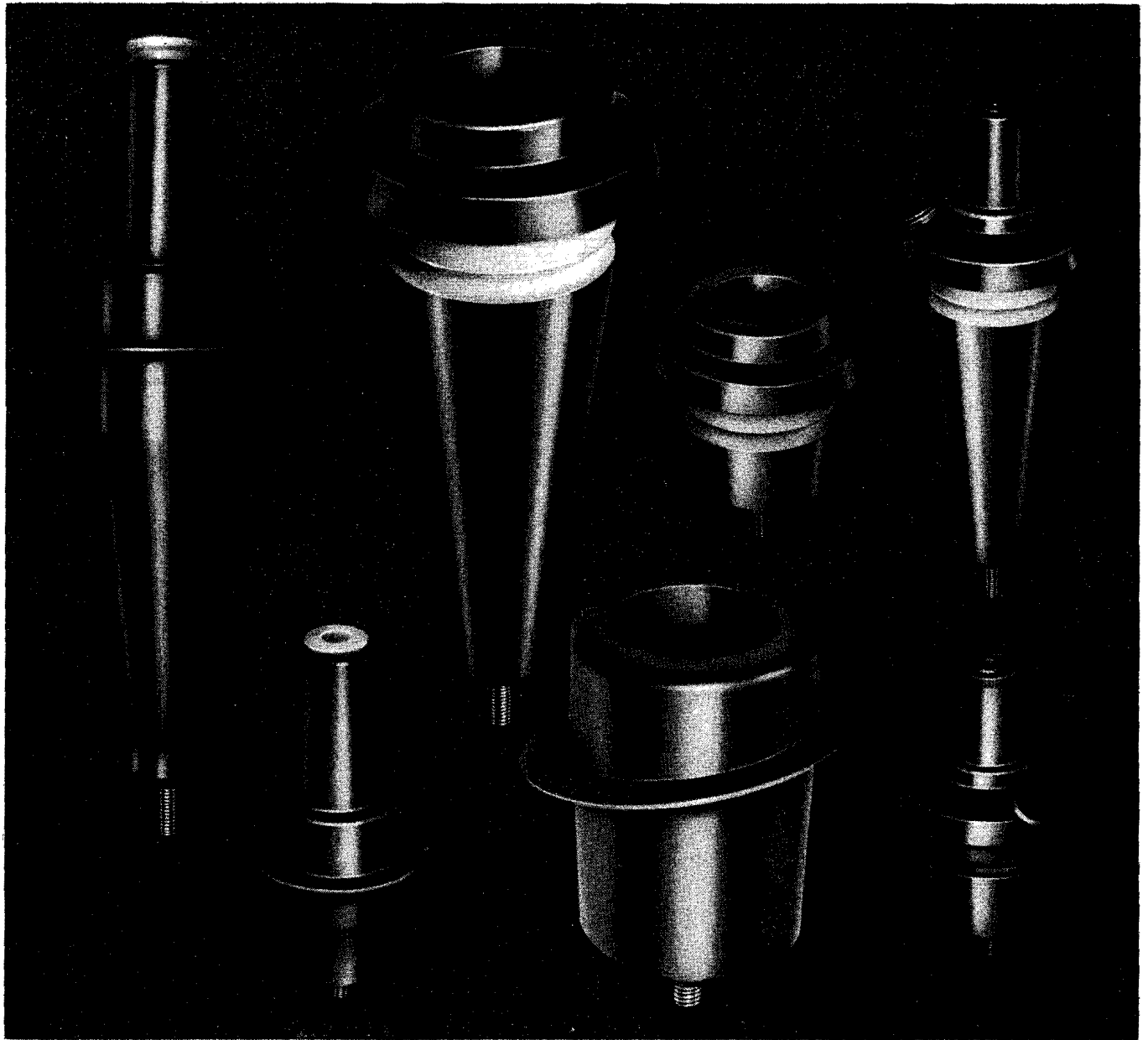


Westinghouse



## High Voltage Cast Epoxy Bushings

For Pad Mounted and  
Submersible Transformer Applications



### Application

Westinghouse offers a complete line of high voltage cast epoxy bushings for use with elbow connectors or inserts. There are designs for single phase and three phase pad mounted and submersible transformers as well as switching equipment. In addition to being supplied on Westinghouse equipment, these bushings are available to other manufacturers.

