

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.

PRODUCTION TESTS

Tests conducted in accordance with IEEE/ANSI Standard 386.

- / Partial Discharge – 19 kV≤5pC
- / 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

Voltage Class	25 kV
Max. Rating Phase to Ground	15.2 kV
AC 1 Minute Withstand	40 kV
DC 15 Minute Withstand	78 kV
BIL and Full Wave Crest	125 kV
Partial Discharge	19 kV≤5pC

•25DE200-121825- REV04

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.

CURRENT RATINGS

Description	Test Parameters
Continuous	200 amps rms
Short Time	• 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 table 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

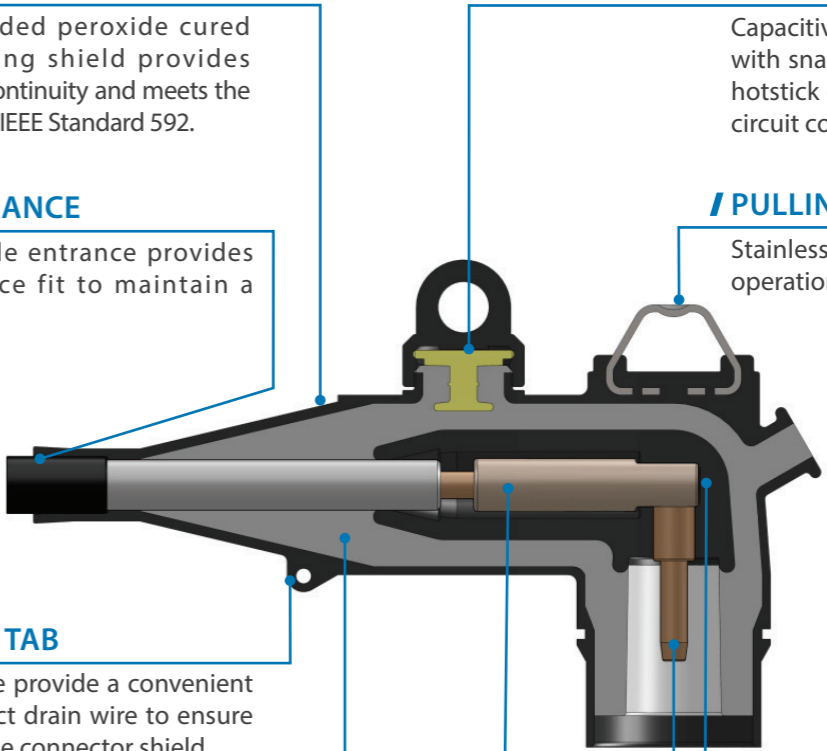
Stainless steel pulling eye for hotstick operations.

