



# COMMUNICATIONS

Catalog CA12042E



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# HUBBELL POWER SYSTEMS, INC.

## TERMS & CONDITIONS OF SALES Effective January 1, 2011

These terms and conditions of sales ("terms and conditions") apply to the purchase by Buyer of any and all Hubbell Power Systems, Inc. ("HPS") products. HPS hereby gives notice of its rejection to any different or additional terms and conditions other than as stated herein. Buyer's acceptance of the provisions of HPS's terms and conditions as recited herein shall be conclusively presumed upon Buyer's receipt of the product(s), or if no written objection is received by HPS within fifteen (15) days from the date on HPS's order acknowledgment, whichever event shall first occur.

### PRICING

Refer to appropriate Price Schedule, unless otherwise quoted.

### TERMS

Payment terms are net 30 days. Invoices will be dated the day of shipment. A service charge of 1-1/2% per month or, if such rate exceeds the maximum lawful rate, the maximum lawful rate shall be assessed on all past due accounts and shall be payable on demand.

### QUOTATIONS

Unless otherwise stated in writing, HPS' quotations are subject to acceptance by the Buyer within thirty (30) days from the date of issue.

### SALES AND SIMILAR TAXES

Prices do not include any sales, use, excise or similar taxes. Consequently, in addition to the price specified herein, the amount of any present or future sales, use, excise or other similar tax applicable to the sale or use of the equipment hereunder, shall be paid by the Buyer, or in lieu thereof the Buyer shall provide HPS with a tax exemption certificate acceptable to the taxing authorities.

### ACCEPTANCE OF ORDERS

All orders are subject to final acceptance by HPS. Any other terms proposed by Buyer are rejected unless expressly accepted in writing. Orders shall be deemed to be executed in the State of Missouri and shall be construed and performed in accordance with the laws of that State. Acceptance of any order is subject to availability of product and the ability of HPS to deliver. Orders will be billed at prices in effect at time of shipment unless otherwise agreed. Unless otherwise stated in writing, HPS reserves the right to ship plus or minus 10% of specified quantity for special products that are made to order.

### SALES BY AGENTS

Sales by agents or through overseas representatives shall be at prices, terms and conditions of sale specified by HPS. All invoices will be issued by and payment remitted to HPS.

### DELAY

HPS will use reasonable efforts to meet shipment or delivery dates specified by HPS, but such dates are estimates only. In no event shall be liable for any delay or nondelivery if caused directly or indirectly by Acts of God, fire, flood, strike or lockout or other labor dispute, accident, civil commotion, riot, war, governmental regulation or order, whether or not it later proves to be invalid, or from any other cause or causes (whether or not similar to any of the foregoing) beyond HPS's control. In no case will HPS be liable for loss of profits or any special or consequential damages on account of any delay in delivery or nondelivery whether or not excused hereunder.

### SHIPPING DEFERMENT

Buyer requests for shipping deferment must be approved by HPS and are subject to price negotiation.

### LIMITED WARRANTY AND LIMITATION OF LIABILITY

HPS warrants to Buyer that the products sold will be free of defects in workmanship or material for a period of one (1) year (or as otherwise specified) from the date of original shipment by HPS when stored, installed, operated or maintained in accordance with recommendations of HPS and standard industry practice and when used under proper and normal use. HPS shall in no event be responsible or liable for modifications, alterations, misapplication or repairs made to its products

by Buyer or others, or for damage caused thereto by negligence, accident or improper use by Buyer or others. This warranty does not include reimbursement for the expenses of labor, transportation, removal or reinstallation of the products. This warranty shall run only to the first Buyer of a product from HPS, from HPS' Buyer, or from an original equipment manufacturer reselling HPS' product, and is non-assignable and non-transferable and shall be of no force and effect if asserted by any person other than such first Buyer.

**APPLICATION:** HPS does not warrant the accuracy of and results from product or system performance recommendations resulting from any engineering analysis or study. This applies regardless of whether a charge is made for the recommendation, or if it is provided free of charge. Responsibility for selection of the proper product of application rests solely 2 Effective January 1, 2011 with the Buyer. In the event of errors or inaccuracies determined to be caused by HPS, its liability will be limited to the reperformance of any such analysis or study.

**BUYER INSPECTIONS:** Tests, inspections and acceptance of all material must be made at the factory. Buyer's inspectors are welcome at the factories and are provided with the necessary facilities for carrying out their work. Name and phone number of who should be contacted for inspection should be given to HPS no later than two weeks prior to scheduled shipment date.

**DISCLAIMER OF WARRANTY: THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES WHETHER WRITTEN, ORAL, EXPRESSED OR IMPLIED. THERE ARE NO WARRANTIES OF MERCHANTABILITY OR FITNESS OF ANY PRODUCT FOR A PARTICULAR PURPOSE.**

**EXCLUSIVE REMEDY:** Any claim by Buyer that a product is defective or non-conforming shall be deemed waived by Buyer unless submitted to HPS in writing within thirty (30) days from the date Buyer discovered, or by reasonable inspection should have discovered the alleged defect or non-conformity. Any warranty claim must be brought within one year of discovery of the alleged defect or non-conformity. Upon prompt written notice by the Buyer that a product is defective or non-conforming, HPS' liability shall be limited to repairing or replacing the product, at HPS' option.

**LIMITATION OF LIABILITY: IN NO EVENT AND UNDER NO CIRCUMSTANCES SHALL HPS BE LIABLE TO BUYER OR TO ANY OTHER PERSON FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL OR INCIDENTAL LOSSES OR DAMAGES, INCLUDING, WITHOUT LIMITATION, DAMAGE TO OR LOSS OF USE OF ANY PRODUCT, LOST SALES, OR PROFITS, OR DELAY OR FAILURE TO PERFORM THIS WARRANTY OBLIGATION, OR CLAIMS OF THIRD PARTIES AGAINST PURCHASER, ARISING OUT OF OR IN CONNECTION WITH THE SALE, INSTALLATION, USE OF, INABILITY TO USE, OR THE REPAIR OR REPLACEMENT OF, HPS' PRODUCTS.** As stated herein, the term "person" shall include without limitation, any individual proprietorship, partnership, corporation or entity.

### FREIGHT ALLOWANCE and F.O.B. POINT

All shipments are F.O.B. origin. Risk of loss and title of products shall pass to Buyer upon delivery to the designated carrier. Freight is prepaid and allowed on all HPS shipments of products with a net order value of \$5,000 and above to destinations within the Continental U.S.A and Canada, with the exception of USCO brand products. Freight is prepaid and allowed on all shipments of USCO brand products with a net order value of \$20,000 and above. An 8% shipping and handling charge will be added to all standard shipments under the minimum net order value. Customer expedited orders will be billed at actual freight cost plus \$50.00 handling. Shipments to Alaska and Hawaii are F.O.B. Pacific Coast docks, collect beyond. Tool trailers will be F.O.B. HPS' dock – no freight allowed. HPS reserves the right to route all qualified freight allowed shipments via least expensive surface route within the Continental United States and Canada. Buyer will assume all charges for transportation specified via more expensive means. Acceptance of a specified routing does not



constitute a guarantee of ship date, transit time or arrival date. HPS will not be responsible for any cartage or storage charges at destination. HPS' responsibility for exception-free delivery ceases when the transportation company receives shipment in good condition. Claims for loss or damage must be reported directly to the carrier. HPS's willingness to assist does not indicate liability for claim or replacement.

#### **PARTIAL RELEASE**

If an order has multiple releases specified by the Buyer, each release will be treated as individual orders, relative to freight allowance and minimum billing.

#### **BACK ORDERS**

Back orders that are the responsibility of HPS will be shipped F.O.B. factory or point of shipment with freight prepaid and allowed via the most cost effective method, providing the original order qualified for freight allowance.

#### **MINIMUM BILLING**

Standard Orders — \$750 net per order. Tools — \$100 net per order. Parts — \$100 net per order.

#### **ORDER ADD-ON POLICY**

HPS' "Add-On" policy allows you to add items to an existing unshipped order for up to fifteen (15) days from the entry date of the original order. The minimum value for added products is \$250. Addition of tools or parts must be \$100.

#### **DELIVERY SCHEDULE**

Shipping dates provided by HPS are estimates only. HPS shall make every reasonable effort to meet Buyer's shipping requirements provided HPS promptly receives all necessary information from Buyer and approved drawings if required by HPS. HPS will not assume liability because of delayed shipment for any reason. HPS's responsibility ceases upon acceptance of shipment by carrier.

#### **CANCELLATIONS**

Cancellation of an order for current stock product requires a minimum of five (5) days' notice prior to actual ship date. Stock product orders shipped after cancellation notice is received, but before expiration of the five-day requirement, will be subject to all standard returned product conditions, noted below. Cancellation on non-stock products may be made only if no work has been performed or material purchased. If cancellation is requested after work is in progress, there will be a cancellation 3 Effective January 1, 2011 charge as established by HPS. Orders may not be cancelled unless HPS gives its written consent, and then only upon agreement as to applicable cancellation charges.

#### **RETURNED PRODUCT**

GENERAL CONDITIONS applying to all transactions:

1. Product is not returnable without the written consent of HPS.
2. Request for permission to return product must be made in writing within one year from date of shipment, and Buyer must provide original HPS invoice number.
3. Product to be returned must be considered standard product by HPS.
4. HPS reserves the right to refuse returns of any special or made-to-order product, regardless of condition.
5. All returned products must be in excellent, resaleable condition and packaged in the original carton. Products will be inspected upon return; and any service or repair needed to place them in first class, saleable condition will be charged and added to the restocking charge.
6. A 25% restocking charge will be deducted from all credits issued on authorized returns.
7. Return Goods Authorization (RGA) Packing List, supplied by the factory, must accompany the return shipment.
8. Return freight must be prepaid. Product must be received by HPS within sixty (60) days of issuance of RGA.
9. Net value of the return must not be less than \$250.
10. HPS reserves the right to deduct for any damage sustained in transit.

11. Unauthorized returns will be refused. Equipment returned without proper authorization from HPS will, at the sole option of HPS, be returned to the Buyer freight collect, or scrapped immediately with no issuance of credit. Unauthorized product included in a return will not be credited.

#### **BROKEN PACKAGE POLICY**

Shipments will be made in standard package quantities or multiples thereof. HPS Customer Service will notify the Buyer of any orders that do not comply with this policy. The Buyer must authorize an adjustment to comply with standard package quantities before the order will be entered.

#### **DROP SHIPMENT POLICY**

A 10% net order value drop shipment charge will be added to all purchase orders requesting delivery to a location other than a recognized Buyer stocking warehouse, with the exception of full truckload and/or project material. This is in addition to any other charges to the net order.

#### **QUOTATION PRICE PROTECTION**

All prices shown in the price lists are subject to change without notice. All quotations on special products or modifications to catalog products are binding only if confirmed in writing by the factory for the period shown on the quotation. Price protection will be provided for a period of thirty (30) days from date of quotation from HPS.

#### **ORDERS**

All orders are taken and prices quoted only with the understanding that each order shall be subject to the acceptance of HPS upon such terms as we may specify when order is received. Prices to cover amount of any sales or excise tax which now or hereinafter may be imposed by any taxing authority upon this product or the sale or manufacture thereof.

#### **PRODUCT SPECIFICATION**

HPS reserves the right to discontinue products, modify designs, and change specifications or prices without incurring obligation.

#### **INVOICING**

All invoices are due and payable per the standard terms stated herein. In the case of an apparent discrepancy in a line item charge, Buyer is obligated to advise HPS Customer Service in writing of the nature of the claimed discrepancy within five (5) days of receipt of the invoice. This includes all requests for proof of delivery. A claim of discrepancy does not relieve Buyer of the absolute obligation to pay the remaining balance of the invoice in accordance with the standard terms of payment. Upon review, HPS will have sole discretion to resolve the discrepancy; and the Buyer expressly agrees to abide by HPS' decision. HPS will promptly advise Buyer of its decision regarding any disputed items or charges.

#### **OSHA**

HPS warrants that at time of shipment, the products will conform to the applicable occupational safety and health standards promulgated pursuant to the Federal Occupational Safety and Health Act of 1970, which are in effect on the date that HPS enters its acknowledgment of Buyer's order. The Buyer's exclusive remedy and HPS' liability for breach of this warranty is limited to replacement of the nonconforming products.

#### **FAIR LABOR STANDARDS ACT AS AMENDED**

HPS represents that any goods to be delivered hereunder will be produced in compliance with the requirements of the Fair Labor Standards Act of 1938, as amended.

#### **NOTE**

These Terms and Conditions supersede all those published and previously issued by The A.B. Chance Company, The Ohio Brass Company, Anderson Electrical Products, Inc., Fargo Manufacturing Company, Inc., Chardon Electrical Components, USCO Power Equipment Corporation, Hubbell Canada LP and Hubbell Power Systems, Inc.









## **Dependable Anchoring Solutions**

Hubbell Power Systems is the proud manufacturer of Chance® Anchors and Anchor Installing Tools. Employing lean manufacturing principles, continuous improvements and unmatched customer service, HPS delivers these internationally renowned products to electric utility and communications providers around the globe.

Engineered for dependability and long-term stability, our anchoring systems feature exclusive anchoring techniques, tools, designs and sizes. Our precision production and meticulous quality assurance produce reliable products that adhere to the strictest industry standards and perform in even the most challenging soil conditions, landslides, floods and time.



# Anchor Selection and Application

## ANCHOR SELECTION

### Soil Mechanics and Holding Capacity

During the early stages of the screw anchor, the load resistance of an installed anchor could not be predicted with reasonable accuracy. Specific information on soil conditions was lacking, making anchor selection more or less a guess. With little consideration for soil variations and the effects of seasonal weather changes or drainage, soils were classified as "sand, clay, hardpan or swamp." There wasn't any definitive explanation for such soil conditions.

Chance® soil classification data opened new horizons in predicting anchor holding capacity. Initially, it was necessary to obtain soil samples from the projected anchor depth in order to classify the soil and to make anchor recommendations. However, this method was inconvenient, costly and time-consuming.

### Soil Probe, A Logical Development

Chance engineers developed the "Soil Test Probe", a mechanical tool makes it possible to infer subsoil conditions from the surface of the earth. The Soil Test Probe is screwed into the soil. As it displaces the soil, probe installation torque is measured in inch-pounds on a torque gauge, which is an integral part of the installing tool. Probe torque readings are then compared with the information on the Chance Soil Classification Data Chart and translated into the appropriate soil classification.



### PISA®: Power-Installed Screw Anchors

More than 50 years ago, Chance introduced this system of utilizing the power of digging equipment to install screw anchors. The system consists of a screw anchor, anchor rod and a special installing wrench. Each anchor has a galvanized steel threaded anchor rod with an upset hex, single or twin helices and a galvanized guy wire nut that is screwed to the anchor rod end. PISA Anchors can be installed in a matter of minutes.



### Torque and Performance

Later this method was improved with the development of Chance Torque Indicators and sets of holding capacity values for given anchor types. This did not obviate the soil classification data, but strengthened and simplified it so the utility employee could install a PISA Anchor or other Chance anchor to a given torque value and predict with relative accuracy the holding capacity of the installed anchor. Actually, the correlation between installing torque and anchor performance required thousands of tests throughout the United States and in every conceivable soil condition. It is much labor, engineering research and investment that have made possible the development of this reliable and predictable anchoring philosophy.



# Anchor Selection and Application *(continued)*



## Torque Ratings

Chance® Screw Anchors are designed and manufactured for maximum torsional strength. During installation, some of the torque applied by the digger and measured by installation torque indicators is dissipated by friction along the wrench and not applied to the anchor itself, so it is possible to apply more torque than the anchor alone can withstand. Chance anchors are rated by maximum working torque or, for the more recent designs, by the 5 percent exclusion limit which is a more explicitly defined criterion based on statistical analysis of on-line quality control testing. Both ratings take into consideration the variation to be expected in anchor torsional strength due to normal variations in materials and manufacturing processes. Customers should consider this variation along with the wide variation that can be seen in the frictional loss along the wrench in deciding how much torque can be applied safely during installation. The fact that Chance ratings are set near the minimum credible torsional strength also should be considered in comparing Chance ratings to those of manufacturers who rate their anchors based on average strength.

## APPLICATION INFORMATION

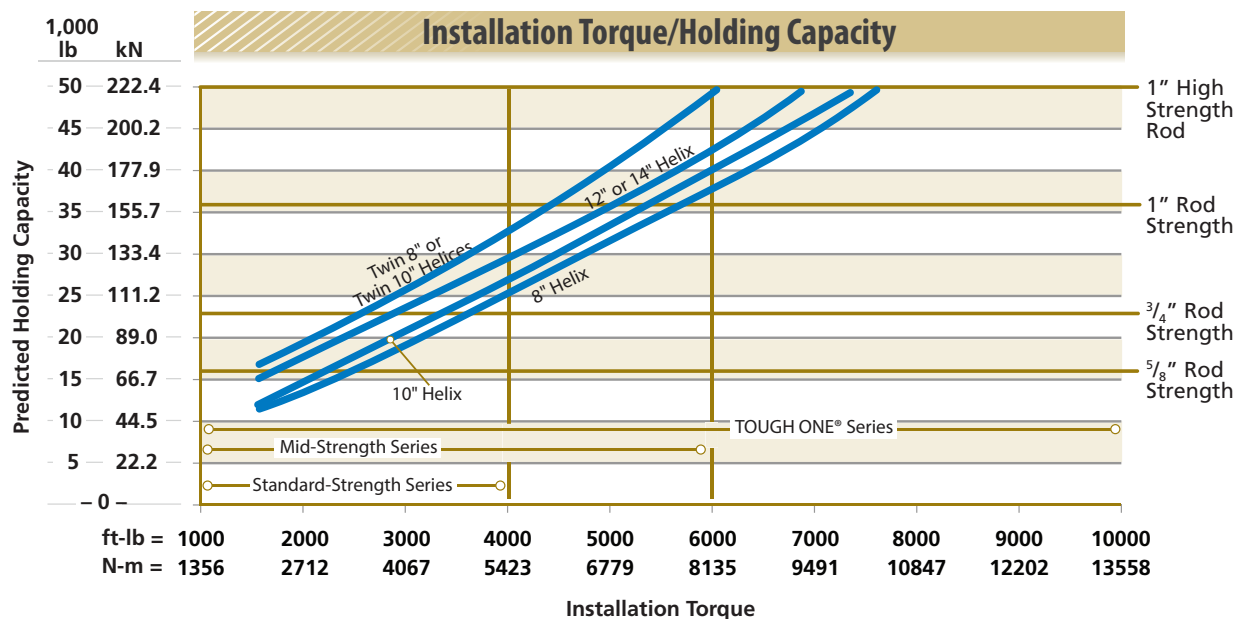
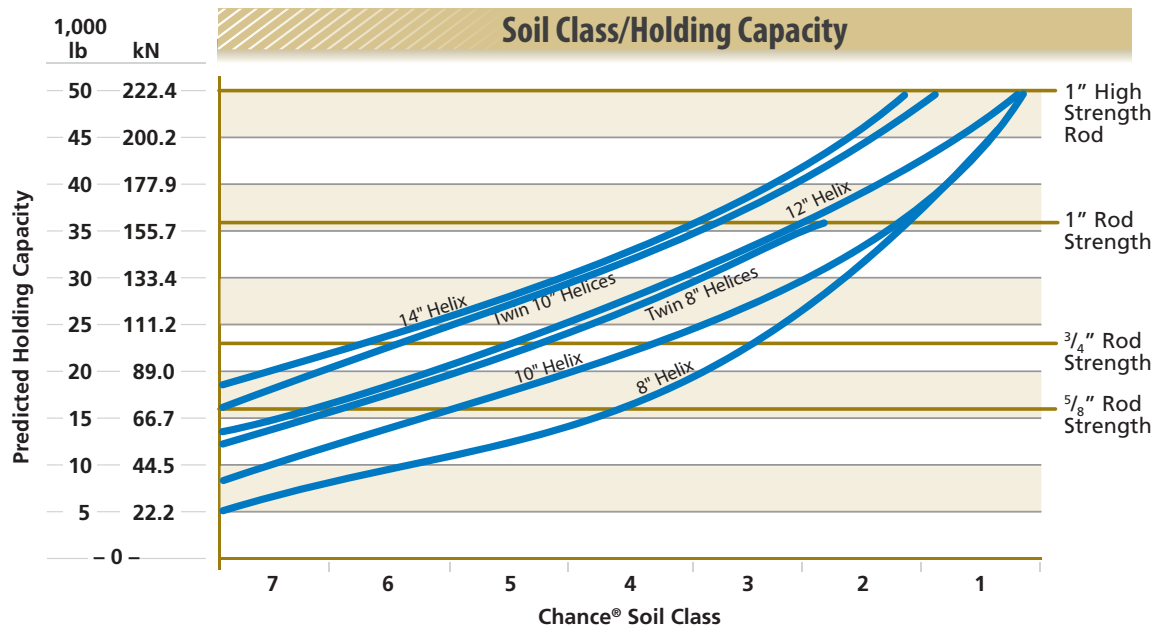
Where applicable, anchors manufactured by Hubbell Power Systems, Inc. are made from steel produced in accordance with ASTM A575 and/or ASTM A576. Where galvanized, items are galvanized in accordance with ASTM A153. Call your Hubbell representative for conformance of particular items to the above specifications.

Soil Classification Data				
Class	Common Soil Type Description	Geological Soil Classification	Probe Values ft-lb (nm)	Typical Blow Count "N" per ASTM-D1586
0	Sound hard rock, unweathered (bedrock)	Granite, Basalt, Massive Limestone	—	—
1	Very dense and/or cemented sands; coarse gravel and cobbles	Caliche, (Nitrate-bearing gravel/rock)	Over 60 (85 - 181)	60-100+
2	Dense fine sands; very hard silts and clays (may be preloaded)	Basal till; boulder clay; caliche; weathered laminated rock	Over 50 (68 - 85)	45-60
3	Dense sands and gravel; hard silts and clays	Glacial till; weathered shales, schist, gneiss and siltstone	42 - 50 (56 - 68)	35-50
4	Medium dense sand and gravel; very stiff to hard silts and clays	Glacial till; hardpan; marls	33 - 42 (45 - 56)	24-40
5	Medium dense coarse sands and sandy gravels; stiff to very stiff silts and clays	Saprolites, residual soils	25 - 33 (34 - 45)	14-25
6	Loose to medium dense fine to coarse sands to stiff clays and silts	Dense hydraulic fill; compacted fill; residual soils	17 - 25 (23 - 34)	7-14
7 <sup>(1)</sup>	Loose fine sands; Alluvium; loess; medium - stiff and varied clays; fill	Flood plain soils; lake clays; adobe; gumbo, fill	8 - 17 (11 - 23)	4-8
8 <sup>(1)</sup>	Peat, organic silts; inundated silts, fly ash very loose sands, very soft to soft clays	Miscellaneous fill, swamp marsh	Under 8 (0 - 11)	0-5

**NOTE:** Class 1 soils are difficult to probe consistently and the ASTM blow count may be of questionable value.

<sup>(1)</sup> It is advisable to install anchors deep enough, by the use of extensions, to penetrate a Class 5 or 6, underlying the Class 7 or 8 soils.

# Power-Installed Screw Anchors (PISA®)



Helix Diameter	Rod Diameter	Rod Strength
8" = 203.2 mm	5/8" (0.625") = 15.9 mm	16,000 lb / 71.2 kN
10" = 254.0 mm	3/4" (0.756") = 19.1 mm	23,000 lb / 102.3 kN
12" = 304.8 mm	1" = 25.4 mm	36,000 lb / 160.1 kN
14" = 355.6 mm	1" High Strength = 25.4 mm	50,000 lb / 222.4 kN

**NOTE:** Predicted ultimate holding capacities are based on results of extensive Chance® tests and interpretation and are offered as an application guide only. They do not represent a guarantee of holding capacity in a particular soil class. A user must factor in his individual, appropriate safety factor. Torque values shown are steady values in homogenous soils, not peak values that might occur in non-homogenous soil. Torque values shown were obtained by averaging readings from the last 2 feet of anchor penetration. The anchor shaft must be aligned with the guy load to prevent premature failure of the rod. Under no circumstance should the rod and guy strand join at an angle of departure exceeding  $\pm 5^\circ$  on PISA anchors.



# Tough ONE® Anchor Helix Assemblies

**Torque Ratings: 8,000 ft-lb and 10,000 ft-lb**

## SMALL HUB (2 1/4" SQUARE INSIDE)

- The C10252 series of Tough One anchors have a smaller inside hub diameter than our C10250 series. The smaller hub is designed to be installed with the Chance® Anchor Wrench C1021583.
- Tough One anchors give users high-strength anchor capability in all soils. You get a better anchor at an economical price.
- The anchor's sloped lead point improves penetration and helps soil flow from below the hub to above the anchor.
- Tough One anchors use standard PISA® rods (see pages A9-A10).
- Tough One anchors are painted with black paint.

Use 8,000 ft-lb Tough One Anchor in soft and medium-hard soils.

Use High-Strength 10,000 ft-lb Tough One Anchor in hard soils.



### 8,000 ft-lb Tough One Anchor 2 1/4" Square Inside Hub

Install with the Chance Standard (10,000 ft-lb) Wrench

	8" Diameter	Standard Pkg/Pallet	10" Diameter	Standard Pkg/Pallet
For 3/4" & 1" Diameter Rods	C1025204	4/144	C1025205	4/144
For 5/8" Diameter Rods	C1025208	4/144	C1025209	4/144
	12" Diameter	Standard Pkg/Pallet	14" Diameter	Standard Pkg/Pallet
For 3/4" & 1" Diameter Rods	C1025206	2/72	C1025207	2/48
For 5/8" Diameter Rods	C1025210	2/72		

### 10,000 ft-lb Tough One Anchor 2 1/4" Square Inside Hub

Install with the Chance Standard (10,000 ft-lb) Wrench

	8" Diameter	Standard Pkg/Pallet	10" Diameter	Standard Pkg/Pallet
	C1025200	4/192	C1025201	4/144
	12" Diameter	Standard Pkg/Pallet	14" Diameter	Standard Pkg/Pallet
For 3/4" & 1" Diameter Rods	C1025202	2/72	C1025203	2/48



# Tough ONE® Anchor Helix Assemblies

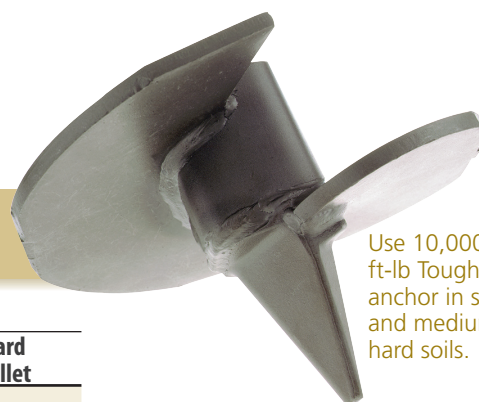
**Torque Ratings: 10,000 ft-lb and 15,000 ft-lb**

## LARGE HUB (2½" SQUARE INSIDE)

- Tough One anchors give users high-strength anchor capability in all soils. You get a better anchor at an economical price. With Tough One anchors, there's little concern about anchor breakage when encountering hard soils.
- The anchor's sloped lead point improves penetration and helps soil flow from below the hub to above the anchor.
- Tough One anchors use standard PISA® rods (see pages A9-A10).
- It's easy to upgrade your entire program with Tough One anchors.
- If soil conditions require installations above 10,000 ft-lb, you will need our Tough One wrench system consisting of Drive-End Assembly, Kelly Bar Adapter and Locking Dog Assembly. The high-strength system will also install PISA 6 and 7 anchors. See page A34 for high-strength anchor installing wrench information.
- Tough One Anchors are painted with black paint.



Use high-strength 15,000 ft-lb Tough One in very hard soils short of solid rock.



Use 10,000 ft-lb Tough One anchor in soft and medium-hard soils.

### 10,000 ft-lb Tough One Anchor 2½" Square Inside Hub

Install with the Chance® Hybrid or Tough One Wrench (see page A31)

	8" Diameter	Standard Pkg/Pallet	10" Diameter	Standard Pkg/Pallet
For ¾" & 1" Diameter Rods For ⅝" Diameter Rods	C1025004 C1025008	4/144 4/144	C1025005 C1025009	4/144 4/144
	12" Diameter	Standard Pkg/Pallet	14" Diameter	Standard Pkg/Pallet
For ¾" & 1" Diameter Rods For ⅝" Diameter Rods	C1025006 C1025010	2/72 2/72	C1025007	2/48

### 15,000 ft-lb Tough One Anchor 2½" Square Inside Hub

Install with the Chance® Tough One Wrench System (see page A34)

	8" Diameter	Standard Pkg/Pallet	10" Diameter	Standard Pkg/Pallet
For ¾" & 1" Diameter Rods	C1025000	4/144	C1025001	3/108
	12" Diameter	Standard Pkg/Pallet	14" Diameter	Standard Pkg/Pallet
	C1025002	2/72	C1025003	2/48



# PISA® Anchor Helix Assemblies

## Standard Strength and Mid Strength



Chance® Standard-Strength 4,000 ft-lb anchors and Mid-Strength 6,000 ft-lb anchors have curvilinear leading edges to help penetrate rocky soils and to reduce damage during installation. These anchors are available in single and twin-helix designs. The same installing wrench installs Standard-Strength and Mid-Strength anchors as well as Tough One® C10252 series anchors. See pages A30-A31 for installing wrench information. Anchors are painted with black paint.



PISA anchor installation takes about five minutes with two workers.

AERIAL  
INSTALLATION

### Standard-Strength Anchor Series

1 3/8" Core – 4000 ft-lb Typical Working Torque – Squared Helix 3" Helix Pitch

Single Helix	Catalog Number							
	8" Diameter	Standard Pkg/Pallet	10" Diameter	Standard Pkg/Pallet	12" Diameter	Standard Pkg/Pallet	14" Diameter	Standard Pkg/Pallet
For 5/8" Diameter Rods	024474	4/180	024476	4/144	024462	3/72	—	—
For 3/4" & 1" Diameter Rods	024475	4/180	024478	4/144	024481	3/72	024484	2/48

Twin Helix	Catalog Number			
	8" Diameter	Standard Pkg/Pallet	10" Diameter	Standard Pkg/Pallet
For 3/4" & 1" Diameter Rods	012904	1/30	012905	1/30

### Mid-Strength Anchor Series

1 3/8" Core – 6000 ft-lb Typical Working Torque – Squared Helix 3" Helix Pitch

Single Helix	Catalog Number							
	8" Diameter	Standard Pkg/Pallet	10" Diameter	Standard Pkg/Pallet	12" Diameter	Standard Pkg/Pallet	14" Diameter	Standard Pkg/Pallet
For 5/8" Diameter Rods	E1021629	4/180	E1021630	4/144	E1021631	4/96	—	—
For 3/4" & 1" Diameter Rods	E1021632	4/180	E1021633	4/144	E1021634	4/96	E1021801	2/48

Twin Helix	Catalog Number					
	4" Diameter	Standard Pkg/Pallet	8" Diameter	Standard Pkg/Pallet	10" Diameter	Standard Pkg/Pallet
For 3/4" & 1" Diameter Rods	E1021635	1/30	E1021636	1/30	E1021637	1/30

NOTE: See pages A9-A10 for PISA anchor rods and eye nuts.



# PISA® 6 and PISA 7 Anchor Helix Assemblies

- Chance® PISA-6 6000 ft-lb anchors and PISA-7 7000 ft-lb anchors have curvilinear leading edges to help penetrate rocky soils and to reduce damage during installation. These anchors are available in single and twin-helix designs.
- PISA-6 and PISA-7 anchors have a 1½" square solid core for added strength. See pages A30-A31 for information on the 1½" installing wrench.
- Anchors are painted with black paint.



## PISA 6 Anchor

1½" Core – 6000 ft-lb Typical Working Torque – Squared Helix – 3" Helix Pitch								
Single Helix	Catalog Number							
	8" Diameter	Standard Pkg/Pallet	10" Diameter	Standard Pkg/Pallet	12" Diameter	Standard Pkg/Pallet	14" Diameter	Standard Pkg/Pallet
	For ¾" Diameter Rods	E1020816	4/180	E1020817	4/144	—	—	—
For ¾" & 1" Diameter Rods	E1020819	4/180	E1020820	4/144	E1020821	3/72	T1022142	2/48
Twin Helix	Catalog Number							
	Two 8" Diameter	Standard Pkg/Pallet	Two 10" Diameter	Standard Pkg/Pallet				
	For ¾" & 1" Diameter Rods	E1020822	1/30	E1020823	1/30			

## PISA 7 Anchor

1½" Core – 7000 ft-lb Typical Working Torque – Squared Helix – 3" Helix Pitch								
Single Helix	Catalog Number							
	8" Diameter	Standard Pkg/Pallet	10" Diameter	Standard Pkg/Pallet	12" Diameter	Standard Pkg/Pallet	14" Diameter	Standard Pkg/Pallet
	For ¾" & 1" Diameter Rods	E1021223	4/180	E1020250	4/144	T1022143	4/96	T1022319
2/48								
Twin Helix	Catalog Number							
	Two 8" Diameter	Standard Pkg/Pallet	Two 4" Diameter	Standard Pkg/Pallet	Two 4" Diameter	Standard Pkg/Pallet		
	For ¾" & 1" Diameter Rods	E1021219	1/30	E1021220	1/30	V1021428	1/30	

NOTE: See pages A9-A10 for PISA anchor rods and eyenuts.

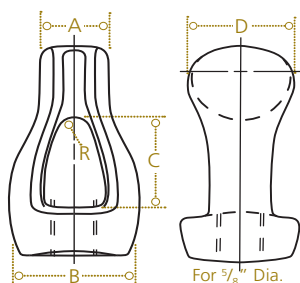
# PISA® Anchor Rods, Eyenuts and Couplings

Eyenut						
	Catalog Number					
	Thimbleye®	Standard Pkg/Pallet	Twineye®	Standard Pkg/Pallet	Tripleye®	Standard Pkg/Pallet
For 5/8" Diameter Rods	12587	25/2250	12589	25/1200	12593	25/750
For 3/4" & 1" Diameter Rods	6512	25/1200	6562	25/1200	12585	25/1200
For 1" Diameter HS <sup>(1)</sup>	—	—	6562H	25/1200	12585H	25/1250

(1) HS Eyenuts are galvanized and painted orange.

Thimbleye Nuts					
	A Inches	B Inches	C Inches	D Inches	R Inches
For 5/8" Diameter Rods	7/8	1 7/8	1 3/8	1 11/64	1/4
For 3/4" & 1" Diameter Rods	1 1/8	2 5/64	1 19/32	1 5/8	13/32

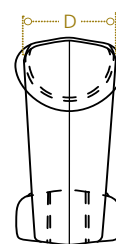
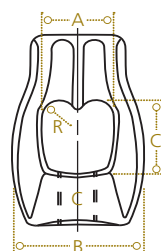
Twineye Nuts					
	A Inches	B Inches	C Inches	D Inches	R Inches
For 5/8", 3/4" & 1" Diameter Rods	1 13/32	2 25/64	1 27/64	1 1/2	5/16



For 5/8" Dia.

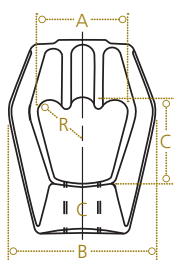


For 3/4" and 1" Dia.



## Tripleye Nuts

	A Inches	B Inches	C Inches	D Inches	R Inches
For 5/8", 3/4" & 1" Diameter Rods	1 3/4	2 13/16	1 5/8	1 1/2	1/4



## Rod

	3 1/2-ft Rod		7-ft Rod		Ultimate Strength lb <sup>(1)</sup>
	Catalog Number	Standard Pkg/Pallet	Catalog Number	Standard Pkg/Pallet	
For 5/8" Diameter	12336P	5/50	12332P	5/50	16,000
For 3/4" Diameter	12634P	5/50	12632P	5/50	23,000
For 1" Diameter	12338P	5/50	12334P	1/50	36,000
For 1" Diameter HS	C1021987	5/50	C1021986	2/50	50,000

(1) Ultimate strength ratings apply to properly installed anchors only. Failure to install within 5° of alignment with the guy load will significantly lower strength.

**NOTE:** All components shown on this page are hot-dip galvanized per ASTM A153.



# PISA® Anchor Rods, Eyenuts and Couplings *(continued)*

## Coupling

Coupling	Catalog Number	Standard Pkg/Pallet
For 5/8" Diameter Rods	12245P	50/1950
For 3/4" & 1" Diameter Rods	12247P	50/2400

NOTE: Couplings are required only when it is necessary to add additional rods of 3½ ft or 7 ft to form an extension.

## Extension Rod & Coupling Combinations

Extension Rod & Coupling Combinations	3½-ft Rod		7-ft Rod	
	Catalog Number	Standard Pkg/Pallet	Catalog Number	Standard Pkg/Pallet
5/8" Diameter	12249A	5/50	—	—
3/4" Diameter	12250A	5/50	C1022328	5/50
1" Diameter	12251A	5/50	12255A	2/50

## PISA Rod & Eyenut Combinations

Catalog Number	Rod & Eyenut
E1020031	58" x 3½' Rod & Thimbleye Nut
E1020047	58" x 31/2' Rod & Tripleye Nut
E1020035	58" x 7' Rod & Thimbleye Nut
E1020043	58" x 7' Rod & Twineye Nut
E1020051	58" x 7' Rod & Tripleye Nut
E1020032	34" x 31/2' Rod & Thimbleye Nut
E1020040	34" x 31/2' Rod & Twineye Nut
E1020036	34" x 7' Rod & Thimbleye Nut
E1020044	34" x 7' Rod & Twineye Nut
E1020052	34" x 7' Rod & Tripleye Nut
E1020041	1" x 31/2' Rod & Twineye Nut
E1020049	1" x 31/2' Rod & Tripleye Nut
E1020037	1" x 7' Rod & Thimbleye Nut
E1020045	1" x 7' Rod & Twineye Nut
E1020053	1" x 7' Rod & Tripleye Nut

## Corrosion-Protected PISA Rod & Coupling

Rod Catalog Number	Fits Rod Size	Standard Pkg/Pallet
C1021996	1" x 7'	2/50
C1022061	1" x 3½'	5/50
Coupling Catalog Number	Fits Rod Size	Standard Pkg/Pallet
C1025240	1"	50/2400

NOTE: Rod is asphalt-coated galvanized with heat-shrink and plastic tube covering. Coupling is galvanized and covered with heat-shrink tubing.

NOTE: All components shown on this page are hot-dip galvanized per ASTM A153.



# RR (Round Rod) Screw Anchors

The Round-Rod (RR) multi-helix anchors are used in areas where weak soil conditions exist and moderate holding capacities are required. All helix lead sections are 7-ft long. Extension shafts may be required for installation to proper depth. RR Screw Anchors consist of three galvanized components: Lead Section, Extension Shaft (which includes an integral coupling), and the Guy Adapter. Each extension and guy adapter includes a high-strength bolt and nut. Type RR anchors torque rating is 2,300 ft-lb. Ultimate tension rating for RR mechanical strength is 70,000 lb. Failure to install within 5° of alignment with the guy load will significantly lower strength.

## Lead Sections

Catalog Number	Length ft	Helix Combinations Inches	Standard Pkg/Pallet	Holding Capacity vs Soil Class lb		
				Class 7	Class 6	Class 5
012690AE	7	8 - 10	1/20	19,000	23,000	27,000
012690AEJ	7	8 - 10 - 12	1/20	26,000	32,000	39,000
V1090007	7	10 - 10 - 10	1/15	25,000	31,000	—
V1090006	7	10	1/20	17,000	21,000	24,000

## Extensions

Catalog Number	Nominal Length ft	Standard Pkg/Pallet
12696	3½	1/50
12697	5	1/50
12698	7	1/30
12699	10	1/50

NOTE: Extensions with helices are available. Contact your Hubbell representative or ServiCenter for information.

## Guy Adapters

Catalog Number	Nominal Length Inches	Description	Standard Pkg/Pallet
C1020023	18	Thimbleye*	5/175
C1020024	18	Twineye*	5/250
C1020025	18	Tripleye*	5/250
C1100026	20	Threaded Stud	5/130
C1100041	18	Ovaleye	5/200

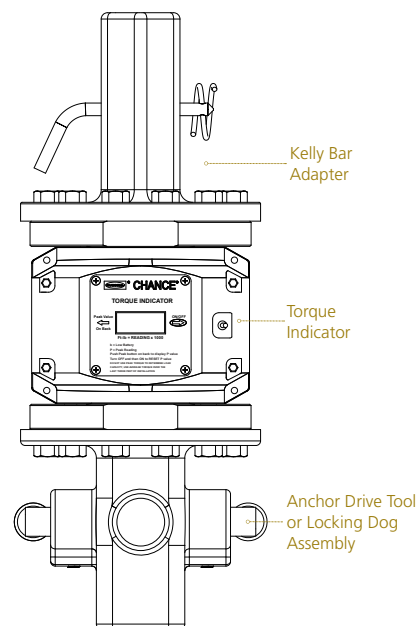
## Load Capacity<sup>(1)</sup> Based on Installation Torque<sup>(2)</sup> Load Capacity of RR Anchors in Soil (Pounds Tension)

Helix Combinations Inches	Installation Torque		
	1,500	2,000	2,300
10	16,000	22,000	28,000
8 - 10	17,000	23,000	29,000
10 - 10 - 10	19,000	25,000	31,000
8 - 10 - 12	19,000	25,000	31,000

(1) Load capacities listed above are ultimate values based on average test data and are offered as an application guide. Typical deflection at ultimate load ranges between 2 and 4 inches. The listed values should be reduced by an appropriate factor of safety. More specific data on soils and anchor performance in any site condition can be obtained by contacting Hubbell Power Systems, Inc.

(2) The torque values shown are steady values in homogeneous soils, not peak values that can occur in non-homogeneous soils such as glacial till or other rocky soils. The torque values shown are obtained by averaging the readings from the last 2 feet of anchor penetration.

## Typical "RR" Drive String



Extension



Guy Adapter



Lead Section



# SS5 (Square Shaft) Screw Anchors

Square-Shaft (SS) multi-helix screw anchors are designed for heavy-guy loading. They have 1½" square steel shafts. Extension shafts must be coupled to the helix section for installation to the proper depth. SS Screw Anchors consist of three galvanized components: Lead Section, Extension Shaft (which includes an integral coupling) and Guy Adapter. Extensions and Guy Adapters include a high-strength bolt and nut. Typical working torque is 5,700 ft-lb and minimum ultimate tension strength is 70,000 lb. Ultimate strength ratings apply to properly installed anchors only. Failure to install within 5° of alignment with the guy load will significantly lower strength.

## Lead Sections<sup>(1)</sup>

Catalog Number	Length ft	Helix Combinations Inches	Standard Pkg/Pallet	Holding Capacity – lb vs Soil Class					
				Class 7	Class 6	Class 5	Class 4	Class 3	Class 2
012642AE	3	8 - 10	1/20	19,000	23,000	27,000	32,000	36,000	41,000
012642EJ	3½	10 - 12	1/20	21,000	26,000	31,000	36,000	41,000	46,000
012642AEJ	5½	8 - 10 - 12	1/20	26,000	32,000	39,000	46,000	51,000	58,000
012642EJN	7	10 - 12 - 14	1/20	29,000	37,000	45,000	53,000	61,000	69,000
012642AEJN	10½	8 - 10 - 12 - 14	1/20	31,000	40,000	49,000	58,000	67,000	—
012642EJNS	10½	10 - 12 - 14 - 14	1/20	40,000	51,000	62,000	70,000	—	—

## ROCK-IT™ Square Shaft Lead Sections<sup>(1)</sup>

C1101290	3	6-8	1/20	16,700	20,600	23,500	28,400	31,400	36,300
C1101291	3	8-10	1/20	19,000	23,000	27,000	32,000	36,000	41,000
C1101292	5.5	8-10	1/20	19,000	23,000	27,000	32,000	36,000	41,000

(1) Lead sections are banded to wood blocks to facilitate forklift handling.

## Extensions

Catalog Number	Nominal Length ft	Helix Dia Inches	Standard Pkg/Pallet
12655	3½	—	1/50
12656	5	—	1/50
12657	7	—	1/40
12658	10	—	1/30
12656N	5	14	1/20
12655J	3½	12	1/20

**NOTE:** Extension shafts are banded to wood blocks to facilitate forklift handling.

## Guy Adapters

Catalog Number	Nominal Length Inches	Description	Standard Pkg/Pallet
C1020023	18	Thimbleye®	5/200
C1020024	18	Twineye®	5/200
C1020025	18	Tripleye®	5/200
C1100026	20	Threaded Stud	5/200
C1100041	18	Ovaleye	5/200

**NOTE:** Guy adapters are shipped in corrugated cartons.

**NOTE:** Load capacities listed above are ultimate values based on average test data and are offered as an application guide. Typical deflection at ultimate load ranges between 2 and 4 inches. The listed values should be reduced by an appropriate factor of safety. More specific data on soils and anchor performance in any site condition can be obtained by contacting Hubbell Power Systems, Inc. The torque values shown are steady values in homogeneous soils, not peak values that can occur in non-homogeneous soils such as glacial till or other rocky soils. The torque values shown are obtained by averaging the readings from the last 2 feet of anchor penetration. Minimum depth is five x diameter of largest helix.



Guy Adapter



Extension

# SS5 (Square Shaft) Screw Anchors *(continued)*

## Lead Section & Guy Adapter Combinations<sup>(1)</sup>

Catalog Number (Lead/Adapter shipped separately) Catalog Number	Catalog Number (Lead/Adapter shipped attached)	Guy Adapter	Helix Combinations Inches
126541AE	C11013251AE	Thimbleye®	8-10
126541EJ	C11013251EJ	Thimbleye®	10-12
126541AEJ	C11013251AEJ	Thimbleye®	8-10-12
126541EJN	C11013251EJN	Thimbleye®	10-12-14
126541EJNS	C11013251EJNS	Thimbleye®	10-12-14-14
126542AE	C11013252AE	Twineye®	8-10
126542EJ	C11013252EJ	Twineye®	10-12
126542AEJ	C11013252AEJ	Twineye®	8-10-12
126542EJN	C11013252EJN	Twineye®	10-12-14
126542EJNS	C11013252EJNS	Twineye®	10-12-14-14
126543AE	C11013253AE	Tripleye®	8-10
126543EJ	C11013253EJ	Tripleye®	10-12
126543AEJ	C11013253AEJ	Tripleye®	8-10-12
126543EJN	C11013253EJN	Tripleye®	10-12-14
126543EJNS	C11013253EJNS	Tripleye®	10-12-14-14

## Load Capacity<sup>(1)</sup> Based on Installation Torque<sup>(2)</sup> Load Capacity of SS Anchors in Soil (Pounds Tension)

Helix Combinations Inches	Installation Torque								
	1,500	2,000	2,500	3,000	3,500	4,000	4,500	5,000	5,500
8 - 10	17,000	23,000	29,000	34,000	40,000	46,000	52,000	58,000	63,000
10 - 12	18,000	24,000	30,000	36,000	42,000	48,000	54,000	60,000	66,000
8 - 10 - 12	19,000	25,000	31,000	38,000	44,000	50,000	56,000	62,000	68,000
10 - 12 - 14	20,000	26,000	32,000	39,000	46,000	52,000	58,000	65,000	70,000
8 - 10 - 12 - 14	20,000	27,000	34,000	40,000	47,000	54,000	61,000	68,000	70,000
10 - 12 - 14 - 14	21,000	28,000	35,000	42,000	49,000	56,000	63,000	70,000	70,000

(1) Load capacities listed above are ultimate values based on average test data and are offered as an application guide. Typical deflection at ultimate load ranges between 2 and 4 inches. The listed values should be reduced by an appropriate factor of safety. More specific data on soils and anchor performance in any site condition can be obtained by contacting Hubbell Power Systems, Inc.

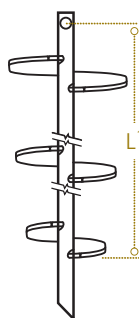
(2) The torque values shown are steady values in homogeneous soils, not peak values that can occur in non-homogeneous soils such as glacial till or other rocky soils. The torque values shown are obtained by averaging the readings from the last 2 feet of anchor penetration. Minimum depth is five x diameter of largest helix.

AERIAL  
INSTALLATION

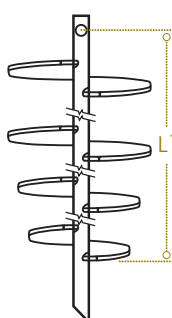
Lead Section



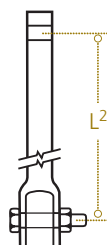
# High-Strength SS Anchors for Heavy Tension Loading



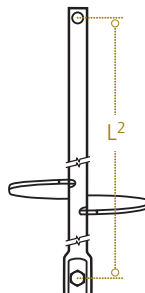
**Triple Helix  
Lead Section**



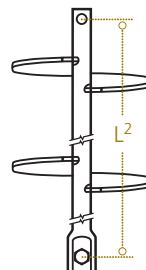
**Quad Helix  
Lead Section**



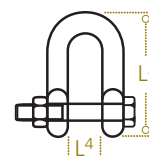
**Plain  
Extension**



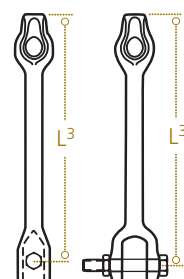
**Single Helix  
Extension**



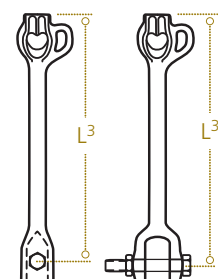
**Twin Helix  
Extension**



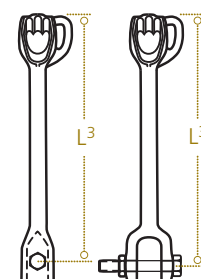
**Chain  
Shackle**



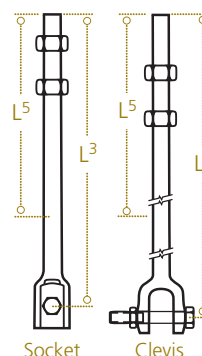
**Thimbleye®  
Adapter**



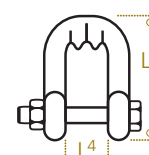
**Twineye®  
Adapter**



**Tripleye®  
Adapter**



**Threaded  
Adapter**



**Tripleye®  
Chain Shackle**

## Ratings

Mechanical Properties	SS 150 1½" Square Shaft	SS 175 1¾" Square Shaft	SS 200 2" Square Shaft	SS 225 2¼" Square Shaft
Max Installation Torque	7,000 ft-lb	11,000 ft-lb	16,000 ft-lb	21,000 ft-lb
Min Ultimate Tension Strength	70,000 lb	100,000 lb	150,000 lb	200,000 lb

## Lead Sections – Hot-Dip Galvanized

Helix Configuration Inches	SS 150		SS 175		SS 200		SS 225	
	Catalog Number	L¹ Inches	Catalog Number	L¹ Inches	Catalog Number	L¹ Inches	Catalog Number	L¹ Inches
8 & 10	C1100385	30	C1100227	30	C1101166	60	—	—
10 & 12	C1100871	42	C1100884	42	—	—	—	—
6, 8 & 10	—	—	—	—	C1100569	60	C1100543	54
8, 10 & 12	C1100386	57	C1100235	60	C1100570	60	C1100544	75
10, 12 & 14	C1100838	84	C1100923	84	C1100791	84	—	—
14, 14 & 14	C1100504	120	C1100505	124	C1100572	122	C1100545	114
8, 10, 12 & 14	T1100521	—	C1100247	124	C1100573	122	C1100591	115

### ROCK-IT™ Square Shaft Lead Sections includes forged carbide tip to improve penetration

6 & 8	C1101290	30	C1101295	30	—	—	—	—
6, 8 & 10	—	—	C1101404	60	—	—	—	—
8 & 10	C1101291	30	C1101296	30	—	—	—	—
8 & 10	C1101292	60	C1101294	60	—	—	—	—
8, 10 & 12	—	—	C1101293	60	—	—	—	—
8, 10 & 12	—	—	—	—	C1101297	84	C1101298	84

# High-Strength SS Anchors for Heavy Tension Loading *(continued)*

## Extensions – Hot-Dip Galvanized

Helix Configuration	SS 150		SS 175		SS 200		SS 225	
	Catalog Number	L <sup>2</sup> Inches	Catalog Number	L <sup>2</sup> Inches	Catalog Number	L <sup>2</sup> Inches	Catalog Number	L <sup>2</sup> Inches
None	C1100388	37	C1100136	37	C1100563	37	C1100645	40
None	C1100470	59	C1100137	59	C1100564	58	C1100646	60
None	C1100389	80	C1100138	80	C1100565	80	C1100647	80
None	C1100440	122	C1100140	124	C1100566	123	—	120
Single 14" Helix	C1100471	48	C1100472	48	C1100577	45	C1100650	39
Twin 14" Helices	C1100454	80	C1100450	80	C1100581	80	C1100652	78
Triple 14" Helices	C1100475	123	C1100476	124	C1100586	123	—	120

## Termination Adapters – Hot-Dip Galvanized

Description	SS 150			SS 175			SS 200			SS 225		
	Catalog Number	Notes	L3 Inches	Catalog Number	Notes	L3 Inches	Catalog Number	Notes	L3 Inches	Catalog Number	Notes	L3 Inches
Thimbleye Adapter	C1020023 <sup>(5)</sup>	—	17	T1100311 <sup>(1) (5)</sup>	—	17	T1100312 <sup>(2) (7)</sup>	—	17	—	—	—
Twineye Adapter	C1020024 <sup>(6)</sup>	—	17	T1100964 <sup>(1) (6)</sup>	—	17	T1101229 <sup>(1) (6) (7)</sup>	—	17	—	—	—
Tripleye Adapter	C1020025 <sup>(6)</sup>	—	17	T1100465 <sup>(1) (6)</sup>	—	17	T1100629 <sup>(2) (7)</sup>	—	17	—	—	—
Ovaleye Adapter	C1100041 <sup>(5)</sup>	—	17	—	—	—	—	—	—	—	—	—
Chain Shackle	C1100574 <sup>(4)</sup>	L <sup>4</sup> =1½"	5½"	T1100134	L <sup>4</sup> =1⅜"	6⅝"	C1100557	L <sup>4</sup> =2¼"	8¼"	C1100558	L <sup>4</sup> =2⅜"	9

(1) Clevis fitting. Others have Socket fitting.

(2) Rated at 70,000 lb.

(3) T1100352 includes two nuts.

(4) Tripleye shackle.

(5) Without Pulling Eye

(6) With Pulling Eye

(7) Rated at 100,000 lb.



# No-Wrench Screw Anchor

## For Hand or Machine Installation

Chance® No-Wrench Screw Anchors may be installed by hand or machine. The Thimbleye® Eye or Tripleye® Eye on the rod has a large opening to admit a turning bar for screwing the anchor down. The eye will also fit into an adapter available from most hole-boring machine manufacturers so the anchor may be power-installed. The No-Wrench Screw Anchor consists of a drop-forged steel Thimbleye Eye or Tripleye Eye rod welded to a steel helix. The entire anchor is hot-dip galvanized for long resistance to rust.

No-Wrench Screw Anchors can be installed to a greater depth to reach a firmer soil by using an extension rod. Maximum installing torque is 2,300 ft-lb for 1¼" diameter rod. Catalog numbers 4345, 6346 and PS816 may be ordered with a forged Thimbleye rod rather than the standard Tripleye rod. To order a Thimbleye rod simply add "1" to the suffix of the catalog number. Example: Catalog Number 63461.



### Application and Ordering Information

Catalog Number	Description	Anchor Size Dia Inches	Rod Dia & Length Inches	Standard Pkg/Pallet	No-Wrench Screw Anchor Holding Capacity lb vs Soil Class		
					Class 5	Class 6	Class 7
4345	Tripleye	4	¾ x 54	1/100	4,500	3,000	1,500
6346 <sup>(1)</sup>	Tripleye	6	¾ x 66	1/100	6,500	5,000	2,500
PS816	Tripleye	8	1 x 66	1/60	11,000	9,000	6,000
10146	Tripleye	10	1¼ x 66	1/20	13,000	10,000	7,000
10148	Tripleye	10	1¼ x 96	1/20	13,000	10,000	7,000
12537	Tripleye	14	1¼ x 96	1/20	16,000	15,000	12,000
15148	Tripleye	15	1¼ x 96	1/20	19,000	17,000	14,000
43451	Thimbleye	4	¾ x 54	1/100	4,500	3,000	1,500
63461	Thimbleye	6	¾ x 66	1/100	6,500	5,000	2,500
8161	Thimbleye	8	1 x 66	1/60	11,000	9,000	6,000

Extension Rod							
402	Tripleye	—	1¼ x 72	1/50	—	—	—

(1) RUS accepted.

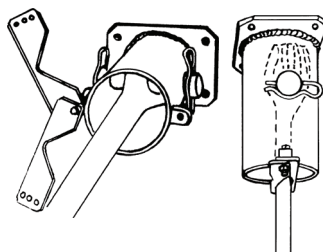
**NOTE:** If hand installed, holding capacity may be reduced by as much as 10% to 20%. Capacity ratings apply to properly installed anchors only. Failure to install within 5° of alignment with the guy load will significantly lower strength.

## No-Wrench Power Installation Tool

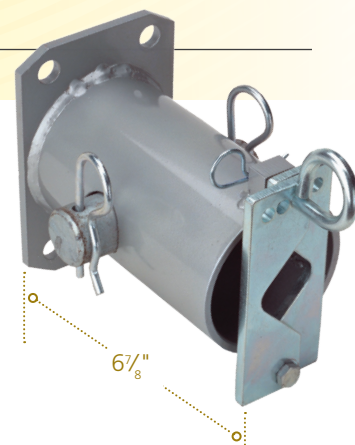
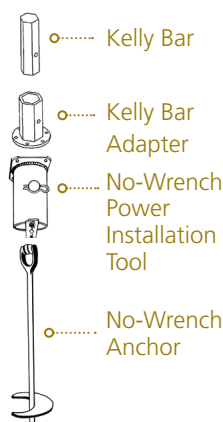
This tool bolts directly to the installer's output flange or appropriate Kelly Bar Adapter. Adjustable pivot plates accept rods from ¾" to 1¼" diameter. Through-pin with retainer clip passes through the eyenut.

It has 4 holes on a 5¼" bolt circle for attachment and includes 4½" x 1½" bolts, nuts and lockwasher.

Tool can be attached to any Chance Torque Indicator.



### No-Wrench Typical Drive String



Catalog Number	Weight lb
E3030255	9

# Bust Expanding Anchor

## More Holding Capacity for Less

- Four different sizes are available with holding capacity as high as 40,000 pounds.
- Chance® Bust Expanding Anchors expand to take full advantage of the available area. All eight blades wedge into undisturbed earth and there is no wasted space between blades.
- This anchor should be installed in relatively dry and solid soils. The effectiveness of the anchor is dependent upon the thoroughness of backfill tamping.



### Application and Ordering Information

Catalog Number	Anchor Hole Size Inches	Area Square Inches	Rod Size <sup>(1)</sup> Inches	Standard Pkg/Pallet	8-Way Anchor Holding Capacity – lb vs Soil Class				
					Class 3	Class 4	Class 5	Class 6	Class 7
6870	6	70	5/8	12/288	16,000	14,000	11,000	8,500	5,000
88135	8	135	5/8 or 3/4	6/150	26,500 <sup>(2)</sup>	22,000 <sup>(2)</sup>	18,000 <sup>(2)</sup>	15,000	10,000
1082	10	200	1	4/48	31,000	26,500	21,000	16,500	12,000
108234	10	200	3/4	4/48	31,000 <sup>(2)</sup>	26,500 <sup>(2)</sup>	21,000	16,500	12,000
1283	12	300	1 1/4	2/36	40,000	34,000	26,500	21,500	16,000
12831	12	300	1	2/36	40,000 <sup>(2)</sup>	34,000	26,500	21,500	16,000

**NOTE:** Capacity ratings apply to properly installed anchors only. Failure to install within 5° of alignment with the guy load will significantly lower strength.

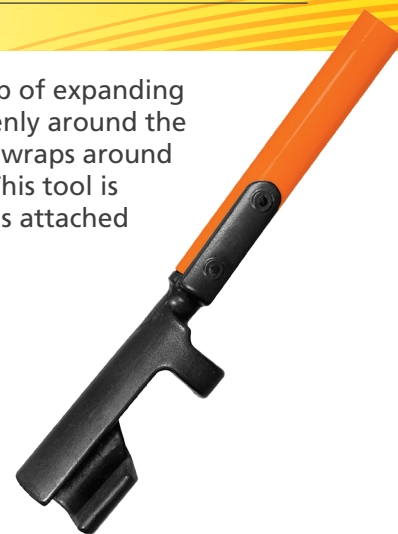
(1) Order separately.

(2) Ultimate strength of rod may limit holding capacity. See pages A19-A20 for rod ratings and selection. Add suffix "G" for galvanized. Example: 88135G.

## Expanding and Tamping Bar

The improved Chance fiberglass handle Expanding and Tamping Bar simplifies the job of expanding anchors. The curved tamper and expander head distributes the weight of the bar evenly around the anchor rod to reduce handle vibration. The hook of the Expanding and Tamping Bar wraps around the anchor rod to keep the expanding head from slipping off the anchor top plate. This tool is also effectively used for tamping in soil above the installed anchor. The base casting is attached directly to the Epoxiglas® handle.

Catalog Number	Description	Length ft	Weight lb
C3020003	Expanding & Tamping Bar	10	22
C3020004	Expanding & Tamping Bar	12	24





# Cross-Plate Anchor

The Cross-Plate Anchor is made for installation in holes drilled by power diggers. Because the size of the hole does not affect holding capacity, the hole can be dug by the same auger that is used to dig the pole holes on transmission projects. Cross-Plate Anchors are installed in a diagonal bored hole which is undercut so the anchor is at right angles to the guy. A rod trench is either cut with a trenching tool or drilled with a small power auger. Both anchor and rod trench should be refilled and tamped.

## Application and Ordering Information

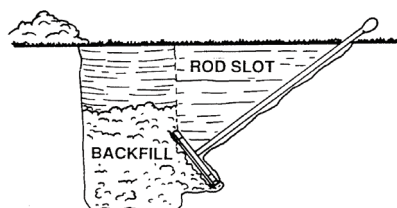
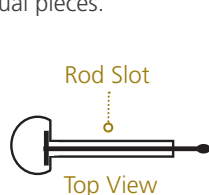
Catalog Number	Hole Size Inches	Standard Pkg/Pallet	Approx Wt per Carton <sup>(1)</sup> lb	Area Sq In	Rod Size <sup>(2)</sup> Inches	Holding Capacity <sup>(3)</sup> lb (No Safety Factors Included) vs Soil Class				
						Class 3	Class 4	Class 5	Class 6	Class 7
X16	16	6/162	62	150	5/8 & 3/4	26,500 <sup>(3)</sup>	22,500 <sup>(3)</sup>	18,500 <sup>(3)</sup>	14,500	9,500
X20	20	4/64	64	250	5/8 & 3/4	34,000	29,000 <sup>(3)</sup>	24,000 <sup>(3)</sup>	19,000 <sup>(3)</sup>	14,000
X201	20	4/64	64	250	1	34,000	29,000	24,000	19,000	14,000
X2434	24	1/48	34	400	5/8 & 3/4	45,000 <sup>(3)</sup>	37,000 <sup>(3)</sup>	30,000 <sup>(3)</sup>	23,500 <sup>(3)</sup>	18,000 <sup>(3)</sup>
X24 <sup>(1)</sup>	24	1/48	34	400	1	45,000 <sup>(3)</sup>	37,000 <sup>(3)</sup>	30,000	23,500	18,000
X241 <sup>(1)</sup>	24	1/48	34	400	1 1/4	45,000	37,000	30,000	23,500	18,000

**NOTE:** Capacity ratings apply to properly installed anchors only. Failure to install within 5° of alignment with the guy load will significantly lower strength.

(1) X24 Series are not available in cartons and are shipped as individual pieces.

(2) Order separately.

(3) Ultimate strength of rod may limit holding capacity. Add suffix "G" for galvanized.  
Example: X20G.



# Anchor Rod Extensions

These Anchor Rod Extensions are primarily for making above-grade connections between installed anchors and guy wires. Each extension's forged eye is designed to distribute pulling stresses uniformly over individual strands of guy wire and keep the guy wire from spreading, kinking or bending. The drop-forged eye of each extension rod is stronger than the rod itself. Rod length and diameter are stamped below each rod eye. Each extension rod is hot-dip galvanized and includes a high-strength bolt and nut.

**Welded Clevis Style**



Catalog Number	Description	Rod Dia & Length Inches	Clevis Bolt Dia Inches	Standard Pkg/Pallet	Strength lb
PSC1022176	Tripleye®	3/4 x 24	3/4	5/50	23,000
PSC1022177	Tripleye®	3/4 x 36	3/4	1/50	23,000
PSC1022178	Tripleye®	3/4 x 72	3/4	1/50	23,000
PSC1022183	Twineye®	1 x 24	7/8	5/50	36,000
PSC1022305	Tripleye®	1 x 24	7/8	1/50	36,000
PSC1022184	Twineye®	1 x 36	7/8	1/50	36,000
PSC1022306	Tripleye®	1 x 36	7/8	1/50	36,000
PSC1022185	Twineye®	1 x 72	7/8	1/50	36,000
PSC1022307	Tripleye®	1 x 72	7/8	1/50	36,000

**Forged Clevis Style**



Catalog Number	Description	Rod Dia & Length Inches	Clevis Bolt Dia Inches	Standard Pkg/Pallet	Strength lb
4022	Tripleye®	1 1/4 x 24	1	1/50	40,000
PS4023	Tripleye®	1 1/4 x 36	1	1/50	40,000
402	Tripleye®	1 1/4 x 72	1	1/50	40,000

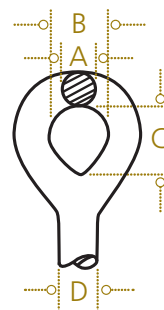
# Galvanized Anchor Rods

- Available for one, two or three guys for use with expanding and Cross Plate Anchor.
- Thimbleye®, Twineye® and Tripleye® rods distribute pulling stresses uniformly over individual strands of guy wire and keep the guy wire from spreading, kinking or bending.
- The drop-forged eye of each anchor rod is stronger than the rod itself.
- Rod length and diameter are stamped below each rod eye.
- Each rod is threaded 3½" minimum length.
- Nuts are included.



### Ovaley Adapter

D Inches	A Inches	B Inches	C Inches
5/8	9/16	1½	2
1	7/8	1½	2



### Tensile Strength<sup>(1)</sup>

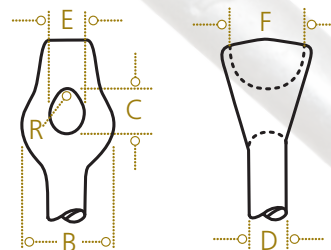
Rod Size inches	Strength lb
½	10,000
5/8	16,000
¾	23,000
1	36,000
1¼	58,000

(1) Ultimate strength ratings apply to properly installed anchors only. Failure to install within 5° of alignment with the guy load will significantly lower strength.

### Thimbleye Adapter

D Inches	R <sup>(1)</sup> Inches	B Inches	C Inches	E Inches	F Inches
½	3/16	1¼	9/16	½	1¼
5/8	¼	1½	11/16	9/16	13/8
¾	9/32	15/8	13/16	11/16	1½
1	13/32	21/16	11/8	15/16	15/8

(1) 2 x R or 2 x R1 = maximum-diameter guy strand.



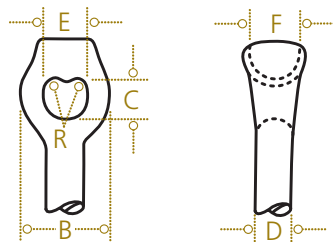


# Galvanized Anchor Rods *(continued)*

**Twineye Adapter**

D Inches	R <sup>(1)</sup> Inches	B Inches	C Inches	E Inches	F Inches
5/8	7/32	1 3/4	7/8	1 5/16	1 1/4
3/4	1/4	2	1	1 1/16	1 3/8
1	5/16	2 5/8	1 3/16	1 5/16	1 1/2
1 1/4	3/8	2 15/16	1 1/4	1 9/16	1 5/8

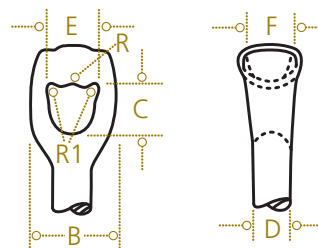
(1) 2 x R or 2 x R1 = maximum-diameter guy strand.



**Tripleye Adapter**

D Inches	R <sup>(1)</sup> Inches	R1 <sup>(2)</sup> Inches	B Inches	C Inches	E Inches	F Inches
3/4	1/4	7/32	2 1/2	1 11/16	1 1/2	1 1/4
1	1/4	7/32	2 9/16	1 11/16	1 5/8	1 1/2
1 1/4	9/32	1/4	2 7/8	1 11/16	1 11/16	1 5/8

(1) 2 x R or 2 x R1 = maximum-diameter guy strand.



Catalog Number				Size	Protected Rods <sup>(1)</sup> – Catalog Number		
Thimbleye® Adapter	Twineye® Adapter	Tripleye® Adapter	Ovaleye Adapter		Thimbleye® Adapter	Twineye® Adapter	Tripleye® Adapter
5305	—	—	—	1/2" x 5'	—	—	—
5306	—	—	—	1/2" x 6'	—	—	—
5307	—	—	—	1/2" x 7'	—	—	—
5315	—	—	—	5/8" x 5'	—	—	—
5316 <sup>(2)</sup>	5346	—	—	5/8" x 6'	—	—	—
5317 <sup>(2)</sup>	5347 <sup>(2)</sup>	—	PS6417	5/8" x 7'	—	—	—
5318 <sup>(2)</sup>	5348 <sup>(2)</sup>	—	—	5/8" x 8'	—	—	—
5326 <sup>(2)</sup>	5356 <sup>(2)</sup>	—	—	3/4" x 6'	C2000088	C2000092	—
5327 <sup>(2)</sup>	5357 <sup>(2)</sup>	7557 <sup>(2)</sup>	—	3/4" x 7'	C2000089	C2000093	C2000099
5328 <sup>(2)</sup>	5358 <sup>(2)</sup>	7558	—	3/4" x 8'	C2000090	C2000094	C2000098
—	5359 <sup>(2)</sup>	7559	—	3/4" x 9'	—	C2000095	C2000097
—	5360	—	—	3/4" x 10'	C2000091	C2000096	—
5338 <sup>(2)</sup>	5368 <sup>(2)</sup>	7568	—	1" x 8'	C2000102	—	C2000105
—	5369	—	—	1" x 9'	—	C2000100	—
5340 <sup>(2)</sup>	5370 <sup>(2)</sup>	7570	6440	1" x 10'	C2000103	C2000101	C2000104
—	—	C2000028	—	1 1/4" x 8'	—	—	—
—	15129	7574	—	1 1/4" x 10'	—	—	—

(1) Galvanized rod and square nuts meet IEEE specification plus have polyethylene tube. No asphalt paint is added, so tube can slide down after anchor is expanded.

(2) IEEE standard.



**Twineye**

**Tripleye**

# Expanding Rock Anchors

## Saves Time, Labor and Money.

The Chance® Expanding Rock Anchor is a big time, labor and money saver, because in most cases, there is no need to mix concrete, melt lead or carry extra bulky equipment to the job. Generally, the cost of installing the Expanding Rock Anchor is about 35% less than the old-fashioned grouting method.

## Expands and Wedges.

This anchor expands and wedges against solid walls of rock. And once it is expanded, the harder the pull on the rod, the tighter it wedges. Wedges are made of malleable or ductile iron with a rust-resistant coating. Rod should be in line with the guy.

## 1, 2 or 3 Guy Strands.

The large drop-forged Tripleye® rod of high-test steel holds up to three guy strands. The contour of the eye grooves keeps the guy strands from spreading, kinking and bending. And it allows slack to be pulled up without binding, damaging or weakening the guy.

Catalog Number	Rod Dia Inches	Rod Length Inches	Anchor Size Inches	Anchor Fully Expanded	Hole Size Inches	Approx Wt Per 100	Number in Bundle
R315	¾	15	1¾	2¾	2	500	5
R330	¾	30	1¾	2¾	2	700	5
R353	¾	53	1¾	2¾	2	960	5
R360	¾	60	1¾	2¾	2	1,040	5
R372	¾	72	1¾	2¾	2	1,200	4
R384	¾	84	1¾	2¾	2	1,300	4
R396	¾	96	1¾	2¾	2	1,460	3
R130L	1	30	2¼	3½	2½	1,166	3
R153L	1	53	2¼	3½	2½	1,833	3
R172L	1	72	2¼	3½	2½	2,133	2
R196L	1	96	2¼	3½	2½	2,666	2

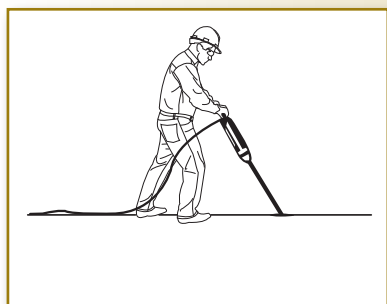
**NOTE:** ¾" rod minimum ultimate strength of 23,000 pounds.  
1" rod minimum ultimate strength of 36,000 pounds. Ultimate strength ratings apply to properly installed anchors only. Failure to install within 5° of alignment with the guy load will significantly lower strength. Recommended minimum installation depth is 12" in solid rock. Rods and wedges are hot-dip galvanized.



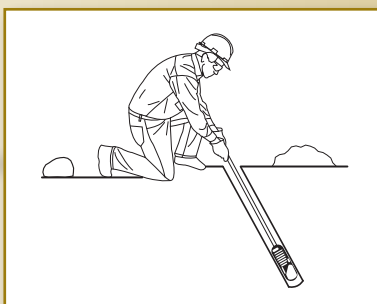
# Expanding Rock Anchors *(continued)*

## Installation is quick and simple.

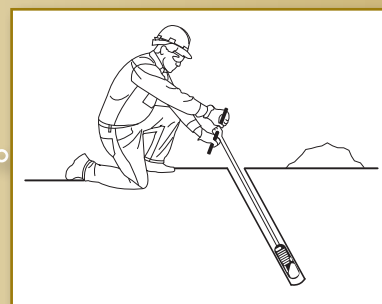
- Bore the hole with hand or power drill, making sure that the diameter of the hole is ¼-inch larger than the diameter of the unexpanded anchor.
- Drop the anchor in the hole. Put a bar through the large eye of the anchor rod.
- Turn the rod until the anchor is firmly expanded against the sides of the hole. Grouting should be done if protection of the rock against weathering is a concern.
- This wedging force holds the anchor securely in place to stay.



*Bore hole*



*Drop anchor into hole*



*Turn rod to expand*

## EXTENDABLE ROCK ANCHOR

The Chance® Extendable Rock Anchor uses standard PISA® couplings and rods to install the rock anchor at depths greater than standard Expandable Rock Anchors (96"). Hot-dip galvanized.

Catalog Number	Rod Diameter Inches	Rod Length Inches	Standard Pkg/Pallet
R84LE	1	84	2/50





# Grouted Rock Anchors

The Chance® Grouted Rock Anchor is designed to be used in situations where the soil is too rocky to use screw anchors, but the rock is fractured preventing the use of wedge style rock anchors. The forged knob on the end of the anchor along with any extension couplings provides the interference fit with the grout. The holding capacity of the anchor is dependent on the bond stress between the rock and the grout. The Grouted Rock Anchor is designed to be used inline with the guy. Failure to install within 5° of alignment with the guy load will significantly lower strength.

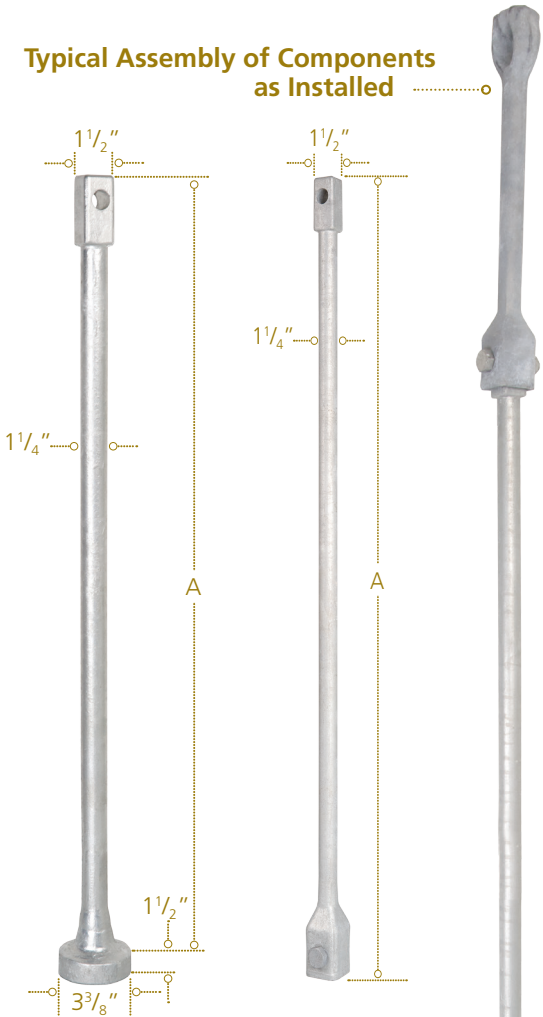
Installing a Grouted Rock Anchor requires first drilling a 6" diameter hole. Then insert the anchor, assembled with any Round Rod Extensions and Guy Adapter needed. Portland Cement grout pumped in to completely fill the hole around the anchor takes approximately 5 days to cure.

Grouted Rock Anchor – 1 1/4" Diameter Rod			
Catalog Number	Length A Inches	Approx Ship Wt Each lb	Standard Pkg/Pallet
W1040004	36	17.6	1/40
W1040055	84	38.0	1/30

Round Rod Extension – 1 1/4" Diameter Rod			
Catalog Number	Length A Inches	Approx Ship Wt Each lb	Standard Pkg/Pallet
12696	42	17.6	1/50
12697	60	38.0	1/50
12698	84	24.0	1/30
12699	120	46.8	1/50

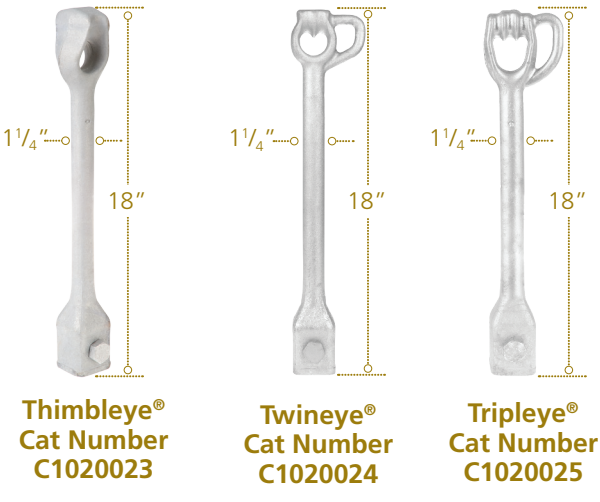
**NOTE:** Galvanized per ASTM A-153. SS5 and SS150 extensions can be used in place of the RR extensions listed above.

Typical Assembly of Components as Installed



Grouted Rock Anchor RR Extension

Guy Adapters



# Grouted Rock Anchors *(continued)*

**Application Table for Catalog Numbers W1040004 and W1040055**

<b>Rock</b>	<b>Ultimate Bond Stress Between Rock &amp; Grout psi <sup>(1) (2) (3)</sup></b>	<b>Allowable Load Capacity for 6" Dia x 1' Long Grout Column lb/ft of Length <sup>(4)</sup></b>
Granite	200	15,000
Basalt		
Dolomitic Limestone		
Soft Limestone	100	7,500
Slates & Hard Shales		
Sandstones		
Soft Shales	30	1,800
Soil <sup>(5)</sup>	8	600
Class 5		

- (1) Ultimate bond stress values from the Post Tensioning Institute and the grout-to-ground bond values from the Federal Highway Administration were used to arrive at the indicated ultimate bond stress between rock and grout used in the above chart.
- (2) Identification of the rock and application of the chart values is the responsibility of those designing the rock anchor.
- (3) The values in the chart are intended to provide conservative results.
- (4) Higher bond stress values may be obtainable, but the associated investigation to determine appropriate values and the use of those values is left to those designing the rock anchor.
- (5) For recommendations concerning bonded lengths and unbonded lengths, reference the Post Tensioning Institute specifications.

**NOTE:**

- The given ultimate stresses were applied over the surface of a 6" diameter x 1' long grout column, then divided by 3 to obtain the recommended allowed load per foot of length in the indicated rock or soil.
- Actual capacities will depend on the strength of the rock, grout strength and quality of the installation.
- A rough surface in the drilled hole is preferred as well as a clean hole free of loose material, soil, dust, etc.
- A 6" diameter hole is recommended for the use of the W1040004 and W1040055 rock anchors.
- The minimum bond length of the rock anchor to be engaging the rock is 5 feet.
- It is recommended that field testing be accomplished to confirm capacities.
- Anchor grout is to be made using Type I, II, III, or V Portland Cement conforming to ASTM C-150 specifications.
- The compressive strength of the grout shall be 3000 psi at the time of stressing.
- Grout should be flowable to reach the bottom of the drilled hole or pumpable if it is to be placed via a grout pump.
- The ultimate mechanical strength of the W1040004 and W1040055 rock anchors and associated extensions and terminations is 70,000 lb when Chance/Hubbell anchor components are used.
- Water used in the grout mix should be potable (suitable for public consumption), clean and free of substances known to be harmful to portland cement or steel.
- It is recommended that grout be placed in the hole prior to inserting the rock anchor.
- When using pre-packaged grout mixes, follow the directions and use the water cement ratio recommended by the manufacturer.
- The rock anchor is to be installed in line with the guy wire. Any misalignment is to be no more than  $\pm 5$  degrees.

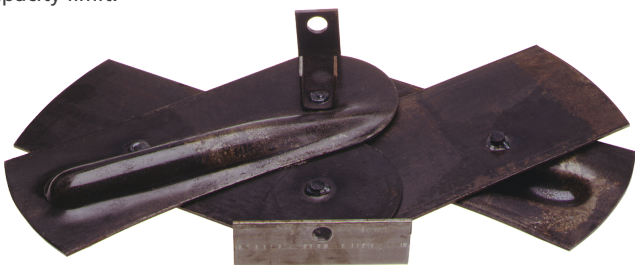
# Expanding Pole Key Anchor

## Quicker Installing, More Efficient Than Wood Key

- The Chance Pole Key can be used to reinforce poles in soft soils where the load is unbalanced and the pole must resist the load. However, it is recommended that Pole Keys only be used where a proper guy wire and guy anchor cannot be used, since a guy and anchor will generally provide more resistance to lateral movement. The Pole Keys will not withstand the same load, or perform as well a proper guy and anchor.
- The Chance Pole Key can be installed next to the distribution pole butt to help hold it in place against light overturning loads such as service drops, prevailing winds or small line angles.
- The additional lateral load and resulting overturning moment which can be resisted by Pole Keys depends on the height of the load, the locations of the Pole Keys, the allowable lateral deflection of the pole at ground line and the quality of the installation.
- The % capacity increase shown in the table is based on analyses that used 2" lateral deflection at the ground line as the upper capacity limit.



Closed

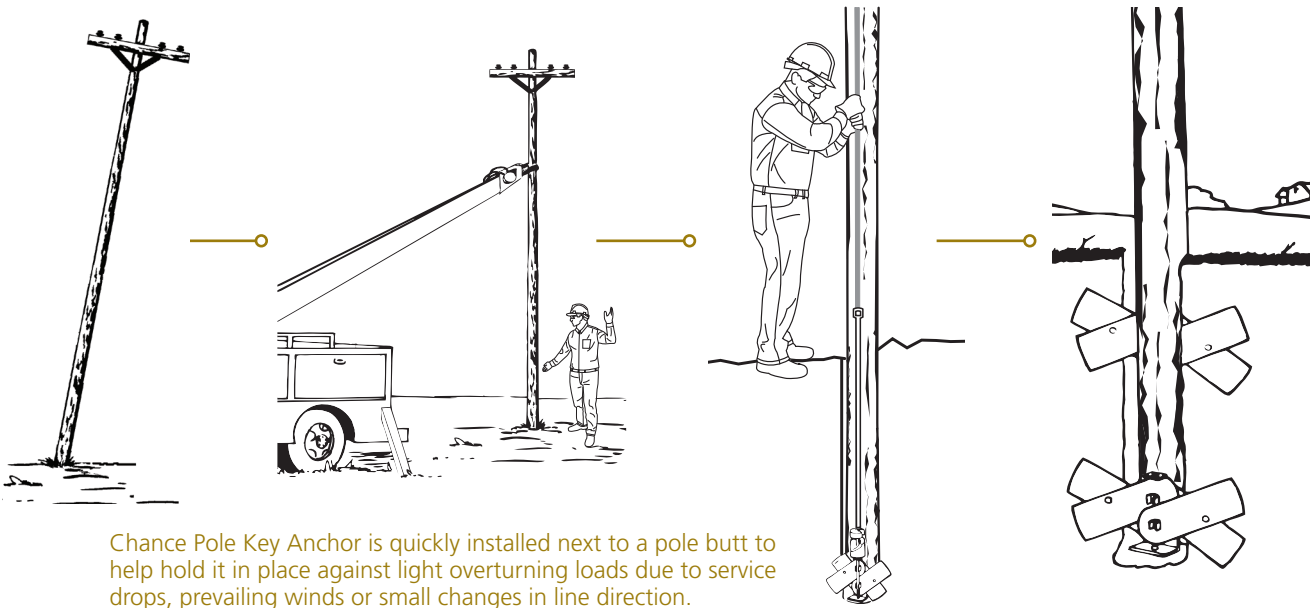


Expanded

### Application and Ordering Information

Catalog Number	Width Expanded Inches	Blade Width Inches	Area Expanded sq in	Approx Weight lb	Pole Height and Class	% Capacity Increase by adding two Pole Keys
P4817*	27¼	7	276	24½	35' C1 5	30
					40' C1 4	24
					60' C1 3	13

\*RUS Accepted. Accommodates any 3/4"-diameter rod on page A19-A20.



Chance Pole Key Anchor is quickly installed next to a pole butt to help hold it in place against light overturning loads due to service drops, prevailing winds or small changes in line direction.



# Corrosion-Resistant Anchor

## Chance® Design Offers Many Advantages.

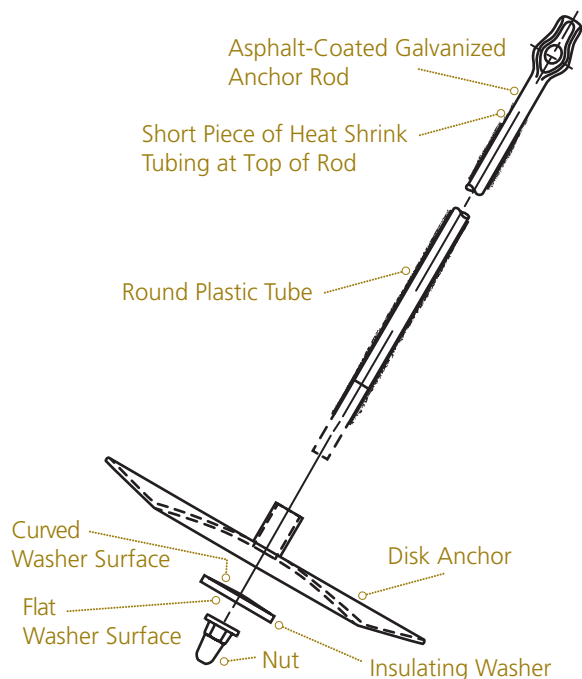
The Chance Corrosion-Resistant Disc Anchor is designed for low resistivity, alkaline and acidic soils with electrolyte combinations. The anchor eye is forged directly to the rod, so the eye is an integral part of the anchor. The anchor's flanged cap nut is cast. It's large and heavy for greater protection. The heat-shrink sleeve over the galvanized anchor rod helps prevent moisture from going down the rod. The insulating washer is fiberglass-reinforced thermoset material for better load-bearing properties compared to thermoform materials.

### Corrosion-Resistant Anchor

Catalog Number	Description	Hole Size Inches	Fits Protected Rod Size Inches	Holding Capacity <sup>(1)</sup> – lb (No Safety Factors Included) vs Soil Class				
				Class 3 500-600 in-lb	Class 4 400-500 in-lb	Class 5 300-400 in-lb	Class 6 200-300 in-lb	Class 7 100-200 in-lb
C1022008	16" Anchor .187" Thick	16	3/4	31,000 <sup>(1)</sup>	26,500 <sup>(1)</sup>	21,000	16,500	12,000
C1022009	16" Anchor .187" Thick	16	1	31,000 <sup>(1)</sup>	26,500	21,000	16,500	12,000
C1022011	20" Anchor .187" Thick	20	1	40,000 <sup>(1)</sup>	34,000	26,000	21,500	16,000
C1022012	20" Anchor .250" Thick	20	1	40,000 <sup>(1)</sup>	34,000	26,000	21,500	16,000
C1022054	24" Anchor .187" Thick	24	1	50,000 <sup>(1)</sup>	41,000 <sup>(1)</sup>	33,500	26,000	20,000
C1022050	24" Anchor .250" Thick	24	1	50,000 <sup>(1)</sup>	41,000 <sup>(1)</sup>	33,500	26,000	20,000
C1022381	30" Anchor .375" Thick	30	1 1/4	78,100 <sup>(1)</sup>	64,000 <sup>(1)</sup>	52,300	40,600	31,200

**NOTE:** Capacity ratings apply to properly installed anchors only. Failure to install within 5° of alignment with the guy load will significantly lower strength.