### Characteristics

Westinghouse bushings are cast using an

epoxy which is specifically formulated and tested for this application. They are impervious to moisture, resistant to tracking, and have excellent impact strength.

The load break bushing is designed to accept interchangeably, elbow connectors made by Elastimold®, Burndy, Blackburn and RTE. The "well" bushing is designed for use with Elastimold® load break and non-load break inserts and the non-load break bushing is designed for the Elastimold® non-load break elbow.

### Tests

Extensive tests have been conducted on all designs at the Westinghouse High Power Laboratory at East Pittsburgh Pennsylvania and at the Laboratories of the Distribution Transformer Division. The results of these tests demonstrate that the bushings will meet all of the requirements for the service designated. The load break bushing meets the requirements outlined in the proposed IEEE-NEMA standards for separable connectors.

① Trademark of Amerace-ESNA Corp.

April, 1970  
New Information  
E, D, C/2062,2069/DB

## Westinghouse



### Load Break Bushing

The high voltage load break bushing is designed to accept a high voltage elbow connector. Its features allow a utility man to energize or de-energize the transformer by simply inserting or removing the elbow connector from the bushing with a hookstick.

An important feature of the bushing is that it has been designed and tested to accept interchangeably, load break elbow connectors made by Elastimold<sup>®</sup>, Blackburn, Burndy and RTE. Another important feature is its non-venting design which prevents any gases or arcing products from entering the transformer tank.

<sup>①</sup> Trademark of Amerace-ESNA Corp.

The contact assembly and arc quenching insert are easily removed for cleaning or replacing.

For cover mounting applications, a long shank load break bushing is available with a straight stainless steel mounting ring. The short shank load break bushing is available with a straight or slanted mounting ring; and is intended for sidewall mounting.

### Identification

- ① Epoxy resin bushing body.
- ② Conductor tube assembly.
- ③ Weld or gasket ring.
- ④ Arc quenching insert.
- ⑤ Contact assembly.
- ⑥ Tension springs.
- ⑦ Stud  $\frac{3}{8}$  x 16 thread
- ⑧ Garter spring groove for internal mounting.
- ⑨ Surge chamber.

### Electrical Characteristics

Voltage—8.3 Kv line to ground, solidly grounded system.

BIL—95 Kv.

