

Description

The 1.0/2.3 series is a European design introduced in the 1990's. The compact design of the 1.0/2.3 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 with 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 ohm units operating from 0-10 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; will not disconnect during trouble shooting like competitor's products.
- Push-pull offers safe coupling. Locking mechanism will not vibrate loose as threaded connectors are prone to do.
- Push-pull coupling mechanism eliminates cross-threading problems eliminates field problems.
- Push-pull connectors can be more densely packed saving panel space in components that are shrinking in size.

Application

- Base Stations
- Cable Assemblies
- Components (Filters)
- Datacom
- Routers
- Switching Equipment
- Telecom



1.0/2.3

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ELECTRICAL

Impedance	50 ohms
Frequency range	0-10 GHz
Voltage rating	250 Volts peak
Other	Contact resistance: Center contact 6 milliohm Outer contact 3 milliohm Insulation resistance: 10000 megohms

ENVIRONMENTAL

Temperature range	- 40°C to +155°C
Connector Durability	500 matings

MECHANICAL

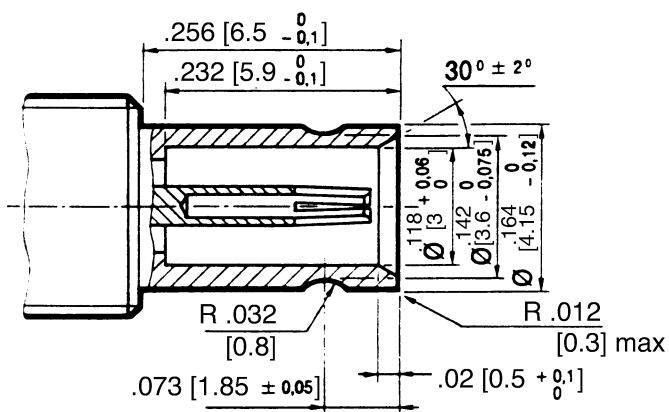
Mating	Slide-On Push-Pull Threaded
Cable affixment (braid or jacket)	Hex crimp
Cable affixment (center conductor)	Crimp or solder
Captivated contacts	All crimps

MATERIAL

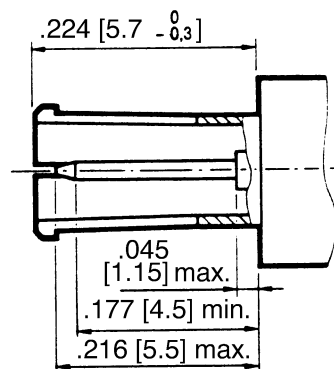
Contacts	Male: Brass Female: (center and outer) Beryllium copper. Gold plated
Other metal parts	Brass, nickel plated
Insulators	Teflon
Crimp ferrule	Copper

NOTE: These characteristics are typical and may not apply to all connectors.

Plug

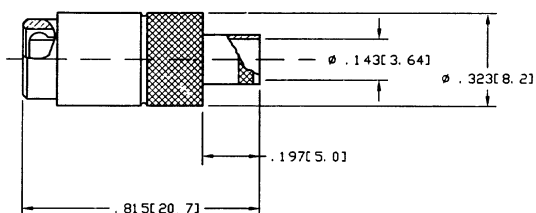


Jack



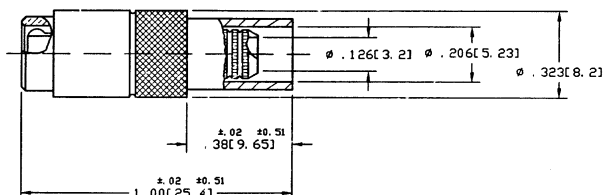
Straight Cable Plugs for Semi-Rigid & Flexible Cable

Fig. 1



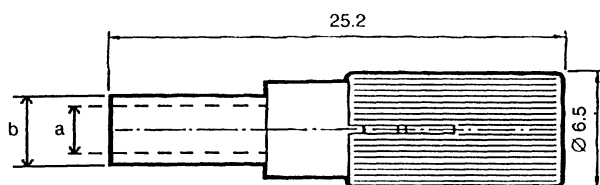
Straight Push-Pull Plugs
Solder to Body
102-799-41
for .141 (3.6mm) SR RG 402
102-799-85
for .085 (2.2mm) SR RG 405

Fig. 2



Straight Push-Pull Plugs
Braid Crimp Solder Contact
102-799-04
for RG 58
102-799-04DB
for RG 142
102-799-16
for RG 174, 179, 188, 316
102-799-16DB
for Double Braid RG 174, 316
102-799-20
for LMR200
102-799-48
for LMR 240