(1) Ultimate strength of rod may limit holding capacity.



# Corrosion-Resistant Anchor *(continued)*

## Fiber-Reinforced Washer

Catalog Number	Fits Rod Size Inches	Approx Wt lb Per 100 Pcs
C2100033	¾	23
C2100034	1	19
C2100050	1¼"	30



## Cap Nut

Catalog Number	Fits Rod Size Inches	Approx Wt lb Per 100 Pcs
C2050407	¾	242
C2050408	1	242
C2050590	1-¼"	300



These rods include fiber-reinforced washer and heavy-forged cap nut. Nut and washer are attached to rod.

Galvanized rod meets NEMA specification PH2 and has an asphalt coating, polyethylene tube and heat shrink collar. For additional sizes of rods, contact Hubbell Power Systems, Inc.

## Protected Rod for Corrosion-Resistant Anchor

Rod Size	Rod Tensile Strength lb	Thimbleye® Adapter		Twineye® Adapter		Tripleye® Adapter	
		Catalog Number	Lb Per 100 Pcs	Catalog Number	Lb Per 100 Pcs	Catalog Number	Lb Per 100 Pcs
¾" x 6'	23,000		1330	C2000053AW	1362		—
¾" x 7'	23,000		1450	C2000054AW	1470		1630
¾" x 8'	23,000	C2000049AW	1566	C2000055AW	1650	C2000061AW	1783
¾" x 9'	23,000	—	—	C2000056AW	1750	C2000062AW	1883
¾" x 10'	23,000	C2000050AW	1826	C2000057AW	1910	—	—
1" x 6'	36,000	—	—	—	—	C2000107AW	—
1" x 7'	36,000	—	—	C2000114AW	—	—	—
1" x 8'	36,000	C2000051AW	2500	C2000108AW	—	C2000063AW	2730
1" x 9'	36,000	—	—	C2000058AW	2800	—	—
1" x 10'	36,000	C2000052AW	3005	C2000059AW	3050	C2000064AW	3270
1-¼" x 10'	58,000	—	—	C2000141AW	5000	—	—
1-¼" x 15'	58,000	—	—	—	—	C2000140AW*	7500

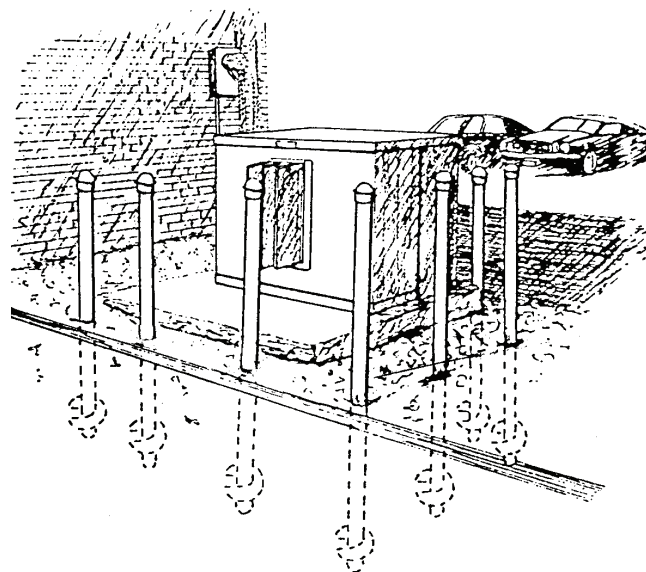
secure

# Bumper Posts

## For Instant Equipment Protection

- Protect transformers, switchgear and guys.
- Any equipment needing bumper protection is an ideal candidate.
- Cheaper than concrete.
- Installation in minutes regardless of weather conditions.
- Available power diggers can install through blacktop surfaces.
- Hot-dip galvanized corrosion-resistant finish.

### Power-Installed Design



## INSTALLING TOOLS

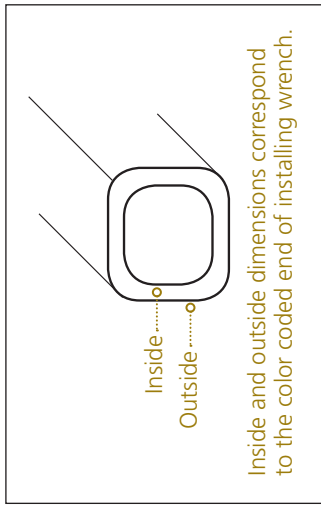
- Additional tools may not be required for Bumper Post if Kelly Bar can be inserted into the 3.06" inside diameter of the post and pinned by a Bent Arm Pin.
- Tools are available which bolt directly to Chance® Kelly Bar Adapters or which can be used with Chance Locking Dog Assembly.
- Order catalog number C3030737 for Kelly Bar attachment or C3030739 for use with Locking Dog Assembly. Bumper Post is inserted into the drive tool and held by the provided Bent Arm Pin.

### 8,000 ft-lb Typical Working Torque

Catalog Number	Standard Pkg/Pallet	Weight Each lb	Description
T1120192	1/12	45	8" Helix, 3½" O.D. x 60" Shaft
T1120224	1/12	53	8" Helix, 3½" O.D. x 75" Shaft
C1120275	1/12	61	8" Helix, 3½" O.D. x 84" Shaft

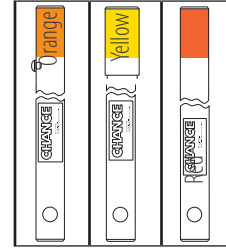


## How to Match Anchors and Installing Wrenches



		Installing Wrench Catalog Number	Length ft	Maximum Installing Torque Rating ft-lb	Outside Dimension Inches	Inside Dimension Inches
PISA® 6 Anchor (formerly PISA® 5 Anchor)				6,000		
PISA® 7 Anchor				7,000		
Standard-Strength PISA® Anchor				4,000		
Mid-Strength PISA® Anchor				6,000		
C102-52XX Series Tough One® Anchor - Small Hub				8,000		
C102-52XX Series Tough One® Anchor - Large Hub				10,000		
C102-50XX Series Tough One® Anchor - Large Hub				10,000		
C102-50XX Series Tough One® Anchor - Large Hub				10,000		
				15,000		
				15,000		
				15,000		
				15,000		
				15,000		
				15,000		

(1) Fits Locking Dog Assembly CC303-0069HD.  
(2) Fits Locking Dog Assembly CC303-0981.



# Standard and Hybrid PISA® Anchor Installing Tools

## For Installing Torques up to 10,000 ft-lb

A complete tool system consists of: Kelly Bar Adapter, Torque Indicator, Locking Dog Assembly and Drive-End assembly. For instructions for selecting the proper Kelly Bar Adapter, see page A31.

### Convertible to Extension Use

Extension assemblies can be added where soil conditions dictate that anchors be set more than one rod length deep or where digger to ground clearances are limited.

Each Standard Kelly Bar Adapter has six holes for ½" bolts on a 5¼" bolt circle and comes with six ½" Grade 5 bolts, nuts, lockwashers and Bent Arm Pin with Coil Lock.



Kelly Bar Adapter

Kelly Bar

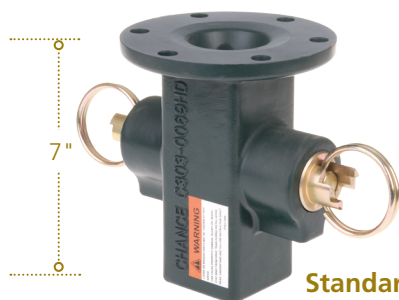
### Standard Kelly Bar Adaptor with Bent Arm Pin

(5" Bolt Circle)

Part Number	Kelly Bar Shape	Kelly Bar Dimension			Wt Each lb
		X	Y	Z	
630013	Hex	2"	5'	6½"	10
630011HD	Hex	2½"	4¼"	8½"	18
630012HD	Hex	2⅝"	4¼"	8½"	18
630015	Square	2½"	2¾"	7"	13¼
630017	Square	2½"	2½"	3½"	9

### Bolt, Nut, Lockwasher

Part Number	Description
P0010259P	Hex Bolt
055371P	Lock Washer
055635P	Hex Nut



Standard Locking Dog Assembly C3030069HD

Standard Locking Dog Assembly has six holes for ½" bolts on a 5¼" bolt circle, comes with six ½" Grade 5 bolts, nuts and lockwashers.

### Standard Locking Dog Assembly

Catalog Number	Description	Wt Each lb
C3030069HD	Complete Standard Locking Dog Assembly	20
C3030070	Locking Dog replacement Kit includes parts needed to replace both Locking Dogs	4
P1300007P	Replacement ring only	0.10

# Standard and Hybrid PISA® Anchor Installing Tools *(continued)*

## For Installing Torques up to 10,000 ft-lb

### Transmits Torque to Anchor Core

The wrench transmits the torque from the Kelly Bar of the digger to the hub of the Power-Installed Screw Anchor so that the anchor rod need be only large enough in diameter to support the guy load.

#### 7-ft Drive-End Wrench

Catalog Number	Description	Wt Each lb
C1021583	Standard Drive-End Wrench Installs 8,000 ft-lb (small-hub) Tough One® Anchors 10,000 ft-lb (small-hub) Tough One Anchors 4,000 ft-lb Standard-Strength PISA Anchors 6,000 ft-lb Mid-Strength PISA Anchors	57
C3031064 <sup>(1) (2)</sup>	Hybrid Drive-End Wrench Installs 10,000 ft-lb (large-hub) Tough One Anchors 6,000 ft-lb PISA 6 Anchors 7,000 ft-lb PISA 7 Anchors	64

#### 3½-ft Drive-End Wrench

Catalog Number	Description	Wt Each lb
C1021595	Standard Drive-End Wrench Installs 8,000 ft-lb (small-hub) Tough One Anchors 10,000 ft-lb (small-hub) Tough One Anchors 4,000 ft-lb Standard-Strength PISA Anchors 6,000 ft-lb Mid-Strength PISA Anchors	29
C3031063 <sup>(1) (2)</sup>	HYBRID Drive-End Wrench Installs 10,000 ft-lb (large-hub) Tough One Anchors 6,000 ft-lb PISA 6 Anchors 7,000 ft-lb PISA 7 Anchors	28

#### Extension Wrench for Standard and Hybrid Drive-End Wrenches

Catalog Number	Description	Wt Each lb
630027	3½' ft Extension	42
630028	7' ft Extension	70

(1) These wrenches will fit 15,000 ft-lb Tough One Anchors dimensionally, but must not be used for torques in excess of 10,000 ft-lb.

(2) The old-style Hybrid wrenches C3031063 and C3031064, having a collar welded around the drive end, fit only PISA 6 and PISA 7 anchors.





# Screw Anchor Drive Tool Strings

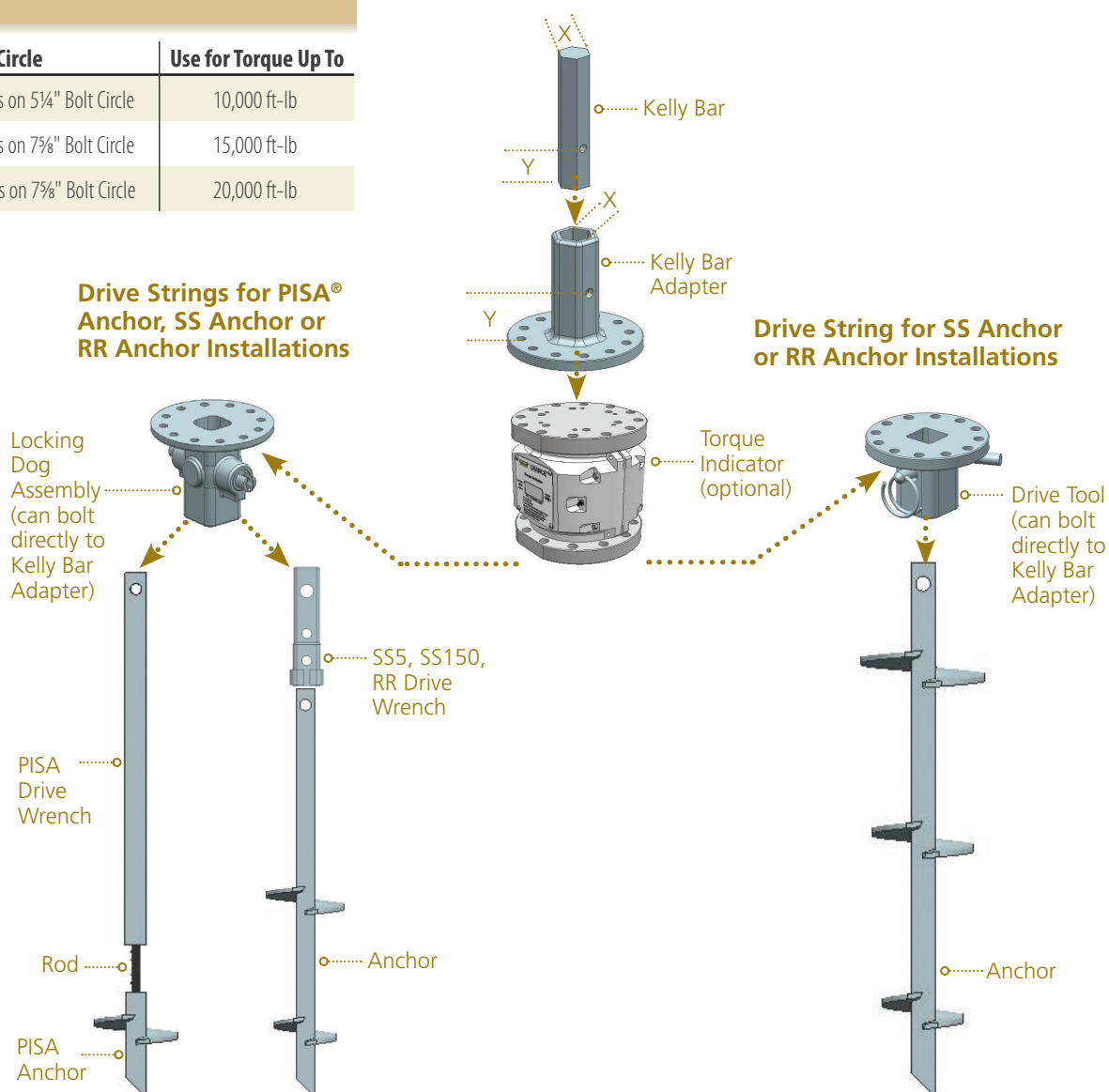
Selecting the correct Kelly Bar Adapter is key to building a successful Drive String. Follow these two easy steps:

1. Remove the auger from the digger and carefully measure the X and Y dimensions of the Kelly Bar.
2. Match the shape of the Kelly Bar and the X and Y dimensions with the Kelly Bar Adapter chart provided on pages A30 and A33. The Y dimension on the Kelly Bar Adapter must be equal to or greater than the Y dimension on the Kelly Bar itself.

## BOLT CIRCLES

Chance® anchor installing tools are provided with appropriate bolt circles for the expected service. The torque limitations for the three standard bolt circles are give below. Never exceed the rated torque of any of Chance installing tool.

Bolt Circle	Use for Torque Up To
(6) ½" Grade 5 Bolts on 5¼" Bolt Circle	10,000 ft-lb
(6) ⅝" Grade 2 Bolts on 7⅝" Bolt Circle	15,000 ft-lb
(12) ⅝" Grade 2 Bolts on 7⅝" Bolt Circle	20,000 ft-lb



# Tough One® Anchor Installing Tools

## For Installing Torques up to 15,000 ft-lb

A complete tool system consists of: Kelly Bar Adapter, Torque Indicator, Locking Dog Assembly and Drive-End Assembly. For instructions for selecting the proper Kelly Bar Adapter, see page A30.

### Tough One Kelly Bar Adapter with Bent Arm Pin

(7<sup>5</sup>/<sub>8</sub>" Bolt Circle)

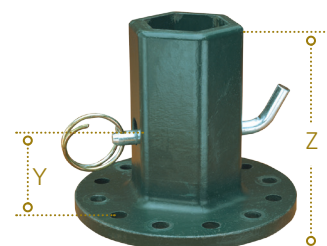
Part Number	Kelly Bar Shape	Kelly Bar Dimensions Inches			Wt lb	5/8" Grade 2 Bolts Included	Bent Arm Pin Included
		X	Y	Z			
C3030936	Hex	2½	3¾	8¼	23	12	C3031223
C3030937	Hex	2¾	3¾	8¼	23	12	C3031223
C3030940	Hex	3	4½	8	27	12	C3031222
C3030955	Square	2½	4¾	7	22	12	C3031227
C3030958	Square	3	3½ & 4 <sup>15</sup> / <sub>16</sub>	7	23	12	C3031227
C3031571	Square	3½	2 & 4	6 <sup>11</sup> / <sub>16</sub>	33	12	C3031227

**NOTE:** Each Tough One Kelly Bar Adapter has twelve holes for 5/8" bolts on a 7<sup>5</sup>/<sub>8</sub>" bolt circle, comes with twelve 5/8" Grade 2 bolts, nuts & lockwashers and Bent Arm Pin with Coil Lock.

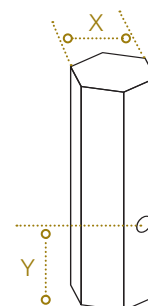
### Digital Torque Indicator<sup>(1)</sup>

Catalog Number	Description	Weight lb
C3031689	Torque Indicator adaptable to 5¼" BC or 7 <sup>5</sup> / <sub>8</sub> " BC	65

(1) See pages A37-A38 for additional information on Torque Indicators.



Kelly Bar Adapter



Kelly Bar



Torque Indicator



# Tough One® Anchor Installing Tools *(continued)*

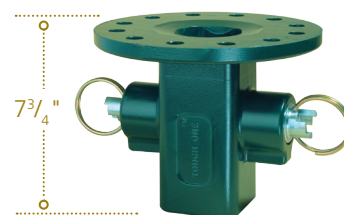
## For Installing Torques up to 15,000 ft-lb

### Tough One Locking Dog Assembly

Catalog Number	Description	Weight lb
C3030981	Complete Tough One Locking Dog Assembly	28
C3031026	Locking Dog Replacement Kit Includes all parts less casting, bolts, nuts, washers	5

**NOTE:** Tough One Locking Dog Assembly has twelve holes for 5/8" bolts on a 7 5/8" bolt circle and comes with twelve 5/8" Grade 2 bolts, nuts and lockwashers.

Part Number	Description
056653P	Hex Bolt
055827P	Lock Washer
055803P	Hex Nut



**Locking Dog Assembly**

### Tough One Drive-End Wrenches

Catalog Number	Length ft	Description	Weight lb
C3030982	3 1/2	Installs 15,000 ft-lb (large hub) Tough One anchors, 10,000 ft-lb (large hub) Tough One and all 1 1/2" Core Anchors	36
C3030983	7		73

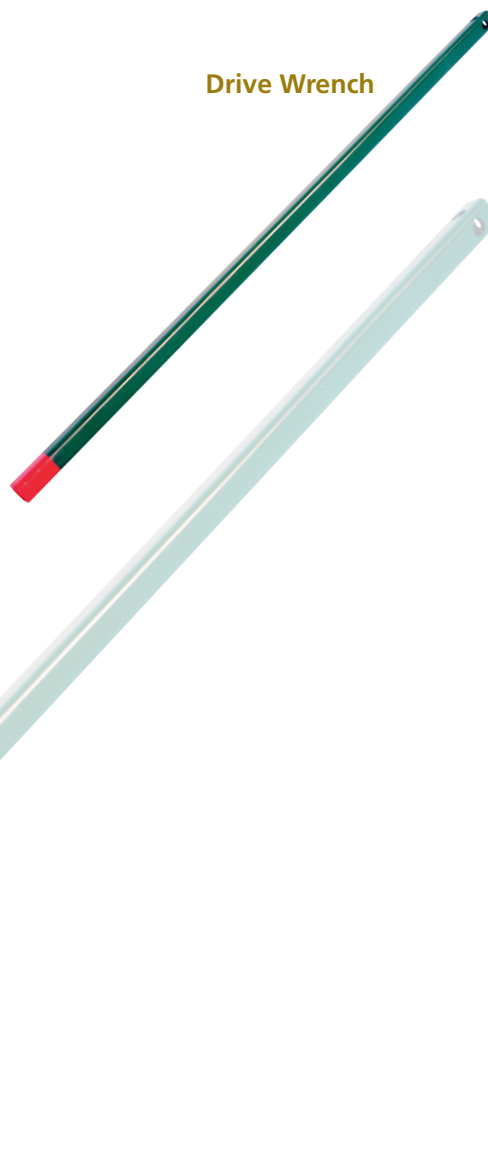
**NOTE:** Tough One Drive Ends are painted with a red band on the bottom.

### Extension Assemblies for Tough One Drive-End Wrenches

Catalog Number	Length ft	Description	Weight lb
C3030987	3 1/2	Extension attaches to drive-end wrench when additional depth is required	53
C3030988	7		89

**NOTE:** For SS and RR Anchor Tool options when using the Tough One Drive String System, see pages A35-A36.

**Drive Wrench**





# Anchor Installing Tool Bent Arm Pin with Coil Lock

## Use with Standard and Tough One® Kelly Bar Adapters, SS, RR and Bumper Post Installing Tools

Each Chance® plated-steel Bent Arm Pin is designed to attach a Kelly Bar Adapter to a Kelly Bar, and to secure SS, RR and Bumper Post Anchors to Anchor Drive Tools.

Bent Arm Pins with Coil Locks are included with new tools as required. Order Pins and Coil Locks for existing tools as shown below.

Kelly Bar Adapter	Bent Arm Pin and Coil Lock Assembly	SS/RR Tools	Bent Arm Pin and Coil Lock Assembly
630010 <sup>(1)</sup>	C3031227	639001	C3031226
630011 <sup>(1)</sup>	C3031223	C3030195	C3031225
630011HD	C3031223	C3030201	C3031224
630012 <sup>(1)</sup>	C3031223	C3030202	C3031224
630012HD	C3031223	C3030020	C3031226
630013	C3031223		
630013A	C3031223		
630014	C3031222		
630015	C3031222		
630016	C3031227		
630017	C3031227		
C3030936	C3031223		
C3030937	C3031223		
C3030940	C3031222		
C3030955	C3031227		
C3030958	C3031227		
C3031571	C3031227		

### Bumper Post Tools

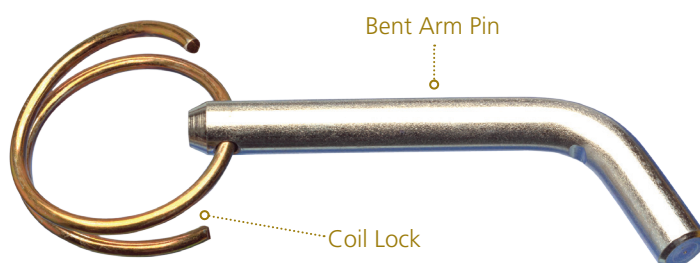
Bent Arm Pin and Coil Lock Assembly
C3030737
C3030739

(1) Old-style Kelly Bar Adapters are no longer available.



### Bent Arm Pin and Coil Lock Assembly

Catalog Number	Size Inches
C3031226	3 x 5/8
C3031225	3 1/2 x 3/4
C3031224	4 1/2 x 1
C3031227	5 x 3/4
C3031223	4 1/2 x 1 1/2
C3031222	5 x 5/8



To order Coil Lock only, order Part Number P3031215P.

### ! WARNING

Always use the approved combination of Coil Locks and Bent Arm Pins. Never attempt to use any other combinations, such as hair pins, cotter keys, etc., with Bent Arm Pins.

### ! WARNING

Chance Bent Arm Pins with Coil Locks are the only tested and approved means for through-pin attachment of drive tools. Do not attempt to use any other means of attachment.

# Adapters

For Torques up to 10,000 ft-lb

## BOLT CIRCLE ADAPTERS

These adapters are used to connect two tools having incompatible bolt circles. The C3030115 is for use between two tools having tapped 5¼" bolt circles. The T3030166 is for use between a tool having a 5¼" bolt circle and one having a 7⅝" bolt circle. Both are limited to 10,000 ft-lb.

Catalog Number	Description	Weight lb
C3030115	Bolt Circle Adapter with two ½" x 5¼" bolt circles	11
T3030166	Bolt Circle Adapter with one ½" x 5¼" bolt circle and one ⅝" x 7⅝" bolt circle	18
T3030166N	Bolt Circle Adapter with one ½" x 5¼" bolt circle and one ⅝" x 7⅝" bolt circle	10



C3030115



T3030166

## FOR INSTALLING SS OR RR ANCHORS

These Drive Tools require the appropriate Kelly Bar Adapter. Each comes with bolts, nuts and lockwashers.

Catalog Number	Description	Bolt Circle	Approx Wt lb
639001	SS5/SS150/RR Drive Tool	(6) ½" holes on 5¼" BC	7
C3030195 <sup>(1)</sup>	SS 175 Drive Tool	(12) ⅝" holes on 7⅝" BC	18
C3030201 <sup>(1)</sup>	SS200 Drive Tool	(12) ⅝" holes on 7⅝" BC	30
C3030202 <sup>(1)</sup>	SS225 Drive Tool	(12) ⅝" holes on 7⅝" BC	30

(1) Requires use of T3030166 adapter, and limited to 10,000 ft-lb when used with Standard Kelly Bar Adapter (with a 5¼" bolt circle).



T3030166N



639001



C3030020

Catalog Number	Description	Unit Fits	Approx Wt lb
C3030020	SS5/SS150/RR Drive Tool	Standard Locking Dog Assembly	8
C3031035	SS5/SS150/RR Drive Tool	Tough One® Locking Dog Assembly	11
T3031403	SS175 Drive Tool	Tough One Locking Dog Assembly	26
C3031077	SS 200 Drive Tool	Tough One Locking Dog Assembly	23

NOTE: These tools slide into Locking Dog Adapter and are retained by spring loaded dogs.

Catalog Number	Description	Bolt Circle	Approx Wt lb
C3031650	SS5/SS150 Drive Tool with Locking Dogs	(6) ½" holes on 5¼" BC	10
C3031645	SS175 Drive Tool with Locking Dogs	(12) ⅝" holes on 7⅝" BC	21



C3031650

# Chance® Torque Indicators

## FOR INSTALLING NO-WRENCH ANCHOR AND MANUAL FOUNDATION TOOL

Designed for use with the Chance® Portable Anchor Installer. This tool bolts directly to the installer's output flange or Kelly Bar Adapter having six ½" diameter holes on a 5¼" bolt circle. Adjustable pivoting plates accept rods from ¾" to 1¼" diameter.

For manually-installed foundations, eyenut must be temporarily installed for installation. Has four holes on 5¼" bolt circle for attachment. Includes four ½" x 1½" bolts, nuts and lockwashers.

Catalog Number	Weight lb
E3030255	9



E3030255



accurate



# Chance® Torque Indicators

## WIRELESS TORQUE INDICATOR

Using the Wireless Chance® Torque Indicator, you can install screw anchors to a pre-determined torque value, which gives a positive indication of anchor holding capacity in any soil type. The handheld Wireless Data Logger gives real time information on torque while storing for easy download.

The Indicator mounts between the Kelly bar adapter and drive tool (or locking dog assembly). The LCD display is easy to read in full daylight and gives the operator a direct readout of installation torque at all times.

Operational temperature range: -30° to 80°C (-22° to 175° F)

Accuracy: ±500ft-lb at any reading

Torque is measured using strain gauges

No shear pins to replace

Powered by a standard 9V battery

Base unit with wireless display

- Torque is displayed on Base Unit and on Wireless Display
- Multiple Wireless Display units can be linked to Base Unit
- Solid one-piece spool design to withstand bending loads. Top and bottom flange, each provides six holes tapped 1/2"- 13 on a 5-1/4" bolt circle and twelve holes tapped 5/8"- 11 on a 7-5/8" bolt circle.

Data Logger

- Torque displayed on Data Logger
- Torque and GPS data recorded and saved on Data Logger
- Data downloadable from Data Logger to computer spreadsheet



ANCHORING

Catalog Number	Description
C3031689	Base Indicator with Wireless Display Screen
C3031690	Data Logger
C3031723	Wireless Display Screen
C3031724	Indicator Kit (Base Indicator with Wireless Display Screen and Data logger)



## SHEAR PIN TORQUE LIMITER

Catalog Number C3030044 for Installing Torques up to 10,000 ft-lb

- Protection for anchors and installing tools by disconnecting the power when the installing torque reaches a preselected level.
- Useable in very rocky soil.
- Durable – does not require special storage or handling.
- Top and bottom each has six holes tapped 1/2"-13 on a 5 1/4" bolt circle.

Catalog Number	Description	Wt lb
C3030044	Shear Pin Torque Indicator	54
C3030045 <sup>(1)</sup>	One Carton of Shear Pins (approx 1700 pins)	50
T3031420 <sup>(1)</sup>	One Box of Shear Pins (approx 510 pins)	15

(1) Each Shear Pin provides 500 ft-lb of torque.

# Soil Test Probe

## Determine Soil Conditions Without Taking Core Samples

The Chance® Soil Test Probe is a mechanical instrument which enables the operator to determine the condition of the sub-soil without core samples. A ratchet-handle torque wrench which slides up and down on the shaft is used to install or retract the probe. Torque wrench readings, in inch-pounds, provide a way to measure the consistency of the sub-soil. The torque values obtained are translated into soil classifications using the copyrighted Chance Soil Classification Table (below) located on the inside flap of the carrying case.

Torque readings are taken at the depth to which an anchor is to be installed, and at least 2 feet above this depth because the average earth consistency 2 to 3 feet above the anchor determines the anchor holding capacity. The probe shaft is marked at 1-foot intervals permitting soil evaluation at every foot of depth.

The length of the Soil Test Probe (including helix) is 5 feet. Each shaft coupled to the probe provides an additional 5 feet. A durable carrying case protects the equipment when not in use.



### Soil Test Probe 1800 In-lb Capacity

Catalog Number	Description	Length ft	Weight lb
C3090032	Probe with 3 5-ft Extensions	20	27½

### Accessories

Catalog Number	Description	Weight lb
C3090033	5-ft Extension Only	3

### Soil Classification Data

Class	Common Soil-Type Description	Geological Soil Classification	Probe Values ft-lb (nm)	Typical Blow Count "N" per ASTM-D1586
—	Sound hard rock, unweathered (bedrock)	Granite, Basalt, Massive Limestone	—	—
1	Very dense and/or cemented sands: coarse gravel and cobbles	Caliche (Nitrate-bearing gravel/rock)	over 60 (85 - 181)	60 - 100+
2	Dense fine sands; very hard silts and clays (may be preloaded)	Basal till; boulder clay; caliche; weathered laminated rock	over 50 (68 - 85)	45 - 60
3	Dense sands and gravel; hard silts and clays	Glacial till; weathered shales, schist, gneiss and siltstone	42 - 50 (56 - 68)	35 - 50
4	Medium dense sand and gravel; very stiff to hard silts and clays	Glacial till; hardpan; marls	33 - 42 (45 - 56)	24 - 40
5	Medium dense coarse sands and sandy gravels; stiff to very hard silts and clays	Saprolites, residual soils	25 - 33 (34 - 45)	14 - 25
6	Loose to medium dense fine to coarse sands to stiff clays and silts	Dense hydraulic fill; compacted fill; residual soils	17 - 25 (23 - 34)	7 - 14
7 <sup>(1)</sup>	Loose fine sands; Alluvium; loess; medium to stiff and varied clays; fills	Flood plain soils; lake clays; adobe; gumbo, fill	8 - 17 (11 - 23)	4 - 8
8 <sup>(1)</sup>	Peat, organic silts; inundated silts; fly ash; very loose sands; very soft to soft clays	Miscellaneous fill, swamp marsh	under 8 (0 - 11)	0 - 5

**NOTE:** Class 1 soils are difficult to probe consistently and the ASTM blow count may be of questionable value.

(1) It is advisable to install anchors deep enough, by the use of extensions, to penetrate a Class 5 or 6, underlying the Class 7 or 8 Soils.

# Expanding & Tamping Bar

The Chance® fiberglass handle Expanding and Tamping Bar simplifies the job of expanding anchors. The curved expander and tamper head distributes the weight of the bar evenly around the anchor rod to reduce handle vibration. The hook of the Expanding and Tamping Bar wraps around the anchor rod to keep the expanding head from slipping off the anchor top plate. This tool is also effectively used for tamping in soil above the installed anchor. The base casting is attached directly to the fiberglass handle.

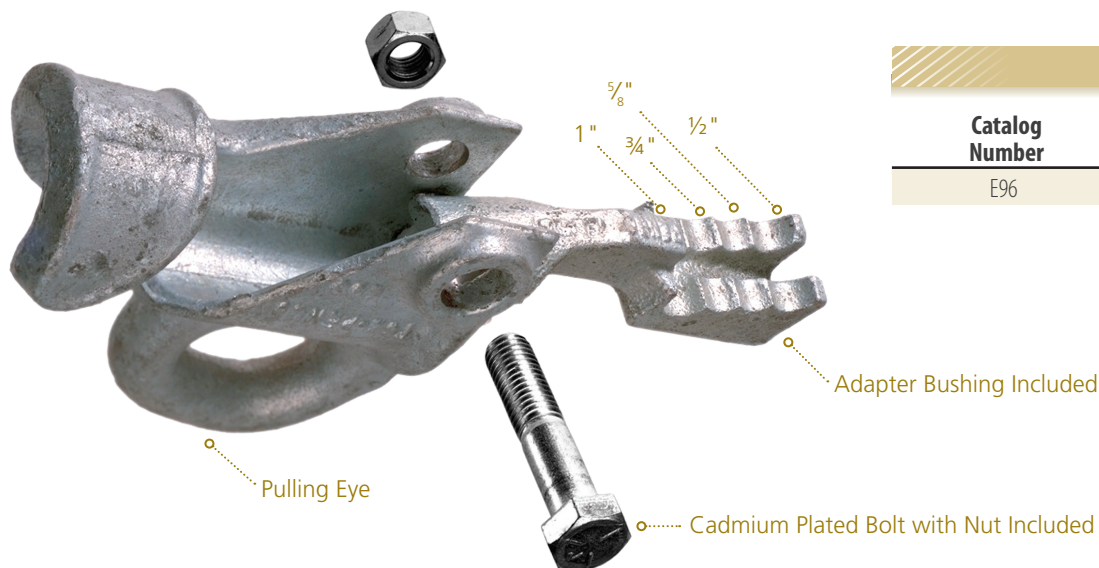


Catalog Number	Description	Length ft	Weight lb
C3020003	Expanding & Tamping Bar	10	22
C3020004	Expanding & Tamping Bar	12	24
E3020001P <sup>(1)</sup>	Fiberglass Handle	10	7
E3020006P <sup>(1)</sup>	Fiberglass Handle	12	8
P3020002P	Expander and Tamper Head	—	14

(1) Includes plug mix to reset handle.

# Standard Pulling Eye

This inexpensive cost-cutter provides a large offset eye to accommodate three-ton chain hoist hooks (see page T7), and leaves the anchor eye free with plenty of clearances for attaching formed wire grips. By removing the adapter bushing, the E96 Pulling Eye fits 1¼" rods. The E96 Pulling Eye is inexpensive and easy to use. One person can assemble and hook up in minutes. For working loads to approximately 6,000 pounds (ultimate strength – 18,000 pounds).



Catalog Number	Weight lb
E96	5



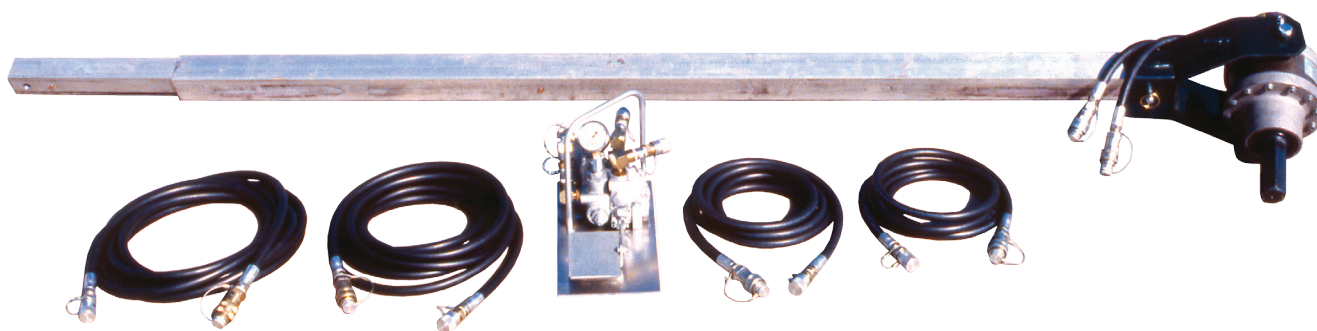
# Portable Anchor Installer for Small Foundations

## 2,500 ft-lb Torque Capacity Hydraulic Power Drive

### Economical Manual Operation and Portability for Remote Sites, Common Anchor Installations.

For most shaft-driven guy anchors and smaller screw foundations, these compact drivers get into areas where large equipment cannot go or is impractical. Operator does not need to resist the torque generated by anchor installation. Countertorque transmits through a torque bar from the drive head to the earth or other restraint. This frees the operator for the task of guiding the anchor path.

- Built-in bypass valve limits output to 2,500 ft-lb maximum.
- Two-way foot pedal gives operator direct control over drive and reverse directions.
- Hoses (two 12-ft and two 25-ft) come with quick couplers for all connections from power supply to foot control to drive head.
- Pivoting drive-head yoke connects with Bent Arm Pin to square-tubular torque bar which telescopes from 8 feet to 10 feet as needed.



#### Catalog Number C3031244

Heavy-Duty Installer requires 1,900 psi at 8 gpm flow rate to deliver 2,500 ft-lb maximum torque.

# 2,500 ft-lb Portable Anchor Installer

## Heavy-Duty – Catalog Number C3031244

Sealed oil-filled gear case. Single catalog number above includes all items below. Each item also may be ordered by separate number.

Hydraulic Control Valve	C3031247
Two 25-ft. Hydraulic Hoses	C4176121 (each)
Hydraulic Drive Head <sup>(1)</sup>	C3031233
Yoke Assembly	E3030680
Two 12-ft. Hydraulic Hoses	E3031253 (pair)
Square Torque Bar Assembly	E3031041

NOTE: Output shaft is 2" Hex. – Requires Kelly Bar Adapter and flanged drive tool (order separately) to install all anchors.

## OPTIONAL HYDRAULIC POWER UNIT CATALOG NUMBER C3031201

For easy wheeling to worksite, hydraulic drive head and foot control are secured by a rubber strap. Unit includes two angle braces atop the cart frame. Hoses may ride on the handles.

Cart-mounted on  $\frac{5}{8}$ " diameter axle with two 4.8" x 8" inflatable (30 psi) tires; 27 $\frac{1}{4}$ " wide x 34 $\frac{1}{2}$ " high x 36" long; shipping weight with oil: 275 lb.

Operating instructions are included with anchor installer and hydraulic power unit.

Drive head and foot control shown in photo are not included with C3031201.

### Hydraulic Pump with Fan Cooling System:

- Typical output pressure —○ 2500 psi
- Pump displacement —○ 8 gpm @ 3400 rpm
- Reservoir capacity —○ 5 gallons US
- Shipping cap and vented fill cap provided

### Gasoline Engine System:

- 16 hp Briggs & Stratton
- Industrial/Commercial Model 326437, Type 2527
- 12-Volt push-button start, 3600 rpm (maximum)









## **Pole Line Hardware**

**When support and timeliness count, Hubbell Power Systems delivers the product breadth and hardware solutions you need to make your complex project more manageable and cost efficient. Constructed to deliver the reliability you depend on from the name you know and trust, our aerial pole product offering utilizes the latest technologies in manufacturing.**

**From aerial to burial, HPS products provide both innovative and cost-effective solutions for telecommunication and utility providers.**

# Banding, for Pole Attachments

A no-drilling way to attach components to a pole of any size or shape.

- Attaches to steel, concrete, composite or wood poles of any shape and size.
- Type 201 Stainless steel bands in widths of 3/4" and 1-1/4"

## Features

- Easily installs with standard hand tools
- Adjustable for any sized pole
- Can be cut to length at installation or ordered in pre-cut lengths

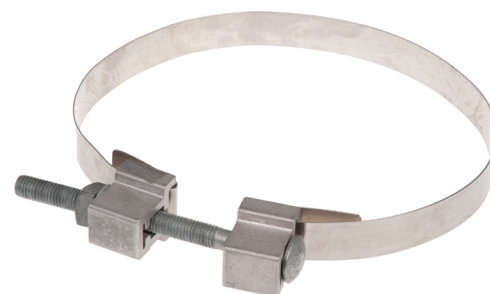
## Material

- Fittings - Aluminum 6061-T6
- Bands - 201 Stainless steel bands with 95,000 P.S.I. min. tensile and 45,000 P.S.I. min. yield
- Bolt - Galvanized steel per ASTM A-153

When determining the band length, add 6" to the circumference of the structure.



Assembled band with buckle



Each kit contains band and buckle.  
5/8 x 7-1/2 carriage bolt  
CBA38 or CBA58 buckle

## Stainless Steel Band Kits - Standard Lengths, includes one buckle

Catalog Number	Band Width	Length	Approx Ship Wt lb Each	Buckle Catalog No.
CBAB3836	3/4"	36"	2	CBAB38
CBAB3840	3/4"	40"	2	CBAB38
CBAB3848	3/4"	48"	2	CBAB38
CBAB3860	3/4"	60"	2	CBAB38
CBAB3872	3/4"	72"	2	CBAB38
CBAB3884	3/4"	84"	2	CBAB38
CBAB5836	1-1/4"	36"	3	CBAB58
CBAB5840	1-1/4"	40"	3	CBAB58
CBAB5848	1-1/4"	48"	3	CBAB58
CBAB5860	1-1/4"	60"	3	CBAB58
CBAB5872	1-1/4"	72"	3	CBAB58
CBAB5884	1-1/4"	84"	3	CBAB58

## Stainless Steel Bands - 100" Coils

Catalog Number	Band Width	Length	Approx Ship Wt lb Each	Buckle Catalog No.
C34201SSB100	3/4"	100"	8	CBAB38
C114201SSB100	1-1/4"	100"	20	CBAB58

NOTE: Order quantity 1 for 100' coil

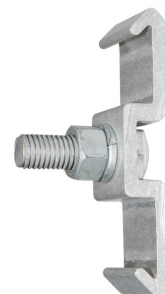
## Buckles for Bands

Catalog Number	Band Width	Approx Ship Wt lb Each
CBAB38	3/4"	8
CBAB58	1-1/4"	20

## General Purpose Mounting Brackets

Catalog Number	Description	Band Width	Approx Ship Wt lb Each
CHDBB1511H	Bracket with standard 5/8" x 2" bolt	3/4"	.65
CHDBB1511H3H	Bracket with Grade 5, 5/8" x 3 bolt	3/4"	.7
CD4080	Heavy duty galvanized steel bracket	1-1/4"	2.3

CHDBB1511H  
or CHDBB1511H3H



BOLT, CABLE EXTENSION

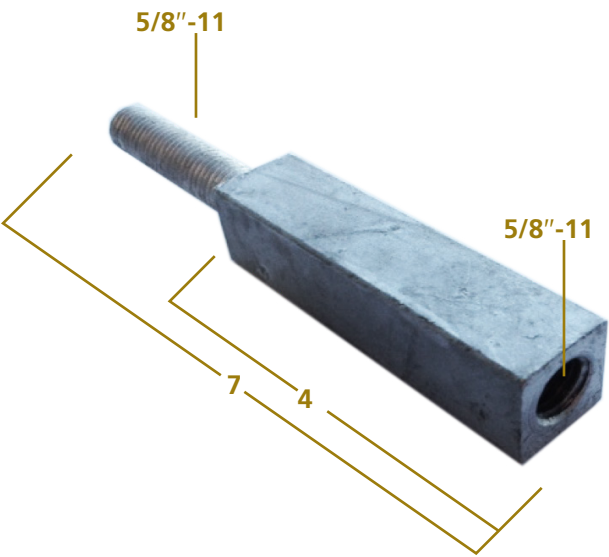
Creates a second cable run at the same level on the same side of the pole as an existing cable run with a 4" extension. Used in conjunction with Reinforcing Strap (PSC2080241) on page A69.

FEATURES

- 5/8" - 11 Thread (Internal and External)
- Stand-off segment 4" x 1" Sq.
- Overall length 7"
- Meets Bellcore 627-0005

MATERIAL

- Steel
- Galvanized per ASTM A-153



Hubbell SKU	Internal Thread	External Thread	Overall Length	Extension Length	Approx. Ship Wt. per each
PSC2080292	5/8"-11	5/8"-11	7"	4"	1.1 lbs.



# Bolts

## CARRIAGE BOLTS

Carriage Bolts have square nuts, finished points and rolled threads. Standard heads have square shoulders. Open-hearth steel. Hot-dip galvanized.

3/8-Inch Diameter			
Catalog Number	Dimensions Inches		Approx Ship Wt lb Each
	Bolt Length	Thread Length	
8634 <sup>(1)(2)</sup>	4	1 3/4	0.16
863412 <sup>(1)(2)</sup>	4 1/2	1 3/4	0.17
8635 <sup>(1)(2)</sup>	5	1 3/4	0.18
8636 <sup>(1)</sup>	6	1 3/4	0.20
8637	7	1 3/4	0.22

NOTE: 4,250 lb rated tensile strength.

(1) RUS listed.

(2) NEMA standard.

1/2-Inch Diameter			
Catalog Number	Dimensions Inches		Approx Ship Wt lb Each
	Bolt Length	Thread Length	
8645 <sup>(1)(2)</sup>	5	3	0.33
864512 <sup>(1)</sup>	5 1/2	3	0.38
8646 <sup>(1)(2)</sup>	6	3	0.39
8647	7	4	0.44

NOTE: 7,800 lb rated tensile strength.

(1) RUS listed.

(2) NEMA standard.

## CLEVIS BOLTS

For supporting crossarm suspension insulator strings. Cotter bolt is 2 3/4" long and comes with cotter pin and hex nut. Clevis Bolts are drop-forged steel. Hot-dip galvanized.

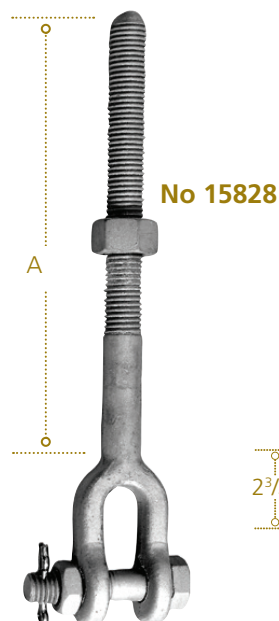
Catalog Number	Dimensions Inches						Approx Ship Wt lb Each
	A	B	C	D	E	Thread Length	
15808 <sup>(1)</sup>	8	5/8	1 3/16	1/2	1 13/16	6	1.50
15810 <sup>(1)</sup>	10	5/8	1 3/16	1/2	1 13/16	6	1.99
15812 <sup>(1)</sup>	12	5/8	1 3/16	1/2	1 13/16	6	2.17
15814 <sup>(1)</sup>	14	5/8	1 3/16	1/2	1 13/16	6	2.20
15828 <sup>(1)</sup>	8	3/4	1 3/16	5/8	1 13/16	6	2.00
15830 <sup>(1)</sup>	10	3/4	1 3/16	5/8	1 13/16	6	2.57
15832 <sup>(1)</sup>	12	3/4	1 3/16	5/8	1 13/16	6	2.80
15834 <sup>(1)</sup>	14	3/4	1 3/16	5/8	1 13/16	6	3.04

NOTE: 5/8" bolt has 12,400 lb rated tensile strength. 3/4" bolt has 18,350 lb rated tensile strength.

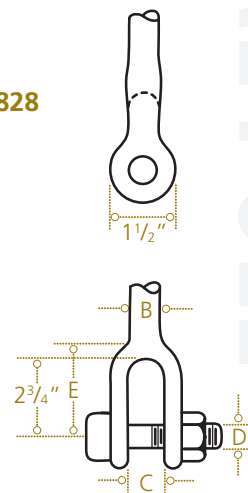
(1) RUS listed.



No 8634



No 15828





# Bolts

## DOUBLE-ARMING EYE BOLT

Bolts have a cone type point and are threaded to within 2" of the 1½" x 2" eye. Three square nuts. Drop-forged steel. Hot-dip galvanized.

### ⅝-Inch Diameter

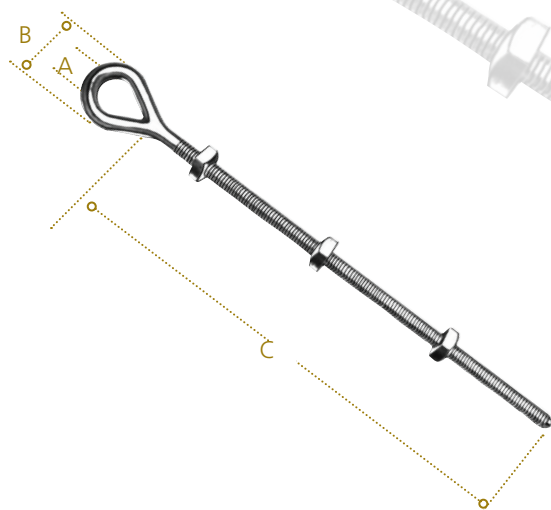
Catalog Number	Dimensions Inches			Approx Ship Wt lb Each
	Inside Dimension A	Outside Dimension B	Length Under Eye C	
19784 <sup>(1)</sup>	1½	2⅝	14	1.96
19786 <sup>(1)</sup>	1½	2⅝	16	2.20
19788 <sup>(1)</sup>	1½	2⅝	18	2.32
19790 <sup>(1)</sup>	1½	2⅝	20	2.56
19792 <sup>(1)</sup>	1½	2⅝	22	2.60

NOTE: 12,400 lb rated tensile strength.

(1) RUS listed.

## DOUBLE-ARMING BOLTS, ALL-THREAD RODS CABLE B SUSPENSION BOLTS

Referred to as "D.A. bolts," Double-Arming Bolts are used for double-arm applications (one arm on each side of the pole) because of the ease of installation if replacement of the crossarm is necessary. Hubbell Power Systems D.A. Bolts are manufactured to HPS specifications that meet the requirements of ANSI C135.1. They are available in a range of thread diameters and lengths. Each bolt includes four assembled square nuts. Threads are formed with the rolled thread process. Bolt length is measured from the last thread, end to end. Semi-cone point comes on bolts 8" and longer in ½", ⅝" and ¾" diameters. All others have chamfered or rounded ends.



### ½" Thread Diameter (½-13 UNC)

Catalog Number	Length Inches	Approx Ship Wt lb Each
8846	16	1.17
8848	18	1.25

NOTE: 7,800 lb rated tensile strength.

### ⅝" Thread Diameter (⅝-11 UNC)

Catalog Number	Length Inches	Approx Ship Wt lb Each
8860	10	1.17
8862 <sup>(1) (2)</sup>	12	1.26
8864 <sup>(1) (2)</sup>	14	1.48
8866 <sup>(1) (2)</sup>	16	1.70
8868 <sup>(1) (2)</sup>	18	1.80
8870 <sup>(1) (2)</sup>	20	1.97
8872 <sup>(1) (2)</sup>	22	2.13
8874 <sup>(1) (2)</sup>	24	2.27
8876	26	2.40
8877	28	2.53
8878	30	2.67
8879	32	2.80

NOTE: 12,400 lb rated tensile strength.

(1) RUS listed, n - double arming bolt.

(2) ANSI standard, C135.1.



# Bolts

## DOUBLE-ARMING BOLTS, ALL-THREAD RODS (continued) CABLE B SUSPENSION BOLTS

### 3/4" Thread Diameter (3/4-10 UNC)

Catalog Number	Length Inches	Approx Ship Wt lb Each
C2050140	6	1.28
C2050141	8	1.50
8882 <sup>(2)</sup>	12	1.82
8884 <sup>(2)</sup>	14	2.24
8886 <sup>(2)</sup>	16	2.48
8888 <sup>(2)</sup>	18	2.72
8890 <sup>(1) (2)</sup>	20	2.92
8892 <sup>(1) (2)</sup>	22	3.16
8894 <sup>(1) (2)</sup>	24	3.35
8896	26	3.56
8897	28	3.65
8898	30	3.81
889832	32	4.13
PS889834	34	4.34
PS889836	36	4.50
PS889838	38	4.82
PS889840	40	5.10
PS889842	42	5.41

**NOTE:** 18,350 lb rated tensile strength.

(1) RUS listed, n - double arming bolt.

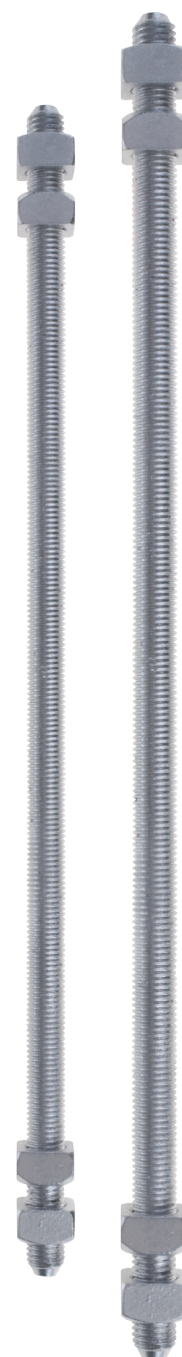
(2) ANSI standard, C-135.1.

### 7/8" Thread Diameter (7/8-9 UNC)

Catalog Number	Length Inches	Approx Ship Wt lb Each
PSDA781200	12	2.83
PSDA781400	14	3.12
PSDA781600	16	3.41
PSDA781800	18	3.70
PSDA782000	20	3.99
PSDA782200	22	4.27
PSDA782400	24	4.56
PSDA782600	26	4.85
PSDA782800	28	5.14
PSDA783000	30	5.43
PSDA783200	32	5.72
PSDA783400	34	6.01
PSDA783600	36	6.30
PSDA783800	38	6.59
PSDA784000	40	6.88
PSDA784200	42	7.17

**NOTE:** 24,500 lb rated tensile strength.

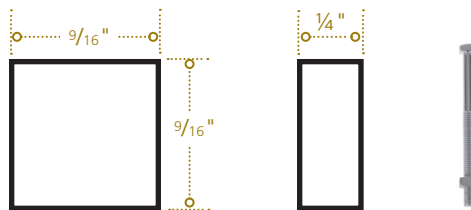
AERIAL  
INSTALLATION



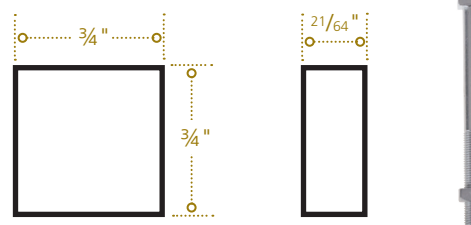
# Bolts

## MACHINE BOLTS, SQUARE HEAD CABLE A SUSPENSION BOLTS

Sometimes referred to as "crossarm" bolts or "through" bolts, Hubbell Power Systems Square Head and Hex Head Machine Bolts are manufactured to HPS specifications that meet the requirements of ANSI C135.1 and are available in a range of thread diameters and lengths. The head is marked with an identifying "C" and the bolt includes an assembled square nut. Threads are formed with the rolled thread process. Bolt length is measured from the underside of the head to the last thread. Semi-cone point comes on bolts 8" and longer in 1/2", 5/8" and 3/4" diameters. All others have chamfered or rounded ends.



3/8" Bolt Head Size



1/2" Bolt Head Size

### 3/8" Thread Diameter (3/8-16 UNC)

Catalog Number	Dimensions Inches		Approx Ship Wt lb Each
	Length	Minimum Thread Length	
8602	2	1	0.11
8603	3	1	0.13
8604	4	3	0.15
860412 <sup>(1)</sup>	4 1/2	3	0.17
8605 <sup>(1)</sup>	5	3	0.18
860512	5 1/2	3	0.19
T2060412 <sup>(1)</sup>	6	3	0.21
8607	7	3	0.24
8608	8	4	0.27
8610	10	4	0.32

NOTE: 4,250 lb rated tensile strength.

(1) ANSI standard, C-135.1.

### 1/2" Thread Diameter (1/2-13 UNC)

Catalog Number	Dimensions Inches		Approx Ship Wt lb Each
	Length	Minimum Thread Length	
8702	2	1 1/4	0.21
870212	2 1/2	1 1/4	0.24
8703	3	1 1/4	0.27
8704	4	3	0.31
870412 <sup>(1) (2)</sup>	4 1/2	3	0.33
8705 <sup>(1)</sup>	5	3	0.35
8706 <sup>(1) (2)</sup>	6	3	0.40
8707 <sup>(1)</sup>	7	3	0.48
8708 <sup>(1) (2)</sup>	8	4	0.49
8709 <sup>(1)</sup>	9	4	0.57
8710 <sup>(1) (2)</sup>	10	4	0.60
8712 <sup>(1) (2)</sup>	12	4	0.71
8714 <sup>(1)</sup>	14	6	0.73
DF2B16	16	6	0.82

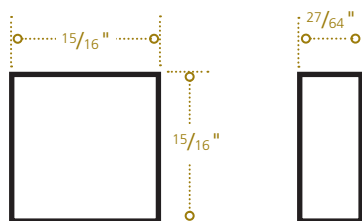
NOTE: 7,800 lb rated tensile strength.

(1) RUS listed, c - machine bolt.

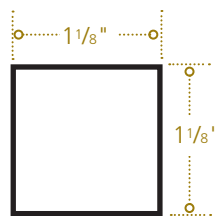
(2) ANSI standard, C-135.1.

# Bolts

## MACHINE BOLTS, SQUARE HEAD (continued) CABLE A SUSPENSION BOLTS



**5/8" Bolt Head Size**



**3/4" Bolt Head Size**



AERIAL  
INSTALLATION

**5/8" Thread Diameter (5/8-11 UNC)**

Catalog Number	Dimensions Inches		Approx Ship Wt lb Each	Cable A Suspension Bolt Catalog Number
	Length	Minimum Thread Length		
8802	2	1½	0.36	
880212	2½	1½	0.39	
PS8803	3	1½	0.48	
8804	4	3	0.57	
8805	5	3	0.60	
8806 <sup>(1) (2)</sup>	6	3	0.69	
8807 <sup>(1) (2)</sup>	7	3	0.75	
8808 <sup>(1) (2)</sup>	8	4	0.78	400013645
8809 <sup>(1)</sup>	9	4	0.88	
8810 <sup>(1) (2)</sup>	10	4	0.93	400013702
8812 <sup>(1) (2)</sup>	12	6	1.08	400013702
8814 <sup>(1) (2)</sup>	14	6	1.23	400013678
8816 <sup>(1) (2)</sup>	16	6	1.40	400013686
8818 <sup>(1) (2)</sup>	18	6	1.54	400013694
8820 <sup>(1)</sup>	20	6	1.71	400013702
8822 <sup>(1)</sup>	22	6	1.76	400013710
8824 <sup>(1)</sup>	24	6	1.96	400314274
8826	26	6	2.15	
8828	28	6	2.31	
8830	30	6	2.52	

**3/4-Inch Thread Diameter (¾-9 UNC)**

Catalog Number	Dimensions Inches		Approx Ship Wt lb Each	Cable A Suspension Bolt Catalog Number
	Length	Minimum Thread Length		
PS8902	2	1¾	0.65	
PS8903	3	1¾	0.75	
PS8906	6	3	1.09	
PS8907	7	3	1.18	
8908 <sup>(1) (2)</sup>	8	4	1.26	
8910 <sup>(1) (2)</sup>	10	4	1.54	400013728
8912 <sup>(1) (2)</sup>	12	6	1.62	400013736
8914 <sup>(1) (2)</sup>	14	6	1.88	400013744
8916 <sup>(1) (2)</sup>	16	6	2.25	400013751
8918 <sup>(1) (2)</sup>	18	6	2.32	400013769
8920 <sup>(1)</sup>	20	6	2.52	
8922 <sup>(1)</sup>	22	6	2.68	400013022
8924 <sup>(1)</sup>	24	6	3.04	400013024
8926 <sup>(1)</sup>	26	6	3.08	
8928	28	6	3.23	
8930	30	8	3.46	
8932	32	8	3.69	

NOTE: 18,350 lb rated tensile strength.

NOTE: Cable A Suspension Bolts include 2 square nuts

(1) RUS listed, c - machine bolt.

(2) ANSI standard, C-135.1.

NOTE: 12,400 lb rated tensile strength.

NOTE: Cable A Suspension Bolts include 2 square nuts

(1) RUS listed, c - machine bolt.

(2) ANSI standard, C-135.1.



# Bolts

## MACHINE BOLTS, SQUARE HEAD (continued) CABLE A SUSPENSION BOLTS

AERIAL  
INSTALLATION

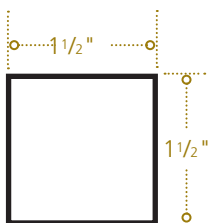
### 7/8-Inch Thread Diameter (7/8- 9 UNC)

Catalog Number	Dimensions Inches		Approx Ship Wt lb Each
	Length	Minimum Thread Length	
PSSB780250	2½	2	0.90
PSSB780300	3	2	0.94
PSSB780400	4	2	1.15
PSSB780500	5	2½	1.30
PSSB780600 <sup>(1)</sup>	6	2½	1.44
PSSB780800 <sup>(1) (2)</sup>	8	3	1.76
PSSB781000 <sup>(1) (2)</sup>	10	6	2.08
DF5B12 <sup>(1) (2)</sup>	12	6	2.40
C2050254 <sup>(1) (2)</sup>	14	6	2.84
C2050255 <sup>(1) (2)</sup>	16	6	3.16
C2050256 <sup>(1) (2)</sup>	18	6	3.52
C2050257 <sup>(1)</sup>	20	6	3.90
C2050258 <sup>(1)</sup>	22	6	4.25
DF5B24 <sup>(1)</sup>	24	6	4.30
PSSB782600 <sup>(1)</sup>	26	8	4.62
PSSB782800 <sup>(1)</sup>	28	8	4.94
PSSB783000	30	8	5.27
PSSB783200	32	8	5.61

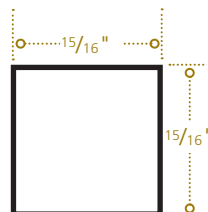
**NOTE:** 24,500 lb rated tensile strength. For additional square nuts, see page A92.

(1) RUS listed, c - machine bolt.

(2) ANSI standard, C135.1.



1" Bolt Head Size



7/8" Bolt Head Size



### 1-Inch Thread Diameter (1-8 UNC)

Catalog Number	Dimensions Inches		Approx Ship Wt lb Each
	Length	Minimum Thread Length	
PSSB100350	3½	2½	1.48
PSSB100400	4	3	1.58
PSSB100500	5	3	1.79
PSSB100600	6	3	2.01
PSSB100800 <sup>(1)</sup>	8	4	2.43
PSSB101000 <sup>(1)</sup>	10	4	2.85
PSSB101200 <sup>(1)</sup>	12	6	3.27
PSSB101400 <sup>(1)</sup>	14	6	3.69
PSSB101600 <sup>(1)</sup>	16	6	4.12
PSSB101800 <sup>(1)</sup>	18	6	4.54
PSSB102000	20	6	4.96
PSSB102200	22	6	5.38
PSSB102400	24	6	5.81
PSSB102600	26	6	6.24
PSSB102800	28	8	6.67
PSSB103000	30	8	7.10
PSSB103200	32	8	7.53

**NOTE:** 33,500 lb rated tensile strength. For additional square nuts, see page A92.

(1) ANSI standard, C-135.1.



# Bolts

## MACHINE BOLTS, HEX HEAD

Hubbell Power Systems Square Head and Hex Head Machine Bolts are manufactured to HPS specifications that meet the requirements of ANSI C135.1 and are available in a range of thread diameters and lengths. The head is marked with an identifying "C" and the bolt includes an assembled hex nut. Threads are formed with the rolled thread process. Bolt length is measured from the underside of the head to the last thread.

AERIAL  
INSTALLATION

**½-Inch Thread Diameter (½-13 UNC)**

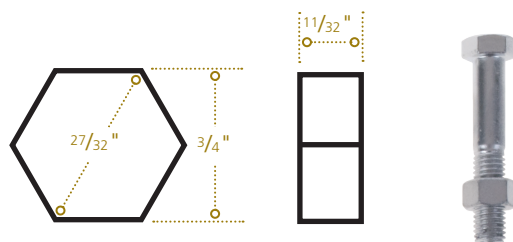
Catalog Number	Dimensions Inches		Approx Ship Wt lb Each
	Length	Minimum Thread Length	
PSHB120125	1¼	1¼	0.14
PSHB120150	1½	1¼	0.15
PSHB120175	1¾	1¼	0.16
PSHB120200	2	1¼	0.17
PSHB120250	2½	1¼	0.20
PSHB120300	3	1¼	0.23
PSHB120350	3½	1¼	0.27
PSHB120400	4	3	0.30

NOTE: 7,800 lb rated tensile strength.

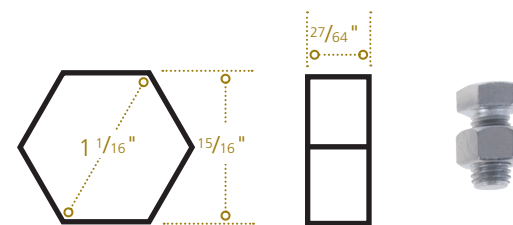
**⅝-Inch Thread Diameter (⅝-11 UNC)**

Catalog Number	Dimensions Inches		Approx Ship Wt lb Each
	Length	Minimum Thread Length	
PSHB580150	1½	1¼	0.33
PSHB580175	1¾	1½	0.35
PSHB580200	2	1½	0.37
PSHB580225	2¼	1½	0.40
PSHB580250	2½	1½	0.43
PSHB580300	3	1½	0.46
PSHB580400	4	3	0.52

NOTE: 12,400 lb rated tensile strength.



**1/2" Bolt Head Size**



**5/8" Bolt Head Size**

strength

# Bolts

## OVALEYE BOLTS

Bolts with 5/8" and 3/4" shanks have 1-1/2" x 2" ovaleyes. Drop-forged, galvanized steel bolts have cone type points and rolled threads.

### 1/2-Inch Shank Diameter (7/16" x 1 1/4" x 1 5/8" Ovaleye)

Catalog Number	Dimensions Inches		Approx Ship Wt lb Each
	Length	Thread Length	
29937	6	4	0.66
29939	8	4	0.77
29943	12	6	1.00

NOTE: 7,800 lb rated tensile strength.

### 3/4-Inch Shank Diameter (5/8" x 1 1/2" x 2" Ovaleye)

Catalog Number	Dimensions Inches		Approx Ship Wt lb Each
	Length Under Eye	Thread Length	
29978 <sup>(1) (2)</sup>	8	4	1.80
29980 <sup>(1) (2)</sup>	10	4	2.00
29982 <sup>(1) (2)</sup>	12	6	2.28
29984 <sup>(1) (2)</sup>	14	6	2.48
29986 <sup>(1) (2)</sup>	16	6	2.68
29988 <sup>(1) (2)</sup>	18	6	3.14
29990 <sup>(1) (2)</sup>	20	6	3.26

NOTE: 20,050 lb rated tensile strength.

(1) RUS listed.

(2) ANSI standard, C135.5

### 5/8-Inch Shank Diameter (9/16" x 1 1/2" x 2" Ovaleye)

Catalog Number	Dimensions Inches		Approx Ship Wt lb Each
	Length	Thread Length	
29956 <sup>(1) (2)</sup>	6	4	1.00
29958 <sup>(1) (2)</sup>	8	4	1.04
29959 <sup>(1) (2)</sup>	9	4	1.13
29960 <sup>(1) (2)</sup>	10	6	1.22
29962 <sup>(1) (2)</sup>	12	6	1.44
29964 <sup>(1) (2)</sup>	14	6	1.46
29966 <sup>(1) (2)</sup>	16	6	1.68
29968 <sup>(1) (2)</sup>	18	6	2.08
29970 <sup>(1) (2)</sup>	20	6	2.40

NOTE: 13,550 lb rated tensile strength.

(1) RUS listed.

(2) ANSI standard, C135.4, C135.5



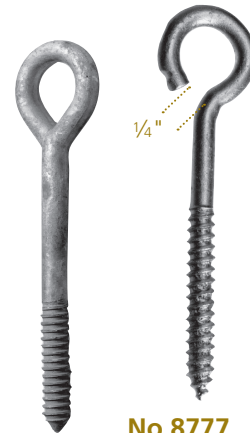
# Bolts

## SCREW EYE BOLTS

Gimlet-point lag-screw thread. Drop-forged except Catalog Number 8777. Hot-dip galvanized per ASTM A-153.

Catalog Number	Type	Dimensions Inches			Approx Ship Wt lb Each
		Size of Eye	Diameter	Length Under Eye	
29930	Ovaleye	1¼ x 1⅝	½	6	0.65
C2050094	Ovaleye	1¼ x 1⅝	½	4	0.54
8777 <sup>(1)</sup>	Hookeye	¾	⅜	3½	0.16

(1) ¼" eye opening.



No 29930

No 8777

## THIMBLEYE® BOLTS

Contoured eye keeps guy strand from kinking, bending or spreading. Drop-forged steel. Hot-dip galvanized. Cone-type points. Eyes of angle bolts are offset 45 degrees.

Catalog Number		Dimensions Inches		Approx Ship Wt lb Each
Straight Bolt	Angle Bolt	Size	Thread Length	
DG1F8 <sup>(1)</sup>	DG4F8 <sup>(1)(2)</sup>	⅝ x 8	4	1.12
5510 <sup>(1)(2)</sup>	5010 <sup>(1)(2)</sup>	⅝ x 10	4	1.48
5512 <sup>(1)(2)</sup>	5012 <sup>(1)(2)</sup>	⅝ x 12	6	1.76
5514 <sup>(2)</sup>	5014 <sup>(2)</sup>	⅝ x 14	6	1.88
5516	5016	⅝ x 16	6	1.92
DG1F18	—	⅝ x 18	6	2.00

NOTE: 12,400 lb rated tensile strength.

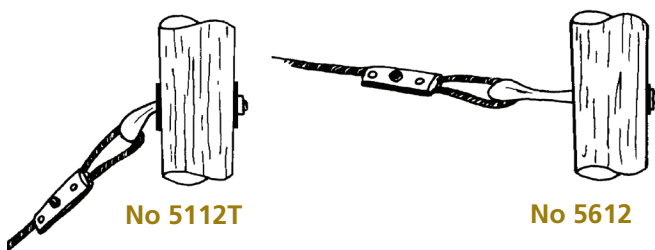
(1) RUS listed.

(2) ANSI standard, C- 135.4.

Catalog Number		Dimensions Inches		Approx Ship Wt lb Each
Straight Bolt	Angle Bolt	Size	Thread Length	
PS5608 <sup>(1)</sup>	—	¾ x 8	4	2.08
PS5610 <sup>(1)</sup>	5110T <sup>(1)</sup>	¾ x 10	4	2.28
5612 <sup>(1)</sup>	5112T <sup>(1)</sup>	¾ x 12	6	2.44
5614	5114T	¾ x 14	6	2.64

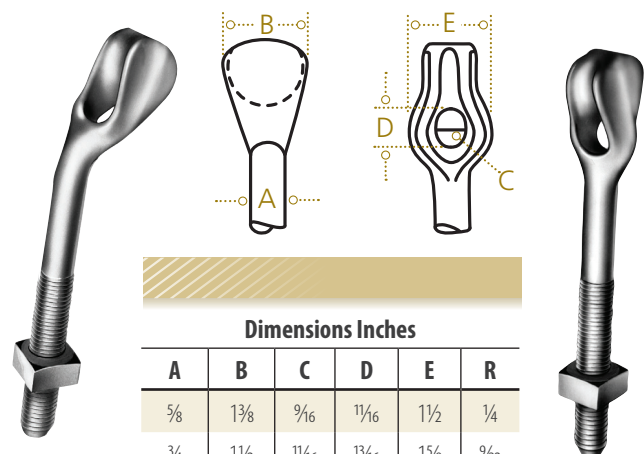
NOTE: 18,350 lb rated tensile strength.

(1) RUS listed.



No 5112T

No 5612



No 5112T

No 5612

Dimensions Inches					
A	B	C	D	E	R
⅝	1⅜	⅞	1¼	1½	¼
¾	1½	1⅞	1⅜	1⅝	⅜



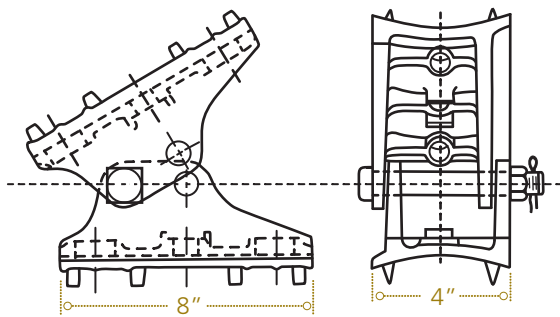
# Braces

## PUSH POLE BRACE

For use in push pole application where tension guying is not feasible. Brace adjusts for different pole angles.

Catalog Number	Dimensions Inches				Approx Ship Wt lb Each
	Pole Diameter	Base Diameter	Mounting Bolt Diameter	Hinge Bolt Diameter	
SG611	6 - 11	4 x 8	$\frac{3}{4}$	$\frac{3}{4}$	7.50

NOTE: Ductile iron per ASTM A-536. Hot-dipped galvanized per ASTM A-153



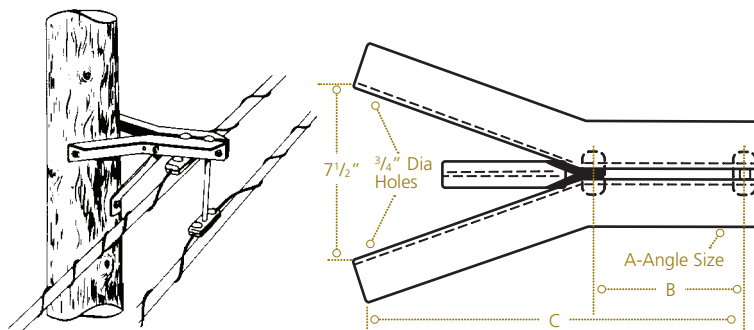
# Brackets

## CABLE EXTENSION BRACKETS

For suspending cables at a distance from the pole, catalog number 7903 Cable Suspension Clamp is suspended under the arm and attached through the center slot to a  $\frac{5}{8}$ " machine bolt with a washer under the bolt head. Cable extension from the pole is 23" for catalog number 7920, and 41" for catalog number 7921. Cable clamp with attachment bolt and pole mounting bolts, or lag screws, must be ordered separately. Hot-dip galvanized.



Catalog Number	Dimensions Inches			Approx Ship Wt lb Each
	A - Angle Size	B	C	
7920	3 x 2½ x ¼	8½	26	29.0
7921	3½ x 2½ x ⅝	18¾	44½	62.0



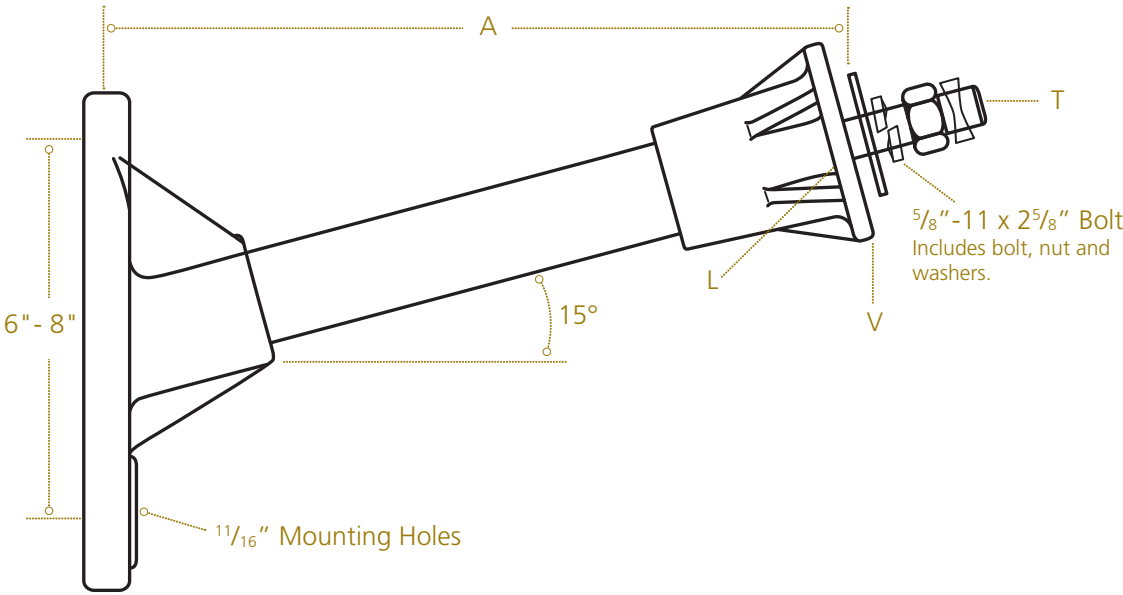
# Brackets

## COMMUNICATION STANDOFF BRACKETS

With over 50 years of experience in manufacturing Chance® Fiberglass Rod polymer insulation products, we are continually expanding our product line to include utility requested products.

These armless construction configurations include various components, such as ductile iron and aluminum fittings, optional lead, nylon or plastisol threads.

Fiberglass units do not warp, split or shrink. They reduce the risk of pole fires due to tracking. All units are coated with a special ultraviolet-resistant polyurethane gray paint or silicone coating. They can also reduce the labor involved during installation, because they are shipped ready to install.

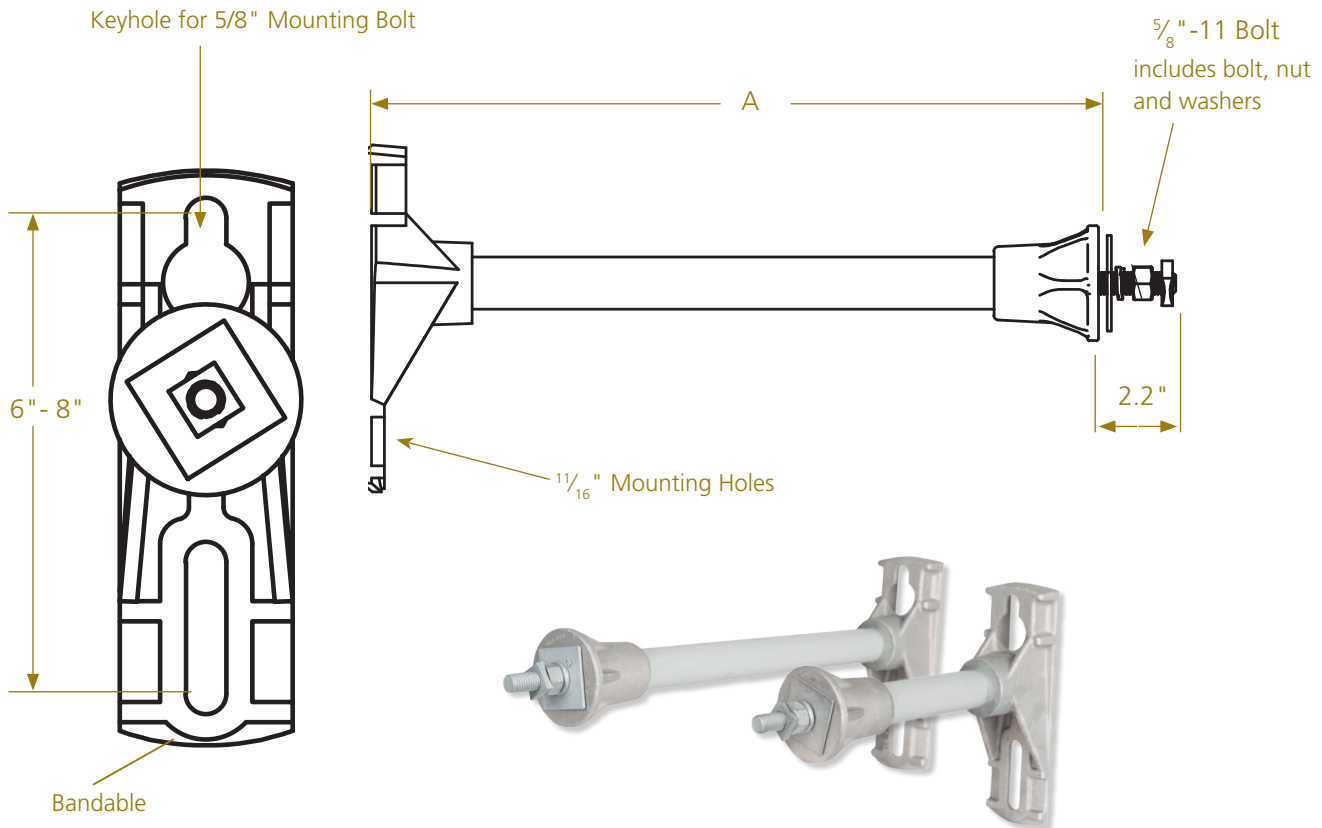


Medium Duty 1 1/2" (38 mm) Diameter Rod					
Catalog Number	Length A Inches (cm)	Minimum Ultimate <sup>(1)</sup>			Weight Each lb
		Vertical V lb (kg)	Longitudinal L lb (kg)	Transverse T lb (kg)	
1CSM12	12 (30.5)	2,100 (945)	1,300 (585)	1,500 (675)	3.8
1CSM15	15 (38.1)	1,800 (810)	1,200 (540)	1,500 (675)	4.2
1CSM18	18 (45.7)	1,500 (675)	1,000 (450)	1,500 (675)	4.6
1CSM21	21 (53.3)	1,300 (585)	850 (383)	1,500 (675)	5.0
1CSM24	24 (61.0)	1,100 (495)	700 (315)	1,500 (675)	5.4
1CSM30	30 (76.2)	900 (405)	600 (270)	1,500 (675)	6.1
1CSM36	36 (91.4)	900 (405)	500 (225)	1,500 (675)	6.8

(1) Recommended maximum working load is 50% of minimum ultimate ratings listed. Consult factory for additional lengths and bases.

# Brackets

## COMMUNICATION STANDOFF BRACKET (0°)



- Base design permits bolting or banding to structure
- Rod is fiberglass with UV-resistant urethane gray paint
- Base and End Fitting are aluminum alloy.

Medium Duty 1½" (38 mm) Dia. Fiberglass Rod

Catalog Number	Length A Inches (cm)	Minimum Ultimate <sup>(1)</sup>			Weight Each lb (kg)
		Vertical V lb (kg)	Longitudinal L lb (kg)	Transverse T lb (kg)	
1CSM120	12 (30)	2100 (953)	900 (408)	1500 (680)	3.8 (1.7)
1CSM150	15 (38)	1800 (810)	800 (363)	1500 (680)	4.2 (1.9)
1CSM180	18 (46)	1500 (680)	700 (318)	1500 (680)	4.6 (2.1)
1CSM210	21 (53)	1200 (544)	600 (272)	1500 (680)	5.0 (2.3)
1CSM240	24 (61)	900 (408)	500 (227)	1500 (680)	5.4 (2.4)

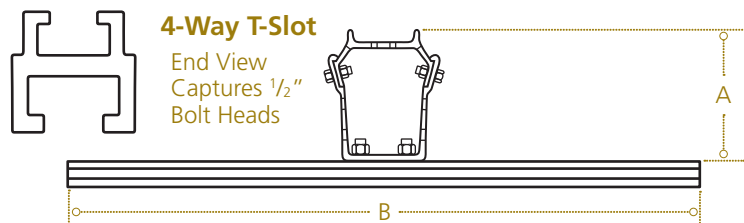
<sup>(1)</sup> Recommended maximum working load is 50% of minimum ultimate ratings listed. Consult factory for additional lengths, bases, and long bolt option. Add "SC" suffix to the end of the catalog number to denote Silicone Coated rod.

# Brackets

## CONDUIT BRACKETS

A multi-purpose bracket for mounting 1" through 6" conduit in a variety of ways. Bracket will mount up to four 6" conduits with unlimited adjustability. 4-Way T-Slot extrusion eliminates field drilling. Unit mounts to the pole on 3 5/8" hole centers using 5/8" thru-bolt and 1/2" lag (not supplied). Conduit straps are not included; see below. Additional T-Slot Shapes are available on the following pages.

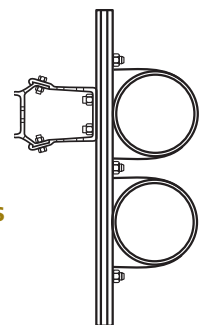
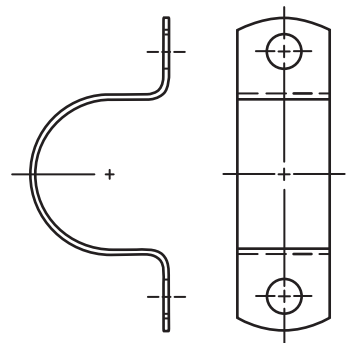
Catalog Number	Dimensions Inches		Approx Ship Wt lb Each
	A	B	
C6CS0	6	N/A	2.31
C6CS06	6	6	3.03
C6CS08	6	8	3.10
C6CS012	6	12	3.50
C6CS024	6	24	4.85
C6CS036	6	36	5.81
C9CS012	9	12	4.81
C9CS024	9	24	6.02
C9CS036	9	36	7.88



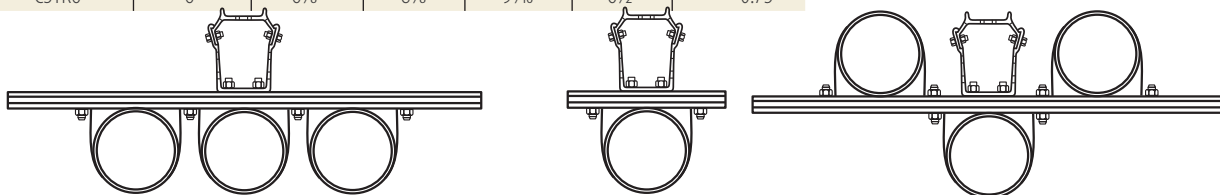
## CONDUIT STRAP KITS

Strap Kits with the following variations are available for use with the Conduit Brackets above. The straps have two holes for mounting one conduit section. Each Strap Kit contains a strap, two each 1/2" x 1 1/4" hex head bolts, lockwashers and hex nuts.

Catalog Number	Dimensions Inches					Approx Ship Wt lb Each
	Conduit Size	A	B	C	D	
CSTK1	1	1 3/8	3	4 1/8	1 1/4	0.30
CSTK15	1 1/2	1 7/8	3 1/2	4 5/8	1 7/8	0.35
CSTK2	2	2 3/8	3 15/16	5 1/16	2 1/4	0.40
CSTK25	2 1/2	2 7/8	4 1/16	5 9/16	2 3/4	0.45
CSTK3	3	3 1/2	5 1/16	6 3/16	3 3/8	0.50
CSTK35	3 1/2	4	5 9/16	6 11/16	3 15/16	0.60
CSTK4	4	4 1/2	6 1/16	7 3/16	5 3/8	0.65
CSTK5	5	5 9/16	7 1/8	8 1/4	5 1/2	0.70
CSTK6	6	6 3/8	8 3/8	9 5/16	6 1/2	0.75



Typical Installations





# Brackets

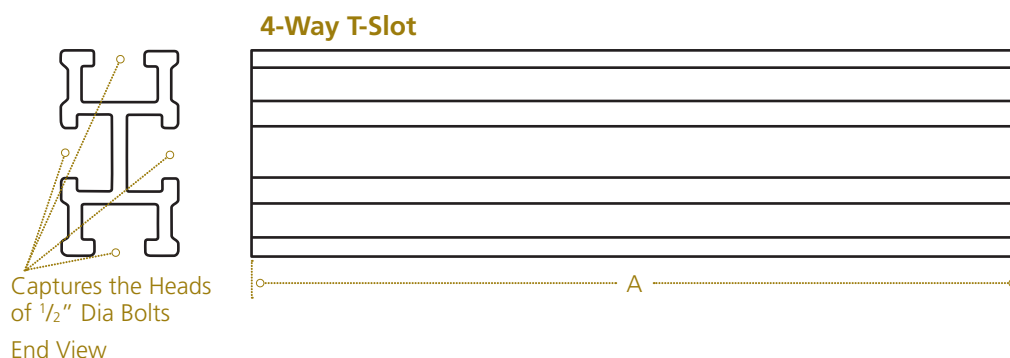
## T-SLOT SHAPED CONDUIT BRACKETS

For versatile equipment mounting, these custom T-Slot Shapes are extruded from high-strength, heat-treated 6061T6 aluminum alloy.

A multi-purpose extrusion for mounting equipment in four directions using 1/2" diameter hardware.