Corona extinction level—11 Kv<sup>②</sup>

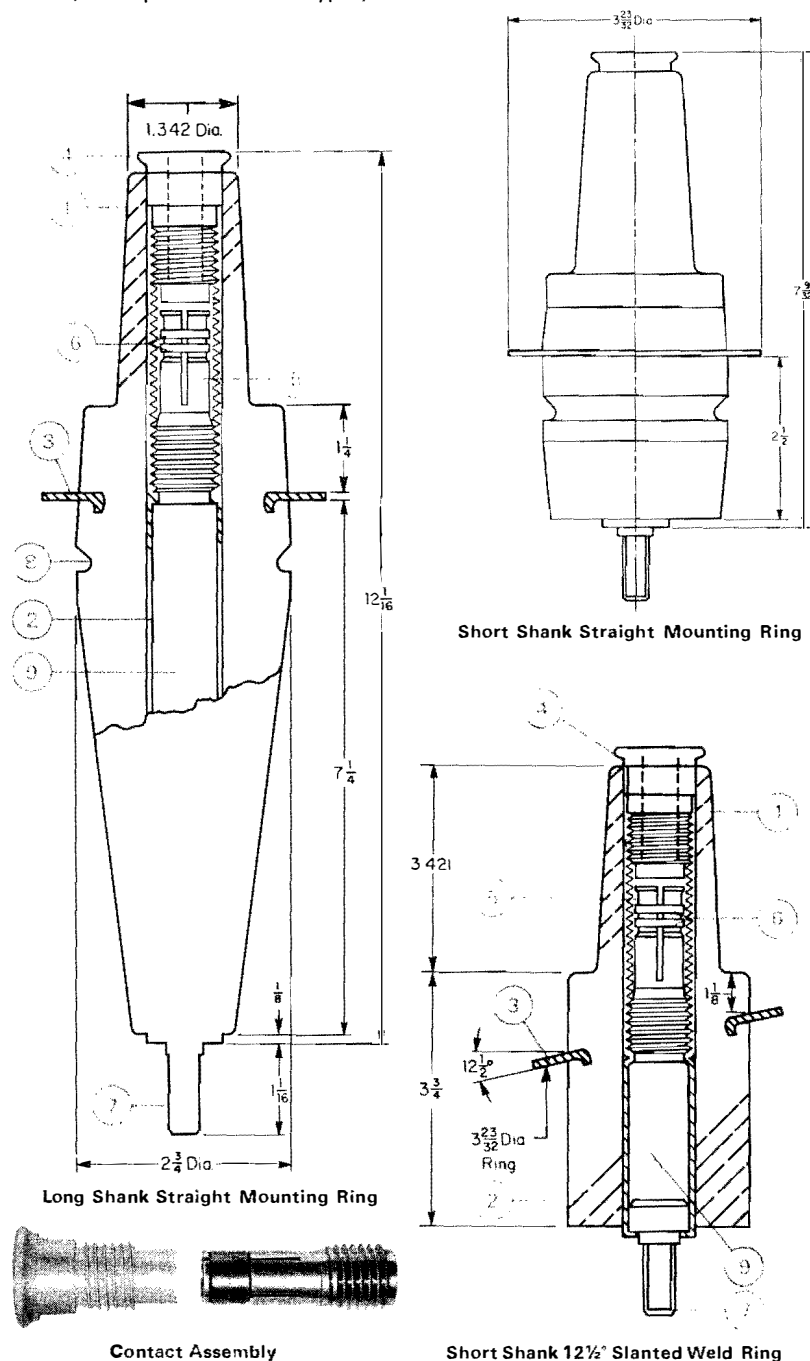
Continuous Current—200 amperes RMS

Momentary Current—10,000 amperes RMS symmetrical for 10 hertz.

Close in—10,000 amperes RMS symmetrical at 8.3 Kv with 140 T or faster backup fuse, or 3 hertz or faster backup breaker.

<sup>②</sup> For corona extinction level above 11 Kv, contact Westinghouse Distribution Transformer Component and Special Products Sales, Sharon, Pa.

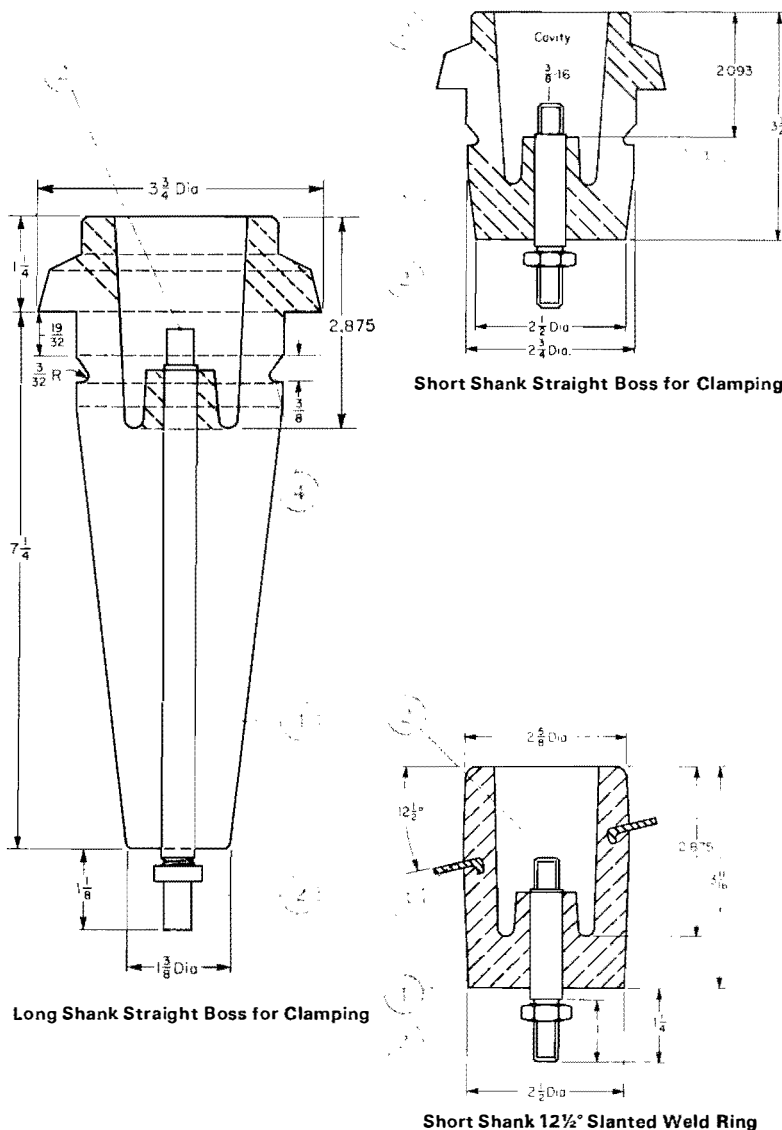
Dimensions In Inches (Unless otherwise shown, are equal for all three types)