Fig. 3



Straight Screw-On Plug
102-920-06
for RG-174, 188, 316

1.0/2.3 CABLE PLUGS

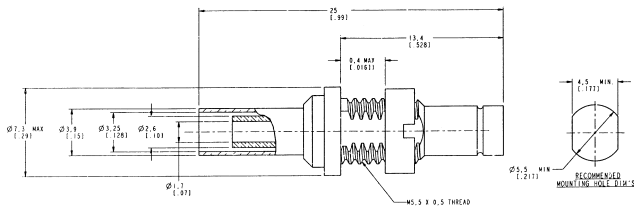
Cable	Cable Attachment		Dimensions, inches (mm)					Amphenol Number	Fig.
	Outer	Inner	a	b	CAI	PLI	Ins.		
.141 S/R RG 402	Solder	Solder	.815(20.7)	.143(3.64)	C78	P37	D1	102-799-41	1
.085 S/R RG 405	Solder	Solder	.815(20.7)	.090(2.3)	C78	P37	D1	102-799-85	1
RG 58	Crimp	Crimp	.984(25.0)	.206(5.23)	C79	P37	D1	102-799-04	2
RG 142B	Crimp	Solder	.984(25.0)	.216(5.5)	C79	P37	D1	102-799-04DB	2
RG 174, 179, 187, 188, 316	Crimp	Crimp	.984(25.0)	.128(3.25)	C79	P37	D1	102-799-16	2
RG 316 Double Braid	Crimp	Solder	.984(25.0)	.142(3.61)	C79	P37	D1	102-799-16DB	2
LMR200	Crimp	Solder	.984(25.0)	.206(5.23)	C79	P37	D1	102-799-20	2
LMR240	Crimp	Solder	1.38(35.0)	.261(6.63)	C79	P37	D1	102-799-48	2
RG 174, 188, 316	Crimp	Crimp	.992(25.2)	.128(3.25)	C79	P37	D1	102-920-06	3

• Accommodates cable diameter

1.0/2.3 Straight Jacks

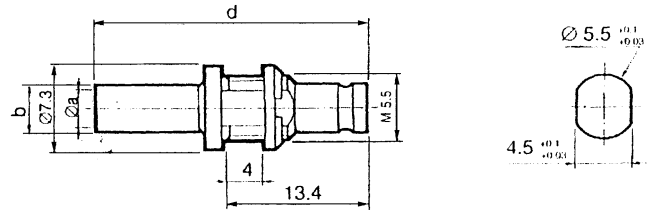
Amphenol®

Fig. 1



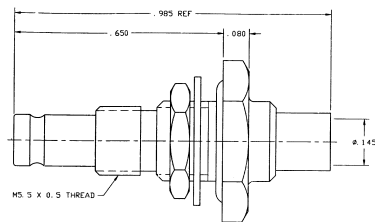
Straight Bulkhead Jack
102-913-06
for RG 174, 179, 316

Fig. 2



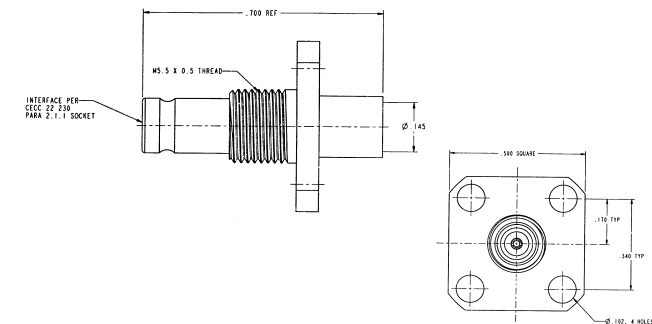
Straight Bulkhead Jack
102-913-18
mini-coax