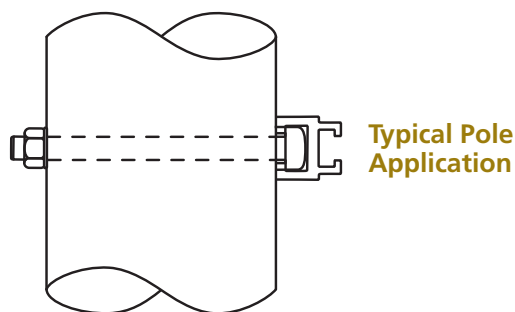
### 4-Way T-Slot

Catalog Number	Dimension A Inches	Weight Each lb
C4WT12	12	1.25
C4WT24	24	2.25
C4WT36	36	3.25
C4WT48	48	4.50
C4WT60	60	5.50
C4WT120	120	11.00

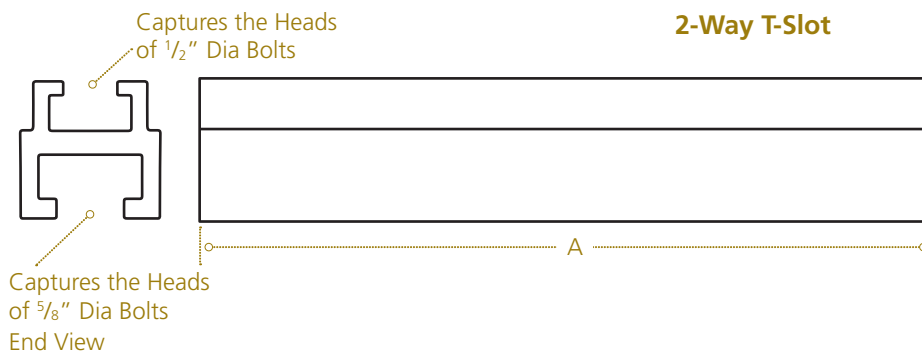


### 2-Way T-Slot

Catalog Number	Dimension A Inches	Weight Each lb
C2WT12	12	1
C2WT24	24	2
C2WT36	36	3
C2WT48	48	4
C2WT60	60	5
C2WT120	120	10



**NOTE:** Both the extrusions can be used for thru-bolt mounting of equipment to poles, structures, walls, enclosures, machinery, etc. Other lengths are available by special order. Contact Hubbell Power Systems for details.

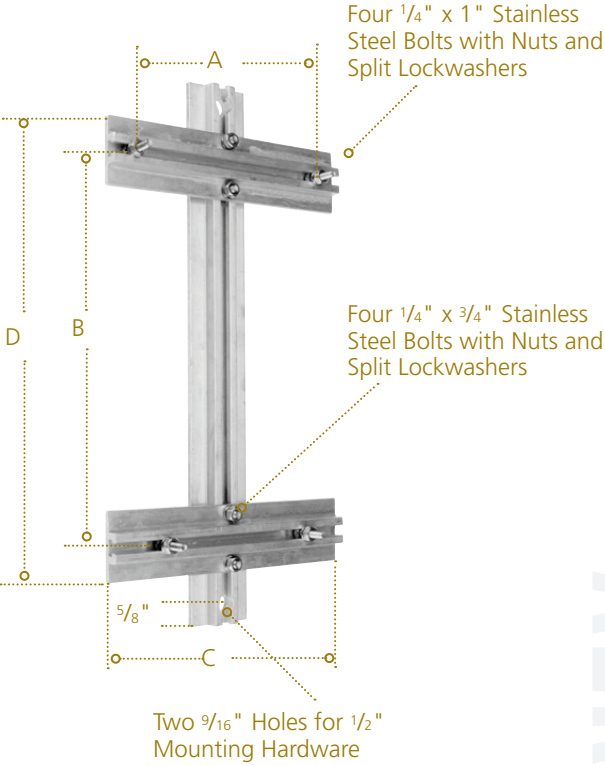


# Brackets

## CABINET MOUNTING BRACKET

- For mounting meter cabinets, meter sockets or other light-duty enclosures, with a maximum weight not to exceed 500 pounds.
- Installs to pole or wall with two 1/2" fasteners, not included.
- Adjust for various hole patterns. See ordering information below for ranges.
- Consists of one vertical support, two horizontal supports and stainless steel mounting hardware.
- Shipped unassembled.

Catalog Number	Mounting Range Inches				Wt Each lb
	A	B	C	D	
CCMB812	1 - 7 1/4	2 - 12	8	16 3/8	2.25
CCMB1218	1 - 11 1/4	2 - 18	12	22 3/8	3.00
CCMB1624	1 - 15 1/4	2 - 24	16	28 3/8	3.75
CCMB1830	1 - 17 1/4	2 - 30	18	34 3/8	4.25



# Brackets

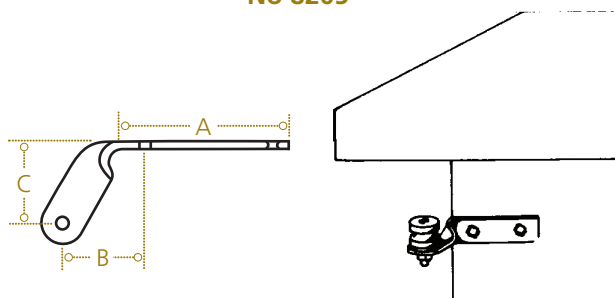
## HOUSE BRACKET

Used where the pole lead attaches to the building at an angle or to carry leads around the corner of a building. Used with porcelain spool insulator and 8604 bolt which are not included. Hot-dip galvanized per ASTM A-153.

Catalog Number	Dimensions Inches						Approx Ship Wt lb Each
	Mtg. Holes	Ins. Holes	Steel Size	A	B	C	
8205	9/32	13/32	1/2 x 3/16	4 3/4	2 7/8	2 5/8	0.82



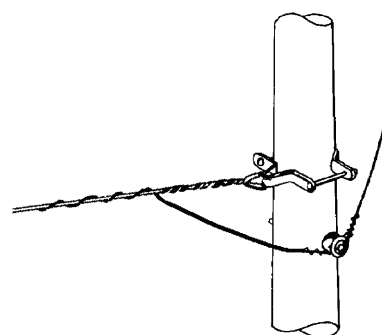
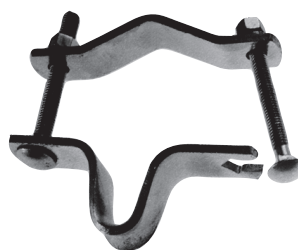
No 8205



## MAST SERVICE DEADEND BRACKET

Attaches to 1 1/4" through 3" diameter service masts. Front strap is rounded to prevent damage to bail of the service clamp. Square hole at end of the front slot captures the carriage bolt head during installation and prevents slippage after installation. Hot-dip galvanized per ASTM A-153.

Catalog Number	Change to Mast Diameter Range (inches)	Approx Ship Wt lb Each
C2060169	1 1/4 - 3	1.02



# Brackets

## SIX-PAIR TERMINAL HANGER BRACKETS

### Application

Attaching six-pair terminals to bare strand or self-support cable.

### Features

- Provides clearance for terminal to mount under cable.
- Works on all six-pair terminals.
- Galvanized steel construction for strength.

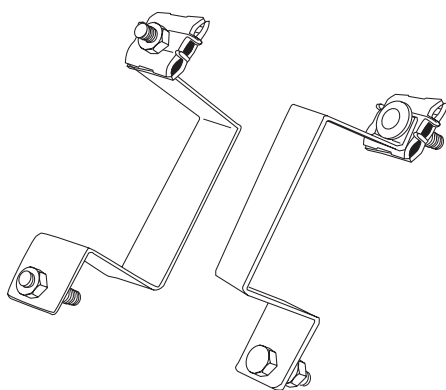
### Ordering information

#### EM 9997

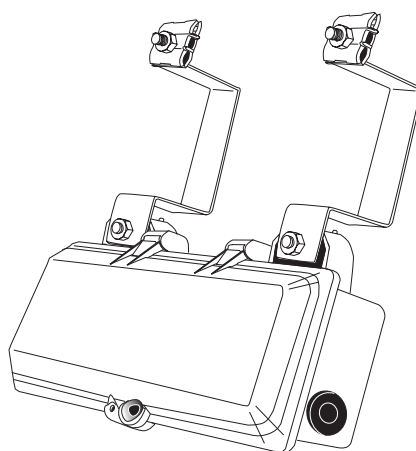
Two brackets for bare strand or self- support cable

#### EM 9997-1

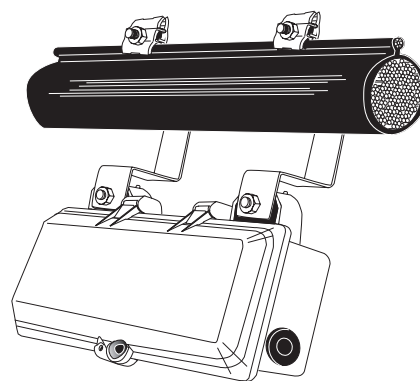
Two brackets with penetrating teeth for self-support cable where a ground is needed



Piece Parts



Applied on Terminal



Applied on Cable



# Brackets

## HANGER BRACKET (TAP)

Aluminum, for strand 6M and 6.6M. Used in CATV drop installations to secure a tap or other electronics to the messenger strand. The bracket can be bent at any point to achieve the desired horizontal location.

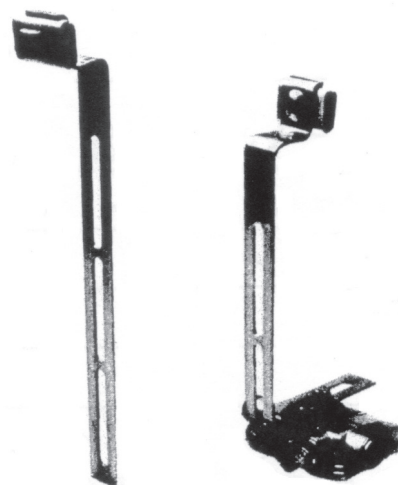
### Features

- Size range 3" to 9" (distance between strand and tap).
- Bracket and clamping plates are made of aluminum alloy.
- Bolt and nut are made of steel.
- Designed for 1/4" (6.6M) and 5/16" (6M) messenger strand.
- Square hole in bracket prevents bolt rotation when tightening.
- Bend at top edge of bracket prevents rotation when bolts are tightened.
- Interlocking clamping plates assure a positive and secure grip on the messenger strand.
- Elongated slots provide variable positioning of tap or other electronics.

### Ordering information

EM 0920

Bracket as Shipped



Bracket bent to desired horizontal location

## ALUMINUM EXTENSION BRACKET (TAP)

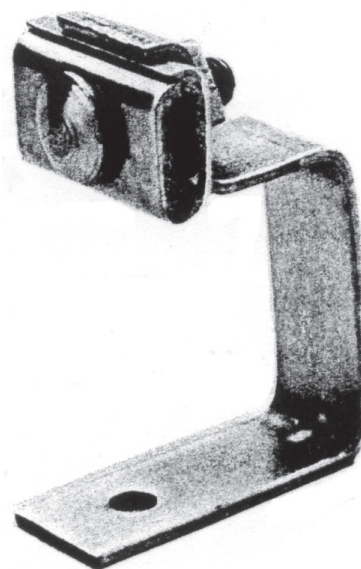
Aluminum, for strand 6M and 6.6M. Used in CATV drop installations to secure a tap to the messenger strand when it cannot be attached directly. The unit is offset below the strand, preventing cable abrasion on the equipment housing.

### Features

- 2-1/2" size (distance between strand and tap).
- Bracket and clamping plates are made of aluminum alloy.
- Bolt and nut are made of steel.
- Designed for 1/4" (6.6M) and 5/16" (6M) messenger strand.
- Square hole in bracket prevents bolt rotation when tightening.
- Tap mounting hole accepts up to a 5/16" bolt.
- Bend at top edge of bracket prevents rotation when bolts are tightened.
- Interlocking clamping plates assure a positive and secure grip on the messenger strand.

### Ordering information

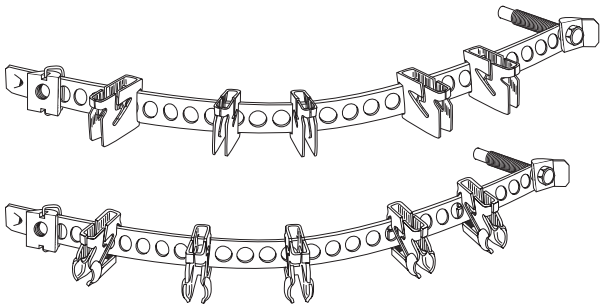
EM 0921



# Clamps

## STAINLESS STEEL MAST CLAMPS

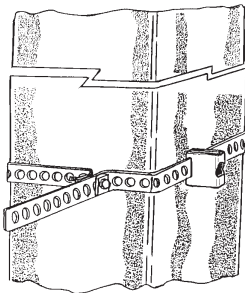
All-stainless-steel strap-type mast clamp, with movable hooks for anchoring aerial drop wire. Designed to secure telephone and CATV aerial drop wire installations to steel masts, wooden poles, concrete poles.



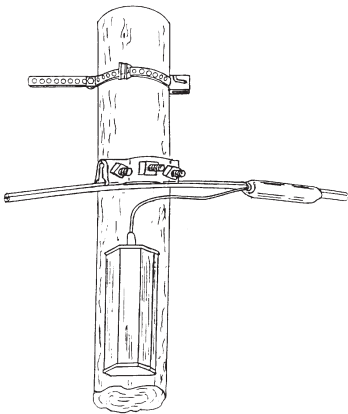
AERIAL  
INSTALLATION

### Features

- All-stainless-steel construction for strength and corrosion resistance.
- Installs on round or square poles and masts.
- Each hook can accommodate up to three drop wire clamps at any angle.
- Upon installation, the hooks can be moved to any position along the strap length, for maximum versatility.
- Works with all of the popular drop wire clamps.
- Strap is made of annealed stainless steel, so it is easily formed around various shapes and diameters.



Ordering Information					
Catalog Number	Length	Hook Type	Number of Hooks per Assembly	Qty.	Approx Ship Wt lb Each
EM 8484TT	32"	Assembled	5	50	32
EM 8484TT-SRH	32"	Removable	5	1	0.7
EM 8484TT-54	54"	Assembled	5	50	39
EM 8484TT-54S2RH	54"	Removable	2	50	27
EM 8484TT-RH	--	Removable	Removable Hooks Only	50	4



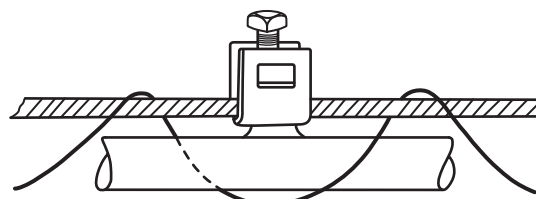
For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Clamps

## GROUND CLAMP, B-STRAND

Connection is soldered to the cable sheath and mechanically clamped to the messenger wire. The bolt can be removed so that the clamp can be dropped over the messenger. Hot-dip galvanized per ASTM A-153.

Catalog Number	Dimensions Inches			Approx Ship Wt lb Each
	Steel Size	Length	Bolt Size	
7956	3/16 x 1 3/4	1 3/4	1/2 x 1 3/4	0.61



No 7956

## CROSSOVER CLAMP 1/4"

Secures mid-span messenger strands crossing perpendicularly to each other to prevent abrasion.

Hubbell SKU	Length	Width	Approx. Ship Wt. per Each
C25CC	2.4	2.4	.7 lbs



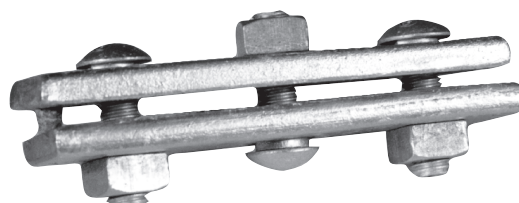
## GUY DEADEND CLAMPS

Parallel grooves trap strand tightly without marring. Plate halves align evenly for easy application. Each bolt has a shoulder to prevent turning while tightening. Hot-dip galvanized per ASTM A-153.

5/8" Clamp Bolts					
Catalog Number	Number of Bolts	Dimensions Inches			Approx Ship Wt lb Each
		Length	Width	Accepts Strand Size	
6460	3	6	2 1/8	3/8 thru 5/8	3.90
6461 <sup>(1)(2)</sup>	3	6	1 7/8	5/16 thru 1/2	2.52
6462	2	4	1 7/8	5/16 thru 1/2	1.78

(1) RUS listed.

(2) NEMA standard.

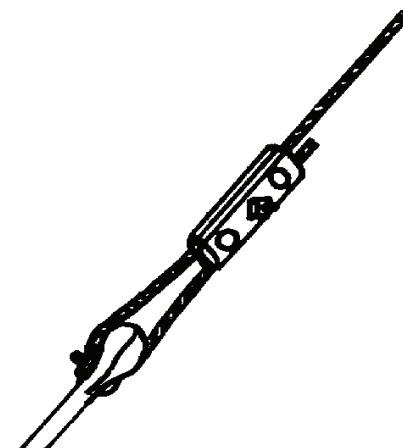


No 6461

1/2" Clamp Bolts					
Catalog Number	Number of Bolts	Dimensions Inches			Approx Ship Wt lb Each
		Length	Width	Accepts Strand Size	
6448	2	3 3/8	1 1/16	1/4 thru 7/16	1.32
6449	3	4	1 1/16	1/4 thru 7/16	1.62
6450 <sup>(1)(2)</sup>	3	6	1 1/16	1/4 thru 7/16	2.28

(1) RUS listed.

(2) NEMA standard.



# Clamps

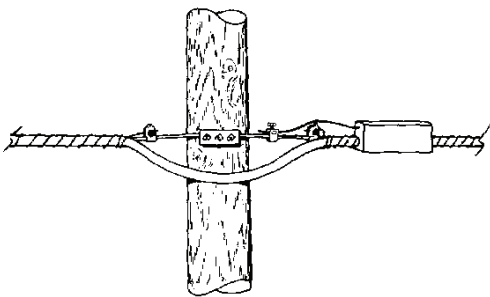
## MESSANGER SUSPENSION CLAMPS

Clamps are used with through bolts to support cable at poles. Through bolt also serves as clamping member. One or more nuts and/or washers are used between the pole and clamp for required spacing. Catalog Number 7901 is used on very light cables. This one bolt clamp consists of the two clamping members only. Catalog Numbers 7902L and 7902R are used at corners and angles. Catalog Numbers 7903 and 7904 are used on straight runs.



No 7903L

AERIAL  
INSTALLATION



No 7902R

Catalog Number	Type	Accommodates Strand Size	Dimensions Inches		Approx Ship Wt lb Each
			Length	Center Hole Dia	
7901	1-Bolt Straight Susp	¼ thru 7⁄₁₆	2½	1¹⁄₁₆	0.75
7902L	3-Bolt Angle Susp.	¼ thru 7⁄₁₆	7	1¹⁄₁₆	2.04
7902R	3-Bolt Angle Susp	¼ thru 7⁄₁₆	7	1³⁄₁₆	2.04
7903	3-Bolt Straight Susp.	¼ thru 7⁄₁₆	5¾	1¹⁄₁₆	1.78
7903L <sup>(1)</sup>	3-Bolt Straight Susp.	¼ thru 7⁄₁₆	5¾	1¹⁄₁₆	1.77
7904	3-Bolt Straight Susp.	¼ thru 7⁄₁₆	5¾	1³⁄₁₆	1.75

(1) Flat keeper plate.

effective



# Clamps

## SUPPORT CLAMP FOR ALL FIGURE 8 FACILITIES

Made of high tensile aluminum. Designed to receive 1/2" or 5/8" standard through bolt.

### Features

- Designed to fit many sizes of support strand used for Figure 8 duct or Figure 8 cable (strand sizes .109 – .148 and 3/16" – 1/4").
- Serpentine design prevents pull-through and allows cable or messenger-on-duct to be twisted when installed.
- Two marked clamp grooves minimize insulation crushing.
- Can be used on corners up to 30° with solid support members, and 20° with stranded.

### Ordering information

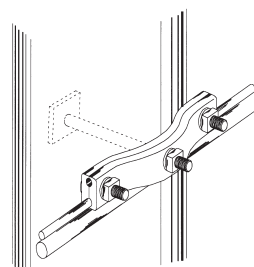
#### EM 0925

Figure 8 Support Clamp

Standard packaging: 25/bx, 30 lb/bx. No minimum order.

#### EM 0925.750

Version of above clamp with 13/16" middle hole for attaching 3/4" hardware



## FIGURE 8 CABLE OR DUCT-ON-STRAND SUPPORT CLAMP

Two-bolt cast malleable iron clamp.

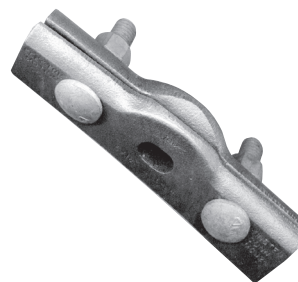
### Features

- Supports strand sizes 5/16" (6M) – 3/8" (10M).
- Can accept 5/8" center bolt.
- Large load-bearing capability
- Galvanized for long life

### Ordering information

#### EM 0926

Cable or Duct-on-Strand Support Clamp



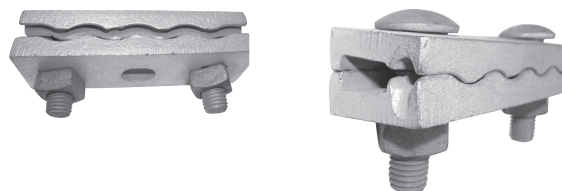
## FIGURE 8 CABLE OR DUCT-ON-STRAND SUPPORT CLAMP

Support clamp that works with any jacketed strand from 1/4" to 3/8". Made from malleable iron with galvanizing. Two 5/8-16 x 2" bolts.

### Ordering information

#### EM 0930

Cable or Duct-on-Strand Support Clamp



For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)

# Clamps and Clips

## REINFORCING STRAP FOR CABLE EXTENSION BOLT

Used to provide support for the Cable Extension Bolt (PSC2080292) when adding a second cable run at the same level on the same side of the pole as an existing cable run.

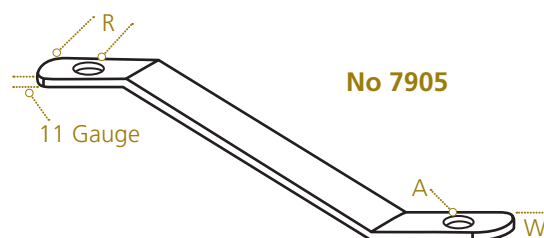
Catalog Number	Mounting Holes Diameter	Distance Between Mounting Holes	Distance of Offset	Overall Length
PSC2080241	1 $\frac{1}{16}$ "	11"	6 $\frac{3}{8}$ "	12 $\frac{1}{4}$ "



## REINFORCING STRAP FOR MESSENGER SUSPENSION CLAMPS

Used as additional support in attaching Messenger Suspension Clamps to pole for heavy loads.

Catalog Number	Dimensions Inches				Approx Ship Wt lb Each
	A	R	D	W	
7905	1 $\frac{1}{16}$	$\frac{7}{8}$	1 $\frac{1}{16}$	1 $\frac{1}{2}$	0.41

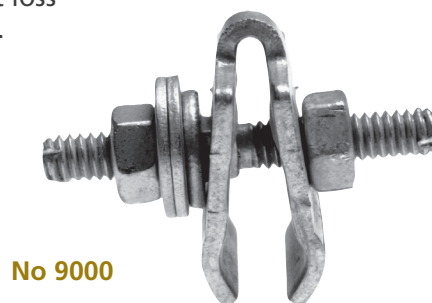


## TYPE E LASHING WIRE CLAMP

Clamp is fitted with a special clamp bolt formed with a shoulder to prevent turning while tightening. Both ends of the  $\frac{1}{4}$ " bolt are peened to prevent loss of nuts during shipment or handling. Hot-dip galvanized per ASTM A-153.

Catalog Number	Dimensions Inches			Approx Ship Wt lb Each
	Length	Width	Strand Size	
9000 <sup>(1)</sup>	1	1	$\frac{1}{4}$ thru $\frac{3}{16}$	0.17

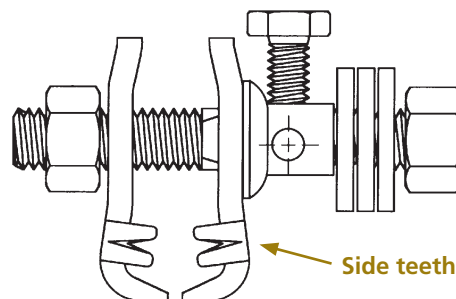
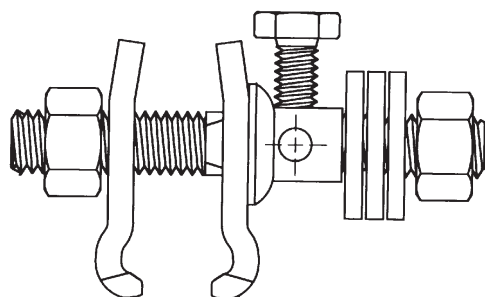
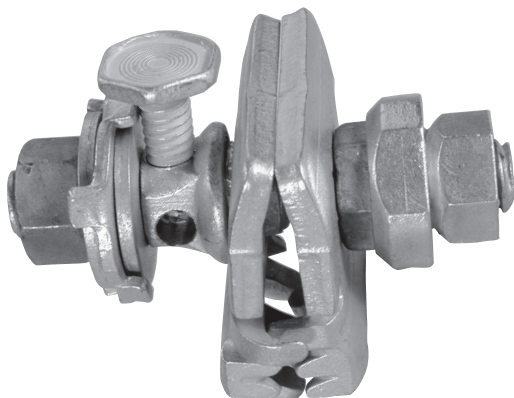
(1) RUS listed.



# Clamps & Cups

## COMBINATION STRAND AND LASHING WIRE CLAMPS

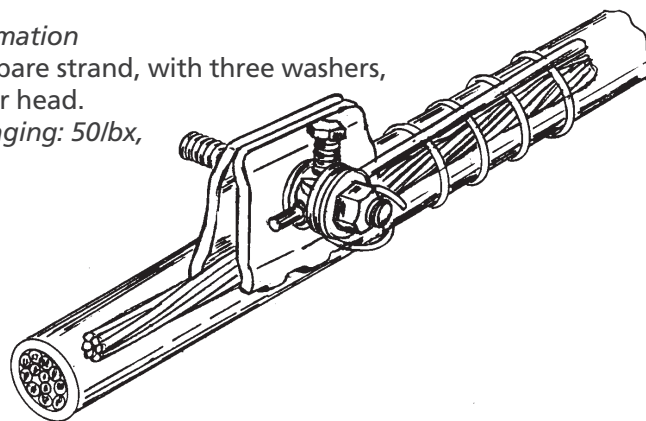
AERIAL  
INSTALLATION



### Ordering information

**EM 5006** – For bare strand, with three washers, no torque shear head.

Standard packaging: 50/bx, 18 lb/bx.

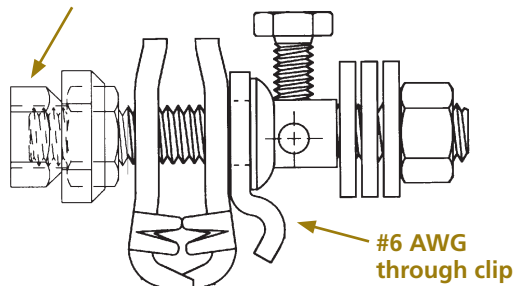


### Ordering information

**EM 5007** – Galvanized steel clamp for terminating lashing wire and bonding and grounding messenger strand. Side teeth to penetrate jacket.

Standard packaging: 100/bx, 29 lb/bx.

torque shear  
head



### Ordering information

**EM 5007-1** – Same as EM 5007 (above), but with torque shear head and a #6 AWG through clip.

Standard packaging: 1/bg, 50/bx, 21 lb/bx.

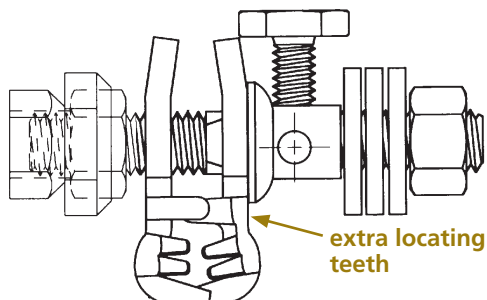


LISTED  
84D8

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Clamps & Cups

## COMBINATION STRAND AND LASHING WIRE CLAMPS (CONTINUED)



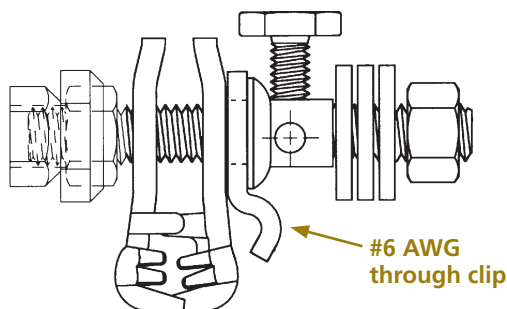
### Ordering information

**EM 5008** – Same as EM 5007 (opposite), but with torque shear head and extra locating teeth.

Standard packaging: 50/lbx, 19 lb/lbx.



LISTED  
84D8



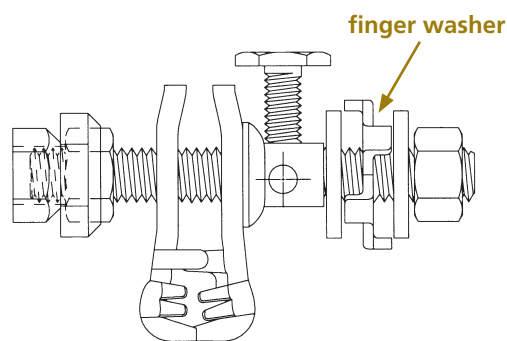
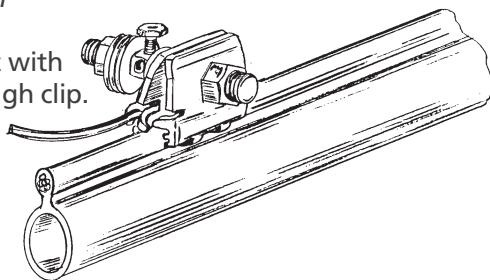
### Ordering information

**EM 5008-1** – Same as EM 5008 (above), but with added #6 AWG through clip.

Standard packaging: 1/lb, 50/lbx, 21 lb/lbx.



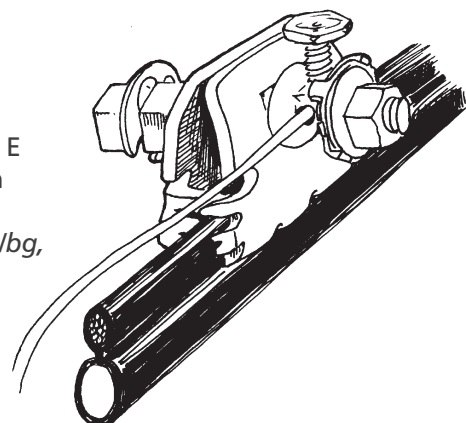
LISTED  
84D8



### Ordering information

**EM 5008-03** – Same as EM 5008 (top), but with added finger washer.

Standard packaging: 5/lb, 50/lbx, 21 lb/lbx.



### At a glance ...

PART NUMBER	DISTINGUISHING FEATURES	LISTINGS
EM 5006		
EM 5007	Side teeth to penetrate jacket	UL
EM 5007-1	Side teeth, torque shear head, #6 AWG through clip	UL
EM 5008	Side teeth, torque shear head, extra locating teeth	UL
EM 5008-1	Side teeth, torque shear head, extra locating teeth, #6 AWG through clip	
EM 5008-03	Side teeth, torque shear head, extra locating teeth, finger washer	

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

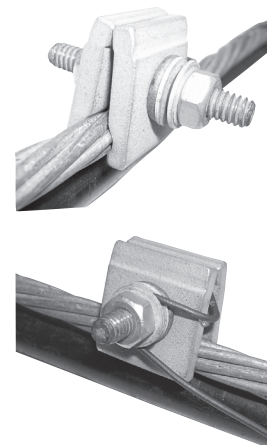


# Clamps, Clips and Eyes

## LASHING WIRE CLAMP

The EMC lashing wire clamp is used for telco and CATV aerial plant to terminate and hold the end of the lashing wire, either at an interruption in continuity or at the end of the lashing wire coil. Also used to hang terminals and splice cases from strand.

- Works with 1/4" (6.6M) to 7/16" (16M) messenger strand.
- Mechanically galvanized for superior corrosion resistance.
- Functional equivalent to the "D" lashing wire clamp.



Catalog Number	Description
EM 8009	Lashing Wire Clamp

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

## WIRE ROPE CLIPS

Body of each clip is galvanized ductile iron designed to fit the strand, which is protected by smooth-rounded contact surfaces. Bolts are made of high-strength steel.

Catalog Number	Strand Size Inches	Approx Ship Wt lb Each	Catalog Number	Strand Size Inches	Approx Ship Wt lb Each
6480	1/4	0.13	6484	1/2	0.50
6481	5/16	0.14	6485	3/8	1.11
6482	3/8	0.23	—	—	—

(1) RUS listed

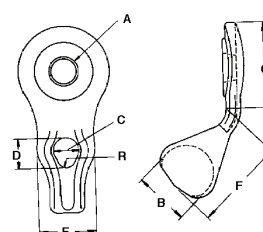
No 6485



## ANGLE THIMBLEYE® EYE






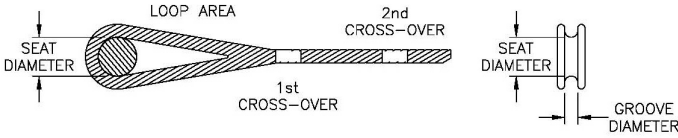
Used for attaching to thru-bolt or threaded end of straight or angle Thimbleye bolt for down guying. Rounded groove protects guy strand from sharp bending and kinking. Drop-forged galvanized steel. Construction for high-strength application.

Catalog Number	Dimensions Inches									Approx Ship Wt lb Each
	For Bolt Diameter	Mtg. Bolt Hole A	B	C	D	E	F	G	R	
0100 <sup>(1)</sup>	5/8	1 1/16	1 1/2	1 1/16	1 3/16	1 5/8	2 1/2	2 1/2	9/32	1.20
0101	3/4	1 3/16	1 1/2	1 1/16	1 3/16	1 5/8	2 1/2	2 1/2	9/32	1.32



# Deadends, Guy Wire

## HARDWARE RECOMMENDATIONS & DIMENSIONS FWDE & AWDE

Recommended Fittings			
Pole Fittings	Anchor Heads	Anchor Rods	Guy Strain Insulators
			 <div> <b>ANSI</b>  <b>54-1</b>  <b>54-2</b>  <b>54-3</b>  <b>54-4</b> </div>
Fittings We Do Not Recommend		Dimensioning	
			

Galvanized Steel Deadends	Aluminized Steel Deadends	Galvanized / Aluminized Steel Sizes	Minimum Seat Diameter, 1st Cross-Over Mark	Maximum Seat Diameter, 1st Cross-Over Mark	Maximum Seat Diameter, 2nd Cross-Over Mark	Minimum Groove Diameter (in)	Min. Hole Diameter for Anchor Rods (in)
FWDE1102		3/16	1	1-3/4	2-1/2	1/4	3/8
FWDE1103		7/32	1-1/8	1-3/4	2-1/2	5/16	3/8
	AWDE4110	7#12, 6M, 3#9	1-1/8	1-3/4	2-1/2	5/16	7/16
FWDE1104		1/4	1-1/8	1-3/4	2-1/2	5/16	7/16
	AWDE4113	3#8, 8M, 7#11	1-1/8	1-3/4	2-1/2	3/8	1/2
FWDE1105		9/32	1-1/8	1-3/4	2-1/2	3/8	1/2
	AWDE4116	3#7, 10M, 7#10	1-1/4	1-3/4	2-1/2	3/8	9/16
FWDE1106		5/16	1-1/4	1-3/4	2-1/2	3/8	9/16
	AWDE4119	3#6, 12.5M, 7#9	1-3/8	1-3/4	2-1/2	7/16	5/8
	AWDE4120	14M	1-3/8	1-3/4	2-1/2	7/16	5/8
FWDE1107		3/8	1-3/8	1-3/4	2-1/2	7/16	5/8
	AWDE4122	3#5, 16M, 7#8	1-3/8	1-3/4	2-1/2	7/16	5/8
	AWDE4124	18M	1-3/8	2-3/8	2-1/2	1/2	11/16
	AWDE4125	7#7	1-3/8	2-3/8	2-1/2	1/2	11/16
FWDE1108		7/16	1-3/8	2-3/8	2-1/2	1/2	11/16
	AWDE4126	20M	1-3/8	2-3/8	2-1/2	1/2	11/16
	AWDE4128	7#6	1-3/8	2-3/8	----	9/16	3/4
FWDE2115		1/2	1-3/8	2-3/8	----	9/16	3/4
	AWDE4130	25M	1-1/2	2-5/8	----	5/8	15/16
	AWDE4131	7#5	1-1/2	2-5/8	----	5/8	15/16
FWDE2116		9/16	1-1/2	2-5/8	----	5/8	15/16

# Deadends, Guy Wire

## FORMED WIRE GALVANIZED STEEL GUY WIRE

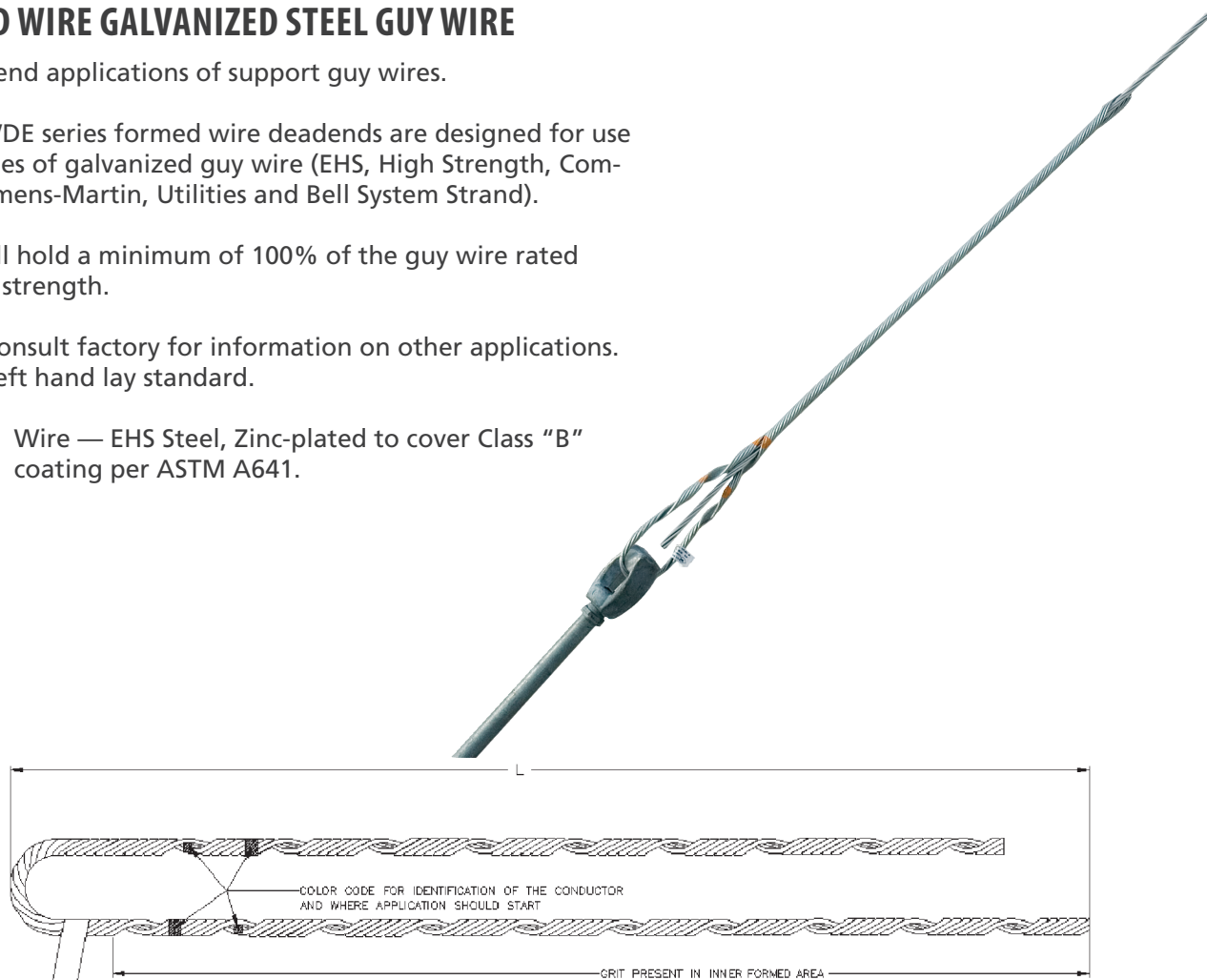
For deadend applications of support guy wires.

Fargo FWDE series formed wire deadends are designed for use on all types of galvanized guy wire (EHS, High Strength, Common, Siemens-Martin, Utilities and Bell System Strand).

FWDE will hold a minimum of 100% of the guy wire rated breaking strength.

Note: Consult factory for information on other applications.  
Left hand lay standard.

Material: Wire — EHS Steel, Zinc-plated to cover Class "B" coating per ASTM A641.



### FWDE

CATALOG NUMBER	NOMINAL SIZE	MAXIMUM RBS LB (KN)	NOMINAL LENGTH (L)		DIAMETER RANGE IN (MM)		COLOR CODE	PACKAGING PER BOX	
			IN	MM	MIN	MAX		UNITS	WEIGHT LBS. (KG)
FWDE1102	3/16"	3,990 (17.7)	20	508	0.174 (4.41)	0.203 (5.16)	Red	150	30 (13.6)
FWDE1103	7/32"	5,400 (24.0)	24	610	0.204 (5.18)	0.230 (5.84)	Green	50	19 (8.6)
FWDE1104**	1/4"	6,650 (29.6)	25	635	0.231 (5.87)	0.259 (6.58)	Yellow	50	24 (10.9)
FWDE1105	9/32"	8,950 (39.8)	28	711	0.260 (6.60)	0.291 (7.39)	Blue	50	26 (11.8)
FWDE1106**	5/16"	11,200 (49.8)	31	787	0.292 (7.42)	0.336 (8.53)	Black	50	41 (18.6)
FWDE1107**	3/8"	15,400 (68.5)	35	891	0.337 (8.56)	0.394 (10.01)	Orange	50	53 (24.0)
FWDE1108**	7/16"	20,800 (92.5)	38	965	0.395 (10.03)	0.474 (12.04)	Green	25	36 (16.3)
FWDE2115	1/2"	26,900 (119.7)	49	1245	0.475 (12.07)	0.515 (13.08)	Blue	20	67 (30.4)
FWDE2116	9/16"	35,000 (155.7)	55	1397	0.516 (13.11)	0.570 (14.48)	Yellow	10	48 (21.8)

NOTES: All dimensions: inches (mm) unless otherwise noted.

Rated at full tension of guy strand RBS for EHS, HS, Siemens-Martin, Common and Utility Grades.

\*\* RUS Technically Accepted.

# Deadends, Guy Wire

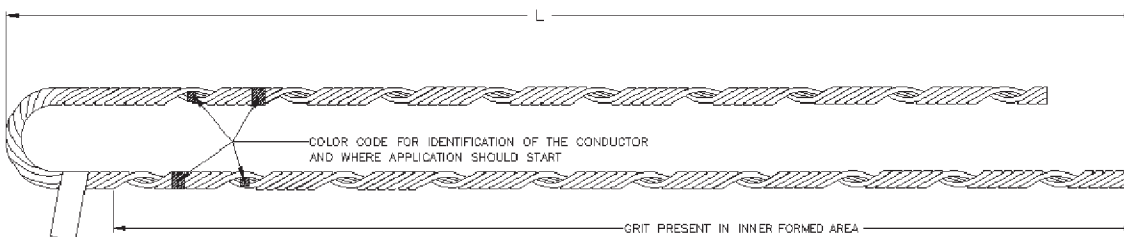
## FORMED WIRE GUY WIRE BEZINAL® COATED STEEL

For deadend applications for support of guy wires.

Fargo BDE series formed wire deadends are designed for use on Bezinal® strand.

BDE will hold a minimum of 100% of the guy wire rated breaking strength.

Note: Left hand lay standard.



### BDE

CATALOG NUMBER	NOMINAL SIZE	MAXIMUM RBS LB (KN)	NOMINAL LENGTH (L)		DIAMETER RANGE IN (MM)		COLOR CODE	PACKAGING PER BOX	
			IN	MM	MIN	MAX		UNITS	WEIGHT LBS (KG)
BDE9102	3/16"	3,900 (17.3)	20	508	0.174 (4.41)	0.203 (5.16)	Red	100	30 (13.6)
BDE9104	1/4"	6,650 (29.6)	25	635	0.231 (5.87)	0.259 (6.58)	Yellow	50	23 (10.5)
BDE9106	5/16"	11,200 (49.8)	31	787	0.292 (7.42)	0.336 (8.53)	Black	50	39 (17.7)
BDE9107	3/8"	15,400 (68.5)	35	891	0.337 (8.56)	0.394 (10.01)	Orange	50	51 (23.2)
BDE9108	7/16"	20,800 (92.5)	38	965	0.395 (10.03)	0.474 (12.04)	Green	25	40 (18.2)

**NOTES:** All dimensions: inches (mm) unless otherwise noted.  
Bezinal is a registered trademark of Bekaert Company



# Deadends, Guy Wire

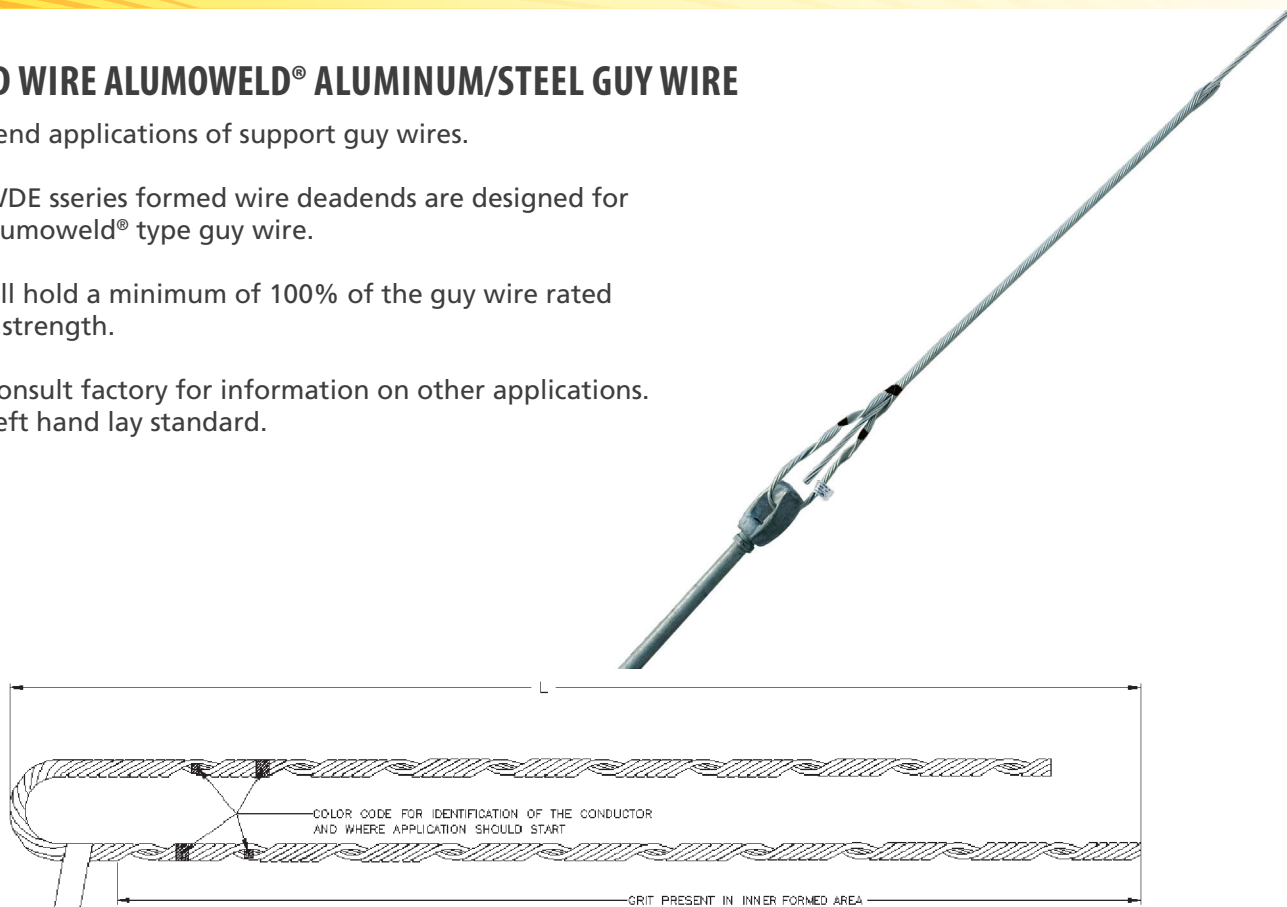
## FORMED WIRE ALUMOWELD® ALUMINUM/STEEL GUY WIRE

For deadend applications of support guy wires.

Fargo AWDE sseries formed wire deadends are designed for use on Alumoweld® type guy wire.

AWDE will hold a minimum of 100% of the guy wire rated breaking strength.


Note: Consult factory for information on other applications.  
Left hand lay standard.



### AWDE

CATALOG NUMBER	NOMINAL SIZE	MAXIMUM RBS LB (KN)	NOMINAL LENGTH (L)		DIAMETER RANGE IN (MM)		COLOR CODE	PACKAGING PER BOX	
			IN	MM	MIN	MAX		UNITS	WEIGHT LBS (KG)
AWDE4110 **	6M, 3#9	6,000 (26.7)	22	559	0.231 (5.87)	0.259 (6.58)	Yellow	50	20 (9.1)
AWDE4113 **	3#8, 8M	8,000 (35.6)	24	610	0.260 (6.60)	0.291 (7.39)	Blue	50	20 (9.1)
AWDE4116 **	3#7, 10M, 7#10	10,000 (44.5)	26	660	0.292 (7.42)	0.336 (8.53)	Black	50	30 (13.6)
AWDE4119 **	3#6, 12.5M, 7#9	12,500 (55.6)	29	737	0.337 (8.56)	0.360 (9.14)	Yellow	50	33 (14.8)
AWDE4120 **	14M	14,000 (62.3)	31	787	0.361 (9.17)	0.384 (9.75)	Blue	50	53 (24.0)
AWDE4122 **	3#5, 16M, 7#8	16,000 (71.2)	32	813	0.385 (9.78)	0.410 (10.41)	Orange	50	55 (25.0)
AWDE4124	18M	18,000 (80.1)	34	864	0.411 (10.44)	0.430 (10.92)	Black	25	29 (13.2)
AWDE4125	7#7	20,000 (89.0)	36	914	0.431 (10.95)	0.474 (12.04)	Green	25	32 (14.5)
AWDE4126 **	20M	20,000 (89.0)	36	914	0.431 (10.95)	0.474 (12.04)	Yellow	10	22 (10.0)
AWDE4128	7#6	22,730 (101.1)	40	1016	0.475 (12.07)	0.515 (13.08)	Blue	10	23 (10.5)
AWDE4130	25M	25,000 (111.2)	43	1092	0.516 (13.11)	0.535 (13.59)	Red	10	31 (14.1)
AWDE4131	7#5	27,030 (120.2)	45	1143	0.536 (13.61)	0.570 (14.48)	Yellow	10	32 (14.5)

NOTES: All dimensions: inches (mm) unless otherwise noted.  
Rated at 100% of guy strand RBS for Alumoweld®.  
Alumoweld is a registered trademark of AFL Corporation.  
\*\* RUS Technically Accepted.



HPS Automatic Deadends are designed for use on all grades of galvanized steel wire strand; High Strength, Extra High Strength, Alumoweld®, Aluminized, Common, Siemens-Martin, Utilities and Bell System Strand. Rating is 90% of conductor breaking strength. The innovative yoke design allows for installation without the use of a gripping hook.

For splicing applications with overhead or support guy wires, Fargo® Automatic Splices are designed for use on High Strength, Common, Siemens-Martin, Utilities and Bell System strand. Fargo Automatic Splices are also designed for use on Extra High Strength and Alumoweld. Automatic splices hold a minimum of 90% of the guy wire rated breaking strength.

# Deadends, Guy Wire

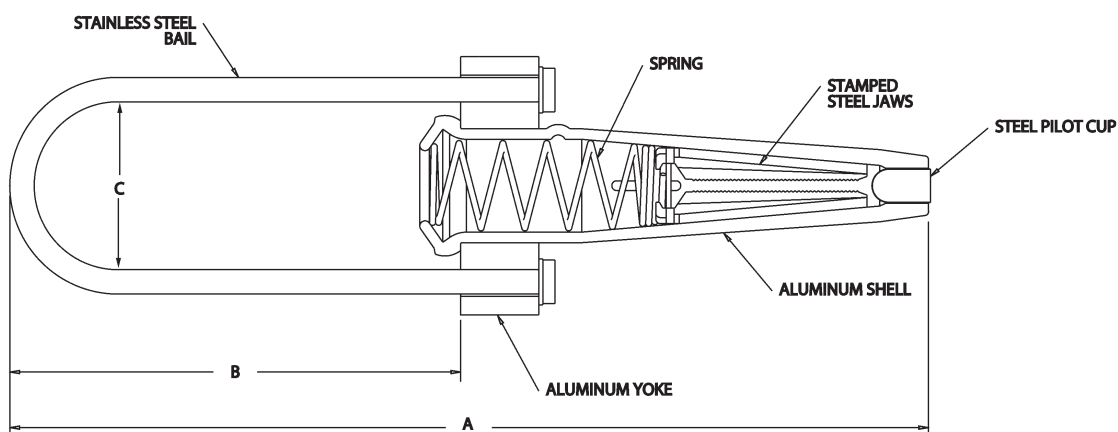
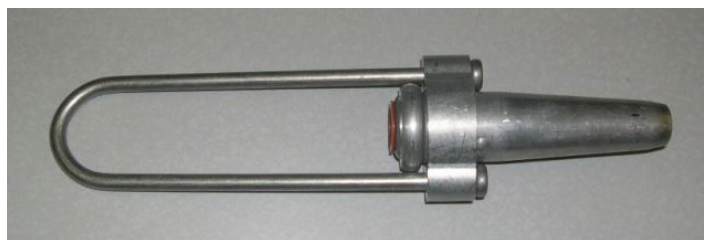
## AUTOMATIC ALUMINUM GUY WIRE DEADENDS

Fargo GDE5100 Series Automatic deadends are designed for use on High Strength, Common, Siemens-Martin, Utilities and Bell System Strand.

Rating: 90% of conductor breaking strength

Note: Consult factory for information on other applications.

Material: Gripping Unit – Stainless Steel  
Yoke – Aluminum Alloy  
Bail – Stainless Steel



### GDE5100

CATALOG NUMBER	PRIMARY STRAND APPLICATION	TO BE USED WITH:			RANGE IN. (MM)	DIMENSIONS IN. (MM)		
		EHS	AW / AWAC	HS, COM, S-M, UTIL, BELL		A	B	C
GDE5100	1/4" HS, Com, S-M, Util, Bell			•	0.240-0.253 (6.11-6.44)	9.2 (234)	5.7 (145)	1.4 (36)
GDE5100L	1/4" HS, Com, S-M, Util, Bell			•	0.240-0.253 (6.11-6.44)	12.7 (234)	9.2 (234)	1.4 (36)
GDE5101	5/16" HS, Com, S-M, Util, Bell			•	0.310-0.335 (7.89-8.53)	9.3 (236)	5.6 (142)	1.5 (38)
GDE5101L	5/16" HS, Com, S-M, Util, Bell			•	0.310-0.335 (7.89-8.53)	13.1 (333)	9.5 (241)	1.5 (38)
GDE5102	3/8" HS, Com, S-M, Util, Bell			•	0.360-0.405 (9.16-10.31)	11.5 (292)	7.1 (180)	2.0 (51)
GDE5102L	3/8" HS, Com, S-M, Util, Bell			•	0.360-0.405 (9.16-10.31)	16.5 (419)	12.0 (305)	2.0 (51)

NOTE: Suffix "L" denotes extended ball.

# Deadends, Guy Wire

## AUTOMATIC ALUMINUM GUY WIRE DEADENDS

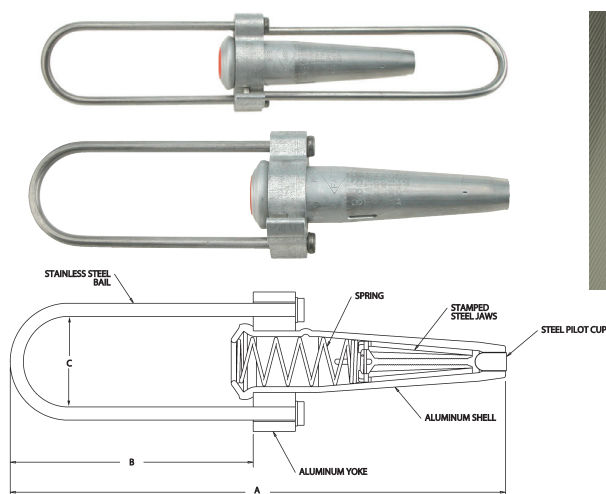
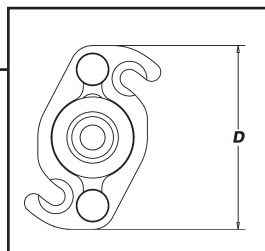
Fargo GDE5200 Series Automatic deadends are designed for use on all grades of galvanized steel wire strand ... High Strength, Extra High Strength, Alumoweld®, Aluminized, Common, Siemens-Martin, Utilities and Bell System Strand.

Rating: 90% of conductor breaking strength

**Innovative yoke design allows for installation without use of a gripping hook.**

**Note:** Consult factory for information on other applications.

**Material:** Gripping Unit — Stainless Steel

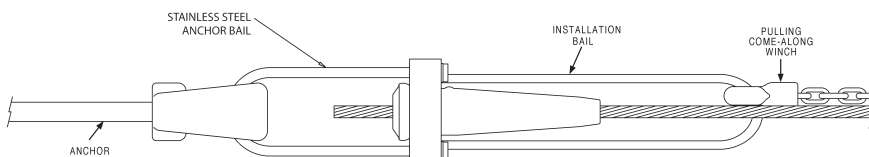


AERIAL  
INSTALLATION

### GDE5200

CATALOG NUMBER	PRIMARY STRAND APPLICATION	TO BE USED WITH:			RANGE IN. (MM)	DIMENSIONS IN. (MM)			
		EHS	AW / AWAC	HS, COM, S-M, UTIL, BELL		A	B	C	D
GDE5199	3/16"EHS (2.8M3) AW	•	•	•	0.145-0.215 (3.68-5.46)	10.0 (254)	5.7 (145)	1.6 (41)	2.7 (69)
GDE5200	1/4"EHS 7#12 (6M) AW	•	•	•	0.215-0.270 (5.46-6.86)	10.2 (259)	5.7 (145)	1.6 (41)	2.7 (69)
GDE5200L	1/4"EHS 7#12 (6M) AW	•	•	•	0.215-0.270 (5.46-6.86)	13.9 (353)	9.4 (239)	1.6 (41)	2.7 (69)
GDE5201	5/16"EHS 7#10 (10M), 7#11 (8M) AW	•	•	•	0.270-0.315 (6.86-8.00)	10.3 (262)	5.5 (140)	1.8 (46)	2.8 (71)
GDE5201L	5/16"EHS 7#10 (10M), 7#11 (8M) AW	•	•	•	0.270-0.315 (6.86-8.00)	15.6 (396)	10.8 (274)	1.8 (46)	2.8 (71)
GDE5202	3/8"EHS 3#5, 7#8, 7#9, 12.5M, 14M, 16M AW #4-2/5, #2-3/4, #1-5/2 AWAC®	•	•	•	0.325-0.392 (8.26-9.96)	13.0 (330)	7.1 (180)	2.1 (53)	3.5 (89)
GDE5202L	3/8"EHS 3#5, 7#8, 7#9, 12.5M, 14M, 16M AW #4-2/5, #2-3/4, #1-5/2 AWAC®	•	•	•	0.325-0.392 (8.26-9.96)	16.8 (427)	11.0 (279)	2.1 (53)	3.5 (89)
GDE5203	7/16"EHS 7#7 (20M), 18M AW #2-2/5, #1-3/4, #1/0-5/2 AWAC®	•	•	•	0.392-0.458 (9.96-11.63)	15.0 (381)	8.2 (208)	2.1 (53)	3.5 (89)
GDE5203L	7/16"EHS 7#7 (20M), 18M AW #2-2/5, #1-3/4, #1/0-5/2 AWAC®	•	•	•	0.392-0.458 (9.96-11.63)	18.7 (475)	12.3 (312)	2.1 (53)	3.8 (97)
GDE5204	1/2"EHS EHS, 25M AW #1-2/5, 1/0-3/4, #2/0-5/2 AWAC, #2/0-4/3 AWAC	•	•	•	0.455-0.520 (11.56-13.21)	16.0 (406)	10.3 (262)	2.1 (53)	4.1 (104)
GDE5204L	1/2"EHS EHS, 25M AW #1-2/5, 1/0-3/4, #2/0-5/2 AWAC, #2/0-4/3 AWAC	•	•	•	0.455-0.520 (11.56-13.21)	20.1 (511)	14.5 (368)	2.1 (53)	4.1 (104)

INSTALLATION BAIL	PART NO.
Bail for GDE5199	PS3005200
Bail for GDE5200 / GDE5200L	PS3005200
Bail for GDE5201 / GDE5201L	PS3005521
Bail for GDE5202 / GDE5202L	3005152
Bail for GDE5203 / GDE5203L	3005527
Bail for GDE5204 / GDE5204L	PS3005524



**Typical Installation with 2nd Bail**

**NOTES:** Suffix "L" denotes extended bail.

Alumoweld® is a registered trademark of the United States Alumoweld Company, LLC (AFL).

AWAC® is a registered trademark of Fushi Copperweld Inc.



# Eyes

## AUXILIARY EYE

Adds additional guy attachment to existing anchor rod. Also can be used as a pulling eye for guying tension.



Catalog Number	Dimensions Inches			Approx Ship Wt lb Each
	Anchor Rod Diameter	Maximum Strand Size	Thimble Diameter	
BB155A	5/8" - 1"	1/2"	1 1/2"	2.70

NOTE: Ductile iron per ASTM A-536. Hot-dipped galvanized per ASTM A-153. U-Bolts .5" diameter.

# Connector

## B STRAND CONNECTOR

Interlocks two strands ranging from 3/16" to 1/2". Accomodates maximum 1/2" diameter strand. Smooth thimble seating surface.

Catalog Number	Length	Width	Seating Diameter	Approx. Ship wt. per each
PSC2080286	2.65"	2.5"	1.8"	1.2 lbs



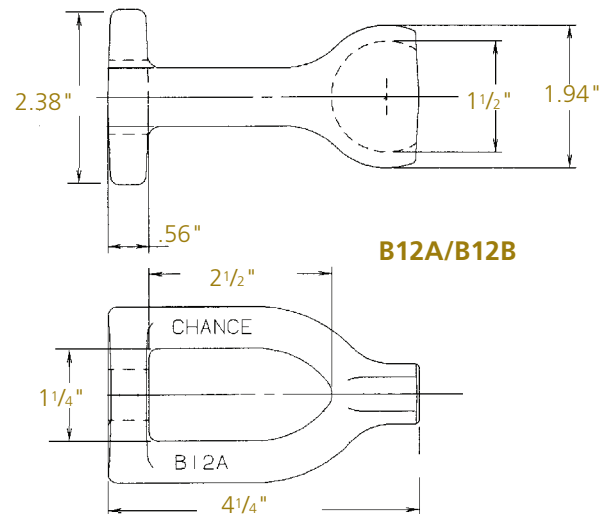
# Eyelets and Eyes

## BOLT EYELETS

Slotted hole design allows thru-bolt to be inserted from eye side; not threaded.

Catalog Number	Dimensions Inches		Approx Ship Wt lb Each
	Mounting Bolt Diameter	Maximum Strand Size	
B14A <sup>(1)</sup>	5/8	—	1.00
B14B	3/4	—	1.00
B12A	5/8	5/8	1.37
B12B	3/4	5/8	1.37

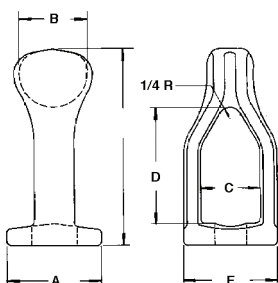
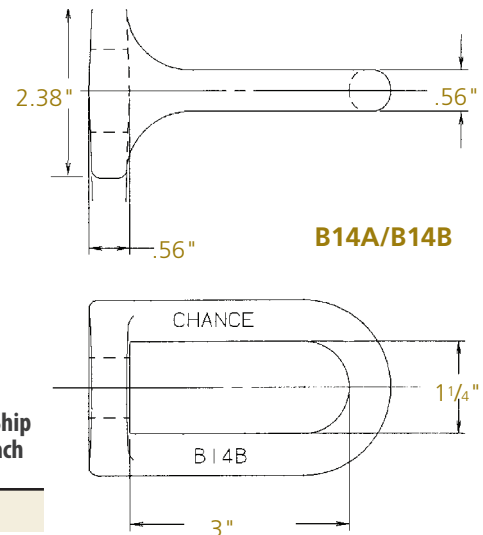
**NOTE:** Ductile iron per ASTM A-536. Hot-dipped galvanized per ASTM A-153. Contact Hubbell Power Systems for round bolt hole design.  
(1) RUS listed.



## THIMBLEYE® EYELETS

Used on ordinary machine bolts for straight-away guys. Rounded groove protects guy strand from sharp kinks and bends. Drop-forged galvanized steel. Construction for high-strength applications.

Catalog Number	Dimensions Inches								Approx Ship Wt lb Each
	For Bolt Diameter	Mtg. Bolt Hole A	A	B	C	D	E	F	
6519	5/8	1 1/16 X 1	2 1/16	1 1/2	1 5/16	2 9/16	2 1/16	4 5/16	1.23
6520	3/4	1 3/16 X 1 1/8	2 1/16	1 1/2	1 5/16	2 9/16	2 1/16	4 5/16	1.30



No 6519

# Eyenuts

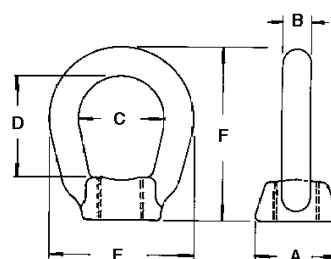
## STANDARD EYENUTS

Most commonly used for deadending, back-guying and attaching pole head guys on the threaded ends of crossarm bolts. Drop-forged, hot-dip galvanized steel.

Catalog Number	Dimensions Inches							Approx Ship Wt lb Each
	For Bolt Diameter	A	B	C	D	E	F	
6500	1/2	1 1/4	1/2	1 1/8	1 1/8	2 1/8	2 3/8	0.51
6501	5/8	1 1/4	1/2	1 1/8	1 1/8	2 1/8	2 3/8	0.46
6502 <sup>(1)(2)</sup>	5/8	1 3/8	1/2	1 1/2	1 3/4	2 1/2	3	0.63
6503 <sup>(2)</sup>	3/4	1 3/8	1/2	1 1/2	1 3/4	2 1/2	3	0.54

(1) RUS listed.

(2) ANSI standard, C-135.5.



No 6502

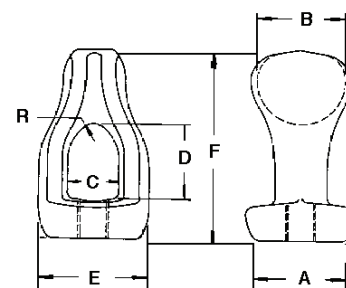
## THIMBLEYE® EYENUTS

For attaching to thru-bolts or threaded end of straight or angle Thimbleye bolts for straight-away head guys. Drop-forged galvanized steel. Nuts are contoured to minimize bending and kinking of guy strand.

Catalog Number	Dimensions Inches								Approx Ship Wt lb Each
	Tapped For Bolt	A	B	C	D	E	F	R	
6510 <sup>(1)(2)</sup>	5/8	1 1/2	1 1/2	7/8	1 3/8	1 7/8	3 1/4	1/4	0.78
6511 <sup>(2)</sup>	3/4	1 1/2	1 1/2	7/8	1 3/8	1 7/8	3 1/4	1/4	0.72
6512	1	1 1/8	1 5/8	1 1/8	1 19/32	2 25/64	3 1/4	1 3/32	1.80

(1) RUS listed.

(2) ANSI standard, C-135.5.



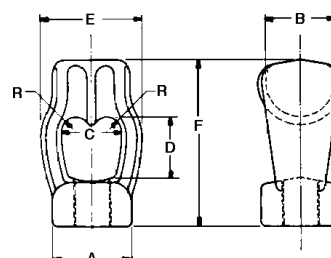
No 6510

## TWINEYE® EYENUTS

Used for head or stub guying of two strands, Twineye Eyenuts can be attached to thru-bolts or threaded end of straight or angle Thimbleye bolts. Grooves are contoured to protect guy strands. Drop-forged galvanized steel.

Catalog Number	Dimensions Inches								Approx Ship Wt lb Each
	Tapped For Bolt	A	B	C	D	E	F	R	
6560	5/8	1 7/8	1 11/16	1 1/8	1 5/16	2 3/8	3 3/8	1 1/16	1.90
6561	3/4	1 7/8	1 11/16	1 1/8	1 5/16	2 3/8	3 3/8	1 1/16	1.84
6562 <sup>(1)</sup>	1 and PISA	1 7/8	1 11/16	1 1/8	1 5/16	2 3/8	3 3/8	1 1/16	1.88

(1) Catalog Number 6562 eyenut fits both 1" bolts and 1" PISA rods.



No 6562

# Guards

## RISER POLE CABLE GUARDS

Protect telephone and power lines where circuits lead from underground to overhead. Guards are 14-gauge hot-dip galvanized steel, formed into "U" shape. Straps are made from hot-dip galvanized flat steel, shaped to fit the guards.

AERIAL  
INSTALLATION

**Guards**

Catalog Number	Inside Diameter Inches	Length ft	Approx Ship Wt lb Each
C2030450	¾	8	4.80
6531 <sup>(1)</sup>	1⅞	5	4.80
653112 <sup>(1)</sup>	1⅞	8	5.60
6532 <sup>(1)</sup>	2⅜	5	8.60
6533 <sup>(1)</sup>	2⅜	8	12.60
6534T	3⅜	5	15.25
6535	3⅜	8	18.00
C2030451	3⅞	8	22.69

(1) RUS listed.

**Mounting Straps**

Catalog Number	Used with Guard Number	Dimensions Inches		Approx Ship Wt lb Each
		Steel Size	Hole Diameter	
6538 <sup>(1)</sup>	6531 & 653112	⅞ x ¾	⅝	0.13
6539 <sup>(1)</sup>	6532 & 6533	⅞ x ¾	⅝	0.24
6540 <sup>(1)</sup>	6534T & 6535	¾ x 1	1⅝	0.64
C2030455	C2030450 C2030452	¾ x ¾	⅝	0.66
C2030456	C2030451	¾ x 1	1⅝	0.69

(1) RUS listed.



No 6538



No 653112

AERIAL POLE



# Guards

## RISER POLE CABLE GUARDS *(continued)*

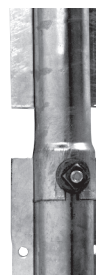
Flanged one-piece unit is formed of 14-gauge steel. Hot-dip galvanized. Extension is flared at one end so that it can be joined to the base section. A carriage bolt fastens the two sections together and also serves as a ground lead attachment point. Mounting holes in 1" wide flanges are located every 25". Straps are not needed for installation.

### Cable Guards

Catalog Number	Overall Length ft	Dimensions Inches		Approx Ship Wt lb Each
		Inside Diameter	Inside Clearance from Face of Pole	
C2030033	9	2	1 $\frac{7}{8}$	19.00
C2030034	9	3	2 $\frac{7}{8}$	26.00
C2030035	9	3 $\frac{1}{2}$	3 $\frac{3}{8}$	28.00

### Cable Guard Extensions

Catalog Number	Overall Length ft	Dimensions Inches		Approx Ship Wt lb Each
		Inside Diameter	Inside Clearance from Face of Pole	
C2030036	5	2	1 $\frac{1}{2}$	10.00
C2030037	5	3	2 $\frac{7}{8}$	14.00



No C2030033



# Guy Attachments

## GUY HOOKS

6584 guy hook is used in wrapped guy applications to prevent wire from creeping downward. Catalog Numbers 5001 and 5004 are used in down guy applications. Hooks should be used under bolt heads for maximum shear strength.

Catalog Number	Description	Dimensions Inches		Approx Ship Wt lb Each
		Material Size	Hole Diameter	
5001	2-Bolt Storm	¼ x 1½ x 7	9⁄16 & 13⁄16	1.08
5004 <sup>(1)</sup>	1-Bolt Storm, ¾" R	¼ x 1½ x 4½	11⁄16	0.79
6584 <sup>(1)</sup>	1-Bolt Standard	7⁄16 x 1¾ x 4	11⁄16	0.85

(1) RUS listed.



No. 6584



No. 5004

# Guy Attachments

## GUY HOOK

Use in down or span guy applications. Spurs resist down slotting. The overturning action is resisted by the wide lower curved heel pad. Guy Hooks are available without cleats for use on non-wood poles. See ordering information below.

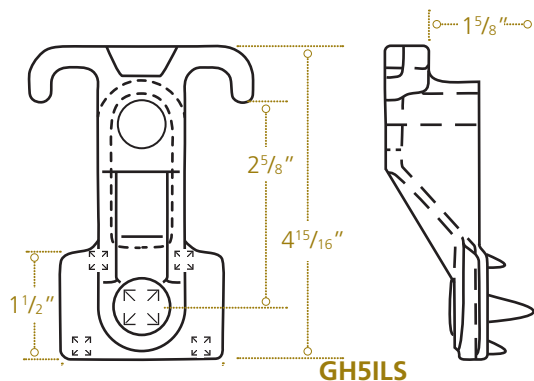
Catalog Number	Minimum Ultimate Tensile Strength lb	Dimensions Inches			Approx Ship Wt lb Each
		Thru-Bolt Diameter	Max Guy Strand	Lag Screw Diameter	
GH151A	12,400	$\frac{5}{8}$	$\frac{7}{16}$	—	0.62
GH5 <sup>(1)</sup>	12,400	$\frac{5}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	1.30
GH5ILS	12,400	$\frac{5}{8}$	$\frac{7}{16}$	—	1.39
GH6	18,350	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{1}{2}$	1.50
GH6ILS	18,350	$\frac{3}{4}$	$\frac{1}{2}$	—	1.53
GH6X	25,400	$\frac{7}{8}$	$\frac{5}{8}$	$\frac{1}{2}$ or $\frac{3}{4}$	2.40
GH6XBILS	33,500	1	$\frac{5}{8}$	—	2.25

**NOTE:** Suffix "ILS" indicates cast in integral lag. Ductile iron per ASTM A-536. Hot-dipped galvanized per ASTM A-153.

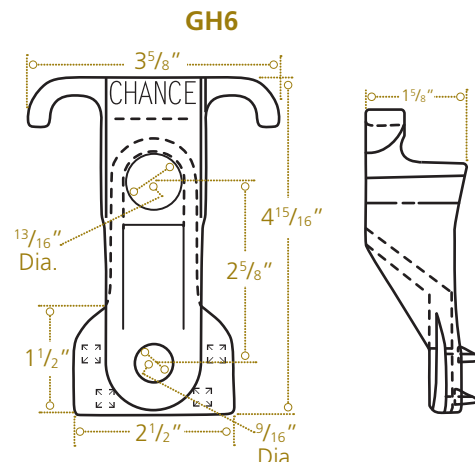
(1) RUS listed.

GH5 and GH6 are available without cleats for non-wood poles.

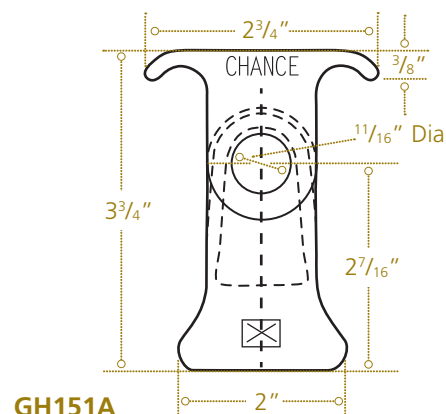
Add "N" suffix to catalog number.



GH5ILS



GH6



GH151A

## GUY HOOK SPAN TYPE

For guy attachment, use at angles  $0^\circ$  to  $30^\circ$  from horizontal.

Catalog Number	Dimensions Inches		Approx Ship Wt lb Each
	Max Thru-Bolt Diameter	Max Guy Strand Diameter	
GH2	$\frac{5}{8}$	$\frac{1}{2}$	0.66
GH3	$\frac{3}{4}$	$\frac{1}{2}$	0.64

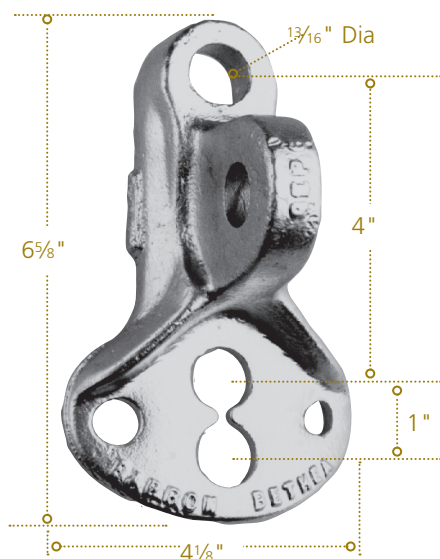
**NOTE:** Ductile iron per ASTM A-536. Hot-dipped galvanized per ASTM A-153.



GH2

# Guy Attachments

## POLE EYE PLATE



The GEP6 style Eye Plate provides a large pad area to spread forces over the pole surface. It is ideal for guy strain insulator installation. Minimum ultimate tension rating is 21,000 lbs. at 90 and 45 degrees.

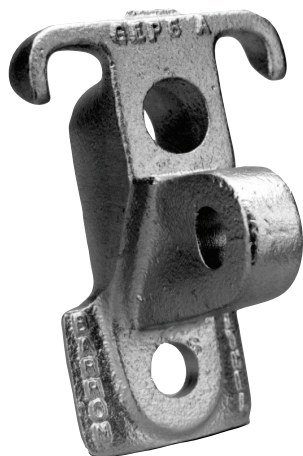
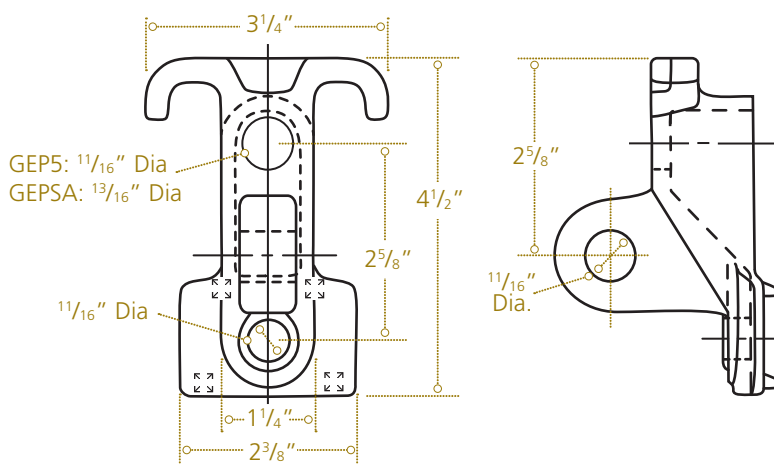
Catalog Number	Dimensions Inches		Approx Ship Wt lb Each
	Mounting Bolt Diameter	Maximum Pin Diameter	
GEP6	3/4	3/4	2.69

**NOTE:** Ductile iron per ASTM A-536. Hot-dipped galvanized per ASTM A-153.

GEP6 is available for non-wood poles. Catalog number GEP6N.

## COMBINATION POLE EYE/GUY HOOK

This combination allows a guy loop to be made up on the ground as well as provides a clevis eye plate capability. Spurs prevent slippage down the pole. Contact HPS Customer Service about eye plates for use on concrete and steel poles.



**GEP5**

Catalog Number	Minimum Ultimate Tension Strength lb	Dimensions Inches		Approx Ship Wt lb Each
		Mounting Bolt Diameter	Max Strand Size	
GEP5	12,500	5/8	5/8	1.75
GEP5A	16,000	3/4	5/8	1.75
GEP5A34	21,000	3/4	5/8	2.25

**NOTE:** Ductile iron per ASTM A-536. Hot-dipped galvanized per ASTM A-153.



# Guy Markers

## FULL ROUND

### Increased Visibility

A full 360° of 1½" diameter high-visibility yellow or orange provides increased visibility to children and adults alike. Also available in green or gray for more aesthetically inconspicuous applications. A 2½" diameter marker is also available.

### Increased Vandal Resistance

A unique strand trapping design has been added to the security of a concealed pigtail and a self-locking nylon strap. The guy strand passes easily in one direction only — into the marker.

### Increased Installation Ease and Range

Easy to install; tough to remove. Simply snap the marker over the guy and lock it in place with the self-locking nylon strap and pigtail. Fits guy strand diameters from ¾" to 1½".

### Increased Ruggedness for Demanding Service

The UV-stabilized, high impact, high density polyethylene construction has excellent color retention, cold weather properties and no cutaway sections to weaken its strength.

### Decreased Costs

Not only will you save time, but you'll also save money with these exceptionally affordable guy markers.



† Cat. No. C0790263. Reflective 10" long bright orange strip 2' from top of yellow marker for greater visibility. Ideal for heavy snow areas and also for recreational ATV-use areas.

## Ordering Information

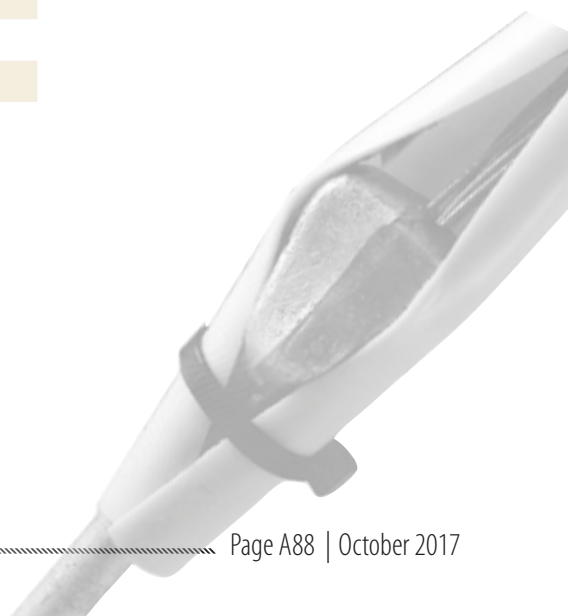
Yellow	Orange	Dimensions Inches			Std Package	Approx Ship Wt lb Each
		Length	Diameter	Strand Range		
84FRPMYEL	84FRPMORG	84	1½	¾ thru ½	20	1.30
96FRPMYEL <sup>(1)</sup>	96FRPMORG	96	1½	¾ thru ½	20	1.48
C0790263†	—	96	1½	¾ thru ½	20	1.48

(1) Can be ordered without pigtail, Catalog Number T0790206.

## Flame Retardant

Catalog Number Yellow	Dimensions Inches			Per Carton	
	Length	Diameter	Strand Range	Std Package	Approx Ship Wt lb Each
96FRPMRYEL <sup>(1)</sup>	96	1½	¾ thru ½	20	1.48

(1) RUS listed.



# Guy Markers

## ECONOMY FULL-ROUND MARKERS

Bright, high-visibility markers neither bleach out to white nor crack from cold temperatures. Made of ultraviolet-stabilized high-density polyethylene, overlapping tube-like design offers full-length coverage. No tools are required for installation. Replaceable standard tie strap allows the markers to be reused. Three holes permit the black self-locking nylon strap (furnished) to secure the lower end in a choice of two attachment methods — either above or over the anchor rod, illustrated above. This fastening design eliminates the cutaway section that would weaken its resistance to breaking. The economy marker is available in high-visibility 8' long, 1 1/8" O.D. and bright yellow sections.

Ordering Information					
Catalog Number	Dimensions		Color	Per Carton	
	Length ft	Diameter Inches		Units	Approx Ship Wt lb Each
96FRPE	8	1 1/8	Bright Yellow	25	0.96



AERIAL  
INSTALLATION

# Hangers and Hooks

## FIGURE 8 HANGER

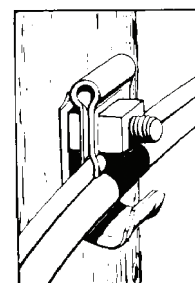
Used to support integrated messenger telephone cable – commonly referred to as Figure 8 Cable. Hanger is in two parts, hook and clamp, both galvanized steel. Installed with a ½" machine bolt and two square nuts. One nut is placed between hook and clamp for spacing. The other is used to tighten the clamp member. Order nuts and bolts separately. Accommodates .109 to .134 solid messenger wire.

**Figure 8 Cable**

Catalog Number	Description	Approx Ship Wt lb Each
PS9015	Hook and Clamp	0.54



**No. PS9015**

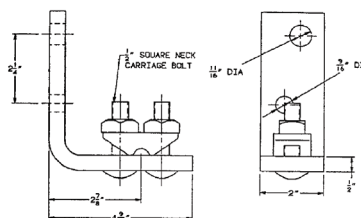


## MESSENGER HANGERS

Used on corners and straight runs, messenger is securely clamped by two ½" carbon-steel guy clamp bolts. Mounted with a ⅝" thru-bolt and a ½" lag screw, neither of which are included. Hot-dip galvanized.

**Universal Type**

Catalog Number	Dimensions Inches			Approx Ship Wt lb Each
	Steel Size	Ext. From Pole	Strand Size	
7911	½ x 2	4¼	⅝ to ½	3.70



**No. 7911**

## DRIVE AND SCREW HOOKS

These hooks are used to attach wedge-type service drops and deadend clamps to crossarms, poles or buildings. Catalog Number C2050190 Drive Hook is furnished with ⅞" fether drive threads and a pilot point for easy starting. Catalog Number 0317 Screw Hook has ⅜" gimlet threads.

**Dimensions Inches**

Catalog Number	Dimensions Inches			Approx Ship Wt lb Each
	Thread Diameter	Length	Overall Length	
C2050190	⅞	2½	4¾	0.27
0317	⅜	2	4	0.13



**No. C2050190**



**No. 0317**

# Molding

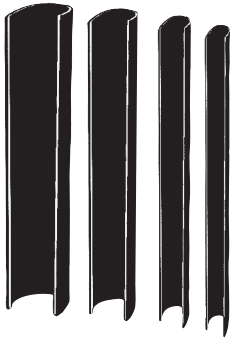
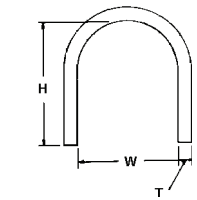
## GROUND WIRE MOLDING

KOVER-GARD® molding protects surface ground wires, lead wires and conductors. Flame retardant and easy to install. Makes wood or metal molding obsolete.

KOVER-GARD® Molding							
Catalog Number	Nominal Size Inches	Measurement Inches				Std Package	Approx Ship Wt lb Each
		H	W	T	Std Length		
96KG12	1/2	1/2	1/2	1/16	96	50	0.48
96KG34	3/4	3/4	3/4	1/16	96	50	0.76
96KG1	1	1	1	5/64	96	50	0.96

K-S Straps for fastening covered conductors, conduit or pipe. Anything up to 7/8" O.D., electrical or not.

K-S Straps					
Catalog Number	Dimensions Inches			Pieces Per Carton	Weight Per Carton lb
	Length	Width	Thickness		
KS12 (for 96KG12)	2	5/8	1/16	1,000	6.25
KS34 (for 96KG34)	2 3/8	5/8	5/64	1,000	7.20



K-S Straps

AERIAL  
INSTALLATION



# Nails and Nuts

## POLE DATING NAILS

Used to indicate the year in which poles are set. Heads are  $\frac{5}{8}$ " diameter. Hot-dip galvanized. Year determines catalog number.

Catalog Number	For Year	Length Inches	Approx Ship Wt lb Each
PSC2052017	2017	2½	0.05
PSC2052018	2018	2½	0.05
PSC2052019	2019	2½	0.05
PSC2052020	2020	2½	0.05
PSC2052021	2021	2½	0.05
PSC2052022	2022	2½	0.05
PSC2052023	2023	2½	0.05
PSC2052024	2024	2½	0.05



Pole Dating Nail



Palnut Locknut



MF Locknut

## NUTS

Made to give tight connections. Galvanized.

