High Voltage Bushing Well 35kV Class

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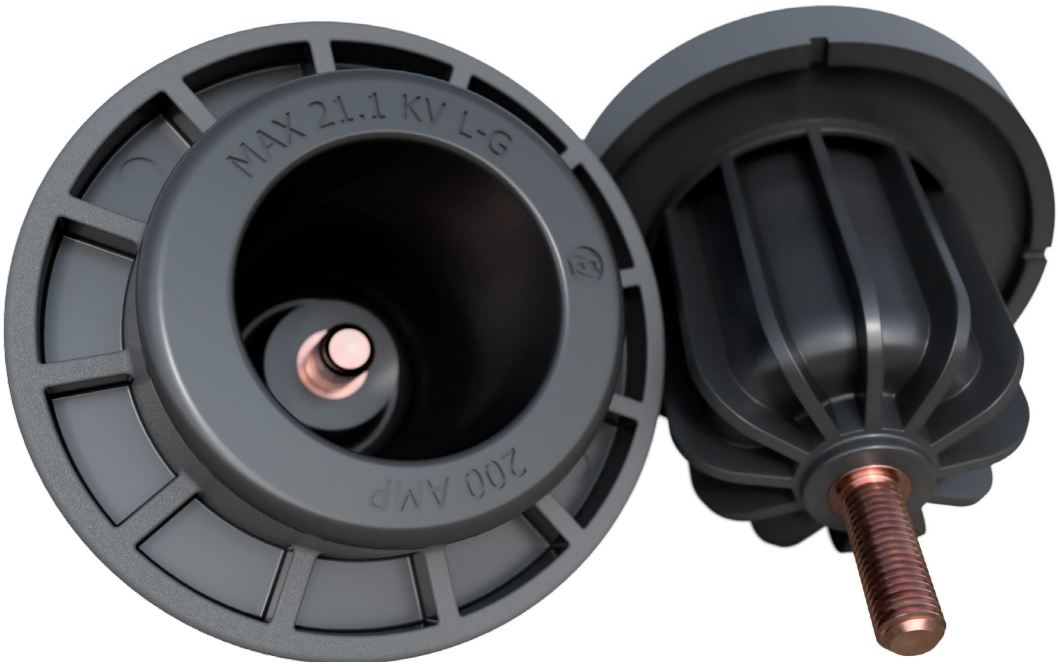


Table 1
Voltage Ratings and Characteristics

Description	kV
Standard Voltage Class	35
Maximum Continuous Line to Ground Voltage	21.1
AC 60 Hz 1 Minute Withstand	50
DC 15 Minute Withstand	103
BIL and Full Wave Crest	150
Minimun Corona Voltage Level	26

Voltage ratings and characteristics are in accordance with ANSI/IEEE Std. 386™ standard.

Table 2
Current Ratings and Characteristics

Description	Amperes
Continuous Current	200 A rms
Short Time	10,000 A rms symmetrical for 0.17 seconds 3,500 A rms symmetrical for 3.0 seconds

Current ratings and characteristics are in accordance with ANSI/IEEE Std. 386™ standard.

BEYOND THE STANDARD

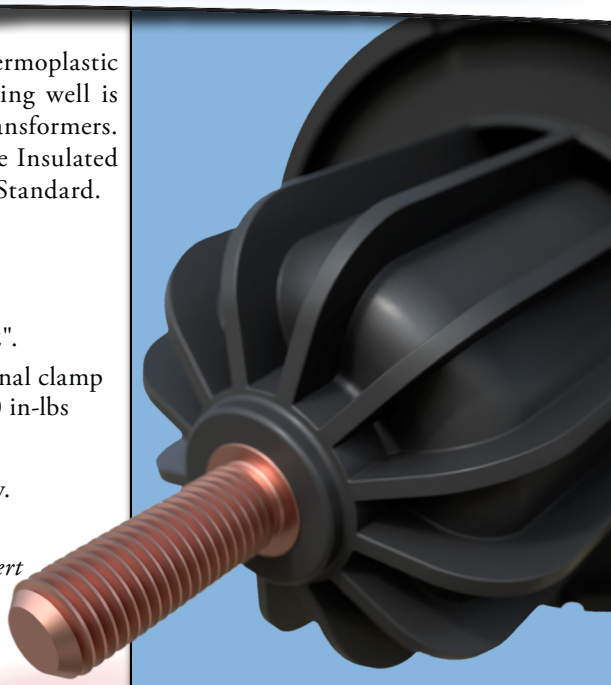
The ERMCO Components, Inc. high voltage bushing well utilizing a highly rigid thermoplastic compound that meets or exceeds all industry and ECI requirements. The bushing well is designed for the termination of primary leads in oil filled devices such as padmount transformers. The bushing well mating interface conforms to the ANSI/IEEE Std. 386 for Separable Insulated Connectors and will accept switch modules (bushing well inserts) complying with the Standard.