Fig. 3



Straight Bulkhead Jack
102-246-41
for SR .141
102-246-85
for SR .085

Fig. 4



Straight 4-Hole Flange Jack
102-243-41
for SR .141

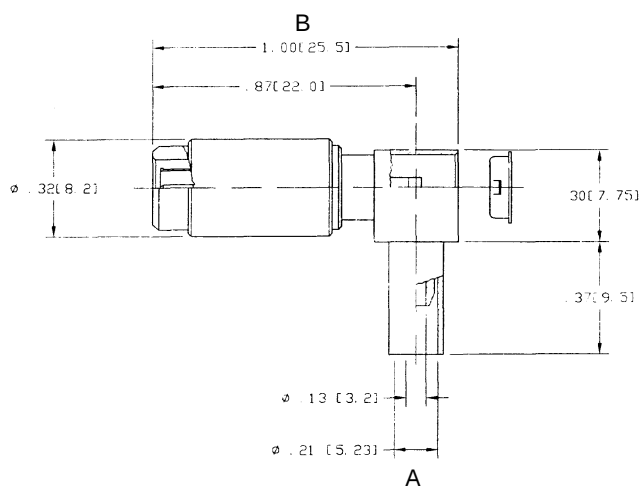
1.0/2.3 CABLE PLUGS

Cable	Cable Attachment		Dimensions, inches (millimeters)				Amphenol Number	Fig.
	Outer	Inner	a	CAI	Plt	Ins.		
RG 174, 179, 316	Crimp	Solder	.127(3.25)	C81	P11	D1	102-913-06	1
Mini Coax	Crimp	Solder	.098(2.50)	C81	P11	D1	102-913-18	2
SR .141	Solder	Solder	.143(3.63)	C78	P11	D1	102-246-41	3
SR .085	Solder	Solder	.090(2.28)	C78	P11	D1	102-246-85	3
SR .141	Solder	Solder	.143(3.63)	C78	P11	D1	102-243-41	4
RG 316 Double Braid	Crimp	Solder	.143(3.63)	C81	P11	D1	102-913-06DB	1

1.0/2.3 Right Angle Cable Plugs & Jacks

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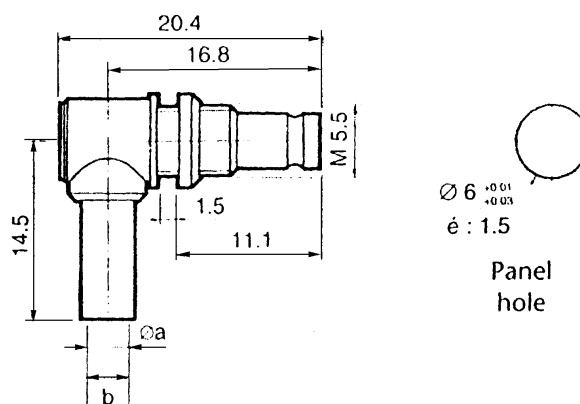
Fig. 1



Push-Pull Angle Plugs

102-799-118 Mini-Coax	102-799-104DB for RG-55, 142
102-799-104 for RG-58	102-799-185 for .085 2.2mm S/R RG-405
102-799-116DB for RD 316	102-799-141 for .141 3.6mm S/R RG-402
	102-799-116 for RG-316

Fig. 2

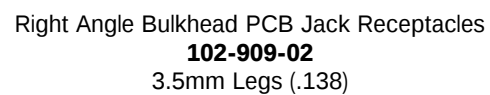
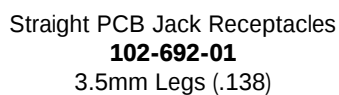


Angle Jacks

102-907-06 for RG 174, 179, 188, 316
102-907-34 for L 910/34 RG 180

1.0/2.3 RIGHT ANGLE PLUGS & JACKS

Cable	Cable Attachment		Dimensions, inches (millimeters)					Amphenol Number	Fig.
	Outer	Inner	a	b	CAI	PLT	Ins.		
Mini-Coax	Crimp	Solder	.099(2.50)	1.00(25.5)	C80	P37	D1	102-799-118	1
RG 58	Crimp	Solder	.205(5.23)	1.00(25.5)	C80	P37	D1	102-799-104	1
RD 316	Crimp	Solder	.142(3.61)	1.00(25.5)	C80	P37	D1	102-799-116DB	1
RG-55, 142	Crimp	Solder	.161(4.10)	.803(20.4)	C80	P37	D1	102-799-104DB	1
RG 174, 179, 188, 316	Crimp	Solder	.128(3.25)	.803(20.4)	C80	P37	D1	102-907-06	2
L 910/34 RG 180	Crimp	Solder	.161(4.10)	.803(20.4)	C80	P37	D1	102-907-34	2
RG-405	Solder	Solder	.090(2.28)	.990(25.1)	C82	P37	D1	102-799-185	1
RG-402	Solder	Solder	.143(3.63)	.990(25.1)	C82	P37	D1	102-799-141	1
RG-316	Crimp	Solder	.128(3.25)	.990(25.1)	C80	P37	D1	102-799-116	1

