

Series QLA 00 – subminiature coaxial connectors

Description

The QLA 00 series contains connectors with a quick latch coupling mechanism: connection is achieved by simply pushing the plug into the jack. Three latching springs automatically engage, thereby securing the mated connectors against axial forces. No twisting action is required. The connectors are easily released by slightly pulling back the outer sleeve of the plug. This coupling mechanism provides a fast and reliable connection for applications up to 1.4 GHz.

Content

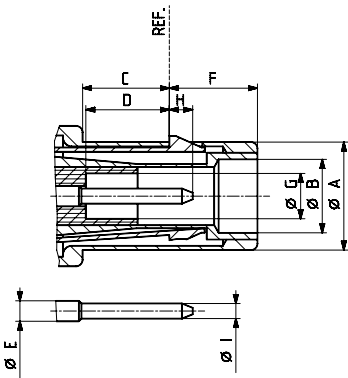
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Compatibility

All connectors of the series QLA 00 are without any restrictions intermateable with Lemo series 00.250.

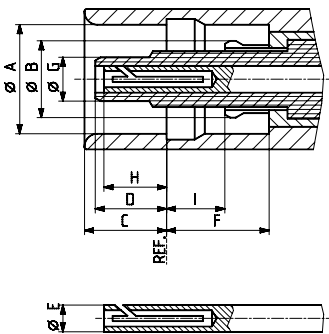
Interface dimensions (mm/inches)

Plug (male)



	Plug		Jack	
	min.	max.	min.	max.
A	4.96/0.195	5.03/0.198	5.05/0.199	5.11/0.201
B	3.38/0.133	3.44/0.135	3.50/0.138 ¹⁾	3.55/0.140 ¹⁾
C	3.93/0.155	4.08/0.161	3.73/0.147	3.86/0.152
D	3.55/0.140	-	-	3.48/0.137
E	0.95/0.037 nom.		1.24/0.049 nom.	
F	4.00/0.157	4.16/0.164	4.23/0.167	4.88/0.192
G	2.10/0.830	2.16/0.085	1.95/0.077	2.03/0.080
H	-	1.32/0.052	-	3.30/0.130
I	0.69/0.027	0.72/0.028	2.35/0.093	2.90/0.114

Jack (female)



Interface dimensions conformable to the standards:

NIM-CAMAC-Standard CD/N549

¹⁾ Prior to slotting

Series QLA 00 – technical data

Electrical data	Requirements
Impedance	50 Ω
Frequency range	DC to 1.4 GHz
Dielectric withstanding voltage (at sea level)	1.5 kV, 50 Hz
Working voltage (at sea level)	
Unmated	≤ 300 V rms, 50 Hz
Mated	≤ 500 V rms, 50 Hz
Insulation resistance	≥ 10 ⁶ MΩ
Contact resistance	
• Centre contact	≤ 4 mΩ
• Outer contact	≤ 2 mΩ
VSWR (typical value for mated connector pair)	
11 QLA - 21 QLA	DC to 300 MHz = 1.15 300 MHz to 1.4 GHz = 1.20
RF leakage (measured at 500 MHz)	≥ 80 dB

Mechanical data	Requirements
Engagement force	typ. 2 N/0.45 lbs
Disengagement force	typ. 5 N/1.1 lbs
Contact captivation	≥ 20 N/4.5 lbs
Cable retention force ¹⁾	see pages 32 - 37
Durability (matings)	≥ 10 000

Environmental data	Requirements
Temperature range	-55 to +150 °C/-67 to +302 °F
Thermal shock	MIL-STD-202, method 107, condition B
Moisture resistance	MIL-STD-202, method 106
Corrosion	saltspray test acc. to MIL-STD-202, method 101, condition B
Vibration	MIL-STD-202, method 204, condition D
Shock	MIL-STD-202, method 213, condition I

Material data		
Connector parts	Material	Plating
Bodies	brass, annealed	nickel
Pin contacts	brass, annealed	gold/SUCOPRO® gold plating
Socket contacts	copper-beryllium alloy	gold/SUCOPRO® gold plating
Crimp ferrules	copper	SUCOPLATE®
Insulators	PTFE or PFA	

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

The products are designed and guaranteed to pass the above mentioned test procedures. Any additional or different requirement arising from specific applications or environmental conditions which is not covered by these test procedures is subject to request.

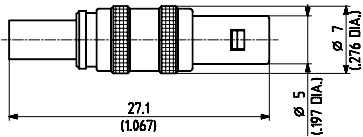
¹⁾ Value considers maximum load of the cables without irreversible variations of specifications.

Series QLA 00 – cable connectors

Straight cable plugs (male)

For flexible cables

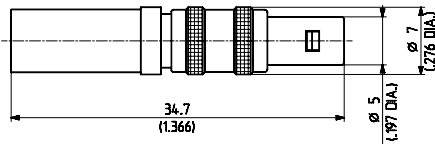
- HUBER+SUHNER full crimp



HUBER+SUHNER type	Item no.	Cable group (example)	Packaging	Assembly instruction	Crimp insert
11_QLA-01-1-8/122_NE	22641146	U1 (EF_178)	single	9007	1 A
11_QLA-01-2-8/122_NE 11_QLA-01-2-8/122_NH	22544043 22544042	U2 (RG_316_U)	single bulk 100 pcs.		
11_QLA-01-2-9/122_NH	22648228	U4 (EF_316_D)	bulk 100 pcs.	27020	
11_QLA-01-2-13/122_NH	22644547	U3 (G_01130_HT)	bulk 100 pcs.		