DESIGN FEATURES

- Insulated body is molded of a thermoplastic compound designed for excellent electrical and mechanical properties.
- The ground shield is oil resistant.
- The connecting stud is a copper alloy molded into the body to provide a high strength leak free bond.
- Gasket location and compression are controlled at the O.D. by the molded in gasket retaining ring.
- Dimensions comply with ANSI/IEEE 386 Standard Figure 3 for Separable Insulated Connectors.
- Uses tank mounting hole of Ø2.562".
- Recommended torque values: External clamp is 80 in-lbs, Internal connection is 80 in-lbs
- Nitrile gasket (9U09AAW278)
- The removable stud is a copper alloy.

Use a 13/16" socket to replace stud, insert 7/16"-14 threaded end first and torque to 22 ft-lbs.

Order removable studs separately (9U09AAW270)



For more information about the high voltage bushing well, contact your Ermco Components representative or call (877) 267-1855

Ordering Information

High Voltage Bushing Well Kits (Standard Stud Type)

Catalog Number	Description
9U03TPS150	• HV Bushing Well
9U03TPS151	• HV Bushing Well • Nitrile Gasket
9U03TPS152	• HV Bushing Well • Nitrile Gasket • Steel Clamp *(Zinc Electroplating with Yellow Chromate)*
9U03TPS153	• HV Bushing Well • Nitrile Gasket • Stainless Steel Clamp
9U03TPS154	• HV Bushing Well • Steel Clamp *(Zinc Electroplating with Yellow Chromate)*
9U03TPS155	• HV Bushing Well • Stainless Steel Clamp

High Voltage Bushing Well Kits (Removable Stud Type)

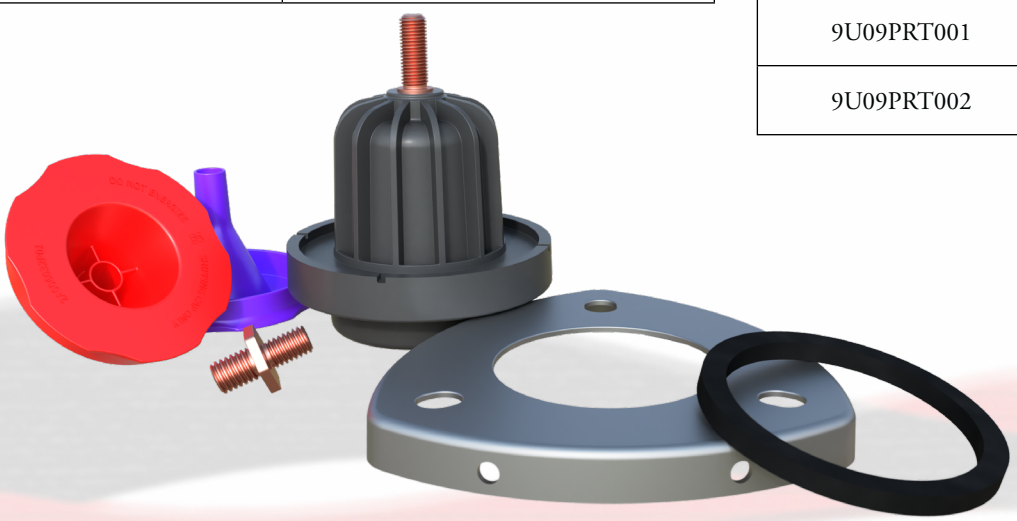
Catalog Number	Description
9U03TPR150	• HV Bushing Well
9U03TPR151	• HV Bushing Well • Nitrile Gasket
9U03TPR152	• HV Bushing Well • Nitrile Gasket • Steel Clamp *(Zinc Electroplating with Yellow Chromate)*
9U03TPR153	• HV Bushing Well • Nitrile Gasket • Stainless Steel Clamp
9U03TPR154	• HV Bushing Well • Steel Clamp *(Zinc Electroplating with Yellow Chromate)*
9U03TPR155	• HV Bushing Well • Stainless Steel Clamp

