

16 SERIES 5-50 kVDC Multi-Conductor Cable Assemblies



The 16 series high voltage cable assemblies are offered in multiple standard shell sizes and insert configurations. This series is designed for high voltage applications where high reliability is required in a wide range of temperature, altitude, and environmental conditions. The connector shells are a rugged aluminum plated in RoHS compliant nickel. Silicone molded and encapsulated terminations provide low micro-discharge performance. The 16 series can easily be modified to meet the most unique high voltage requirement.

GENERAL SPECIFICATIONS

1.0 ELECTRICAL

- 1.1 Operating Voltage: 5-50 kVDC
- 1.2 Current Range: 4-85 AMPS

2.0 MECHANICAL

- 2.1 Plug Style: Inline and right angle
- 2.2 Receptacle Style: Inline and panel mount
- 2.3 Termination: Silicone rubber inserts, bonded to wire













3.0 ENVIRONMENTAL

- 3.2 Altitude: Sea level to 70,000 feet
- 3.3 Operating Temperature Range: -55°C to +125°C

4.0 MATERIALS

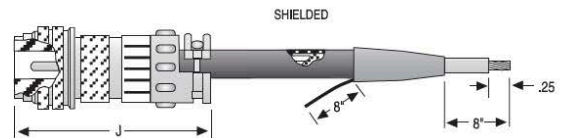
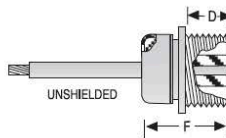
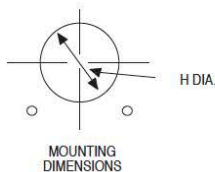
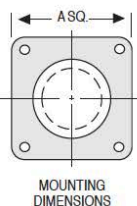
- 4.1 Connector Body: Silicone Rubber
- 4.1 Shell Plating: Electroless Nickel or Clear Cadmium
- 4.1 Connector Inserts: Silicone Rubber
- 4.1 Pin Contact: Per MIL-C-39029 or half hard brass
- 4.1 Socket Contact: Per MIL-C-39029, QQ-B-626 or ASTM-B196
- 4.4 Contact Plating: Gold Plated
- 4.5 Wire: Tin or Silver Plated Copper, Silicone Insulation
- 4.6 Cable Shielding: Braided, Tinned Copper
- 4.7. Cable Jacket: Silicone Rubber

Insert Configurations

Voltage	AMPS	Poles	Insert	Shell Size	Insert #
5 KVDC	4	5		12s	0505
	4	13		18	0513
15 KVDC	6.5	3		16s	1503
	6.5	7		16	1507
20 KVDC	16.5	1		16	2001
	6.5	2		16s	2002
25 KVDC	16.5	5		28	2505
	10	7		24	2507
30 KVDC	10	1		18	3001
	16.5	2		24	3002
	26	5		36	3005
50 KVDC	10	1		22	5001

Other configurations available, contact a sales engineer to see other options.

Shell Size	Dimensions for 16 Series Connectors (Inches)				
	A	D	F	H	J
12s	1.09	0.56	1.48	0.81	2.50
16s	1.28	0.56	1.65	1.06	2.69
18	1.37	0.75	1.96	1.18	3.32
22	1.62	0.75	2.00	1.44	3.37
24	1.75	0.81	2.00	1.56	3.37
28	2.00	0.81	2.09	1.81	3.56
36	2.50	0.87	2.09	2.31	3.65



Receptacle Styles



97-3100A
(Panel mount receptacle)



97-3101A
(Inline cable mount receptacle)

Plug Styles



97-3106A
(Cable mount plug)



97-3108B
(Right angle plug)

Plating

- Electroless Nickel (RoHS) (Special Order)
- Clear Cadmium (Standard)
- Olive Drab (Special Order)

Cable Types

- Unshielded Silicone
- Shielded Silicone

Consult a Caton sales engineer to discuss customizing a 16 series cable assembly to suit your needs.