## High Voltage Cast Epoxy Bushings

For Pad Mounted and Submersible Transformer Applications

Dimensions In Inches (Unless otherwise shown, are equal for all three types)







### Well Bushings

The high voltage well bushing is designed to accept the Elastimold® load break or non-load break insert.

The long shank well bushing has a straight boss for cover mounting. It is mounted on the cover of the transformer with an internal spring and flange arrangement. (see page 4) The short shank bushing with a straight boss, or with a straight or slanted weld ring (for side wall mounting) is also available.

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### Identification

-  Epoxy resin body.
-  Threaded stud  $\frac{3}{8}$  x 16.
-  Weld ring
-  Garter spring groove for internal mounting.

### Electrical Characteristics

Voltage – 8.66 Kv line to ground, solidly grounded system.

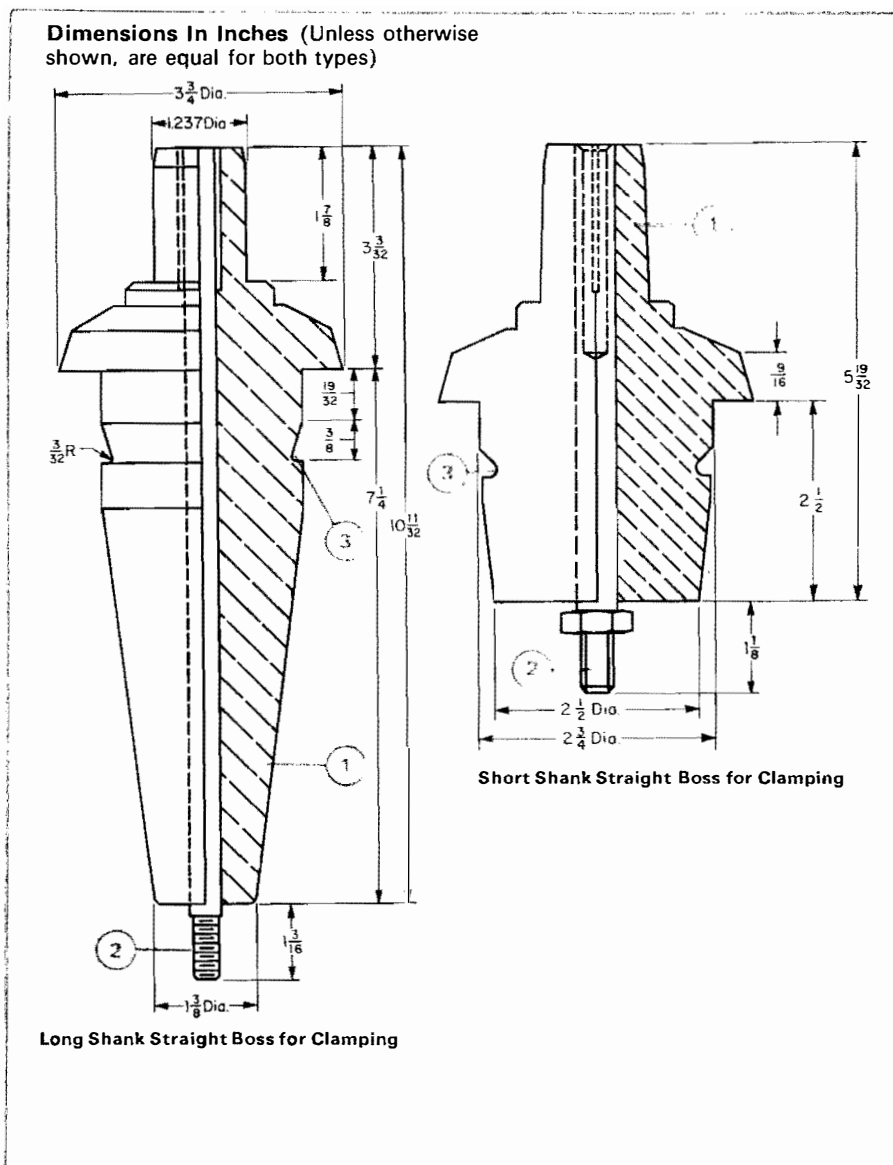
BIL – 95 Kv, Corona Extinction – 11 Kv.

