

250 A Deadbreak Straight Connector

DS250

Electrical Apparatus

250 A, 24 kV Class

1550-11



Figure 1.
DS250 Deadbreak Straight Connector.

RELATED PRODUCTS

- DPC250 Receptacle Cap
- DPD2500 Dead End Plug
- DPE250 Earthing Plug
- DPS250 Standoff Plug
- DJ250 Junctions

INSTALLATION

- No special tools, heating, taping, or potting are required.
- Connector may be energised 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 mm²

FEATURES

- Provides a fully screened and fully submersible separable connection when mated with 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.
- AC withstand
- Partial Discharge

STANDARDS

- Meets the requirements of Cenelec HD629.1 S2 & IEC 60502-4.

QUALITY ASSURANCE

- Our manufacturing facility is registered to ISO 9001-2000 by third party audit.
- Required Production Tests
- Periodic X-Ray Analysis

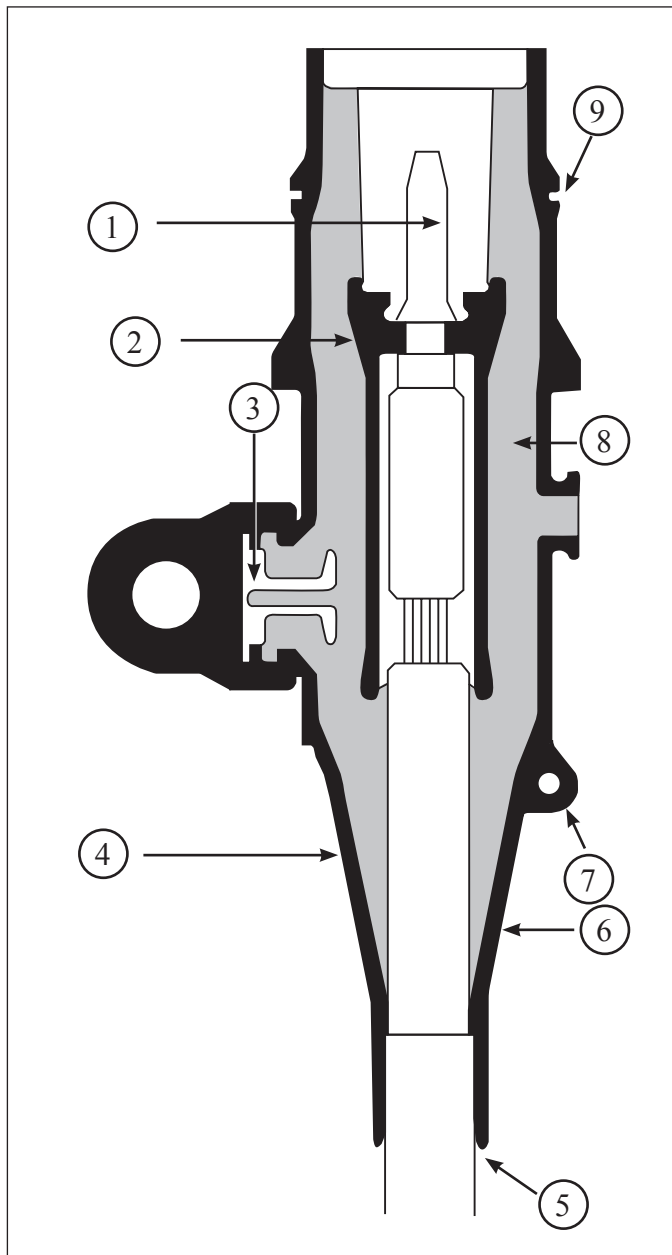
PACKAGING

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

TABLE A
Electrical Ratings

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

Features and Detailed Description



1. Conductor Contact

Inertia welded bimetallic compression connector accepts copper or aluminum conductors.

2. Internal Screen

Moulded EPDM conducting rubber screen controls electrical stress.

3. Capacitive Test Point

Capacitive test point provides a means to check circuit status. A moulded EPDM conducting rubber cap earths the test point when not in use.