Hardware Kit

Catalog Number	Description
9U09AAW280	• Steel Clamp *(Zinc Electroplating with Yellow Chromate)* • Nitrile Gasket
9U09AAW281	• Stainless Steel Clamp • Nitrile Gasket

Replacement Parts

Catalog Number	Description
9U09AAW270	Removable Stud
9U09AAW272	Steel Clamp *(Zinc Electroplating with Yellow Chromate)*
9U09AAW273	Stainless Steel Clamp
9U09AAW278	Nitrile Gasket
9U09PRT001	Dust Cap for Standard Stud Type Color: Red
9U09PRT002	Dust Cap for Removable Stud Type Color: Purple



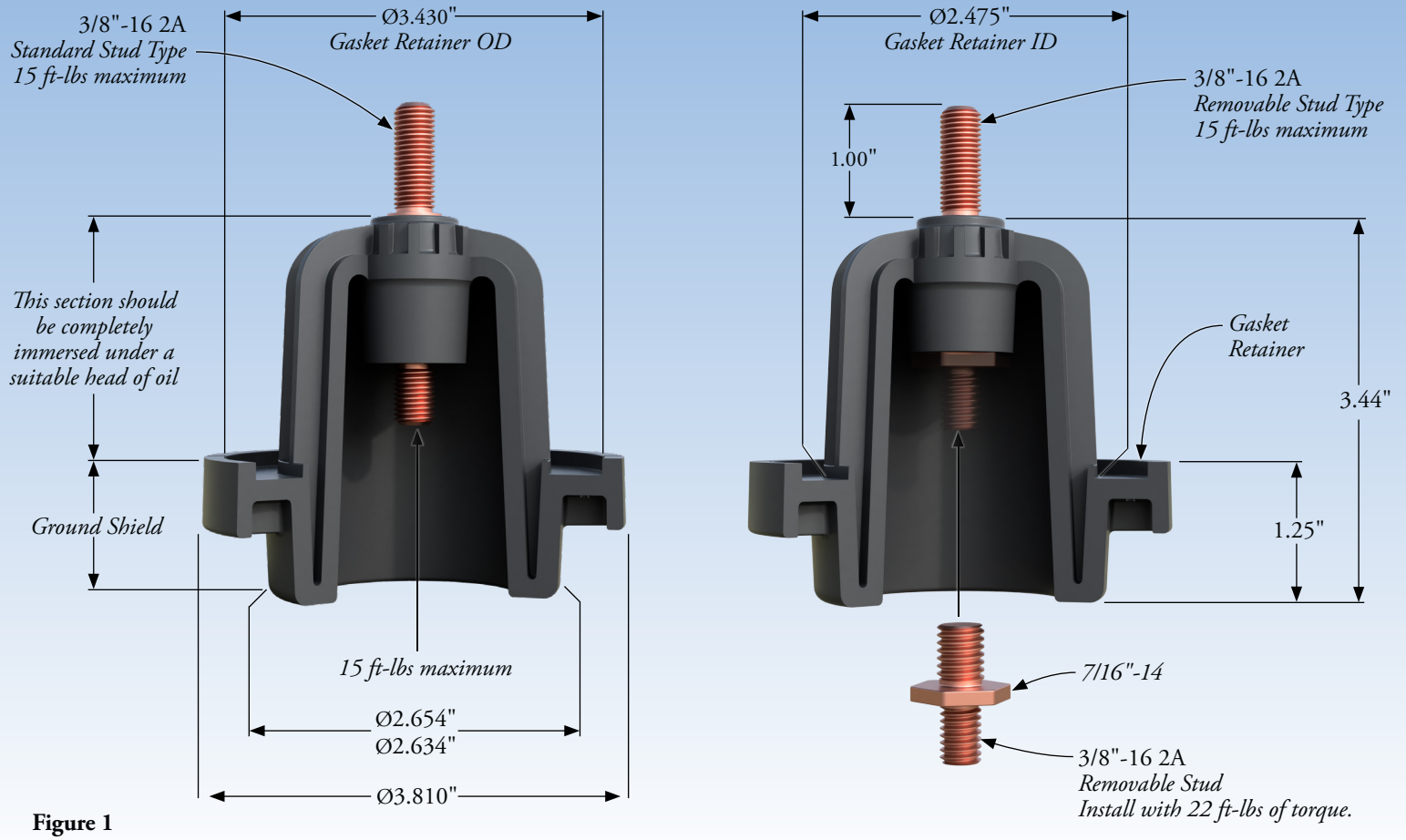


Figure 1

High Voltage Bushing Well Dimensions
Removable and Standard Type

Note: Dimensions are given for reference only.