BIL – 125 Kv, Corona Extinction – 19 Kv.

Continuous Current – 200 amperes RMS.

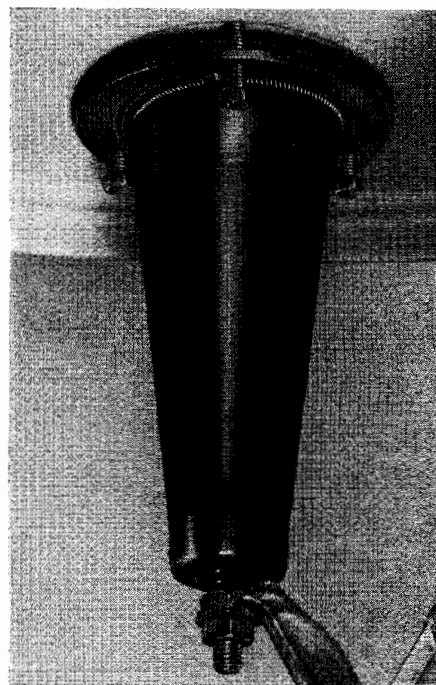
## High Voltage Cast Epoxy Bushings

For Pad Mounted and Submersible Transformer Applications

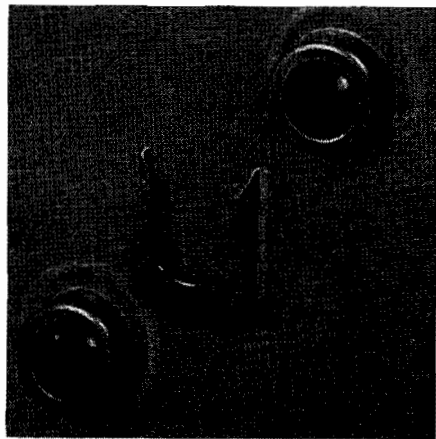


## Mounting Arrangements For All Bushings

The bushings are designed such that they can be welded in and/or gasket mounted. Some designs feature a stainless steel ring which can serve as a welding or gasket surface. Other bushings have a boss (shoulder) for gasket mounting only.



Clamp Ring Mounting



Welded Mounting

## Ordering Information

For additional information and prices, refer to Westinghouse Distribution Transformer Div., Component and Special Product Sales, Sharon, Pa.

## Non-Load Break Bushing

The Westinghouse non-load break bushing is used for de-energized operation only. It will only accept the Elastimold® non-load break elbow.

The long shank bushing has a straight boss for cover mounting and the short shank has a similar boss for side wall mounting. The bushing is also available with a straight or slanted ring for weld mounting.

® Trademark of Amerace-ESNA Corp.

## Identification

- 1 Epoxy resin body.
- 2 Threaded stud  $\frac{3}{8}$  x 16.
- 3 Garter spring groove for internal mounting.

## Electrical Characteristics

Voltage—8.66 Kv line to ground, solidly grounded system.  
 BIL—95 Kv, Corona Extinction—11 Kv.  
 BIL—125 Kv, Corona Extinction—19 Kv.  
 Continuous Current—200 amperes RMS.

**Westinghouse Electric Corporation**

Distribution Transformer Division, Sharon, Pa. 16146  
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