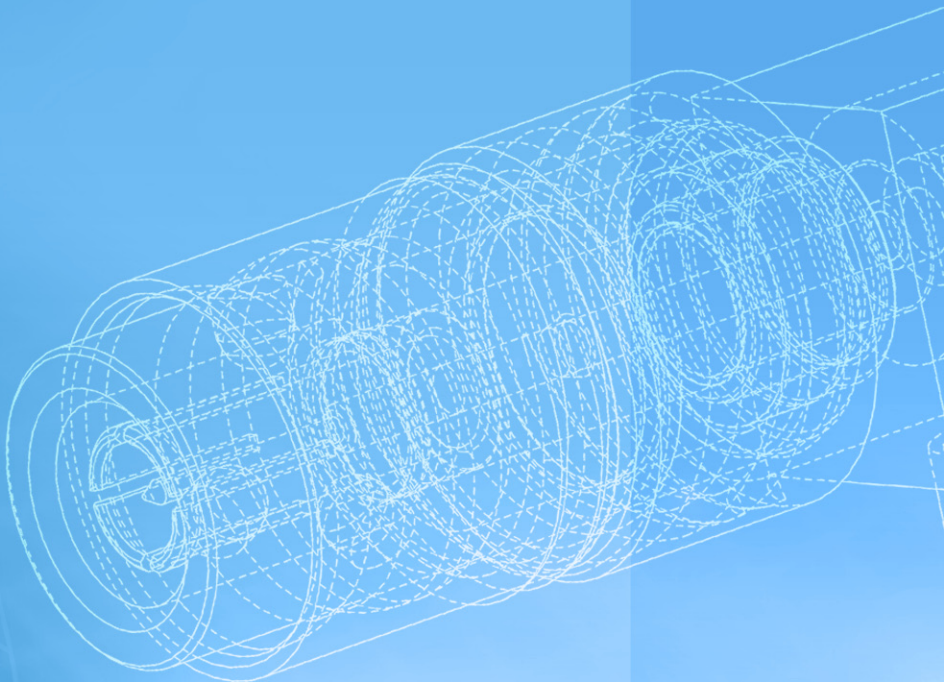


1.0/2.3



1.0/2.3 Connectors



1.0/2.3 Connector Series

Description

The compact European design of the 1.0/2.3 series permits dense connector packing; they are ideally suited to applications where space limitation is a factor. Versions are available with threaded coupling mechanisms which provide positive mating or a unique push-pull coupling system which allows quick installation. The Amphenol push-pull process is patented and ensures positive locking.

Amphenol 1.0/2.3 coaxial connectors are 50 Ω units operating from DC-10 GHz. This series complies with DIN 41626, DIN 47297, and NFC 93-571 international specifications.

Features/Benefits

- Push-pull coupling with patented locking mechanism allows quick installation.
- Push-pull offers safe coupling.
- Locking mechanism will not vibrate loose as threaded connectors are prone to do.
- Push-pull connectors can be more densely packed saving panel space in components that are shrinking in size.

Applications

- Amplifiers
- Base Stations
- Cable Assemblies
- Components
- Filters
- Routers
- Switching Equipment
- Telecom

1.0/2.3 Specifications

Electrical

Impedance	50 Ω
Frequency range	DC - 10 GHz
VSWR	1.06 max. @ DC - 1 GHz 1.13 max. @ 1 - 4 GHz 1.22 max. @ 4 - 10 GHz
Voltage rating (at sea level)	≥ 250 Vrms (depending on cable)
Contact resistance	center contact: ≤ 10 m Ω outer contact: ≤ 3 m Ω
Insulation resistance	10,000 M Ω minimum

Mechanical

Mating	Slide-on, push-pull, threaded
Attachment method (inner / outer)	Crimp, clamp
Braid/Jacket cable affixment	Hex crimp
Center conductor cable affixment	Crimp or solder
Engagement force	≤ 2.3 lbs (10N)
Disengagement force	≥ 2.3 lbs (10N)
Durability (matings)	500 cycles minimum

