



Series

531

10 KVDC

GENERAL SPECIFICATIONS

Series 531

A series of high voltage connectors, kits and cable assemblies designed to minimize the risk of electrical shock to personnel through the use of recessed contacts. Both the panel and cable connectors have recessed contacts and will stand off the rated voltage in the unmated condition.

This series of connectors is rated at 10 KVDC and will operate at altitudes up to 10,000 feet. Operating temperature is from -40°C to +85°C.

Applications

Series 531 connectors are ideal for laboratory and research applications and the plug and receptacle are interchangeable with Kings connectors of the same type. The connectors are also well suited for use in ground based power supplies and other components where reliable high voltage connections are essential. These connectors feature a spring finger contact on the plug body which assures a reliable ground circuit prior to engagement of the center contact, further reducing the risk of electrical shock.

Interface cleaning

High voltage connectors must always be cleaned prior to mating. The proper cleaning method is to wipe or spray the interface area with isopropyl alcohol and immediately blow an inert gas such as dry nitrogen over the interface area until dry. No other cleaning method should be attempted.

WARNING: These connectors should **NEVER** be handled, mated or unmated when voltage is applied.

GENERAL SPECIFICATION

Voltage rating	10 KVDC Sea level to 10,000 feet, maximum
Operating temperature range	?
Plug insulator material	Plastic
Receptacle insulator material	Plastic
Bayonet coupling nut diameter	0.625/15.8mm
Bayonet coupling nut material/finish	Brass/nickel plate
Male contact diameter (receptacle)	.052/1.32mm
Male contact material/finish	Brass/gold plate
Female contact material/finish (plug)	Be Cu/gold plate
Spring finger grounding (plug)	Yes
Crimp braid termination (plug)	Yes

100% voltage test

Cable Assembly
Length vs Manufacturing
Tolerance Chart

15 KVDC @ sea level	
Length: Feet/M	Tolerance: inches/mm
7.5/2.28 or less	0.25/6.3
7.5/2.2 to 12.5/3.8	1.0/25.4
12.5/3.8 to 22.5/6.8	1.50/38.1
22.5/6.8 to 35/10.6	2.0/50.8
35/10.6 to 50/15.2	3.0/76.2
50/15.2 to 70/21.3	4.0/101.6
70/21.3 to 100/30.4	5.0/127

**531 Receptacle
P/N 167- 3555**



**531 Plug
P/N 167- 3554**