/ SEMICONDUCTING INSERT

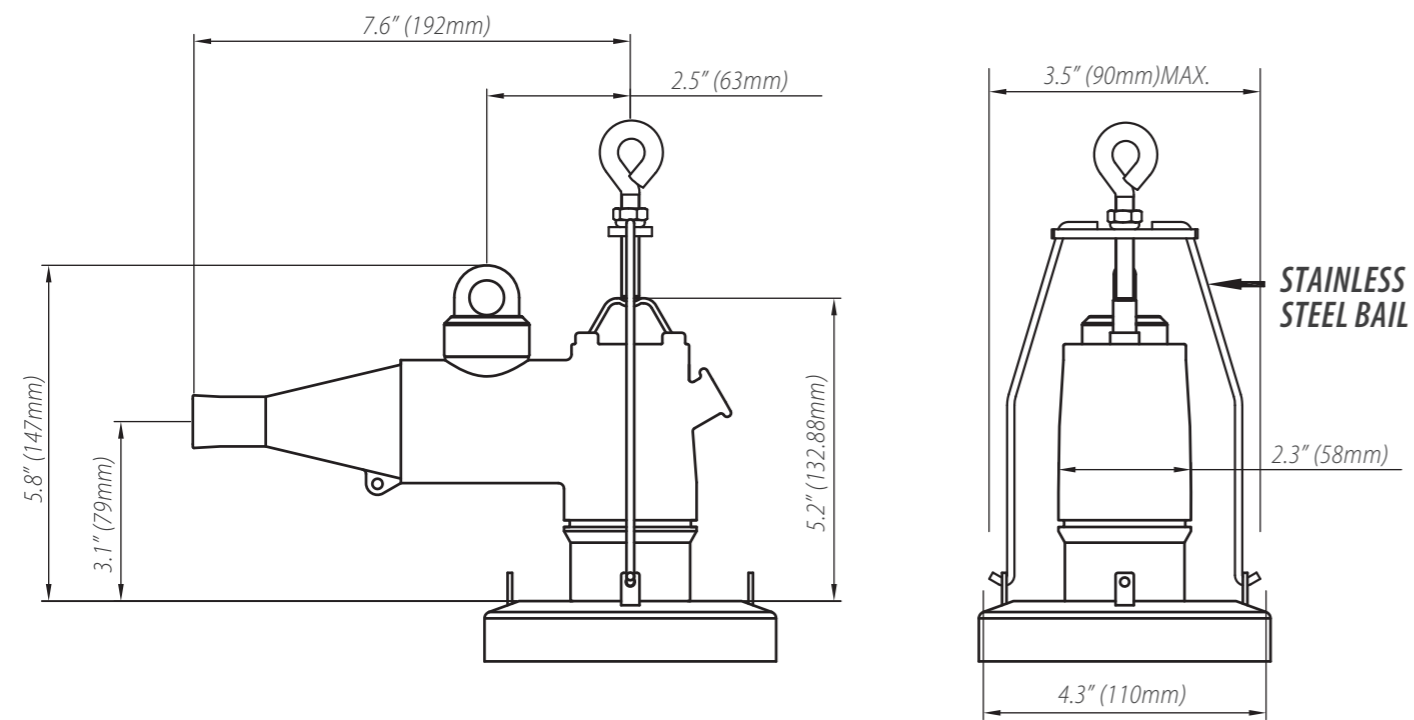
Precision molded peroxide cured semiconducting insert provides corona-free electrostatic shielding of the compression connector.

/ 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:

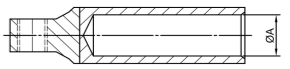
25-DE200	"W"	"X"	"Y"	"Z"
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- "W" = Enter T if want a Capacitive Test Point
- "X" = Cable Range Code (See Cable Range Table)
- "Y" = Conductor Code (See Conductor Table)
- "Z" = Enter C if a Plated Copper Connector is needed
Enter B if a Bi-metal Connector is needed

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	Concentricor Compressed		CompactorSolid		Inner Diameter ØA(mm)	
	AWG or kcmil	mm²	AWG or kcmil	mm²	Copper Lug	Bi-metal Lug
01	#6	-	#4	-	5.5	5.13
02	#4	-	#3	25	6.0	6.55
03	#3	25	#2	35	7.0	7.32
04	#2	35	#1	-	8.5	8.13
05	#1	-	1/0	50	9.0	9.09
06	1/0	50	2/0	70	9.6	10.20
07	2/0	70	3/0	-	12.0	11.35
08	3/0	-	4/0	95	13.3	13.33
09	4/0	95	250	120	14.0	14.00
10	250	120	300	-	15.0	15.21

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-DE200TC08B.

Shear Bolt Connector Selection Guide

Catalog No.	Conductor Range (mm²)	Remarks
200SBC-25-50/1-AL	25-50	Only suitable for Cable Range Code A
200SBC-70-95/1-AL	70-95	Only suitable for Cable Range Code B and C
200SBC-25-95/1-AL	25-95	Only suitable for Cable Range Code B and C
200SBC-120/1-AL	120	Only suitable for Cable Range Code B and C

Example:
For Shear Bolt Connector with a conductor Range between 25-50 mm², the part number would be : 200SBC-25-50/1-AL



200SBC Series



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