

General Description

Delta MHV connectors are compact, 50 Ω impedance, high-voltage connectors with two-stud bayonet coupling. MHV connectors are similar in size to, but are not interchangeable with, BNC connectors. They are best suited for use with cables in the range of .195" to .220" diameter, but are available for other cables from .090" to over .75" diameter. For safety, Delta MHV connectors feature deeply recessed contacts, as well as polarized plugs and jacks to ensure that only the compatible plugs and jacks can be mated in applications incorporating multiple connector pairs. As with all other Delta connector series, we welcome your specifications for special configurations.

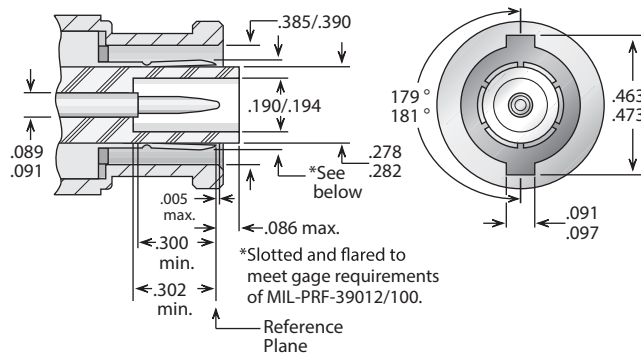
MHV Configurations

Standard mating	
Straight Cable Plugs	2
Right Angle Cable Plugs	2
Straight Cable Jacks	3
Bulkhead Cable Jacks	3
Panel Cable Jacks	3
Panel Jack Receptacles (square flange)	4
Bulkhead Jack Receptacles	4

Polarized mating	
Straight Cable Plugs	2
Bulkhead Cable Jacks	3
Panel Cable Jacks	3
Panel Jack Receptacles (square flange)	4
Bulkhead Jack Receptacles	4

MHV Specifications

Plug Interface**



Electrical:

Nominal Impedance: Nonconstant.
 Frequency Range: DC-50 MHz.
 Voltage Rating: 3,500 volts RMS;
 5,000 volts DC.
 Dielectric Withstanding Voltage: 5,000 VRMS.
 Insulation Resistance: 5,000 megohms.

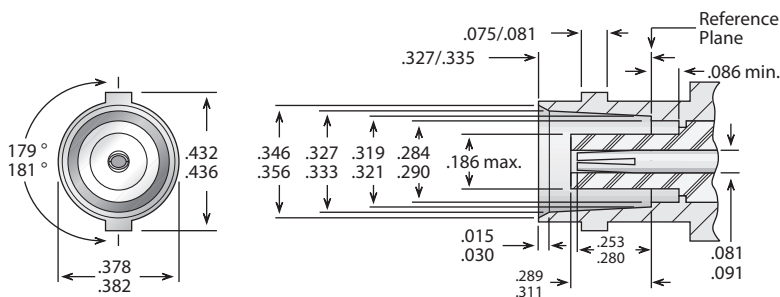
Materials/Finishes:

Insulators: Teflon per ASTM D1710.
 Male Contacts: Brass per ASTM B16.
 Female Contacts: Beryllium Copper per ASTM B196.
 Contact Plating: Silver - ASTM B700, or
 Gold - MIL-DTL-45204.

Gaskets: Silicone rubber per ZZ-R-765,
 Class II, Grade 50.

Other Metal Parts: Brass per ASTM B16, plated:
 Silver - ASTM B700, or
 Nickel - AMS-QQ-N-290

Jack Interface**



All other specifications are in accordance with the latest issues of MIL-PRF-39012, or MIL-C-3643, or other applicable MIL specifications, and interfaces are in accordance with MIL-STD-348.

*These specifications are typical and may not apply to all connectors. Detailed specifications for individual connectors are available on request.

