

# 17.5/24kV Deadbreak 250A Straight Connector



### **APPLICATION**

The Chardon Deadbreak Straight Connector is a fully shielded and insulated termination for connecting underground cable to transformers, switch gear and other apparatus equipped with deadbreak bushings, junctions, or other deadbreak connectors.

The Chardon Deadbreak Straight meets all the requirements of HD629.1, EN-50180, EN-50181 & IEC 60502, and is fully interchangeable with competitor's products

and mating products that meet EN-50180 & EN-50181.

Chardon Deadbreak Straight Connectors are molded using high quality peroxide – cured insulatingand semi-conducting EPDM rubber. All insulating rubber is compounded in house, using Chardon -developed proprietary formulations. Chardon Deadbreak Straight Connector contains a copper or bi-metal conductor contact, this ensures a reliable operating connection.

## **PRODUCTION TESTS**

#### Tests conducted in accordance with HD 629.1.

- ✓ Minimum Corona Voltage Level 22 kV < 3 pC</p>
- AC 1 Minute Withstand 60 kV
- I Test Point Voltage Test

#### Tests conducted in accordance with Chardon manufacturing process requirements:

- Physical Inspection
- / Periodic Dissection
- Periodic X-ray Analysis

## **VOLTAGE RATINGS**

Maximum Voltage Class (U <sub>m</sub> )	24 kV
AC 5 Minute Withstand	57 kV
Minimum Corona Voltage Level	22 kV < 3pC
BIL and Full Wave Crest (Impulse)	125 kV

# **CURRENT RATINGS**

Continuous Current	250 A
Overload Current (8 hour maximum)	300 A

# DETAILED COMPOSITION OF THE CHARDON DEADBREAK STRAIGHT CONNECTOR

#### / CAPACITIVE TEST POINT

Capacitive test point on molded Straight Connector with snap-on cap provides a shielded, hotstick operable means to determine circuit condition.



# / CABLE ENTRANCE

The sized cable entrance provides an interference fit to maintain a watertight seal.

#### / DRAIN WIRE TAB

Drain wire table provide a convenient point to connect drain wire to ensure grounding of the connector shield.

#### **I** SEMICONDUCITING INSERT

Precision molded peroxide cured semiconducting insert provides corona-free electrostatic shielding of the compression connector.

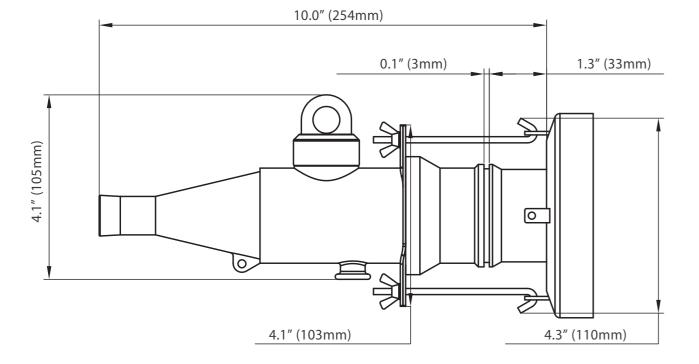
#### / CONDUCTOR CONTACT

Tin plated copper connector ensures reliable electrical connection.

#### / INSULATION LAYER

High quality peroxide cured EPDM insulation is mixed and formulated inhouse for complete control of rubber characteristics.

# DETAILED COMPOSITION OF THE CHARDON DEADBREAK STRAIGHT CONNECTOR



# **ORDERING INFORMATION**

17.5/24kV Straight Connector

#### **Each kit Contains:**

Straight Connector body

/ Bail Assembly

Installation Instruction Sheet

Conductor Contact

/ Silicone Grease

#### To order a Chardon 24kV Deadbreak Straight Connector Kit, follow the steps below:

24-CL250 "W"	"X"	"Y"	"Z"
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"W" = Enter T if want a Capacitive Test Point

"X" = Cable Range Code (See Cable Range Table)

"Y" = Conductor Code (See Conductor Table)

"Z" = Enter C if a plated Copper Connector is Desired

#### **Cable Range Table (Insulation Diameter)**

Cable Range Code	ble Range Code Inches Millimeters	
AA	0.508-0.685	12.9-17.4
Α	0.642 - 0.807	16.3 - 20.5
В	0.768 - 0.945	19.5 - 24.0
С	0.906 - 1.106	23.0 - 28.1

#### **Conductor Code Table (Compression Connectors)**

		Compressed	Compact or Solid	
CODE	AWG or kcmil	mm²	AWG or kcmil	mm²
03	#3	25	#2	35
04	#2	35	#1	-
05	#1	-	1/0	50
06	1/0	50	2/0	70
07	2/0	70	3/0	-
08	3/0	-	4/0	95
09	4/0	95	250	120
10	250	120	300	-

#### **Shear Bolt Connector Selection Guide**

CATALOG NO.	Conductor Range(mm²)
200SSBC-25-50/1 -AL	25 - 50
200SSBC-70-95/1 -AL	70 - 95
200SSBC-120/1 -AL	120

Example:

For Shear Bolt Connector with a conductor Range between 25-50 mm<sup>2</sup>, the part number would be : 200SSBC-25-50/1-AL



200SSBC Series

