400 A Apparatus Bushings

DB400 – 24 for 24 kV Applications
DB400 – 36 for 36 kV Applications

COOPER
Cooper Power Systems

Electrical Apparatus
I550-25

Figure 1.
DB400 Deadbreak Apparatus Bushing.

APPLICATION

- For oil-insulated (R-temp, hydrocarbon, or silicon) apparatus, including switchgear, transformers, and capacitors.
- System voltages of 24 kV and 36 kV.
- Continuous Current 400 A.
- For indoor and outdoor installations.
- Mounting in vertical or horizontal position.

STANDARDS

- Meets the interface requirements of CENELEC HD 506 S1, DIN 47636, and EDF C33-051 and others.
- Has been tested with mating parts to IEC 60502-4 and CENELEC HD 629.1 S1.

QUALITY

- 100% Production Tests
- Periodic X-Ray Analysis

TABLE A
Electrical Ratings

	DB400-24	DB400-36
Maximum System Voltage (U_m)	24 kV	36 kV
Impulse Withstand	125 kV	170 kV
AC Withstand	54 kV	81 kV
Continuous Current	400 A	400 A
Overload (8 hrs Max.)	600 A	600 A
Short Circuit Withstand 1 sec. (rms sym.)	18 kA	18 kA

RELATED PRODUCTS

- Mates with the following products of the same voltage rating:

DE400 Elbow	DE436 Elbow
DT400P Plug-in Tee	DT436P Plug-in Tee
DRC400P Receptacle Cap	DRC436P Receptacle Cap

PACKAGING

- Supplied in a box of three, approximate weight 10 kg.

Features and Detailed Description

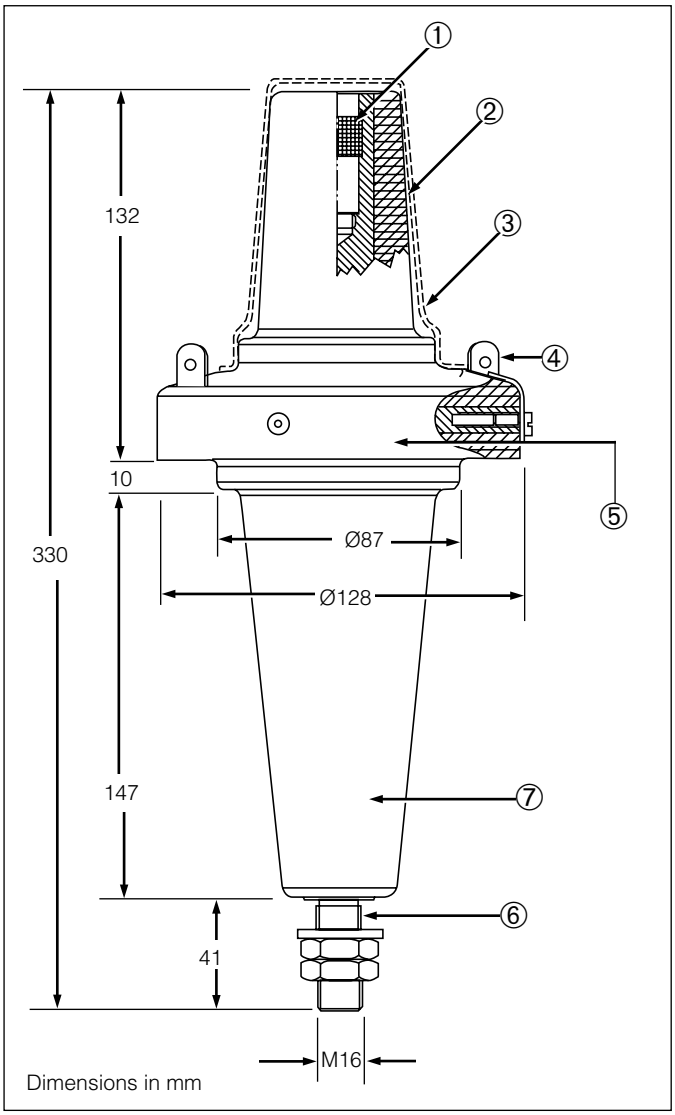


Figure 2.
Section View DB400 Bushing

ORDERING INFORMATION

To order, simply specify:
DB400-24 for 24 kV applications
DB400-36 for 36 kV applications.