### M-F Curved Lock Nuts

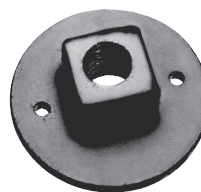
Catalog Number	Bolt Size Inches	Approx Ship Wt lb Each
3510	$\frac{3}{8}$	0.01
3511	$\frac{1}{2}$	0.03
3512	$\frac{5}{8}$	0.05
3513	$\frac{3}{4}$	0.06
3514	$\frac{7}{8}$	0.08
3515	1	0.10

### Palnut Lock Nuts

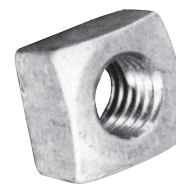
Catalog Number	Dimensions Inches			Approx Ship Wt lb Each
	Bolt Size	Width	Height	
3530	$\frac{3}{8}$	$\frac{5}{8}$	.160	0.01
3531	$\frac{1}{2}$	$\frac{13}{16}$	.190	0.01
3532	$\frac{5}{8}$	1	.224	0.01
3533	$\frac{3}{4}$	1½	.246	0.02

### Washer Nuts

Catalog Number	Dimensions Inches			Approx Ship Wt lb Each
	Accommodates Bolt Size	Width	Thickness	
3193	$\frac{1}{2}$	2	$\frac{13}{16}$	0.18
3194	$\frac{5}{8}$	2½	1	0.41
3195	$\frac{3}{4}$	2¾	1½	0.47



Washer Nut



Regular Square Nut

### For Bolts - Regular Square Nuts

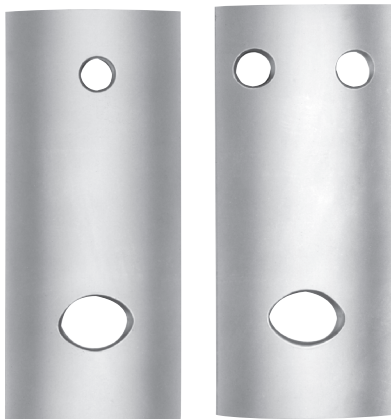
Catalog Number	Bolt Size Inches	Threads Per Inch	Approx Ship Wt lb Each
8600M	$\frac{3}{8}$	16	0.02
55083P	$\frac{1}{2}$	13	0.08
55084P	$\frac{5}{8}$	11	0.10
55085P	$\frac{3}{4}$	10	0.14
56538P	$\frac{7}{8}$	9	0.30
56073P	1	8	0.50

Regular square nuts are not for use on anchor rods

# Plates

## LIFT AND LOAD PLATES

Used to protect poles on heavy down guying when Thimbleye®, Angle-Thimbleye or Oval-Eye bolts are used through the pole. Hot-dip galvanized.



No. PS7887

No. 7897

Catalog Number	Description	Size Holes Inches		Plate Size Inches	Approx Ship Wt lb Each
		Top	Bottom		
PS7887	2-Hole Lift	$\frac{9}{16}$	$\frac{3}{4} \times 1$	$\frac{3}{16} \times 2\frac{1}{2} \times 7$	0.98
7888	2-Hole Lift	$\frac{9}{16}$	$\frac{7}{8} \times 1$	$\frac{1}{4} \times 2\frac{1}{2} \times 7$	1.26
7897	3-Hole Lift	$\frac{9}{16}$	$\frac{3}{4} \times 1$	$\frac{3}{16} \times 2\frac{1}{2} \times 7$	0.97
7898 <sup>(1)</sup>	3-Hole Lift	$\frac{9}{16}$	$\frac{7}{8} \times 1$	$\frac{1}{4} \times 2\frac{1}{2} \times 7$	1.26

(1) RUS listed.

## STRAIN PLATES

Strain Plates are used to prevent pole from being damaged by guy wire. Nail holes at corners are  $\frac{3}{16}$ " diameter. Hot-dip galvanized steel plates are formed to 5" radius.

Catalog Number	Type	Dimensions Inches	Approx Ship Wt lb Each
6575	Standard	4 x 8 x 14 Ga.	1.16



No. 6575

# Screws

## LAG SCREWS

Lag Screws of 1/4", 3/8" and 1/2" diameter have upset shoulders. Hot-dip galvanized.



**Gimlet Point Type**



**Fetter Drive, Drive-Point**



**Twist-Drive Pilot Point**

### Gimlet Point Type

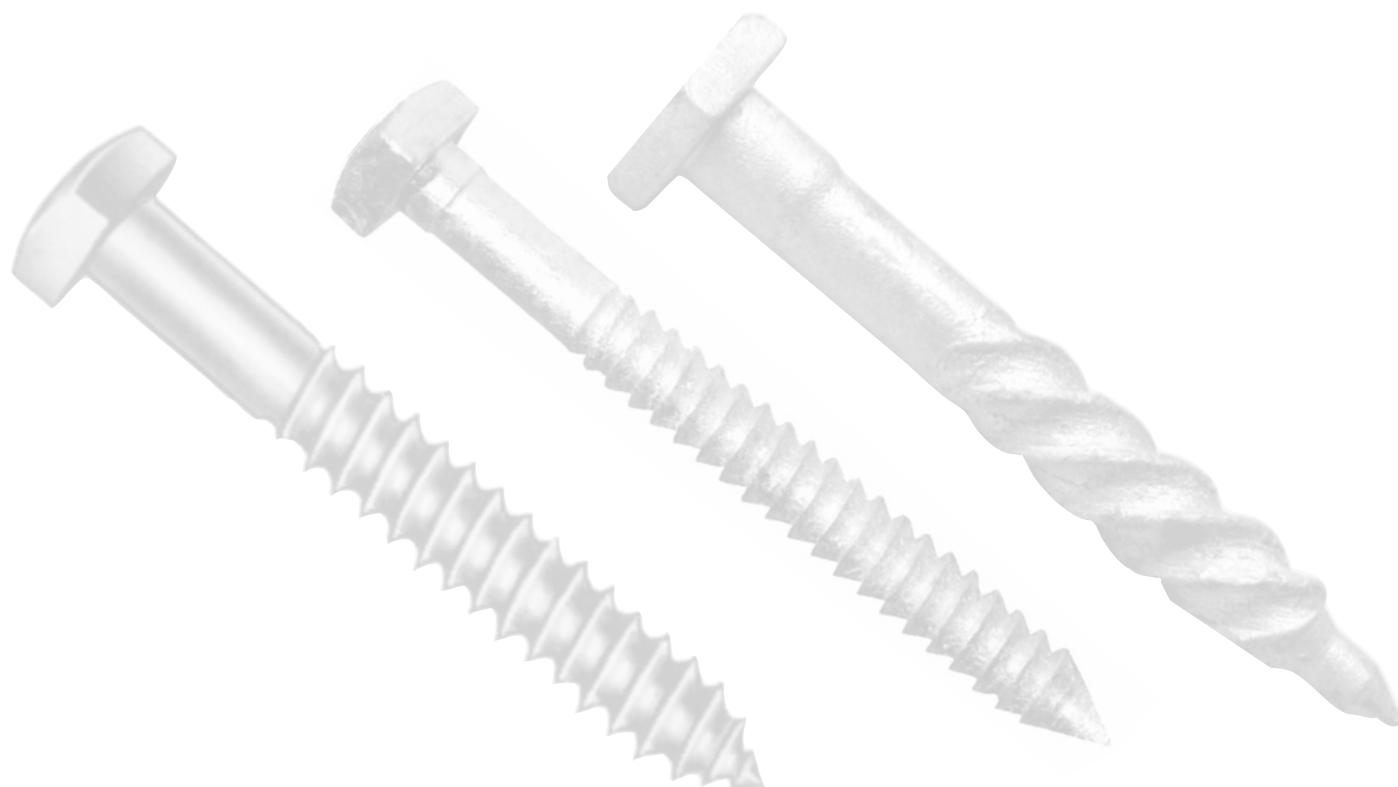
Catalog Number	Dimensions Inches		Approx Ship Wt lb Each
	Diameter	Length	
872112GP	1/4	1 1/2	0.02
8722GP	1/4	2	0.03
872212GP	1/4	2 1/2	0.04
DF1L3	1/4	3	0.06
DF3L3	3/8	3	0.09

### Twist-Drive Pilot Point Type

508500	1/2	4	0.23
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### Fetter Drive Pilot-Point Type

508743	3/8	3	0.10
508744	3/8	4	0.13
508753	1/2	3	0.20
508754	1/2	4	0.24
50875412	1/2	4 1/2	0.27
508755	1/2	5	0.28



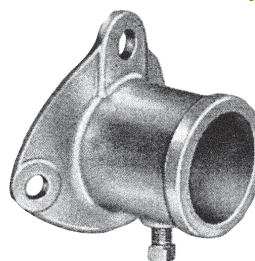
# Sleeves and Fittings

## SIDEWALK GUY FITTINGS

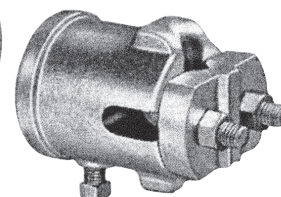
These fittings are used along sidewalks or near buildings where space is not available for standard guying. Catalog Number 0501 Pole Plate is attached with one  $\frac{5}{8}$ " bolt and two  $\frac{1}{2}$ " lag screws. Catalog Numbers 0502 and 0512 End Fittings clamp the strand. All fittings are hot-dip galvanized.



No. 0512



No. 0501



No. 0502

Catalog Number	Description	Pipe Inches	Approx Ship Wt lb Each
0501 <sup>(1)</sup>	Pole Plate	2	4.55
0502 <sup>(1)</sup>	End Fitting w/Clamp	2	4.95
0512 <sup>(1)</sup>	End Fitting w/Double Clamp	2	6.20

(1) RUS listed.

## SERVING SLEEVES

For holding down the loose end of guy strand projecting beyond the guy clamp. Chance Serving Sleeves, which have a flared end to speed application, are faster to apply than wire-wrap sleeves. Hot-dip galvanized.

No. 6456



Catalog Number	Dimensions Inches		Approx Ship Wt lb Each
	Strand Size	Overall Length	
6452	$\frac{1}{4}$	$1\frac{1}{8}$	0.028
6453	$\frac{5}{16}$	$1\frac{1}{2}$	0.059
6454	$\frac{3}{8}$	$1\frac{3}{4}$	0.073
6455	$\frac{7}{16}$	2	0.120
6456	$\frac{1}{2}$	$2\frac{1}{4}$	0.130



# Splices, Guy Wire

## FORMED WIRE GALVANIZED STEEL SPLICES

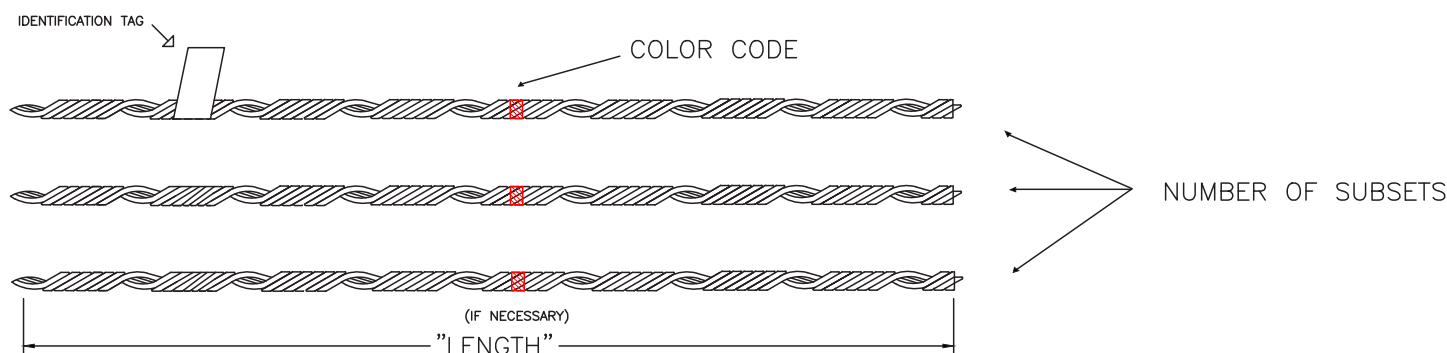
For repairing damaged or severed guy wire or messenger cable.

Do not use FWLS splices on overhead shield wires.

Fargo FWLS series formed wire are designed for use on all types of galvanized guy wire (EHS, High Strength, Common, Siemens-Martin, Utilities, and Bell System Strand).

FWLS will hold a minimum of 100% of the guy wire rated breaking strength (ultimate strength) when centered over the severed or point of damage.

Note: Consult factory for information on use if damaged area exceeds length of splice.  
Left hand lay standard.



FWLS										
CATALOG NUMBER	NOMINAL SIZE	MAXIMUM RBS LB (KN)	NOMINAL LENGTH (L)		DIAMETER RANGE IN (MM)		NUMBER OF SUBSETS	COLOR CODE	PACKAGING PER BOX	
			IN	MM	MIN	MAX			UNITS	WEIGHT LBS. (KG)
FWLS2102	3/16" (3W & 7W)	3,990 (17.7)	27	685	0.174 (4.41)	0.203 (5.16)	2	Red	100	30 (13.6)
FWLS2103	7/32" (7W)	5,400 (24.0)	29	737	0.204 (5.18)	0.230 (5.84)	2	Green	100	36 (16.3)
FWLS2104	1/4" (3W & 7W)	6,650 (29.6)	35	889	0.231 (5.87)	0.259 (6.58)	2	Yellow	50	34 (15.4)
FWLS2105	9/32" (7W)	8,950 (39.8)	38	965	0.260 (6.60)	0.291 (7.39)	2	Blue	50	36 (16.3)
FWLS2106	5/16" (3W & 7W)	11,200 (49.8)	42	1067	0.292 (7.42)	0.336 (8.53)	2	Black	50	46 (20.8)
FWLS2107	3/8" (3W & 7W)	15,400 (68.5)	50	1270	0.337 (8.56)	0.394 (10.01)	3	Orange	25	38 (17.2)
FWLS2108	7/16" (7W)	20,800 (92.5)	56	1422	0.395 (10.03)	0.474 (12.04)	3	Green	25	58 (26.3)
FWLS2109	1/2" (7W & 19W)	26,900 (119.7)	63	1600	0.475 (12.07)	0.515 (13.08)	3	Blue	10	36 (16.3)
FWLS2110	9/16" (7W & 19W)	35,000 (155.7)	71	1803	0.516 (13.11)	0.570 (14.48)	3	Yellow	10	52 (23.5)

NOTES: All dimensions: inches (mm) unless otherwise noted.

Rated at full tension of guy strand RBS for EHS, HS, Siemens-Martin, Common, and Utility Grades.

# Splice, Guy Wire

## AUTOMATIC ALUMINUM GUY WIRE SPLICES

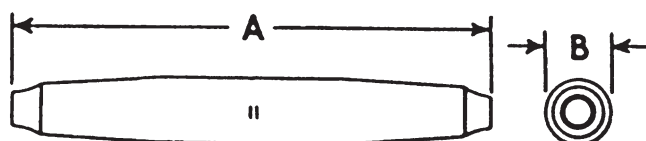
For splicing applications with overhead or support guy wires.

Fargo GLS500x series automatic splices are designed for use on High Strength (HS), Common (Com), Siemens-Martin (SM), Utilities (Util) and Bell System strand.

Fargo GLS504x series automatic splices are designed for use on all guy wire types listed above, plus Extra High Strength (EHS) and Alumoweld (AW).

All GLS automatic splices will hold a minimum of 90% of the guy wire rated breaking strength.

Material: Shell - High Strength Aluminum Alloy  
Jaws - Plated Steel



AERIAL  
INSTALLATION

GLS								
CATALOG NUMBER	PRIMARY STRAND APPLICATION	TO BE USED WITH:			RANGE (IN.)	RANGE (MM)	DIMENSIONS INCHES (MM)	
		EHS	AW / AWAC	HS, COM, S-M, UTIL, BELL			A	B
GLS5000	1/4" HS, Com, S-M, Util, Bell			•	0.240 - 0.253	6.11 - 6.44	6.4 (163)	0.9 (23)
GLS5001	5/16" HS, Com, S-M, Util, Bell			•	0.310 - 0.335	7.89 - 8.53	7.3 (185)	1.1 (28)
GLS5002	3/8" HS, Com, S-M, Util, Bell			•	0.360 - 0.405	9.16 - 10.31	8.1 (206)	1.3 (33)
GLS5039	3/16" EHS, AW	•	•	•	0.145 - 0.215	3.86 - 5.45	8.6 (219)	1.1 (28.6)
GLS5040	1/4" EHS 7#12 (6M) AW	•	•	•	0.215 - 0.270	5.46 - 6.86	8.3 (211)	1.13 (28)
GLS5041	5/16" EHS 7#10 (10M), 7#11 (8M) AW	•	•	•	0.270 - 0.315	6.86 - 8.00	8.6 (218)	1.22 (31)
GLS5042	3/8" EHS 3#5, 7#8, 7#9, 12.5M, 14M, 16M AW #4-2/5, #2-3/4, #1-5/2 AWAC	•	•	•	0.325 - 0.392	8.26 - 9.96	10.0 (254)	1.48 (38)
GLS5044	1/2" EHS, 25M AW, #1-2/5, #1/0-3/4, #2/0-5/2 AWAC #2/0-4/3 AWAC	•	•	•	0.455 - 0.520	11.56 - 13.21	10.8 (274)	1.70 (43)

# Splice, Guy Wire

## ALUMINUM GLS REDUCING WIRE SPLICES

- For splicing applications with overhead or support wires.
- Fargo GLS508x series automatic splices are designed for use on High Strength (HS), Common (Com), Siemens-Martin (SM), Utilities (Util), and Bell System Strand (Bell).
- All GLS automatic splices will hold a minimum of 90% of the guy wire rated breaking strength.

Material: Shell - High Strength Aluminum Alloy  
Jaws - Plated Steel



### GLS Reducing

CATALOG NUMBER	SMALL END STRAND APPLICATION	LARGE END STRAND APPLICATION	TO BE USED WITH:			SMALL END RANGE IN. (MM)	LARGE END RANGE IN. (MM)
			EHS	AW / AWAC	HS, COM, S-M, UTIL, BELL		
GLS5086	3/16"HS, Com, S-M, Util, Bell	1/4"HS, Com, S-M, Util, Bell				0.145-0.215 (3.68-5.46)	0.215-0.270 (5.46-6.86)
GLS5087	1/4"EHS 7#12, (6M) AW	5/16"EHS 7#10, (10M), 7#11, (8M) AW				0.215-0.270 (5.46-6.86)	0.270-0.315 (6.86-8.00)
GLS5088	5/16"EHS 7#10, (10M), 7#11, (8M) AW	3/8"EHS 3#5, 7#8, 7#9, 12.5M, 14M, 16M AW #4-2/5, #2-3/4, #1-5/2 AWAC				0.270-0.315 (6.86-8.00)	0.325-0.392 (8.26-9.96)
GLS5089	3/8"EHS 3#5, 7#8, 7#9, 12.5M, 14M, 16M AW #4-2/5, #2-3/4, #1-5/2 AWAC	7/16"EHS 7#7 (20M), 18M AW #2-2/5, #1-3/4, #1/0-5/2 AWAC				0.325-0.392 (8.26-9.96)	0.392-0.458 (9.6-11.63)

# Staples

Used to secure ground wire and ground wire molding to wood poles.

AERIAL  
INSTALLATION



Staple Type	Dimensions Length x Inside Width x Wire Diameter Inches	FINISH							
		ELECTRO ZINC Catalog Number		GALVANIZED Catalog Number		COPPER COATED Catalog Number		BRIGHTWIRE Catalog Number	
		Quantity Per Carton/Inner Package	Approx Ship Wt lb Each	Quantity Per Carton/Inner Package	Approx Ship Wt lb Each	Quantity Per Carton/Inner Package	Approx Ship Wt lb Each	Quantity Per Carton/Inner Package	Approx Ship Wt lb Each
Barbed Square Shank Cut Point	1½ x ¾ x .131			C2050460 <sup>(1)</sup> 1750/350   0.014					
	1½ x ¾ x .140					C2050464 <sup>(1)</sup> 1500/300   0.017			
	2 x ¾ x .131			C2050461 1300/260   0.019					
	2 x ¾ x .165			C2050463 <sup>(1)</sup> 800/160   0.032					
	3 x 1½ x .218			C2050462 <sup>(1)</sup> 300/60   0.032					

(1) RUS listed.

Staple Type	Dimensions Length x Inside Width x Wire Diameter Inches	FINISH							
		ELECTRO ZINC Catalog Number		GALVANIZED Catalog Number		COPPER COATED Catalog Number		BRIGHTWIRE Catalog Number	
		Quantity Per Carton/Inner Package	Approx Ship Wt lb Each	Quantity Per Carton/Inner Package	Approx Ship Wt lb Each	Quantity Per Carton/Inner Package	Approx Ship Wt lb Each	Quantity Per Carton/Inner Package	Approx Ship Wt lb Each
Cut Slash Point	1¼ x ¾ x .114					C2050245 6700/NA   0.007			
	1¾ x ½ x .162					C2050244 3100/NA   0.016			
	1½ x ¼ x .148	751134 3600/NA	0.014	C2050247 <sup>(1)(2)</sup> 3600/NA   0.014					
	1½ x ¾ x .162					9167 <sup>(1)</sup> 2900/NA   0.017			
	2 x ½ x .162					9169 2200/NA   0.023			


Sold by the Pound

(1) RUS listed. (2) ANSI standard, C-135.14.



# Staples (continued)

AERIAL  
INSTALLATION

Staple Type	Dimensions Length x Inside Width x Wire Diameter Inches	FINISH							
		ELECTRO ZINC Catalog Number		GALVANIZED Catalog Number		COPPER COATED Catalog Number		BRIGHTWIRE Catalog Number	
		Quantity Per Carton/Inner Package	Approx Ship Wt lb Each	Quantity Per Carton/Inner Package	Approx Ship Wt lb Each	Quantity Per Carton/Inner Package	Approx Ship Wt lb Each	Quantity Per Carton/Inner Package	Approx Ship Wt lb Each
<b>Rolled</b>  Diamond Point  	1 x 1/4 x .114					C2050223 <sup>(2)</sup> 5000/500	0.005		
	1 x 5/16 x .120	7511 1000/100	0.005	C2050213 1000/100	0.005				
	1 1/4 x 1/4 x .114					C2050224 <sup>(2)</sup> 5000/500	0.006		
	1 1/2 x 5/16 x .144					C2050225 <sup>(2)</sup> 2500/500	0.012		
	1 1/2 x 3/8 x .148	C2050207 1000/100	0.014	C2050214 <sup>(2)</sup> 1000/100	0.014			C2050235 1000/100	0.104
	1 3/4 x 3/8 x .144					9153 <sup>(2)</sup> 2500/500	0.014		
	1 3/4 x 3/8 x .148	C2050208 1000/100	0.015	C2050215 <sup>(2)</sup> 1000/100	0.015				
	2 x 1/2 x .162	7512 <sup>(2)</sup> 1000/100	0.022	C2050216 <sup>(1)(2)</sup> 1000/100	0.022	9154 1000/100	0.022	C2050237 1000/100	0.022
	2 x 5/8 x .162	C2050209 <sup>(2)</sup> 1000/100	0.023	C2050217 <sup>(2)</sup> 1000/100	0.023	C2050226 <sup>(2)</sup> 1000/100	0.023		
	2 x 5/8 x 3/16	C2050210 1000/100	0.032	C2050218 <sup>(2)</sup> 1000/100	0.032				
	2 x 1 1/16 x 3/16	7513 1000/100	0.031	C2050219 <sup>(2)</sup> 1000/100	0.031	C2050229 1000/100	0.031		
	2 1/4 x 25/32 x 3/16					C2050227 1000/100	0.034		
	2 1/2 x 1 1/16 x 3/16					C2050230 <sup>(2)</sup> 1000/100	0.040		
	3 x 1 x 1/4					C2050232 <sup>(2)</sup> 500/100	0.080		
	3 x 1 1/16 x 1/4	7522 <sup>(2)</sup> 500/100	0.080	C2050220 <sup>(2)</sup> 500/100	0.080	9161 <sup>(1)(2)</sup> 500/100	0.080		
	3 x 1 1/2 x 1/4	C2050211 500/100	0.080		0.080	C2050233 500/100	0.080	C2050242 500/100	0.080
	3 1/2 x 1 3/4 x 1/4	C2050212 250/100	0.095	C2050222 250/50	0.095				

(1) RUS listed. (2) ANSI standard, C-135.14.

# Steps

## POLE STEPS

Steps are made from hot-rolled, open-hearth steel. Hot-dip galvanized. Standard Drive Hook type has fetter drive thread and pilot point for easy starting.

Catalog Number	Type Head	Size Inches	Approx Ship Wt lb Each
506125 <sup>(1)</sup>	Hook	5/8 x 10	0.92

(1) NEMA standard.



**No. 506125**

## Detachable Type

Steps make a neat appearance and deter unauthorized pole climbing. Installed by placing plate over lag until plate cuts into pole. Nail driven into bottom hole gives extra rigidity. Step fits on lag head. Order lags and steps separately. Lag and plate assemblies are available for either wood pole or steel pole applications.

Note: T2050433 and T2050449 are not for composite pole installations.

Detachable Type		
Catalog Number	Description	Approx Ship Wt lb Each
PS6235 <sup>(1)</sup>	Lag & Plate (for wood pole installation)	0.60
PS6236 <sup>(1)</sup>	Step	1.05
T2050433	Bolt & Plate (for steel pole installation)	0.64
T2050449	Bolt, Plate, Step (for steel pole installation)	1.70

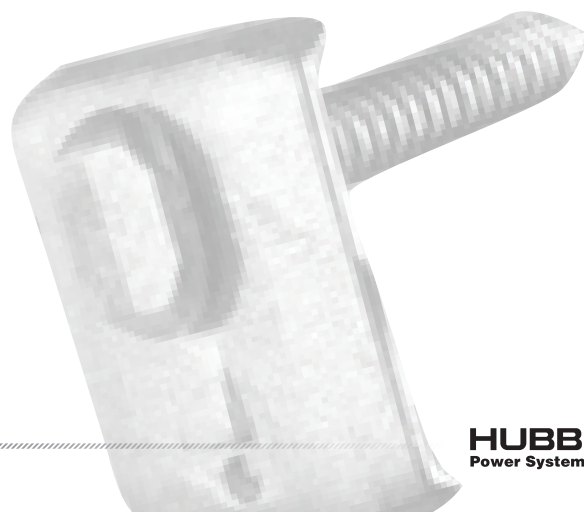
(1) NEMA standard.



**No. PS6235**



**No. PS6236**

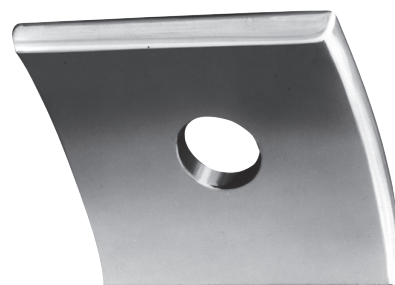


# Washers

## GALVANIZED STEEL WASHERS

### Square Curved Washers

Catalog No	Dimensions Inches			Approx Ship Wt lb Each
	Washer Size	Hole Diameter	Bolt Diameter	
680912	4 x 4 x 1/4	15/16	7/8	1.20
681012	2 1/4 x 2 1/4 x 3/16	1 1/16	5/8	0.31
PS6822	2 1/2 x 2 1/2 x 3/16	1 1/16	5/8	0.36
682212	3 x 3 x 1/4	1 3/16	3/4	0.66
6823	3 x 3 x 1/4	7/8	3/4	0.62
682312	3 x 3 x 1/4	1 1/16	5/8	0.62
6825	3 1/4 x 3 1/4 x 1/4	1 3/16	3/4	0.76
DF4W15	4 x 4 x 3/16	1 3/16	3/4	0.82



Square Curved

### Square Washers

Catalog No	Dimensions Inches			Approx Ship Wt lb Each
	Washer Size	Hole Diameter	Bolt Diameter	
6811	2 x 2 x 1/8	9/16	1/2	0.13
6812	2 x 2 x 1/8	1 1/16	5/8	0.12
6813	2 1/4 x 2 1/4 x 3/16	1 1/16	5/8	0.24
6814 <sup>(1)</sup>	2 1/4 x 2 1/4 x 3/16	1 3/16	3/4	0.23
6816	3 x 3 x 3/16	1 3/16	3/4	0.51
6817 <sup>(1)</sup>	3 x 3 x 1/4	1 3/16	3/4	0.64
6818 <sup>(1)</sup>	4 x 4 x 3/16	1 3/16	3/4	0.87
681812	4 x 4 x 1/4	7/8	3/4	1.20
6819	4 x 4 x 1/4	1 5/16	7/8	1.18
681912 <sup>(1)</sup>	4 x 4 x 1/2	1 3/16	3/4	2.36
6820	4 x 4 x 1/2	1 1/8	1	2.28



Square

### Round Washers

Catalog No	Dimensions Inches			Approx Ship Wt lb Each
	Washer Size	Hole Diameter	Bolt Diameter	
PS6801	1 O.D. x 14 Ga.	7/16	3/8	0.016
PS6802	1 1/4 O.D. x 14 Ga.	9/16	3/8	0.028
PS6803 <sup>(1)</sup>	1 3/8 O.D. x 12 Ga.	9/16	1/2	0.045
6805 <sup>(1)</sup>	1 3/4 O.D. x 10 Ga.	1 1/16	5/8	0.085
6806	2 O.D. x 9 Ga.	1 3/16	3/4	0.118



Round

(1) RUS listed.

# Washers *(continued)*

## Spring Clip Washers

Catalog Number	Dimensions Inches			Approx Ship Wt lb Each
	Stock	Hole Size	Bolt Size	
3539	5/32 x 1	9/16	1/2	0.22
3540	1/4 x 1 3/4	1 1/16	5/8	0.93
3541	1/4 x 1 3/4	1 3/16	3/4	0.91
C2050436	1/4 x 1 3/4	1 5/16	7/8	0.89
C2050438	1/4 x 1 3/4	1 1/16	1	0.87



Spring Clip

## Spring Lock Washers

Catalog Number	Dimensions Inches			Approx Ship Wt lb Each
	Stock	Hole Size	Bolt Size	
DF7W1	0.094 x 0.141	7/16	3/8	0.010
4035	0.125 x 0.171	9/16	1/2	0.015
4036	0.156 x 0.203	1 1/16	5/8	0.024
4037	0.188 x 0.234	1 3/16	3/4	0.048
PSC2050496	0.219 x 0.266	1 5/16	7/8	0.066
PSC2050497	0.250 x 0.297	1 1/16	1	0.084



Spring Lock

## Double Coil Spring Lockwashers

Catalog Number	Dimensions Inches			Approx Ship Wt lb Each
	Stock	Hole Size	Bolt Size	
C2050185	5/32 x 1	9/16	1/2	0.040
C2050186	3/16 x 1 3/16	1 1/16	5/8	0.066
C2050187	7/32 x 1 3/8	1 3/16	3/4	0.104
C2050188	7/64 x 3/4	7/16	3/8	0.015



Double Coil Spring

## Heavy Duty Double Coil Spring Lockwashers

Catalog Number	Dimensions Inches			Approx Ship Wt lb Each
	Stock	Hole Size	Bolt Size	
CMW38	0.156 x 0.196	0.40	3/8	0.030
CMW12	0.156 x 0.243	0.53	1/2	0.050
CMW58	0.234 x 0.302	0.65	5/8	0.120
CMW34	0.234 x 0.302	0.78	3/4	0.140



# Washers (continued)

## CAST GALVANIZED STEEL WASHERS

Cast washers provide excellent strength characteristics. Reinforcing ribs helps prevent washer from crushing.

### Curved Square

Catalog Number	Dimensions Inches			Approx Ship Wt lb Each
	Size	Max. Bolt Diameter	Thickness At Boss	
GCW1	2¼ x 2¼	⅝	¼	0.20
GCW31	3 x 3	⅝	⅜	0.45
GCW31A	3 x 3	¾	⅜	0.45
GCW41	4 x 4	¾	½	1.00
GCW41A	4 x 4	7/8	17/32	1.00

### Curved Rectangular

Catalog Number	Dimensions Inches			Approx Ship Wt lb Each
	Size	Max. Bolt Diameter	Thickness At Boss	
CRW3	2¼ x 3½	¾	⅜	0.45
CRW4A	3 x 4	7/8	½	0.93
CRW4B	3 x 4	1	½	0.93

### Round Flat

Catalog Number	Dimensions Inches			Approx Ship Wt lb Each
	Diameter	Max. Bolt Diameter	Thickness At Boss	
GWR3	3	¾	7/16	0.44
GWR4	4	7/8	½	0.87
GWR4A	4	1	½	0.87

### Square Flat

Catalog Number	Dimensions Inches			Approx Ship Wt lb Each
	Size	Max. Bolt Diameter	Thickness At Boss	
BB214	2¼ x 2¼	⅝	9/32	0.20
BB214A	2¼ x 2¼	¾	9/32	0.20



GCW



GCW31



GWR



BB





## Drop Line Hardware

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With pole line hardware manufacturing experience going back to 1907, Hubbell's growing line of drop line hardware provides the same quality and reliability all the way to the customer's premises. Products include those needed for twisted pair, coax, or fiber from the pole to the house or business.

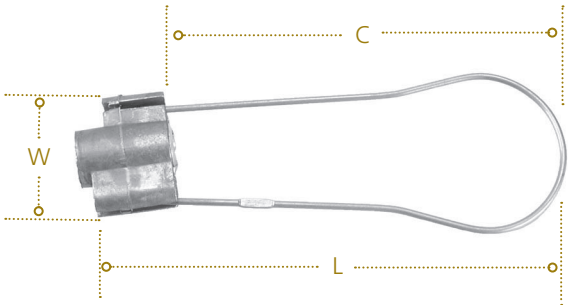


# Guy Wire Deadends Telecom Messenger

## WIRE GO SERIES

- Telecom Voice/Data/Signal cables are looped over messenger/guy wire at residential/commerical/industrial location.
- Bail loop fits to most industrial/commerical/residential wall mounting.
- For dead ending galvanized steel wire.
- Fast and easy installation.
- GO083B provides initial minimum grip of 675 lb on 0.083" wire.

Material: Body – aluminum  
Bail – stainless steel  
Grip Unit – stainless steel



GO					
Catalog Number	Messenger/Guy Wire Diameter Inches	Dimensions Inches (mm)			Weight lb (kg)
		Overall Length L	Clearance Rear of Body to End of Bail C	Width W	
GO083B	0.083	5.88 (149.4)	4.75 (120.7)	1.38 (35.1)	.11 (.05)

durable

# Clamps

## 1-2 PAIR AND 6 PAIR DROPWIRE CLAMPS

Attaches to hooks and span clamps to secure ends (pole, building or mid-span) of 1-2 & 6 pair communication service drops

- 1-2 pair meets the requirements of Telcordia specifications GR-3174
- Clamp Strength Rating:  
1-2 pair clamps - 555 lbs.  
6 pair clamps - 800 lbs.

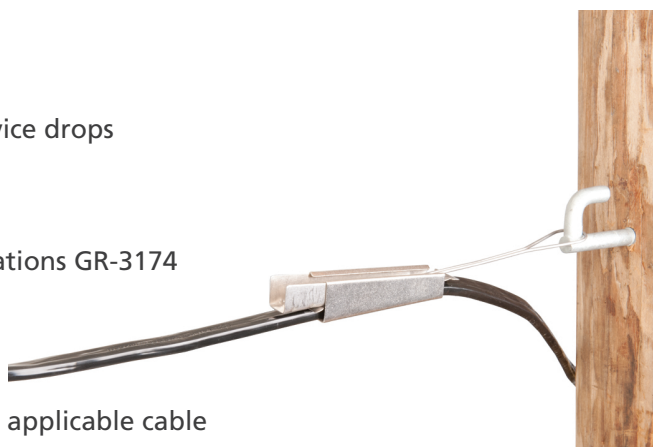
Drop clamps will exceed the rated tensile strength of the applicable cable

### Features

- Available in either stainless steel or aluminum
- 1-2 pair supplied with serrated shims
- 6 pair supplied with dimpled shims

### Material:

- Stainless steel clamps - 304 stainless steel
- Aluminum clamps - 5052-H32 aluminum
- Clamp bail wire (aluminum and stainless clamps) - 430 stainless



1-2 Pair Drop Wire Clamp



6 Pair Drop Wire Clamp

Catalog Number	Drop Cable	Material	Shim Style	Approx. Ship Wt. per Each
C2PRAS	1-2 Pair	Aluminum	Serrated	.08 lb.
C2PRSS		Stainless		.11 lb.
C6PRAD	6 Pair	Aluminum	Dimpled	.14 lb.
C6PRSD		Stainless		.18 lb.

## UNIVERSAL CATV CLAMP

Attaches to hooks and span clamps to secure ends (pole, building or mid-span) of CATV messengered service drops.

### Material:

- Clamp - 5052-H32 aluminum
- Clamp bail wire - 430 stainless



Catalog Number CMDCA  
CATV Service Drop Clamp

Catalog Number	Drop Cable	Approx. Ship Wt. per Each
CMDCA	Messengered COAX	.05 lb.

# Clamps, Span

## SPAN CLAMPS

For attaching overhead service wire to strand.

### Features

- Works on 6M through 25M strand.
- Short, shaped teeth give extraordinary gripping power to clamp without touching the web.
- Works well on both self-support cable and bare strand.
- Especially effective in attaching to duct-on-strand or aerial inner duct.
- Meets Spec CA08391 for function and mechanical strength.

### Ordering information

**EM 8010** Span Clamp with Teeth.

Standard packaging: 5/sm bx, 100/lg bx, 41 lb/lg bx. No minimum order.

**EM 8011** "The Gripper" finger version.

Standard packaging: 5/sm bx, 100/lg bx, 41 lb/lg bx. No minimum order.



**EM 8010 on  
Strand**



**EM 8011**

## MID-SPAN CLAMPS

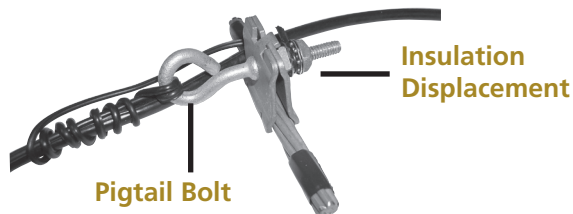
For attaching overhead service wire to strand, and bonding messenger to strand.

### Features

- Pigtail bolt reduces chance of messenger wire slipping out of bolt.
- Three stainless steel washers with insulation-penetrating teeth contact messenger through jacket. This reduces corrosion and installation time.
- Works on .109 through 25M strand.
- Short, shaped teeth give extraordinary gripping power.

### Ordering information

**EM 8012-1PIDC**



# Clamps, Span

## SPAN CLAMP WITH INTERNAL TEETH

### Applications

- Attaching overhead service wire to strand, and bonding messenger to strand.

### Features

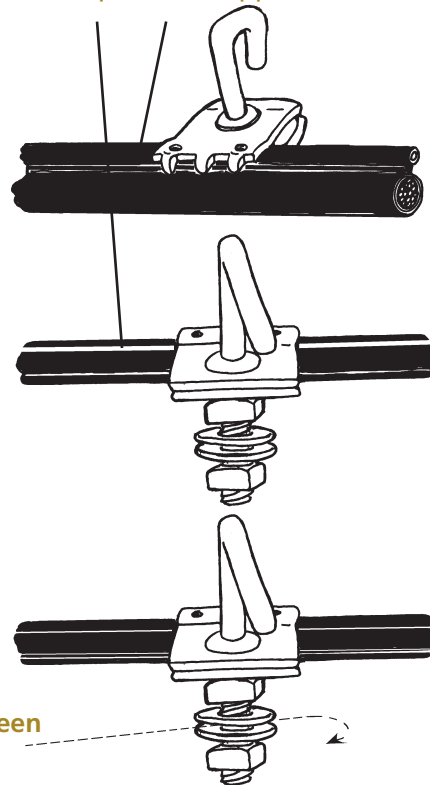
- Works on 6M through 25M strand.
- Short, shaped teeth give extraordinary gripping power to clamp without touching the web.
- Especially effective in attaching to duct-on-strand or aerial inner duct.
- Meets Spec CA08391 for function and mechanical strength.
- Internal insulation-penetrating teeth contact strand through jacket (no stripping).

### Ordering information

**EM 8012** Span clamp

Standard packaging: 5/sm bx, 100/lg bx, 43 lb/lg bx. No minimum order.

Clamp on self support



Attach messenger between washers

## BONDING CLIP FOR INTEGRATED MESSENGER COAX CABLE

### Description

A set of teeth in clip form, made of tinned copper alloy.

### Applications

- Can be used under strand applied hardware to provide bonding contact through IM coax insulation.

### Features

- Teeth long enough and strong enough to make reliable contact.
- A multiple of teeth to pass the high current test.
- Tinned to provide compatibility.
- Collapsible enough to be pre-applied by hand.
- Prevents having to strip insulation.
- Longer than most hardware so the clip can be seen from the ground, assuring bonding is done.

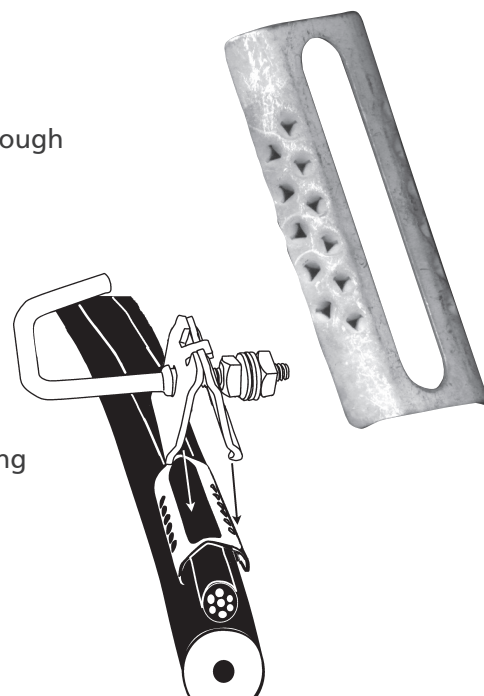
### Ordering information

**EM 8801**

Bonding Clip for Integrated Messenger Coax Cable

Standard packaging: 2000/bx, 30 lb/bx.

No minimum order.



For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com



# Clamps, Span

## MID-SPAN CLAMP INSULATOR

### Description

The Mid-Span Clamp Insulator provides extra insulation between the support strand and aerial drop wire. Made from low density polyethylene, it helps prevent lightning burn through of the drop wire jacket, which causes nuisance ground-outs.

### Features

- Simple, economical design is available as a loose piece to install on existing hardware, or it can be ordered on new mid span clamps.
- Shaped like a cam, it can be installed on pigtail bolt, located, and then turned to lock in the drop wire bail.

### Applications

For use in lightning-prone areas. It is also economical enough to use on every span clamp to help prevent trouble.

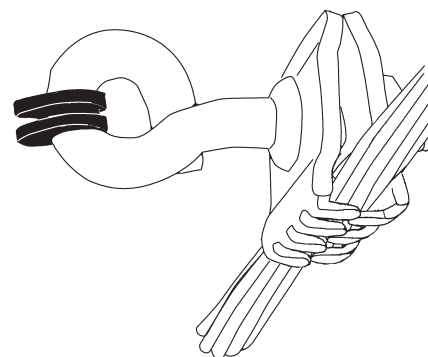
### Ordering information

EM PG02 Mid-span clamp insulator

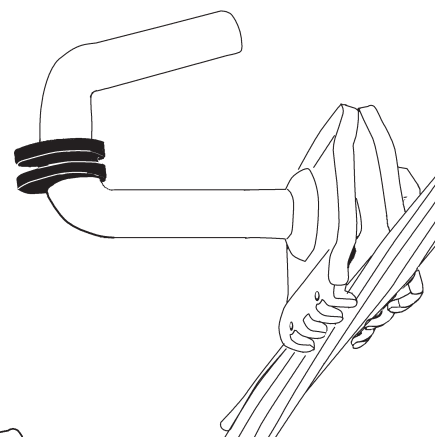
EM 8010PG Span clamp with teeth and insulator

EM 8011PG Span clamp with fingers and insulator

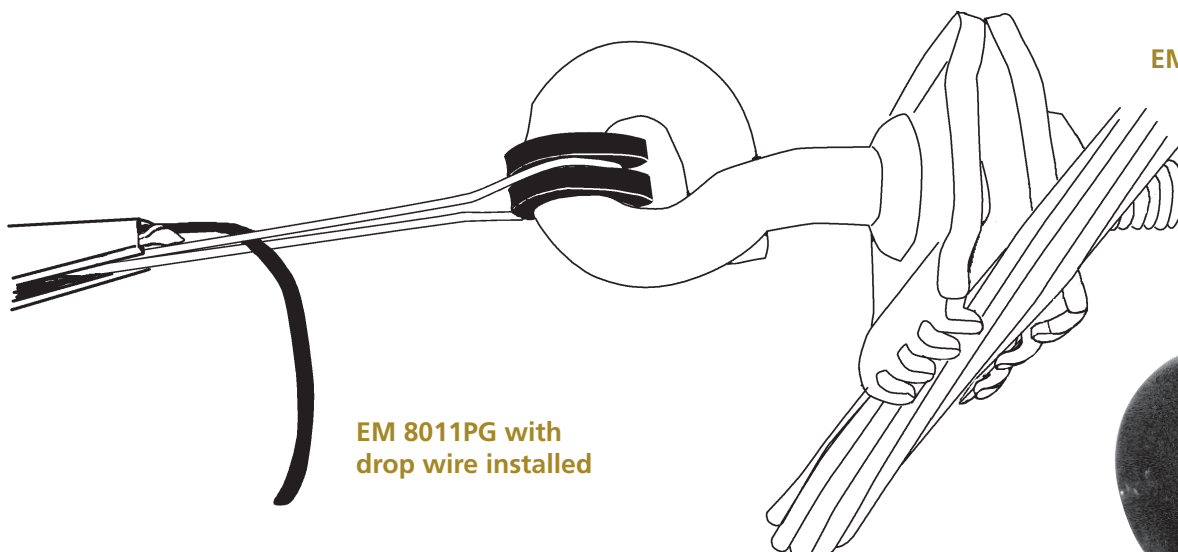
EM 8012PG Span clamp with internal teeth, "L"-shaped bolt, and insulator



EM 8010PG



EM 8012PG



EM 8011PG with  
drop wire installed



# Hook

## INSULATED P-HOOK

House attachment for drop wire clamps. Extra long shank for aluminum siding. Porcelain knob for high strength as well as insulating qualities.

### Ordering information

**EM 8016** Insulated P-Hook Standard packaging: 100/bx, 12 lb/bx. No minimum order.

**EM 8016-KNOB** Just the porcelain knob.



AERIAL  
INSTALLATION

## INSULATED P-HOOK

### Applications

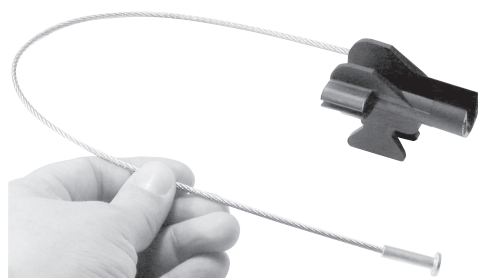
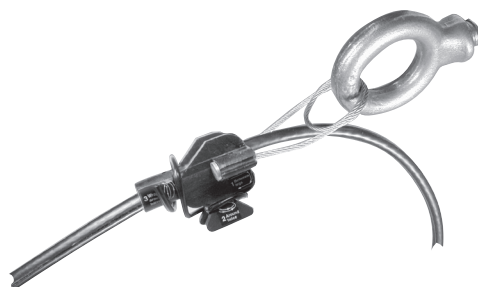
Connecting messengered coax drop wire to house hooks, "P" clamps, ram's horns.

### Features

- Glass-filled nylon for outstanding strength.
- Non metallic body insulates against shorts.
- Detachable bail can be threaded through a loop.
- Flexible bail can be looped around for extra stability.
- Rounded geometry prevents damage to coax or messenger.

### Ordering information

**EM RD011** Coax Drop Clamp



For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)

# Porcelain

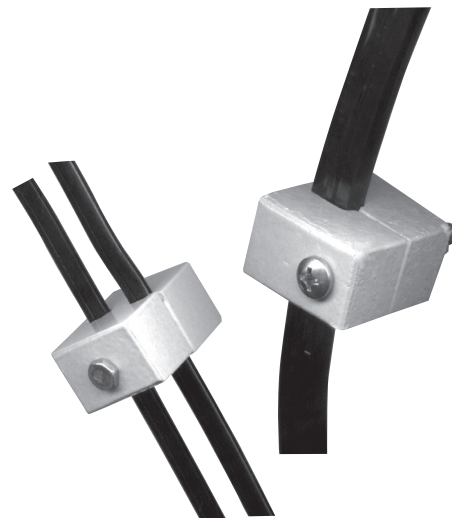
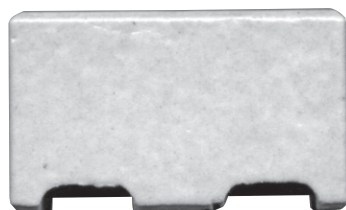
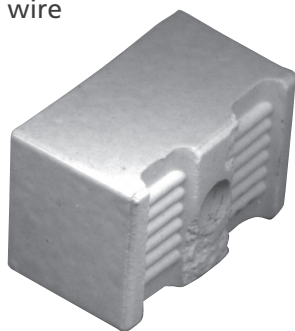
## PORCELAIN SPACERS (TELEPHONE KNOBS)

Used to offset aerial service wire on side of residence.

### Ordering information

**EM 7708** Set of 2 porcelain spacers; accommodates 1-pair and 2-pair aerial service wire.

**EM 7706** Set of 2 porcelain spacers; accommodates up to 6-pair aerial service wire



## S PORCELAIN KNOB

For insulating drop wire house attachments.

### Ordering information

**EM 7703** S Porcelain Knob



## T PORCELAIN KNOB

For insulating drop wire house attachments, with twice the capacity of the S knob.

### Ordering information

**EM 7703T** T Porcelain Knob

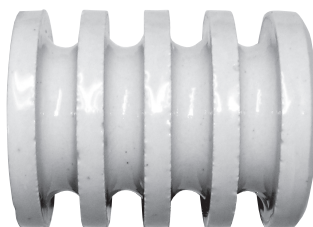


## PORCELAIN INSULATOR

Spool type, four grooves.

### Ordering information

**EM 7705** Porcelain Insulator



For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)





## **ADSS Hardware**

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**In many cases, ADSS aerial fiber installation is faster and more cost effective than lashing, and allows communications cables to be placed in the power zone on utility poles.**

**Hubbell Power Systems' line of ADSS support hardware for short span distribution applications makes the job even faster, reducing installation costs while ensuring system integrity, even in heavy ice and wind loading areas.**

# Lite Tension ADSS Formed Wire Deadends

The ADSS Formed Wire Deadend is designed to securely but safely terminate all ADSS (All Dielectric Self-Support) aerial fiber optic cables with spans up to 300 ft.

## Material

- Galvanized Steel

## Benefits

- Economical single component design
- Shorter lengths result in shorter installation time

## Specifications

- Deadending of 0.394" to 0.748" ADSS cables
- Spans up to 300 ft.
- For standard ADSS jackets

## Tension

- Lite tensions, approximately:  
600# (2.7 kN) maximum initial (stringing/nominal axial/long-term) tension  
800# (3.5 kN) maximum loaded (working/loaded axial/short-term) tension



PART NUMBER	CABLE DIAMETER RANGE				OVERALL LENGTH		COLOR
	MIN (IN)	MAX (IN)	MIN (MM.)	MAX (MM.)	IN.	MM.	
AFWDEL100	0.394	0.433	10	11	18	450	GREEN
AFWDEL101	0.453	0.492	11.5	12.5	22	550	RED
AFWDEL102	0.512	0.551	13	14.0	23	590	BLUE
AFWDEL103	0.571	0.610	14.5	15.5	25	630	BLACK
AFWDEL104	0.630	0.685	16	17.4	27	680	BROWN
AFWDEL105	0.689	0.748	17.5	19	28	720	ORANGE

\* To include accessories in the same carton, add the suffix CEL to the part number. For instance AFWDEL100CEL includes deadend AFWDEL100, TC1 thimble clevis, 6502 eyenut, and L14 extension link.



# Limited Tension ADSS Formed Wire Deadends

The ADSS Formed Wire Deadend with armor rods is designed to securely but safely terminate all ADSS (All Dielectric Self-Support) aerial fiber optic cables with spans up to 500 feet.

## Material

- Galvanized Steel

## Benefits

- Armored rods included for increased strength
- Suitable for temperatures and conditions defined by cable manufacturers

## Specifications

- Deadending of 0.413" to 0.654" ADSS cables
- Spans up to 500 ft.
- For standard ADSS jackets

## Tension

- Low tensions, approximately:  
1000# (4.4 kN) maximum initial (stringing/nominal axial/long-term) tension  
2500# (11.1 kN) maximum loaded (working/loaded axial/short-term) tension



PART NUMBER	CABLE DIAMETER RANGE				OVERALL LENGTH				COLOR
					ARMOR RODS		DEADENDS		
	MIN (IN)	MAX (IN)	MIN (MM.)	MAX (MM.)	IN.	MM.	IN.	MM.	
AFWDEL107	0.413	0.445	10.5	11.3	40	1015	32	820	WHITE
AFWDEL108	0.453	0.496	11.5	12.6	40	1015	32	820	YELLOW
AFWDEL110	0.492	0.535	12.5	13.6	40	1015	32	820	BLACK
AFWDEL111	0.531	0.571	13.5	14.5	40	1015	32	820	BLUE
AFWDEL112	0.559	0.598	14.2	15.2	40	1015	32	820	RED
AFWDEL113	0.602	0.654	15.3	16.6	40	1015	32	820	BROWN

\* To include accessories in the same carton, add the suffix CEL to the part number. For instance AFWDEL107CEL includes deadend AFWDEL107, TC1 thimble clevis, 6502 eyenut, and L14 extension link.

# Medium Tension ADSS Formed Wire Deadends

The ADSS Formed Wire Deadend with armor rods is designed to securely but safely deadend all ADSS (All Dielectric Self Support) aerial fiber optic cables with spans up to 1100 ft.

## Material

- Galvanized Steel

## Benefits

- Armor rods included for increased strength
- Suitable for temperatures and conditions defined by cable manufacturers

## Specifications

- Deadending of 0.638" to 0.850" ADSS cables
- Spans up to 1100 ft.
- For standard ADSS jackets

## Tension

- Limited to Moderate tensions, approximately:  
1000# - 2000# (4.4 kN - 8.9 kN) maximum initial tension  
2500# - 4000# (11.1 kN - 17.8 kN) maximum loaded tension



PART NUMBER	CABLE CAPACITY		OVERALL LENGTH				COLOR
			ARMOR RODS		DEADENDS		
	IN.	MM.*	IN.	MM.	IN.	MM.	
AFWDEL114	0.638	16.2	91	2300	56	1420	GREEN
AFWDEL115	0.661	16.8	60	1525	43	1100	WHITE
AFWDEL116	0.713	18.1	91	2300	56	1420	BLUE
AFWDEL117	0.724	18.4	60	1525	43	1100	YELLOW
AFWDEL120	0.850	21.6	60	1525	43	1100	BLACK

\* +/- 0.5 mm

\* To include accessories in the same carton, add the suffix CEL to the part number. For instance AFWDEL114CEL includes deadend AFWDEL114, TC1 thimble clevis, 6502 eyenut, and L14 extension link.

# Lite Tension ADSS Formed Wire Helical Suspension

The ADSS Formed Wire Suspension is designed for use on all ADSS (All Dielectric Self-Support) aerial fiber optic cables with spans up to 295 ft. The ADSS formed wire suspension requires using a J-hook (Part # PSC2080237) through bolt for best installation.

## Material

- Galvanized Steel

## Specifications

- Suspending of 0.394" to 0.768" ADSS cables
- Spans up to 295 ft
- For standard ADSS jackets
- Accepts standard J-hook
- Round 50mm (1.97") thimble included



PART NUMBER	CABLE DIAMETER RANGE				OVERALL LENGTH				COLOR
					ARMOR RODS		SUSPENSION		
	MIN (IN)	MAX (IN)	MIN (MM.)	MAX (MM.)	IN.	MM.	IN.	MM.	
AFWSUS100	0.394	0.453	10	11.5	17	440	34	870	GREEN
AFWSUS101	0.453	0.496	11.5	12.6	19	480	37	950	RED
AFWSUS102	0.512	0.551	13	14	19	480	37	950	BLUE
AFWSUS103	0.571	0.630	14.5	16.0	21	510	40	1010	BLACK
AFWSUS104	0.630	0.689	16	17.5	21	530	41	1050	BROWN
AFWSUS105	0.689	0.768	17.5	19.5	21	530	41	1050	ORANGE

# ADSS Wedge Deadends

The Hubbell ADSS Wedge Style Deadend is designed for fast, easy, and reliable installation of ADSS (All Dielectric Self-Support) aerial fiber optic cable. The deadends are designed with an open, conical body containing a pair of sliding wedges. The wedges are engineered to mechanically couple to the cable without causing damage to the sheath or fibers, providing a secure grip without fear of signal loss.

## Material

- Body: UV Resistant Thermoplastic
- Bail: Stainless Steel

## Benefits

- Light and compact
- Easy, quick, and safe deadending
- Installation takes seconds with no special tools
- The flexible bail provides an extra protection to the cable against Aeolian vibrations
- Safe for installation near space potentials up to 11kV

## Specifications

- Deadending of 0.236" to 0.787" ADSS cables
- Spans up to 325 ft.
- All plastic parts are UV resistant and tested in conditions equivalent to minimum of 25 years in service
- Accepts standard pole line fittings
- Recommended for double jacket ADSS cables. For single jacket cables, contact the manufacturer for recommendations.



PART NUMBER	CABLE DIAMETER RANGE				ULTIMATE BODY STRENGTH (LBF)
	MIN (IN)	MAX (IN)	MIN (MM.)	MAX (MM.)	
WEGADSS100	0.236	0.315	6	8	750
WEGADSS101	0.315	0.394	8	10	750
WEGADSS102	0.394	0.472	10	12	1650
WEGADSS103	0.472	0.551	12	14	1650
WEGADSS104	0.551	0.630	14	16	1650
WEGADSS105	0.630	0.709	16	18	1650
WEGADSS106	0.709	0.787	18	20	1650

# ADSS Suspension Clamps

The Hubbell ADSS suspension clamp is a heavy duty, versatile, and reliable solution for securely suspending ADSS (All Dielectric Self-Support) aerial fiber optic cable. The versatility of the clamp allows the installer to fix the clamp to the pole using either a through bolt or band. If a loose tangent is required, the clamp can be suspended using a standard J-hook (Part # PSC2080237). Accepting a range of sizes and multiple installation methods, the Hubbell ADSS suspension clamp is sure to meet your tangent needs.

## Material

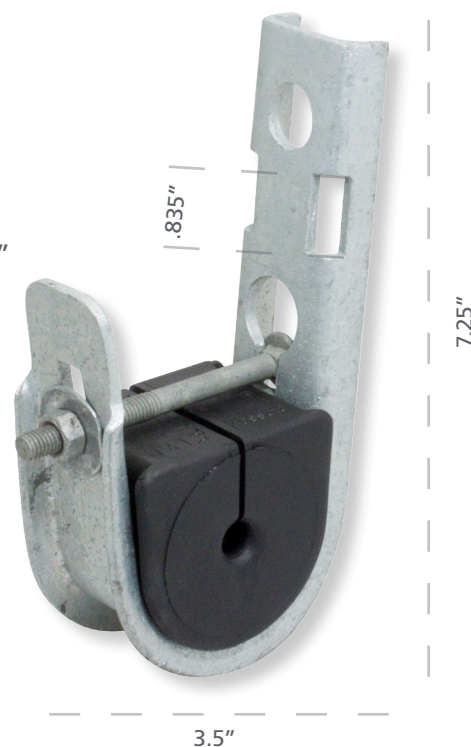
- Body: Galvanized Steel
- Insert: Neoprene Sleeve

## Benefits

- Two sizes to cover the full range of ADSS cables from 0.394" to 0.787"
- Installation in just a few seconds with standard tools
- Versatility in installation methods

## Specifications

- Tangent suspension for spans up to 600 ft.
- Less than 20° angle on cable routes between spans (For angles greater than 20°, double deadend or false deadend)



PART NUMBER	CABLE DIAMETER RANGE				ULTIMATE BODY STRENGTH (LBS.)
	MIN (IN)	MAX (IN)	MIN (MM.)	MAX (MM.)	
ASCF102	0.394	0.591	10	15	3000
ASCF114	0.591	0.787	15	20	3000



# ADSS Hanging Suspension Clamps

The Hubbell ADSS Dielectric Suspension Clamp is a great choice when installing ADSS (All Dielectric Self-Support) aerial fiber optic cable near the energized zone on a utility pole. Installed as a float mount, the clamp is best used on a closed eye nut (Part #'s 6500, 6501, 6502, 6503).

## Material

- Body: UV Resistant Thermoplastic
- Insert: Neoprene Sleeve

## Benefits

- Lightweight, compact, and cost effective design
- Dielectric body
- Installation in seconds
- Suspension bails provide additional protection against Aeolian vibration

## Specifications

- Tangent suspension for spans up to 325 ft
- Less than 20° angle on cable routes between spans (For angles greater than 20°, double deadend or false deadend)



PART NUMBER	CABLE DIAMETER RANGE				ULTIMATE BODY STRENGTH (LBF)
	MIN (IN)	MAX (IN)	MIN (MM.)	MAX (MM.)	
AHSC800	0.315	0.472	8	12	450
AHSC1200	0.472	0.630	12	16	450

# RPX® Suspension Clamp

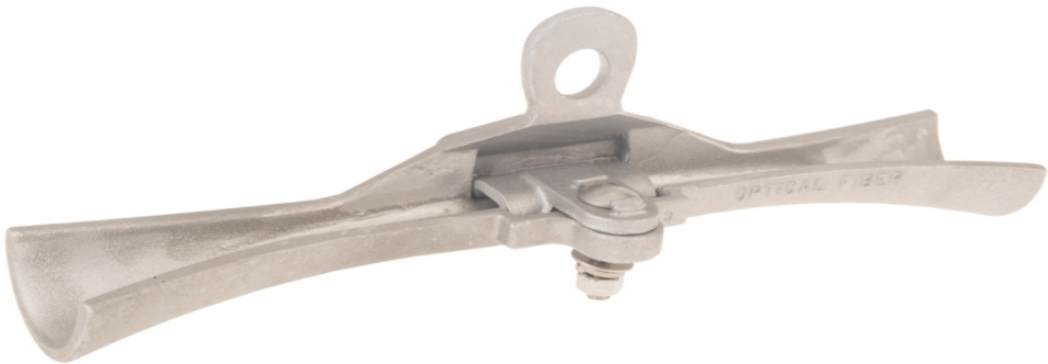
The Hubbell RPX suspension clamp is designed specifically for efficient aerial installation of Corning RPX cable in middle pole installations.

**Material**

- Aluminum

**Benefits**

- Two-step installation for quick assembly
- Profile of clamp designed to handle all sizes from 48f to 144f
- Utilizes deviation angles of up to 20 degrees on both sides



Catalog Number	Size Range	Deviation Angle	Max. Span Length		Span Differential		Tension Differential		Initial Sag	Quantity
			FT	M	FT	M	LBF	N	%	#
HUBRPXSUS	48f-144f	up to 20°	262	80	98	30	150	667	1-3	10

For cable installation instructions, contact Corning Cable Systems.  
Span differential is the difference in span length on each side of the clamp.  
Tension differential is also known as unbalanced load.  
**Recommended pole attachment hardware: PSC2080237 J-Hook.**

# Communication Pole Bracket

The Hubbell Communications Pole Bracket (CPB) is designed to be a high strength, universal fitting for use on all wooden, metal, or concrete poles using a bolt or steel bands.

## Material

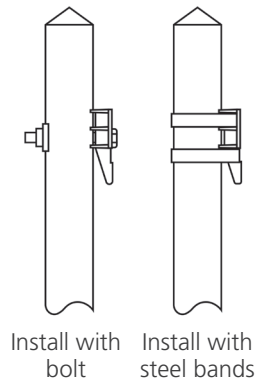
- Aluminum

## Benefits

- Provides three attachment points to cover a wide array of deadending applications - single, double and triple deadending options available on a single bracket

## Specifications

- Through hole (.67" diameter) for bolted installation
- Incorporates two defined areas for 3/4" banding installation
- For use in telecom applications only



# Spiral Vibration Dampers

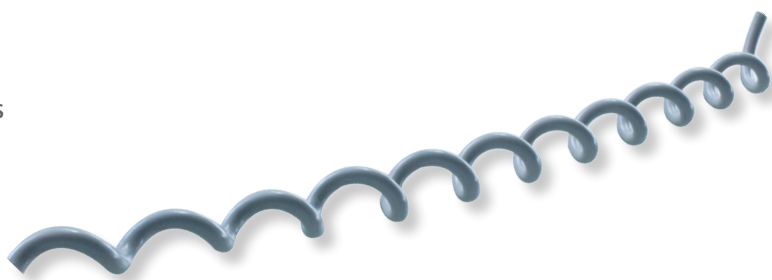
The ADSS spiral vibration damper reduces Aeolian vibration. Aeolian vibration is a high frequency, low amplitude vibration caused by wind passing across the fiber cable. This vibration can cause support hardware to breakdown and fail over time. The spiral vibration dampers are made of PVC and are very easy to install.

## Material

- PVC

## Benefits

- Reduces Aeolian and galloping vibrations
- Easy installation
- Dielectric material



PART NUMBER	CABLE DIAMETER RANGE				LENGTH (IN.)
	MIN (IN)	MAX (IN)	MIN (MM.)	MAX (MM.)	
SVD103	0.252	0.327	6.4	8.3	49
SVD104	0.327	0.461	8.3	11.7	53
SVD105	0.461	0.563	11.7	14.3	53
SVD106	0.563	0.760	14.3	19.3	65



## **OPTI-LOOP™ Storage Systems**

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Cable slack in aerial networks is critical for expansion and repairs. Hubbell's OptiLoop aerial slack storage products are ideal for storing slack on the span. Available in various sizes and materials, OptiLoop slack storage systems can be used on lashed aerial, ADSS, and drop cables.

They provide a convenient, economically priced and industry-approved method of storing extra length of fiber optic cable.



# Aluminum Fiber Optic Storage System

The aluminum Opti-Loop™ FOS for strand and messenger mounted cable is available in a variety of sizes. With more than one million units in service, Opti-Loop fiber storage systems lead the industry in quality and durability.

## DESIGN FEATURES AND BENEFITS

- All aluminum construction with continuous welds at crossbars and ends.
- Each pair is individually boxed and includes stainless steel mounting bolts, nuts and washers.
- Fits all fiber cable up to 1.50" OD.
- Powder coat finish.
- Tie eyelets designed to accommodate both stainless steel and tie wrap securing methods.
- Radius ends to ensure no sharp corners.
- Outward facing channel and minimal surface area minimizes stress and ice loading.



## Ordering Information

Catalog Number	Size (Inches)	Length (Inches)	Outside Diameter (Inches)
FOS10TMK	10.2	23	11.4
FOS1TMK	12.2	26	13.4
FOS2TMK*	12.2	26	13.4
FOS3TMK	16.2	31	17.7
FOS3DTMK*	16.2	31	17.7
FOS4TMK	18.2	33	19.7
FOS5TMK*	18.2	33	19.8
FOS6TMK	20.2	34	21.4
FOS24TMK	24.0	38	25.4
FOS30TMK	30.0	44	31.4

\*Indicates multi-wrap unit

# Plastic Fiber Optic Storage System

The plastic Opti-Loop™ FOS for strand and messenger mounted cable is available in a variety of sizes. They provide a convenient, economically priced and industry approved method of storing extra length of fiber optic cable.

## DESIGN FEATURES AND BENEFITS

- Utilizes self-aligning tap brackets.
- Requires only one tool for installation.
- No "fishing" tie wraps through holes or slots.
- Can be stacked if necessary.
- Contains UV inhibitor.
- Cut away channel creates a smoother transition to messenger.
- Minimal surface area minimizes stress and ice loading.



## Ordering Information

Catalog Number	Size (Inches)	Length (Inches)	Outside Diameter (Inches)
FOSP17TMK	17	26	18.9
FOSP12TMK	12	18	13.1

# ADSS Direct Attach Fiber Optic Storage System

The Opti-Loop™ ADSS Direct Attach unit uses the patented bowtie double deadend process for storing ADSS fiber. This system provides maximum protection for fiber cable and contains no conductive properties.

## DESIGN FEATURES AND BENEFITS

- Each pair is individually boxed and includes ADSS Direct Attach mounting brackets and an all dielectric pole block.
- No "fishing" tie wraps through holes or slots.
- Cut away channel creates a smoother transition to messenger.
- Contains UV inhibitor.



## Ordering Information

Catalog Number	Size (Inches)	Length (Inches)	Outside Diameter (Inches)
FOSDA17ADSS	17	26	18.9
FOSDA12ADSS	12	18	13.1

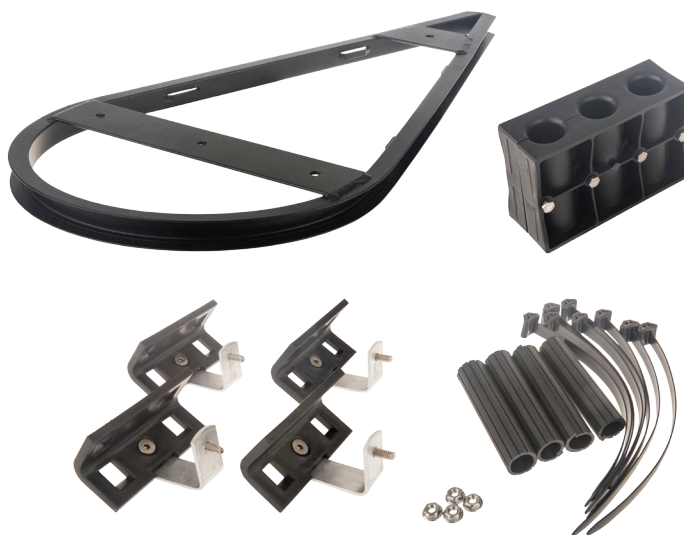
# OptiLoop™ FOS Aluminum ADSS Storage System

The aluminum Opti-Loop™ FOS for All Dielectric Self Support (ADSS) cable is available in 3 sizes. With more than one million units in service, Opti-Loop fiber storage systems lead the industry in quality and durability.

## DESIGN FEATURES AND BENEFITS

- All aluminum construction with continuous welds at crossbars and ends
- Each pair is individually boxed and includes ADSS Direct Attach mounting brackets and an all dielectric pole block
- Fits all fiber cable up to 1.50" OD
- Powder coat finish
- Tie eyelets designed to accommodate both stainless steel and tie wrap securing methods
- Radius ends to ensure no sharp corners
- Outward facing channel and minimal surface area minimizes stress and ice loading

*\*Hubbell Power Systems does not recommend using the aluminum ADSS Storage System in the power zone of the pole. It is only recommended for use in the communications zone of the pole. For All Dielectric plastic units please order the FOSDA version.*



## Ordering Information

Catalog Number	Size (Inches)	Length (Inches)	Outside Diameter (Inches)
FOS20ADSS	20.2	34.0	21.4
FOS24ADSS	24.0	38.0	25.4
FOS30ADSS	30.0	44.0	31.4

# Fiber Cable Storage Wheel

The Hubbell® Opti-Loop™ Fiber Cable Storage Wheel provides another convenient option for storing fiber optic cable. This newest member of the Opti-Loop™ family brings versatility, security, and mobility by offering multiple safe mounting options aerially or on a pole or wall. Designed with the highest of standards and expectations that are associated with the Hubbell® and Opti-Loop™ names, the Cable Wheel delivers an economic solution for your fiber cable storage needs.

**DESIGN FEATURES AND BENEFITS**

- Can be mounted aerially, on a pole, or to a wall
- Suitable for all types of fiber optic cable
- Protects cable while preventing pinching by utilizing exclusive tie wrap notches
- Features a bracket “safety groove” for greater stability after installation

**SPECIFICATIONS**

- Convenient slots for banding
  - Accepts standard 20 x 0.7mm banding
- Can be used on lashed aerial fiber or All Dielectric Self Support (ADSS) fiber
- Rugged, non-conductive material with UV protection



Ordering Information		
Catalog Number	Diameter (Inches)	Description
FOSPCW14	14	One 14" Opti-Loop™ Cable Wheel
FOSPCW14TMK	14	One 14" Opti-Loop™ Cable Wheel with one tap mounting bracket, nut and bolt
FOSPCW1ADSS	14	One 14" Opti-Loop™ Cable Wheel with one direct attach ADSS mounting bracket, nut, bolt and grommet
FOSPCW14HEX	14	One 14" Opti-Loop™ Cable Wheel with one hex head lag bolt, washer, and spacer
FOSPCW14CM		



# Mini Shoe for FTTP and FTTH Storage Applications

The Opti-Loop Mini-Shoe was designed to store and organize the small amount of slack from a fiber drop that is to be left at an FDT (Fiber Drop Terminal). It is also to be used for the organization or storage of the minimal amount of unused multi-fiber drop, in the placing of a multiport terminal from FITS splices (Factory Installed Termination System). Additionally, the remaining cable left for future use is safely stored, as opposed to the slack hanging in a vertical coil. This procedure stores the coil in a more unobtrusive, horizontal fashion.

## DESIGN FEATURES AND BENEFITS

- NEW inverted style stores fiber according to it's most natural tendency
- NEW patented design also features angled slots to accommodate the use of banding material on steel or concrete poles
- Lightweight and stackable, tough UV resistant plastic compound
- No coiling of the fiber drop
- Keyed bracket slot, to prevent twisting
- Optional, changeable, mounting hardware for aerial, pole or below-grade hand holes
- All dielectric for use anywhere on the pole
- Weather resistant, non-rusting
- Tie wraps included
- Future drops can be added without disturbing the original bundle



## Ordering Information

Catalog Number	Size (Inches)	Length (Inches)	Outside Diameter (Inches)
DCSU8	8	8.2	7

# Tap Bracket Mounting Hardware

## ATB255050

The 2 1/2" tap mount bracket is a versatile bracket for strand and messenger mounted drop installation components. Brackets are sold as a box of 50 pieces.

### DESIGN FEATURES AND BENEFITS

- 2 1/2" tall bracket (distance between strand and bracket base)
- High grade 6063 aluminum alloy bracket and clamping plates (bugnuts)
- Galvanized steel bolt and square nut
- Interlocking clamping plates (bugnuts) assure a secure grip of the messenger strand - 1/4" and 5/16"
- Tap mounting hole accepts up to a 5/16" bolt
- 1/4" x 1/4" square hole at base of bracket for additional mounting options
- Contents: Sold as box of 50 pieces. (1) bracket, (2) bugnuts, (1) bolt and (1) square nut per piece.

\* Use the suffix "GS" when ordering to indicate a galvanized steel bracket.



ATB255050

## ATB115050

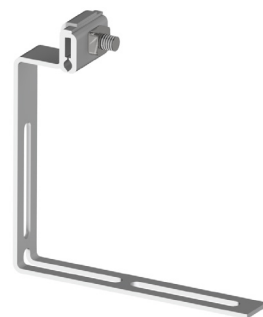
The 11 1/2" adjustable tap mount bracket is a versatile bracket for strand and messenger mounted drop installation components. The longer length of these tap brackets allow the installer to adjust the mounting height to fit the intended application. Brackets are sold as box of 50 pieces.

### DESIGN FEATURES AND BENEFITS

- 11 1/2" tall bracket (distance between strand and bracket base)
- High grade 6063 aluminum alloy bracket and clamping plates (bugnuts)
- Galvanized steel bolt and square nut
- Interlocking clamping plates (bugnuts) assure a secure grip of the messenger strand - 1/4" and 5/16"
- Tap mounting slots accept up to a 5/16" bolt
- Contents: Sold as box of 50 pieces. (1) bracket, (2) bugnuts, (1) bolt and (1) square nut per piece.



ATB115050



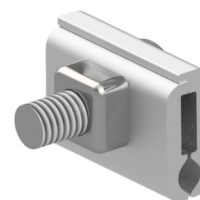
ATB115050 hand formed

## FOSBN250

The interlocking clamping plates (bugnuts) and mounting hardware (bolt and nut) are also available in bulk. Bugnut and hardware assemblies are sold as a box of 250 pieces.

### DESIGN FEATURES AND BENEFITS

- High grade 6063 aluminum alloy clamping plates (bugnuts)
- Galvanized steel bolt and square nut
- Contents: Sold as box of 250 pieces. (2) bugnuts, (1) bolt and (1) square nut per piece.



FOSBN250

# Tap Bracket Mounting Hardware

## DAKITSEP

The 2 1/2" direct attach mounting bracket is a versatile bracket for ADSS mounted drop installation components. Brackets are sold as a kit of 4 with mounting hardware.

### DESIGN FEATURES AND BENEFITS

- 2 1/2" tall bracket (distance between mounting angle and bracket base)
- High grade 6063 aluminum alloy bracket
- Stainless steel threaded stud, bolt and hex nut hardware
- Durable, UV resistant plastic mounting angle

Contents: Sold as kit of 4 brackets with mounting hardware, including: (4) brackets, (4) grommets, (8) zip ties and (4) hex nuts.



DAKITSEP

## PBKSEP

The Hubbell all dielectric pole block kit provides ADSS cable routing and protection for your dead ending applications.

### DESIGN FEATURES AND BENEFITS

- Durable, UV resistant plastic
- Galvanized steel hardware
- High grade 6063 aluminum alloy banding bracket (PBKSEPBND)
- Three individual routing holes for separation of the two bypassing cable ends plus support of the slack cable loop
- Two piece design allows for easy access to slack cable
- Protects against cable-on-pole abrasion
- Kit can be banded to pole for metal or concrete pole installation (PBKSEPBND)

Contents: (1) pole block bracket, (2) 2 1/2" lag bolts and (2) 3 1/2" lag bolts



PBKSEP



# UNDERGROUND ENCLOSURES





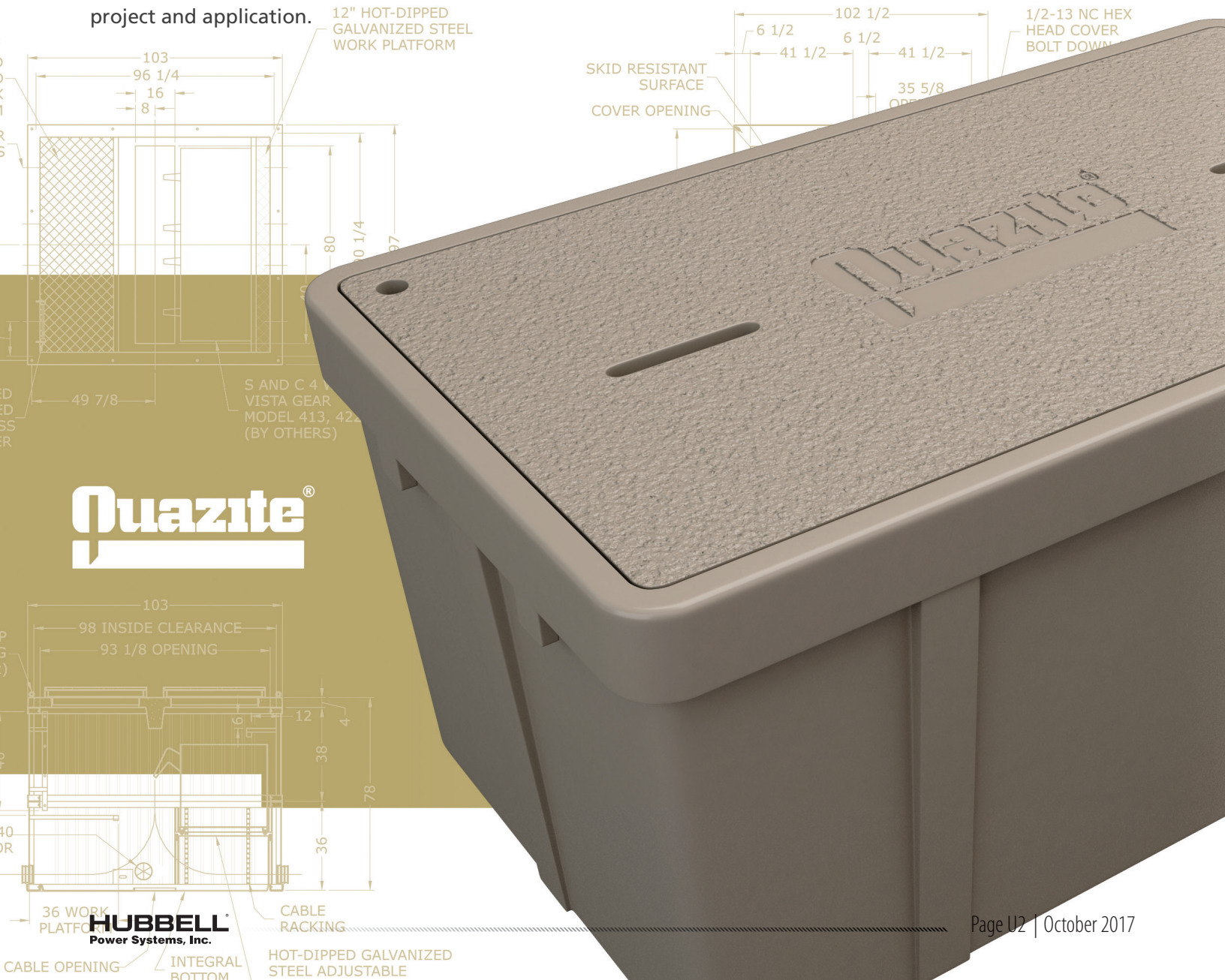
# Hubbell Underground Enclosures

Strength, performance, quality, and outstanding customer service have been hallmarks of all Hubbell underground enclosure brands for more than 40 years. The industry leader for applications in non-deliberate traffic areas, our enclosures provide rugged and cost-effective protection for a variety of electric utility, commercial & industrial, communications, water and gas equipment while meeting the specific demands of your industry.

All Hubbell underground enclosure brands come backed with cutting-edge engineering expertise and a total commitment to quality that is designed into our products. Our engineers are respected and valued advisors throughout the industry and our quality processes are among the most sophisticated in application. When you need unyielding performance and reliability, Hubbell underground enclosure brands are the right choice.

Hubbell is proud to offer the wide selection of underground enclosures found in this catalog. The following pages outline our industry leading Quazite, Quazite FRP and Pencell brands. In addition to our core products and options, Hubbell can help customize a solution for your project and application.

UNDERGROUND  
ENCLOSURES

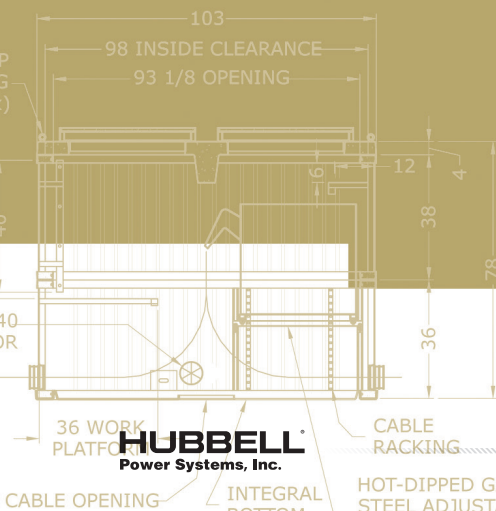


12" HOT-DIPPED  
GALVANIZED STEEL  
WORK PLATFORM

SKID RESISTANT  
SURFACE  
COVER OPENING

1/2-13 NC HEX  
HEAD COVER  
BOLT DOWN

**Quazite®**





# Hubbell Underground Enclosures

Hubbell offers three distinct brands of underground enclosures. All three are built with the same attention to quality and performance that you know and expect from Hubbell. Each brand is made of a different base material. Our comprehensive product offering is tailored to ensure that your application requirements are met, no matter what. Based on your design style preference, Hubbell offers Quazite® monolithic polymer concrete, Quazite® FRP fiberglass-reinforced polymer, and PenCell HDPE enclosure products. All three brands offer superior performance and unique benefits.

## Quazite® Enclosures

Polymer concrete is made from select-grade aggregates in combination with a polymer resin system. When combined through a process of mixing, molding, and curing, an extremely powerful cross-linked bond is formed. Precast polymer concrete is reinforced with fiberglass to give it additional strength and rigidity.

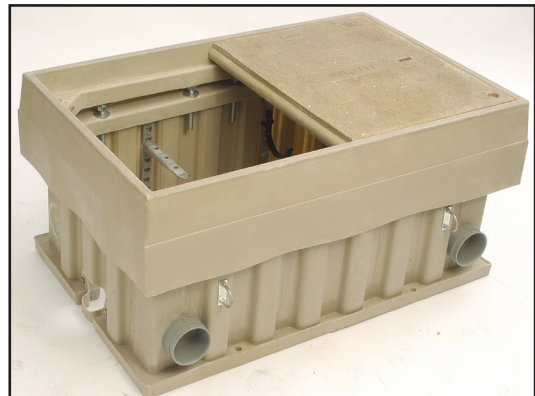
Polymer Concrete



## Quazite® FRP Enclosures

Fiberglass-reinforced polymer, also called FRP, is a special combination of polymer concrete and fiber-reinforced polymer. This hybrid construction, formed from an FRP shell and a polymer concrete ring and cover, delivers a high strength, lightweight, abrasion-resistant product that is protected from ultraviolet rays.

Fiberglass Reinforced Polymer



## PenCell® Enclosures

Structural foam molded high density polyethylene, also called HDPE, is a light weight, high strength plastic molding process that provides outstanding structural integrity and durability. HDPE enclosures are mated with covers made from a variety of materials: HDPE, polymer concrete or steel. This combination creates a highly versatile choice for underground utility enclosures where low weight and high strength are necessary.