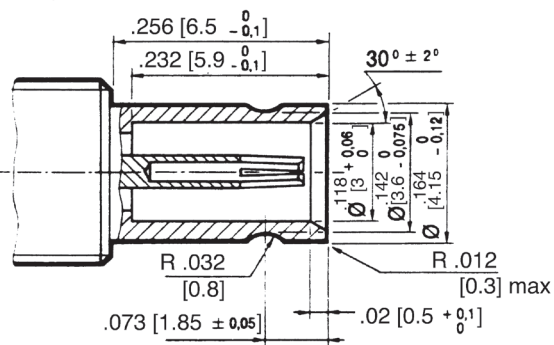
Environmental

Temperature range	-40°C to +155°C
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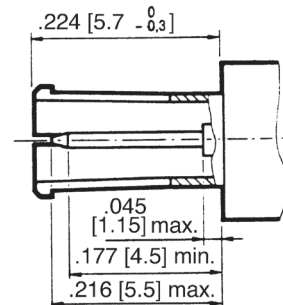
Material

Body and outer contacts	Brass and beryllium copper, nickel and gold plated
Male contact	Brass, gold plated
Female contact	Beryllium copper center and outer, gold plated
Crimp ferrule	Copper or brass
Insulator	PTFE

Plug

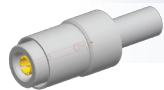


Jack



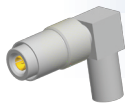
Cable Connectors

Straight Plugs



Cable Group	Part Number	Body	Plating		Termination	
			Contact	Body	Contact	Body
B	102-799-16	Nickel	Gold		Crimp	Solder
B	102-920-06	Gold	Gold		Crimp	Solder
B2	102-799-16DB	Nickel	Gold		Crimp	Crimp
C	102-799-04	Nickel	Gold		Crimp	Solder
C1	102-799-04DB	Nickel	Gold		Crimp	Solder
C2	102-799-20	Nickel	Gold		Crimp	Solder
L	102-799-41	Nickel	Gold		Solder	Solder
L2	102-799-85	Nickel	Gold		Solder	Solder
G2	102-799-48	Nickel	Gold		Crimp	Solder

Angle Plugs



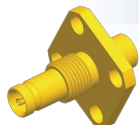
Cable Group	Part Number	Body	Plating		Termination	
			Contact	Body	Contact	Body
B	102-799-116	Nickel	Gold		Crimp	Solder
B2	102-799-116DB	Nickel	Gold		Crimp	Solder
C	102-799-104	Nickel	Gold		Crimp	Solder
C1	102-799-104DB	Nickel	Gold		Crimp	Solder
L	102-799-141	Nickel	Gold		Crimp	Solder
L2	102-799-185	Nickel	Gold		Crimp	Solder

Straight Bulkhead Jacks



Cable Group	Part Number	Body	Plating		Termination	
			Contact	Body	Contact	Body
L	102-246-41	Gold	Gold		Solder	Solder
L2	102-246-85	Gold	Gold		Solder	Solder
P3	102-913-07	Gold	Gold		Crimp	Solder
B	102-913-06	Gold	Gold		Crimp	Solder
B2	102-913-06DB	Gold	Gold		Crimp	Solder

Straight Panel Jacks (4-Hole Flange)

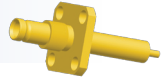


Cable Group	Part Number	Body	Plating		Termination	
			Contact	Body	Contact	Body
L	102-243-41	Gold	Gold		Solder	Solder

Receptacles

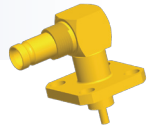
Straight Panel Jacks: 4-Hole Flange (Blunt Post Terminal)

Part Number	Plating		Dielectric Length	Center Conductor Length
	Body	Contact		
102-233-01	Gold	Gold	0.590" (14.99mm) behind flange	0.705" (17.91mm) behind flange
102-233-10	Gold	Gold	0.240" (6.10mm) behind flange	0.380" (9.65mm) behind flange
102-233-20	Gold	Gold	0.350" (8.89mm) behind flange	0.490" (12.45mm) behind flange
102-233-30	Gold	Gold	0.170" (4.32mm) behind flange	0.310" (7.87mm) behind flange



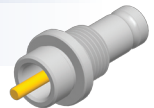
Angle Panel Jacks: 4-Hole Flange (Blunt Post Terminal)

Part Number	Plating		Dielectric Length	Center Conductor Length
	Body	Contact		
102-245-01	Gold	Gold	0.118" (3.00mm) behind flange	0.235" (5.97mm) behind flange
102-245-10	Gold	Gold	0.210" (5.33mm) behind flange	0.420" (10.67mm) behind flange
102-245-20	Gold	Gold	0.200" (5.08mm) behind flange	0.550" (13.97mm) behind flange