Clamping devices and gaskets are ordered separately, as shown below:

TABLE B
Clamping Device and Gaskets

Type of Clamp	Catalog Number
DIN 42538	**BC-D-400-630**
NFC 52-453	**BC-N-400-630**

1. Contact

Plated multi-point contact accepts the pin contact of the mating connector.

2. Interface

The interference fit between the bushing and the connector prevents the entrance of moisture and contamination.

3. Shipping Cap

The cap prevents contamination of the interface before energization.

4. Bail Tabs

Attachment points for the bail of the mating connector.

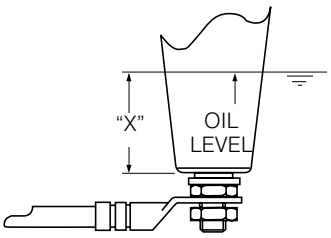
5. Internal Screen

The screen controls electrical stress. An earthing plate for connection to the screen is supplied.

6. Central Conductor

The copper conductor has an M16 thread for the apparatus connection.

7. Moulded Epoxy Resin Body



Voltage (kV)	X (mm)
12	40
24	50
36	70

Figure 3.
Minimum oil level.

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Quality from
Cooper Industries

P.O. Box 1640, Waukesha, WI 53187
www.cooperpower.com

MI
10/97 2M

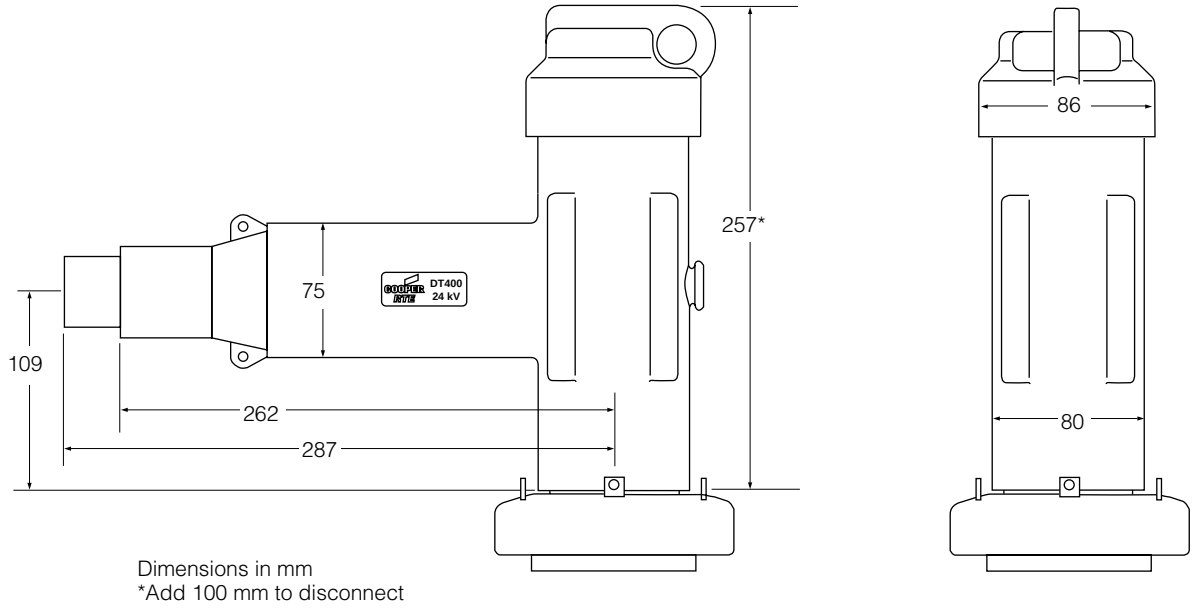

Figure 3.
DT400 Deadbreak Tee Connector dimensional information.

Insulation Range Designation	Cable Insulation Range Ø (mm)	
	Min.	Max.
A	16.3	19.3
B	18.3	21.0
C	20.0	24.1
D	23.1	27.0
E	24.9	28.9
F	27.7	32.6
G	30.9	36.2
H	34.0	39.5

Stranded Conductor Size (mm^2)	DIN Type	EDF Type	DIN All Copper
25	25	E25	C25
35	35	E35	C35
50	50	E50	C50
70	70	E70	C70
95	95	E95	C95
120	120	E120	C120
150	150	E150	C150
185	185	E185	C185
240	240	E240	C240
300	300	–	C300
400	400	–	C400