



# MHV Connectors

## MHV Connectors

### Description

MHV connectors from Amphenol RF are miniature, bayonet locking connections similar to the BNC interface but used for high voltage applications up to 5000 volts. This interface conforms to MIL-STD-348 and does not mate with standard BNC connectors. MHV connectors offer quick-connect functionality and are used in a variety of applications where transmission of high voltage is a requirement. The design of the MHV interface is such that the insulator protrudes beyond the outer contact to provide a degree of protection from shock in the unmated condition. In the mated condition, this interface is considered weatherproof and free from dust ingress.

### Features/Benefits

- 5000 Volts Peak
- Quick Connect/Disconnect
- Non-Constant Impedance
- Conforms to Mil 348 Standards

### Applications

- High Voltage Environments
- Transmission/Conversion lines
- Power Supplies
- Military Applications

**MHV**

**Specifications**

**Electrical**

Impedance	Non-Constant
Frequency range	0-50MHz
Voltage rating (at sea level)	5,000 volts peak
Current rating	5 amp max

**Mechanical**

Mating	2 stud bayonet lock/ braid clamp
Cable affixment	Standard Clamp, MIL Clamp, and Original Crimp (see description)

**Environmental**

Temperature range	-65°C to +165°C
Weatherproof	All
Hermetic seals	Pass helium leak test of $2 \times 10^{-8}$ cc/sec.

**Material**

Body and outer contacts:	Brass
Male contact	Brass
Female contact	Beryllium copper. Silver plated
Other metal parts	Brass: ASTROplate finish
Insulator	Teflon, glass teflon (herm. seal)
Clam Gaskets:	Silicone or synthetic rubber

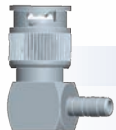
Note: These characteristics are typical but may not apply to all connectors.

## Plugs

### Straight



Cable Group	Part Number	Plating		Military Reference
		Body	Contact	
C	000-29100	Nickel	Silver	
E	000-28000	Nickel	Silver	UG 932/U
E	000-27975	Nickel	Silver	UG 932A/U



### Right Angle

Cable Group	Part Number	Body	Plating	
			Contact	
E	000-28100	Nickel	Silver	

## Jacks

### Straight Jack



Part Number	Body	Plating		Military Reference
		Contact		
000-27075	Nickel	Silver		UG 1016A/U

### Panel Jack



Part Number	Body	Plating	
		Contact	
000-28175	Nickel	Silver	

## Receptacle

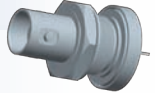
### Panel Receptacle

Part Number	Body	Plating		Military Reference
		Contact		
000-27000	Nickel	Silver		UG 931/U



### Bulkhead Receptacle

Part Number	Body	Plating		Terminal	Description
		Contact			
000-10400	Nickel	Silver		Glass	Rear Mount Glass, Pressurized
000-27025	Nickel	Silver		Turret	Rear Mount



## Adapters

Part Number	Body	Plating		Description
		Contact		
000-12650	Nickel	Silver		Straight (Jack to Jack) 4 hole flange



# Cable Group Listing

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