High Density Polyethylene (HDPE)



# Quazite: Available Size Chart



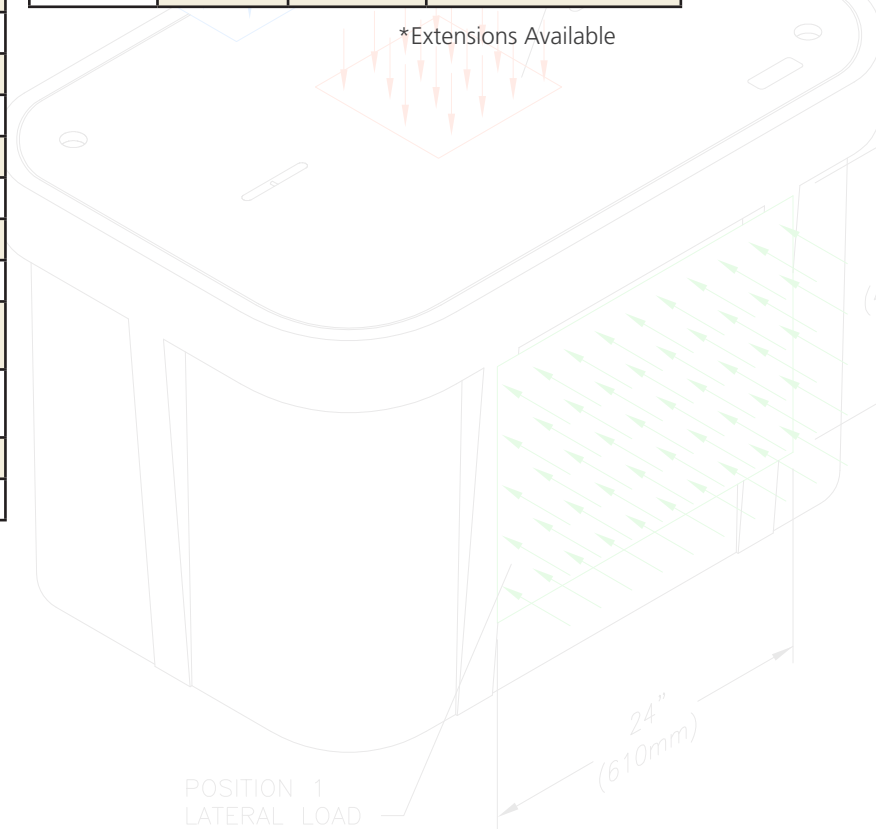
Style	Size	Depths	Assembly Load Rating Options	UL
PC	6x8	6 3/4	Tier 15	Yes
	8x8	12, 18	Tier 15	Yes
	8x18	7, 8	Tier 8, Tier 15	Yes
	11x18	12, 18	Tier 8	Yes
	12x12	12	Tier 8, Tier 15	Yes
	13x24	12	Tier 5	Yes
	17x30	12	Tier 5	Yes
PD	13x24	18, 26	Tier 8, Tier 15, Tier 22	Yes
	17x30	18, 26	Tier 8, Tier 15, Tier 22	Yes
	24x36	18, 26, 48	Tier 8, Tier 15, Tier 22	Yes
	30x48	24, 48	Tier 8, Tier 15, Tier 22	Yes
PG	11x18	12, 18	Tier 8, Tier 15, Tier 22	Yes
	11x20	12, 18	Tier 8, Tier 15, Tier 22	No
	13x24	12, 18, 24	Tier 8, Tier 15, Tier 22	Yes
	17x30	12, 18, 22, 24, 30	Tier 8, Tier 15, Tier 22	Yes
	24x24	24 (Extensions Available)	Tier 8, Tier 15, Tier 22	Yes
	24x36	18, 24, 30, 36, 42 (Extensions Available)	Tier 8, Tier 15, Tier 22	Yes
	30x48	18, 24, 36, 48 (Extensions Available)	Tier 8, Tier 15, Tier 22	Yes
	30x60	21, 30, 36	Tier 5, Tier 15, Tier 22	No
	36x36	36 (Extensions Available)	Tier 8, Tier 15, Tier 22	Yes
	36x60	19, 24, 31, 36 (Extensions Available)	Tier 5, Tier 15, Tier 22	No
	36x72	21, 36	Tier 5, Tier 15, Tier 22	No
	48x48	36, 48	Tier 5, Tier 15, Tier 22	No
	48x72	36, 48 (Extensions Available)	Tier 5, Tier 15, Tier 22	No
	48x78	27, 36	Design 12,000 lbs / Test 24,000 lbs	No
	48x96	48 (Extensions Available)	Tier 5, Tier 15, Tier 22	No
PT	10x15	18	Tier 8, Tier 15	No
	13x24	18	Tier 8, Tier 15	Yes
	17x30	18	Tier 8, Tier 15	Yes
PX	12x12	24	Tier 8, Tier 15	Yes
Median	5x16		Tier 8, Tier 15	No
	10x12		Tier 8, Tier 15	No
Round	27	36, 48	Tier 8, Tier 15, Tier 22	Yes
	39	18, 24, 36, 48, 72	Tier 8, Tier 15, Tier 22	Yes

# Quazite FRP: Available Size Chart

Style	Size	Depths	Load Rating Options
Straight Wall	6x8	6-3/4	Tier 8
	10x15	12	Tier 8, Tier 15
	11x18	12, 18	Tier 8, Tier 15, Tier 22
	11x21	12	Tier 5, Tier 8, Tier 15
	11x32	12	Tier 5, Tier 8, Tier 15
	12x12	12	Tier 8, Tier 15, Tier 22
	13x24	12, 18	Tier 8, Tier 15, Tier 22
	15x17	12	Tier 8, Tier 15
	15x27	12	Tier 5, Tier 8
	16x22	18	Tier 8, Tier 15
	17x30	12, 18, 22, 30	Tier 8, Tier 15, Tier 22
	24x24	12, 18, 24	Tier 8, Tier 15, Tier 22
	24x36	18, 24, 30	Tier 8, Tier 15, Tier 22
	30x48	18, 24, 36	Tier 8, Tier 15, Tier 22
	30x60	18, 30, 36, 48	Tier 8, Tier 15, Tier 22
	36x36	18, 24, 30, 36, 48	Tier 8, Tier 15, Tier 22
	36x60	18, 24, 30, 36, 48	Tier 8, Tier 15, Tier 22
	36x72	36, 48	Tier 8, Tier 15, Tier 22
Flared Wall	10x15	12, 18	Tier 8, Tier 15
	11x18	12, 18	Tier 8, Tier 15, Tier 22
	11x32	12	Tier 5, Tier 8
	12x12	12, 24	Tier 8, Tier 15
	13x24	12, 18, 24*	Tier 8, Tier 15, Tier 22
	15x17	12	Tier 5, Tier 8, Tier 15
	15x27	12	Tier 5, Tier 8
	16x22	30	Tier 8, Tier 15
	17x30	12, 18, 22, 24, 30, 34*	Tier 8, Tier 15, Tier 22
	24x36	18, 24, 30, 36, 42, 48*	Tier 8, Tier 15, Tier 22
	24x60	24	Tier 5
	30x48	18, 24, 30, 36	Tier 8, Tier 15, Tier 22

Style	Size	Depths	Load Rating Options
Corrugated Wall	30x48	18, 24, 30, 36, 48*	Tier 8, Tier 15, Tier 22
	30x60	18, 24, 30, 36, 48	Tier 5, Tier 8, Tier 15, Tier 22
	36x60	18, 24, 30, 36, 48	Tier 8, Tier 15, Tier 22
	36x72	18, 24, 30, 36, 48	Tier 8, Tier 15, Tier 22
	36x96	30, 36, 48	Tier 8, Tier 15, Tier 22
	48x48	18, 24, 30, 36, 48	Tier 8, Tier 15, Tier 22
	48x72	18, 24, 30, 36, 48	Tier 8, Tier 15, Tier 22
	48x78	18, 24, 30, 36, 48	Tier 8, Tier 15, Tier 22
	48x96	18, 24, 30, 36, 48	Tier 8, Tier 15, Tier 22
	78x96	36, 48	Tier 8, Tier 15, Tier 22
	96x96	36, 48	Tier 8, Tier 15, Tier 22
Round	2000	24, 48	Tier 8, Tier 15, Tier 22
	2700	36, 72	Tier 8, Tier 15
	3200	36	Tier 8, Tier 15, Tier 22
	3900	14, 30, 36	Tier 8, Tier 15, Tier 22

\*Extensions Available



# PenCell: Available Size Chart



UNDERGROUND  
ENCLOSURES

Style	Size	Depths	Load Rating Options
DT	11x18	9, 11, 18, 20	5k, Tier 15
	12x12	14, 16, 20, 25	5K, Tier 15
	13x24	15, 17, 18, 23, 24*	5K, Tier 15
	17x30	15, 17, 18, 24, 26, 30, 32, 36, 38*	5k, Tier 15, Tier 22 (24" & 36" depth only)
	24x36	18, 24, 36	5K, Tier 15, Tier 22
	30x48	18, 24, 36	5K, Tier 15, Tier 22
PE	6	9	5K
	9	10	5K
	10	18, 19	5K
	14	12, 17*	5K
	20	17, 19	5K, 10K
	30	12, 17, 19*	5K, 10K
	36	15	5K
PM	10x10	12	20K
	10x14	12	20K
	10x18	12	20K
	12x12	24	20K
	12x18	24	20K
	12x20	18	20K
	12x24	24	20K
	18x18	24	5K, 20K
	18x24	24	20K
	18x30	24	20K
	24x24	24*	5K, 20K
	24x36	24*	5K, 20K
	24x48	24*	5K, 20K
	24x60	24*	5K, 20K
	30x36	24*	5K, 20K
	30x48	24*	5K, 20K
	30x60	24*	5K, 20K
	36x36	24*	5K, 20K
	36x48	24*	5K, 20K
	36x60	24*	5K, 20K
	48x48	24, 30, 36, 42, 48*	20K
Round	12x12	24	20K
	18x18	24	20K




\*Extensions Available

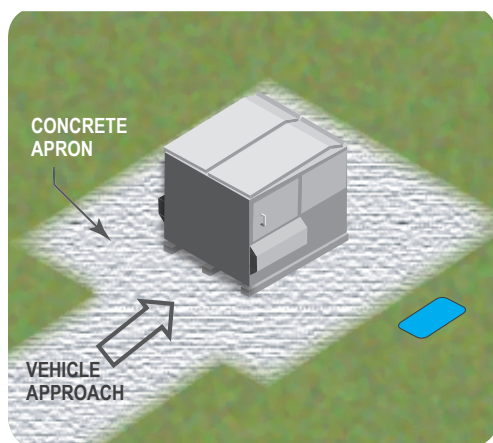
# "ANSI Tier" Selection and Placement in Non-Deliberate Vehicular Traffic Applications

## All load ratings are not the same

All Hubbell enclosures include load ratings either as a specified design load, or as a "Tier" rating that designates the achievement of a particular ANSI load rating level. Most Hubbell enclosures use the ANSI Tier rating system. However, some of the PenCell enclosures use the "K" rating system. More information on both of these ratings can be found in this catalog. If you have any questions, our engineering department is here to help.

The enclosures shown in these sketches have been color coded to indicate the proper Tier level required for the application.

-  Pedestrian/Tier 5
-  Tier 8
-  Tier 15 or 22



## TRASH RECEPTACLE APPLICATION

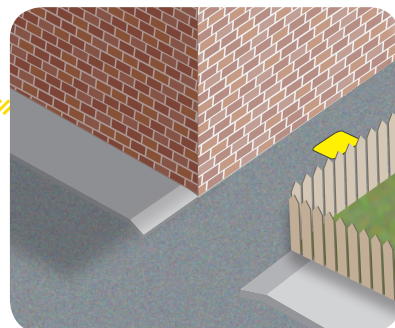
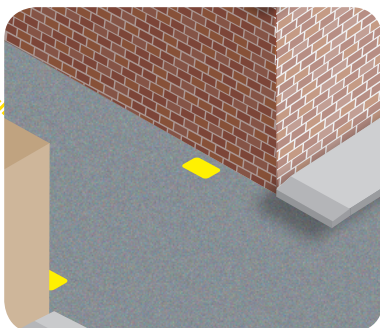
(NON-DELIBERATE TRAFFIC)

Where there is a trash receptacle, place the enclosure away from the concrete that the receptacle is set on. Even though the traffic expected on the receptacle's concrete apron is occasional, it is deliberate because the traffic is both intentional and heavy in nature. Correct placement will ensure the wheels of the truck will not roll over the enclosure.

## DUAL LANE ALLEY

(NON-DELIBERATE TRAFFIC)

In a single lane alleyway, the enclosure should be placed in the center of the alleyway. This minimizes the possibility of the enclosure being run over. In a dual lane alleyway, the enclosure should be placed as close to the building as possible. Typically, two vehicles will not be in the alleyway at the same time, so chances of the enclosure being run over are minimal. Knowledge of the location and expected traffic patterns should be used to determine if traffic will be deliberate or non-deliberate.



## RESIDENTIAL

(NON-DELIBERATE TRAFFIC)

Enclosures may be placed in grassy areas, sidewalks or in areas next to a structure or pole where it is unlikely a vehicle will run over it. Do not place enclosures in the street or driveway where traffic is anticipated and deliberate.





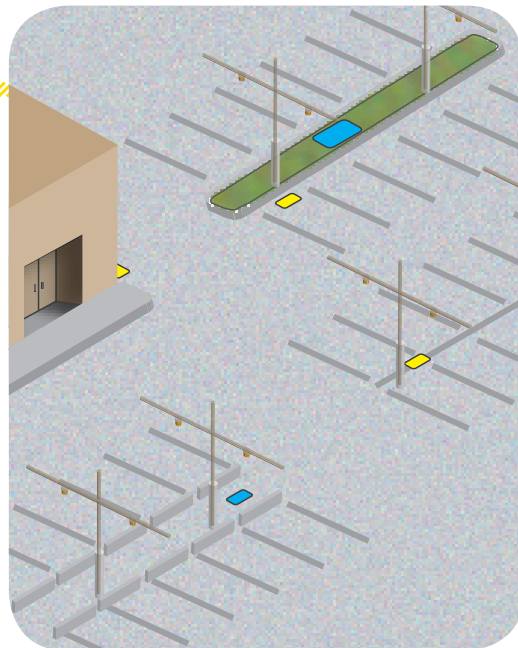
# "ANSI Tier" Selection and Placement in Non-Deliberate Vehicular Traffic Applications

## PARKING LOTS

(NON-DELIBERATE TRAFFIC)

Enclosure applications:

- In the front center of a parking space so that vehicle tires will straddle the enclosure.
- In the grassy area where the parking lot ends.
- Alongside and close to the lighting poles.
- Between parking curbs where the possibility of running over the enclosure is remote.
- Along the building but not in front of a door or pick up area where vehicular traffic is expected.

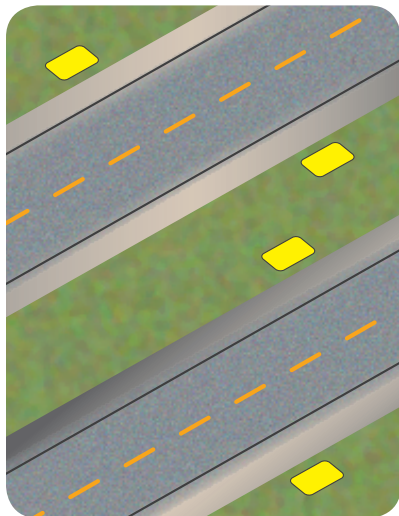


## DIVIDED HIGHWAY

(NON-DELIBERATE TRAFFIC)

On a divided highway, place the enclosure in any area that is not paved and where deliberate traffic is not expected. They can be placed in the grassy median or off the shoulder of the highway.

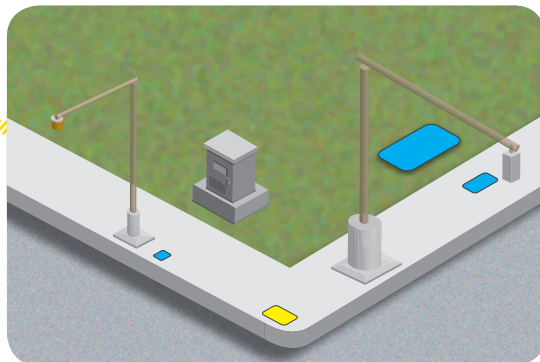
NOTE: The paved shoulder of the highway is normally considered a deliberate traffic location because it may be used as a breakdown lane or as an actual traffic lane in times of construction. Therefore, an enclosure should never be placed in the paved shoulder of a road or in the road itself. The enclosure should be placed off the shoulder, in the grassy areas.



## SIDEWALK & GRASSY AREA

(NON-DELIBERATE TRAFFIC)

An enclosure can be placed in any grassy area and in most sidewalks. However, an enclosure should not be placed in a sidewalk where a driveway crosses over the sidewalk.



# ANSI/SCTE Tier Selection Guide

## Load Ratings – Steadfast Reliability

Many Hubbell underground enclosures are designed to meet or exceed the load requirements set forth in the American National Standards Institute's ANSI/SCTE 77 2013 "Specification for Underground Enclosure Integrity." ANSI tier designations represent the minimum allowable load requirements in the industry to ensure underground enclosures are always secure and reliable.

The ANSI application tier number relates to a nominal design load multiplied by 1,000 pounds. For example, Tier 8 is 8 x 1,000 pounds, or 8,000 lbs. All ANSI tier loadings will have a corresponding test load, which is 50% greater than the design load. The maximum deflection at the indicated design load shall be a half-inch for vertical tests and a quarter-inch per foot of length for lateral tests.

### Application Tiers & Static Vertical Wheel Load Ratings per ANSI/SCTE 77 2013 "Specification for Underground Enclosure Integrity"

**NOTE** — Quazite® products are not intended for use in deliberate traffic areas.

Application Tiers	Loading Requirements				UL Listed to meet ANSI 77 Requirements
<b>Light Duty</b> Pedestrian Traffic Only	<b>Vertical</b>	<b>Test Load</b>	13.3kN	3,000 lbs.	
<b>Tier 5</b> Sidewalk applications with a safety factor for occasional non-deliberate vehicular traffic	<b>Vertical</b>	<b>Design Load</b>	22.2 kN	5,000 lbs.	PC 13"x24" or PC 17"x30" style enclosure and cover assemblies with standard covers (CA) and standard covers w/o bolts (WA).
	<b>Lateral</b>	<b>Design Load</b>	28.7 kPa	600 lbs./sq. ft.	
<b>TIER 8</b> Sidewalk applications with a safety factor for non-deliberate vehicular traffic	<b>Vertical</b>	<b>Design Load</b>	35.6 kN	8000 lbs.	PG and PT style enclosure and cover assemblies up to 30"x 48" and PC style in sizes 6"x 8", 8"x18", 11"x18" and 12"x12" with standard covers (CA) and standard covers w/o bolts (WA).
	<b>Lateral</b>	<b>Design Load</b>	28.7 kPa	600 lbs./sq. ft.	
<b>TIER 15</b> Driveway, parking lot, and off-roadway applications subject to occasional non-deliberate heavy vehicular traffic	<b>Vertical</b>	<b>Design Load</b>	66.7 kN	15,000 lbs.	PG, PT and PC style enclosure and cover assemblies up to 30"x48" with heavy duty covers (HA).
	<b>Lateral</b>	<b>Design Load</b>	38.3 kPa	800 lbs./sq. ft.	
<b>TIER 22</b> Driveway, parking lot, and off-roadway applications subject to non-deliberate heavy vehicular traffic	<b>Vertical</b>	<b>Design Load</b>	100.1 kN	22,500 lbs.	PC, PD, PG and PT style enclosure and cover assemblies up to 30"x 48" with extra heavy duty covers (HH).
	<b>Lateral</b>	<b>Design Load</b>	38.3 kPa	800 lbs./sq. ft.	

#### AASHTO H-20

Deliberate vehicular traffic applications ONLY. Quazite® does not currently offer any enclosures for this application tier.

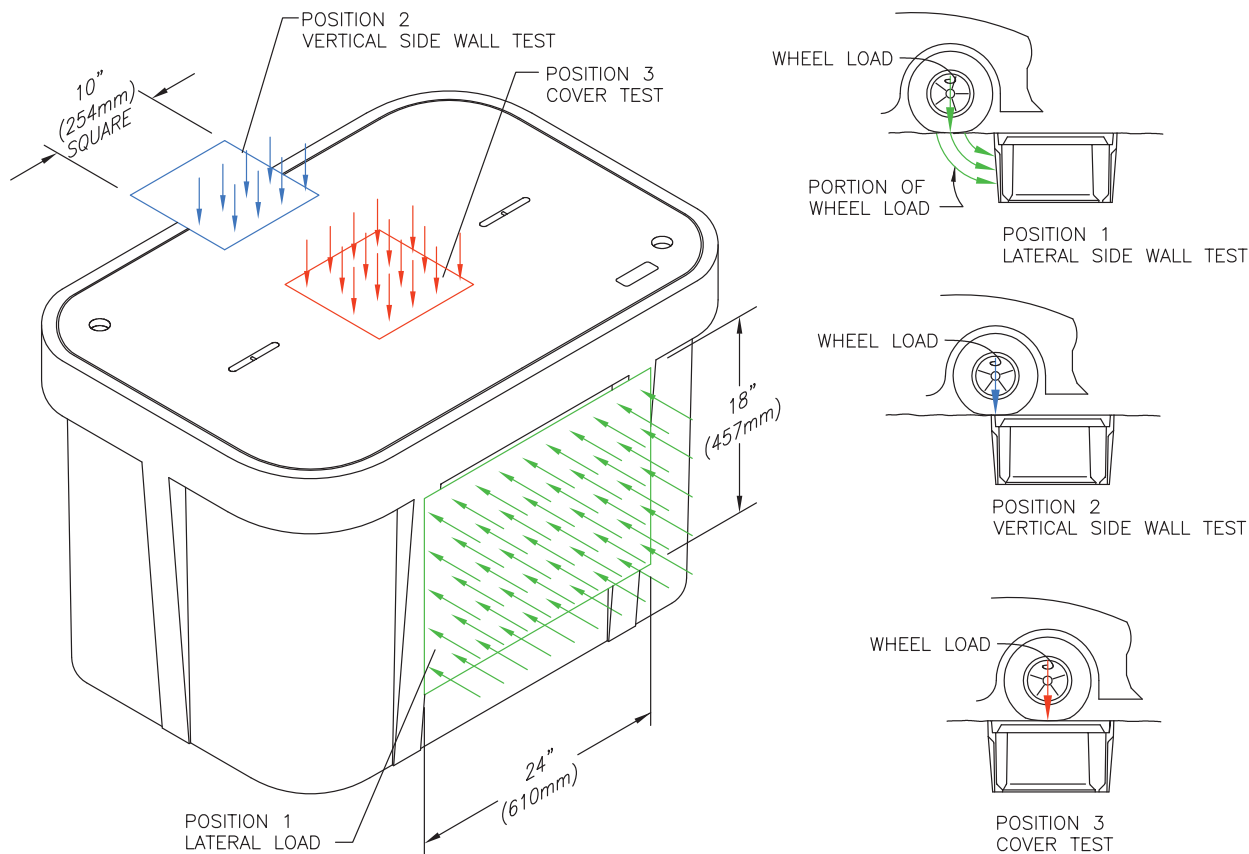
Certified precast concrete, cast iron or other AASHTO recognized materials.\*

**\*There are no AASHTO design or test provisions for polymer composites. Therefore there is no recognized method of testing for qualification. Applying other material testing methods to polymer composites is not recognized by AASHTO. BUYER BEWARE!**

### Three-Position Testing – Proven Endurance.

A key requirement outlined in ANSI/SCTE 77 2013 is three-position testing for enclosures. Three-position testing is a method to verify product performance, and is accomplished by test loading at three pre-designated critical points. Quazite products have been tested at each of the three positions and all have met or surpassed requirements.

- The latest copy of the standard may be purchased from ANSI. It may also be viewed in PDF form on SCTE's website at [http://www.scte.org/documents/pdf/Standards/ANSI\\_SCTE%2077%202013.pdf](http://www.scte.org/documents/pdf/Standards/ANSI_SCTE%2077%202013.pdf)





# Quazite®

UNDERGROUND  
ENCLOSURES

*Hubbell maintains a large inventory of Quazite enclosures to serve your needs.*



## NEC & Underground Enclosures

The National Electric Code states in article 314.30 that enclosures "...shall be designed and installed to withstand all loads likely to be imposed..." and addresses issues related to enclosure size, wiring entries, enclosures without bottoms, and bonding requirements for covers. "

The code references the ANSI/SCTE 77 "Specification for Underground Enclosure Integrity" National Standard, which outlines various tests that enclosures must pass to meet the standard. ANSI/SCTE 77 also provides load charts with Tier ratings to help users determine the appropriate enclosure to select based on the loadings expected in the application.

### Quazite® – UL-Listed to ANSI Standard.

All Quazite® polymer concrete enclosures meet or exceed the test provisions of ANSI/SCTE 77 2013, and most polymer concrete enclosures sized 30" x 48" and smaller are UL-Listed to the ANSI National Standard as referenced in the 2005, 2008, 2011 and 2014 NEC. To achieve this, Quazite® enclosures must pass numerous material and product performance tests before they can meet ANSI/SCTE 77 2013.

### Testing Requirements for ANSI/SCTE 77 2013

- Three-Position Load Testing to simulate actual application performance
- UV Degradation per ASTM G-154
- Fire Resistance per RUS 7CFR 1755.910 (PE-91)
- Chemical Resistance per ASTM D-543
- Water Absorption per ASTM D-570
- Impact Resistance per ASTM D2444
- Accelerated service per ASTM D-756, procedure E

Note: Quazite® recommends testing by third party organizations such as UL or ETL to verify that enclosures meet all test provisions of ANSI/SCTE 77.

### Quazite® – Peace of Mind.

Quazite® enclosures have undergone rigorous physical, environmental, and internal equipment-protection tests, and have been found by UL to meet the requirements required by the ANSI Standard. By adhering to the NEC, ANSI, and UL requirements, in the enclosure-selection process, users are ensured long service life. Quazite® enclosures offer not only improved manageability and cost-efficiency over other enclosures, but peace of mind as well.

*National Fire Protection Agency, 2005, 2008, 2011 and 2014 National Electric Code.*

*Subsequent to the issuance of the 2005 NEC, ANSI approved an updated version of the standard, ANSI/SCTE 77 2013.*

*The latest copy of the standard may be purchased from ANSI. It may also be viewed in PDF form on SCTE's website at [http://www.scte.org/documents/pdf/Standards/ANSI\\_SCTE%2077%202013.pdf](http://www.scte.org/documents/pdf/Standards/ANSI_SCTE%2077%202013.pdf)*



# Quazite Selection Guide

## Style Guide – Tailored Product Variety.

We offer a wide variety of box styles in order to meet your most specialized enclosure needs. Each style offers specific strengths and assets for diverse functionality

### PG Style

Straight sides allow for easy adjustment of box should the grade level change. Used for a variety of purposes, such as a splice box, pull box, equipment enclosure, or for any application requiring easy access to an underground service. PG boxes are stackable for increased depth.

### PC Style

Straight sides allow for easy adjustment of box should the grade level change. All PC boxes are stackable and are available with gasketing.

### PX Style

PX Styles are excellent for service box assemblies and offer flared design to prevent frost heave. PX boxes are also nestable for compact storage.

### PT Style

The flared design prevents frost heave, and covers are interchangeable with many precast concrete parts. PT boxes are also nestable for compact storage.

### PD Style

These enclosures feature a 1 degree flare for maximum strength. Flared design optimizes internal volume and minimizes frost heave.



# Quazite Selection Guide

## • PR Style

This polymer concrete round enclosure can prevent a cover from falling into the box.



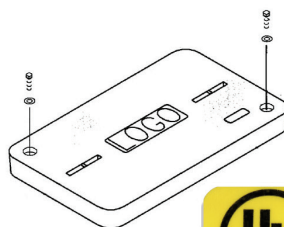
## UL Listing

 indicates UL Listing

### UL Listed Enclosures

Determine if a UL listed enclosure is required for your installation. Federally funded electrical and telecom projects, as well as many state and municipal projects, generally require the use of a UL Listed product whenever one is available.

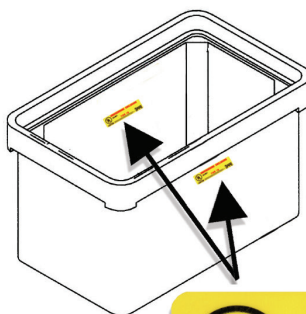
Most Quazite® polymer concrete underground handhole enclosures in sizes through 30" x 48" and smaller are agency listed. These products are clearly marked with the UL label on both the box and underneath the cover. Special order boxes with holes (or mouseholes, etc.) may qualify for UL listing as long as the holes do not exceed more than 25 percent of the area of each sidewall and as long as the holes do not cut into a structural reinforcing rib, corner, or box lip.



**COVER FOR  
UNDERGROUND ENCLOSURE**  
**66WF TIER 15**

Compliant with all test provisions of ANSI/SCTE 77-2007  
Listed for all electrical & communications equipment and  
cable, water and gas applications

**Quazite®**  
MADE IN USA



**UNDERGROUND ENCLOSURE**

**66WF**

**TIER 15**

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MADE IN USA

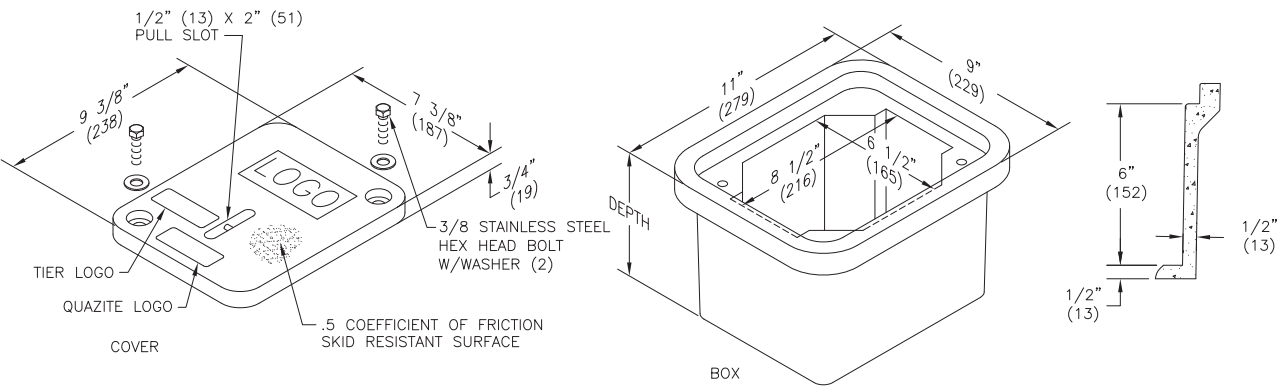
Highlighted areas indicate UL Listing

# Quazite: Available Size Chart

UNDERGROUND  
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Style	Size	Depths	Assembly Load Rating Options	UL
PC	6x8	6 3/4	Tier 15	Yes
	8x8	12, 18	Tier 15	Yes
	8x18	7, 8	Tier 8, Tier 15	Yes
	11x18	12, 18	Tier 8	Yes
	12x12	12	Tier 8, Tier 15	Yes
	13x24	12	Tier 5	Yes
	17x30	12	Tier 5	Yes
PD	13x24	18, 26	Tier 8, Tier 15, Tier 22	Yes
	17x30	18, 26	Tier 8, Tier 15, Tier 22	Yes
	24x36	18, 26, 48	Tier 8, Tier 15, Tier 22	Yes
	30x48	24, 48	Tier 8, Tier 15, Tier 22	Yes
PG	11x18	12, 18	Tier 8, Tier 15, Tier 22	Yes
	11x20	12, 18	Tier 8, Tier 15, Tier 22	No
	13x24	12, 18, 24	Tier 8, Tier 15, Tier 22	Yes
	17x30	12, 18, 22, 24, 30	Tier 8, Tier 15, Tier 22	Yes
	24x24	24 (Extensions Available)	Tier 8, Tier 15, Tier 22	Yes
	24x36	18, 24, 30, 36, 42 (Extensions Available)	Tier 8, Tier 15, Tier 22	Yes
	30x48	18, 24, 36, 48 (Extensions Available)	Tier 8, Tier 15, Tier 22	Yes
	30x60	21, 30, 36	Tier 5, Tier 15, Tier 22	No
	36x36	36 (Extensions Available)	Tier 8, Tier 15, Tier 22	Yes
	36x60	19, 24, 31, 36 (Extensions Available)	Tier 5, Tier 15, Tier 22	No
	36x72	21, 36	Tier 5, Tier 15, Tier 22	No
	48x48	36, 48	Tier 5, Tier 15, Tier 22	No
	48x72	36, 48 (Extensions Available)	Tier 5, Tier 15, Tier 22	No
	48x78	27, 36	Design 12,000 lbs / Test 24,000 lbs	No
	48x96	48 (Extensions Available)	Tier 5, Tier 15, Tier 22	No
PT	10x15	18	Tier 8, Tier 15	No
	13x24	18	Tier 8, Tier 15	Yes
	17x30	18	Tier 8, Tier 15	Yes
PX	12x12	24	Tier 8, Tier 15	Yes
Median	5x16		Tier 8, Tier 15	No
	10x12		Tier 8, Tier 15	No
Round	27	36, 48	Tier 8, Tier 15, Tier 22	Yes
	39	18, 24, 36, 48, 72	Tier 8, Tier 15, Tier 22	Yes

Hex Head Bolts are St



Covers

	DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	W/ 2 Bolts	15	15,000 / 22,500	4	40	PC0608HA00**
UL	Gasketed w/4 bolts	15	15,000 / 22,500	4	40	PC0608HG00**

Replace \*\* with a logo code found on page U54.  
NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

Boxes

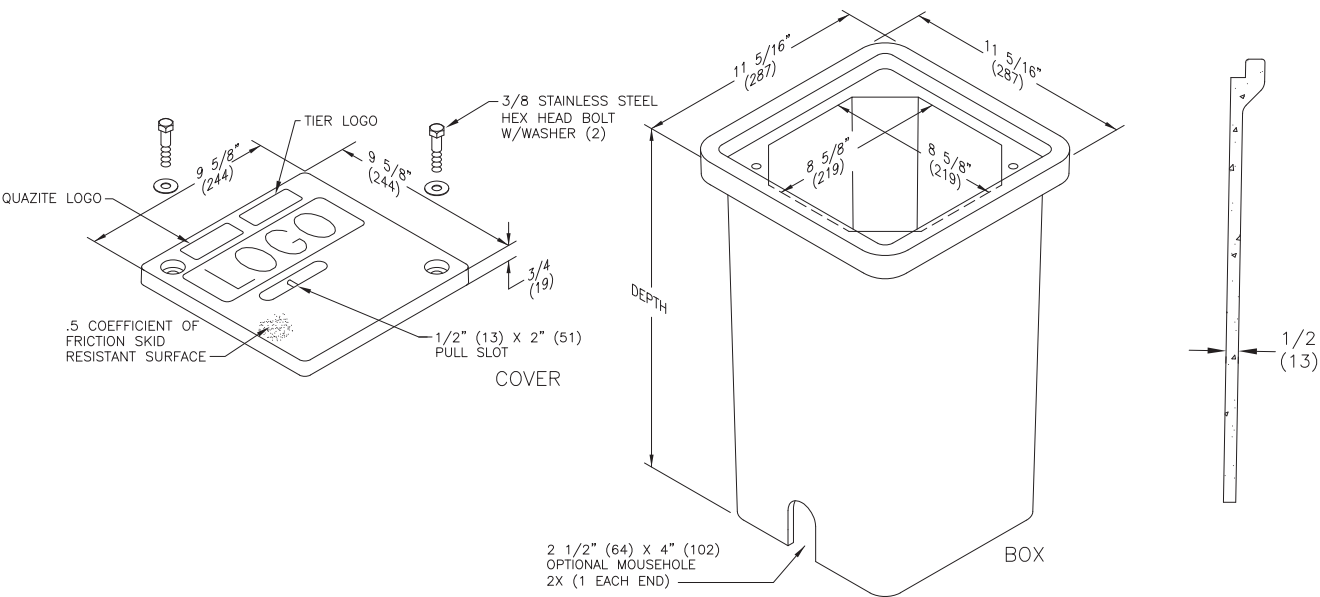
	DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	Standard Open Bottom	6 3/4"	15	15,000/22,500	14	160	PC0608BA06
UL	Solid Bottom	7 1/4"	15	15,000/22,500	15	160	PC0608DA06

To order gasketed boxes, replace the letter "A" with the letter "G".  
NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

# Dimensions / Data

## 8" x 8" PC Style Polymer Concrete (Stackable) Assembly

Hex Head Bolts are Standard



UNDERGROUND  
ENCLOSURES

### Covers

	DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	W/ 2 Bolts	15	15,000 / 22,500	6	36	PC0808HA00**
UL	Gasketed W/ 2 Bolts	15	15,000 / 22,500	6	36	PC0808HG00**

Replace \*\* with a logo code found on page U54.  
NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

### Boxes

	DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	Standard Open Bottom	12"	15	15,000/22,500	25	36	PC0808BA12
UL		18"	15	15,000/22,500	36	24	PC0808BA18
UL	Solid Bottom	18 1/2"	15	15,000/22,500	42	24	PC0808DA18

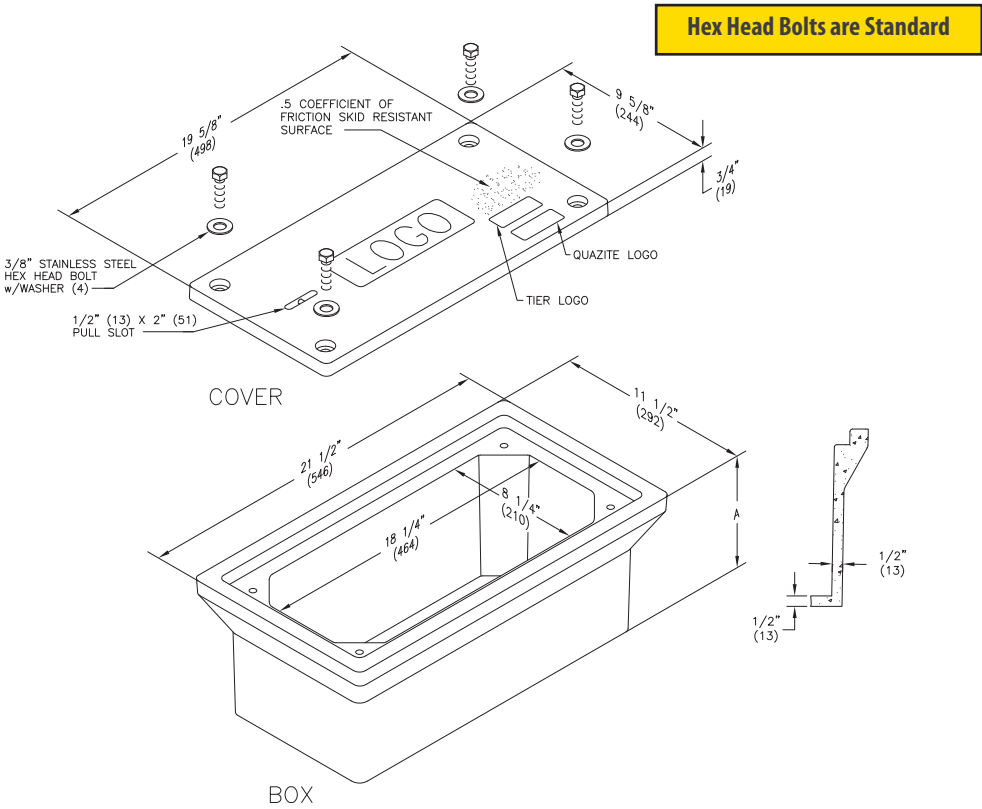
To order boxes with 2 standard mouseholes, replace the letter "A" with the letter "B".  
To order gasketed boxes, replace the letter "A" with the letter "G".  
NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.



# Dimensions / Data

## 8" x 18" PC Style Polymer Concrete (Stackable) Assembly

UNDERGROUND  
ENCLOSURES



### Covers

	DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	W/ 4 Bolts	8	8,000 / 12,000	11	20	PC0818CA00**
UL	No Bolts	8	8,000 / 12,000	11	20	PC0818WA00**
UL	W/ 4 Bolts	15	15,000 / 22,500	11	20	PC0818HA00**

Replace \*\* with a logo code found on page U54.  
To order gasketed covers replace the letter "A" with the letter "G".  
NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

### Boxes

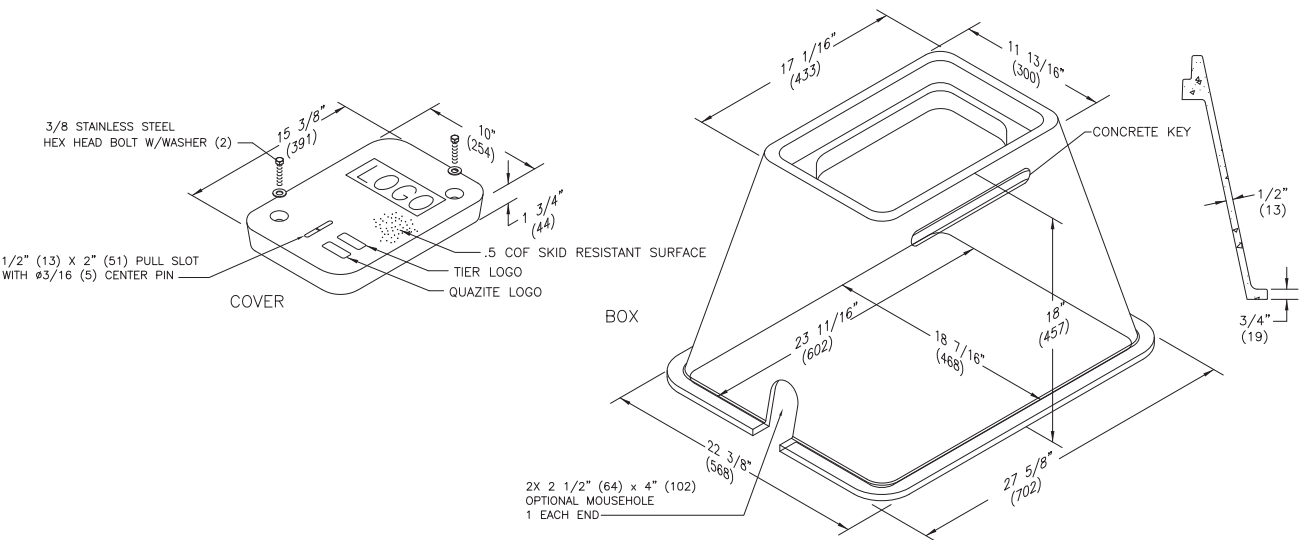
	DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	Standard Open Bottom	7"	15	15,000/22,500	25	20	PC0818BA07
UL		8"	15	15,000/22,500	27	20	PC0818BA08
UL	Solid Bottom	7 1/2"	15	15,000/22,500	32	20	PC0818DA07
UL		8 1/2"	15	15,000/22,500	35	20	PC0818DA08

To order boxes with 2 standard mouseholes, replace the letter "A" with the letter "B".  
To order gasketed boxes, replace the letter "A" with the letter "G".  
NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

# Dimensions / Data

## 10" x 15" PT Style Polymer Concrete (Nestable) Assembly

Hex Head Bolts are Standard



UNDERGROUND  
ENCLOSURES

### Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 2 Bolts	8	8,000 / 12,000	20	40	PG1015CA00**
W/ 2 Bolts	15	15,000 / 22,500	20	40	PG1015HA00**
No Bolts	8	8,000 / 12,000	20	40	PG1015WA00**

To order gasketed covers, replace the letter "A" with the letter "G".

Replace \*\* with a logo code found on page U54. See page U59 for meter and touch/radio read cover options.

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

### Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	18"	15	15,000/22,500	70	5	PT1015BA18

To order boxes with 2 standard mouseholes, replace the letter "A" with the letter "B".

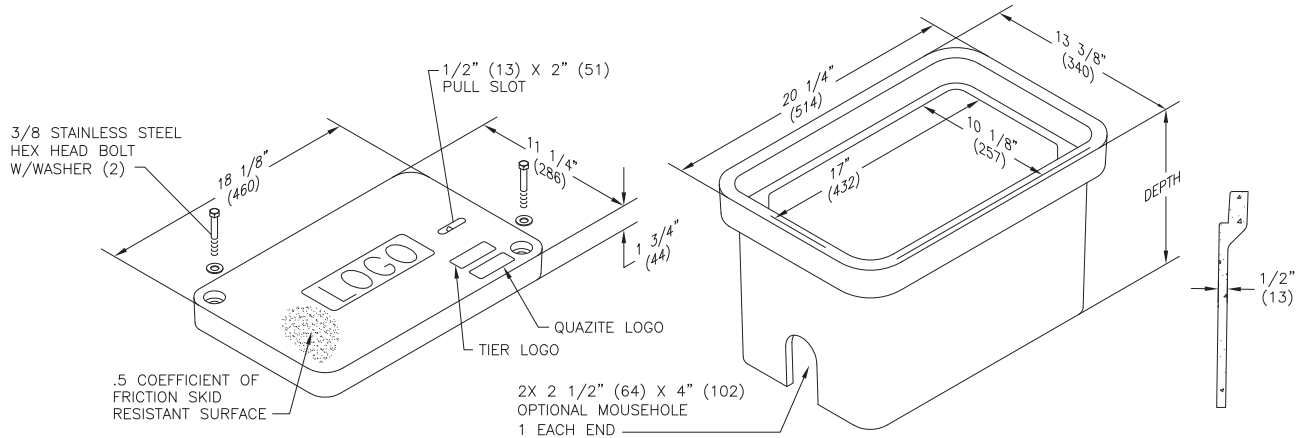
To order gasketed boxes, replace the letter "A" with the letter "G".

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

# Dimensions / Data

## 11" x 18" PG Style Polymer Concrete (Stackable) Assembly

Hex Head Bolts are Standard



### Covers

	DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	W/ 2 Bolts	8	8,000 / 12,000	27	40	PG1118CA00**
UL	W/ 2 Bolts	15	15,000 / 22,500	27	40	PG1118HA00**
UL	No Bolts	8	8,000 / 12,000	27	40	PG1118WA00**
UL	W/ 2 Bolts	22	22,500 / 33,750	27	40	PG1118HH00**

To order gasketed covers, replace the letter "A" with the letter "G".

Replace \*\* with a logo code found on page U54. See page U59 for meter and touch/radio read cover options.

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

### Boxes

	DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	Standard Open Bottom	12"	22	22,500 / 33,750	40	30	PG1118BA12
UL		18"		22,500 / 33,750	53	24	PG1118BA18
UL	Solid Bottom	12 1/2"	22	22,500 / 33,750	43	30	PG1118DA12
UL		18 1/2"		22,500 / 33,750	60	24	PG1118DA18
UL	Footed Box	12 1/2"	22	22,500 / 33,750	41	30	PG1118JA12
UL		18 1/2"		22,500 / 33,750	55	24	PG1118JA18

To order boxes with 2 standard mouseholes, replace the letter "A" with the letter "B".

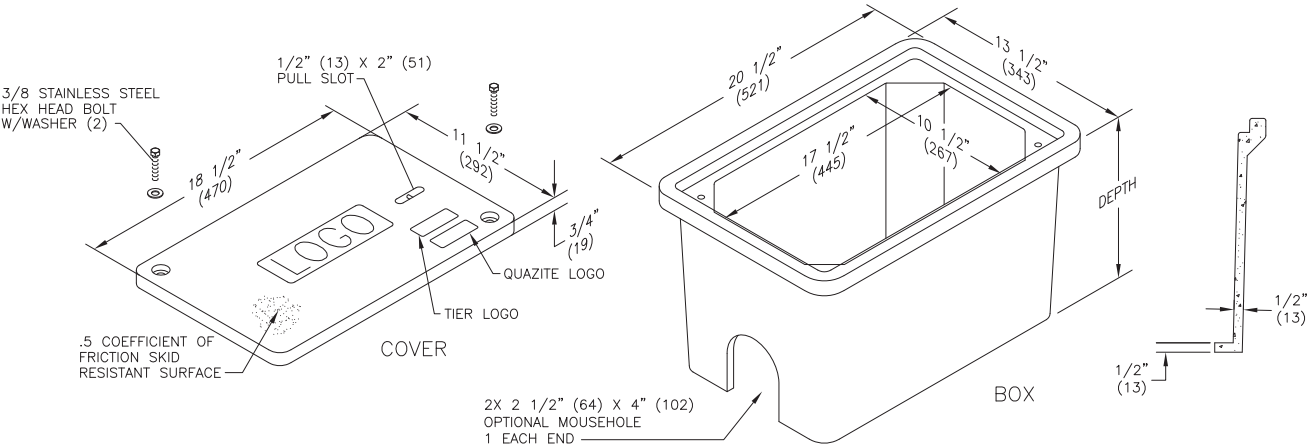
To order gasketed boxes, replace the letter "A" with the letter "G".

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

# Dimensions / Data

## 11"x 18" PC Style Polymer Concrete (Stackable) Assembly

Hex Head Bolts are Standard



UNDERGROUND  
ENCLOSURES

### Covers

	DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	W/ 2 Bolts	8	8,000 / 12,000	13	40	PC1118CA00**
UL	Gasketed W/ 4 Bolts	8	8,000 / 12,000	13	40	PC1118CG00**
UL	No Bolts	8	8,000 / 12,000	13	40	PC1118WA00**

Replace \*\* with a logo code found on page U54.

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

### Boxes

	DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	Std. Open Bottom	12"	15	15,000 / 22,500	37	24	PC1118BA12
UL		18"		15,000 / 22,500	53	30	PC1118BA18
UL	Solid Bottom	12 1/2"	15	15,000 / 22,500	45	24	PC1118DA12
UL		18 1/2"		15,000 / 22,500	60	30	PC1118DA18
UL	Footed Box	12 1/2"	15	15,000 / 22,500	37	24	PC1118JA12
UL		18 1/2"		15,000 / 22,500	56	30	PC1118JA18

To order boxes with 2 standard mouseholes, replace the letter "A" with the letter "B".

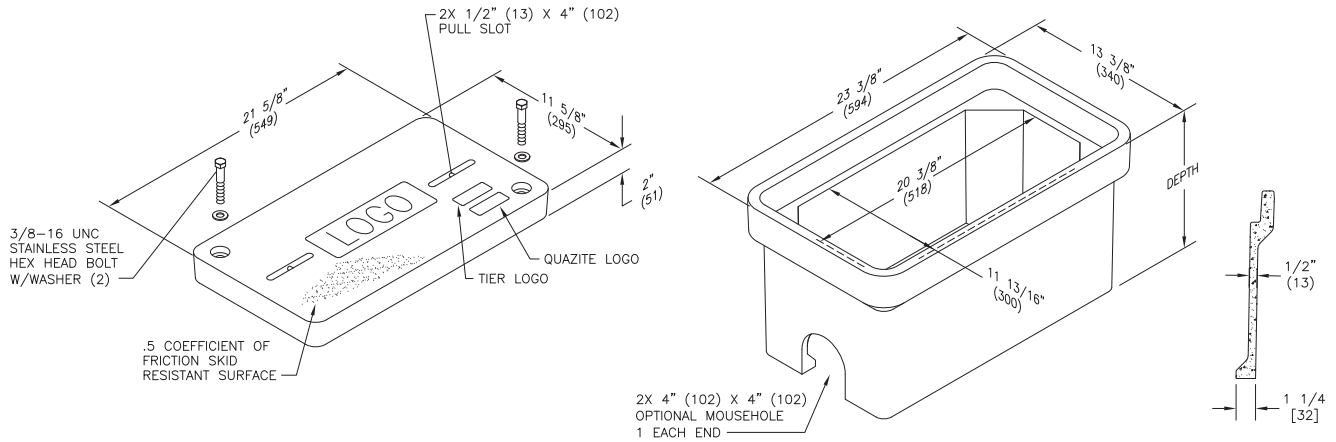
To order gasketed boxes, replace the letter "A" with the letter "G".

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

# Dimensions / Data

## 11" x 20" PG Style Polymer Concrete (Stackable) Assembly

Hex Head Bolts are Standard



### Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 2 Bolts	8	8,000 / 12,000	28	30	PG1120CA00**
W/ 2 Bolts	15	15,000 / 22,500	38	30	PG1120HA00**
No Bolts	8	8,000 / 12,000	28	30	PG1120WA00**
W/ 2 Bolts	22	22,500 / 33,750	38	30	PG1120HH00**

To order gasketed covers, replace the letter "A" with the letter "G".

Replace \*\* with a logo code found on page U54. See page U59 for meter and touch/radio read cover options.

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

### Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	12"	22	22,500 / 33,750	50	20	PG1120BA12
	18"		22,500 / 33,750	69	16	PG1120BA18
Solid Bottom	12 1/2"	22	22,500 / 33,750	58	20	PG1120DA12
	18 1/2"		22,500 / 33,750	77	16	PG1120DA18

To order boxes with 2 standard mouseholes, replace the letter "A" with the letter "B".

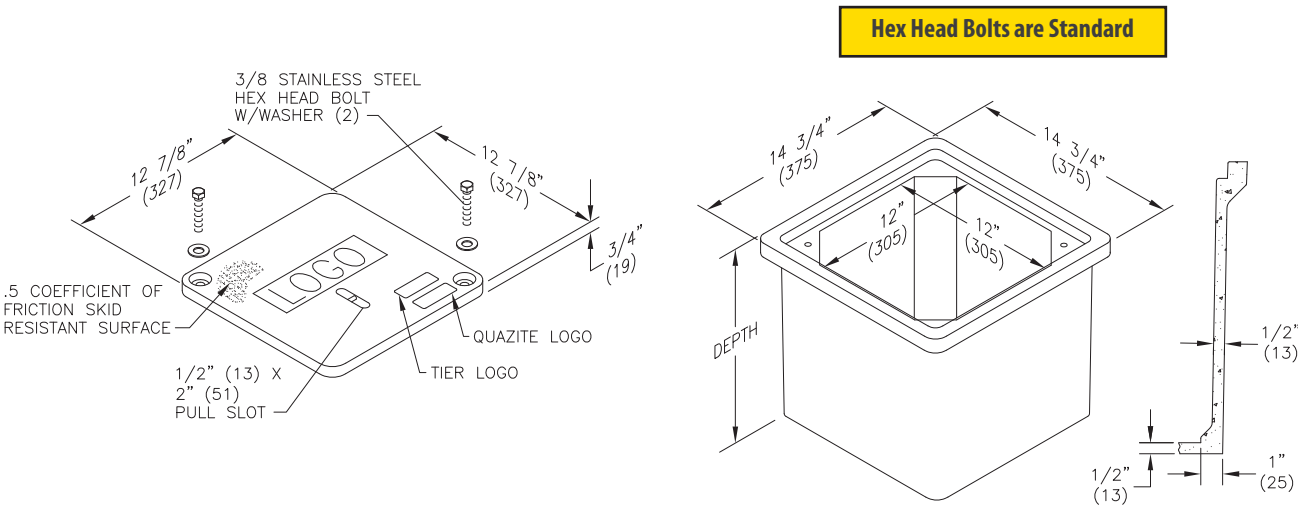
To order gasketed boxes, replace the letter "A" with the letter "G".

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.



# Dimensions / Data

## 12"x 12" PC Style Polymer Concrete (Stackable) Assembly



UNDERGROUND  
ENCLOSURES

### Covers

	DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	W/ 2 Bolts	8	8,000 / 12,000	12	60	PC1212CA00**
UL	W/ 2 Bolts	15	15,000 / 22,500	12	60	PC1212HA00**
UL	No Bolts	8	8,000 / 12,000	12	60	PC1212WA00**

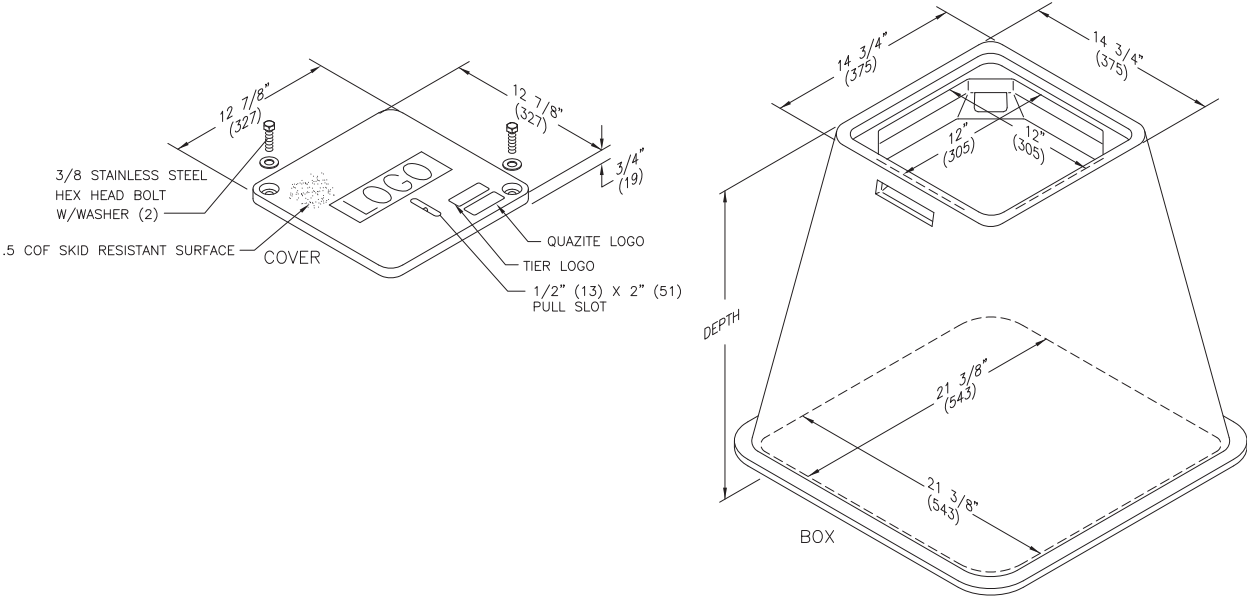
To order gasketed covers, replace the letter "A" with the letter "G".  
Gasketed covers are with 4 bolts.  
Replace \*\* with a logo code found on page U54.  
NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do make the enclosure water tight.

### Boxes

	DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	Standard Open Bottom	12"	15	15,000 / 22,500	36	30	PC1212BA12
UL	Solid Bottom	12 1/2"	15	15,000 / 22,500	41	30	PC1212DA12

To order gasketed boxes, replace the letter "A" with the letter "G".  
Gaskets reduce the inflow of fluids but do not make the enclosure water tight.  
NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do make the enclosure water tight.

Hex Head Bolts are Standard



Covers

	DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	W/ 2 Bolts	8	8,000 / 12,000	20	60	PC1212CA00**
UL	W/ 2 Bolts	15	15,000 / 22,500	20	60	PC1212HA00**
UL	No Bolts	8	8,000 / 12,000	20	60	PC1212WA00**

To order gasketed covers, replace the letter "A" with the letter "G".  
Gasketed covers are with 4 bolts.  
Replace \*\* with a logo code found on page U54.  
NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

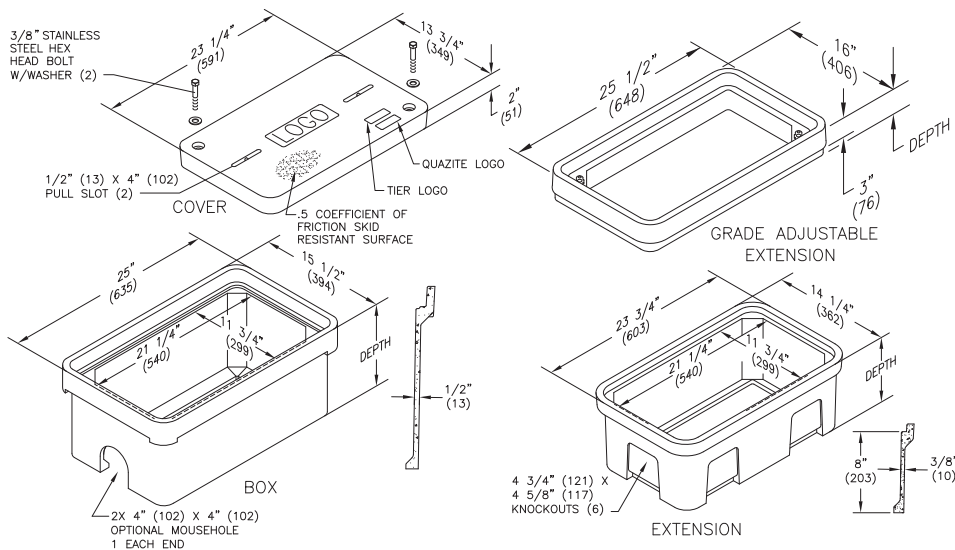
Boxes

	DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	Standard Open Bottom	24"	15	15,000 / 22,500	85	5	PX1212BA24

To order gasketed boxes, replace the letter "A" with the letter "G".  
NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

# Dimensions / Data

## 13" x 24" PG Style Polymer Concrete (Stackable) Assembly



Hex Head Bolts are Standard

### Covers



DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 2 Bolts	8	8,000 / 12,000	33	30	PG1324CA00**
W/ 2 Bolts	15	15,000 / 22,500	51	30	PG1324HA00**
W/ 2 Bolts	22	22,500 / 33,750	54	30	PG1324HH00**
No Bolts	8	8,000 / 12,000	33	30	PG1324WA00**

To order gasketed covers, replace the letter "A" with the letter "G".

Replace \*\* with a logo code found on page U54. See page U59 for meter and touch/radio read cover options.

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

Available with EZ Locate.

### Boxes



DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	12"	22	22,500 / 33,700	53	20	PG1324BA12
	18"		22,500 / 33,700	72	16	PG1324BA18
	24"		22,500 / 33,700	91	12	PG1324BA24
Solid Bottom	12 1/2"	22	22,500 / 33,700	63	20	PG1324DA12
	18 1/2"		22,500 / 33,700	85	16	PG1324DA18
	24 1/2"		22,500 / 33,700	107	12	PG1324DA24

To order boxes with 2 standard mouseholes, replace the letter "A" with the letter "B".

To order gasketed boxes, replace the letter "A" with the letter "G".

### Extensions (for use under box only, one per box)

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
8" - Open Bottom	8 3/4"	22	22,500 / 33,750	25	24	PG1324EA08
8" - Solid Bottom	9 1/4"	22	22,500 / 33,750	35	24	PG1324RA08

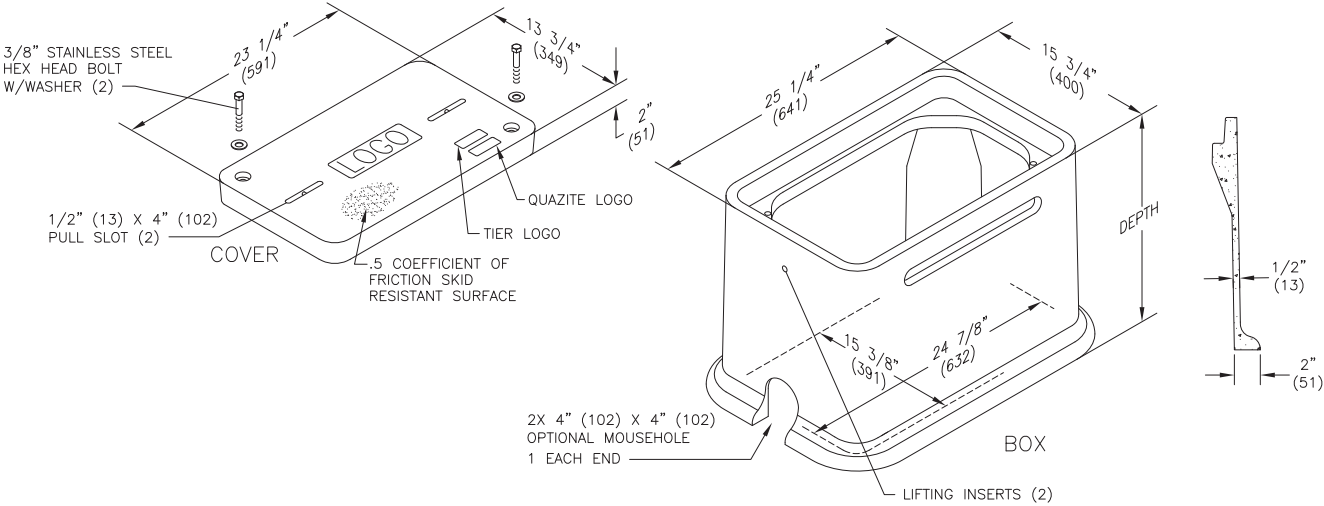
### Grade Adjustable Extension (for use on top of box only, one per box)

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
3" Top Extension	5 1/8"	22	22,500 / 33,750	37	24	PG1324ED03

# Dimensions / Data

## 13" x 24" PD Style Polymer Concrete (Stackable) Assembly

Hex Head Bolts are Standard



### Covers

	DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	W/ 2 Bolts	8	8,000 / 12,000	33	30	PG1324CA00**
UL	W/ 2 Bolts	15	15,000 / 22,500	51	30	PG1324HA00**
UL	W/ 2 Bolts	22	22,500 / 33,750	54	30	PG1324HH00**
UL	No Bolts	8	8,000 / 12,000	33	30	PG1324WA00**

Replace \*\* with a logo code found on page U54. See page U59 for meter and touch/radio read cover options.  
To order gasketed covers, replace the letter "A" with the letter "G".

### Boxes

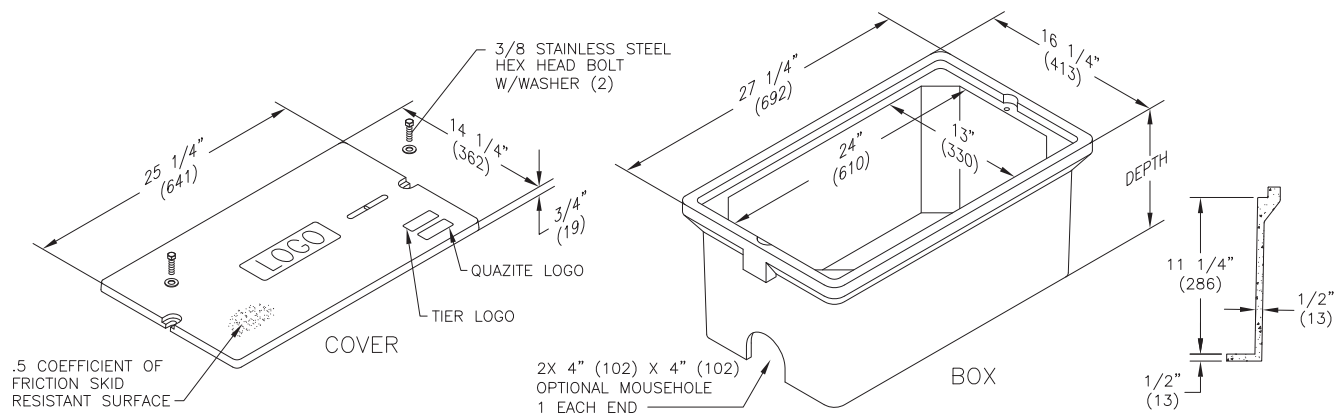
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	18"	22	22,500 / 33,750	104	4	PD1324BA18
Open Bottom	26"	22	22,500 / 33,750	133	4	PD1324BA26

To order boxes with 2 standard mouseholes, replace the letter "A" with the letter "B".  
To order gasketed boxes, replace the letter "A" with the letter "G".  
NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

# Dimensions / Data

## 13"x 24" PC Style Polymer Concrete (Stackable) Assembly

Hex Head Bolts are Standard



### Covers

	DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	W/ 2 Bolts	5	5,000 / 7,500	23	40	PC1324CA00**
UL	No Bolts	5	5,000 / 7,500	23	40	PC1324WA00**

To order gasketed covers, replace the letter "A" with the letter "G".

Replace \*\* with a logo code found on page U54.

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

### Boxes

	DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	Standard Open Bottom	12"	5	5,000 / 7,500	50	20	PC1324BA12
UL	Solid Bottom	12 1/2"	5	5,000 / 7,500	60	20	PC1324DA12
UL	Footed Box	12 1/2"	5	5,000 / 7,500	57	20	PC1324JA12

To order boxes with 2 standard mouseholes, replace the letter "A" with the letter "B".

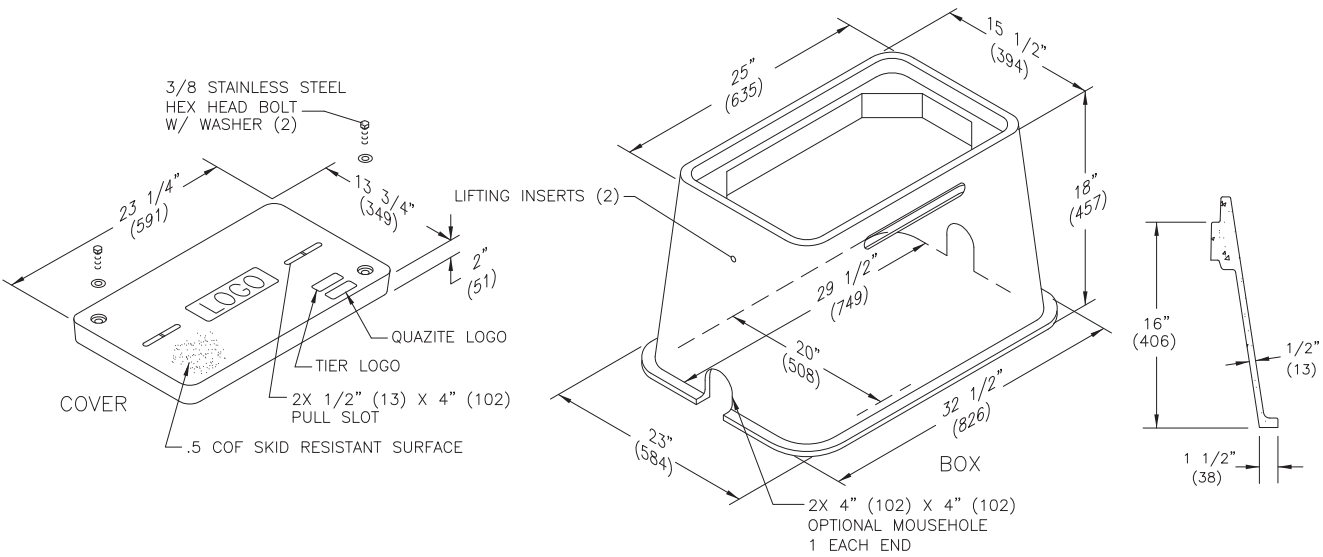
To order gasketed boxes, replace the letter "A" with the letter "G".

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

UNDERGROUND  
ENCLOSURES



Hex Head Bolts are Standard



Covers

	DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	W/ 2 Bolts	8	8,000 / 12,000	32	30	PT1324CA00**
UL	W/ 2 Bolts	15	15,000 / 22,500	49	30	PT1324HA00**

To order gasketed covers, replace the letter "A" with the letter "G".  
Replace \*\* with a logo code found on page U54. See page U59 for meter and touch/radio read cover options.  
NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

Boxes

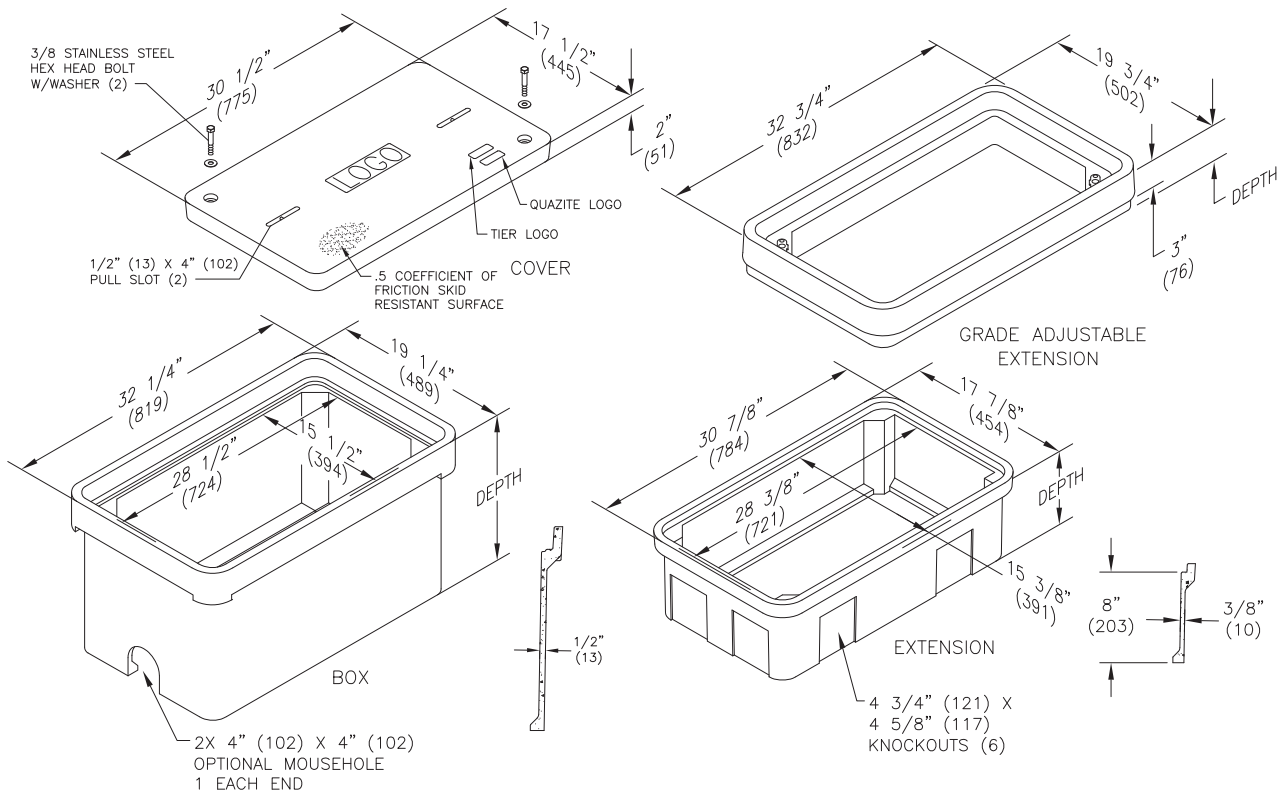
	DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	Standard Open Bottom	18"	15	15,000 / 22,500	97	5	PT1324BA18

To order boxes with 2 standard mouseholes, replace the letter "A" with the letter "B".  
To order gasketed boxes, replace the letter "A" with the letter "G".  
NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

# Dimensions / Data

## 17" x 30" PG Style Polymer Concrete (Stackable) Assembly

Hex Head Bolts are Standard



UNDERGROUND  
ENCLOSURES

### Covers

	DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	W/ 2 Bolts	8	8,000 / 12,000	52	20	PG1730CA00**
UL	W/ 2 Bolts	15	15,000 / 22,500	83	20	PG1730HA00**
UL	W/ 2 Bolts	22	22,500 / 33,750	83	20	PG1730HH00**
UL	No Bolts	8	8,000 / 12,000	52	20	PG1730WA00**

To order gasketed covers, replace the letter "A" with the letter "G".  
Replace \*\* with a logo code found on page U54. See page U59 for meter and touch/radio read cover options.  
NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.  
Available with EZ Locate.

# Dimensions / Data 17"x 30" PG Style Polymer Concrete (Stackable) Assembly (Continued)

Hex Head Bolts are Standard

## Boxes (Box depths 22" thru 30" must be used as bottom of any stack)

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	12"	22	22,500 / 33,750	67	10	PG1730BA12
	18"		22,500 / 33,750	94	8	PG1730BA18
	22"		22,500 / 33,750	106	6	PG1730BA22
	24"		22,500 / 33,750	122	6	PG1730BA24
	30"		22,500 / 33,750	144	4	PG1730BA30
Solid Bottom	12 1/2"	22	22,500 / 33,750	85	10	PG1730DA12
	18 1/2"		22,500 / 33,750	112	8	PG1730DA18
	22 1/2"		22,500 / 33,750	124	6	PG1730DA22
	24 1/2"		22,500 / 33,750	137	6	PG1730DA24
	30 1/2"		22,500 / 33,750	150	4	PG1730DA30

To order boxes with 2 standard mouseholes, replace the letter "A" with the letter "B".

To order gasketed boxes, replace the letter "A" with the letter "G".

NOTE: Gasketed cover and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

## Bottom Extensions (for use under 12" and 18" boxes only, one per box)

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Open bottom	8 3/4"	22	22,500 / 33,750	36	12	PG1730EA08
Solid bottom	9 1/4"	22	22,500 / 33,750	55	12	PG1730RA08

## Grade Adjustable Extension (for use on top of box only, one per box)

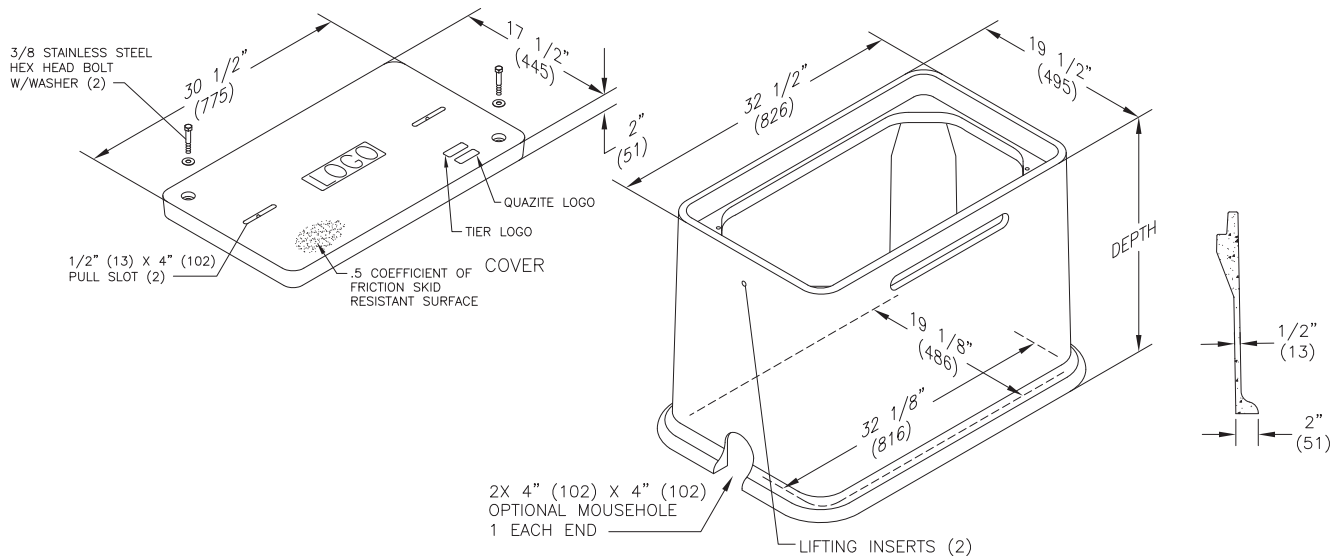
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
3" Top extension	5 1/8"	22	22,500 / 33,750	48	12	PG1730ED03

# Dimensions / Data

## 17" x 30" PD Style Polymer Concrete Assembly

Hex Head Bolts are Standard

UNDERGROUND  
ENCLOSURES



### Covers

	DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	W/ 2 Bolts	8	8,000 / 12,000	52	20	PG1730CA00**
UL	W/ 2 Bolts	15	15,000 / 22,500	83	20	PG1730HA00**
UL	W/ 2 Bolts	22	22,500 / 33,750	83	20	PG1730HH00**
UL	No Bolts	8	8,000 / 12,000	52	20	PG1730WA00**

To order gasketed covers, replace the letter "A" with the letter "G".  
Replace \*\* with a logo code found on page U54. See page U59 for meter and touch/radio read cover options.

### Boxes

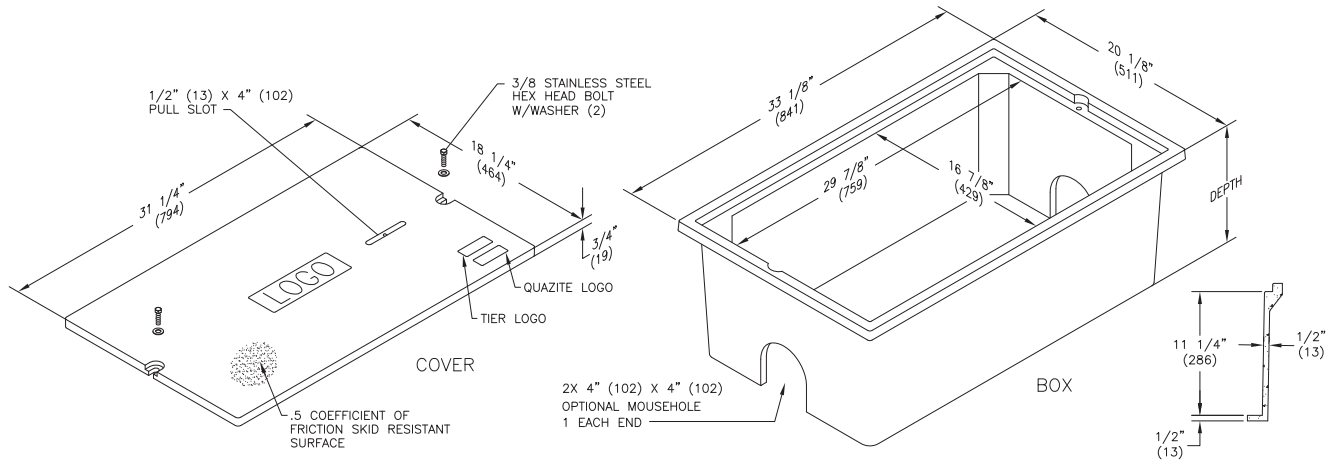
	DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	Standard Open Bottom	18"	22	22,500 / 33,750	129	4	PD1730BA18
UL	Open Bottom	26"	22	22,500 / 33,750	166	4	PD1730BA26

To order boxes with 2 standard mouseholes, replace the letter "A" with the letter "B".  
To order gasketed boxes, replace the letter "A" with the letter "G".  
NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

# Dimensions / Data

## 17" x 30" PC Style Polymer Concrete (Stackable) Assembly

Hex Head Bolts are Standard



### Covers

	DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	W/ 2 Bolts	5	5,000 / 7,500	33	30	PC1730CA00**
UL	No Bolts	5	5,000 / 7,500	33	30	PC1730WA00**

To order gasketed covers, replace the letter "A" with the letter "G".

Replace \*\* with a logo code found on page U54.

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

### Boxes

	DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	Standard Open Bottom	12"	5	5,000 / 7,500	58	10	PC1730BA12
UL	Solid Bottom	12 1/2"	5	5,000 / 7,500	83	10	PC1730DA12
UL	Footed Box	12 1/2"	5	5,000 / 7,500	67	10	PC1730JA12

To order boxes with 2 standard mouseholes, replace the letter "A" with the letter "B".

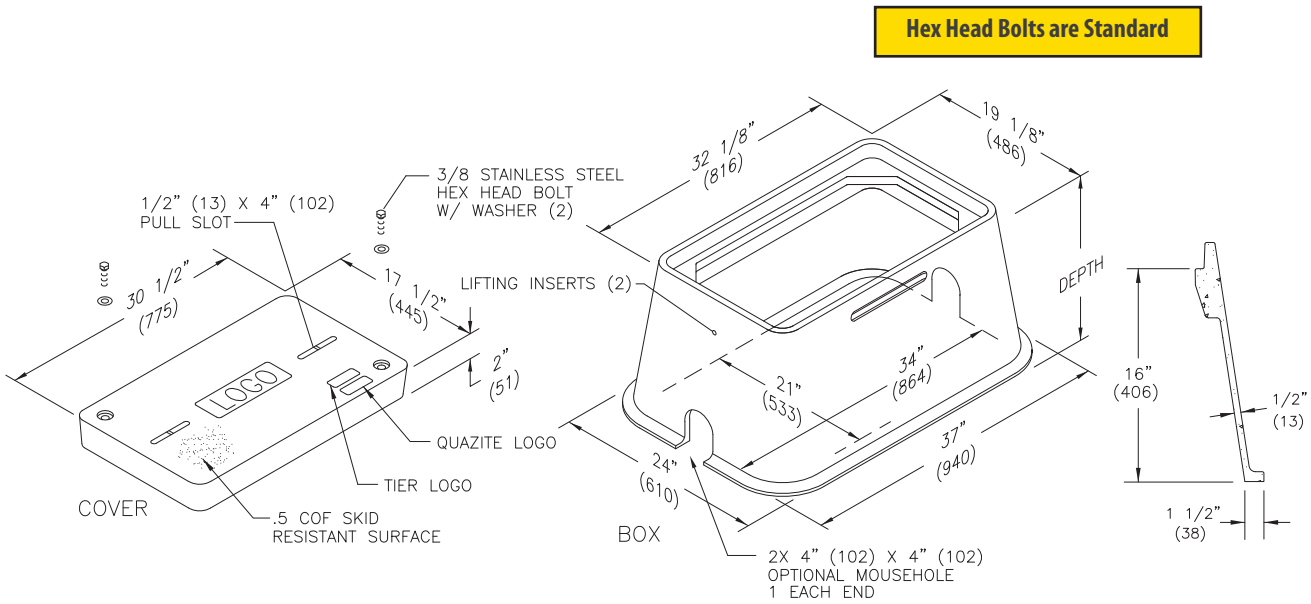
To order gasketed boxes, replace the letter "A" with the letter "G".

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.



# Dimensions / Data

## 17" x 30" PT Style Polymer Concrete (Nestable) Assembly



UNDERGROUND  
ENCLOSURES

### Covers

	DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	W/ 2 Bolts	8	8,000 / 12,000	52	20	PT1730CA00**
UL	W/ No Bolts	8	8,000 / 12,000	52	20	PT1730WA00**
UL	W/ 2 Bolts	15	15,000 / 22,500	83	20	PT1730HA00**

To order gasketed covers, replace the letter "A" with the letter "G".

Replace \*\* with a logo code found on page U54. See page U59 for meter and touch/radio read cover options.

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

### Boxes

	DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	Standard Open Bottom	18"	15	15,000 / 22,500	126	5	PT1730BA18

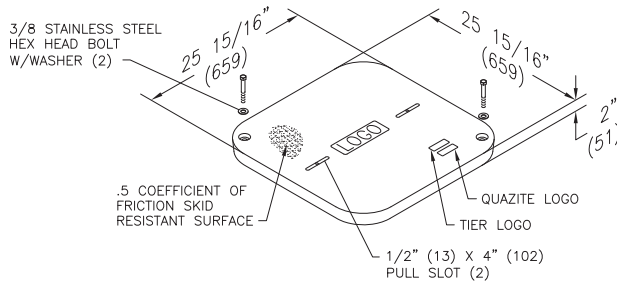
To order boxes with 2 standard mouseholes, replace the letter "A" with the letter "B".

To order gasketed boxes, replace the letter "A" with the letter "G".

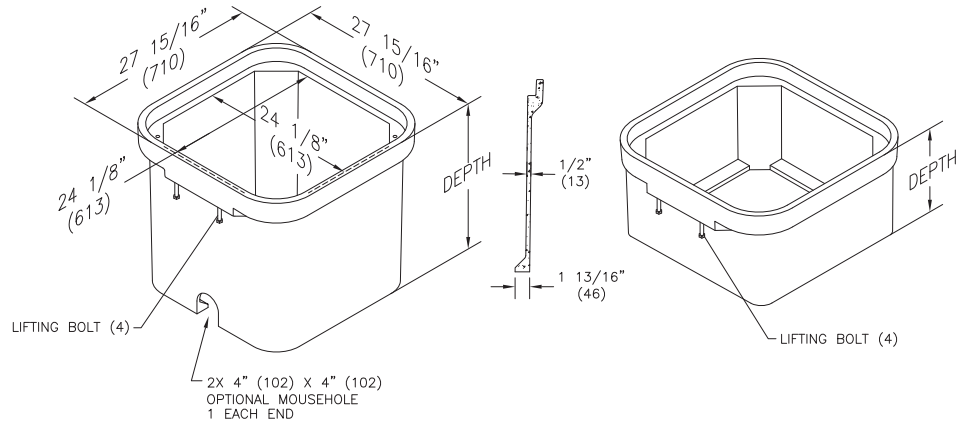
NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

# Dimensions / Data

## 24" x 24" PG Style Polymer Concrete (Stackable) Assembly



Hex Head Bolts are Standard



### Covers

	DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	W/ 2 Bolts	8	8,000 / 12,000	70	10	PG2424CA00**
UL	W/ 2 Bolts	15	15,000 / 22,500	100	10	PG2424HA00**
UL	No Bolts	8	8,000 / 12,000	70	10	PG2424WA00**
UL	W/ 2 Bolts	22	22,500 / 33,750	100	10	PG2424HH00**

To order gasketed covers, replace the letter "A" with the letter "G".

Replace \*\* with a logo code found on page U54. See page U59 for meter and touch/radio read cover options.

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

### Boxes

	DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	Standard Open Bottom	24"	22	22,500 / 33,750	165	2	PG2424BA24
UL	Solid Bottom	24 1/2"	22	22,500 / 33,750	185	2	PG2424DA24

To order boxes with 2 standard mouseholes, replace the letter "A" with the letter "B".

To order gasketed boxes, replace the letter "A" with the letter "G".

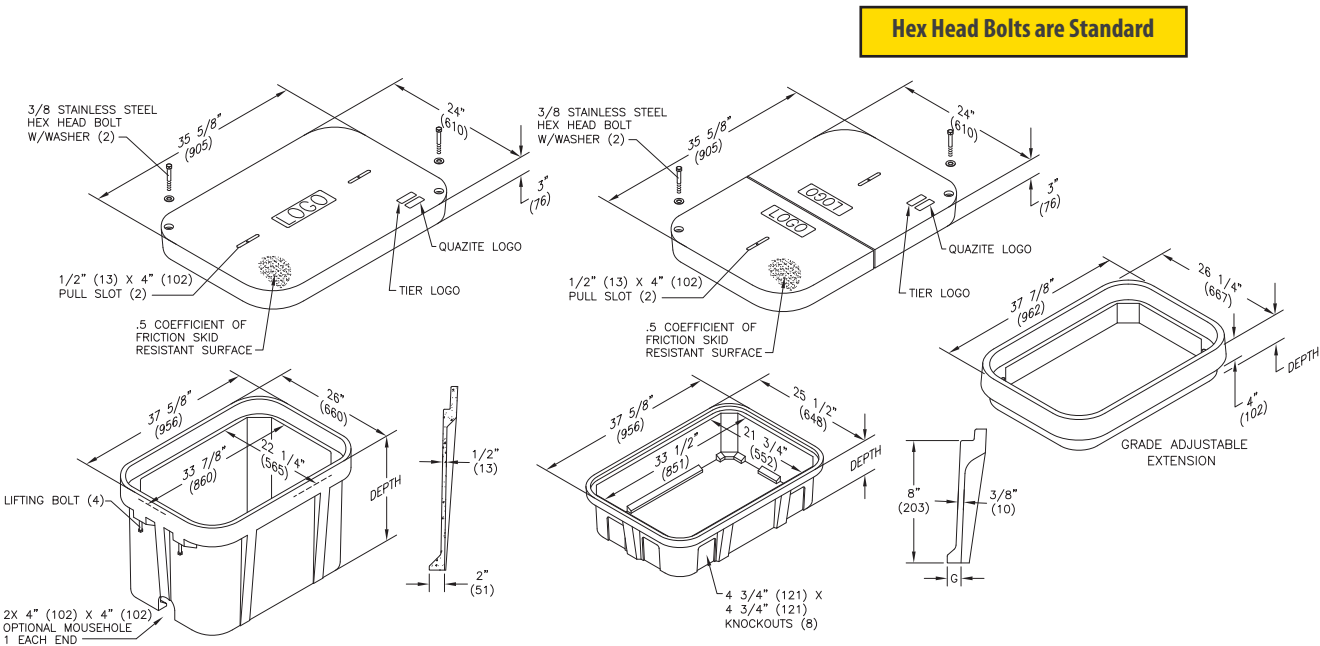
NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

### Extensions (Open bottom can be used as top or bottom, solid bottom is bottom extension only)

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Open Bottom	8"	22	22,500 / 33,750	71	8	PG2424EA06
Open Bottom	14"	22	22,500 / 33,750	112	6	PG2424EA12
Solid Bottom	8 1/2"	22	22,500 / 33,750	96	8	PG2424RA06
Solid Bottom	14 1/2"	22	22,500 / 33,750	130	6	PG2424RA12

# Dimensions / Data

## 24" x 36" PG Style Polymer Concrete (Stackable) Assembly



UNDERGROUND  
ENCLOSURES

### Covers

	DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	W/ 2 Bolts	8	8,000 / 12,000	100	10	PG2436CA00**
	2 piece w/2 Bolts	8	8,000 / 12,000	122	10	PG2436CS00**
UL	W/ 2 Bolts	15	15,000 / 22,500	115	10	PG2436HA00**
UL	2 piece w/2 Bolts	15	15,000 / 22,500	122	10	PG2436HS00**
UL	W/ 2 Bolts	22	22,500 / 33,750	122	10	PG2436HH00**
UL	No Bolts	8	8,000 / 12,000	100	10	PG2436WA00**

To order gasketed covers, replace the letter "A" with the letter "G".  
Replace \*\* with a logo code found on page U54. See page U59 for meter and touch/radio read cover options.  
NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.  
Available with EZ Locate.

