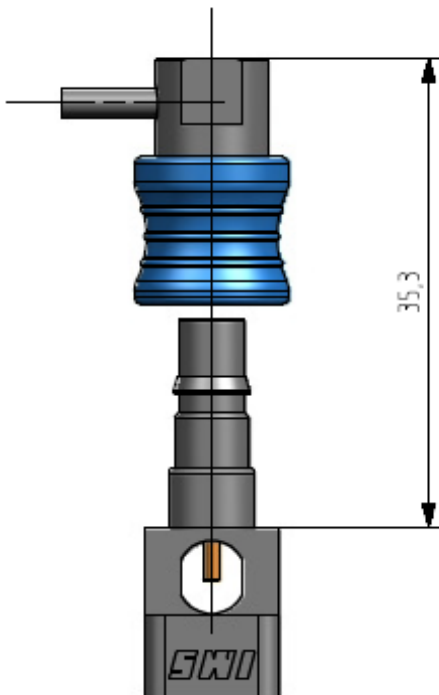


	Plug / Stecker (mm)		Jack / Buchse (mm)	
	min.	max.	min.	max.
A	11,4 nom			
B	6,8	9		
C			5,57 nom.	
D			9,1	

Jack



**Mounting profile**



IMS Connector Systems connectors fulfills in principle the indicated technical data. Individual values of the connectors may deviate depending based on applications, design, type of cables, assembly method and execution. Specific product data sheets for particular products can be provided on request from your IMS Connector Systems sales contact.