

# 15/25kV Deadbreak 200A Elbow Connector



## APPLICATION

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

The Chardon Deadbreak Elbow meets all the requirements of IEEE standard 386, and is fully interchangeable with competitor's products and mating products that meet IEEE Standard 386.

Chardon Deadbreak Elbow Connectors are molded using high quality peroxide-cured insulating and semi-conducting EPDM rubber. All insulating rubber is compounded in house, using Chardon-developed proprietary formulations. Chardon Deadbreak Elbow Connectors and copper probe are combined with the bi-metal compression lug, this ensures a reliable operating connection.

## PRODUCTION TESTS

Tests conducted in accordance with IEEE/ANSI Standard 386.

- / Minimum Corona Voltage Level – 19 kV
- / AC 1 Minute Withstand – 40 kV
- / Test Point Voltage Test

Tests conducted in accordance with Chardon manufacturing process requirements:

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

## VOLTAGE RATINGS

<b>Voltage Class</b>	25 kV
<b>Max. Rating Phase to Ground</b>	15.2 kV
<b>AC 1 Minute Withstand</b>	40 kV
<b>DC 15 Minute Withstand</b>	78 kV
<b>BIL and Full Wave Crest</b>	125 kV
<b>Minimum Corona Voltage Level</b>	19 kV

• 25DE200- 041118- REV04

## CURRENT RATINGS

Description	Test Parameters
<b>Continuous</b>	200 amps rms
<b>Short Time</b>	• 10,000 amps rms symmetrical for 0.17 s • 3,500 amps rms symmetrical for 3.0 s

## DETAILED COMPOSITION OF THE CHARDON DEADBREAK ELBOW CONNECTOR

### / SEMICONDUCTING SHIELD

Precision molded peroxide cured semiconducting shield provides ground shield continuity and meets the requirements of IEEE Standard 592.

### / CABLE ENTRANCE

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

### / DRAIN WIRE TAB

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

### / INSULATION LAYER

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

### / COMPRESSION CONNECTOR

Compression connector is sized to ensure a cool running connection with maximum current transfer.

### / CAPACITIVE TEST POINT

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

### / PULLING EYE

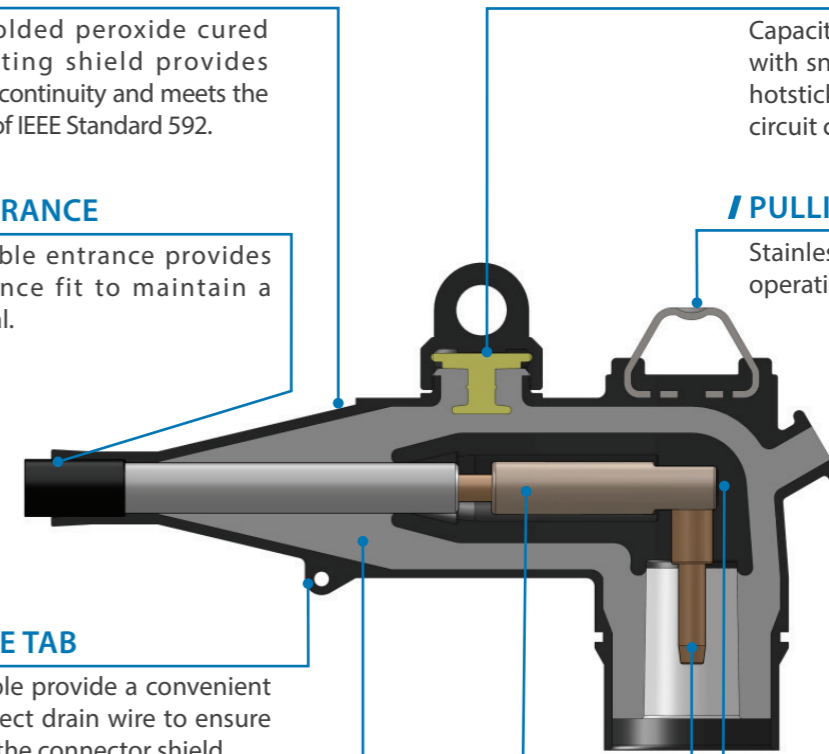
Stainless steel pulling eye for hotstick operations.