**Some proportions altered to illustrate detail.

Straight & Right Angle Plugs For Flexible Cable - Standard Mating

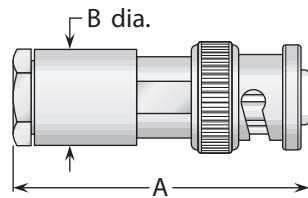


Figure 1
(Clamp type)

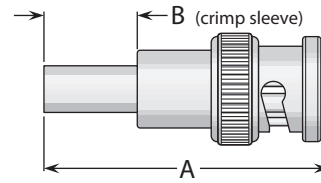


Figure 2
(Crimp type)

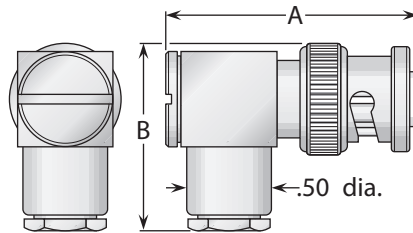


Figure 3
(Clamp type)

Cable Group	Figure	Dimensions		Plating		Delta P/N	Assembly Procedure/ Trim Code
		A	B	Body	Contact		
5, 6	1	1.56	.500	Nickel	Silver	1701015N000-000	A/30
7	1	1.56	.500	Nickel	Silver	UG-932A/U	A/30
8A	1	1.56	.500	Nickel	Silver	1701029N000-000	A/30
5	2	1.44	.500	Nickel	Silver	1703017N000-000	B/25
7	2	1.44	.500	Nickel	Silver	1703020N000-000	B/25
5, 6	3	1.27	1.03	Nickel	Silver (C)	1705015N000-000	A/32
7	3	1.27	1.03	Nickel	Silver (C)	1705021N000-000	A/32

Straight Plug For Flexible Cable - Polarized Mating

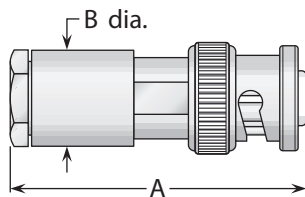


Figure 1
(Clamp type)

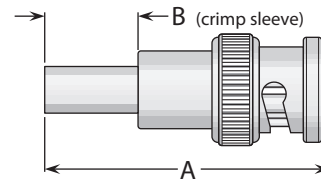


Figure 2
(Crimp type)

Cable Group	Figure	Dimensions		Plating		Delta P/N	Assembly Procedure/ Trim Code
		A	B	Body	Contact		
5, 6	1	1.56	.500	Nickel	Silver	1701015N002-000	A/30
8A	1	1.56	.500	Nickel	Silver	1701029N002-000	A/30
5	2	1.44	.500	Nickel	Silver	1703017N002-000	B/25
7	2	1.44	.500	Nickel	Silver	1703020N002-000	B/25

- See page 209 for cable groups.
- Assembly procedures start on page 210.
- (C) in contact plating column indicates captive contact.
- See page 6 for alternate body plating information.

Cable Jacks For Flexible Cable - Standard Mating

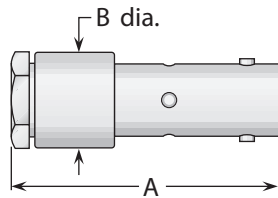


Figure 1
(Straight jack, clamp type)

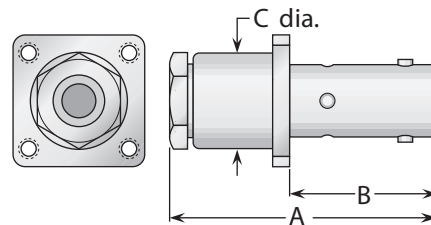


Figure 2
(Panel jack, clamp type)

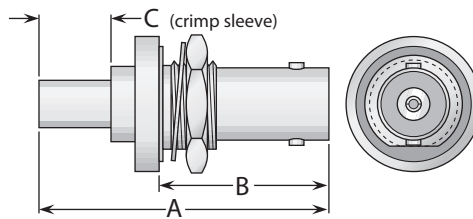


Figure 3
(Bulkhead jack, crimp type)

Cable Group	Fig.	Dimensions			Mounting Figure	Max. Panel	Plating		Delta P/N	Assembly Procedure/Trim Code
		A	B	C			Body	Contact		
5, 6	1	1.50	.500	—	—	—	Nickel	Silver	1708015N000-000	A/31
7	1	1.50	.500	—	—	—	Nickel	Silver	UG-1016A/U	A/31
5, 6	2	1.44	.780	.440	07	—	Nickel	Silver	1711014N070-000	C/07
7	2	1.50	.780	.500	07	—	Nickel	Silver	UG-961A/U	A/31
5	3	1.70	.890	.500	59	.200	Nickel	Silver	1719017N590-000	B/24
7	3	1.70	.890	.500	59	.200	Nickel	Silver	1719021N590-000	B/24

