

ERITECH®

ERITECH® HAMMERLOCK

Copper Grounding Connector



ERICO®

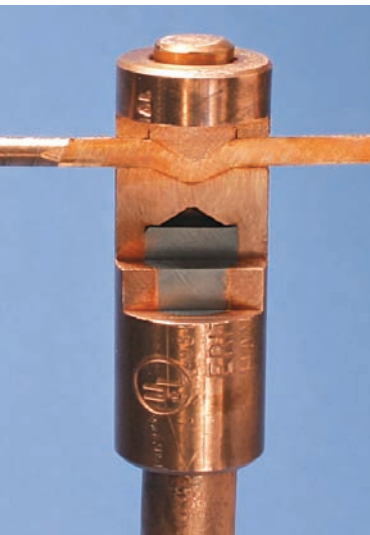
High Quality Connections



ERITECH HAMMERLOCK is machined from highly conductive copper.



It is easy to see why acorn clamps are more susceptible to corrosion than any other type of grounding connection.



ERITECH HAMMERLOCK cutaway.

The patented ERITECH® HAMMERLOCK grounding connector from ERICO® connects the grounding conductor to the ground rod. Machined from highly conductive copper, the state-of-the-art ERITECH HAMMERLOCK provides a low-resistance connection designed to withstand ground fault currents and lightning transients. The ERITECH HAMMERLOCK connector's mechanically rugged design will help ensure that the highest level of performance is maintained for many years after the connection has been buried in the harsh underground environment. The ERITECH HAMMERLOCK is one of the quickest and easiest grounding connectors to install and requires no special tools or training. It has been engineered to be user-friendly, cost-effective, and provides a high level of protection for people and expensive equipment.

Features Include:

- Machined from 100% high-conductivity copper
- Excellent mechanical strength
- Irreversible connection
- Fast and simple installation requires only a hammer
- No training required
- Provides a visual indication of completed connection
- Allows for "T" or pass-through connections
- UL® Listed (#2, 4 and 6 solid to 5/8" copper or galvanized rod)

The Importance of Grounding Connections

Electrical utilities and other industries are discovering significant cost benefits when high-quality electrical grounding systems are installed. Many are specifying low-resistance grounds along their transmission and distribution networks. These low-resistance electrodes limit neutral-to-ground voltage, improve safety and provide better protection against lightning damage. In fact, the savings realized from reduced equipment damage and the decrease in service interruptions have prompted many utilities to undertake large-scale grounding improvement programs.

The three main components of the grounding system are the grounding connector, grounding conductor and ground rod. They are all equally important to the performance of the system. A loose or corroded connection will render the grounding system ineffective. While acorn clamps are still the connector of choice, many installers recognize the serious deficiency in their performance and the risks associated with poor-quality connections. Many acorn clamps are loose the day they are installed.

In order to install an acorn clamp effectively, it is necessary to know the proper torque level for the bolt. Since acorn clamps don't come with instructions and most crews don't have or wouldn't use a torque wrench, many are broken or installed incorrectly. The cost of replacing damaged equipment, and the labor associated with doing so, quickly puts the cost of using inferior connectors into perspective.

Installation Costs

The actual cost of the grounding connector represents only a small fraction of the total installed expense when the labor rate of the installation crew, equipment overhead costs, ground rod and conductor costs are considered. Installation costs increase significantly when deep-driven rods are used — a common practice in grounding improvement programs.

Therefore, investing in the best-performing, longest-lasting grounding connector is a wise choice. Initially paying more for a quality connector will actually save money in the long run, by reducing downtime and eliminating the need for crews to return to the site for repairs.



ERITECH® HAMMERLOCK Is The Answer!

Acorn clamps are utilized because they are inexpensive. They were developed before the proliferation of expensive electronics, at a time when the demand for electric power was lower and before power quality was a serious consideration. The ERITECH® HAMMERLOCK, on the other hand, was designed to meet the needs of today's modern grounding programs. Therefore, an upgraded or perhaps more aptly stated, *updated*, grounding program specification should require a quality connector and exclude the acorn clamp.

How the ERITECH HAMMERLOCK works

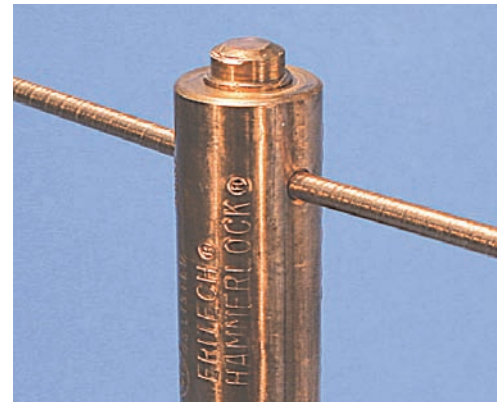


The ground wire is placed through the connector body and then the body is placed on the top of the ground rod. As the connector is struck with a hammer, ERITECH HAMMERLOCK is connected to the ground rod using the same compression technology used in the ERITECH® threadless couplers that connect deep-driven rods together. At the same time, the ground wire is locked in place as the connector plug enters the body.

Ease of Installation

Installing the ERITECH HAMMERLOCK is as easy as swinging a hammer. Its intuitive design requires no special tools or training. When the large diameter on the ERITECH HAMMERLOCK plug is flush or below the round body, the connection is complete and irreversible. The ERITECH HAMMERLOCK can be installed three to five times faster than an acorn clamp and is easier to install in a trench.

The ERITECH HAMMERLOCK provides a high-quality grounding connection that is easy to use and cost-effective — withstanding 100% of the current carrying capacity of the conductor. Given the important function of today's grounding system, the ERITECH HAMMERLOCK provides excellent connector value.