For flexible cables

- HUBER+SUHNER full crimp



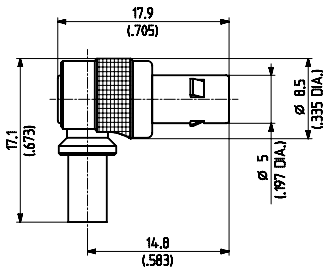
HUBER+SUHNER type	Item no.	Cable group (example)	Packaging	Assembly instruction	Crimp insert
11_QLA-01-3-1/122_NE	22641313	U7 (RG_58_C/U)	single	3015	2 B
11_QLA-01-3-2/122_NE	22643326	U9 (RG_223_/U)			

Series QLA 00 – cable connectors

Right angle cable plugs (male)

For flexible cables

- Cable entry crimp
- Centre contact soldered

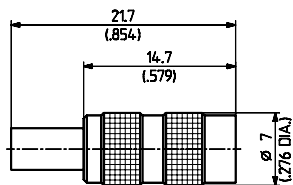


HUBER+SUHNER type	Item no.	Cable group (example)	Packaging	Assembly instruction	Crimp insert
16_QLA-01-2-1/122_NE	22640013	U2 (RG_316_U)	single	3091	A
16_QLA-01-2-13/122_NE	22544279	U3 (G_01130_HT)			

Straight cable jack (female)

For flexible cables

- HUBER+SUHNER full crimp



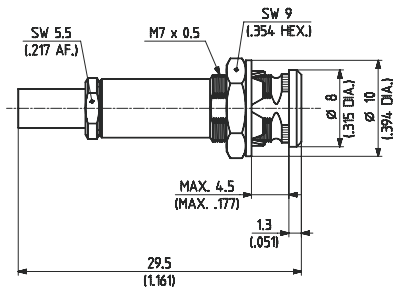
HUBER+SUHNER type	Item no.	Cable group (example)	Packaging	Assembly instruction	Crimp insert
21_QLA-01-2-5/112_NH	22652371	U2 (RG_316_U)	bulk 100 pcs.	27158	1 A

Series QLA 00 – cable connectors

Straight bulkhead cable jacks (female)

For flexible cables

- Cable entry crimp
- Centre contact soldered



HUBER+SUHNER type	Item no.	Cable group (example)	Packaging	Assembly instruction	Mounting hole	Crimp insert
24_QLA-01-2-1/112_NE	22640026	U2 (RG_316_/U)	single	3089	ML 99	A

Series QLA 00 – receptacles with solder end

Receptacles, jacks (female)

- Bulkhead mounted

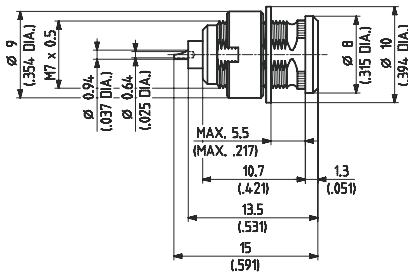


Fig. 1

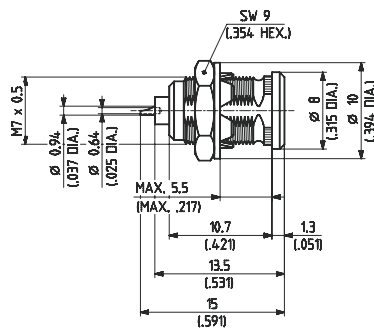


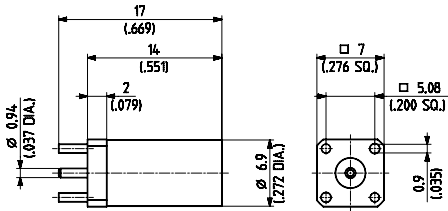
Fig. 2



HUBER+SUHNER type	Item no.	Packaging	Mounting hole	Fig.	Notes
22_QLA-01-0-1/112_NE	22640023	single	ML 23	1	
22_QLA-01-0-1/112_NH	22646308	bulk 100 pcs.	ML 23	1	
22_QLA-01-0-2/112_NE	22640024	single	ML 99	2	counter sunk from rear

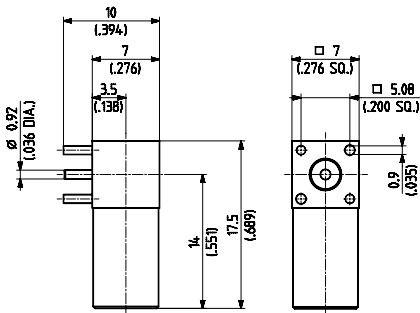
Series QLA 00 – PCB connectors

Straight PCB jack (female)



HUBER+SUHNER type	Item no.	Packaging	Mounting hole	Notes
82_QLA-01-0-2/112_NE	22543414	single	ML 97	without stand-off

Right angle PCB jacks (female)



HUBER+SUHNER type	Item no.	Packaging	Mounting hole	Notes
85_QLA-01-0-2/112_NE	22640039	single	ML 97	without stand-off
85_QLA-01-0-2/110_NH	22646483	bulk 100 pcs.		