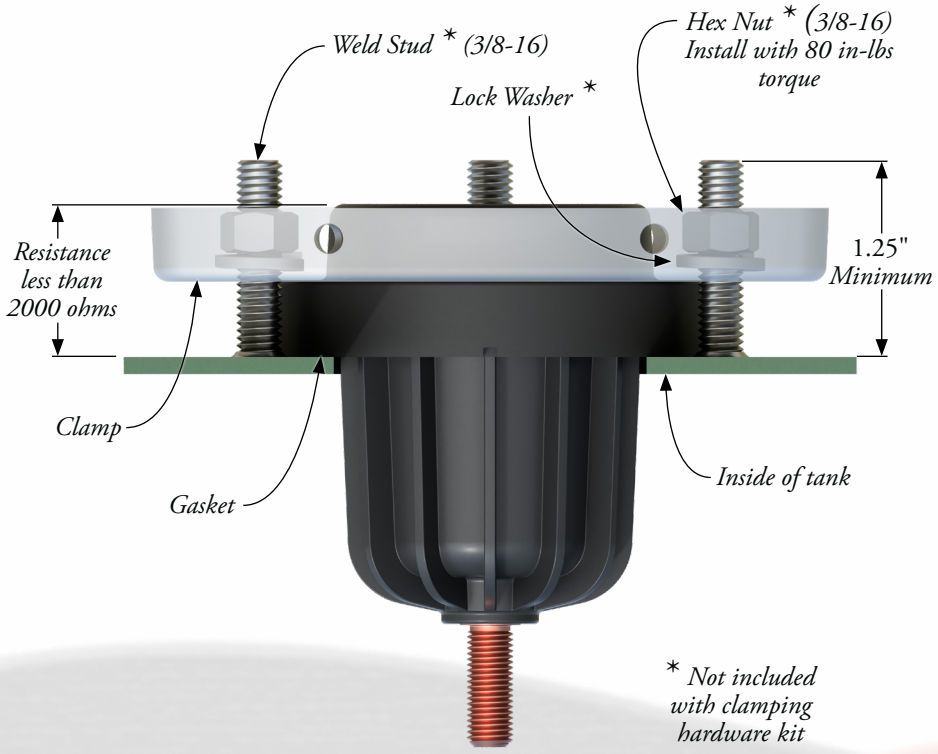


Figure 2

External Clamping Hardware Arrangement

MECHANICAL PERFORMANCE

- The bushing well interface conforms to ANSI / IEEE Std 386 for separable insulated connections.
- Direct pushout force exceeds 1,500 lbf
- Breaking torque exceeds 25 ft-lbs on molded-in studs
- Seal integrity between the molding compound and the current carrying stud certified using Helium mass spectrometer at 1.2 x 10-6 atm cc/sec sensitivity.

CHEMICAL PERFORMANCE

- Passes recognized 10°C transformer oil compatibility test.
- Passes recognized silicone fluid compatibility test.
- Material retains mechanical strength after 120 hrs exposure to insulating fluids at 140°C.

THERMAL PERFORMANCE

- The ERMCO Components bushing well exhibited no cracking and passed electrical testing after thermal cycling between -40°C and 130°C (10 cycles, one cycle / day, six hours transition, six hours dwell).

