

# 250 A Deadbreak Elbow Connector

**DE250**

**Electrical Apparatus**

**250 A, 24 kV Class**

**1550-10**



**Figure 1.**  
**DE250 Deadbreak Elbow Connector.**

## RELATED PRODUCTS

- DRC250 Receptacle Cap
- DPD250 Dead End Plug
- DPS250 Standoff Plug
- DPE250 Earthing Plug
- DJ2503 3-Way Junction

## INSTALLATION

- No special tools, heating, taping, or potting are required.
- Connector may be energized immediately after installation on its mating part.
- Mates with bushings, plugs, and junction devices complying with the listed standards.

## APPLICATION

- For connection of polymeric cable to transformers, switchgear, motors and other equipment with a premoulded separable connector.
- For indoor and outdoor installations.
- System voltage up to 24 kV.
- Continuous current 250 A (300 A overload for 8 hours).
- Cable particulars:
  - Polymeric cable (XLPE, EPR, etc.)
  - Copper or aluminum conductors
  - Semiconducting or metallic screens
- Conductor size 16-120 mm<sup>2</sup>

## FEATURES

- Provides a fully screened and fully submersible separable connection when mated with the proper bushing or plug.
- Built-in capacitive test point to determine the circuit status or install a fault indicator.
- No minimum phase clearance requirements.
- Mounting can be vertical, horizontal, or any angle in between.
- 100% factory tested.

## STANDARDS

- Will meet the requirements of VDE 0278, IEC 502-4, EDF HN 52-S-61, EEE Std 386™ standard, BS 7215 and others.

## QUALITY ASSURANCE

- Our manufacturing facility is registered to ISO 9001-2008 by third party audit.
- Required Production Tests
- Periodic X-Ray Analysis

## PACKAGING

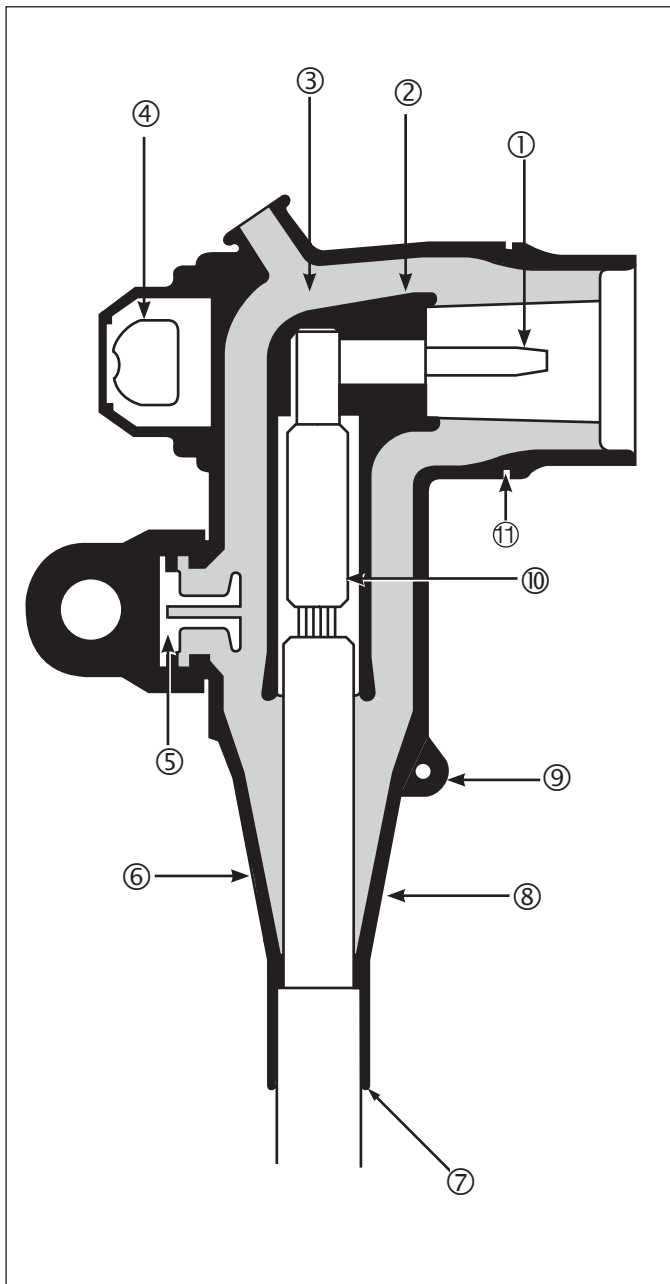
- Supplied in a kit with all necessary parts, approximate weight 1 kg.

**TABLE A**  
**Electrical Ratings**

<b>Maximum System Voltage (U<sub>m</sub>)</b>	24 kV
<b>Impulse</b>	125 kV
<b>AC Withstand (5 min.)</b>	54 kV
<b>Continuous Current</b>	250 A
<b>Overload (8 hrs Max.)</b>	300 A
<b>Short Circuit Withstand, 1 sec. (rms sym.)</b>	12.5 kA

NOTE: Ratings are based on IEC Standards and do not reflect maximum capability.

## Features and Detailed Description



**Figure 2.**  
250 A, 24 kV Class DE250 Deadbreak Elbow Connector.

### 1. Pin Contact

Tin-plated copper pin screws into the conductor connector with the supplied hex key.

### 2. Internal Screen

Moulded EPDM conducting rubber screen controls electrical stress.

### 3. Insulation

Moulded EPDM insulating rubber is formulated and mixed in-house to ensure high quality.

### 4. Pulling Eye

Encapsulated stainless steel pulling eye with a detent to position the bail.