ERITECH HAMMERLOCK Specification

Cable to ground rod connectors shall be made from a round, high conductivity copper alloy bar stock, with a minimum of 90% IACS. The connector shall provide a high quality, irreversible, compression connection area for the conductor and a taper fit compression connection area for the ground rod. The connector shall be able to withstand 100% of the current carrying capacity of the conductor. The connector shall not rely on bolts or screws to maintain the integrity of the connection. Each connector shall be clearly marked with the catalog number and clear description of the conductor and ground rod to be connected and packaged with installation instructions. A hammer shall be required for the connector installation. The connector shall provide a positive visual means of verifying a successfully completed connection. The connector shall be the ERITECH HAMMERLOCK as manufactured by ERICO® or approved equal. Silicon bronze connectors are not acceptable.

ERITECH® HAMMERLOCK

Copper Grounding Connector

ERITECH HAMMERLOCK vs. Acorn Clamps – A Comparison

ERITECH HAMMERLOCK	Acorn Clamps
Its intuitive design requires no special tools or training	Proper installation of an acorn clamp requires the use of a torque wrench and knowledge of proper bolt torque level
A few swings of the hammer and the ERITECH HAMMERLOCK provides a complete, irreversible connection	Many acorn clamps are loose the day they are installed
ERITECH HAMMERLOCK installation is 3 to 5 times faster than an acorn clamp	It takes longer to install an acorn clamp
ERITECH HAMMERLOCK allows for 100% of the conductor and ground rod circumference surface areas to be used in the connection	An acorn clamp only uses 15% of the available contact area between rod and conductor
The ERITECH HAMMERLOCK provides a high-quality grounding connection that is easy to use and cost effective	Acorn clamps are more susceptible to loosening and corrosion than any other type of grounding connection
The ERITECH HAMMERLOCK is manufactured from high-conductivity copper – 93% IACS	Manufactured from low conductivity silicon bronze – 10% IACS
With ERITECH HAMMERLOCK there is visual indication of the finished connection	Provides no visual indication of a completed connection unless a torque wrench is used
The ERITECH HAMMERLOCK has excellent mechanical strength and a robust design	Pulling on the ground conductor can loosen the acorn clamp

COPPER BONDED GROUND RODS

Conductor Size	Rod Size 1/2" (12.7 mm)		Rod Size 5/8" (14.2 mm)		Rod Size 3/4" (17.2 mm)	
	Part #	European Article #	Part #	European Article #	Part #	European Article #
#6 Sol	EHL12FC1G	166955	EHL58C1G	166970	EHL34C1G	166986
Two #6 Sol	EHL12FC1G1G	166956	EHL58C1G1G	166971		
#6 Str	EHL12FC1H	166957	EHL58C1H	166972	EHL34C1H	166987
#4 Sol	EHL12FC1K	166958	EHL58C1K	166973	EHL34C1K	166988
Two #4 Sol	EHL12FC1K1K	166959	EHL58C1K1K	166974		
#4 Str	EHL12FC1L	166960	EHL58C1L	166975	EHL34C1L	166989
#2 Sol	EHL12FC1T	166961	EHL58C1T	166976	EHL34C1T	166990
#2 Str	EHL12FC1V	166962	EHL58C1V	166977	EHL34C1V	166991
1/0 Str			EHL58C2C		EHL34C2C	
2/0 Str			EHL58C2G	166978	EHL34C2G	166992
6 mm Sol	EHL12FC6MM	166963	EHL58C6MM	166979	EHL34C6MM	166993
8 mm Sol	EHL12FC8MM	166964	EHL58C8MM	166980	EHL34C8MM	166994
16 mm² Str	EHL12FCW3	166950	EHL58CW3	166965	EHL34CW3	166981
25 mm² Str	EHL12FCY1	166951	EHL58CY1	166966	EHL34CY1	166982
35 mm² Str	EHL12FCY2	166952	EHL58CY2	166967	EHL34CY2	166983
50 mm² Str	EHL12FCY3	166953	EHL58CY3	166968	EHL34CY3	166984
70 mm² Str	EHL12FCY4	166954	EHL58CY4	166969	EHL34CY4	166985

GALVANIZED GROUND RODS

Conductor Size	Rod Size 5/8" (14.2 mm)	Rod Size 3/4" (18.3 mm)
	Part #	Part #
#6 Sol	EHL58C1G	EHL34C1G
Two #6 Sol	EHL58C1G1G	
#6 Str	EHL58C1H	EHL34C1H
#4 Sol	EHL58C1K	EHL34C1K
Two #4 Sol	EHL58C1K1K	
#4 Str	EHL58C1L	EHL34C1L
#2 Sol	EHL58C1T	EHL34C1T
#2 Str	EHL58C1V	EHL34C1V

ERITECH® GROUND ROD DRIVING SLEEVES

Slides on top of ground rod to prevent mushrooming while driving rod into ground

Part #	European Article #	Ground Rod Size
B13714	158120	1/2" (12.7 mm) copperclad
B13716	158130	5/8" (14.2 mm) copperclad
B13731		5/8" (16 mm) galvanized
B13718	158140	3/4" (17.2 mm) copperclad
B13733		3/4" (19 mm) galvanized

Sleeves for use in power assisted ground rod drivers

Part #	Ground Rod Size
DH58	5/8" (14.2 mm) copperclad
DH34	3/4" (17.2 mm) copperclad

WARNING
ERICO products shall be installed and used only as indicated in ERICO's product instruction sheets and training materials. Instruction sheets are available at www.erico.com and from your ERICO customer service representative. Improper installation, misuse, misapplication or other failure to completely follow ERICO's instructions and warnings may cause product malfunction, property damage, serious bodily injury and death.

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