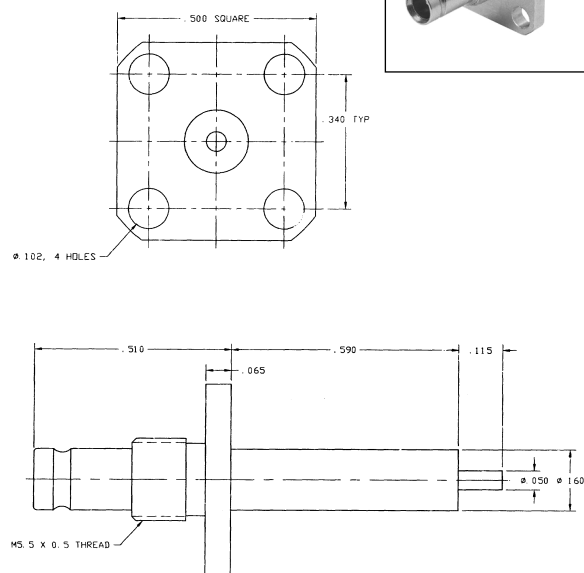




1.0/2.3 4-Hole Flange Jacks

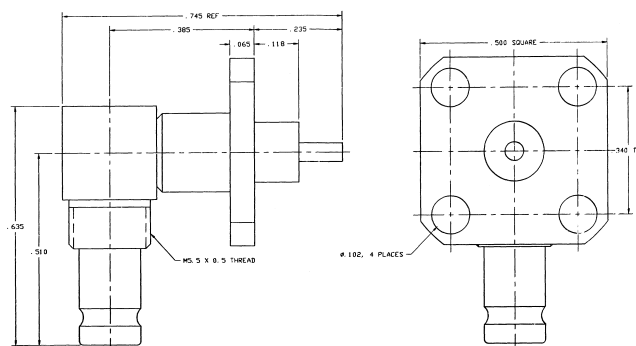
Amphenol®

Fig. 1



Straight 4-Hole Flange
102-233-01
102-233-10
102-233-20
102-233-30

Fig. 2



Right Angle & 4-Hole Flange
102-245-01
102-245-10
102-245-20

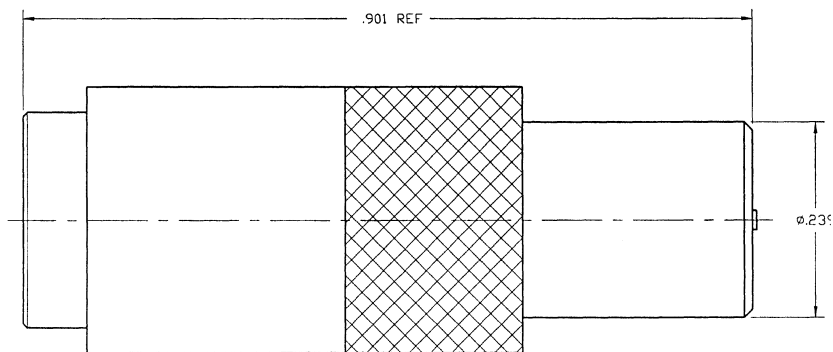
1.0/2.3 4-HOLE FLANGE JACKS

Description	Terminal Type	Ins.	Dimensions, inches (mm)		Construction Notes	Amphenol Number	Fig
			a	b			
Straight 4-Hole Flange	Blunt Post	D1	.590	.705	Gold Plated	102-233-01	1
Straight 4-Hole Flange	Blunt Post	D1	.240	.380	Gold Plated	102-233-10	1
Straight 4-Hole Flange	Blunt Post	D1	.350	.490	Gold Plated	102-233-20	1
Straight 4-Hole Flange	Blunt Post	D1	.170	.310	Gold Plated	102-233-30	1
Right Angle 4-Hole Flange	Blunt Post	D1	.118	.235	Gold Plated	102-245-01	2
Right Angle 4-Hole Flange	Blunt Post	D1	.210	.420	Gold Plated	102-245-10	2
Right Angle 4-Hole Flange	Blunt Post	D1	.200	.550	Gold Plated	102-245-20	2

1.0/2.3

50 Ohm Terminator

Fig. 1



50 Ω Terminator
102-799-050

1.0/2.3

50 Ohm Terminator

Description	F(GHz)	Power	VSWR	Ins	Construction Notes	Amphenol Number	Fig
50 Ω Terminator	O-4	1/4Watt	1.1 + .05 F (GHz)	D1	Push Pull Coupling	102-799-050	1