# Dimensions / Data 24"x 36" PG Style Polymer Concrete (Stackable) Assembly (Continued)

Hex Head Bolts are Standard

## Boxes (Box depths 24" thru 42" must be used as bottom of any stack)

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	18"	22	22,500 / 33,750	141	4	PG2436BA18
	24"		22,500 / 33,750	180	3	PG2436BA24
	30"		22,500 / 33,750	196	2	PG2436BA30
	36"		22,500 / 33,750	254	2	PG2436BA36
	42"		22,500 / 33,750	293	1	PG2436BA42
Solid Bottom	18 1/2"	22	22,500 / 33,750	171	4	PG2436DA18
	24 1/2"		22,500 / 33,750	228	3	PG2436DA24
	30 1/2"		22,500 / 33,750	238	2	PG2436DA30
	36 1/2"		22,500 / 33,750	282	2	PG2436DA36
	42 1/2"		22,500 / 33,750	321	1	PG2436DA42

To order boxes with 2 standard mouseholes, replace the letter "A" with the letter "B".

To order gasketed boxes, replace the letter "A" with the letter "G".

NOTE: 24" thru 42" boxes must be used as bottom on any stack.

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

## Bottom Extensions (for use under 12" and 18" boxes only, one per box)

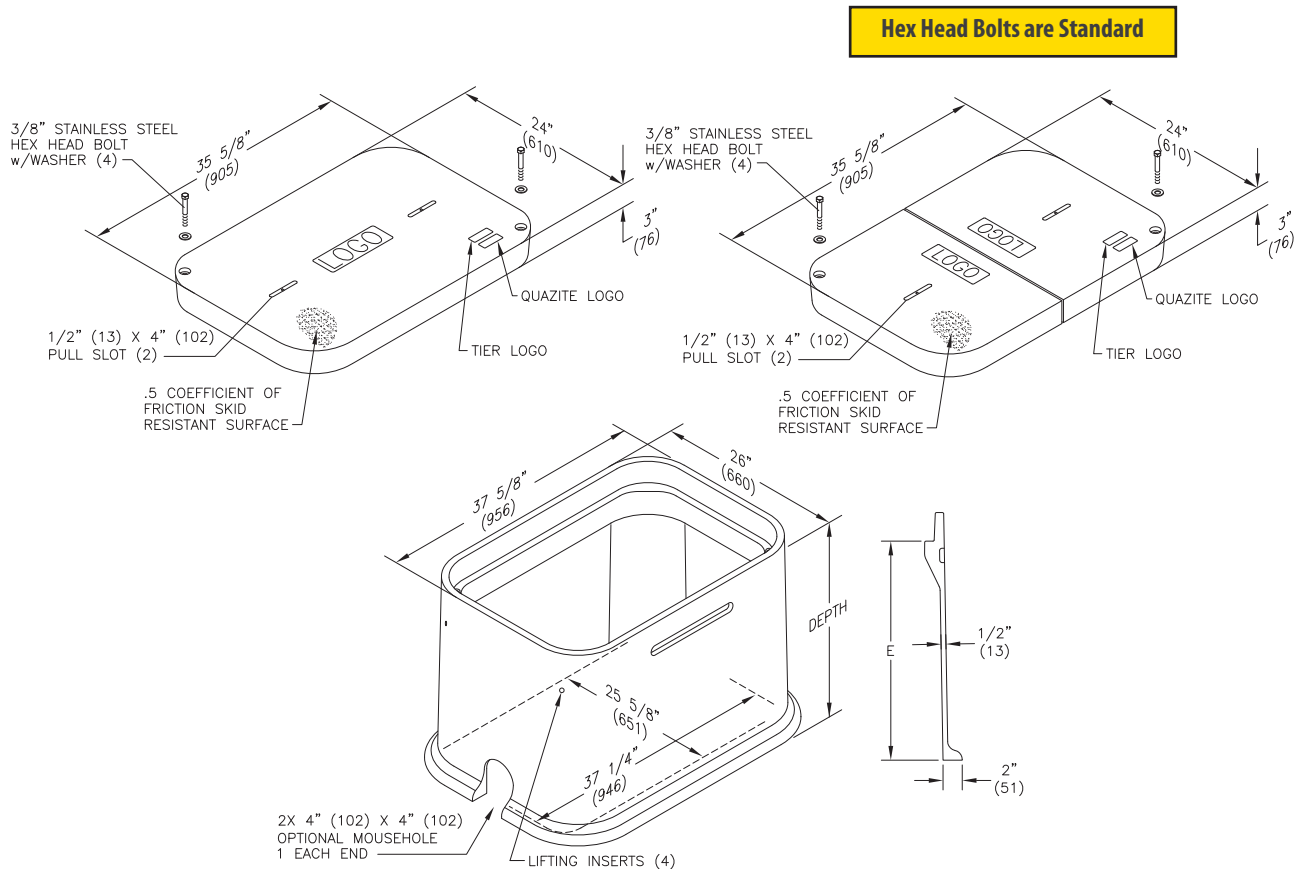
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Open bottom	8 3/4"	22	22,500 / 33,750	81	6	PG2436EA08
Solid bottom	9 1/4"	22	22,500 / 33,750	95	6	PG2436RA08

## Grade Adjustable Extension

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
4" top extension, 1/2 thread	7 1/8"	22	22,500 / 33,750	80	6	PG2436ED04
4" top extension, 3/8 thread	7 1/8"	22	22,500 / 33,750	80	6	PG2436E503

# Dimensions / Data

## 24"x 36" PD Style Polymer Concrete Assembly



UNDERGROUND  
ENCLOSURES

### Covers

	DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	W/ 2 Bolts	8	8,000 / 12,000	100	10	PG2436CA00**
	2 piece w/2 Bolts	8	8,000 / 12,000	122	10	PG2436CS00**
UL	W/ 2 Bolts	15	15,000 / 22,500	115	10	PG2436HA00**
UL	2 piece w/2 Bolts	15	15,000 / 22,500	122	10	PG2436HS00**
UL	W/ 2 Bolts	22	22,500 / 33,750	122	10	PG2436HH00**
UL	No Bolts	8	8,000 / 12,000	100	10	PG2436WA00**

To order gasketed covers, replace the letter "A" with the letter "G".

Replace \*\* with a logo code found on page U54. See page U59 for meter and touch/radio read cover options.

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

### Boxes

	DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	Standard Open Bottom	18"	22	22,500 / 33,750	159	2	PD2436BA18
UL		26"	22	22,500 / 33,750	199	2	PD2436BA26
		48"	22	22,500 / 33,750	313	1	PD2436BA48

To order boxes with 2 standard mouseholes, replace the letter "A" with the letter "B".

To order gasketed boxes, replace the letter "A" with the letter "G".

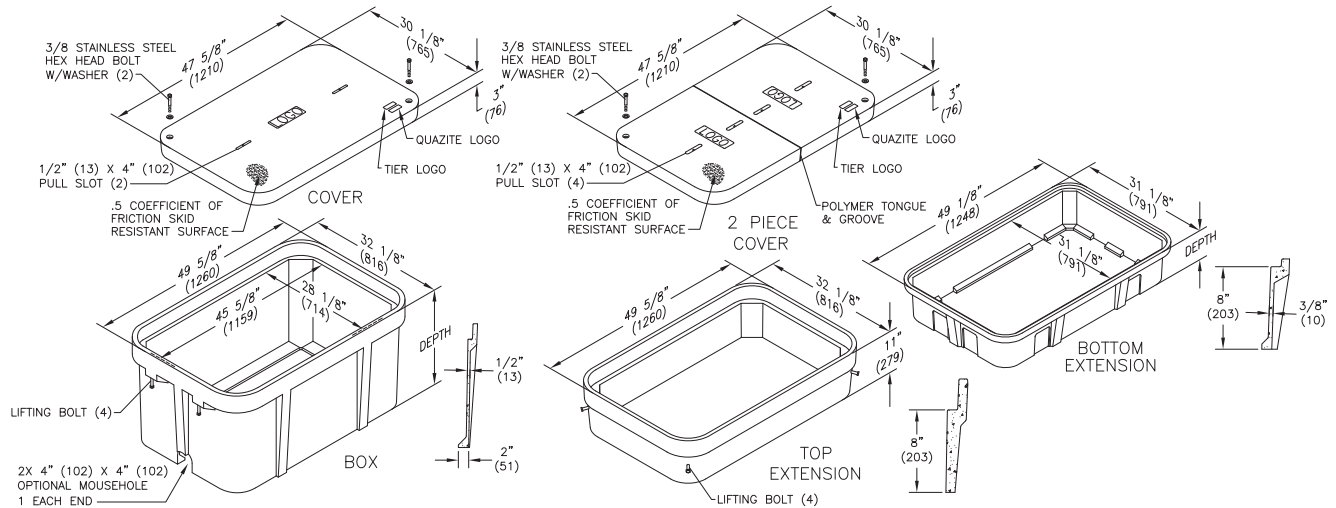
NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.



# Dimensions / Data

## 30" x 48" PG Style Polymer Concrete (Stackable) Assembly

Hex Head Bolts are Standard



### Covers

	DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	W/ 2 Bolts	8	8,000 / 12,000	159	10	PG3048CA00**
	2 piece w/2 Bolts	8	8,000 / 12,000	181	10	PG3048CS00**
UL	W/ 2 Bolts	15	15,000 / 22,500	206	10	PG3048HA00**
UL	2 piece w/2 Bolts	15	15,000 / 22,500	206	10	PG3048HS00**
UL	W/ 2 Bolts	22	22,500 / 33,750	220	10	PG3048HH00**
UL	No Bolts	8	8,000 / 12,000	159	10	PG3048WA00**

To order gasketed covers, replace the letter "A" with the letter "G".

Replace \*\* with a logo code found on page U54. See page U59 for meter and touch/radio read cover options.

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

# Dimensions / Data 30"x 48" PG Style Polymer Concrete (Stackable) Assembly (Continued)

Hex Head Bolts are Standard

## Boxes (Box depths 24" thru 48" must be used as bottom of any stack)

	DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	Standard Open Bottom	18"	22	22,500 / 33,750	185	4	PG3048BA18
		24"		22,500 / 33,750	236	3	PG3048BA24
		36"		22,500 / 33,750	343	2	PG3048BA36
		48"		22,500 / 33,750	450	1	PG3048BA48
UL	Solid Bottom	18 1/2"	22	22,500 / 33,750	220	4	PG3048DA18
		24 1/2"		22,500 / 33,750	287	3	PG3048DA24
		36 1/2"		22,500 / 33,750	394	2	PG3048DA36
		48"		22,500 / 33,750	501	1	PG3048DA48

To order boxes with 2 standard mouseholes, replace the letter "A" with the letter "B".

To order gasketed boxes, replace the letter "A" with the letter "G".

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

## Top Extension

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Open bottom	11"	22	22,500 / 33,750	100	8	PG3048EA11

## Bottom Extensions (for use under 18" box only, one per box)

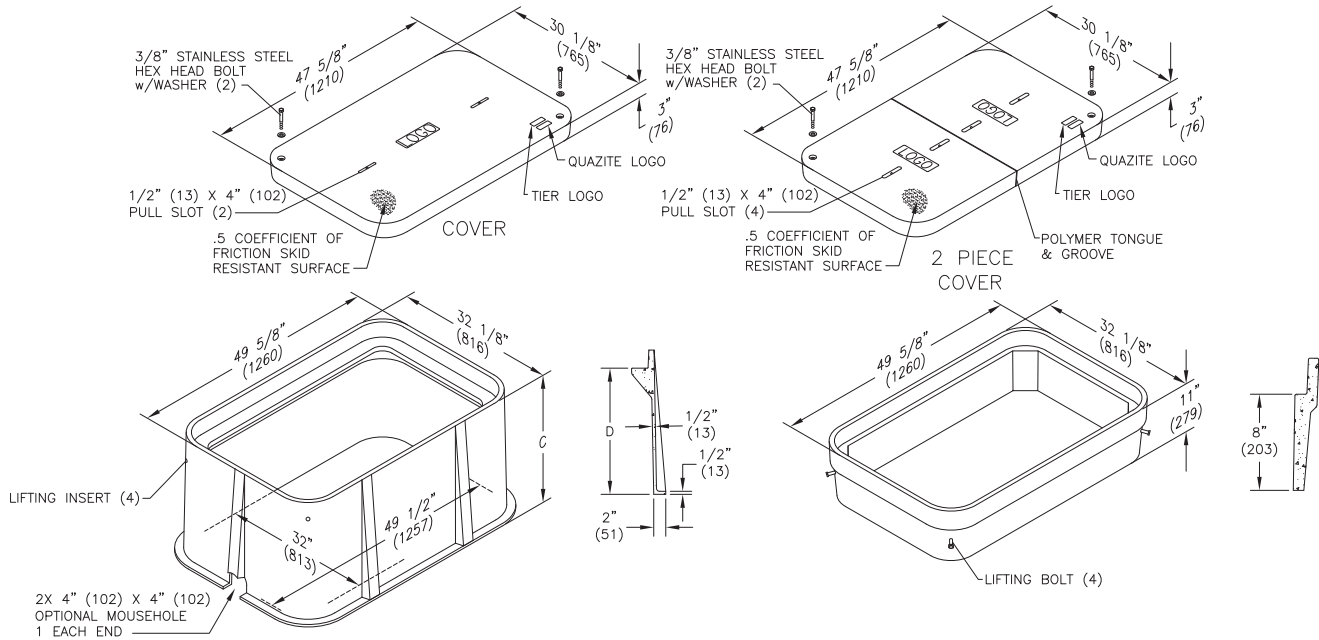
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Open bottom	8 3/4"	22	22,500 / 33,750	102	8	PG3048EA08
Solid bottom	9 1/4"	22	22,500 / 33,750	151	8	PG3048RA08

UNDERGROUND  
ENCLOSURES

# Dimensions / Data

## 30"x 48" PD Style Polymer Concrete (Nestable) Assembly

Hex Head Bolts are Standard



### Covers

	DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	W/ 2 Bolts	8	8,000 / 12,000	159	10	PG3048CA00**
	2 piece w/2 Bolts	8	8,000 / 12,000	181	10	PG3048CS00**
UL	W/ 2 Bolts	15	15,000 / 22,500	206	10	PG3048HA00**
UL	2 piece w/2 Bolts	15	15,000 / 22,500	206	10	PG3048HS00**
UL	W/ 2 Bolts	22	22,500 / 33,750	220	10	PG3048HH00**
UL	No Bolts	8	8,000 / 12,000	159	10	PG3048WA00**

To order gasketed covers, replace the letter "A" with the letter "G".

Replace \*\* with a logo code found on page U54. See page U59 for meter and touch/radio read cover options.

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

### Boxes

	DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	Standard Open Bottom	24"	22	22,500 / 33,750	286	2	PD3048BA24
UL		48"	22	22,500 / 33,750	614	1	PD3048BA48

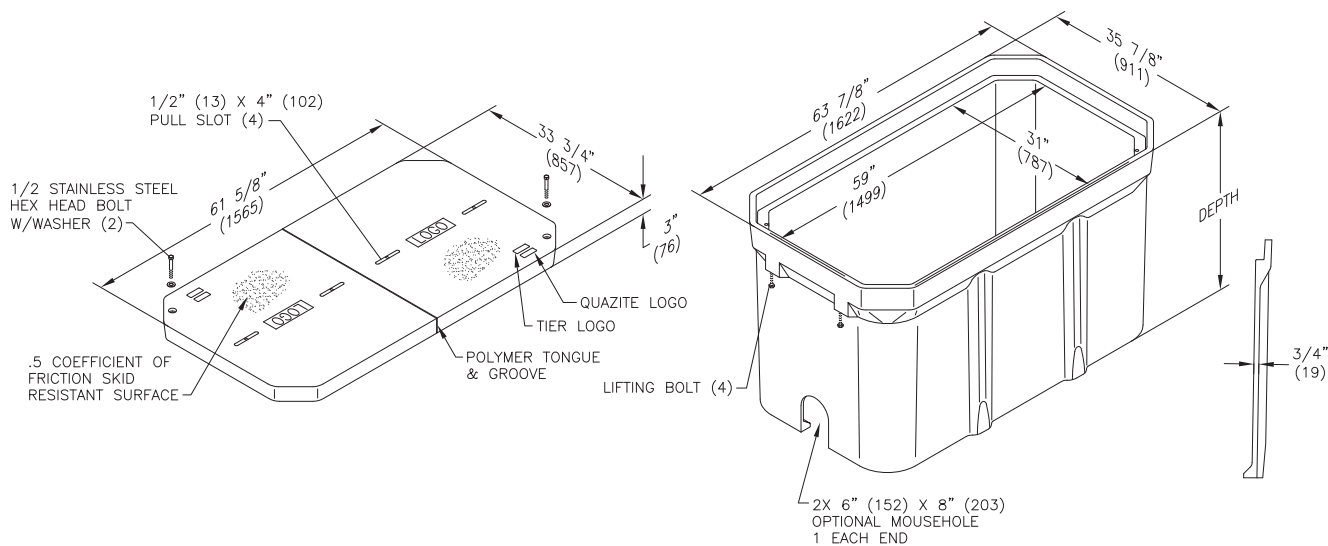
### Top Extension

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Open bottom	11"	22	22,500 / 33,750	100	8	PG3048EA11

# Dimensions / Data

## 30" x 60" PG Style Polymer Concrete (Stackable) Assembly

Hex Head Bolts are Standard



UNDERGROUND  
ENCLOSURES

### Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Lightweight 2 Bolts	5	5,000 / 7,500	228	10	LG3060CA00**
W/ 2 Bolts	15	15,000 / 22,500	346	10	PG3060HA00**
W/ 2 Bolts	22	22,500 / 33,750	368	10	PG3060HH00**
Lightweight No bolts	5	5,000 / 7,500	228	10	LG3060WA00**

Replace \*\* with a logo code found on page U54. See page U59 for meter and touch/radio read cover options.

### Boxes (Box depths 30" and 36" must be used as bottom of any stack)

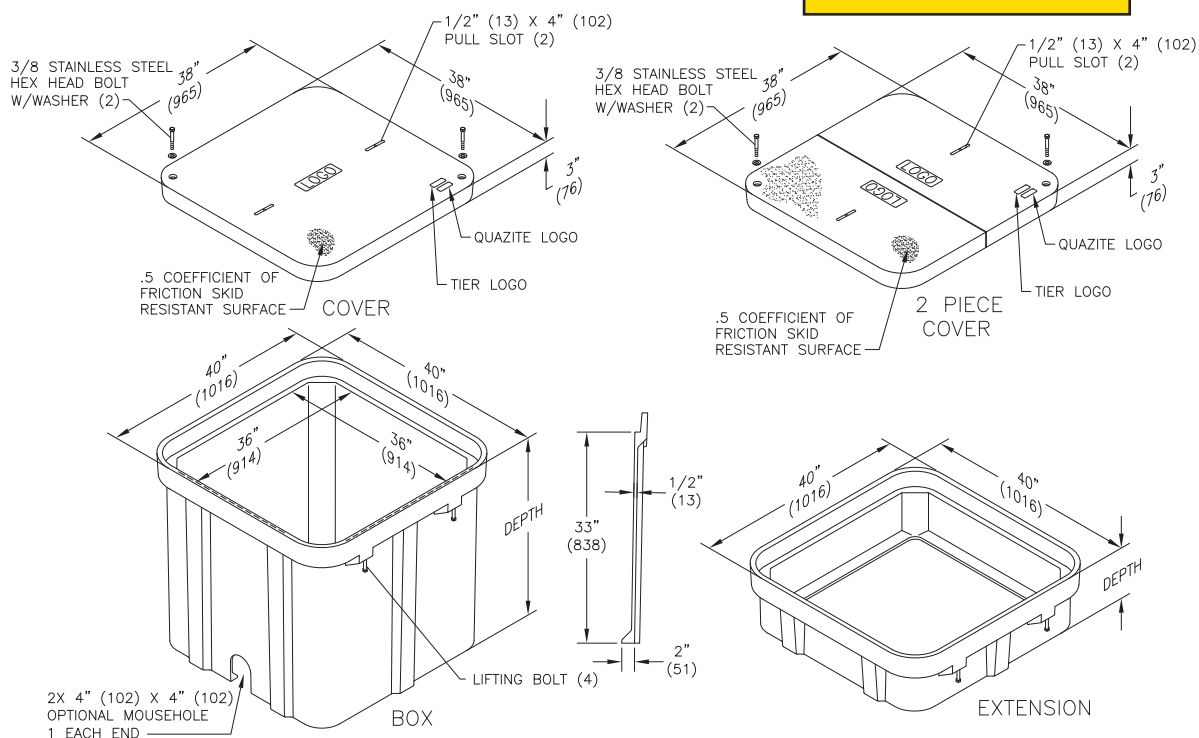
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	21"	22	22,500 / 33,750	350	4	PG3060BA21
	30"		22,500 / 33,750	492	3	PG3060BA30
	36"		22,500 / 33,750	565	2	PG3060BA36
Solid Bottom	21 1/2"	22	22,500 / 33,750	420	4	PG3060DA21
	30 1/2"		22,500 / 33,750	532	3	PG3060DA30
	36 1/2"		22,500 / 33,750	601	2	PG3060DA36

To order boxes with 2 standard mouseholes, replace the letter "A" with the letter "B".

# Dimensions / Data

## 36" x 36" PG Style Polymer Concrete (Stackable) Assembly

Hex Head Bolts are Standard



### Covers

	DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	W/ 2 Bolts	8	8,000 / 12,000	174	10	PG3636CA00**
	2 piece w/2 Bolts	8	8,000 / 12,000	220	10	PG3636CS00**
UL	W/ 2 Bolts	15	15,000 / 22,500	220	10	PG3636HA00**
UL	2 piece w/2 Bolts	15	15,000 / 22,500	220	10	PG3636HS00**
UL	W/ 2 Bolts	22	22,500 / 33,750	330	10	PG3636HH00**
UL	No Bolts	8	8,000 / 12,000	174	10	PG3636WA00**

To order gasketed covers, replace the letter "A" with the letter "G".

Replace \*\* with a logo code found on page U54. See page U59 for meter and touch/radio read cover options.

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

### Boxes

	DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	Standard Open Bottom	36"	22	22,500 / 33,750	367	2	PG3636BA36
UL	Solid Bottom	36 1/2"		22,500 / 33,750	407	2	PG3636DA36

To order boxes with 2 standard mouseholes, replace the letter "A" with the letter "B".

To order gasketed boxes, replace the letter "A" with the letter "G".

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

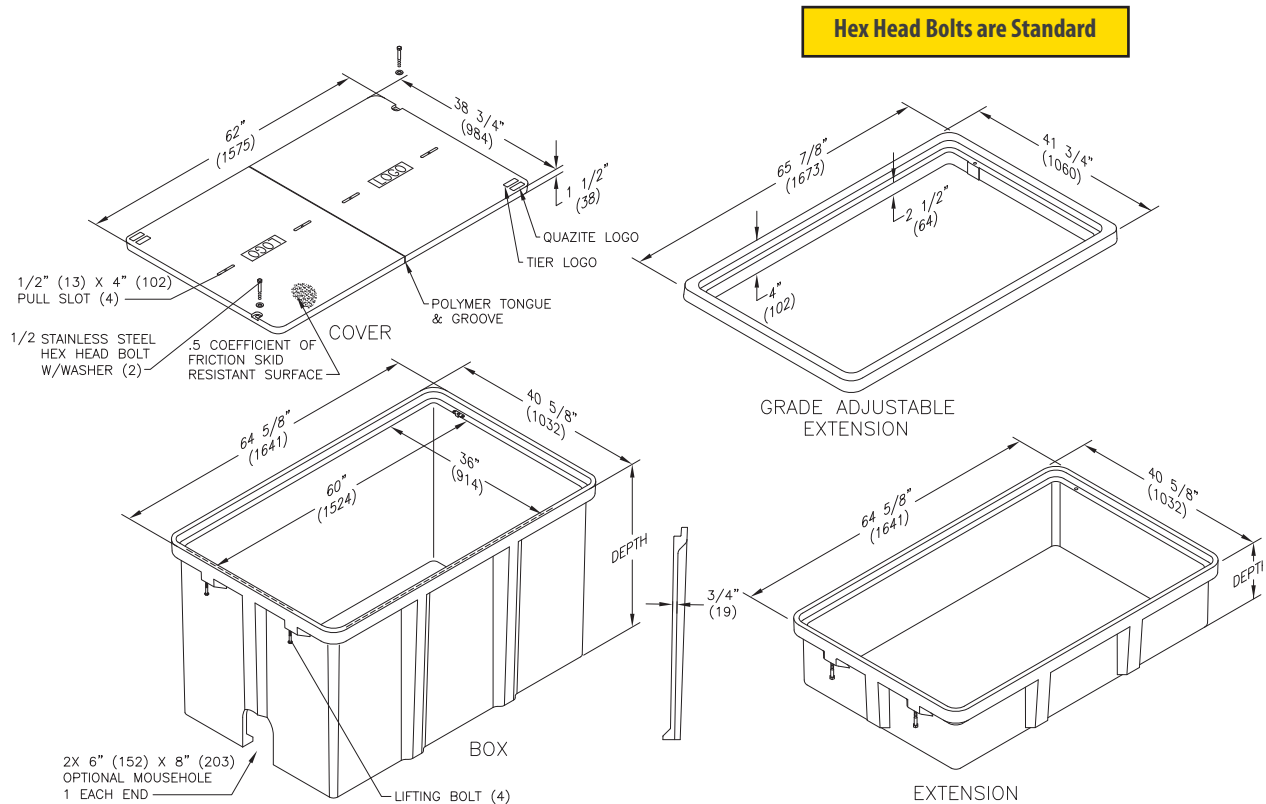
### Top Extensions

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Open bottom	12"	22	22,500 / 33,750	129	6	PG3636EA12



# Dimensions / Data

## 36" x 60" PG Style Polymer Concrete (Stackable) Assembly



UNDERGROUND ENCLOSURES

### Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Lightweight 2 Bolts	5	5,000 / 7,500	222	10	LG3660CA00**
W/ 2 Bolts	15	15,000 / 22,500	384	10	PG3660HA00**
W/ 2 Bolts	22	22,500 / 33,750	470	10	PG3660HH00**
Lightweight No bolts	5	5,000 / 7,500	222	10	LG3660WA00**

Replace \*\* with a logo code found on page U54. See page U59 for meter and touch/radio read cover options.

### Boxes (Box depths 31" and 36" must be used as bottom of any stack)

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	19"	22	22,500 / 33,750	381	4	PG3660BA19
	24"		22,500 / 33,750	397	3	PG3660BA24
	31"		22,500 / 33,750	481	2	PG3660BA31
	36"		22,500 / 33,750	647	2	PG3660BA36
Solid Bottom	19 1/2"	22	22,500 / 33,750	479	4	PG3660DA19
	24 1/2"		22,500 / 33,750	495	3	PG3660DA24
	31 1/2"		22,500 / 33,750	590	2	PG3660DA31
	36 1/2"		22,500 / 33,750	738	2	PG3660DA36

To order boxes with 2 standard mouseholes, replace the letter "A" with the letter "B".

# Dimensions / Data 36"x 60" PG Style Polymer Concrete (Stackable) Assembly (Continued)

## Grade Adjustable Extension

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Top extension	2 1/2"	22	22,500 / 33,750	116	6	PG3660ED03

## Top Extensions

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Open bottom	11 1/2"	22	22,500 / 33,750	200	6	PG3660EA12

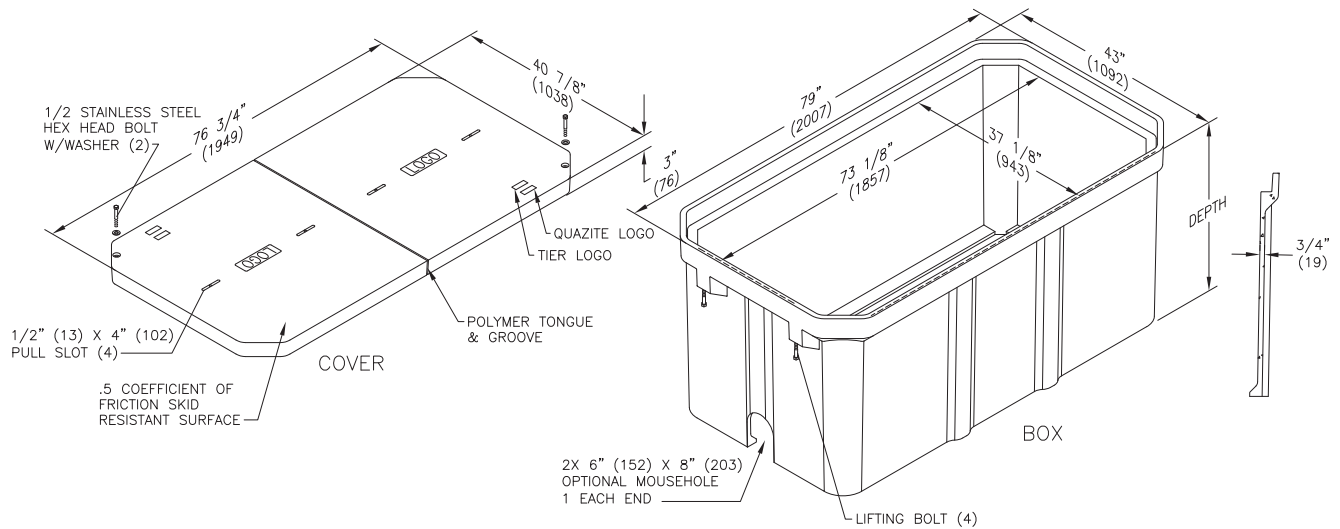


# Dimensions / Data

## 36" x 72" PG Style Polymer Concrete (Stackable) Assembly

Hex Head Bolts are Standard

UNDERGROUND  
ENCLOSURES



### Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Lightweight 2 Bolts	5	5,000 / 7,500	310	10	LG3672CA00**
W/ 2 Bolts	15	15,000 / 22,500	488	10	PG3672HA00**
W/ 2 Bolts	22	22,500 / 33,750	544	10	PG3672HH00**
Lightweight No bolts	5	5,000 / 7,500	310	10	LG3672WA00**

Replace \*\* with a logo code found on page U54. See page U59 for meter and touch/radio read cover options.

### Boxes (Box depth 36" must be used as bottom of any stack)

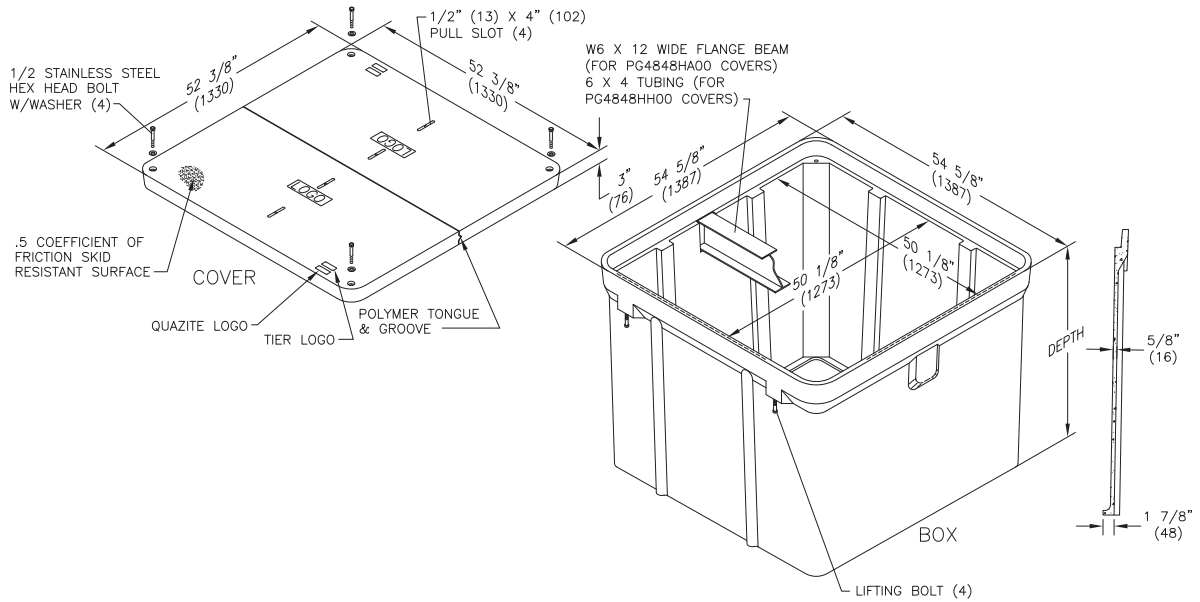
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	21"	22	22,500 / 33,750	448	3	PG3672BA21
	36"		22,500 / 33,750	768	2	PG3672BA36
Solid Bottom	21 1/2"	22	22,500 / 33,750	569	3	PG3672DA21
	36 1/2"		22,500 / 33,750	822	2	PG3672DA36

To order boxes with 2 standard mouseholes, replace the letter "A" with the letter "B".

# Dimensions / Data

## 48" x 48" PG Style Polymer Concrete (Stackable) Assembly

Hex Head Bolts are Standard



### Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Lightweight 4 Bolts	5	5,000 / 7,500	286	10	LG4848CA00**
W/ 4 Bolts	15	15,000 / 22,500	364	10	PG4848HA00**
W/ 4 Bolts	22	22,500 / 33,750	596	10	PG4848HH00**
Lightweight No bolts	5	5,000 / 7,500	286	10	LG4848WA00**

Replace \*\* with a logo code found on page U54. See page U59 for meter and touch/radio read cover options.

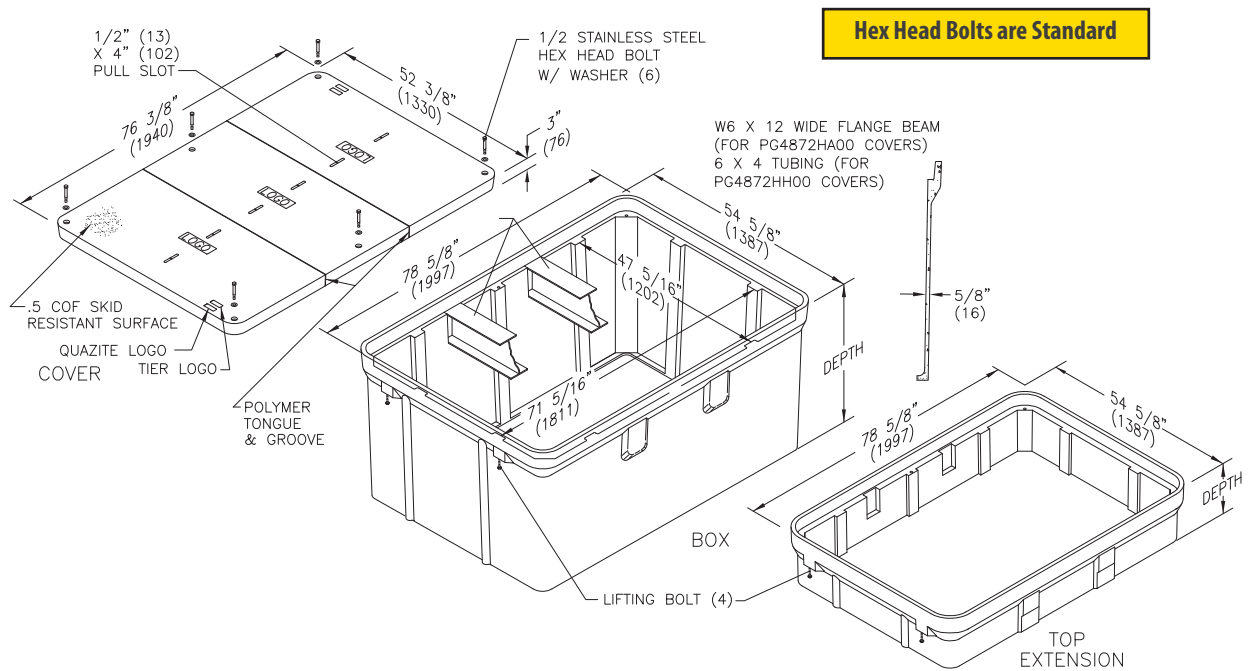
### Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	36"	22	22,500 / 33,750	629	2	PG4848BA36
	48"		22,500 / 33,750	866	2	PG4848BA48
Solid Bottom	36 1/2"	22	22,500 / 33,750	663	2	PG4848DA36
	48 1/2"		22,500 / 33,750	940	2	PG4848DA48

To order boxes with 2 standard mouseholes, replace the letter "A" with the letter "B".

# Dimensions / Data

## 48" x 72" PG Style Polymer Concrete (Stackable) Assembly



### Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Lightweight 6 Bolts	5	5,000 / 7,500	447	2	LG4872CA00**
W/ 6 Bolts	15	15,000 / 22,500	573	2	PG4872HA00**
W/ 6 Bolts	22	22,500 / 33,750	891	2	PG4872HH00**
Lightweight No bolts	5	5,000 / 7,500	447	2	LG4872WA00**

Replace \*\* with a logo code found on page U54. See page U59 for meter and touch/radio read cover options.

### Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	36"	22	22,500 / 33,750	810	2	PG4872BA36
	48"		22,500 / 33,750	1050	1	PG4872BA48
Solid Bottom	36 1/2"	22	22,500 / 33,750	1065	2	PG4872DA36
	48 1/2"		22,500 / 33,750	1245	1	PG4872DA48

To order boxes with 2 standard mouseholes, replace the letter "A" with the letter "B".

### Top Extension

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Open Bottom, No beam provided	15"	22	22,500 / 33,750	359	5	PG4872EA12

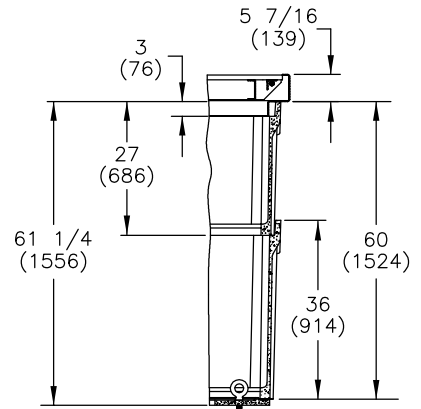


# Dimensions / Data

## 48" x 78" PG Style Polymer Concrete Assembly

Hex Head Bolts are Standard

HOLDERS FOR OPTIONAL  
SAFETY BARS



SECTION A-A

3/8 THICK GASKET

4X PULLING EYE RATED  
FOR 5,000 LBS (22,240 N)  
WITH A MINIMUM TEST LOAD  
OF 10,000 LBS. (44,480 N)  
(2 EACH END OF BASE)

### Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Torsion	N/A	12,000 / 24,000	622	10	PG4878CT00**

Replace \*\* with a logo code found on page U54.

### Boxes (Box Depth 36" must be used as bottom of any stack)

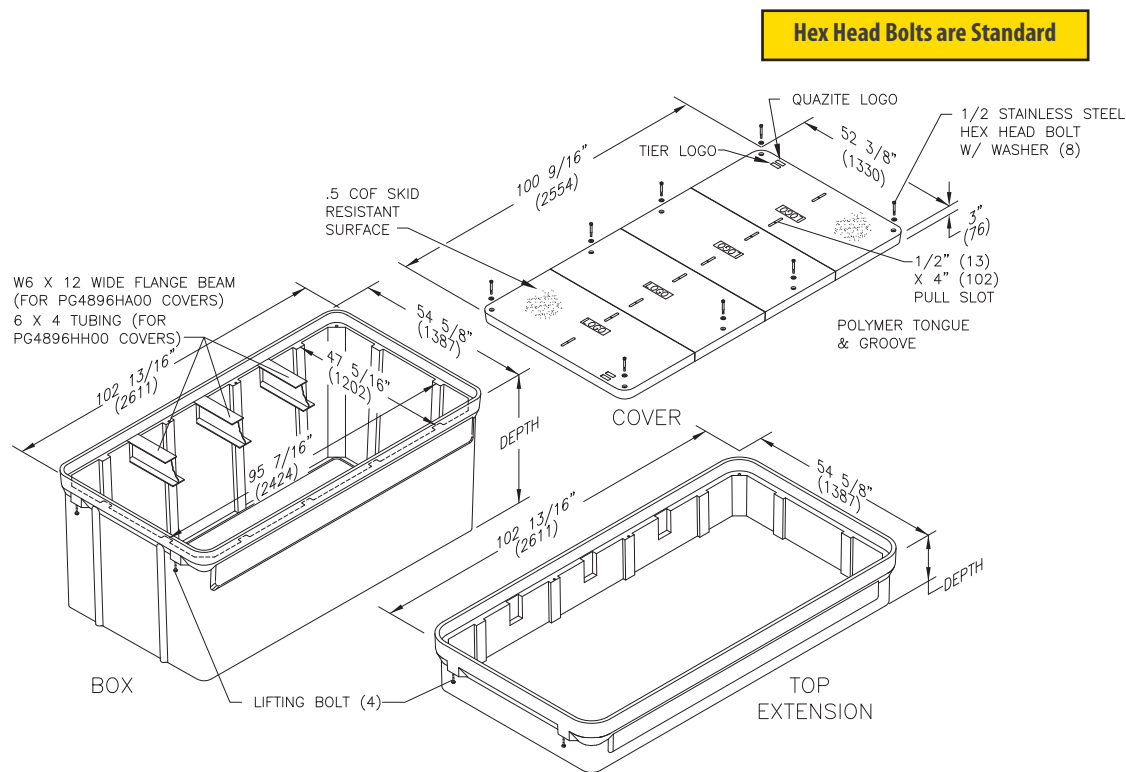
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	27"	22	22,500 / 33,750	867	1	PG4878BA27
	36	22	22,500 / 33,750	707	1	PG4878BG36

### Base

DESCRIPTION	WEIGHT #	PART NO.
Bottom with pulling eyes & ground holes	555	PG4878D500

# Dimensions / Data

## 48" x 96" PG Style Polymer Concrete (Stackable) Assembly



### Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Lightweight 8 Bolts	5	5,000 / 7,500	608	2	LG4896CA00**
W/ 8 Bolts	15	15,000 / 22,500	794	2	PG4896HA00**
W/ 8 Bolts	22	22,500 / 33,750	1186	2	PG4896HH00**
Lightweight No bolts	5	5,000 / 7,500	608	2	LG4896WA00**

Replace \*\* with a logo code found on page U54. See page U59 for meter and touch/radio read cover options.

### Boxes

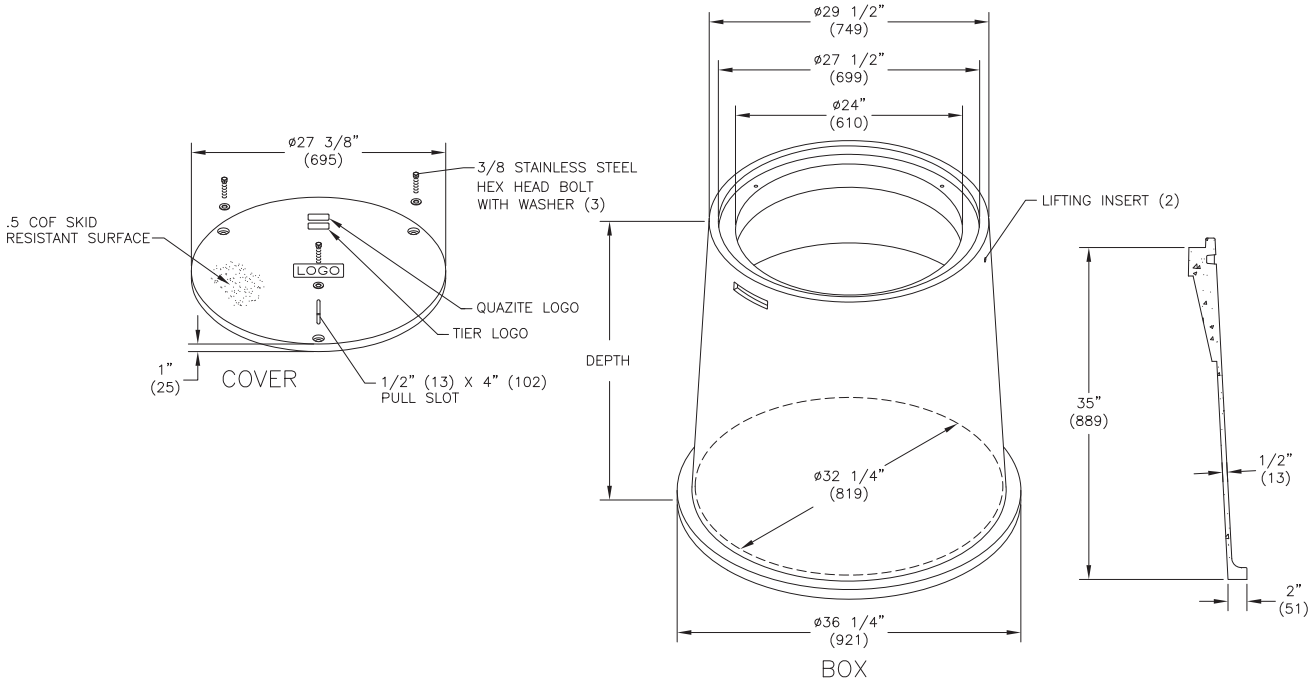
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	48"	22	22,500 / 33,750	1384	1	PG4896BA48
Solid Bottom	48 1/2"	22	22,500 / 33,750	1537	1	PG4896DA48

To order boxes with 2 standard mouseholes, replace the letter "A" with the letter "B".

### Top Extension

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Open Bottom, No beam provided	15"	22	22,500 / 33,750	485	5	PG4896EA12

Hex Head Bolts are Standard



Covers

	DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	W/ 3 Bolts	8	8,000 / 12,000	53	10	PR2700CA00**
	W/ 3 Bolts	15	15,000 / 22,500	75	10	PR2700HA00**
	W/ 3 Bolts	22	22,500 / 33,750	75	10	PR2700HH00**

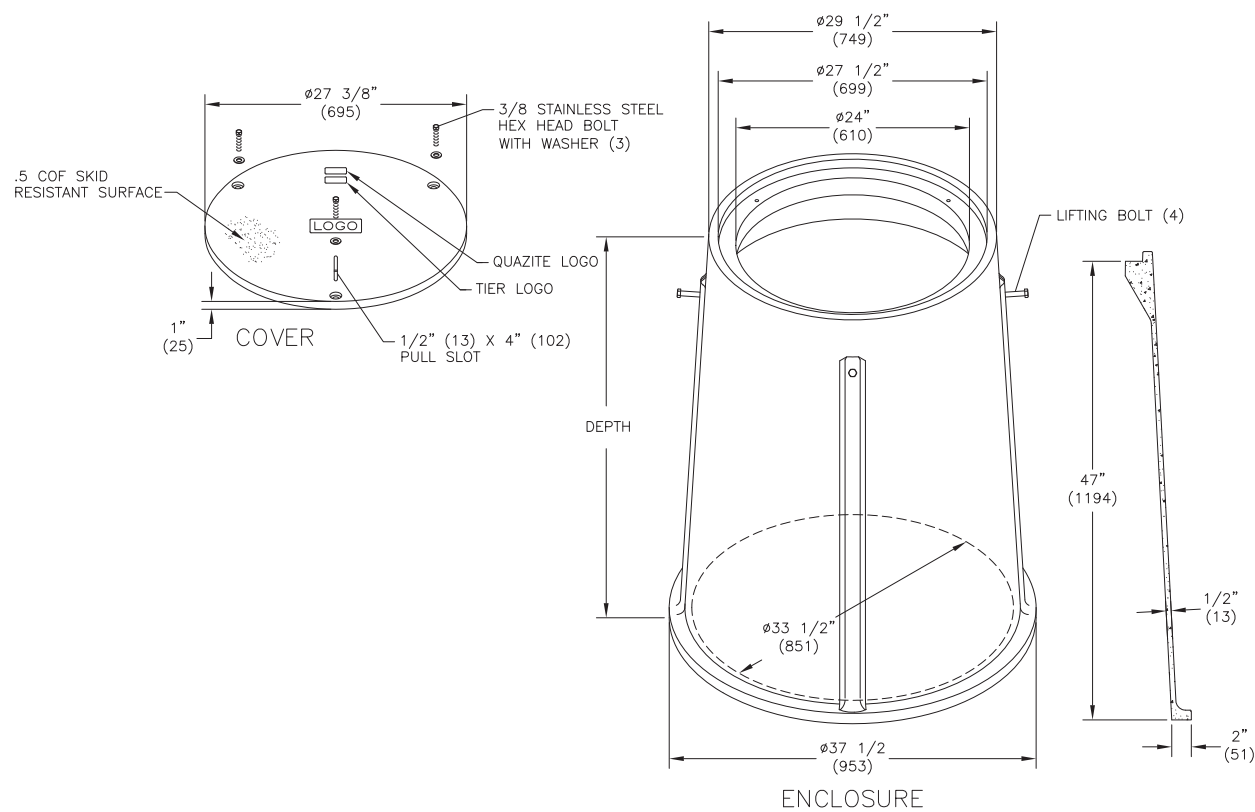
To order gasketed covers, replace the letter "A" with the letter "G".  
Replace \*\* with a logo code found on page U54.  
NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

Boxes

	DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	Standard Open Bottom	36"	22	22,500 / 33,750	278	3	PR2732BA36

To order gasketed boxes, replace the letter "A" with the letter "G".  
NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

Hex Head Bolts are Standard



UNDERGROUND  
ENCLOSURES

Covers

	DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	W/ 3 Bolts	8	8,000 / 12,000	53	10	PR2700CA00**
	W/ 3 Bolts	15	15,000 / 22,500	75	10	PR2700HA00**
	W/ 3 Bolts	22	22,500 / 33,750	75	10	PR2700HH00**

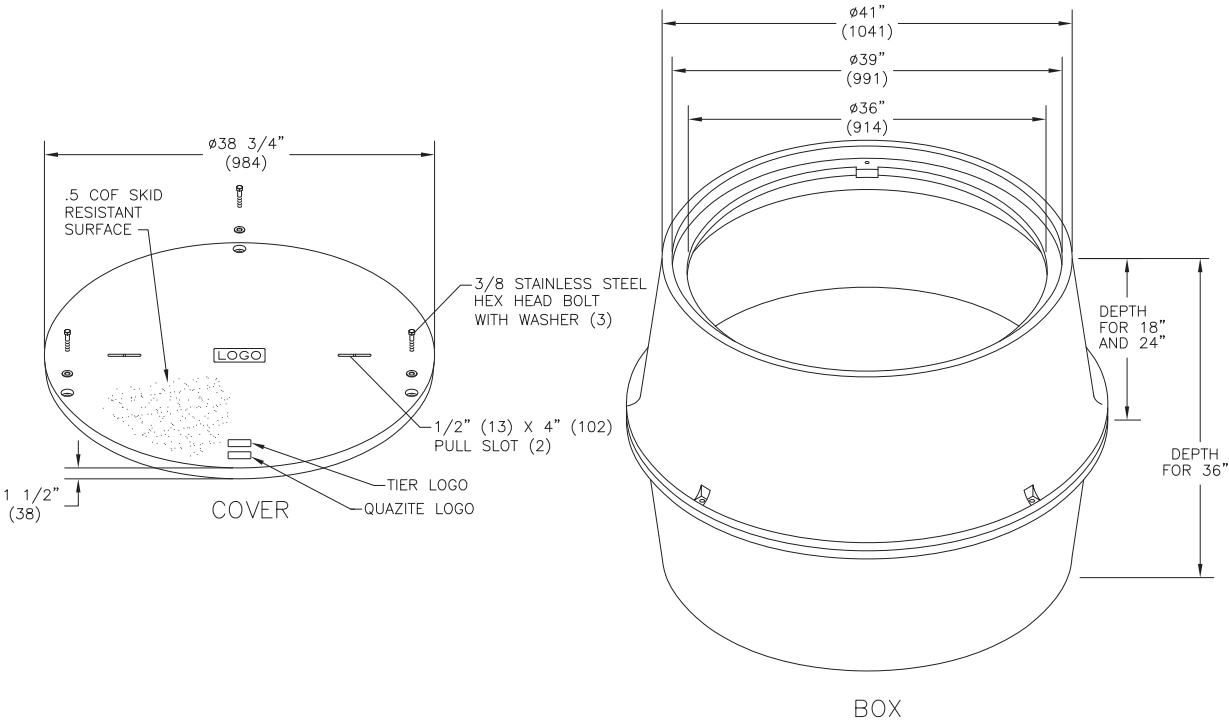
To order gasketed covers, replace the letter "A" with the letter "G".  
Replace \*\* with a logo code found on page U54.  
NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

Boxes

	DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	Standard Open Bottom	48"	22	22,500 / 33,750	283	2	PR2733BA48

To order gasketed boxes, replace the letter "A" with the letter "G".  
NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

Hex Head Bolts are Standard



Covers

	DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	W/ 3 Bolts	8	8,000 / 12,000	141	10	PR3900CA00**
UL	W/ 3 Bolts	15	15,000 / 22,500	180	10	PR3900HA00**
UL	W/ 3 Bolts	22	22,500 / 33,750	180	10	PR3900HH00**

To order gasketed covers, replace the letter "A" with the letter "G".

Replace \*\* with a logo code found on page U54.

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

Boxes

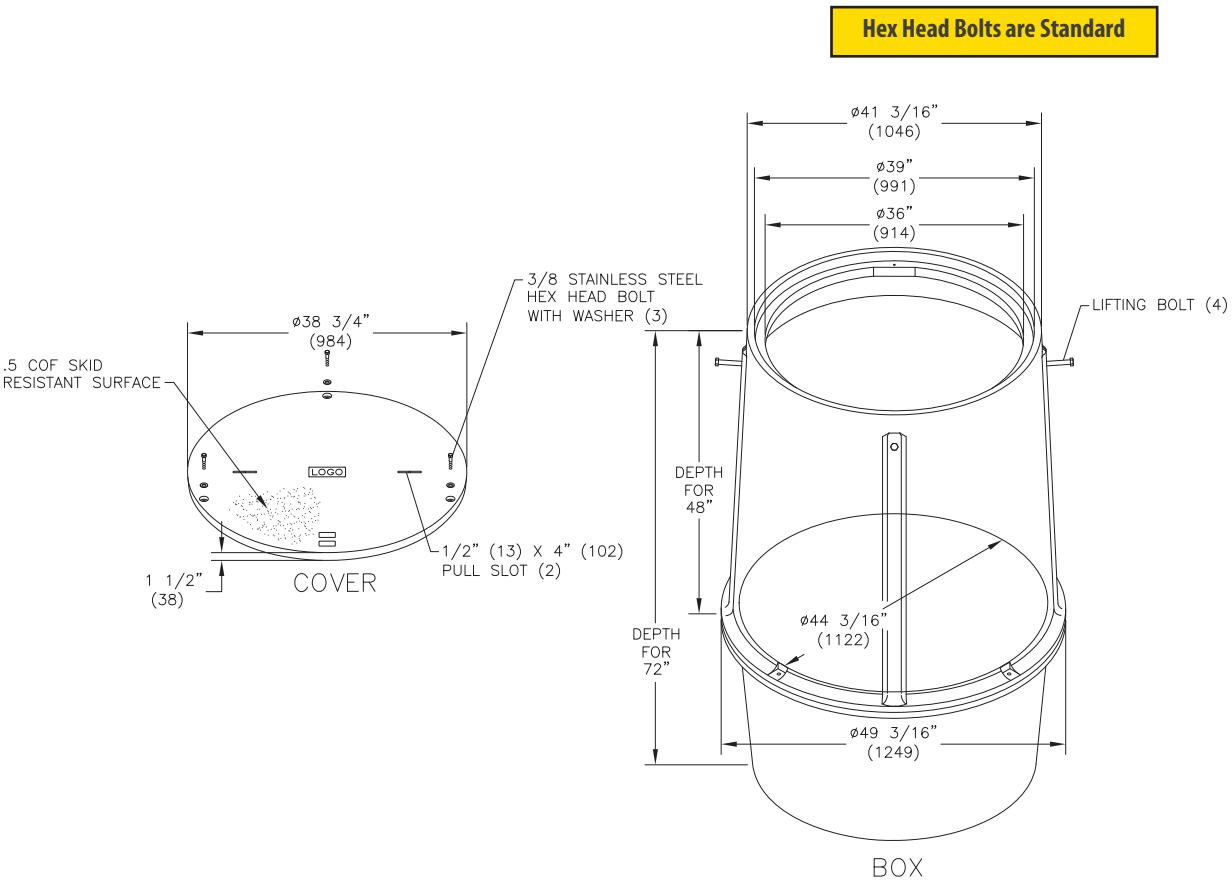
	DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL		18"	22	22,500 / 33,750	244	3	PR3943BA18
	Standard Open Bottom	24"	22	22,500 / 33,750	326	2	PR3944BA24
UL		36"	22	22,500 / 33,750	488	1	PR3943BA36

To order gasketed boxes, replace the letter "A" with the letter "G".

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

NOTE: 36" depth created by bolting 2-18" deep boxes bottom to bottom.





Covers

	DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
UL	W/ 3 Bolts	8	8,000 / 12,000	141	10	PR3900CA00**
UL	W/ 3 Bolts	15	15,000 / 22,500	180	10	PR3900HA00**
UL	W/ 3 Bolts	22	22,500 / 33,750	180	10	PR3900HH00**

To order gasketed covers, replace the letter "A" with the letter "G".  
Replace \*\* with a logo code found on page U54.  
NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	48"	22	22,500 / 33,750	377	2	PR3944BA48
	72"	22	22,500 / 33,750	707	1	PR3944BA72

To order gasketed boxes, replace the letter "A" with the letter "G".  
NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.  
NOTE: 72" depth created by bolting 1-48" & 1-24" deep box bottom to bottom.

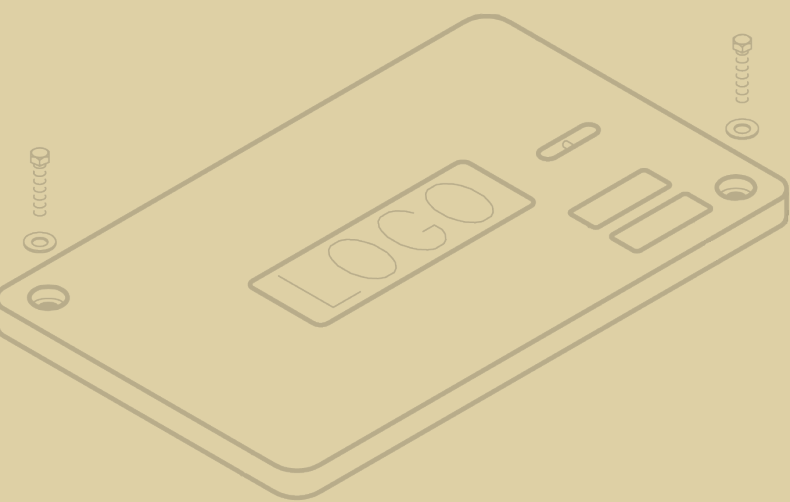
# Quazite® Cover Options

Most commonly used cover logos are shown below.  
Custom Logos are available. Contact your Quazite/Hubbell Representative.

## Logos

Polymer Concrete Logo Codes	Description
09	BLANK
10	CATV
12	COMMUNICATIONS
14	CONTROLS
17	ELECTRIC
21	FIBER OPTICS
22	FIRE ALARM
23	GAS
24	GROUND
26	HIGH VOLTAGE
29	LIGHTING
36	SECURITY
38	SIGNAL
40	STATE TRAFFIC SIGNAL
41	STREET LIGHTING
42	TELECOM
43	TELEPHONE
44	TRAFFIC
45	TRAFFIC CONTROL
46	TRAFFIC SIGNAL
48	TV
50	WATER
57	EMERGENCY
65	ILLUMINATION
81	DANGER HIGH VOLTAGE
84	POWER
92	TELECOMMUNICATIONS
3A	DOT
6B	INSTRUMENTATION
ZA	IRRIGATION
K91	RECLAIMED WATER
KH1	FIBEROPTIC

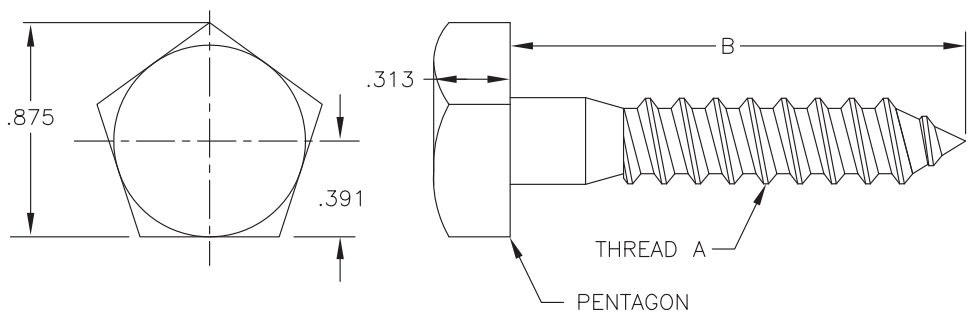
UNDERGROUND  
ENCLOSURES



# Cover Options:

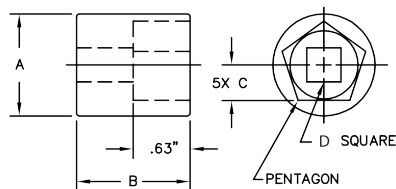
## Tamper Resistant Penta-Head Bolt

This upgrade option includes a special penta head bolt that can only be turned using a Penta-Head socket. To order this option for Polymer Concrete Covers, add the suffix P to the end of the cover part number. (Example: PG2436HA0017P).



# Quazite® Tools

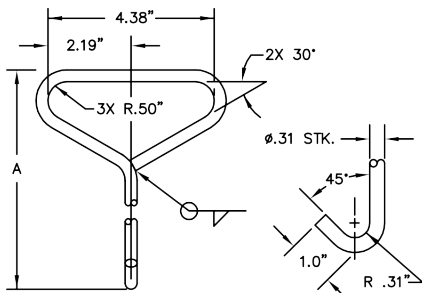
## Tamper Resistant Standard Penta-Head Socket - Alloy Steel



Part No.	UPC #	(A)	(B)	(C)	(D)
C082920	11844	1.13"	2.00"	.391"	.375"
C082922	11845	0.88"	1.50"	.250"	.375"
WP74900	N/A	1.13"	2.00"	.391"	.500"
WP74902	N/A	1.13"	2.00"	.391"	*

\* Includes integral T-handle

## Cover Hook - Electroplated Steel



Description	Part No.	UPC#	(A)
Short Cover Hook	C082905	11842	7.0"
Long Cover Hook	C082908	11843	27.0"

# Cover Options:

## • Electronic Markers (Cast in Cover)

A full range of electronic markers are encased in the polymer concrete PC, PG, PT, LG, LT, or PR style covers. Specify frequency for your utility type by inserting the code letter into the 10th digit of the cover number.

(Example: PG3048CA0P09)

TYPE	POLYMER CONCRETE CODE	FREQUENCY
TELECOMMUNICATIONS	T	101.4 kHz
POWER	P	169.8 kHz
GAS	G	83.0 kHz
WATER	W	145.7 kHz
SANITARY	S	121.6 kHz

## • Quazite® Torsion Covers

Feature a skid-resistant surface and come with an assisted, low-force cover opening that bolts closed. Torsion covers range in size from 35-5/8" x 58-3/4" to 54-5/8" x 81-5/8". Torsion Covers provide easy access to the vault when open, and security when closed.

## • Lightweight Covers

The reduced weight combined with the tremendous strength of Hubbell's lightweight cover design translates into speed and productivity. Contact your Hubbell / Quazite representative for more information.

## • Touch Read

Touch Read counter bores and Radio Read opening are available in several size covers. Contact your Hubbell / Quazite representative for more information.

UNDERGROUND  
ENCLOSURES



# EZ AUGER™ Upgrade Kits

Most existing Quazite polymer concrete enclosures can be upgraded to EZ Auger™ bolt technology. Upgrade kits are available for most enclosures in both hex head and penta head configurations.

HEX HEAD KIT	Quazite's Self-Cleaning EZ Auger™ Bolt System Upgrade Kit for Polymer Concrete Enclosures (Each assembly includes 2 HEX HEAD EZ Auger™ bolts, 2 EZ Auger™ nuts and 2 washers)			
	<b>Thread</b>	<b>Part No.</b>	<b>UPC # 66-2037</b>	<b>Cover Application</b>
	3/8-7 Lag Thread	C082500	12861	PC0608, PC0818, PC1012, PC1118, PC1212, PC1324, PC1730, PX1324, PX1730, PR2700
	3/8-7 Lag Thread	C082507	18369	PG1015, PG1118
	3/8-7 Lag Thread	C082505	12862	PG1324, PG1730
	3/8-7 Lag Thread	C082510	12863	PG2436, PG3048, PG3636
	3/8-7 Lag Thread	C082512	17590	PG3048 Overlapping
	1/2-6 Lag Thread	C082522	17591	LG3660
	1/2-6 Lag Thread	C082524	17592	PG3660 Overlapping
	1/2-6 Lag Thread	C082526	17593	PG3060, PG3672, PG4848, PG4872, PG4896
	1/2-6 Lag Thread	C082528	17594	PG3060 Overlapping
PENTA HEAD KIT	Hubbell's Self-Cleaning EZ Auger™ Bolt System Upgrade Kit for Polymer Concrete Enclosures (Each assembly includes 2 PENTA HEAD EZ Auger™ bolts, 2 EZ Auger™ nuts and 2 washers)			
	<b>Thread</b>	<b>Part No.</b>	<b>UPC # 66-2037</b>	<b>Cover Application</b>
	3/8-7 Lag Thread	C082600	18378	PC0608, PC0818, PC1012, PC1118, PC1212, PC1324, PC1730, PX1324, PX1730, PR2700
	3/8-7 Lag Thread	C082607	18379	PG1015, PG1118
	3/8-7 Lag Thread	C082605	18377	PG1324, PG1730
	3/8-7 Lag Thread	C082610	18376	PG2436, PG3048, PG3636
	3/8-7 Lag Thread	C082612	18375	PG3048 Overlapping
	1/2-6 Lag Thread	C082622	18374	LG3660
	1/2-6 Lag Thread	C082624	18373	PG3660 Overlapping
	1/2-6 Lag Thread	C082626	18372	PG3060, PG3672, PG4848, PG4872, PG4896
	1/2-6 Lag Thread	C082628	18371	PG3060 Overlapping

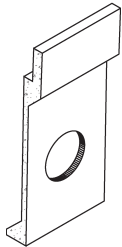
UNDERGROUND  
ENCLOSURES



# Polymer Concrete Enclosure Options:

Quazite® features several different accessories for its boxes, including cable racks, unistrut racks, pulleys, knockouts, coiling brackets, and terminators. Knockouts are pre-scored at the factory, allowing for easy break out without the need for special tools. Pulleys feature a forged-steel eye-nut and a steel-reinforcing plate.

## Holes



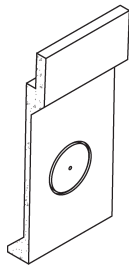
Conduit Sizes  
(For actual hole sizes and locations see page U61.)

2"  
3"  
4" Electrical  
4" Telephone  
5"  
6"

Other hole sizes available. Contact your local HUBBELL®/QUAZITE® representative for additional

Special order boxes with holes (or mouseholes, etc.) may qualify for UL Listing as long as the holes do not exceed more than 25% of the area of each sidewall and as long as the holes do not cut into a structural reinforcing rib, corner, or box lip.

## Knockouts



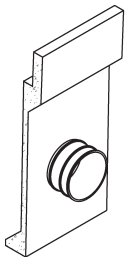
Conduit Sizes  
(For actual hole sizes and locations see page U61.)

2"  
3"  
4" Electrical  
4" Telephone  
5"  
6"

Other knockout sizes available. Contact your local HUBBELL®/QUAZITE® representative for additional

Special order boxes with holes (or mouseholes, etc.) may qualify for UL Listing as long as the holes do not exceed more than 25% of the area of each sidewall and as long as the holes do not cut into a structural reinforcing rib, corner, or box lip.

## Terminators



Conduit Sizes  
(For actual hole sizes and locations see page U61.)

2"  
3"  
4" (Electrical & Telephone)\*  
5"  
6"

\*New 4" terminator design accommodates both electrical and telephone conduit sizes. Other terminator sizes available. Contact your local HUBBELL®/QUAZITE® representative for additional

Special order boxes with holes (or mouseholes, etc.) may qualify for UL Listing as long as the holes do not exceed more than 25% of the area of each sidewall and as long as the holes do not cut into a structural reinforcing rib, corner, or box lip.

## Strut Racks

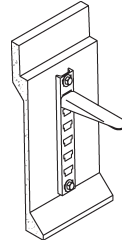


Box and cover struts available. Contact your local HUBBELL®/QUAZITE® representative for sizes.

Inserts must be located in ribs. See page U61 for rib locations.

Width x Depth  
1-5/8" x 1-5/8"

## Cable Racks & Rack Hooks - Galvanized Steel



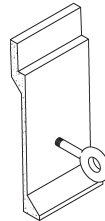
Cable Racks available in the following lengths:

12" length	C080911
18" length	C080910
24" length	C080915
30" length	C080920
36" length	C080921

See page U61 for cable rack locations.

Cable Rack Hooks	Part No.
7-1/2" length	C2031132
10" length	C080907

## Pulling Eyes



Available Ratings

1,500 lbs.  
3,000 lbs.  
10,000 lbs.

## Captive Bolts

Captive bolts are available for PC, PG, LG, PT, LT and PR style covers. Captive bolts prevent the bolt from falling out of the cover when the cover is removed.

## EZ - Locate

The EZ Locate System allows the #6 – #24 AWG ground wires / bonding harnesses or tracer wires to be quickly isolated from the grounding electrode.

The telescoping body is made from stainless steel; the isolating ground switch is made from engineering-grade thermo-plastic and tin-plated copper alloy components to prevent corrosion.

Available Sizes

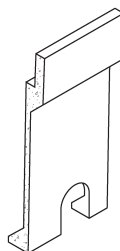
13x24, 17x30, 24x36, 30x48, 48x48



## UNDERGROUND ENCLOSURES

1/2"

There is no additional charge for mouseholes in the standard size and location for their respective enclosures. PC0608, PC0818 and PC1212 boxes usually do not have mouseholes. See pg. 139 for locations.



2-1/2" x 4"

LT1015, PC1118, PG1118

4" x 4"

PC1324, PT1324, PC1730, PT1730,  
PG1324, PG2424, PG1730,  
PD1730, PG2436, PG3048,  
PD3048, PG3636

6" x 8"

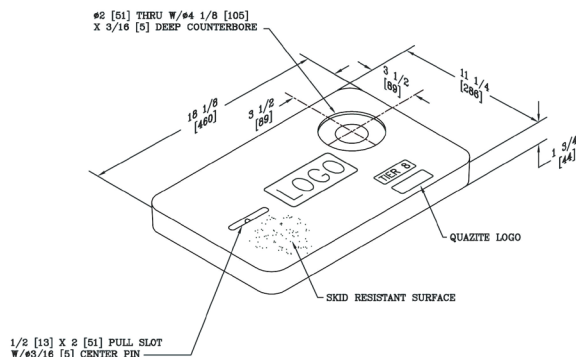
PG3060, PG3660, PG3672, PG4848, PG4872,  
PG4896

Special order boxes with holes (or mouseholes, etc.) may qualify for UL Listing as long as the holes do not exceed more than 25% of the area of each sidewall and as long as the holes do not cut into a structural reinforcing rib, corner, or box lip.

Other sizes available. Contact your local HUBBELL®/QUAZITE® representative for information.

The standard cover pull slot measures 1/2" x 4". Bell cover pull slots measuring 1" x 4" are available upon request.

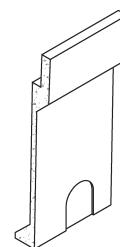
Holes for touch or radio read applications can be provided in covers as needed.



3/8" or 1/2"

Inserts must be located in ribs. See page U61 for rib locations.

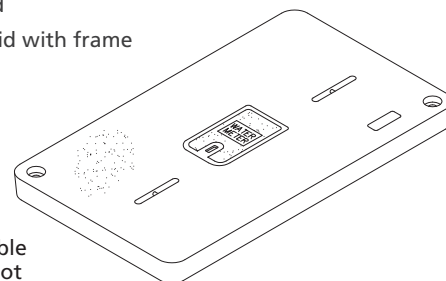
There is no additional charge for mousehole knockouts in the standard size and location for their respective enclosures. Contact your local HUBBELL®/QUAZITE® representative for size options. See pg. U61 for locations.



Available Sizes  
Cast iron 4 1/2" x 7 1/2" lid

Cast iron 6" x 9" lid

Cast iron 9" x 12" lid with frame



\*Select sizes available in Tier 15. Tier 22 not available.

Polymer concrete 9" x 15" drop-in lid

\*Select sizes available in Tier 15. Tier 22 not available. /



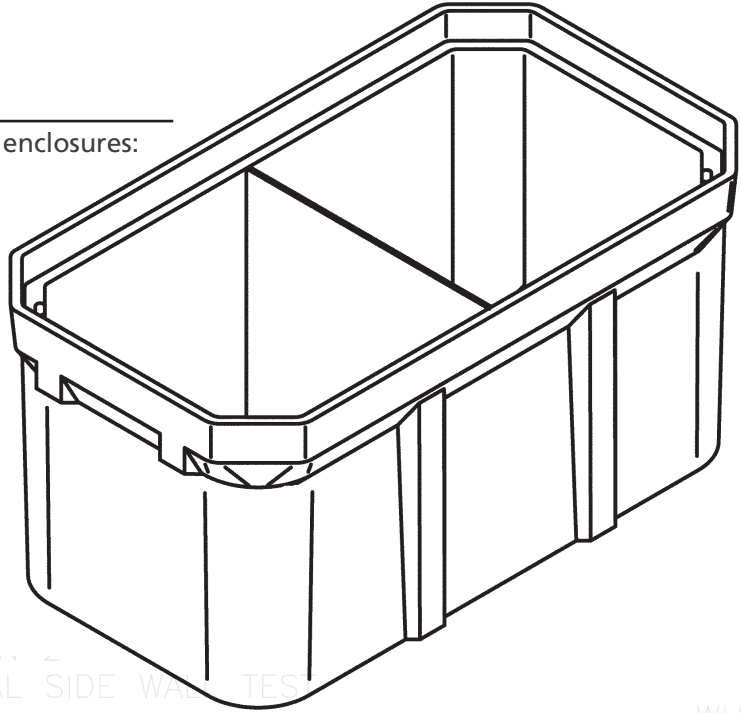
# Polymer Concrete Enclosure Dividers:

## Divided Boxes

Dividers are available for the following size enclosures:

24" x 36" x 18"	36" x 60" x 36"
24" x 36" x 30"	36" x 72" x 21"
24" x 36" x 42"	36" x 72" x 36"
30" x 48" x 18"	48" x 48" x 36"
30" x 48" x 36"	48" x 48" x 48"
30" x 60" x 21"	48" x 72" x 36"
30" x 60" x 36"	48" x 72" x 48"
36" x 36" x 36"	48" x 96" x 48"

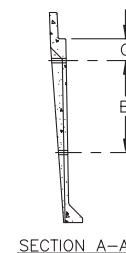
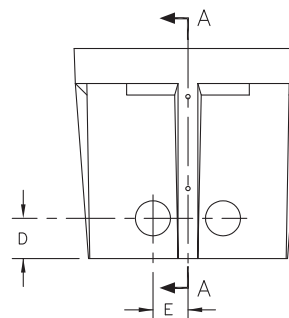
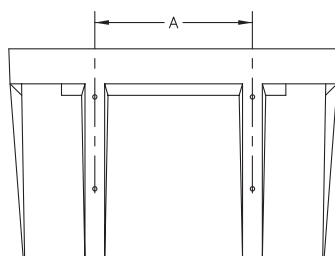
NOTE: Dividers are not sold separately.



Dividers are typically located at the center of the box. Multiple dividers are also available. Additional dividers not listed may be available upon request. Contact your local HUBBELL® / QUAZITE® representative.

# Specifications / Data Standard Cable Rack Insert, Terminator, Knockout & Hole Locations

Mouseholes (not illustrated) - The standard location for mouseholes is in the center of the end walls of the enclosure.



## Boxes

PART NO.	DIMENSIONS				
	A	B	C	D	E
PG2424BA24	12" (305 mm)	10 1/2" (267mm)	4" (102 mm)	5 1/2" (140mm)	4" (102mm)
PG2436BA18	18" (457mm)	9" (229mm)	2 1/2" (64 mm)	5 1/2" (140mm)	4" (102mm)
PG2436BA24	18" (457mm)	13 1/2" (343mm)	2 1/2" (64 mm)	5 1/2" (140mm)	4" (102mm)
PG2436BA30	18" (457mm)	13 1/2" (343mm)	2 1/2" (64 mm)	5 1/2" (140mm)	4" (102mm)
PG2436BA42	18" (457mm)	13 1/2" (343mm)	2 1/2" (64 mm)	5 1/2" (140mm)	4" (102mm)
PD3048BA24	22" (559mm)	10 1/2" (267mm)	6" (152 mm)	5 1/2" (140mm)	5 1/2" (140mm)
PD3048BA48	22" (559mm)	13 1/2" (343 mm)	6" (152 mm)	5 1/2" (140mm)	5 1/2" (140mm)
PG3048BA18	22" (559mm)	9" (229mm)	2 1/2" (64 mm)	5 1/2" (140mm)	5 1/2" (140mm)
PG3048BA24	22" (559mm)	10 1/2" (267mm)	2 1/2" (64 mm)	5 1/2" (140mm)	5 1/2" (140mm)
PG3048BA36	22" (559mm)	13 1/2" (343mm)	2 1/2" (64 mm)	5 1/2" (140mm)	5 1/2" (140mm)
PG3060BA21	20 3/4" (527mm)	10 1/2" (267mm)	2 1/2" (64 mm)	5 1/2" (140mm)	7" (178mm)
PG3060BA30	24" (610mm)	10 1/2" (267mm)	2 1/2" (64 mm)	5 1/2" (140mm)	7" (178mm)
PG3060BA36	20 3/4" (527mm)	10 1/2" (267mm)	2 1/2" (64 mm)	5 1/2" (140mm)	7" (178mm)
PG3636BA36	18" (457mm)	13 1/2" (343mm)	2 1/2" (64 mm)	5 1/2" (140mm)	7" (178mm)
PG3660BA19	22" (559mm)	10 1/2" (267mm)	4" (102 mm)	5 1/2" (140mm)	9" (229mm)
PG3660BA24	22" (559mm)	10 1/2" (267mm)	4" (102 mm)	5 1/2" (140mm)	9" (229mm)
PG3660BA31	22" (559mm)	10 1/2" (267mm)	4" (102 mm)	5 1/2" (140mm)	9" (229mm)
PG3660BA36	22" (559mm)	10 1/2" (267mm)	4" (102 mm)	5 1/2" (140mm)	9" (229mm)
PG3672BA21	20" (508mm)	10 1/2" (267mm)	2 1/2" (76 mm)	5 1/2" (140mm)	9" (229mm)
PG3672BA36	20" (508mm)	10 1/2" (267mm)	3" (76 mm)	5 1/2" (140mm)	9" (229mm)
PG4848BA36	22" (559mm)	10 1/2" (267mm)	5 1/2" (140 mm)	7" (178mm)	5 1/2" (140mm)
PG4848BA48	22" (559mm)	10 1/2" (267mm)	5 1/2" (140 mm)	7" (178mm)	5 1/2" (140mm)
PG4872BA36	46" (1168mm)	13 1/2" (343mm)	5 1/2" (140 mm)	7" (178mm)	5 1/2" (140mm)
PG4872BA48	46" (1168mm)	13 1/2" (343mm)	5 1/2" (140 mm)	7" (178mm)	5 1/2" (140mm)
PG4896BA48	24 3/16" (614mm)	13 1/2" (343mm)	5 1/2" (140 mm)	7" (178mm)	5 1/2" (140mm)

NOTE - Holes should be located only in the walls of an enclosure. Do not cut holes in ribs or corners. Hole locations are  $\pm 1"$  (25mm). Dimensions & weights in parentheses are metric equivalent.

## Hole Sizing for Non-Metallic Conduit / Duct


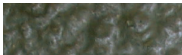








NOMINAL SIZE	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	3"	4" (elec.)	4" (tele.)	5"	6"
CONDUIT O.D.	.840	1.050	1.315	1.660	1.900	2.375	3.500	4.500	4.350	5.563	6.625
HOLE SIZE	1"	1 1/4"	1 3/8"	1 3/4"	2"	2 1/2"	3 3/4"	4 3/4"	4 3/4"	5 3/4"	6 3/4"

Quazite recommends that holes be punched 1/8" to 1/4" larger than the actual outside diameter of the conduit duct. If more precise holes are required, contact your local HUBBELL®/QUAZITE® representative.

# Quazite® Color Options

The standard color for QUAZITE® products is concrete gray. Various color options allow for blending with adjacent materials or special identification of enclosures. Some commonly requested colors include:

UNDERGROUND ENCLOSURES

Color Sample	Description	Polymer Concrete Part No. Code
	Brick Red	R
	Munsell Green	G
	Light Green	F
	Cement Gray	C
	Charcoal Gray	D
	Black	B
	Pecan	T
	International Orange	A
	Purple	N (non-potable water)
	Blue	U

10" (254mm) SQUARE

VERTICAL SIDE WALL TEST

POSITION 3 COVER TEST

WHEEL LOAD

PORTION WHEEL

WHEEL

18" (457mm)

Note: Printed colors are reference only and do not exactly represent product colors. Contact your local Hubbell / Quazite representative for other special colors.

Specify color for PC & PG polymer concrete by inserting the code letter into the 6th digit of the cover or box number. (Example: PG304RCA0009).



# Quazite® in the field

UNDERGROUND  
ENCLOSURES





# Quazite® FRP

UNDERGROUND  
ENCLOSURES

Hubbell maintains a large inventory of Quazite FRP enclosures to serve your needs.



## NEC & Underground Enclosures

The National Electric Code states in article 314.30 that enclosures "...shall be designed and installed to withstand all loads likely to be imposed..." and addresses issues related to enclosure size, wiring entries, enclosures without bottoms, and bonding requirements for covers. "

The code references the ANSI/SCTE 77 "Specification for Underground Enclosure Integrity" National Standard, which outlines various tests that enclosures must pass to meet the standard. ANSI/SCTE 77 also provides load charts with Tier ratings to help users determine the appropriate enclosure to select based on the loadings expected in the application.

### Quazite® FRP – ANSI Standard.

All Quazite® FRP enclosures meet or exceed the test provisions of ANSI/SCTE 77 2013 as referenced in the 2005, 2008, 2011 and 2014 NEC. To achieve this, Quazite® FRP enclosures must pass numerous material and product performance tests before they can meet ANSI/SCTE 77 2013.

### Testing Requirements for ANSI/SCTE 77 2013

- Three-Position Load Testing to simulate actual application performance
- UV Degradation per ASTM G-154
- Fire Resistance per RUS 7CFR 1755.910 (PE-91)
- Chemical Resistance per ASTM D-543
- Water Absorption per ASTM D-570
- Impact Resistance per ASTM D2444
- Accelerated service per ASTM D-756, procedure E

### Quazite® FRP – Peace of Mind.

Quazite® FRP enclosures have undergone rigorous physical, environmental, and internal equipment-protection tests and meet the requirements of the ANSI Standard. By adhering to the NEC and ANSI requirements in the enclosure-selection process, users are ensured long service life. Quazite® FRP enclosures offer not only improved manageability and cost-efficiency over other enclosures, but peace of mind as well.

*National Fire Protection Agency, 2005, 2008, 2011 and 2014  
National Electric Code.*

*Subsequent to the issuance of the 2005 NEC, ANSI approved an updated version of the standard, ANSI/SCTE 77 2013.*

*The latest copy of the standard may be purchased from ANSI.  
It may also be viewed in PDF form on SCTE's website at [http://www.scte.org/documents/pdf/Standards/ANSI\\_SCTE%2077%202013.pdf](http://www.scte.org/documents/pdf/Standards/ANSI_SCTE%2077%202013.pdf)*



# FRP Selection Guide

## Style Guide – Tailored Product Variety.

We offer a wide variety of FRP box styles in order to meet your most specialized enclosure needs. Each style offers specific strengths and assets for diverse functionality



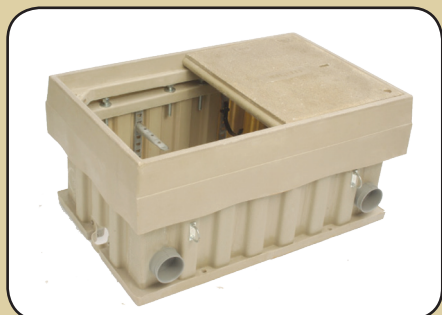
### • FRP Flared Wall Style

This style features a unique combination of polymer concrete and fiber-reinforced polymer. FRP flared wall styles are nestable for compact storage and shipment. The flared wall design also optimizes internal volume and minimizes frost heave.



### • FRP Straight Wall Style

This style features a unique combination of polymer concrete and fiber-reinforced polymer. FRP straight wall boxes are stackable for increased depth. Straight wall design is also easy to remove or adjust in the field.



### • Corrugated Style

A special combination of polymer concrete and fiber-reinforced polymer along with the corrugated walls give this style design flexibility, added strength and durability. Adjust-to-grade or torsion options also available on select sizes.



### • FRP Round Style

This round enclosure features a unique combination of polymer concrete and fiber-reinforced polymer. The shape also prevents a cover from falling into the box.



# Quazite FRP: Available Size Chart

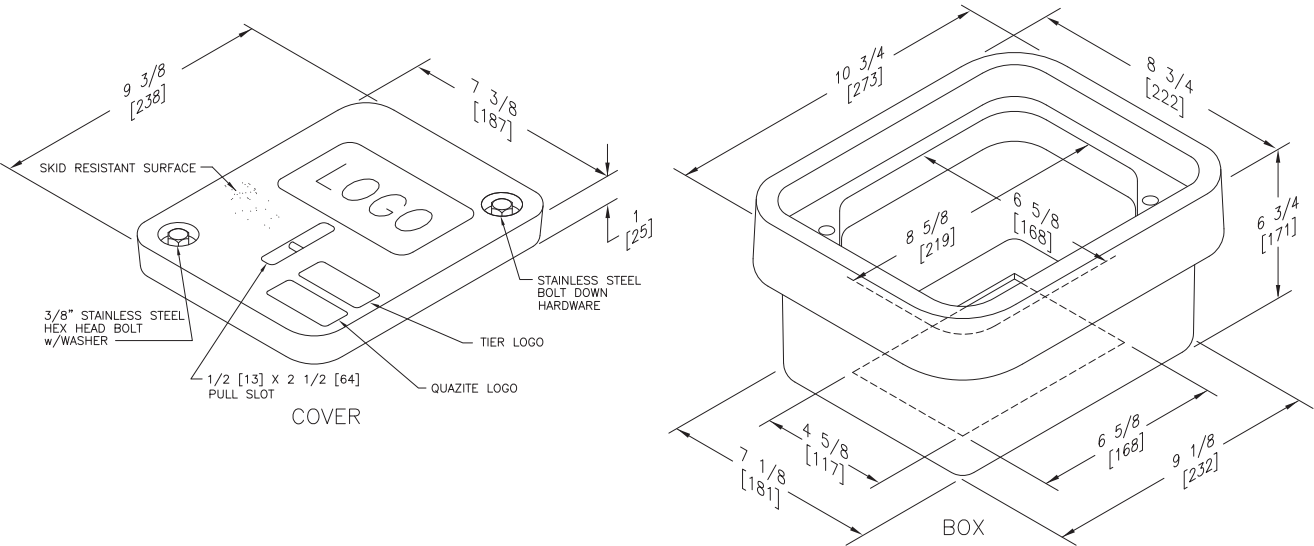
UNDERGROUND  
ENCLOSURES

Style	Size	Depths	Load Rating Options
Straight Wall	6x8	6-3/4	Tier 8
	10x15	12	Tier 8, Tier 15
	11x18	12, 18	Tier 8, Tier 15, Tier 22
	11x21	12	Tier 5, Tier 8, Tier 15
	11x32	12	Tier 5, Tier 8, Tier 15
	12x12	12	Tier 8, Tier 15, Tier 22
	13x24	12, 18	Tier 8, Tier 15, Tier 22
	15x17	12	Tier 8, Tier 15
	15x27	12	Tier 5, Tier 8
	16x22	18	Tier 8, Tier 15
	17x30	12, 18, 22, 30	Tier 8, Tier 15, Tier 22
	24x24	12, 18, 24	Tier 8, Tier 15, Tier 22
	24x36	18, 24, 30	Tier 8, Tier 15, Tier 22
	30x48	18, 24, 36	Tier 8, Tier 15, Tier 22
	30x60	18, 30, 36, 48	Tier 8, Tier 15, Tier 22
	36x36	18, 24, 30, 36, 48	Tier 8, Tier 15, Tier 22
	36x60	18, 24, 30, 36, 48	Tier 8, Tier 15, Tier 22
	36x72	36, 48	Tier 8, Tier 15, Tier 22
Flared Wall	10x15	12, 18	Tier 8, Tier 15
	11x18	12, 18	Tier 8, Tier 15, Tier 22
	11x32	12	Tier 5, Tier 8
	12x12	12, 24	Tier 8, Tier 15
	13x24	12, 18, 24*	Tier 8, Tier 15, Tier 22
	15x17	12	Tier 5, Tier 8, Tier 15
	15x27	12	Tier 5, Tier 8
	16x22	30	Tier 8, Tier 15
	17x30	12, 18, 22, 24, 30, 34*	Tier 8, Tier 15, Tier 22
	24x36	18, 24, 30, 36, 42, 48*	Tier 8, Tier 15, Tier 22
	24x60	24	Tier 5
	30x48	18, 24, 30, 36	Tier 8, Tier 15, Tier 22

Style	Size	Depths	Load Rating Options
Corrugated Wall	30x48	18, 24, 30, 36, 48*	Tier 8, Tier 15, Tier 22
	30x60	18, 24, 30, 36, 48	Tier 5, Tier 8, Tier 15, Tier 22
	36x60	18, 24, 30, 36, 48	Tier 8, Tier 15, Tier 22
	36x72	18, 24, 30, 36, 48	Tier 8, Tier 15, Tier 22
	36x96	30, 36, 48	Tier 8, Tier 15, Tier 22
	48x48	18, 24, 30, 36, 48	Tier 8, Tier 15, Tier 22
	48x72	18, 24, 30, 36, 48	Tier 8, Tier 15, Tier 22
	48x78	18, 24, 30, 36, 48	Tier 8, Tier 15, Tier 22
	48x96	18, 24, 30, 36, 48	Tier 8, Tier 15, Tier 22
	78x96	36, 48	Tier 8, Tier 15, Tier 22
	96x96	36, 48	Tier 8, Tier 15, Tier 22
Round	2000	24, 48	Tier 8, Tier 15, Tier 22
	2700	36, 72	Tier 8, Tier 15
	3200	36	Tier 8, Tier 15, Tier 22
	3900	14, 30, 36	Tier 8, Tier 15, Tier 22

\*Extensions Available

Hex Head Bolts are Standard



UNDERGROUND  
ENCLOSURES

Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 2 Bolts	8	8,000 / 12,000	5	300	C30060801A***
No Bolts	8	8,000 / 12,000	5	300	C00060801A***

Replace \*\*\* with a logo code found on page U133.