### 5. Capacitive Test Point

Capacitive test point provides means to check circuit status. A moulded EPDM conducting rubber cap provides a watertight seal.

### 6. Stress Relief

The configuration of the outer screen and insulation provides cable stress relief.

### 7. Cable Entrance

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

### 8. External Screen

Moulded EPDM conducting rubber mates with the cable screen to maintain screen continuity and ensure that the assembly is at earth potential.

### 9. Earthing Eye

Moulded into the external screen for connection of an earthing wire.

### 10. Conductor Contact

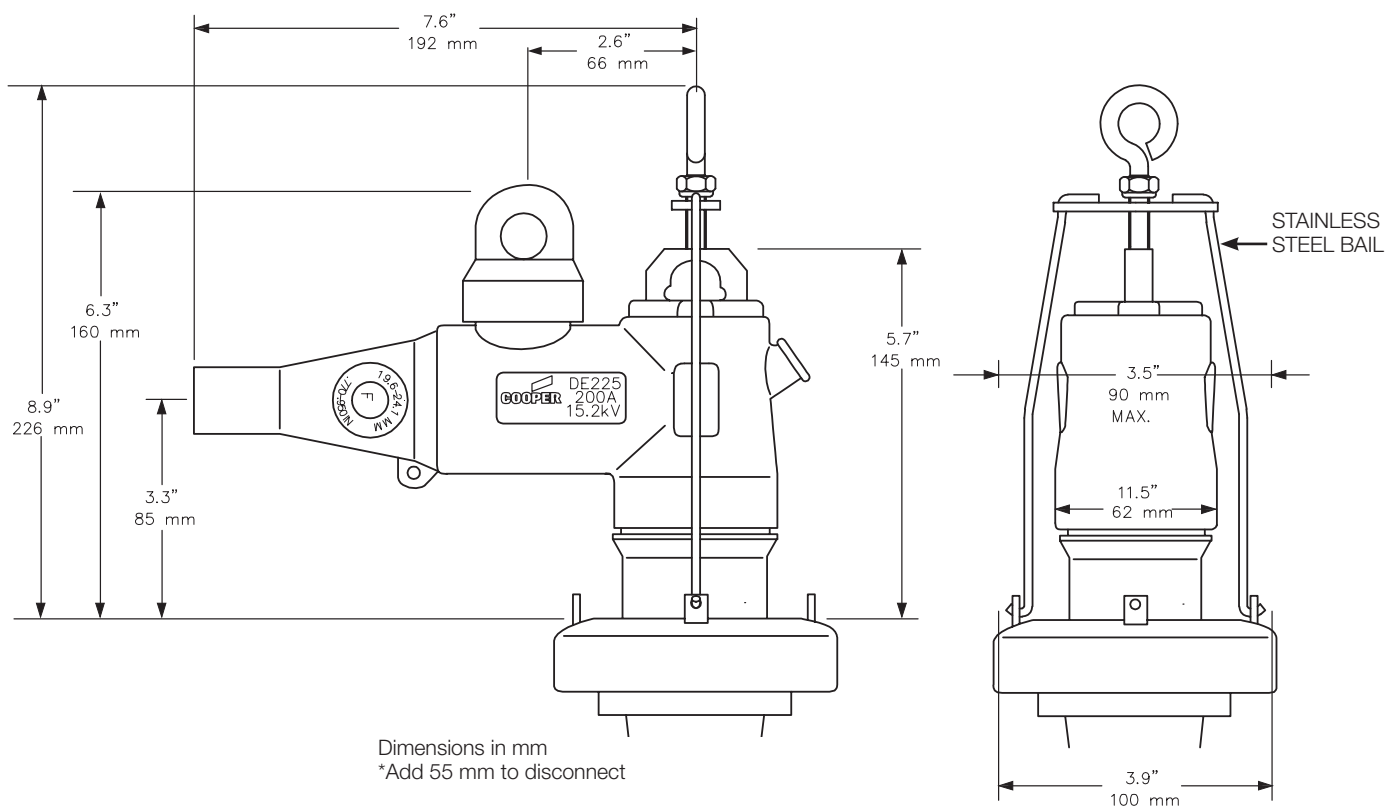
Inertia welded bimetallic compression connector accepts copper or aluminum conductors.

### 11. Locking Ring Groove

Provision for an optional three-phase locking ring.

### 12. Stainless Steel Bail (Figure 3)

Secures the connector to its mating bushing or accessory.



**Figure 3.**  
**DE250 Deadbreak Elbow Connector dimensional information.**

**ORDERING INFORMATION**

The ordering formula for the DE250 Separable Connector is **DE250-R-C**. Substitute for R and C as described below. Select the range from Table R that best fits the diameter of the core insulation. Select the code from Table C for the conductor size and type of connector required.

**Ordering Example:** For 20 kV cable, 50 mm<sup>2</sup> aluminum conductor, 21.0 mm core insulation diameter, unplated, DIN connector, specify **DE250-F-50**

**NOTE:** Bimetallic connectors can be used with aluminum or copper conductors.

**TABLE R**  
**Cable Insulation Range**

Insulation Range Designation	Cable Insulation Range Ø (mm)	
	Min.	Max.
B	13.5	17.4
D	16.3	20.8
F	19.6	24.1
H	23.1	28.7
J	27.9	33.5

**Cable seal adapters are ordered separately.**

**TABLE C**  
**Conductor Code**

Stranded Conductor Size (mm <sup>2</sup> )	DIN Unplated	DIN Plated	EDF Type	DIN Copper
16	16	P16	E16	C16
25	25	P25	E25	C25
35	35	P35	E35	C35
50	50	P50	E50	C50
70	70	P70	E70	C70
95	95	P95	E95	C95
120	120	P120	-	C120