### / SEMICONDUCTING INSERT

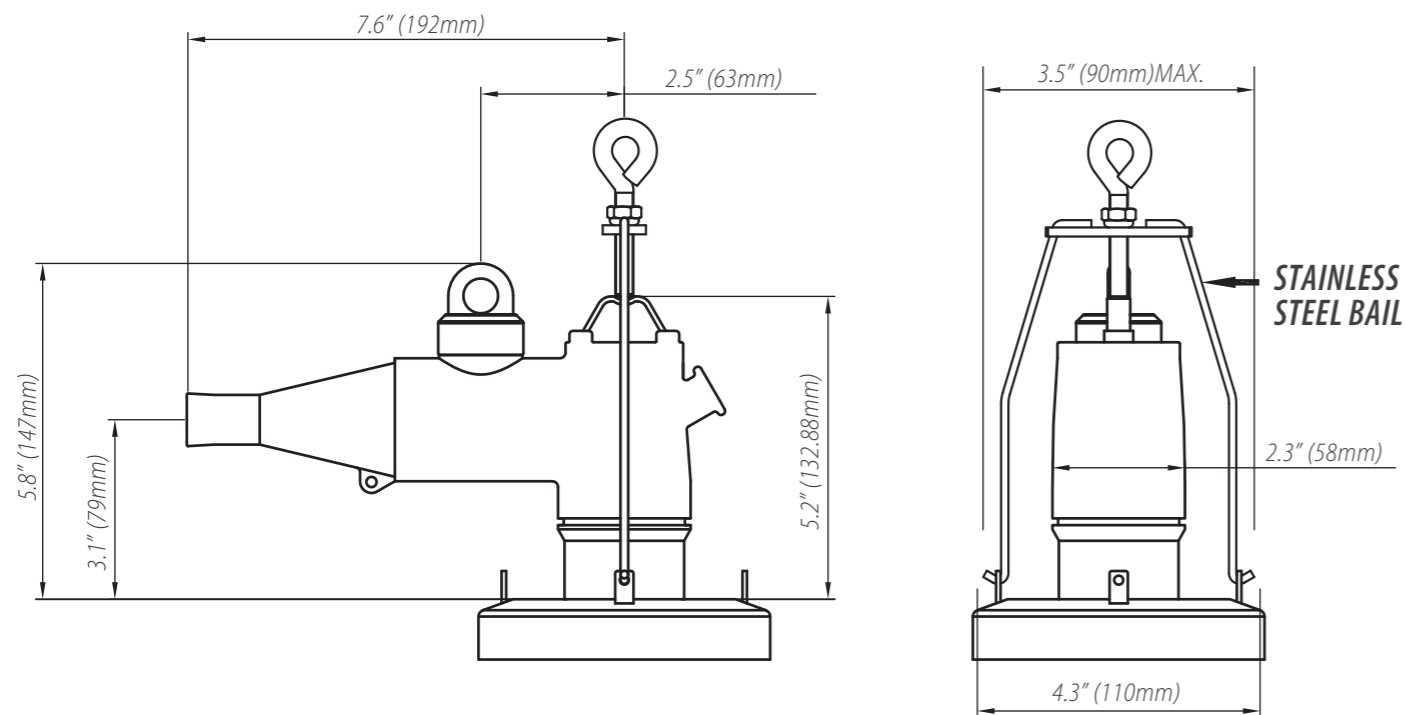
Precision molded peroxide cured semiconducting insert provides corona-free electrostatic shielding of the compression connector.

### / PROBE

Tin plated copper probe ensures reliable electrical connection.



## DETAILED COMPOSITION OF THE CHARDON DEADBREAK ELBOW CONNECTOR



## ORDERING INFORMATION

15/25kV Deadbreak Elbow

Each kit Contains:

- / Elbow body
  - / Bi-Metal Compression Lug
  - / Copper Probe
  - / Probe Installation Tool
- / Bail Assembly
  - / Silicone Lubricant
  - / Installation Instruction Sheet

To order a Chardon 25kV Deadbreak Elbow Kit, follow the steps below:

**25-DE200**

**"W"**

**"X"**

**"Y"**

**"Z"**

**"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	Inches	Millimeters
AA	0.508 - 0.685	12.9 - 17.4
A	0.642 - 0.807	16.3 - 20.5
B	0.768 - 0.945	19.5 - 24.0
C	0.906 - 1.106	23.0 - 28.1

### Conductor Code Table (Compression Connectors)

CONDUCTOR CODE	Concentric or Compressed		Compact or Solid	
	AWG or kcmil	mm <sup>2</sup>	AWG or kcmil	mm <sup>2</sup>
01	#6	-	#4	-
02	#4	-	#3	25
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	-

Example :

To order a standard Chardon 25kV Deadbreak Elbow with a cable insulation diameter of 0.990", a 3/0 bi-metal compression connector, and a capacitive test point, order the part number 25-DE200TC08.



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