Boxes

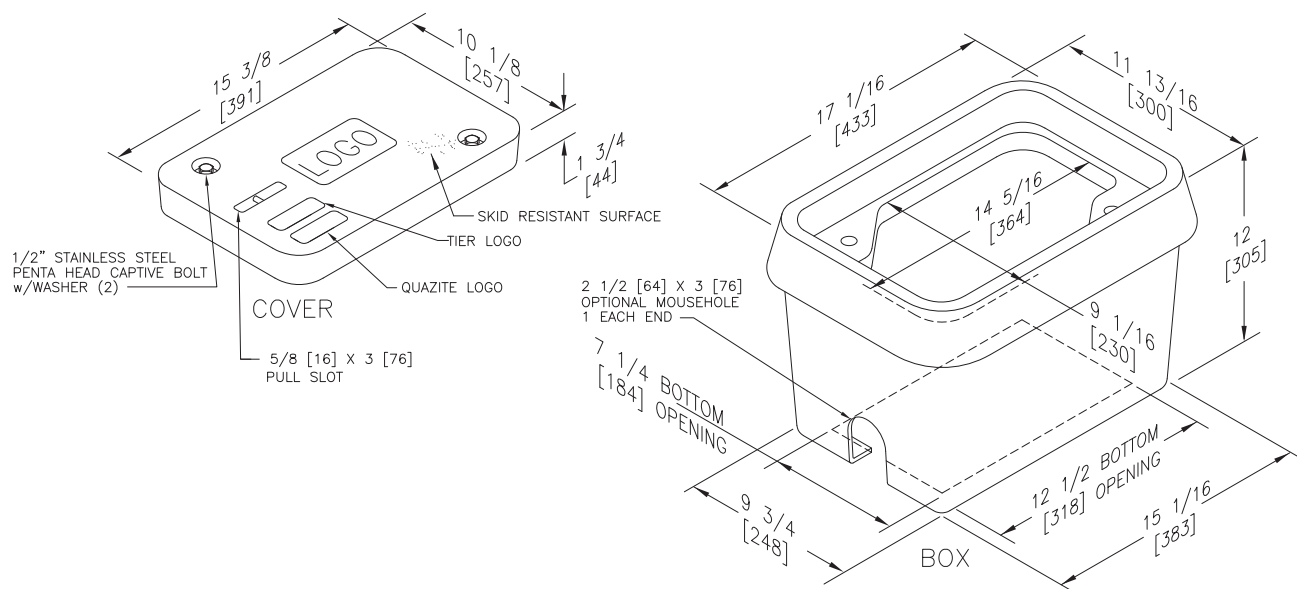
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open	6-3/4"	8	8,000 / 12,000	6	64	B33060806A
Solid Bottom	6-3/4"	8	8,000 / 12,000	6.5	64	B33060806B

To order gasketed boxes, replace the last character with "G".  
NOTE: Gasket reduce the inflow of fluids but do not make the enclosure water tight.

# Dimensions / Data

10" x 15" FRP Straight Wall Stackable

Penta Head Bolts are Standard



## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 2 Bolts	8	8,000 / 12,000	17	100	C10101502A***
W/ 2 Bolts	15	15,000 / 22,500	19	100	C12101502A***
No Bolts	8	8,000 / 12,000	17	100	C00101502A***
No Bolts, W/CI Reader, Over 90	5	5,000 / 7,500	20	100	C08101502C009
No Bolts, W/CI Reader, Under 90	5	5,000 / 7,500	20	100	C08101502D009
No Bolts, W/CI Reader, Over 90	8	8,000 / 12,000	20	100	C00101502C009
No Bolts, W/CI Reader, Under 90	8	8,000 / 12,000	20	100	C00101502D009
No Bolts, W/CI Reader, Over 90	15	15,000 / 22,500	20	100	C02101502C009
No Bolts, W/CI Reader, Under 90	15	15,000 / 22,500	20	100	C02101502D009

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	12"	8	8,000 / 12,000	24	25	B13101512A
	12"	15	15,000 / 22,500	27	25	B14101512A
Solid Bottom	12"	8	8,000 / 12,000	28	25	B13101512B
	12"	15	15,000 / 22,500	31	25	B14101512B

To order boxes with 2 standard mouseholes, replace the last character with "M".

To order gasketed boxes, replace the last character with "G".

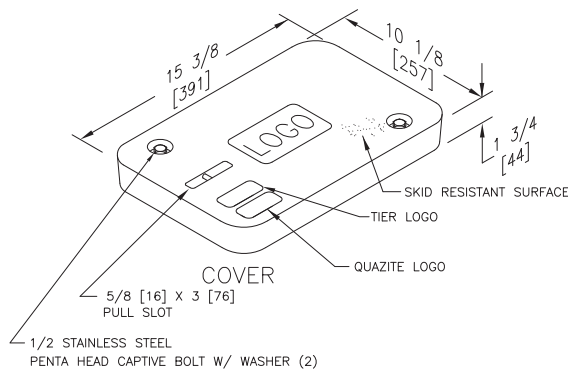
NOTE: Gasket reduce the inflow of fluids but do not make the enclosure water tight.

# Dimensions / Data

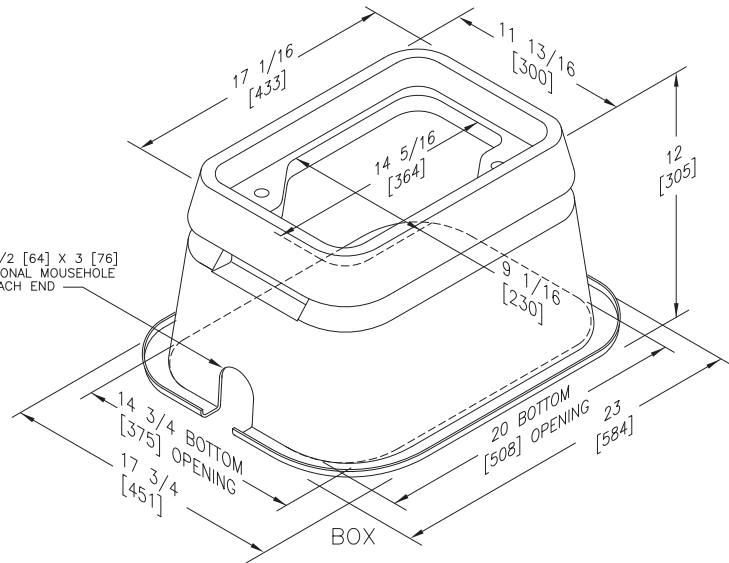
10"x 15" FRP Flared

Penta Head Bolts are Standard

UNDERGROUND  
ENCLOSURES



2 1/2 [64] X 3 [76]  
OPTIONAL MOUSEHOLE  
1 EACH END



## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 2 Bolts	8	8,000 / 12,000	17	100	C10101502A***
W/ 2 Bolts	15	15,000 / 22,500	19	100	C12101502A***
No Bolts	8	8,000 / 12,000	17	100	C00101502A***
No Bolts, W/CI Reader, Over 90	5	5,000 / 7,500	20	100	C08101502C009
No Bolts, W/CI Reader, Under 90	5	5,000 / 7,500	20	100	C08101502D009
No Bolts, W/CI Reader, Over 90	8	8,000 / 12,000	20	100	C00101502C009
No Bolts, W/CI Reader, Under 90	8	8,000 / 12,000	20	100	C00101502D009
No Bolts, W/CI Reader, Over 90	15	15,000 / 22,500	20	100	C02101502C009
No Bolts, W/CI Reader, Under 90	15	15,000 / 22,500	20	100	C02101502D009

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	12"	8	8,000 / 12,000	22	50	B10101512A
	18"		8,000 / 12,000	36	20	B10101518A
	12"	15	15,000 / 22,500	25	50	B12101512A
	18"		15,000 / 22,500	38	20	B12101518A

To order boxes with 2 standard mouseholes, replace the last character with "M".

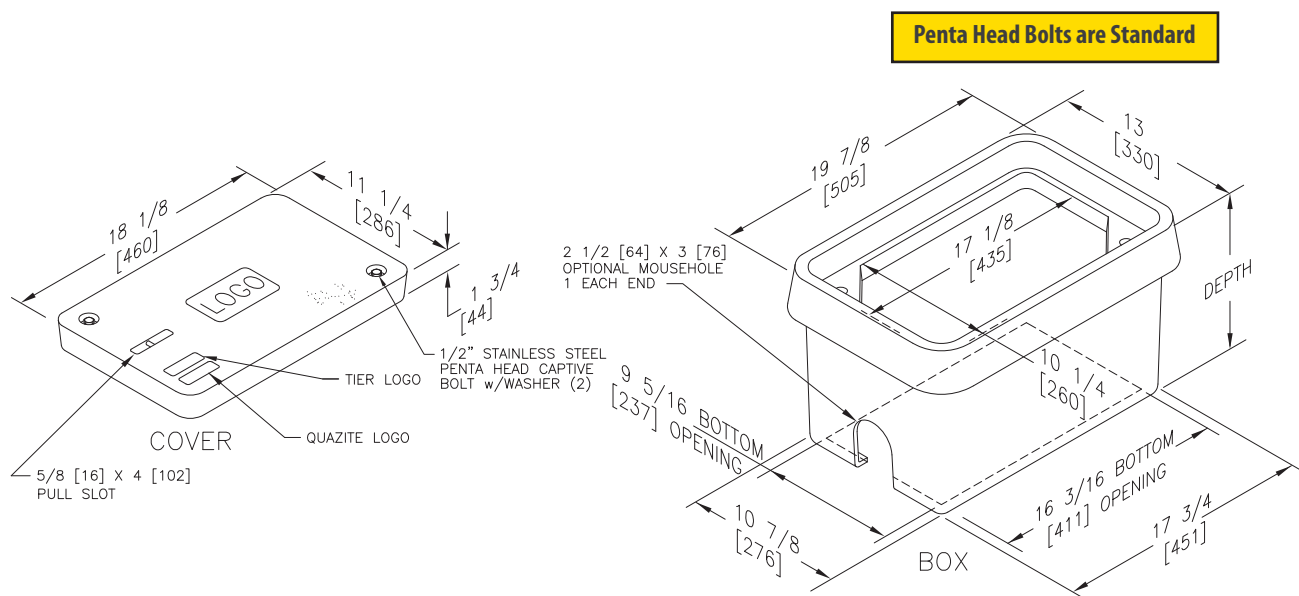
To order gasketed boxes, replace the last character with "G".

Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

NOTE: Cover rating cannot exceed box rating.

# Dimensions / Data

## 11" x 18" FRP Straight Wall Stackable



### Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 2 Bolts	8	8,000 / 12,000	21	100	C10111802A***
W/ 2 Bolts	15	15,000 / 22,500	23	100	C12111802A***
No Bolts	8	8,000 / 12,000	21	100	C00111802A***
W/ 2 Bolts	22	22,500 / 33,750	23	100	C16111802A***
No Bolts, W/CI Reader, Over 90	5*	5,000 / 7,500	26	100	C08111802C009
No Bolts, W/CI Reader, Under 90	5*	5,000 / 7,500	26	100	C08111802D009

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

\* CI Reader covers also available in Tier 8.

### Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	12"	8	8,000/12,000	25	25	B13111812A
	18"		8,000/12,000	29	20	B13111818A
	12"	15	15,000/22,500	28	25	B14111812A
	18"		15,000/22,500	32	20	B14111818A
	12"	22	22,500/33,750	28	25	B16111812A
	18"		22,500/33,750	32	20	B16111818A
Solid Bottom	12"	8	8,000/12,000	27	25	B13111812B
	18"		8,000/12,000	31	20	B13111818B
	12"	15	15,000/22,500	30	25	B14111812B
	18"		15,000/22,500	34	20	B14111818B
	12"	22	22,500/33,750	30	25	B16111812B
	18"		22,500/33,750	34	20	B16111818B

To order boxes with 2 standard mouseholes, replace the last character with "M".

To order gasketed boxes, replace the last character with "G".

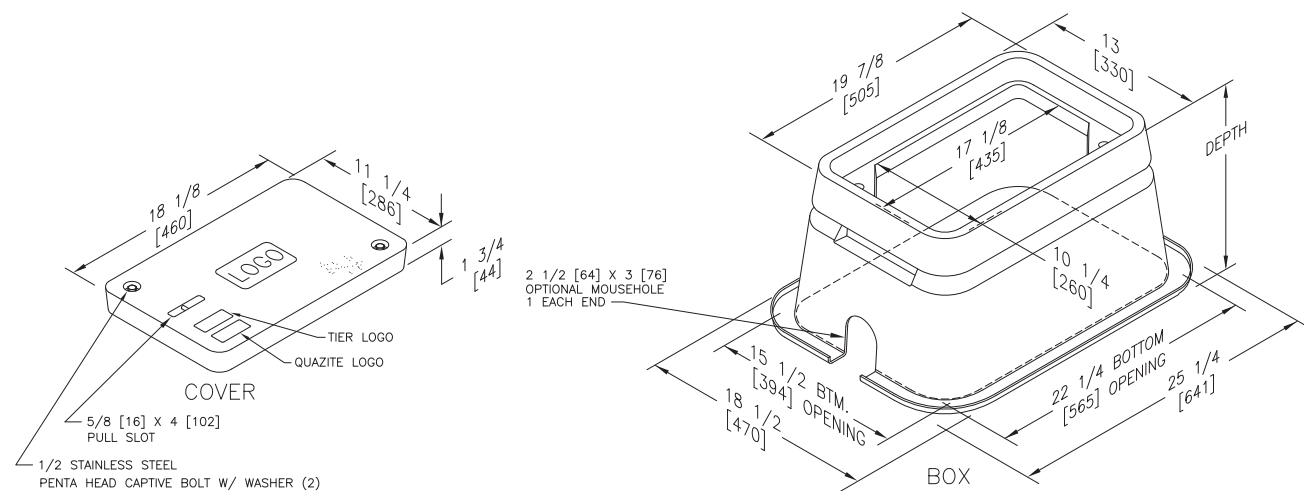
NOTE: Gasket reduce the inflow of fluids but do not make the enclosure water tight.



# Dimensions / Data

## 11" x 18" Flared Wall Style FRP (Nestable) Assembly

Penta Head Bolts are Standard



### Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 2 Bolts	8	8,000 / 12,000	21	100	C10111802A***
W/ 2 Bolts	15	15,000 / 22,500	23	100	C12111802A***
No Bolts	8	8,000 / 12,000	21	100	C00111802A***
W/ 2 Bolts	22	22,500 / 33,750	23	100	C16111802A***
No Bolts, W/CI Reader, Over 90	5*	5,000 / 7,500	26	100	C08111802C009
No Bolts, W/CI Reader, Under 90	5*	5,000 / 7,500	26	100	C08111802D009

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.  
\* CI Reader covers also available in Tier 8.

### Boxes

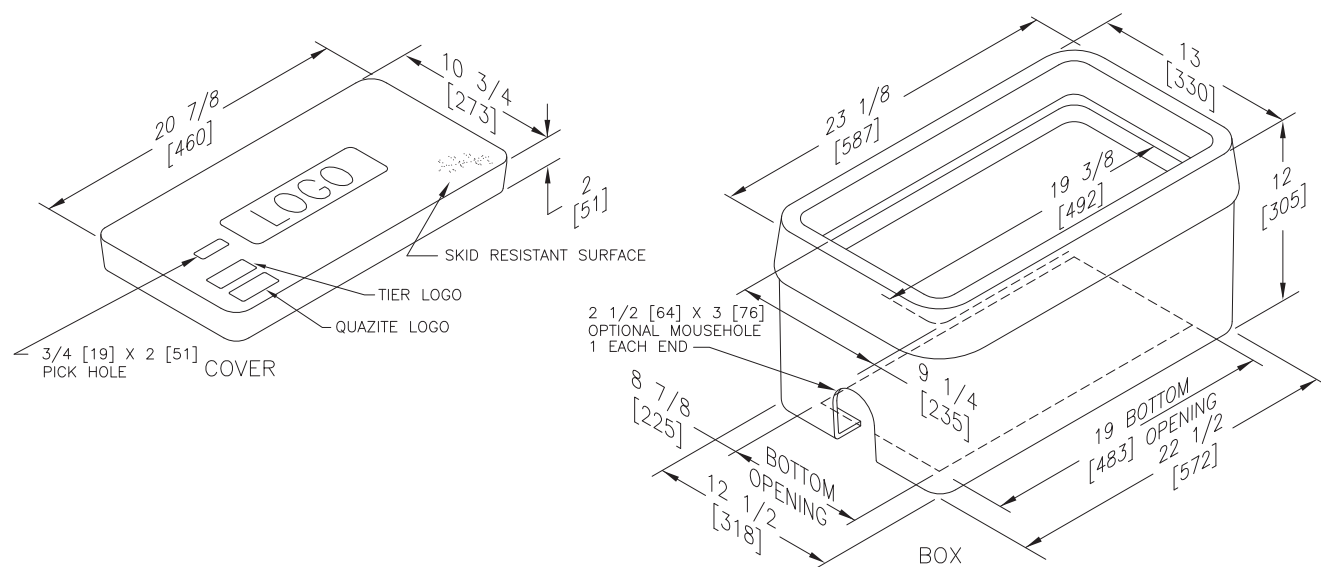
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	12"	8	8,000 / 12,000	25	50	B10111812A
	18"		8,000 / 12,000	29	40	B10111818A
	12"	15	15,000 / 22,500	28	50	B12111812A
	18"		15,000 / 22,500	32	40	B12111818A
	12"	22	22,500 / 33,750	28	50	B19111812A
	18"		22,500 / 33,750	32	40	B19111818A

To order boxes with 2 standard mouseholes, replace the last character with "M".  
To order gasketed boxes, replace the last character with "G".  
Gaskets reduce the inflow of fluids but do not make the enclosure water tight.  
NOTE: Cover rating cannot exceed box rating.

# Dimensions / Data

11" x 21" FRP Straight Wall

Penta Head Bolts are Standard



## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
No Bolts	8	8,000 / 12,000	27	100	C00112102A***
No Bolts	15	15,000 / 22,500	27	100	C02112102A***
No Bolts, w/CI Reader, Over 90	5*	5,000 / 7,500	32	100	C08112102C009
No Bolts, w/CI Reader, Under 90	5*	5,000 / 7,500	32	100	C08112102D009

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

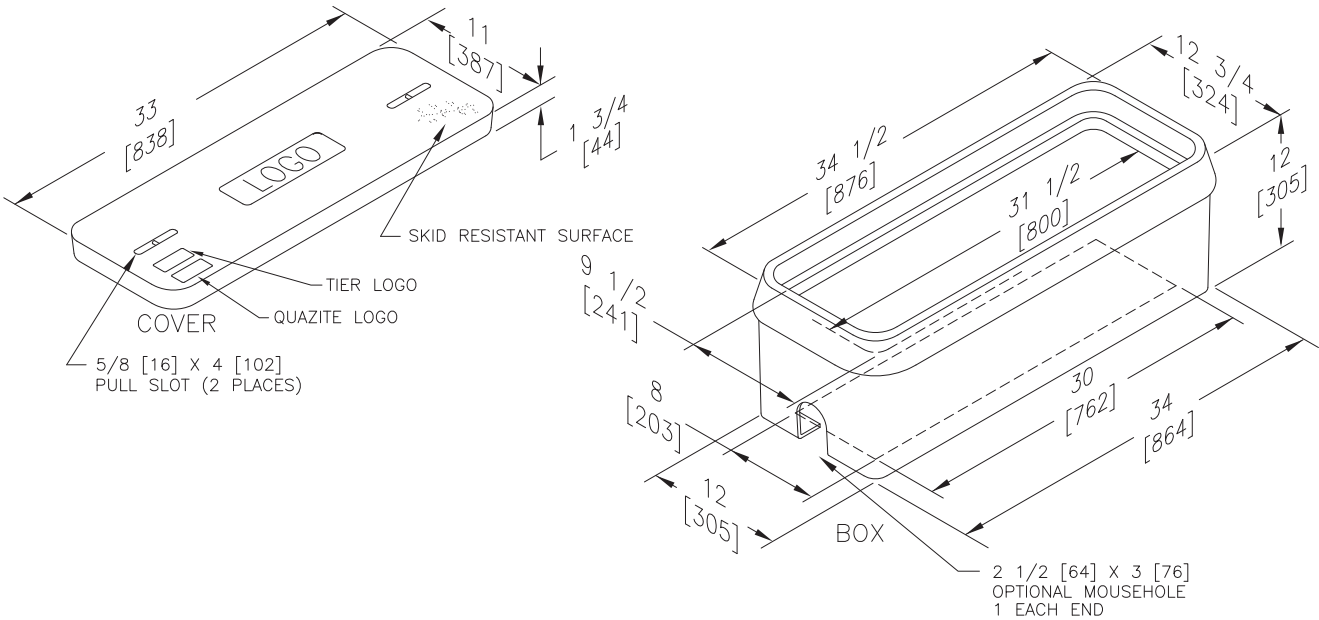
\* CI Reader covers also available in Tier 8.

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	12"	8	8,000/12,000	30	25	B03112112A
	12"	15	15,000/22,500	34	25	B04112112A
Solid Bottom	12"	8	8,000/12,000	32	25	B03112112B
	12"	15	15,000/22,500	36	25	B04112112B

To order boxes with 2 standard mouseholes, replace the last character with "M".

Penta Head Bolts are Standard



UNDERGROUND  
ENCLOSURES

Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
No Bolts	8	8,000 / 12,000	40	100	C00113202A***
No Bolts	15	15,000 / 22,500	43	100	C02113202A***
No Bolts, W/CI Reader, Over 90	5*	5,000 / 7,500	45	100	C08113202C009
No Bolts , W/CI Reader, Under 90	5*	5,000 / 7,500	45	100	C08113202D009

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.  
\* CI Reader covers also available in Tier 8.

Boxes

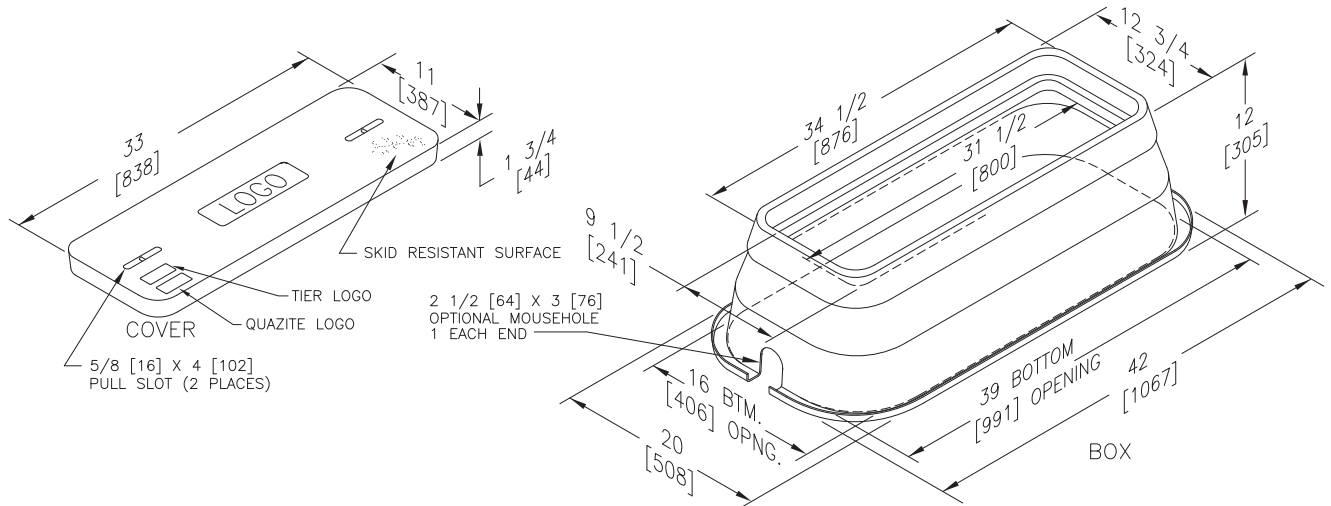
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	12"	8	8,000/12,000	40	16	B03113212A
	12"	15	15,000/22,500	44	16	B04113212A
Solid Bottom	12"	8	8,000/12,000	42	16	B03113212B
	12"	15	15,000/22,500	46	16	B04113212B

To order boxes with 2 standard mouseholes, replace the last character with "M".

# Dimensions / Data

## 11" x 32" Flared Wall Style FRP (Nestable) Assembly

Penta Head Bolts are Standard



### Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
No Bolts	8	8,000 / 12,000	40	100	C00113202A***
No Bolts, W/CI Reader, Over 90	5*	5,000 / 7,500	45	100	C08113202C009
No Bolts, W/CI Reader, Under 90	5*	5,000 / 7,500	45	100	C08113202D009

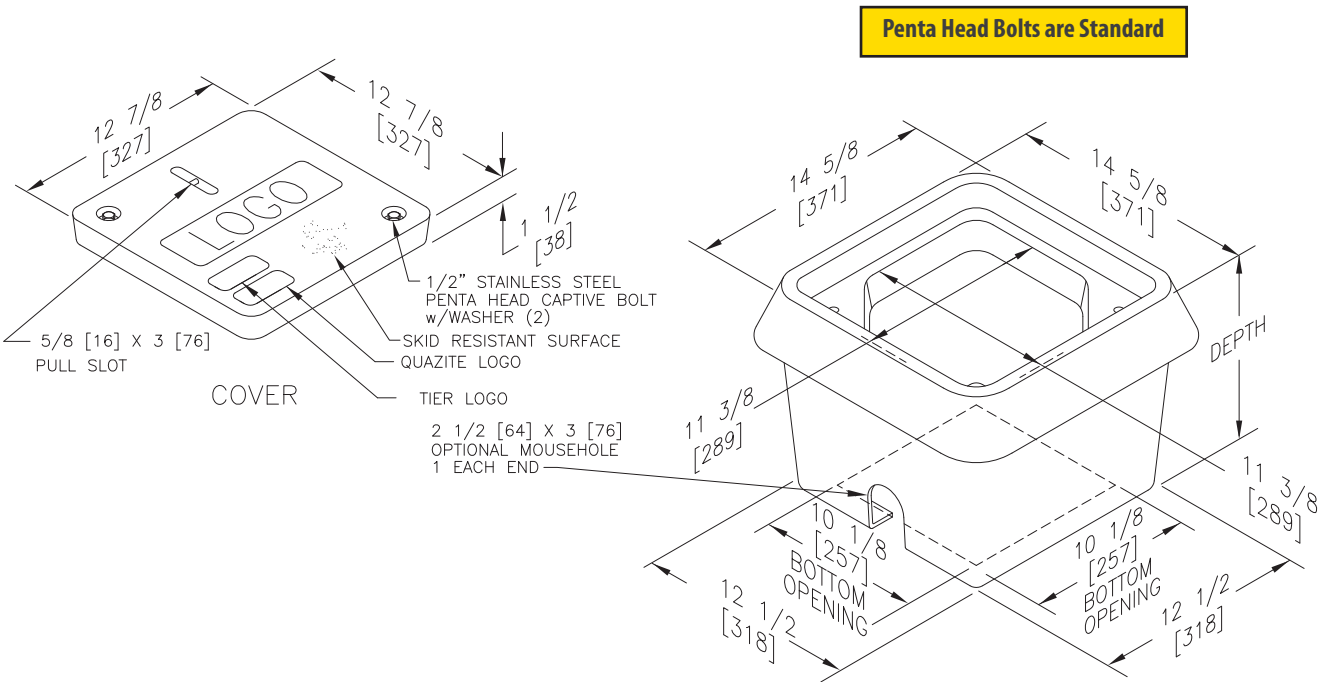
Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

\* CI Reader covers also available in Tier 8.

### Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	12"	8	8,000 / 12,000	40	16	B00113212A

To order boxes with 2 standard mouseholes, replace the last character with "M".



UNDERGROUND  
ENCLOSURES

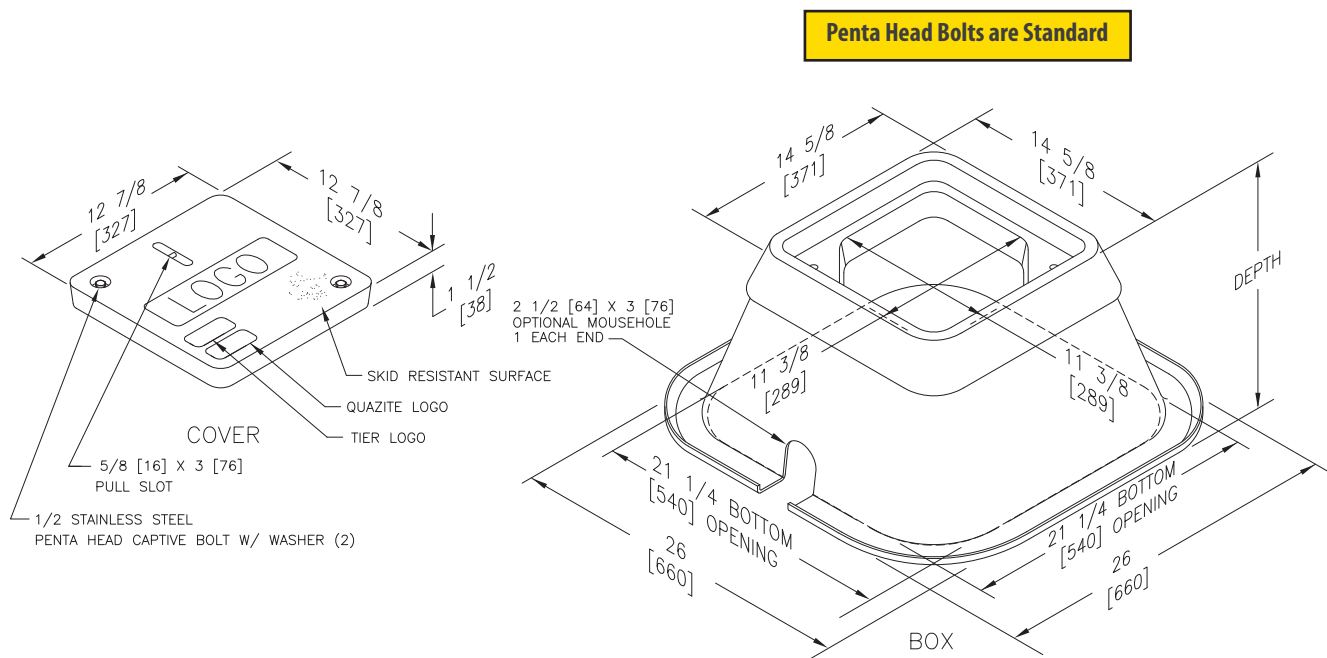
Covers					
DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 2 Bolts	8	8,000 / 12,000	14	100	C10121202A***
W/ 2 Bolts	15	15,000 / 22,500	15	100	C12121202A***
No Bolts	8	8,000 / 12,000	14	100	C00121202A***
W/ 2 Bolts	22	22,500 / 33,750	15	100	C16121202A***

Replace \*\*\* with a logo code found on page U133.

Boxes						
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	12"	8	8,000 / 12,000	26	30	B13121212A
	12"	15	15,000 / 22,500	30	30	B14121212A
	12"	22	22,500 / 33,750	30	30	B16121212A
Solid Bottom	12"	8	8,000 / 12,000	27	30	B13121212B
	12"	15	15,000 / 22,500	31	30	B14121212B
	12"	22	22,500 / 33,750	31	30	B16121212B

To order boxes with 2 standard mouseholes, replace the last character with "M".  
To order gasketed boxes, replace the last character with "G".  
NOTE: Gasket reduce the inflow of fluids but do not make the enclosure water tight.





## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 2 Bolts	8	8,000 / 12,000	27	100	C10121202A***
W/ 2 Bolts	15	15,000 / 22,500	27	100	C12121202A***
No Bolts	8	8,000 / 12,000	27	100	C00121202A***

Replace \*\*\* with a logo code found on page U133.

## Boxes

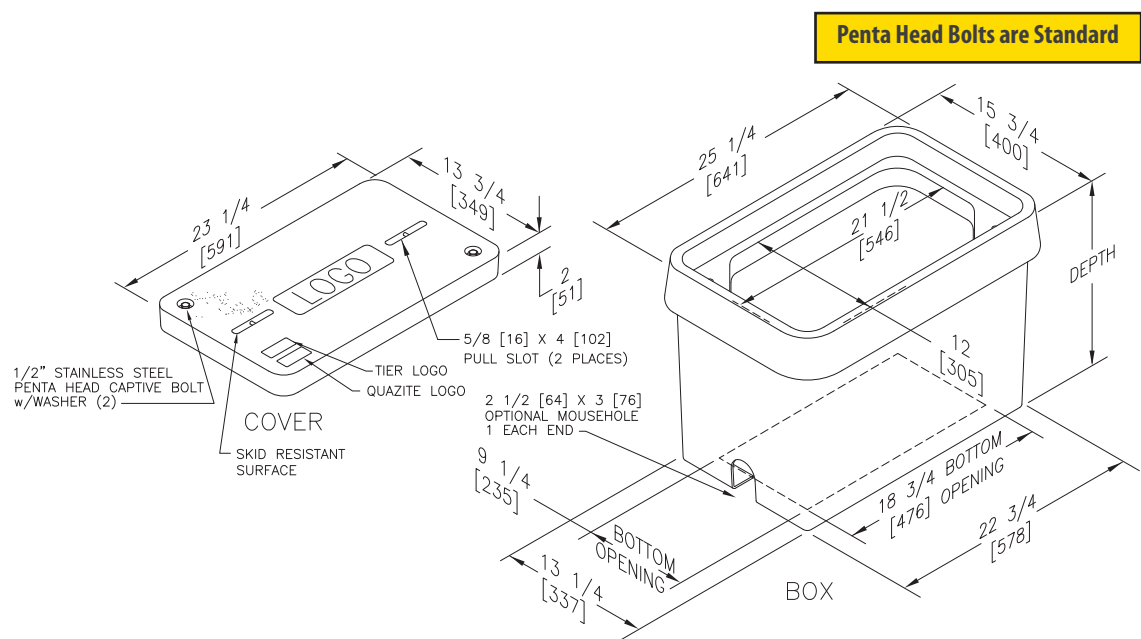
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	12"	8	8,000 / 12,000	28	10	B10121212A
	24"		8,000 / 12,000	45	10	B10121224A
	12"	15	15,000 / 22,500	32	10	B12121212A
	24"		15,000 / 22,500	51	10	B12121224A

To order boxes with 2 standard mouseholes, replace the last character with "M".

To order gasketed boxes, replace the last character with "G".

Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

NOTE: Cover rating cannot exceed box rating.



Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 2 Bolts	8	8,000 / 12,000	26	50	C10132402A***
W/ 2 Bolts	15	15,000 / 22,500	40	50	C12132402A***
No Bolts	8	8,000 / 12,000	26	50	C00132402A***
W/ 2 Bolts	22	22,500 / 33,750	40	50	C16132402A***
No Bolts, W/CI Reader, Over 90	5*	5,000 / 7,500	30	50	C08132402C009
No Bolts , W/CI Reader, Under 90	5*	5,000 / 7,500	30	50	C08132402D009

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.  
\* CI Reader covers also available in Tier 8.

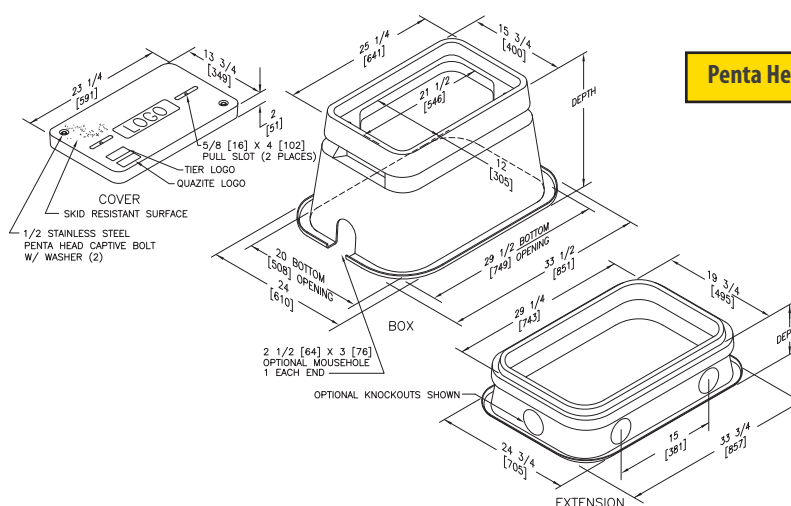
Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	12"	8	8,000 / 12,000	38	20	B13132412A
	18"			44	16	B13132418A
	12"	15	15,000 / 22,500	42	20	B14132412A
	18"			50	16	B14132418A
Solid Bottom	12"	22	22,500 / 33,750	42	20	B16132412A
	12"	8	8,000 / 12,000	40	20	B13132412B
	18"			46	16	B13132418B
	12"	15	15,000 / 22,500	44	20	B14132412B
	18"			52	16	B14132418B
	12"	22	22,500 / 33,750	44	20	B16132412B

To order boxes with 2 standard mouseholes, replace the last character with "M".  
To order gasketed boxes, replace the last character with "G".  
Gasket reduce the inflow of fluids but do not make the enclosure water tight.  
NOTE: Cover rating cannot exceed box rating.

# Dimensions / Data

## 13" x 24" Flared Wall Style FRP (Nestable) Assembly



Penta Head Bolts are Standard

### Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 2 Bolts	8	8,000 / 12,000	26	50	C10132402A***
W/ 2 Bolts	15	15,000 / 22,500	40	50	C12132402A***
No Bolts	8	8,000 / 12,000	26	50	C00132402A***
W/ 2 Bolts	22	22,500 / 33,750	40	50	C16132402A***
No Bolts, W/CI Reader, Over 90	5*	5,000 / 7,500	30	50	C08132402C009
No Bolts , W/CI Reader, Under 90	5*	5,000 / 7,500	30	50	C08132402D009

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

\* CI Reader covers also available in Tier 8.

### Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	12"	8	8,000 / 12,000	38	16	B10132412A
	18"		8,000 / 12,000	44	16	B10132418A
	24"		8,000 / 12,000	52	10	B10132424A
	12"	15	15,000 / 22,500	42	16	B12132412A
	18"		15,000 / 22,500	50	16	B12132418A
	24"		15,000 / 22,500	58	10	B12132424A
	12"	22	22,500 / 33,750	42	16	B19132412A
	18"		22,500 / 33,750	50	16	B19132418A
	24"		22,500 / 33,750	58	10	B19132424A

To order boxes with 2 standard mouseholes, replace the last character with "M".

To order gasketed boxes, replace the last character with "G".

Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

NOTE: Cover rating cannot exceed box rating.

### Bottom Extensions

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
8" - Tier 8	8"	8	8,000 / 12,000	33	12	E00132408A
8" - Tier 15	8"	15	15,000 / 22,500	38	12	E02132408A

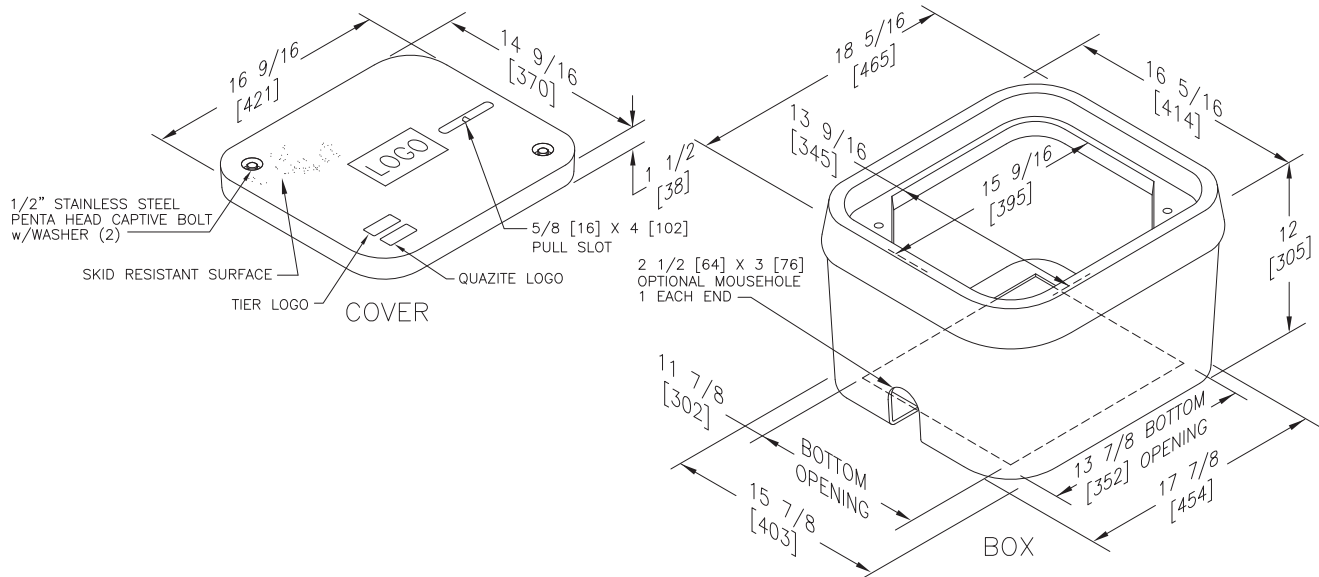
To order boxes with 2 standard mouseholes, replace the last character with "M".

To order gasketed boxes, replace the last character with "G".

# Dimensions / Data

15" x 17" FRP Straight Wall

Penta Head Bolts are Standard



UNDERGROUND  
ENCLOSURES

## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 2 Bolts	8	8,000 / 12,000	22	100	C10151702A***
W/ 2 Bolts	15	15,000 / 22,500	25	100	C12151702A***
No Bolts	8	8,000 / 12,000	22	100	C00151702A***
No Bolts	15	15,000 / 22,500	25	100	C02151702A***
No Bolts, w/CI Reader, Over 90	5*	5,000 / 7,500	30	100	C08151702E009
No Bolts, w/CI Reader, Under 90	5*	5,000 / 7,500	30	100	C08151702F009

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

\* CI Reader covers also available in Tier 8."

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	12"	8	8,000 / 12,000	24	20	B13151712A
	12"	15	15,000 / 22,500	28	20	B14151712A
Open Bottom, No Bolts	12"	8	8,000 / 12,000	24	20	B03151712A
	12"	15	15,000 / 22,500	28	20	B04151712A
Solid Bottom	12"	8	8,000 / 12,000	26	20	B13151712B
	12"	15	15,000 / 22,500	30	20	B14151712B

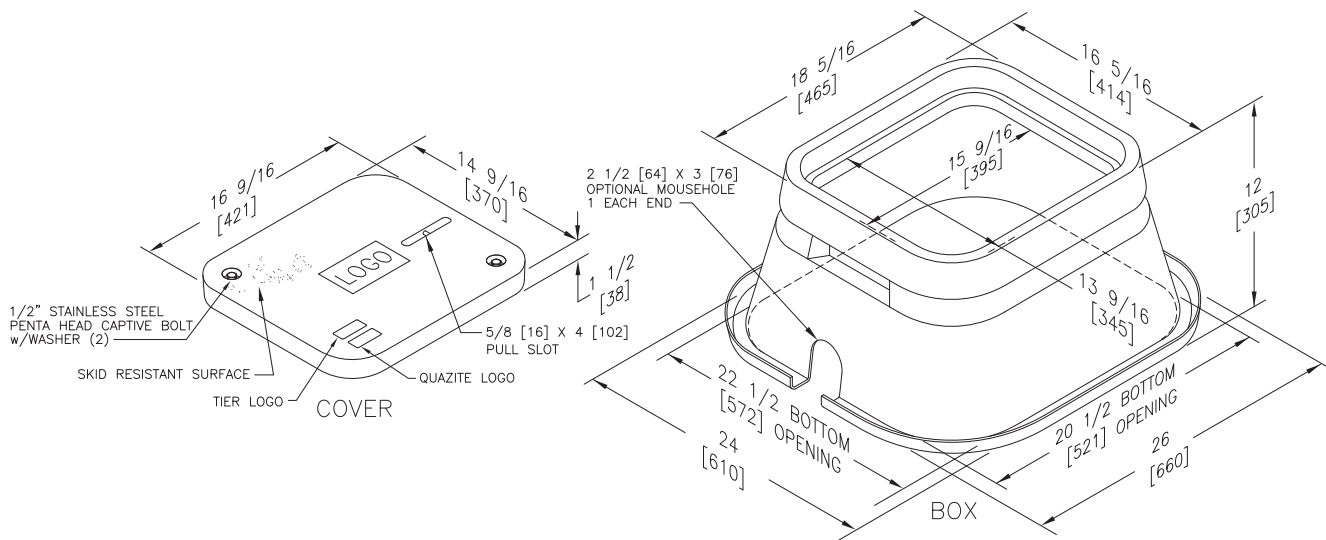
To order boxes with 2 standard mouseholes, replace the last character with "M".

To order gasketed boxes, replace the last character with "G".

Gasket reduce the inflow of fluids but do not make the enclosure water tight.

NOTE: Cover rating cannot exceed box rating.

Penta Head Bolts are Standard



## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 2 Bolts	8	8,000 / 12,000	22	100	C10151702A***
W/ 2 Bolts	15	15,000 / 22,500	25	100	C12151702A***
No Bolts	8	8,000 / 12,000	22	100	C00151702A***
No Bolts, w/CI Reader, Over 90	5*	5,000 / 7,500	27	100	C08151702E009
No Bolts, w/CI Reader, Under 90	5*	5,000 / 7,500	27	100	C08151702F009

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

\* CI Reader covers also available in Tier 8.

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	12"	8	8,000 / 12,000	24	20	B10151712A
	12"	15	15,000 / 22,500	28	20	B12151712A

To order with 2 standard mouseholes, replace the last character with "M".

To order gasketed boxes, replace the letter "A" with the letter "G".

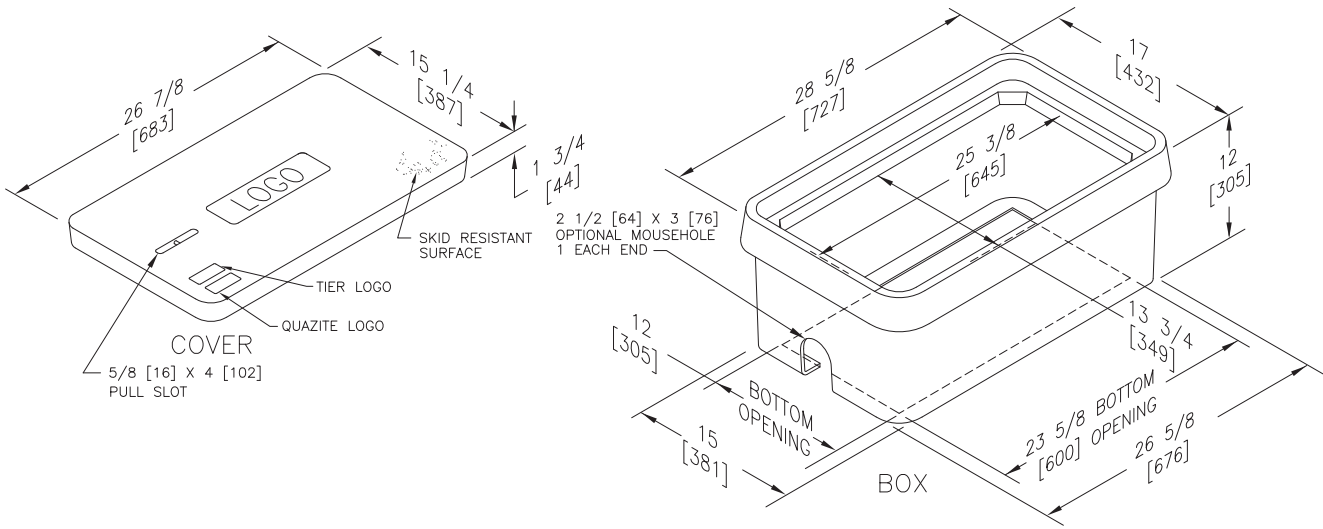
NOTE: Gasket reduce the inflow of fluids but do not make the enclosure water tight.

NOTE: Cover rating cannot exceed box rating.



Penta Head Bolts are Standard

UNDERGROUND  
ENCLOSURES



Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
No Bolts	8	8,000 / 12,000	22	50	C00152702A***
No Bolts, w/CI Reader, Over 90	5	5,000 / 7,500	27	50	C08152702E009
No Bolts, w/CI Reader, Under 90	5	5,000 / 7,500	27	50	C08152702F009

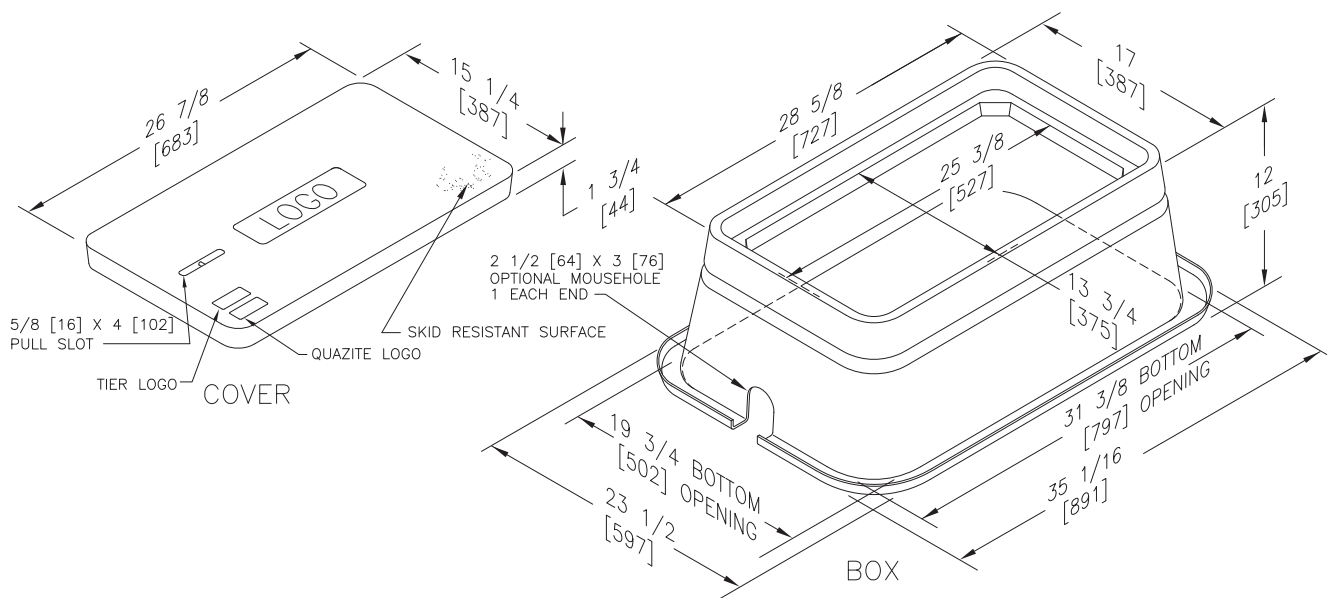
Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	12"	8	8,000 / 12,000	32	10	B03152712A
Solid Bottom	12"	8	8,000 / 12,000	34	10	B03152712B

To order with 2 standard mouseholes, replace the last character with "M".  
To order gasketed boxes, replace the letter "A" with the letter "G".  
NOTE: Gasket reduce the inflow of fluids but do not make the enclosure water tight.  
NOTE: Cover rating cannot exceed box rating.

Penta Head Bolts are Standard



## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
No Bolts	8	8,000 / 12,000	22	50	C00152702A***
No Bolts, w/CI Reader, Over 90	5	5,000 / 7,500	27	50	C08152702E009
No Bolts, w/CI Reader, Under 90	5	5,000 / 7,500	27	50	C08152702F009

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

## Boxes

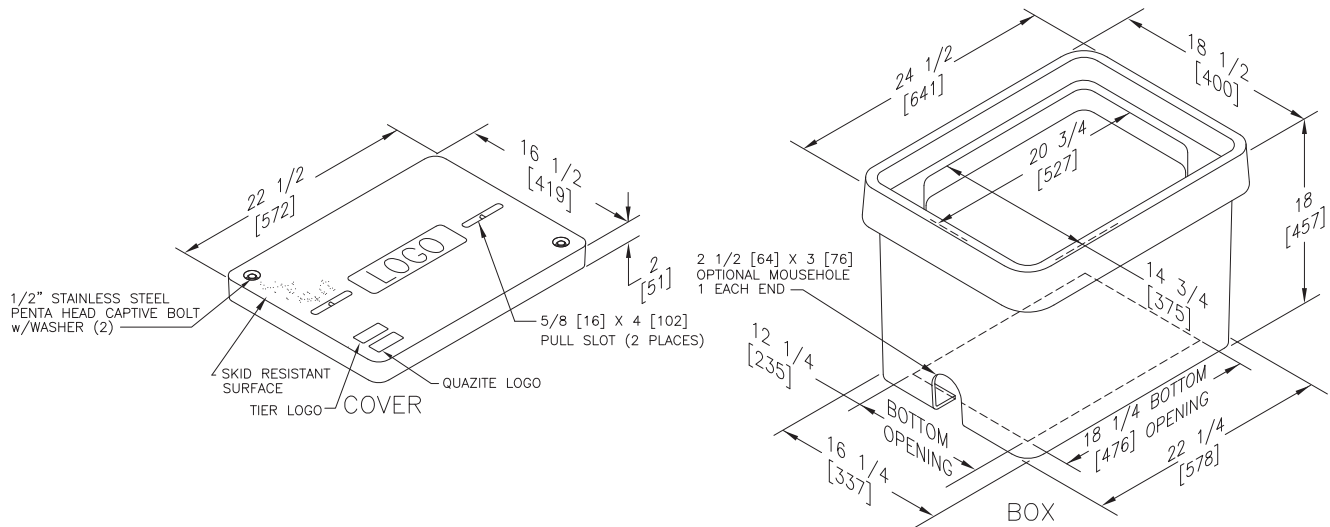
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	12"	8	8,000 / 12,000	32	10	B00152712A

To order with 2 standard mouseholes, replace the last character with "M".  
NOTE: Cover rating cannot exceed box rating.

# Dimensions / Data

16" x 22" FRP Straight Wall Stackable

Penta Head Bolts are Standard



UNDERGROUND  
ENCLOSURES

## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 2 Bolts	8	8,000 / 12,000	29	50	C10162202A***
W/ 2 Bolts	15	15,000 / 22,500	34	50	C12162202A***
No Bolts	8	8,000 / 12,000	29	50	C00162202A***
No Bolts	15	15,000 / 22,500	34	50	C02162202A***

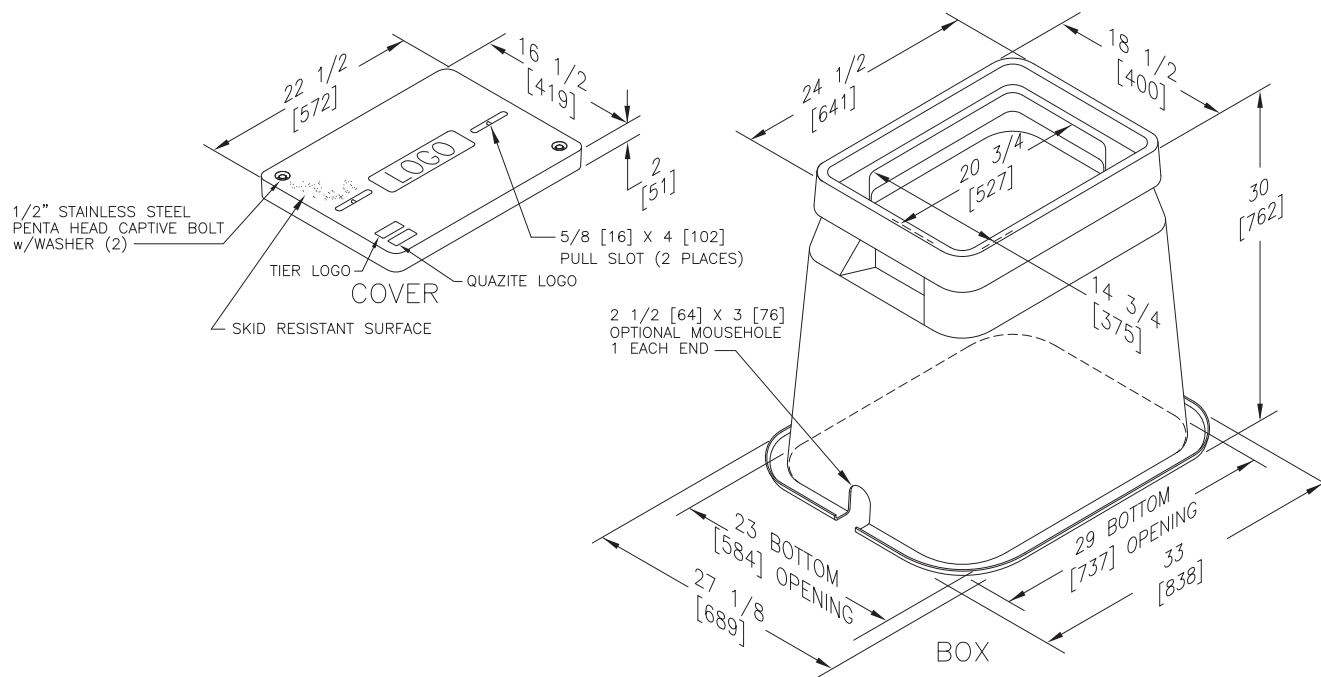
Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	18"	8	8,000 / 12,000	42	9	B13162218A
	18"	15	15,000 / 22,500	52	9	B14162218A
No Bolts	18"	8	8,000 / 12,000	42	9	B03162218A
No Bolts	18"	15	15,000 / 22,500	42	9	B04162218A
Solid Bottom	18"	8	8,000 / 12,000	46	9	B13162218B
	18"	15	15,000 / 22,500	56	9	B14162218B
No Bolts	18"	8	8,000 / 12,000	42	9	B03162218B
No Bolts	18"	15	15,000 / 22,500	42	9	B04162218B

To order boxes with 2 standard mouseholes, replace the letter "A" with letter "B".  
 NOTE: Gasket reduce the inflow of fluids but do not make the enclosure water tight.  
 NOTE: Cover rating cannot exceed box rating.

## Penta Head Bolts are Standard



## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 2 Bolts	8	8,000 / 12,000	29	50	C10162202A***
W/ 2 Bolts	15	15,000 / 22,500	34	50	C12162202A***
No Bolts	8	8,000 / 12,000	29	50	C00162202A***
No Bolts	15	15,000 / 22,500	34	50	C02162202A***

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	30"	8	8,000 / 12,000	66	10	B10162230A
	30"	15	15,000 / 22,500	76	10	B12162230A
No Bolt	30"	8	8,000 / 12,000	66	10	B00162230A
	30"	15	15,000 / 22,500	66	10	B02162230A

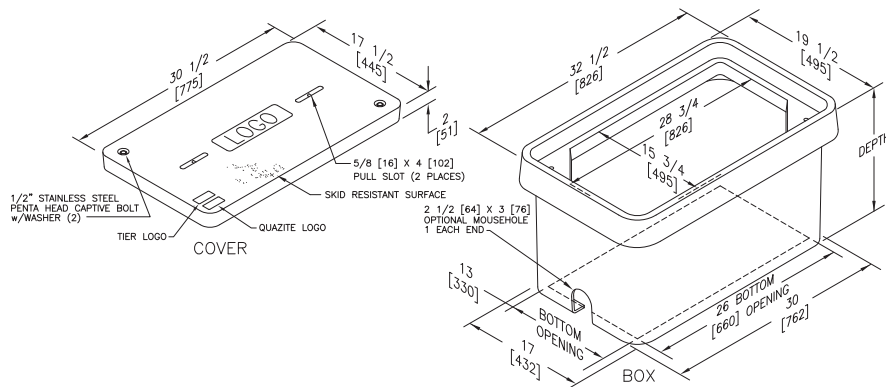
To order boxes with 2 standard mouseholes, replace the letter "A" with letter "B".

NOTE: Gasket reduce the inflow of fluids but do not make the enclosure water tight.

NOTE: Cover rating cannot exceed box rating.

# Dimensions / Data

## 17" x 30" FRP Straight Wall Stackable



**Penta Head Bolts are Standard**

### Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 2 Bolts	8	8,000 / 12,000	27	50	C10173002A***
W/ 2 Bolts	15	15,000 / 22,500	27	50	C12173002A***
No Bolts	8	8,000 / 12,000	27	50	C00173002A***
No Bolts	15	15,000 / 22,500	27	50	C02173002A***
W/ 2 Bolts	22	22,500 / 33,750	27	50	C16173002A***
No Bolts, W/CI Reader, Over 90	5	5,000 / 7,500	53	50	C08173003E009
No Bolts, W/CI Reader, Under 90	5	5,000 / 7,500	53	50	C08173003F009
No Bolts, W/CI Reader, Over 90	8	8,000 / 12,000	53	50	C00173003E009
No Bolts, W/CI Reader, Under 90	8	8,000 / 12,000	53	50	C00173003F009

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options. Available with EZ-Locate.

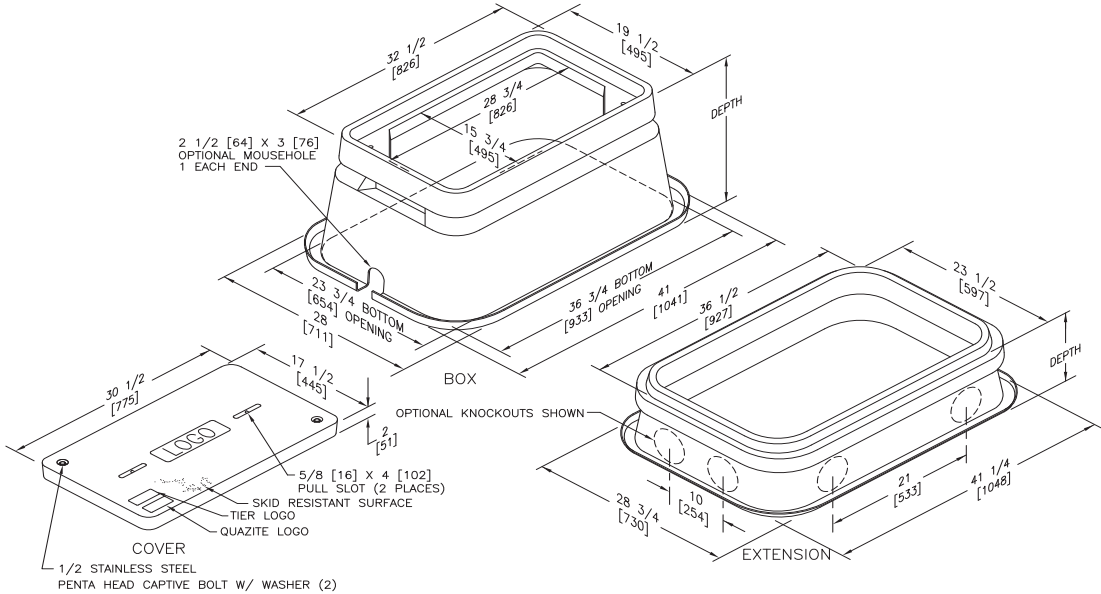
### Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	12"	8	8,000 / 12,000	46	10	B13173012A
	18"		8,000 / 12,000	58	9	B13173018A
	22"		8,000 / 12,000	68	8	B13173022A
	30"		8,000 / 12,000	88	6	B13173030A
	12"	15	15,000 / 22,500	50	10	B14173012A
	18"		15,000 / 22,500	62	9	B14173018A
	22"		15,000 / 22,500	74	8	B14173022A
	30"		15,000 / 22,500	94	6	B14173030A
	12"	22	22,500 / 33,750	50	10	B16173012A
	18"		22,500 / 33,750	62	9	B16173018A
Solid Bottom	12"	8	8,000 / 12,000	51	10	B13173012B
	18"		8,000 / 12,000	63	9	B13173018B
	22"		8,000 / 12,000	73	8	B13173022B
	30"		8,000 / 12,000	93	6	B13173030B
	12"	15	15,000 / 22,500	55	10	B14173012B
	18"		15,000 / 22,500	67	9	B14173018B
	22"		15,000 / 22,500	79	8	B14173022B
	30"		15,000 / 22,500	99	6	B14173030B
	12"	22	22,500 / 33,750	55	10	B16173012B
	18"		22,500 / 33,750	67	9	B16173018B

To order boxes with 2 standard mouseholes, replace the last character with "M". To order gasketed boxes, replace the last character with "G". NOTE: Gaskets reduce the inflow of fluids but do not make the enclosure water tight. NOTE: Cover rating cannot exceed box rating.



Penta Head Bolts are Standard



Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 2 Bolts	8	8,000 / 12,000	47	50	C10173002A***
W/ 2 Bolts	15	15,000 / 22,500	51	50	C12173002A***
No Bolts	8	8,000 / 12,000	47	50	C00173002A***
No Bolts	15	15,000 / 22,500	51	50	C02173002A***
W/ 2 Bolts	22	22,500 / 33,750	51	50	C16173002A***
No Bolts, W/CI Reader, Over 90	5	5,000 / 7,500	53	50	C08173003E009
No Bolts, W/CI Reader, Under 90	5	5,000 / 7,500	53	50	C08173003F009
No Bolts, W/CI Reader, Over 90	8	8,000 / 12,000	53	50	C00173003E009
No Bolts, W/CI Reader, Under 90	8	8,000 / 12,000	53	50	C00173003F009

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

# Dimensions / Data

## 17" x 30" Flared Wall Style FRP (Nestable) Assembly (Continued)

Penta Head Bolts are Standard

### Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	12"	8	8,000 / 12,000	46	10	B10173012A
	18"		8,000 / 12,000	58	10	B10173018A
	22"		8,000 / 12,000	68	10	B10173022A
	24"		8,000 / 12,000	78	10	B10173024A
	30"		8,000 / 12,000	88	10	B10173030A
	34"		8,000 / 12,000	96	8	B10173034A
	12"	15	15,000 / 22,500	50	10	B12173012A
	18"		15,000 / 22,500	64	10	B12173018A
	22"		15,000 / 22,500	74	10	B12173022A
	24"		15,000 / 22,500	84	10	B12173024A
	30"		15,000 / 22,500	94	10	B12173030A
	34"		15,000 / 22,500	102	8	B12173034A
	12"	22	22,500 / 33,750	50	10	B19173012A
	18"		22,500 / 33,750	64	10	B19173018A
	22"		22,500 / 33,750	74	10	B19173022A
	24"		22,500 / 33,750	84	10	B19173024A
	30"		22,500 / 33,750	94	10	B19173030A

To order boxes with 2 standard mouseholes, replace the last character with "M".

To order gasketed boxes, replace the last character with "G".

Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

NOTE: Cover rating cannot exceed box rating.

### Bottom Extensions

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
8" - Tier 8	8"	8	8,000 / 12,000	39	12	E00173008A
8" - Tier 15	8"	15	15,000 / 22,500	45	12	E02173008A
16" - Tier 8	16"	8	8,000 / 12,000	42	8	E00173016A
16" - Tier 15	16"	15	15,000 / 22,500	48	8	E02173016A

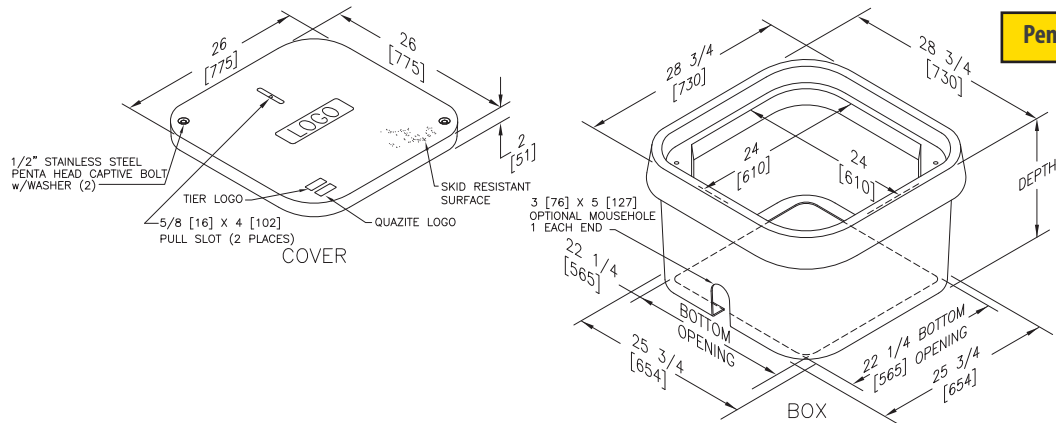
To order boxes with 2 standard mouseholes, replace the last character with "M".

To order gasketed boxes, replace the last character with "G".

UNDERGROUND  
ENCLOSURES

# Dimensions / Data

## 24" x 24" FRP Straight Wall Stackable



**Penta Head Bolts are Standard**

### Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 2 Bolts	8	8,000 / 12,000	70	20	C10242402A***
W/ 2 Bolts	15	15,000 / 22,500	100	20	C12242402A***
No Bolts	8	8,000 / 12,000	70	20	C00242402A***
W/ 2 Bolts	22	22,500 / 33,750	100	20	C16242402A***

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

### Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	12"	8	8,000 / 12,000	74	9	B13242412A
	18"		8,000 / 12,000	78	5	B13242418A
	24"		8,000 / 12,000	83	5	B13242424A
	12"	15	15,000 / 22,500	77	9	B14242412A
	18"		15,000 / 22,500	84	5	B14242418A
	24"		15,000 / 22,500	92	5	B14242424A
	12"	22	22,500 / 33,750	77	9	B16242412A
	18"		22,500 / 33,750	84	5	B16242418A
	24"		22,500 / 33,750	92	5	B16242424A
Solid Bottom	12"	8	8,000 / 12,000	81	9	B13242412B
	18"		8,000 / 12,000	85	5	B13242418B
	24"		8,000 / 12,000	90	5	B13242424B
	12"	15	15,000 / 22,500	84	9	B14242412B
	18"		15,000 / 22,500	91	5	B14242418B
	24"		15,000 / 22,500	99	5	B14242424B
	12"	22	22,500 / 33,750	84	9	B16242412B
	18"		22,500 / 33,750	91	5	B16242418B
	24"		22,500 / 33,750	99	5	B16242424B

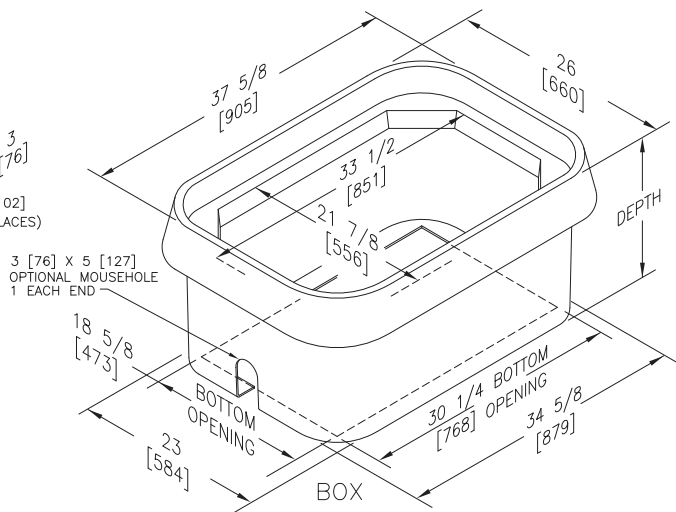
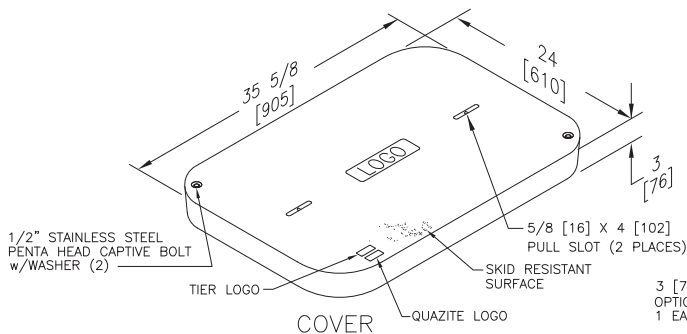
To order boxes with 2 standard mouseholes, replace the last character with "M".

To order gasketed boxes, replace the last character with "G".

NOTE: Gasket reduce the inflow of fluids but do not make the enclosure water tight.

NOTE: Cover rating cannot exceed box rating.

Penta Head Bolts are Standard



UNDERGROUND ENCLOSURES

Covers					
DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 2 Bolts	8	8,000 / 12,000	86	20	C10243603A***
W/ 2 Bolts	15	15,000 / 22,500	94	20	C12243603A***
No Bolts	8	8,000 / 12,000	86	20	C00243603A***
W/ 2 Bolts	22	22,500 / 33,750	94	20	C16243603A***
No Bolts, W/CI Reader, Over 90	5	5,000 / 7,500	89	20	C08243603E009
No Bolts, W/CI Reader, Under 90	5	5,000 / 7,500	89	20	C08243603F009
No Bolts, W/CI Reader, Over 90	8	8,000 / 12,000	89	20	C00243603E009
No Bolts, W/CI Reader, Under 90	8	8,000 / 12,000	89	20	C00243603F009

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options. Available with EZ-Locate.

Penta Head Bolts are Standard

### Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	18"	8	8,000 / 12,000	100	6	B13243618A
	24"		8,000 / 12,000	109	5	B13243624A
	30"		8,000 / 12,000	118	4	B13243630A
	18"	15	15,000 / 22,500	105	6	B14243618A
	24"		15,000 / 22,500	114	5	B14243624A
	30"		15,000 / 22,500	123	4	B14243630A
	18"	22	22,500 / 33,750	105	6	B16243618A
	24"		22,500 / 33,750	114	5	B16243624A
	30"		22,500 / 33,750	123	4	B16243630A
Solid Bottom	18"	8	8,000 / 12,000	107	6	B13243618B
	24"		8,000 / 12,000	116	5	B13243624B
	30"		8,000 / 12,000	125	4	B13243630B
	18"	15	15,000 / 22,500	112	6	B14243618B
	24"		15,000 / 22,500	121	5	B14243624B
	30"		15,000 / 22,500	130	4	B14243630B
	18"	22	22,500 / 33,750	112	6	B16243618B
	24"		22,500 / 33,750	121	5	B16243624B
	30"		22,500 / 33,750	130	4	B16243630B

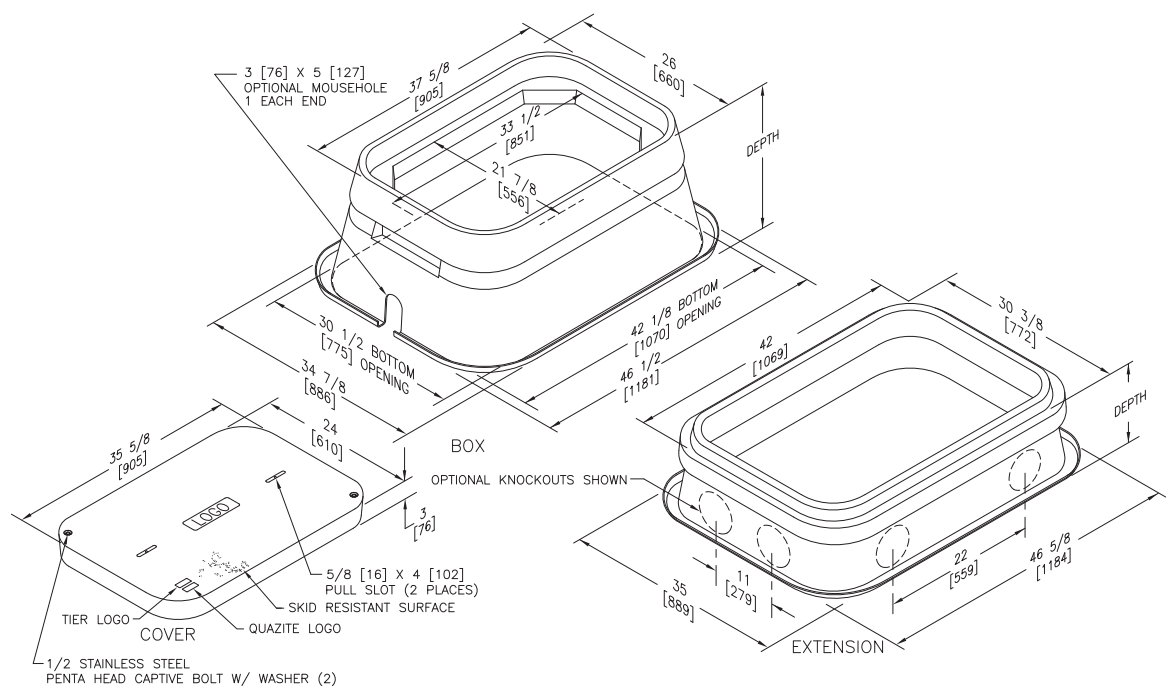
To order boxes with 2 standard mouseholes, replace the last character with "M". To order gasketed boxes, replace the last character with "G". NOTE: Gasket reduce the inflow of fluids but do not make the enclosure water tight.  
NOTE: Cover rating cannot exceed box rating.



# Dimensions / Data

## 24" x 36" Flared Wall Style FRP (Nestable) Assembly

Penta Head Bolts are Standard



UNDERGROUND  
ENCLOSURES

### Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 2 Bolts	8	8,000 / 12,000	86	20	C10243603A***
W/ 2 Bolts	15	15,000 / 22,500	94	20	C12243603A***
No Bolts	8	8,000 / 12,000	86	20	C00243603A***
W/ 2 Bolts	22	22,500 / 33,750	94	20	C16243603A***
No Bolts, W/CI Reader, Over 90	5	5,000 / 7,500	89	20	C08243603E009
No Bolts , W/CI Reader, Under 90	5	5,000 / 7,500	89	20	C08243603F009
No Bolts, W/CI Reader, Over 90	8	8,000 / 12,000	89	20	C00243603E009
No Bolts, W/CI Reader, Under 90	8	8,000 / 12,000	89	20	C00243603F009

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

# Dimensions / Data

## 24" x 36" Flared Wall Style FRP (Nestable) Assembly (Continued)

Penta Head Bolts are Standard

### Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	18"	8	8,000 / 12,000	100	5	B10243618A
	24"		8,000 / 12,000	109	5	B10243624A
	30"		8,000 / 12,000	118	5	B10243630A
	36"		8,000 / 12,000	124	4	B10243636A
	42"		8,000 / 12,000	127	3	B10243642A
	48"		8,000 / 12,000	133	3	B10243648A
	18"	15	15,000 / 22,500	105	5	B12243618A
	24"		15,000 / 22,500	114	5	B12243624A
	30"		15,000 / 22,500	123	5	B12243630A
	36"		15,000 / 22,500	129	4	B12243636A
	42"		15,000 / 22,500	132	3	B12243642A
	48"		15,000 / 22,500	138	3	B12243648A
	18"	22	22,500 / 33,750	105	5	B19243618A
	24"		22,500 / 33,750	114	5	B19243624A

To order boxes with 2 standard mouseholes, replace the last character with "M".

To order gasketed boxes, replace the last character with "G".

Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

NOTE: Cover rating cannot exceed box rating.

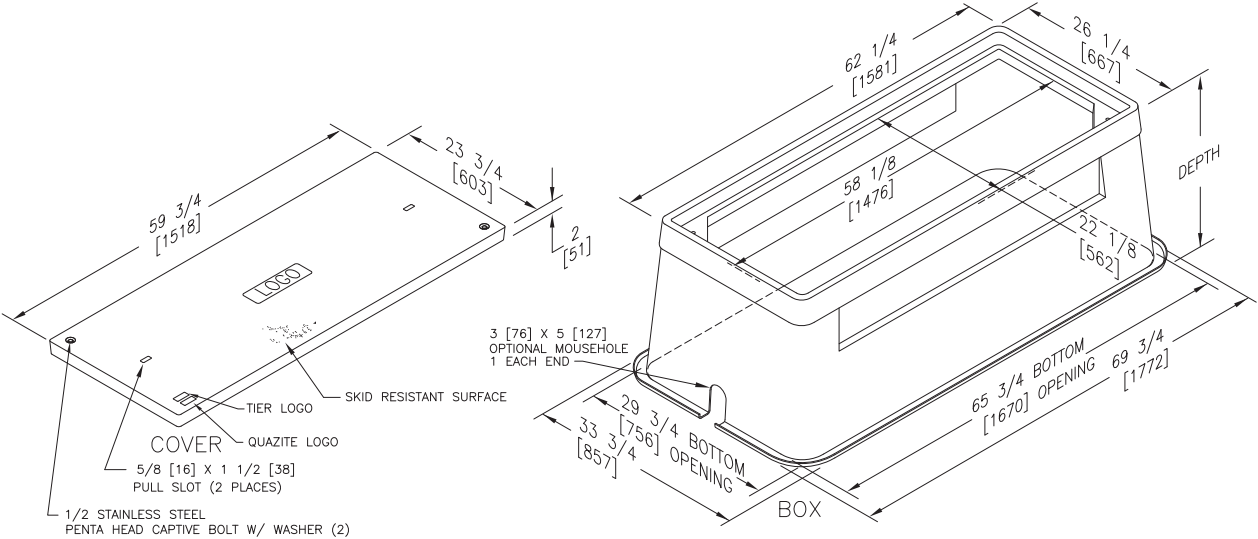
### Bottom Extensions

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
8" - Tier 8	8"	8	8,000 / 12,000	46	6	E00243608A
8" - Tier 15	8"	15	15,000 / 22,500	46	6	E02243608A
16" - Tier 8	16"	8	8,000 / 12,000	55	5	E00243616A
16" - Tier 15	16"	15	15,000 / 22,500	63	5	E02243616A

# Dimensions / Data

## 24" x 60" Flared Wall Style FRP (Nestable) Assembly

Penta Head Bolts are Standard



UNDERGROUND  
ENCLOSURES

### Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 2 Bolts	5	5,000 / 7,500	65	10	C18246002A***
No Bolts	5	5,000 / 7,500	65	10	C08246002A***

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

### Boxes

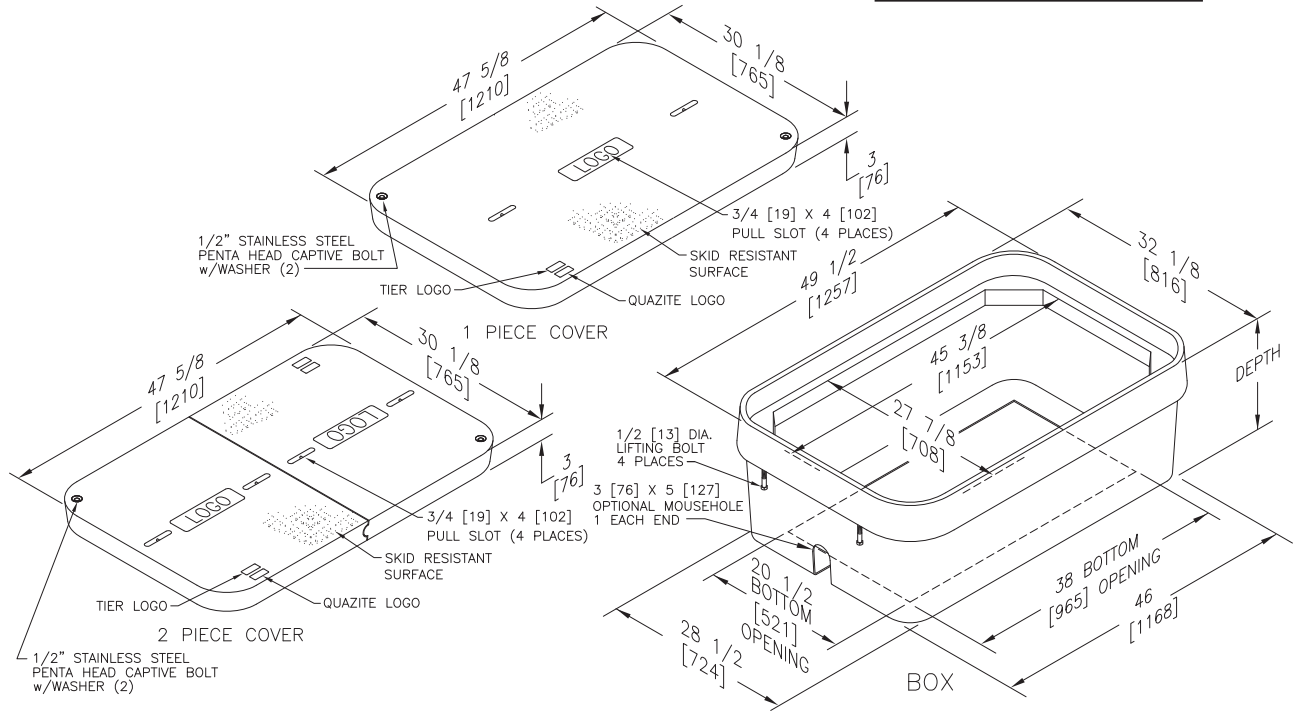
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	24"	5	5,000 / 7,500	115	5	B18246024A

To order boxes with two standard mouse holes, replace the last character with "M".  
To order gasketed boxes, replace the last character with "G".  
Gaskets reduce the inflow of fluids but do not make the enclosure water tight.  
NOTE: Cover rating cannot exceed box rating.

# Dimensions / Data

30"x 48" FRP Straight Wall Stackable

Penta Head Bolts are Standard



## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
2 Piece W/ 2 Bolts	8	8,000 / 12,000	165	10	C10304803A***
2 Piece W/ 2 Bolts	15	15,000 / 22,500	225	10	C12304803A***
2 Piece No Bolts	8	8,000 / 12,000	165	10	C00304803A***
2 Piece W/ 2 Bolts	22	22,500 / 33,750	225	10	C16304803A***
1 Piece W/ 2 Bolts	8	8,000 / 12,000	165	10	C10304803Y***
1 Piece W/ 2 Bolts	15	15,000 / 22,500	225	10	C12304803Y***
No Bolts, W/CI Reader, Over 90	5	5,000 / 7,500	168	10	C08304803E009
No Bolts, W/CI Reader, Under 90	5	5,000 / 7,500	168	10	C08304803F009
No Bolts, W/CI Reader, Over 90	8	8,000 / 12,000	168	10	C00304803E009
No Bolts, W/CI Reader, Under 90	8	8,000 / 12,000	168	10	C00304803F009

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

# Dimensions / Data

30" x 48" FRP Straight Wall Stackable (Continued)

Penta Head Bolts are Standard

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	18"	8	8,000 / 12,000	130	6	B13304818A
	24"		8,000 / 12,000	148	5	B13304824A
	36"		8,000 / 12,000	160	4	B13304836A
	18"	15	15,000 / 22,500	135	6	B14304818A
	24"		15,000 / 22,500	153	5	B14304824A
	36"		15,000 / 22,500	170	4	B14304836A
	18"	22	22,500 / 33,750	135	6	B16304818A
	24"		22,500 / 33,750	153	5	B16304824A
	36"		22,500 / 33,750	170	4	B16304836A
Solid Bottom	18"	8	8,000 / 12,000	140	6	B13304818B
	24"		8,000 / 12,000	158	5	B13304824B
	36"		8,000 / 12,000	170	4	B13304836B
	18"	15	15,000 / 22,500	140	6	B14304818B
	24"		15,000 / 22,500	158	5	B14304824B
	36"		15,000 / 22,500	170	4	B14304836B
	18"	22	22,500 / 33,750	140	6	B16304818B
	24"		22,500 / 33,750	158	5	B16304824B
	22"		22,500 / 33,750	170	4	B16304836B

To order boxes with 2 standard mouseholes, replace the last character with "M".