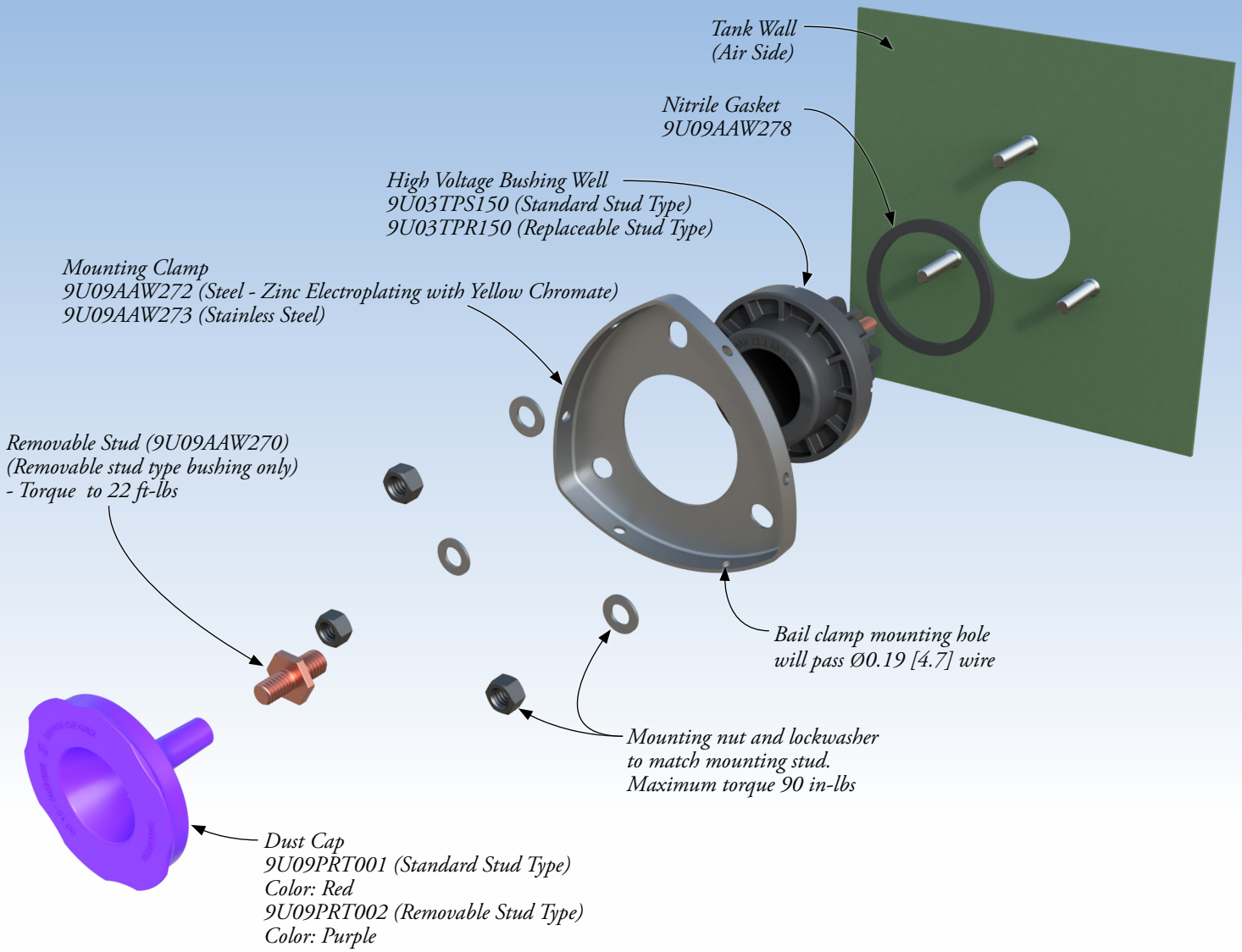


Figure 3

Mounting to Tank

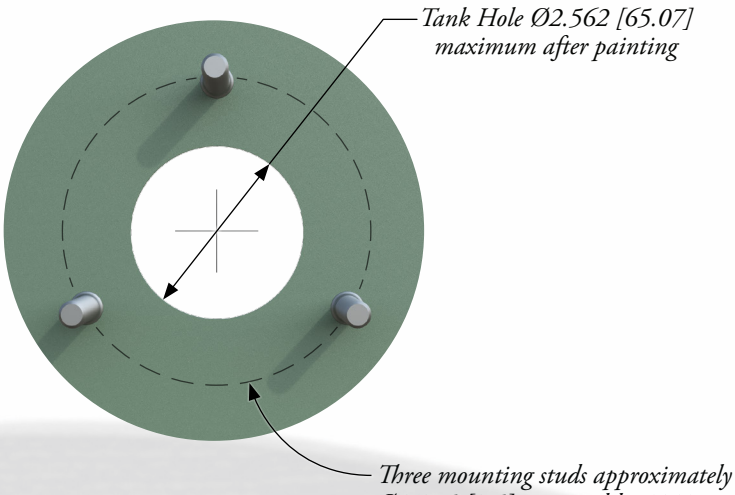


Figure 4

Tank Hole with Studs

Note: Dimensions are given for reference only.