Cable Jacks For Flexible Cable - Polarized Mating

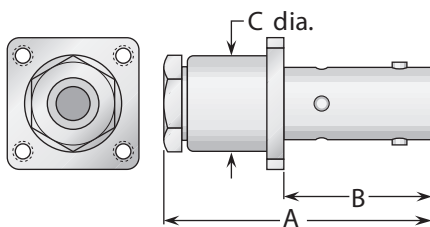


Figure 1
(Panel jack, clamp type)

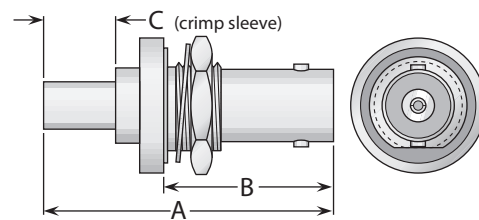


Figure 2
(Bulkhead jack, crimp type)

Cable Group	Fig.	Dimensions			Mounting Figure	Max. Panel	Plating		Delta P/N	Assembly Procedure/Trim Code
		A	B	C			Body	Contact		
5, 6	1	1.50	.780	.500	07	—	Nickel	Silver	1711014N072-000	A/31
5	2	1.88	1.08	.500	59	.200	Nickel	Silver	1719017N592-000	B/24
7	2	1.88	1.08	.500	59	.200	Nickel	Silver	1719021N592-000	B/24

- See page 209 for cable groups.
- Assembly procedures start on page 210.
- See page 208 for mounting dimensions.
- (C) in contact plating column indicates captive contact.
- See page 6 for alternate body plating information.

Bulkhead & Panel Receptacles - Standard Mating

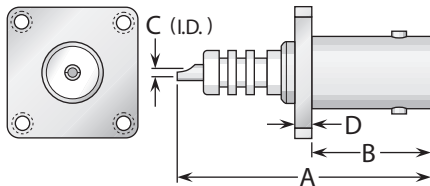


Figure 1
(Panel jack receptacle)

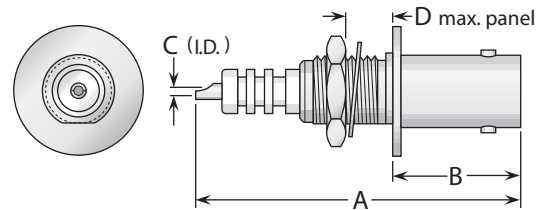


Figure 2
(Bulkhead jack receptacle, front mount, no mounting gasket)

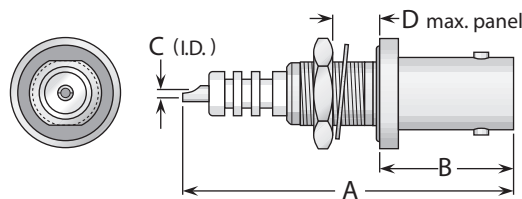


Figure 3
(Bulkhead jack receptacle, front mount, with mounting gasket)

Figure	Dimensions				Mounting Figure	Plating		Delta P/N
	A	B	C	D		Body	Contact	
1	1.34	.630	.043	.090	07	Nickel	Gold (C)	UG-931/U
2	1.42	.470	.043	.110	65	Nickel	Gold (C)	1720000N651-003
3	1.69	.590	.043	.230	75	Nickel	Gold (C)	1720000N751-001

Bulkhead & Panel Receptacles - Polarized Mating

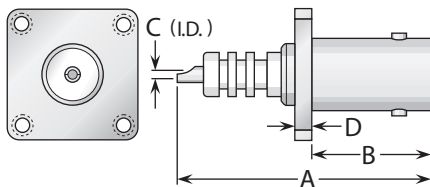


Figure 1
(Panel jack receptacle)

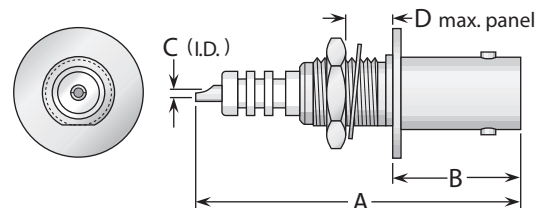


Figure 2
(Bulkhead jack receptacle, front mount, no mounting gasket)

Figure	Dimensions				Mounting Figure	Plating		Delta P/N
	A	B	C	D		Body	Contact	
1	1.34	.630	.043	.090	07	Nickel	Gold (C)	1713000N072-000
2	1.54	.510	.043	.180	65	Nickel	Gold (C)	1720000N652-000

- (C) in contact plating column indicates captive contact.
- See page 6 for alternate body plating information.
- See page 208 for mounting dimensions.