4. Stress Relief

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

5. Cable Entrance

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

6. External Screen

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

7. Earthing Eye

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

8. Insulation

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

9. Locking Ring Groove

Provision for an optional three-phase locking ring.

10. Stainless Steel Bail (Not Shown)

Secures the connector to its mating bushing or accessory.

Figure 2.
250 A - 24 kV Class DS250 Deadbreak Straight Connector.

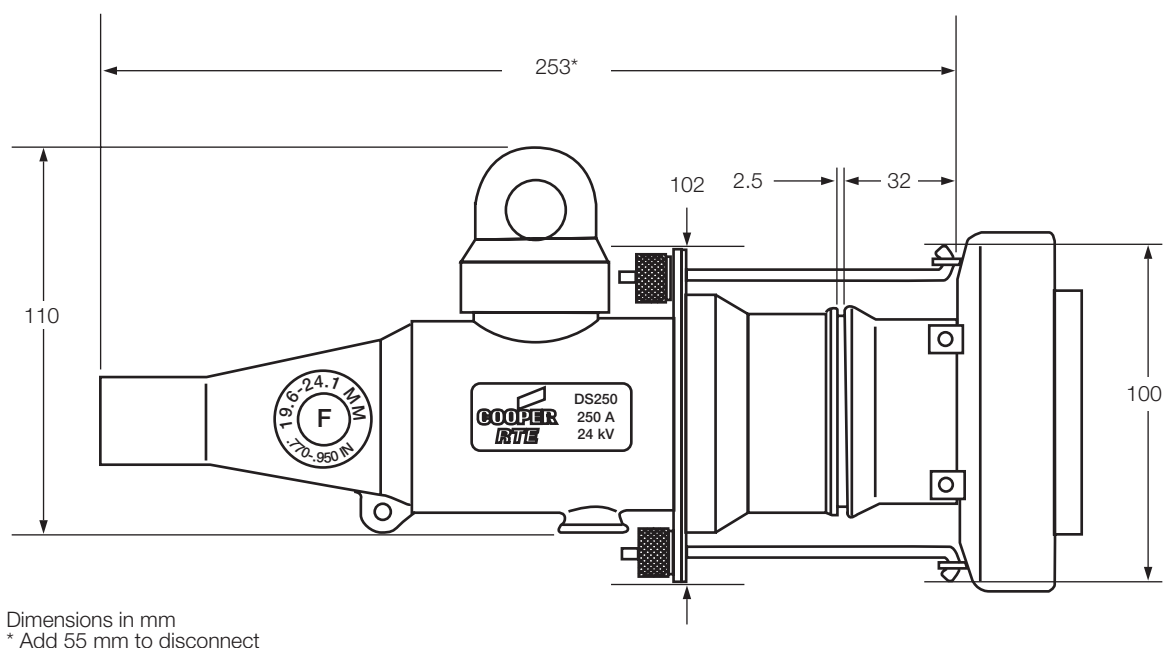


Figure 3.
DS250 Deadbreak Connector dimensional information.

KIT CONTENTS

The complete kit includes 1 each moulded straight housing, conductor contact, stainless steel ball, silicone lubricant, and installation instructions.

ORDERING INFORMATION

The complete catalog number for the elbow connector is **DS250RC**.

R is the cable range designation and C is the conductor contact code. Select the cable range designation from Table R. Select the conductor contact code from Table C for the conductor size and type of connector required.

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

Ordering Example: For 20 kV cable, 50 mm² aluminum conductor, 21.0 mm core insulation diameter, unplated DIN connector, specify **DS250F50**.

Cable seal adapters are ordered separately.

TABLE C
Conductor Code

Stranded Conductor Size (mm ²)	DIN Unplated	EDF Type	DIN All Copper
16	16	E16	C16
25	25	E25	C25
35	35	E35	C35
50	50	E50	C50
70	70	E70	C70
95	95	E95	C95
120	120	-	C120

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