Straight Panel Jacks: Press-In (Blunt Post Terminal)

Part Number	Plating		Contact	Terminal Type
	Body			
102-912-20	Passivated		Gold	Blunt Post



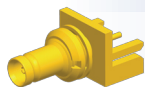
Printed Circuit Board Connectors

Straight Jacks



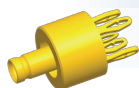
Part Number	Body	Plating	Contact	Terminal Type
102-692-01	Gold		Gold	Blunt Post

Edge Mount Jacks



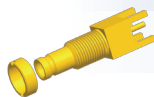
Part Number	Body	Plating	Contact	Terminal Type
102-692-04	Gold		Gold	Blunt Post

Press Fit Jacks



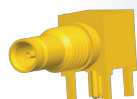
Part Number	Body	Plating	Contact	Terminal Type
102-909-D100	Gold		Gold	Compliant Pin
102-912-10	Gold		Gold	Blunt Post

Straight Bulkhead Jacks



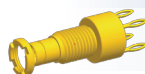
Part Number	Body	Plating	Contact	Terminal Type
102-692-10	Gold		Gold	Blunt Post
102-912-02	Gold		Gold	Blunt Post

Angle Bulkhead Jacks



Part Number	Body	Plating	Contact	Terminal Type
102-909-02	Gold		Gold	Blunt Post

Press Fit Bulkhead Jacks



Part Number	Body	Plating	Contact	Terminal Type
102-811-03	Gold		Gold	Compliant Pin

Adapters

In-Series Adapter



Part Number	Body	Plating	Contact	Description
102-100-01	Gold		Gold	Jack-Jack for Push Pull Plug

Accessories

1.0/2.3 Push-Pull Termination



Part Number	F(GHz)	Power	VSWR
102-799-050	0-2	1/4 Watt	1.1 + 0.2f GHz (Max)

Notes

Cable Group	Cable Type
A	RG-178, 196
B	RG-174, 188A, 316, Belden 7805
B1	RG-179, 187, Belden 9221
B2	RD-188/U, RD-316/U
B3	RD-179/U, AT&T 19224L2
C	RG-58, 58A, 58C, 141, 303, LMR195, Belden 7806A, 9907
C1	RG-55, 142, 223, 400
C2	LMR200, Belden 7807A
D	RG-58/U Plenum, Thinnet, RG-122/U, Belden 88240, 89907
E	RG-59, 62, 140, 210, Belden 8241, 8263, 8279, 9209
E1	RG-59/U 20 AWG center conductor, Belden 1426A, 1505A, 9100, 9278
E2	RD-59/U, Belden 8281, 9141, 9231
E3	RG-59/U Quad Shield, Belden 1152A
F	RG-59/U Plenum, Belden 1560A, 9259, 82259, 89259, 88241
F1	RG-59/U Plenum 20 AWG center conductor, Belden 82108
G1	RG-6, 143, 212
G2	8X, LMR240, Belden 7808A, 9258
G3	LMR400, Belden 7810A, 8214, 9913
G4	RG-8, 8A, 9, 87A, 213, 214, 225, 393
G5	RD-6/U
H	RG-11
H1	Belden 1694A, 9248
H2	Belden 1859A, 7731, 8213, 9292
H3	RG-54A/U
I	AT&T 734A, Belden 1505A
I2	AT&T 735A, Belden 735A1
J	Quad 59 headend cable
K	LMR600
K2	Belden 1695A
K3	RG-122, 180, 195, Belden 1855, 1865A, 8218
L	.141 semi-rigid, RG-402/U
L2	.085, .086, .087 semi-rigid, RG-405/U
L3	.250 semi-rigid
L4	.047 semi-rigid, Belden 1674
M	1/2 inch annular corrugated
M1	1 1/4 inch annular corrugated
M2	1 5/8 inch annular corrugated
M3	7/8 inch annular corrugated
N	1/4 Helical
N1	3/8 Helical
N2	1/2 Helical
N3	7/8 inch SFC
P1	.81 mm OD micro-cable
P2	1.13 mm OD micro-cable, TCB-068
P3	1.32 mm OD micro-cable
P4	1.37 mm OD micro-cable