To order gasketed boxes, replace the last character with "G".

NOTE: Gasket reduce the inflow of fluids but do not make the enclosure water tight.

NOTE: Cover rating cannot exceed box rating.

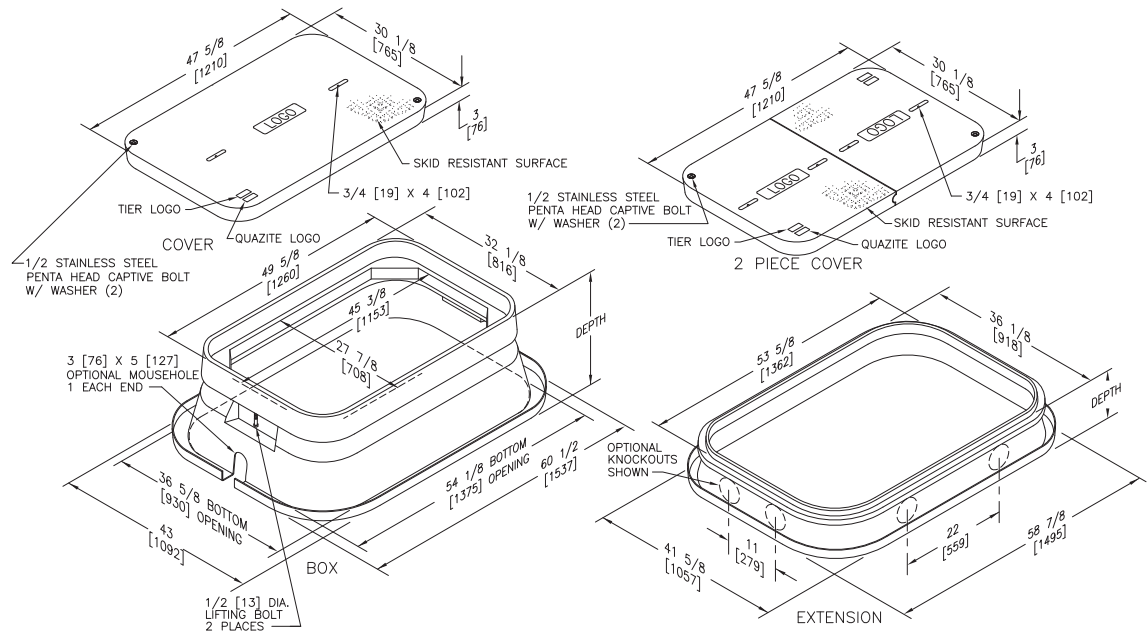
UNDERGROUND  
ENCLOSURES



# Dimensions / Data

## 30" x 48" Flared Wall Style FRP (Nestable) Assembly

**Penta Head Bolts are Standard**



### Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
2 piece w/2 bolts	8	8,000 / 12,000	165	10	C10304803A***
2 piece w/2 bolts	15	15,000 / 22,500	225	10	C12304803A***
2 piece w/no bolts	8	8,000 / 12,000	165	10	C00304803A***
2 piece w/2 bolts	22	22,500 / 33,750	225	10	C16304803A***
1 piece w/2 bolts	8	8,000 / 12,000	165	10	C10304803Y***
1 piece w/2 bolts	15	15,000 / 22,500	225	10	C12304803Y***
No Bolts, W/CI Reader, Over 90	5	5,000 / 7,500	168	10	C08304803E009
No Bolts, W/CI Reader, Under 90	5	5,000 / 7,500	168	10	C08304803F009
No Bolts, W/CI Reader, Over 90	8	8,000 / 12,000	168	10	C00304803E009
No Bolts, W/CI Reader, Under 90	8	8,000 / 12,000	168	10	C00304803F009

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

# Dimensions / Data

## 30" x 48" Flared Wall Style FRP (Nestable) Assembly (Continued)

Penta Head Bolts are Standard

Boxes						
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	18"	8	8,000 / 12,000	145	5	B10304818A
	24"		8,000 / 12,000	155	5	B10304824A
	30"		8,000 / 12,000	175	5	B10304830A
	36"		8,000 / 12,000	190	4	B10304836A
	18"	15	15,000 / 22,500	150	5	B12304818A
	24"		15,000 / 22,500	160	5	B12304824A
	30"		15,000 / 22,500	180	5	B12304830A
	36"		15,000 / 22,500	200	4	B12304836A
	18"	22	22,500 / 33,750	150	5	B19304818A
	24"		22,500 / 33,750	160	5	B19304824A
	30"		22,500 / 33,750	180	5	B19304830A
	36"		22,500 / 33,750	200	4	B19304836A

To order boxes with 2 standard mouseholes, replace the last character with "M".

To order gasketed boxes, replace the last character with "G".

Gaskets reduce the inflow of fluids but do not make the enclosure water tight. One piece covers are recommended when using gaskets.

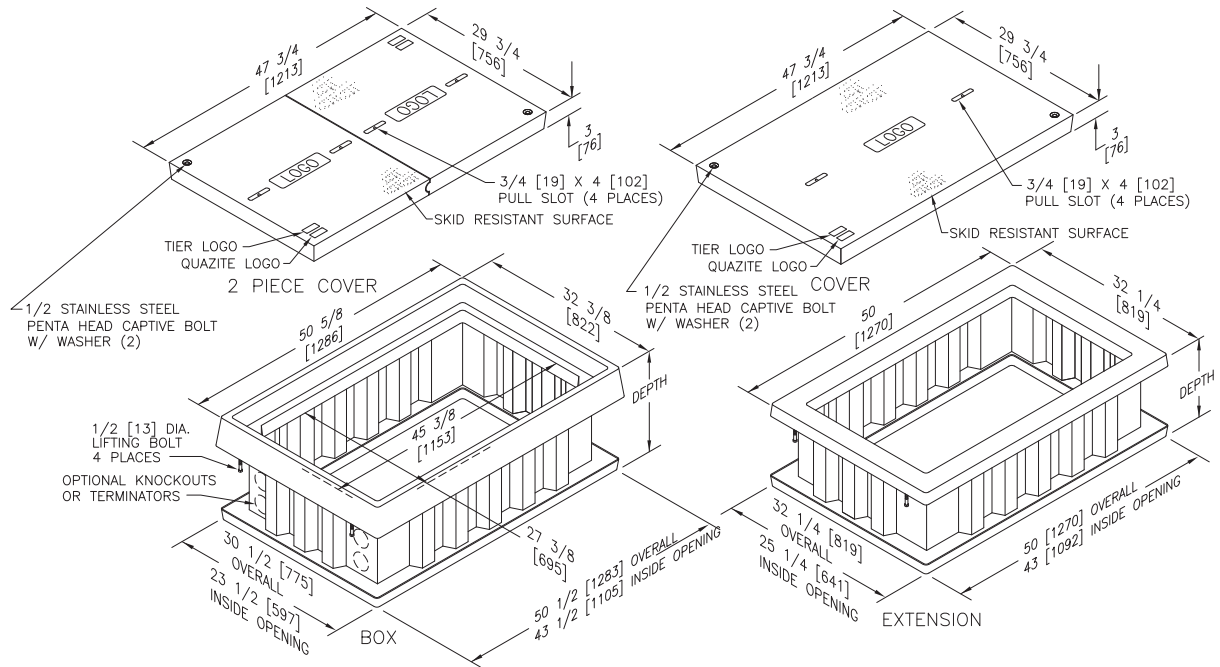
NOTE: Cover rating cannot exceed box rating.

Bottom Extensions						
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
8" - Tier 8	8"	8	8,000 / 12,000	55	5	E00304808A
8" - Tier 15	8"	15	15,000 / 22,500	65	5	E02304808A
16" - Tier 8	16"	8	8,000 / 12,000	100	3	E00304816A
16" - Tier 15	16"	15	15,000 / 22,500	110	3	E02304816A

NOTE: Cover rating cannot exceed box rating.

UNDERGROUND  
ENCLOSURES

Penta Head Bolts are Standard



### Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
2 piece w/2 bolts	8	8,000 / 12,000	165	3	C1A304803A***
2 piece w/no bolts	8	8,000 / 12,000	165	3	C0A304803A***
2 piece w/2 bolts	15	15,000 / 22,500	220	3	C1B304803A***
2 piece w/2 bolts	22	22,500 / 33,750	225	3	C1C304803A***
1 piece w/2 bolts	8	8,000 / 12,000	165	3	C1A304803Y***
1 piece w/2 bolts	15	15,000 / 22,500	225	3	C1B304803Y***
No Bolts, W/CI Reader, Over 90	5	5,000 / 7,500	168	3	C0E304803E009
No Bolts, W/CI Reader, Under 90	5	5,000 / 7,500	168	3	C0E304803F009
No Bolts, W/CI Reader, Over 90	8	8,000 / 12,000	168	3	C0A304803E009
No Bolts, W/CI Reader, Under 90	8	8,000 / 12,000	168	3	C0A304803F009

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

# Dimensions / Data

## 30" x 48" Corrugated Wall Style Assembly (Continued)

Penta Head Bolts are Standard

Boxes						
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	18"	8	8,000 / 12,000	190	1	B1A304818A
	24"		8,000 / 12,000	199	1	B1A304824A
	30"		8,000 / 12,000	209	1	B1A304830A
	36"		8,000 / 12,000	218	1	B1A304836A
	48"		8,000 / 12,000	236	1	B1A304848A
Standard Open Bottom	18"	15	15,000 / 22,500	190	1	B1B304818A
	24"		15,000 / 22,500	199	1	B1B304824A
	30"		15,000 / 22,500	209	1	B1B304830A
	36"		15,000 / 22,500	218	1	B1B304836A
	48"		15,000 / 22,500	236	1	B1B304848A
Standard Open Bottom	18"	22	22,500 / 33,750	190	1	B1C304818A
	24"		22,500 / 33,750	199	1	B1C304824A
	30"		22,500 / 33,750	209	1	B1C304830A
	36"		22,500 / 33,750	218	1	B1C304836A
	48"		22,500 / 33,750	236	1	B1C304848A

To order boxes with an integral bottom, replace the last character with "B".

To order gasketed boxes, replace the last character with "G".

To order adjust-to-grade boxes, replace the last character with "W".

Gaskets reduce the inflow of fluids but do not make the enclosure water tight. One piece covers are recommended when using gaskets.

NOTE: Cover rating cannot exceed box rating.

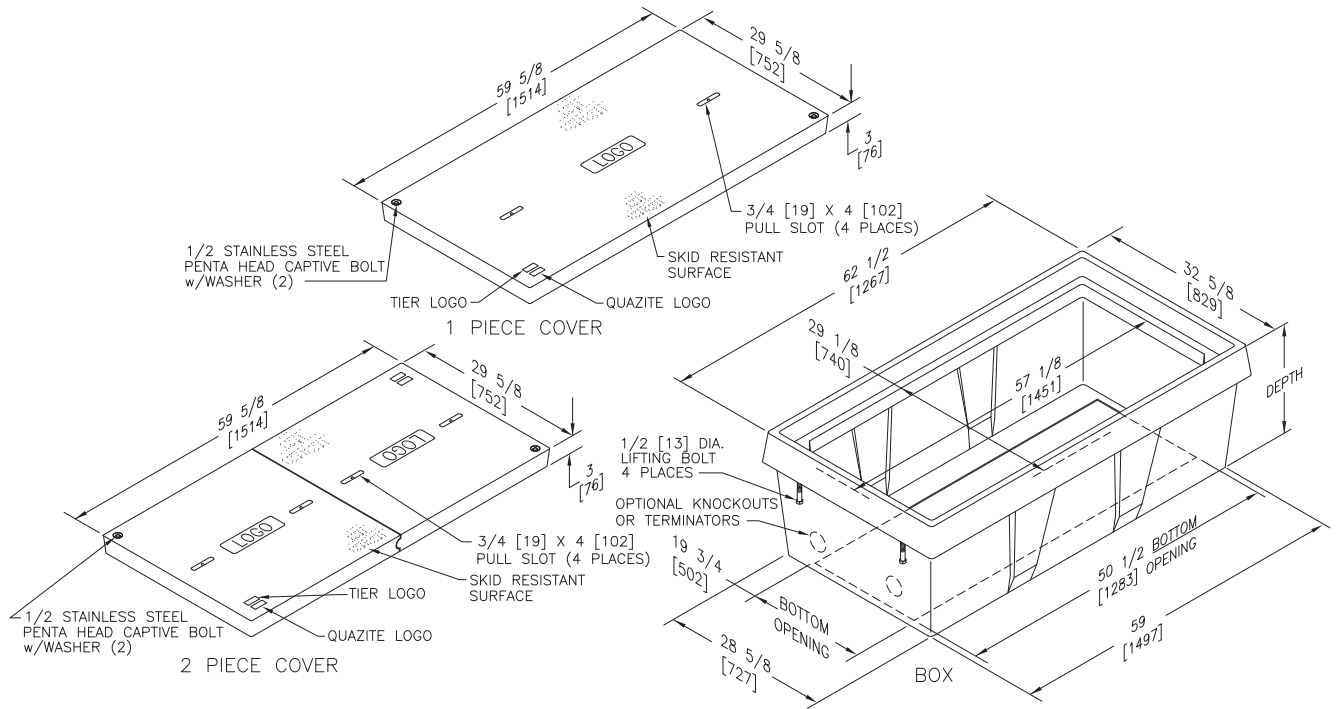
Bottom Extensions						
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	8"	8	8,000 / 12,000	105	1	E0A304808A
	12"		8,000 / 12,000	111	1	E0A304812A
	18"		8,000 / 12,000	120	1	E0A304818A
	24"		8,000 / 12,000	129	1	E0A304824A
Standard Open Bottom	8"	15	15,000 / 22,500	105	1	E0B304808A
	12"		15,000 / 22,500	111	1	E0B304812A
	18"		15,000 / 22,500	120	1	E0B304818A
	24"		15,000 / 22,500	129	1	E0B304824A
Standard Open Bottom	8"	22	22,500 / 33,750	105	1	E0C304808A
	12"		22,500 / 33,750	111	1	E0C304812A
	18"		22,500 / 33,750	120	1	E0C304818A
	24"		22,500 / 33,750	129	1	E0C304824A

UNDERGROUND  
ENCLOSURES

# Dimensions / Data

30" x 60" FRP Straight Wall Stackable

Penta Head Bolts are Standard



## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
2 Piece W/ 2 Bolts	8	8,000 / 12,000	208	10	C1A306003A***
2 Piece W/ 2 Bolts	15	15,000 / 22,500	268	10	C1B306003A***
2 Piece No Bolts	8	8,000 / 12,000	208	10	C0A306003A***
2 Piece W/ 2 Bolts	22	22,500 / 33,750	268	10	C1C306003A***
1 Piece W/ 2 Bolts	8	8,000 / 12,000	208	10	C1A306003Y***
1 Piece W/ 2 Bolts	15	15,000 / 22,500	268	10	C1B306003Y***
W/2 Bolts, W/CI Reader, Over 90	5	5,000 / 7,500	211	10	C1E306003E009
W/2 Bolts, W/CI Reader, Under 90	5	5,000 / 7,500	211	10	C1E306003F009

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.



# Dimensions / Data

## 30" x 60" FRP Straight Wall Stackable (Continued)

Penta Head Bolts are Standard

### Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	18"	8	8,000 / 12,000	195	1	B13306018A
	30"		8,000 / 12,000	220	1	B13306030A
	36"		8,000 / 12,000	235	1	B13306036A
	48"		8,000 / 12,000	255	1	B13306048A
	18"	15	15,000 / 22,500	251	1	B14306018A
	30"		15,000 / 22,500	271	1	B14306030A
	36"		15,000 / 22,500	286	1	B14306036A
	48"		15,000 / 22,500	306	1	B14306048A
	18"	22	22,500 / 33,750	251	1	B16306018A
	30"		22,500 / 33,750	271	1	B16306030A
	36"		22,500 / 33,750	286	1	B16306036A
	48"		22,500 / 33,750	306	1	B16306048A
Solid Bottom	18"	8	8,000 / 12,000	210	1	B13306018B
	30"		8,000 / 12,000	235	1	B13306030B
	36"		8,000 / 12,000	250	1	B13306036B
	48"		8,000 / 12,000	270	1	B13306048B
	18"	15	15,000 / 22,500	266	1	B14306018B
	30"		15,000 / 22,500	286	1	B14306030B
	36"		15,000 / 22,500	301	1	B14306036B
	48"		15,000 / 22,500	321	1	B14306048B
	18"	22	22,500 / 33,750	266	1	B16306018B
	30"		22,500 / 33,750	286	1	B16306030B
	36"		22,500 / 33,750	301	1	B16306036B
	48"		22,500 / 33,750	321	1	B16306048B

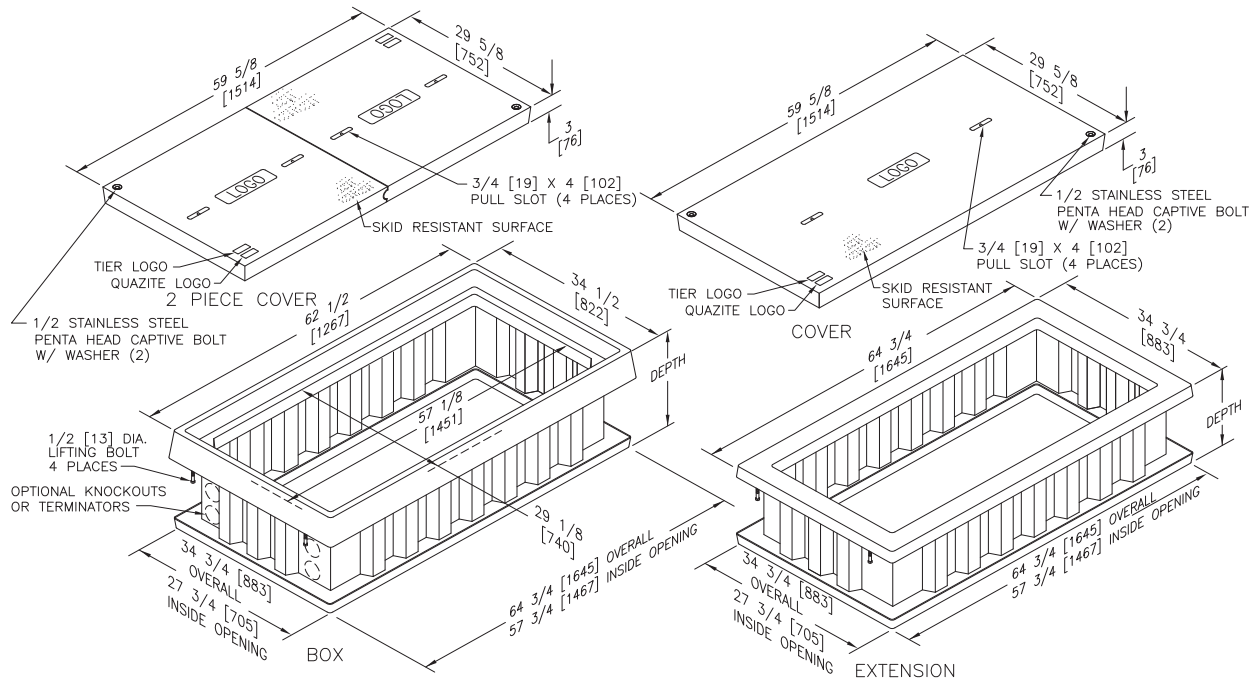
To order boxes with 2 standard mouseholes, replace the last character with "M". To order gasketed boxes, replace the last character with "G". NOTE: Gaskets reduce the inflow of fluids but do not make the enclosure water tight. NOTE: Cover rating cannot exceed box rating.

UNDERGROUND  
ENCLOSURES

# Dimensions / Data

## 30" x 60" Corrugated Wall Style Assembly

Penta Head Bolts are Standard



### Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
2 piece w/2 bolts	8	8,000 / 12,000	208	1	C1A306003A***
2 piece w/no bolts	8	8,000 / 12,000	208	1	COA306003A***
2 piece w/2 bolts	15	15,000 / 22,500	268	1	C1B306003A***
2 piece w/2 bolts	22	22,500 / 33,750	268	1	C1C306003A***
1 piece w/2 bolts	8	8,000 / 12,000	208	1	C1A306003Y***
1 piece w/2 bolts	15	15,000 / 22,500	268	1	C1B306003Y***
W/2 Bolts, W/CI Reader, Over 90	5	5,000 / 7,500	211	1	C1E306003E009
W/2 Bolts, W/CI Reader, Under 90	5	5,000 / 7,500	211	1	C1E306003F009

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

# Dimensions / Data

## 30" x 60" Corrugated Wall Style Assembly (Continued)

Penta Head Bolts are Standard

### Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	18"	8	8,000 / 12,000	229	1	B1A306018A
	24"		8,000 / 12,000	240	1	B1A306024A
	30"		8,000 / 12,000	251	1	B1A306030A
	36"		8,000 / 12,000	263	1	B1A306036A
	48"		8,000 / 12,000	286	1	B1A306048A
Standard Open Bottom	18"	15	15,000 / 22,500	229	1	B1B306018A
	24"		15,000 / 22,500	240	1	B1B306024A
	30"		15,000 / 22,500	251	1	B1B306030A
	36"		15,000 / 22,500	263	1	B1B306036A
	48"		15,000 / 22,500	286	1	B1B306048A
Standard Open Bottom	18"	22	22,500 / 33,750	229	1	B1C306018A
	24"		22,500 / 33,750	240	1	B1C306024A
	30"		22,500 / 33,750	251	1	B1C306030A
	36"		22,500 / 33,750	263	1	B1C306036A
	48"		22,500 / 33,750	286	1	B1C306048A

To order boxes with an integral bottom, replace the last character with "B".

To order adjust-to-grade boxes, replace the last character with "W".

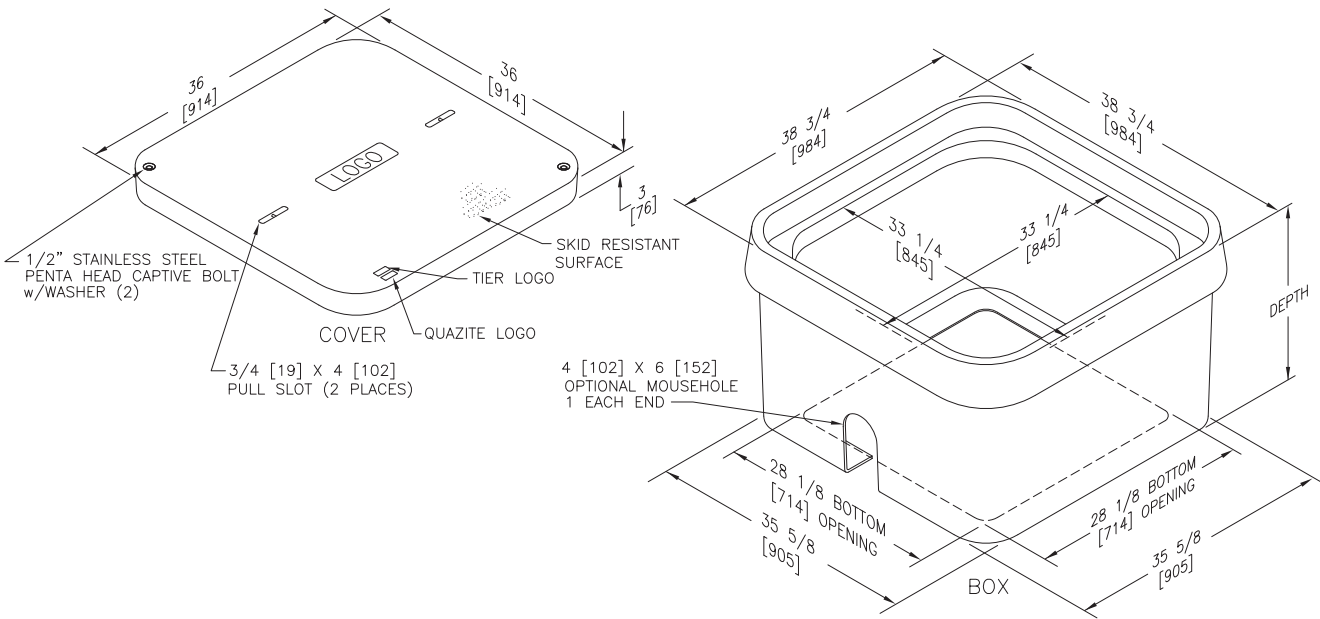
NOTE: Cover rating cannot exceed box rating.

### Bottom Extensions

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	8"	8	8,000 / 12,000	131	1	E0A306008A
	12"		8,000 / 12,000	139	1	E0A306012A
	18"		8,000 / 12,000	150	1	E0A306018A
	24"		8,000 / 12,000	161	1	E0A306024A
Standard Open Bottom	8"	15	15,000 / 22,500	131	1	E0B306008A
	12"		15,000 / 22,500	139	1	E0B306012A
	18"		15,000 / 22,500	150	1	E0B306018A
	24"		15,000 / 22,500	161	1	E0B306024A
Standard Open Bottom	8"	22	22,500 / 33,750	131	1	E0C306008A
	12"		22,500 / 33,750	139	1	E0C306012A
	18"		22,500 / 33,750	150	1	E0C306018A
	24"		22,500 / 33,750	161	1	E0C306024A

UNDERGROUND  
ENCLOSURES

Penta Head Bolts are Standard



Covers					
DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 2 Bolts	8	8,000 / 12,000	140	50	C10363603A***
W/ 2 Bolts	15	15,000 / 22,500	170	50	C12363603A***
No Bolts	8	8,000 / 12,000	140	50	C00363603A***
W/ 2 Bolts	22	22,500 / 33,750	170	50	C16363603A***

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

# Dimensions / Data

36" x 36" FRP Straight Wall Stackable (Continued)

Penta Head Bolts are Standard

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	18"	8	8,000 / 12,000	130	10	B13363618A
	24"		8,000 / 12,000	140	10	B13363624A
	30"		8,000 / 12,000	150	10	B13363630A
	36"		8,000 / 12,000	160	10	B13363636A
	48"		8,000 / 12,000	180	10	B13363648A
	18"	15	15,000 / 22,500	140	10	B14363618A
	24"		15,000 / 22,500	150	10	B14363624A
	30"		15,000 / 22,500	160	10	B14363630A
	36"		15,000 / 22,500	165	10	B14363636A
	48"		15,000 / 22,500	185	10	B14363648A
	18"	22	22,500 / 33,750	140	10	B16363618A
	24"		22,500 / 33,750	150	10	B16363624A
	30"		22,500 / 33,750	160	10	B16363630A
	36"		22,500 / 33,750	165	10	B16363636A
	48"		22,500 / 33,750	185	10	B16363648A
Solid Bottom	18"	8	8,000 / 12,000	140	10	B13363618B
	24"		8,000 / 12,000	150	10	B13363624B
	30"		8,000 / 12,000	160	10	B13363630B
	36"		8,000 / 12,000	170	10	B13363636B
	48"		8,000 / 12,000	190	10	B13363648B
	18"	15	15,000 / 22,500	150	10	B14363618B
	24"		15,000 / 22,500	160	10	B14363624B
	30"		15,000 / 22,500	170	10	B14363630B
	36"		15,000 / 22,500	175	10	B14363636B
	48"		15,000 / 22,500	195	10	B14363648B
	18"	22	22,500 / 33,750	150	10	B16363618B
	24"		22,500 / 33,750	160	10	B16363624B
	30"		22,500 / 33,750	170	10	B16363630B
	36"		22,500 / 33,750	175	10	B16363636B
	48"		22,500 / 33,750	195	10	B16363648B

To order boxes with 2 standard mouseholes, replace the last character with "M".

To order gasketed boxes, replace the last character with "G".

NOTE: Gasket reduce the inflow of fluids but do not make the enclosure water tight.

NOTE: Cover rating cannot exceed box rating.

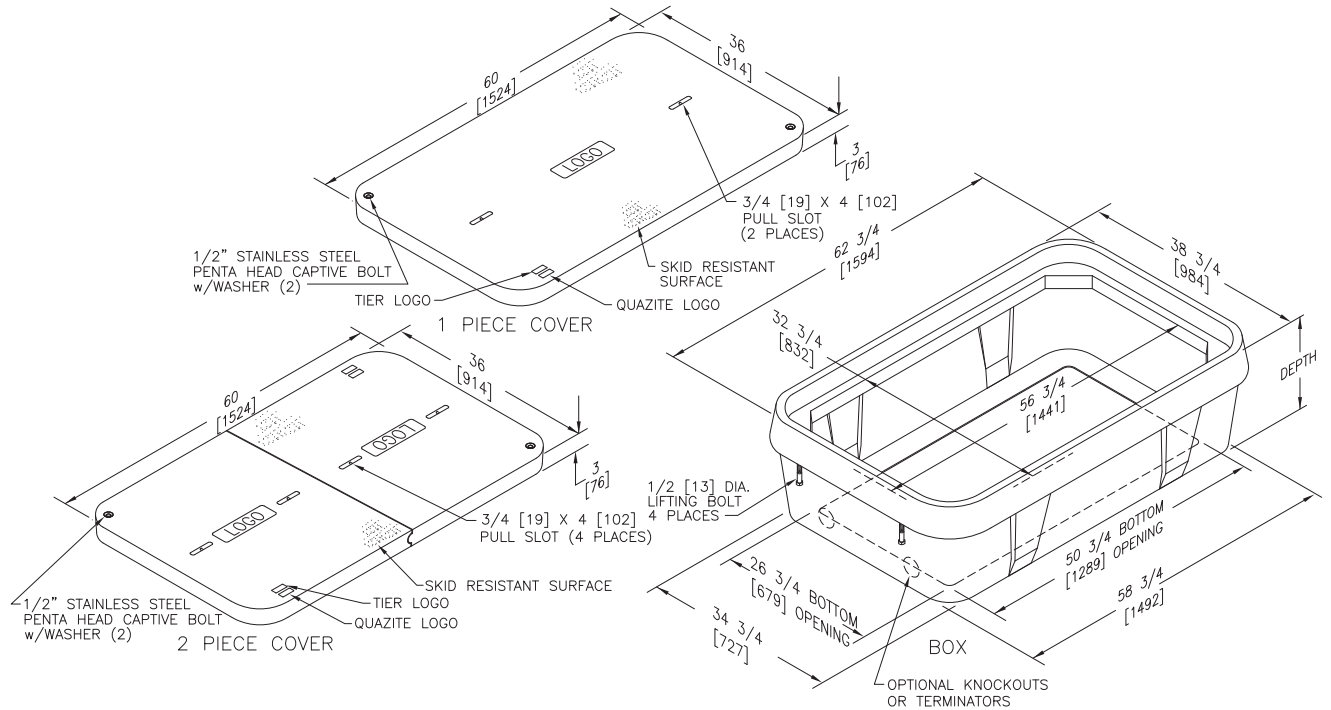
UNDERGROUND  
ENCLOSURES



# Dimensions / Data

36" x 60" FRP Straight Wall Stackable

Penta Head Bolts are Standard



## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
2 Piece W/ 2 Bolts	8	8,000 / 12,000	273	10	C10366003A***
2 Piece W/ 2 Bolts	15	15,000 / 22,500	333	10	C12366003A***
2 Piece No Bolts	8	8,000 / 12,000	273	10	C00366003A***
2 Piece W/ 2 Bolts	22	22,500 / 33,750	333	10	C16366003A***
1 Piece W/ 2 Bolts	8	8,000 / 12,000	273	10	C10366003Y***
1 Piece W/ 2 Bolts	15	15,000 / 22,500	333	10	C12366003Y***

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

# Dimensions / Data

36" x 60" FRP Straight Wall Stackable (Continued)

Penta Head Bolts are Standard

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	18"	8	8,000 / 12,000	212	1	B13366018A
	24"		8,000 / 12,000	222	1	B13366024A
	30"		8,000 / 12,000	236	1	B13366030A
	36"		8,000 / 12,000	260	1	B13366036A
	48"		8,000 / 12,000	308	1	B13366048A
	18"	15	15,000 / 22,500	237	1	B14366018A
	24"		15,000 / 22,500	247	1	B14366024A
	30"		15,000 / 22,500	261	1	B14366030A
	36"		15,000 / 22,500	285	1	B14366036A
	48"		15,000 / 22,500	333	1	B14366048A
	18"	22	22,500 / 33,750	237	1	B16366018A
	24"		22,500 / 33,750	247	1	B16366024A
	30"		22,500 / 33,750	261	1	B16366030A
	36"		22,500 / 33,750	285	1	B16366036A
	48"		22,500 / 33,750	333	1	B16366048A
Solid Bottom	18"	8	8,000 / 12,000	230	1	B13366018B
	24"		8,000 / 12,000	240	1	B13366024B
	30"		8,000 / 12,000	254	1	B13366030B
	36"		8,000 / 12,000	278	1	B13366036B
	48"		8,000 / 12,000	326	1	B13366048B
	18"	15	15,000 / 22,500	255	1	B14366018B
	24"		15,000 / 22,500	265	1	B14366024B
	30"		15,000 / 22,500	279	1	B14366030B
	36"		15,000 / 22,500	303	1	B14366036B
	48"		15,000 / 22,500	351	1	B14366048B
	18"	22	22,500 / 33,750	255	1	B16366018B
	24"		22,500 / 33,750	265	1	B16366024B
	30"		22,500 / 33,750	279	1	B16366030B
	36"		22,500 / 33,750	303	1	B16366036B
	48"		22,500 / 33,750	351	1	B16366048B

To order boxes with 2 standard mouseholes, replace the last character with "M".

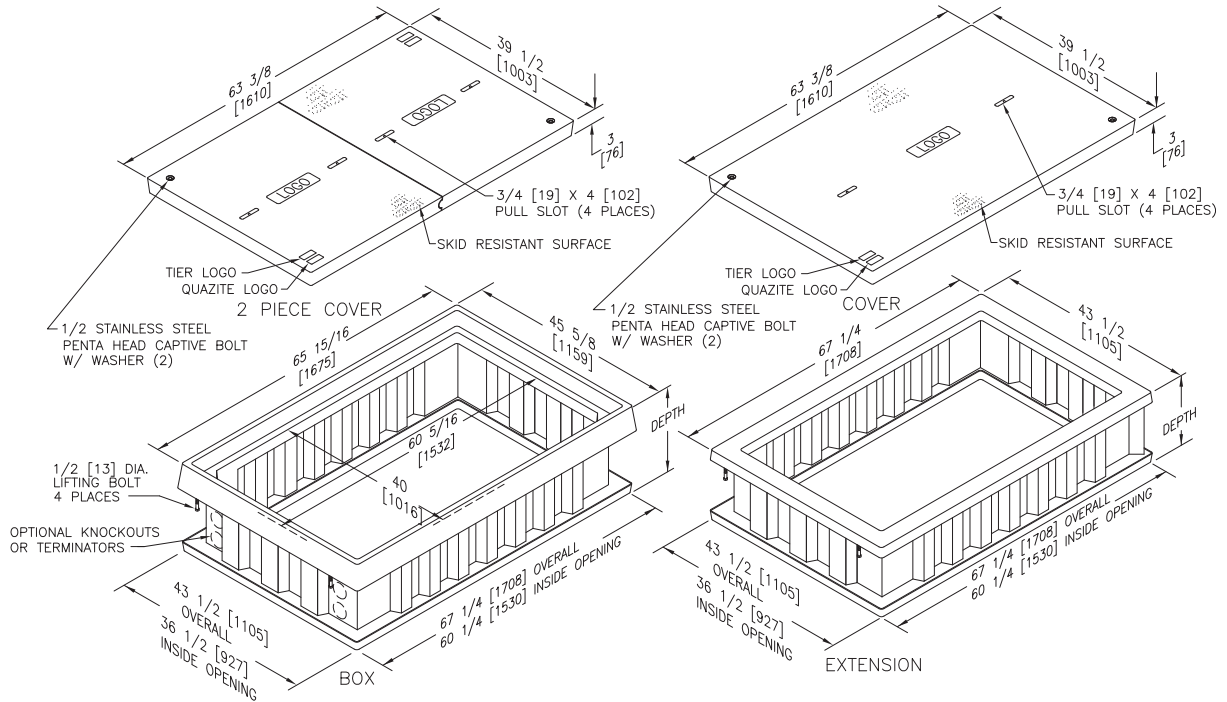
To order gasketed boxes, replace the last character with "G".

NOTE: Gasket reduce the inflow of fluids but do not make the enclosure water tight.

NOTE: Cover rating cannot exceed box rating.

UNDERGROUND  
ENCLOSURES

Penta Head Bolts are Standard



### Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
2 Piece W/ 2 Bolts	8	8,000 / 12,000	273	1	C1A366003A***
2 Piece No Bolts	8	8,000 / 12,000	273	1	C0A366003A***
2 Piece W/ 2 Bolts	15	15,000 / 22,500	333	1	C1B366003A***
2 Piece W/ 2 Bolts	22	22,500 / 33,750	333	1	C1C366003A***
1 Piece w/2 Bolts	8	8,000 / 12,000	273	1	C1A366003Y***
1 Piece w/2 Bolts	15	15,000 / 22,500	333	1	C1B366003Y***

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

# Dimensions / Data

## 36" x 60" Corrugated Wall Style Assembly (Continued)

Penta Head Bolts are Standard

### Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	18"	8	8,000 / 12,000	212	1	B1A366018A
	24"		8,000 / 12,000	222	1	B1A366024A
	30"		8,000 / 12,000	236	1	B1A366030A
	36"		8,000 / 12,000	260	1	B1A366036A
	48"		8,000 / 12,000	308	1	B1A366048A
Standard Open Bottom	18"	15	15,000 / 22,500	232	1	B1B366018A
	24"		15,000 / 22,500	252	1	B1B366024A
	30"		15,000 / 22,500	256	1	B1B366030A
	36"		15,000 / 22,500	280	1	B1B366036A
	48"		15,000 / 22,500	328	1	B1B366048A
Standard Open Bottom	18"	22	22,500 / 33,750	232	1	B1C366018A
	24"		22,500 / 33,750	252	1	B1C366024A
	30"		22,500 / 33,750	256	1	B1C366030A
	36"		22,500 / 33,750	280	1	B1C366036A
	48"		22,500 / 33,750	328	1	B1C366048A

To order boxes with an integral bottom, replace the last character with "B".

To order adjust-to-grade boxes, replace the last character with "W".

NOTE: Cover rating cannot exceed box rating.

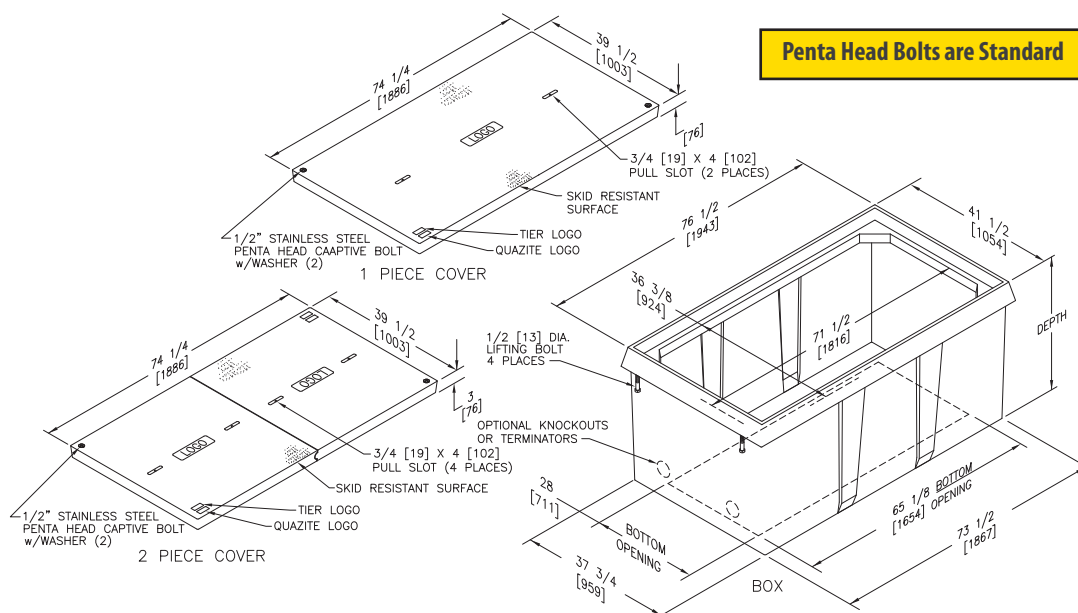
### Bottom Extensions

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	8"	8	8,000 / 12,000	173	1	E0A366008A
	12"		8,000 / 12,000	182	1	E0A366012A
	18"		8,000 / 12,000	197	1	E0A366018A
	24"		8,000 / 12,000	212	1	E0A366024A
Standard Open Bottom	8"	15	15,000 / 22,500	173	1	E0B366008A
	12"		15,000 / 22,500	182	1	E0B366012A
	18"		15,000 / 22,500	197	1	E0B366018A
	24"		15,000 / 22,500	212	1	E0B366024A
Standard Open Bottom	8"	22	22,500 / 33,750	173	1	E0C366008A
	12"		22,500 / 33,750	182	1	E0C366012A
	18"		22,500 / 33,750	197	1	E0C366018A
	24"		22,500 / 33,750	212	1	E0C366024A

UNDERGROUND  
ENCLOSURES

# Dimensions / Data

## 36" x 72" FRP Straight Wall Stackable



Penta Head Bolts are Standard

### Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
2 Piece W/ 2 Bolts	8	8,000 / 12,000	275	10	C1A367203A***
2 Piece W/ 2 Bolts	15	15,000 / 22,500	355	10	C1B367203A***
2 Piece No Bolts	8	8,000 / 12,000	275	10	C0A367203A***
2 Piece W/ 2 Bolts	22	22,500 / 33,750	355	10	C1C367203A***
1 Piece W/ 2 Bolts	8	8,000 / 12,000	275	10	C1A367203Y***
1 Piece W/ 2 Bolts	15	15,000 / 22,500	355	10	C1B367203Y***

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

### Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	36"	8	8,000 / 12,000	326	1	B13367236A
	48"		8,000 / 12,000	382	1	B13367248A
	36"	15	15,000 / 22,500	346	1	B14367236A
	48"		15,000 / 22,500	402	1	B14367248A
	36"	22	22,500 / 33,750	346	1	B16367236A
	48"		22,500 / 33,750	402	1	B16367248A
Solid Bottom	36"	8	8,000 / 12,000	353	1	B13367236B
	48"		8,000 / 12,000	414	1	B13367248B
	36"	15	15,000 / 22,500	375	1	B14367236B
	48"		15,000 / 22,500	436	1	B14367248B
	36"	22	22,500 / 33,750	375	1	B16367236B
	48"		22,500 / 33,750	436	1	B16367248B

To order boxes with 2 standard mouseholes, replace the last character with "M".

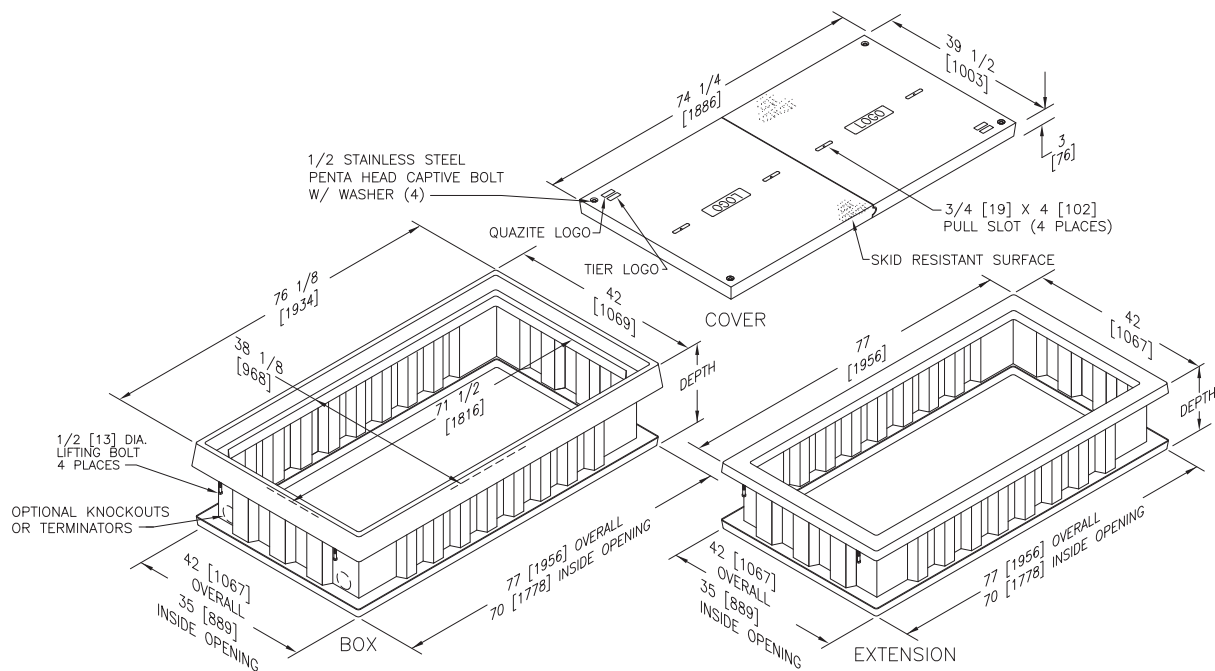
To order gasketed boxes, replace the last character with "G".

NOTE: Gasket reduce the inflow of fluids but do not make the enclosure water tight.

NOTE: Cover rating cannot exceed box rating.



Penta Head Bolts are Standard



Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 4 Bolts	8	8,000 / 12,000	275	5	C1A367203A***
No Bolts	8	8,000 / 12,000	275	5	COA367203A***
W/ 4 Bolts	15	15,000 / 22,500	355	5	C1B367203A***
W/ 4 Bolts	22	22,500 / 33,750	355	5	C1C367203A***

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

UNDERGROUND  
ENCLOSURES

**Penta Head Bolts are Standard**

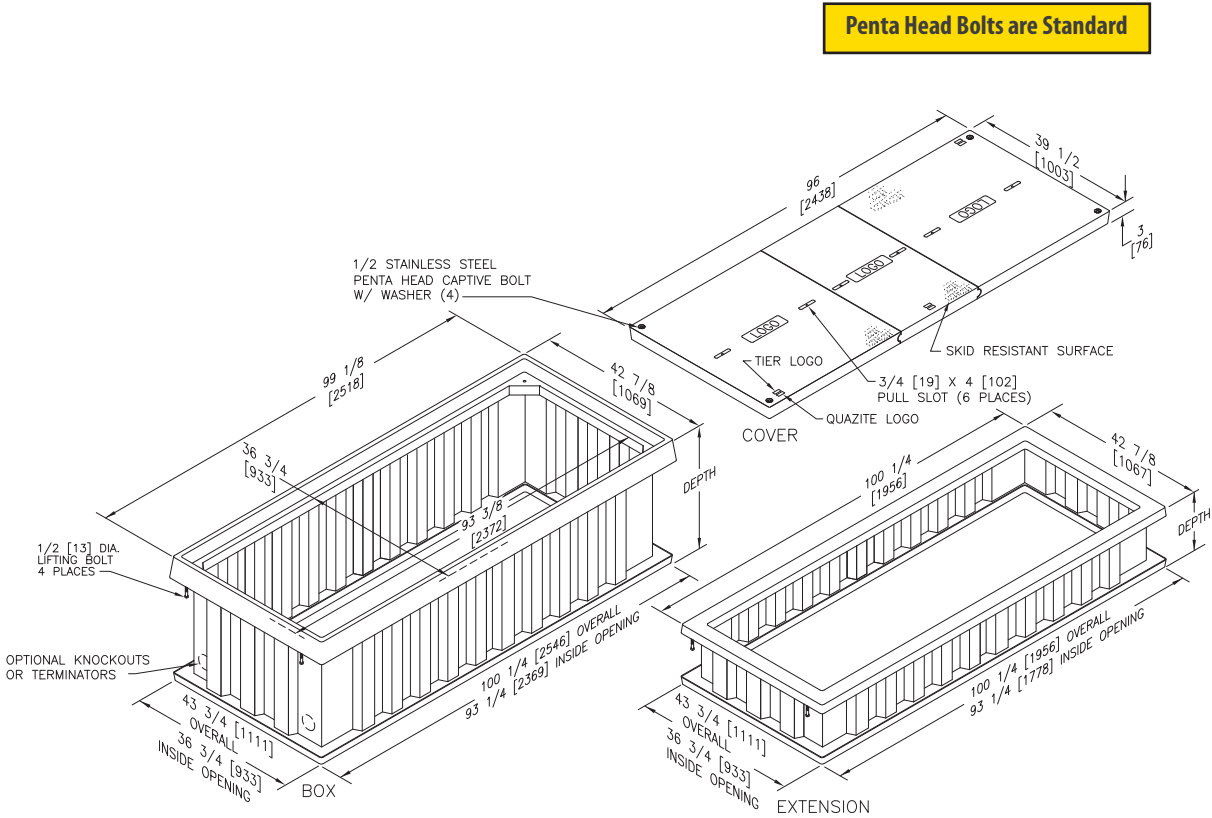
Boxes						
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	18"	8	8,000 / 12,000	269	1	B1A367218A
	24"		8,000 / 12,000	284	1	B1A367224A
	30"		8,000 / 12,000	299	1	B1A367230A
	36"		8,000 / 12,000	313	1	B1A367236A
	48"		8,000 / 12,000	343	1	B1A367248A
Standard Open Bottom	18"	15	15,000 / 22,500	300	1	B1B367218A
	24"		15,000 / 22,500	315	1	B1B367224A
	30"		15,000 / 22,500	330	1	B1B367230A
	36"		15,000 / 22,500	344	1	B1B367236A
	48"		15,000 / 22,500	374	1	B1B367248A
Standard Open Bottom	18"	22	22,500 / 33,750	300	1	B1C367218A
	24"		22,500 / 33,750	315	1	B1C367224A
	30"		22,500 / 33,750	330	1	B1C367230A
	36"		22,500 / 33,750	344	1	B1C367236A
	48"		22,500 / 33,750	374	1	B1C367248A

To order boxes with an integral bottom, replace the last character with "B".

To order adjust-to-grade boxes, replace the last character with "W".

NOTE: Cover rating cannot exceed box rating.

Bottom Extensions						
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	8"	8	8,000 / 12,000	186	1	E0A367208A
	12"		8,000 / 12,000	193	1	E0A367212A
	18"		8,000 / 12,000	205	1	E0A367218A
	24"		8,000 / 12,000	217	1	E0A367224A
Standard Open Bottom	8"	15	15,000 / 22,500	186	1	E0B367208A
	12"		15,000 / 22,500	193	1	E0B367212A
	18"		15,000 / 22,500	205	1	E0B367218A
	24"		15,000 / 22,500	217	1	E0B367224A
Standard Open Bottom	8"	22	22,500 / 33,750	186	1	E0C367208A
	12"		22,500 / 33,750	193	1	E0C367212A
	18"		22,500 / 33,750	205	1	E0C367218A
	24"		22,500 / 33,750	217	1	E0C367224A



UNDERGROUND  
ENCLOSURES

Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 4 Bolts	8	8,000 / 12,000	400	2	C1A369603A***
No Bolts	8	8,000 / 12,000	400	2	COA369603A***
W/ 4 Bolts	15	15,000 / 22,500	420	2	C1B369603A***
W/ 4 Bolts	22	22,500 / 33,750	420	2	C1C369603A***

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

# Dimensions / Data

## 36" x 96" Corrugated Wall Style Assembly (Continued)

Penta Head Bolts are Standard

### Boxes

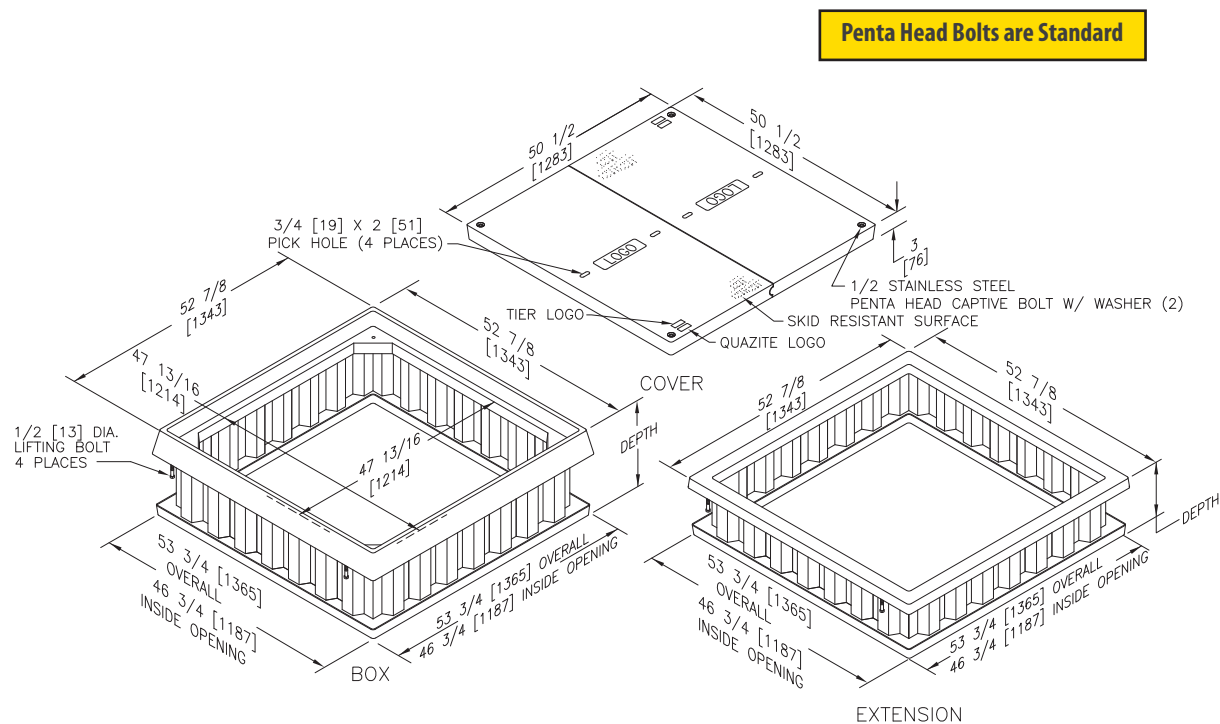
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	30"	8	8,000 / 12,000	649	1	B1A369630A
	36"		8,000 / 12,000	669	1	B1A369636A
	48"		8,000 / 12,000	709	1	B1A369648A
Standard Open Bottom	30"	15	15,000 / 22,500	798	1	B1B369630A
	36"		15,000 / 22,500	818	1	B1B369636A
	48"		15,000 / 22,500	858	1	B1B369648A
Standard Open Bottom	30"	22	22,500 / 33,750	798	1	B1C369630A
	36"		22,500 / 33,750	818	1	B1C369636A
	48"		22,500 / 33,750	858	1	B1C369648A

To order boxes with an integral bottom, replace the last character with "B".

NOTE: Cover rating cannot exceed box rating.

### Bottom Extensions

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	12"	8	8,000 / 12,000	246	1	E0A369612A
	18"		8,000 / 12,000	258	1	E0A369618A
	24"		8,000 / 12,000	270	1	E0A369624A
	36"		8,000 / 12,000	294	1	E0A369636A
	48"		8,000 / 12,000	318	1	E0A369648A
Standard Open Bottom	12"	15	15,000 / 22,500	246	1	E0B369612A
	18"		15,000 / 22,500	258	1	E0B369618A
	24"		15,000 / 22,500	270	1	E0B369624A
	36"		15,000 / 22,500	294	1	E0B369636A
	48"		15,000 / 22,500	318	1	E0B369648A
Standard Open Bottom	12"	22	22,500 / 33,750	246	1	E0C369612A
	18"		22,500 / 33,750	258	1	E0C369618A
	24"		22,500 / 33,750	270	1	E0C369624A
	36"		22,500 / 33,750	294	1	E0C369636A
	48"		22,500 / 33,750	318	1	E0C369648A



Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 4 Bolts	8	8,000 / 12,000	271	3	C1A484803A***
No Bolts	8	8,000 / 12,000	271	3	COA484803A***
W/ 4 Bolts	15	15,000 / 22,500	345	3	C1B484803A***
W/ 4 Bolts	22	22,500 / 33,750	345	3	C1C484803A***

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.



Penta Head Bolts are Standard

### Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	18"	8	8,000 / 12,000	262	1	B1A484818A
	24"		8,000 / 12,000	275	1	B1A484824A
	30"		8,000 / 12,000	288	1	B1A484830A
	36"		8,000 / 12,000	301	1	B1A484836A
	48"		8,000 / 12,000	327	1	B1A484848A
Standard Open Bottom	18"	15	15,000 / 22,500	291	1	B1B484818A
	24"		15,000 / 22,500	304	1	B1B484824A
	30"		15,000 / 22,500	317	1	B1B484830A
	36"		15,000 / 22,500	330	1	B1B484836A
	48"		15,000 / 22,500	356	1	B1B484848A
Standard Open Bottom	18"	22	22,500 / 33,750	291	1	B1C484818A
	24"		22,500 / 33,750	304	1	B1C484824A
	30"		22,500 / 33,750	317	1	B1C484830A
	36"		22,500 / 33,750	330	1	B1C484836A
	48"		22,500 / 33,750	356	1	B1C484848A

To order boxes with an integral bottom, replace the last character with "B".

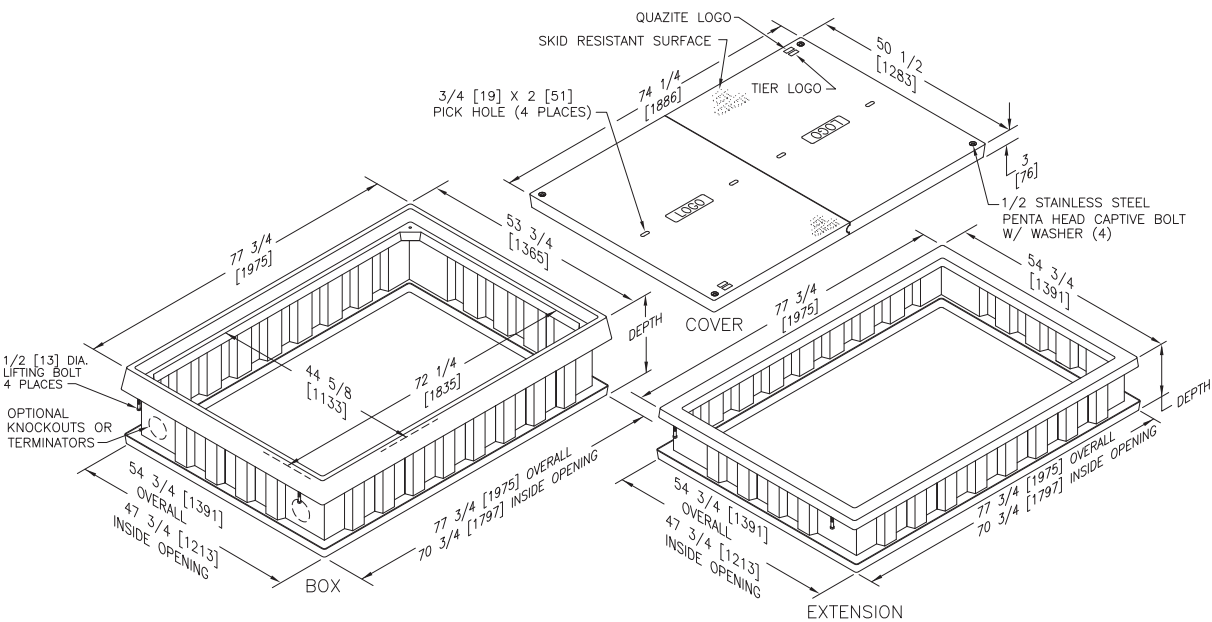
To order adjust-to-grade boxes, replace the last character with "W".

NOTE: Cover rating cannot exceed box rating.

### Bottom Extensions

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	12"	8	8,000 / 12,000	240	1	E0A484812A
	18"		8,000 / 12,000	265	1	E0A484818A
	24"		8,000 / 12,000	290	1	E0A484824A
Standard Open Bottom	12"	15	15,000 / 22,500	240	1	E0B484812A
	18"		15,000 / 22,500	265	1	E0B484818A
	24"		15,000 / 22,500	290	1	E0B484824A
Standard Open Bottom	12"	22	22,500 / 33,750	240	1	E0C484812A
	18"		22,500 / 33,750	265	1	E0C484818A
	24"		22,500 / 33,750	290	1	E0C484824A

Penta Head Bolts are Standard



Covers					
DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 4 Bolts	8	8,000 / 12,000	294	3	C1A487203A***
No Bolts	8	8,000 / 12,000	294	3	C0A487203A***
W/ 4 Bolts	15	15,000 / 22,500	368	3	C1B487203A***
W/ 4 Bolts	22	22,500 / 33,750	368	3	C1C487203A***

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

UNDERGROUND  
ENCLOSURES

# Dimensions / Data

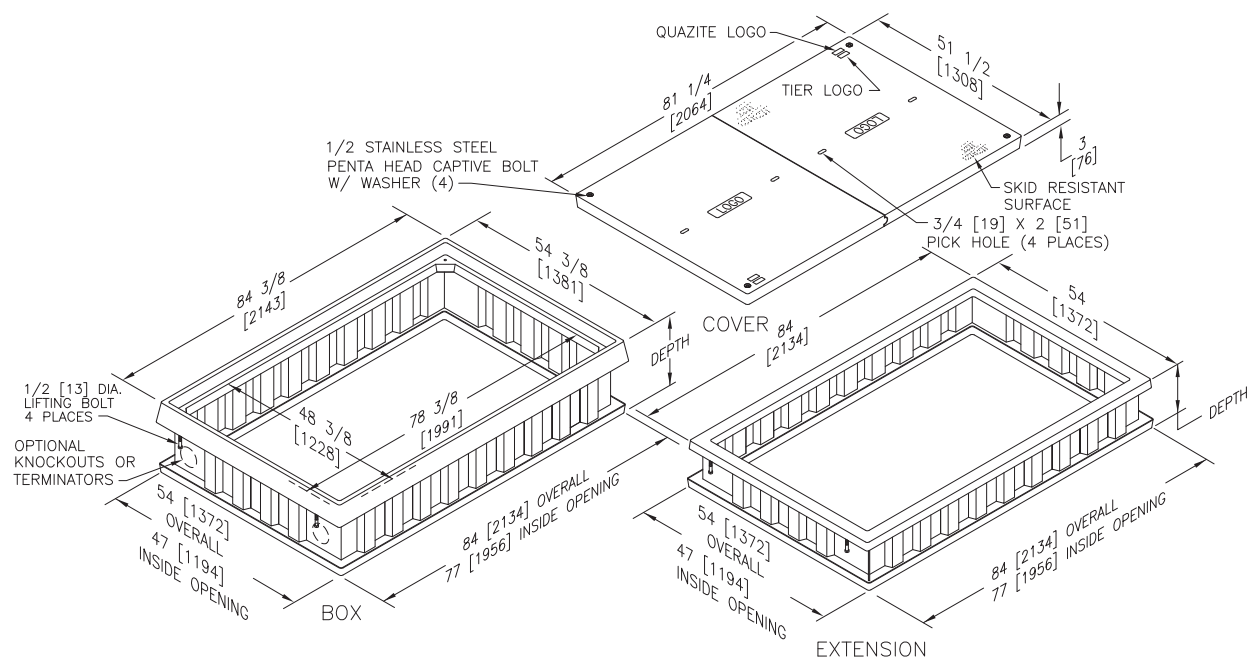
## 48" x 72" Corrugated Wall Style Assembly (Continued)

Penta Head Bolts are Standard

Boxes						
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	18"	8	8,000 / 12,000	348	1	B1A487218A
	24"		8,000 / 12,000	364	1	B1A487224A
	30"		8,000 / 12,000	380	1	B1A487230A
	36"		8,000 / 12,000	396	1	B1A487236A
	48"		8,000 / 12,000	428	1	B1A487248A
Standard Open Bottom	18"	15	15,000 / 22,500	387	1	B1B487218A
	24"		15,000 / 22,500	403	1	B1B487224A
	30"		15,000 / 22,500	419	1	B1B487230A
	36"		15,000 / 22,500	435	1	B1B487236A
	48"		15,000 / 22,500	467	1	B1B487248A
Standard Open Bottom	18"	22	22,500 / 33,750	387	1	B1C487218A
	24"		22,500 / 33,750	403	1	B1C487224A
	30"		22,500 / 33,750	419	1	B1C487230A
	36"		22,500 / 33,750	435	1	B1C487236A
	48"		22,500 / 33,750	467	1	B1C487248A

Bottom Extensions						
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	12"	8	8,000 / 12,000	240	1	E0A487212A
	18"		8,000 / 12,000	265	1	E0A487218A
	24"		8,000 / 12,000	290	1	E0A487224A
	36"		8,000 / 12,000	310	1	E0A487236A
Standard Open Bottom	12"	15	15,000 / 22,500	240	1	E0B487212A
	18"		15,000 / 22,500	265	1	E0B487218A
	24"		15,000 / 22,500	290	1	E0B487224A
	36"		15,000 / 22,500	310	1	E0B487236A
Standard Open Bottom	12"	22	22,500 / 33,750	240	1	E0C487212A
	18"		22,500 / 33,750	265	1	E0C487218A
	24"		22,500 / 33,750	290	1	E0C487224A
	36"		22,500 / 33,750	310	1	E0C487236A

Penta Head Bolts are Standard



UNDERGROUND  
ENCLOSURES

Covers					
DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 4 Bolts	8	8,000 / 12,000	320	5	C1A487803A***
No Bolts	8	8,000 / 12,000	320	5	C0A487803A***
W/ 4 Bolts	15	15,000 / 22,500	400	5	C1B487803A***
W/ 4 Bolts	22	22,500 / 33,750	400	5	C1C487803A***

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

**Penta Head Bolts are Standard**

### Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	18"	8	8,000 / 12,000	384	1	B1A487818A
	24"		8,000 / 12,000	400	1	B1A487824A
	30"		8,000 / 12,000	415	1	B1A487830A
	36"		8,000 / 12,000	431	1	B1A487836A
	48"		8,000 / 12,000	463	1	B1A487848A
Standard Open Bottom	18"	15	15,000 / 22,500	423	1	B1B487818A
	24"		15,000 / 22,500	439	1	B1B487824A
	30"		15,000 / 22,500	454	1	B1B487830A
	36"		15,000 / 22,500	470	1	B1B487836A
	48"		15,000 / 22,500	502	1	B1B487848A
Standard Open Bottom	18"	22	22,500 / 33,750	423	1	B1C487818A
	24"		22,500 / 33,750	439	1	B1C487824A
	30"		22,500 / 33,750	454	1	B1C487830A
	36"		22,500 / 33,750	470	1	B1C487836A
	48"		22,500 / 33,750	502	1	B1C487848A

To order boxes with an integral bottom, replace the last character with "B".

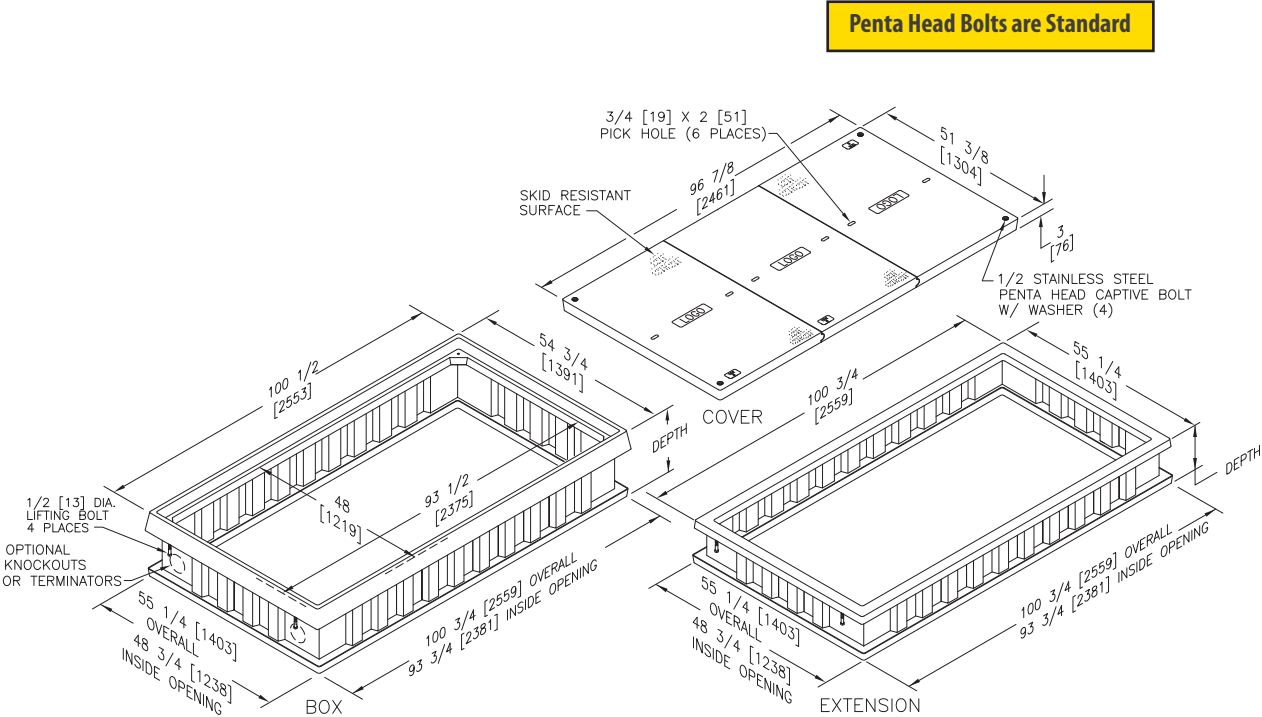
To order adjust-to-grade boxes, replace the last character with "W".

NOTE: Cover rating cannot exceed box rating.

### Bottom Extensions

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	12"	8	8,000 / 12,000	275	1	E0A487812A
	18"		8,000 / 12,000	294	1	E0A487818A
	24"		8,000 / 12,000	312	1	E0A487824A
	36"		8,000 / 12,000	331	1	E0A487836A
Standard Open Bottom	12"	15	15,000 / 22,500	275	1	E0B487812A
	18"		15,000 / 22,500	294	1	E0B487818A
	24"		15,000 / 22,500	312	1	E0B487824A
	36"		15,000 / 22,500	331	1	E0B487836A
Standard Open Bottom	12"	22	22,500 / 33,750	275	1	E0C487812A
	18"		22,500 / 33,750	294	1	E0C487818A
	24"		22,500 / 33,750	312	1	E0C487824A
	36"		22,500 / 33,750	331	1	E0C487836A





UNDERGROUND  
ENCLOSURES

Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 4 Bolts	8	8,000 / 12,000	402	2	C1A489603A***
No Bolts	8	8,000 / 12,000	402	2	C0A489603A***
W/ 4 Bolts	15	15,000 / 22,500	520	2	C1B489603A***
W/ 4 Bolts	22	22,500 / 33,750	520	2	C1C489603A***

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

# Dimensions / Data

## 48" x 96" Corrugated Wall Style Assembly (Continued)

Penta Head Bolts are Standard

### Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	18"	8	8,000 / 12,000	694	1	B1A489618A
	24"		8,000 / 12,000	713	1	B1A489624A
	30"		8,000 / 12,000	729	1	B1A489630A
	36"		8,000 / 12,000	748	1	B1A489636A
	48"		8,000 / 12,000	767	1	B1A489648A
Standard Open Bottom	18"	15	15,000 / 22,500	776	1	B1B489618A
	24"		15,000 / 22,500	795	1	B1B489624A
	30"		15,000 / 22,500	811	1	B1B489630A
	36"		15,000 / 22,500	830	1	B1B489636A
	48"		15,000 / 22,500	849	1	B1B489648A
Standard Open Bottom	18"	22	22,500 / 33,750	776	1	B1C489618A
	24"		22,500 / 33,750	795	1	B1C489624A
	30"		22,500 / 33,750	811	1	B1C489630A
	36"		22,500 / 33,750	830	1	B1C489636A
	48"		22,500 / 33,750	849	1	B1C489648A

To order boxes with an integral bottom, replace the last character with "B".

To order adjust-to-grade boxes, replace the last character with "W".

NOTE: Cover rating cannot exceed box rating.

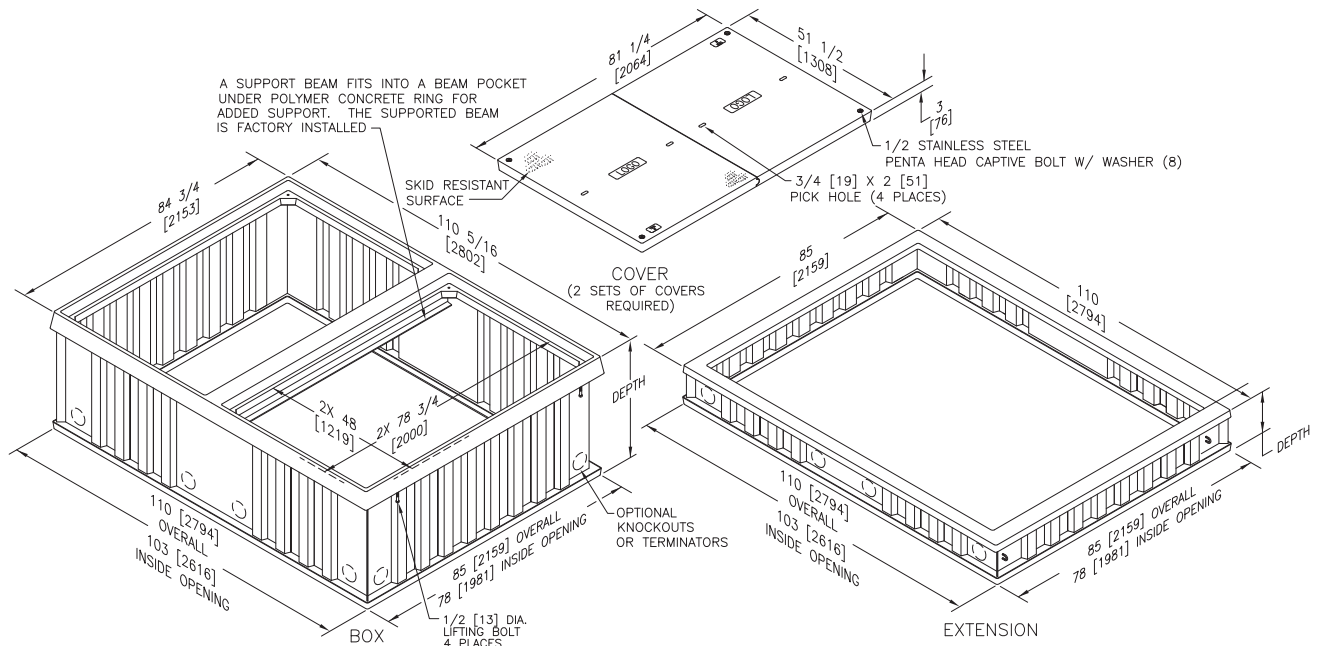
### Bottom Extensions

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	12"	8	8,000 / 12,000	299	1	E0A489612A
	18"		8,000 / 12,000	305	1	E0A489618A
	24"		8,000 / 12,000	311	1	E0A489624A
	36"		8,000 / 12,000	317	1	E0A489636A
	44"		8,000 / 12,000	323	1	E0A489644A
Standard Open Bottom	12"	15	15,000 / 22,500	299	1	E0B489612A
	18"		15,000 / 22,500	305	1	E0B489618A
	24"		15,000 / 22,500	311	1	E0B489624A
	36"		15,000 / 22,500	317	1	E0B489636A
	44"		15,000 / 22,500	323	1	E0B489644A
Standard Open Bottom	12"	22	22,500 / 33,750	299	1	E0C489612A
	18"		22,500 / 33,750	305	1	E0C489618A
	24"		22,500 / 33,750	311	1	E0C489624A
	36"		22,500 / 33,750	317	1	E0C489636A
	44"		22,500 / 33,750	323	1	E0C489644A

# Dimensions / Data

## 78" x 96" Corrugated Wall Style Assembly

**Penta Head Bolts are Standard**



UNDERGROUND  
ENCLOSURES

### Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 8 Bolts	8	8,000 / 12,000	704	1	C1A789603A***
No Bolts	8	8,000 / 12,000	704	1	COA789603A***
W/ 8 Bolts	15	15,000 / 22,500	880	1	C1B789603A***
W/ 8 Bolts	22	22,500 / 33,750	880	1	C1C789603A***

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

### Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	36"	8	8,000 / 12,000	1826	1	B1A789636A
	48"		8,000 / 12,000	1892	1	B1A789648A
Standard Open Bottom	36"	15	15,000 / 22,500	1826	1	B1B789636A
	48"		15,000 / 22,500	1892	1	B1B789648A
Standard Open Bottom	36"	22	22,500 / 33,750	1826	1	B1C789636A
	48"		22,500 / 33,750	1892	1	B1C789648A

To order boxes with an integral bottom, replace the last character with "B".

NOTE: Cover rating cannot exceed box rating.

**Penta Head Bolts are Standard**

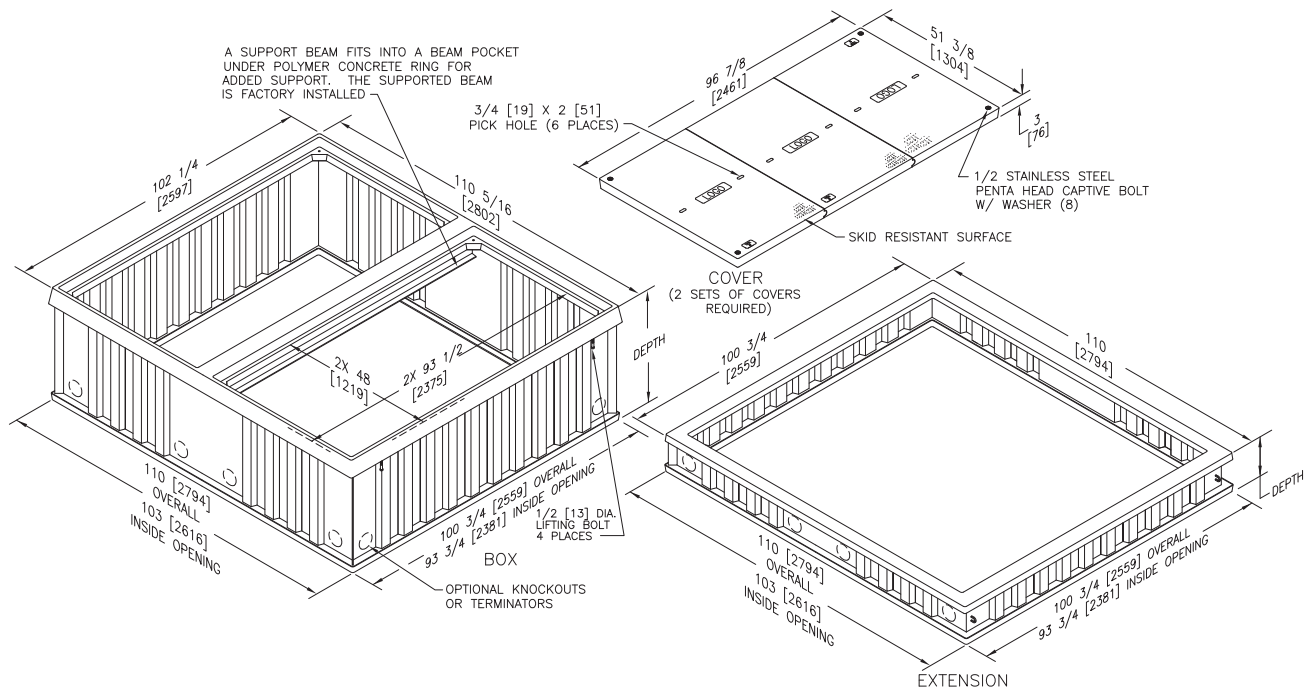
### Bottom Extensions

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	12"	8	8,000 / 12,000	1050	1	E0A789612A
	24"		8,000 / 12,000	1063	1	E0A789624A
	36'		8,000 / 12,000	1076	1	E0A789636A
	44"		8,000 / 12,000	1089	1	E0A789644A
Standard Open Bottom	12"	15	15,000 / 22,500	1050	1	E0B789612A
	24"		15,000 / 22,500	1063	1	E0B789624A
	36'		15,000 / 22,500	1076	1	E0B789636A
	44"		15,000 / 22,500	1089	1	E0B789644A
Standard Open Bottom	12"	22	22,500 / 33,750	1050	1	E0C789612A
	24"		22,500 / 33,750	1063	1	E0C789624A
	36'		22,500 / 33,750	1076	1	E0C789636A
	44"		22,500 / 33,750	1089	1	E0C789644A

# Dimensions / Data

## 96" x 96" Corrugated Wall Style Assembly

Penta Head Bolts are Standard



UNDERGROUND  
ENCLOSURES

### Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 8 Bolts	8	8,000 / 12,000	804	1	C1A969603A***
No Bolts	8	8,000 / 12,000	804	1	C0A969603A***
W/ 8 Bolts	15	15,000 / 22,500	1005	1	C1B969603A***
W/ 8 Bolts	22	22,500 / 33,750	1005	1	C1C969603A***

Replace \*\*\* with a logo code found on page U133. See page U136 for other meter lid and touch/radio read cover options.

### Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	36"	8	8,000 / 12,000	2247	1	B1A969636A
	48"		8,000 / 12,000	2328	1	B1A969648A
Standard Open Bottom	36"	15	15,000 / 22,500	2247	1	B1B969636A
	48"		15,000 / 22,500	2328	1	B1B969648A
Standard Open Bottom	36"	22	22,500 / 33,750	2247	1	B1C969636A
	48"		22,500 / 33,750	2328	1	B1C969648A

To order boxes with an integral bottom, replace the last character with "B".

NOTE: Cover rating cannot exceed box rating.



Penta Head Bolts are Standard

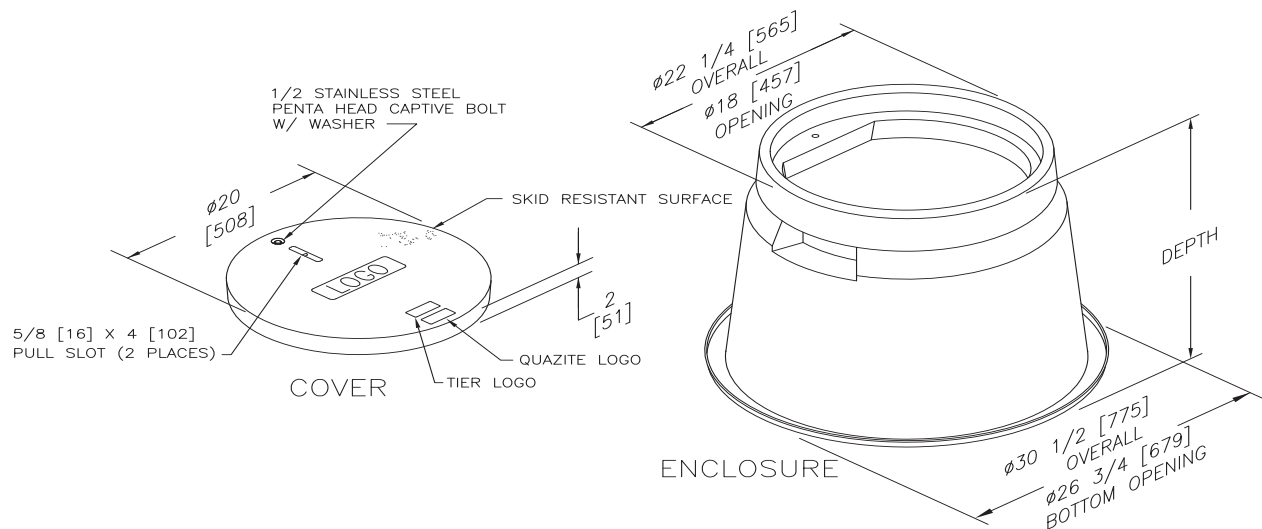
### Bottom Extensions

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	12"	8	8,000 / 12,000	1292	1	E0A969612A
	24"		8,000 / 12,000	1308	1	E0A969624A
	35"		8,000 / 12,000	1324	1	E0A969636A
	44"		8,000 / 12,000	1340	1	E0A969644A
Standard Open Bottom	12"	15	15,000 / 22,500	1292	1	E0B969612A
	24"		15,000 / 22,500	1308	1	E0B969624A
	35"		15,000 / 22,500	1324	1	E0B969636A
	44"		15,000 / 22,500	1340	1	E0B969644A
Standard Open Bottom	12"	22	22,500 / 33,750	1292	1	E0C969612A
	24"		22,500 / 33,750	1308	1	E0C969624A
	35"		22,500 / 33,750	1324	1	E0C969636A
	44"		22,500 / 33,750	1340	1	E0C969644A

# Dimensions / Data

## 2000 Round Enclosure FRP (Nestable) Assembly

Penta Head Bolts are Standard



UNDERGROUND  
ENCLOSURES

### Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 1 Bolts	8	8,000 / 12,000	23	20	C10200002A***
W/ 1 Bolts	15	15,000 / 22,500	34	20	C12200002A***
W/ 1 Bolts	22	22,500 / 33,750	34	20	C16200002A***
No Bolts	8	8,000 / 12,000	23	20	C00200002A***

Replace \*\*\* with a logo code found on page U133.

### Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	24"	8	8,000 / 12,000	48	10	B10200024A
	48"		8,000 / 12,000	96	6	B10200048A
Standard Open Bottom	24"	15	15,000 / 22,500	59	10	B12200024A
	48"		15,000 / 22,500	118	6	B12200048A
Standard Open Bottom	24"	22	22,500 / 33,750	59	10	B19200024A
	48"		22,500 / 33,750	118	6	B19200048A

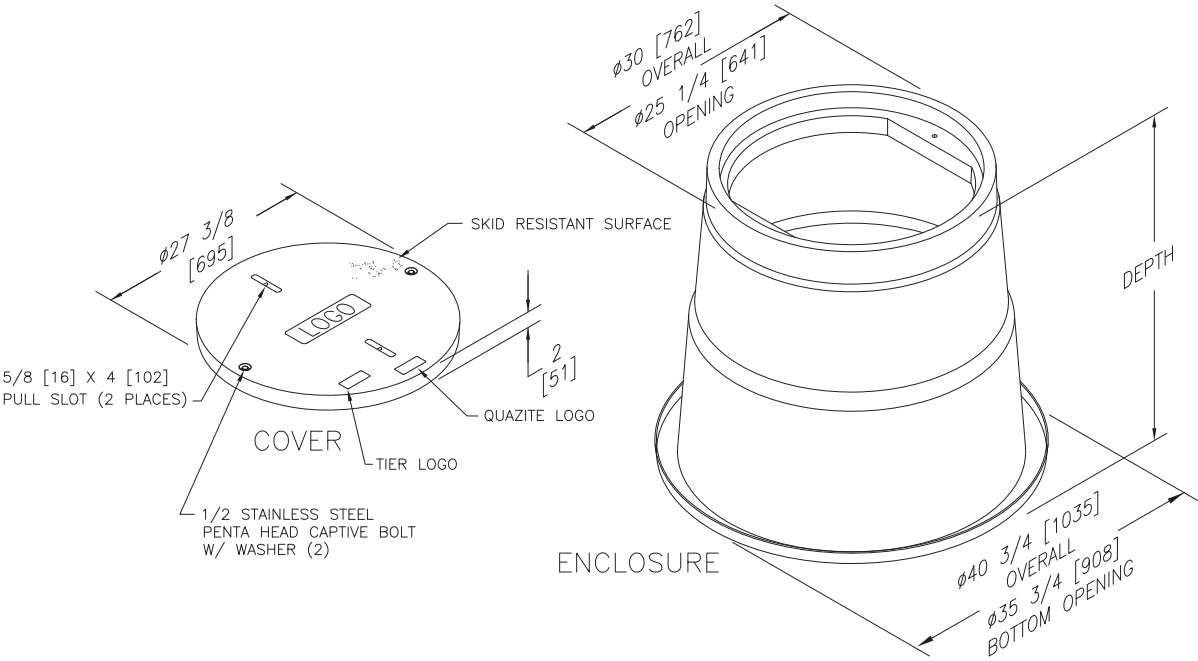
48" Depth created by bolting 2-24" deep boxes bottom to bottom.

To order gasketed boxes, replace the last character with "G".

Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

NOTE: Cover rating cannot exceed box rating.

Penta Head Bolts are Standard



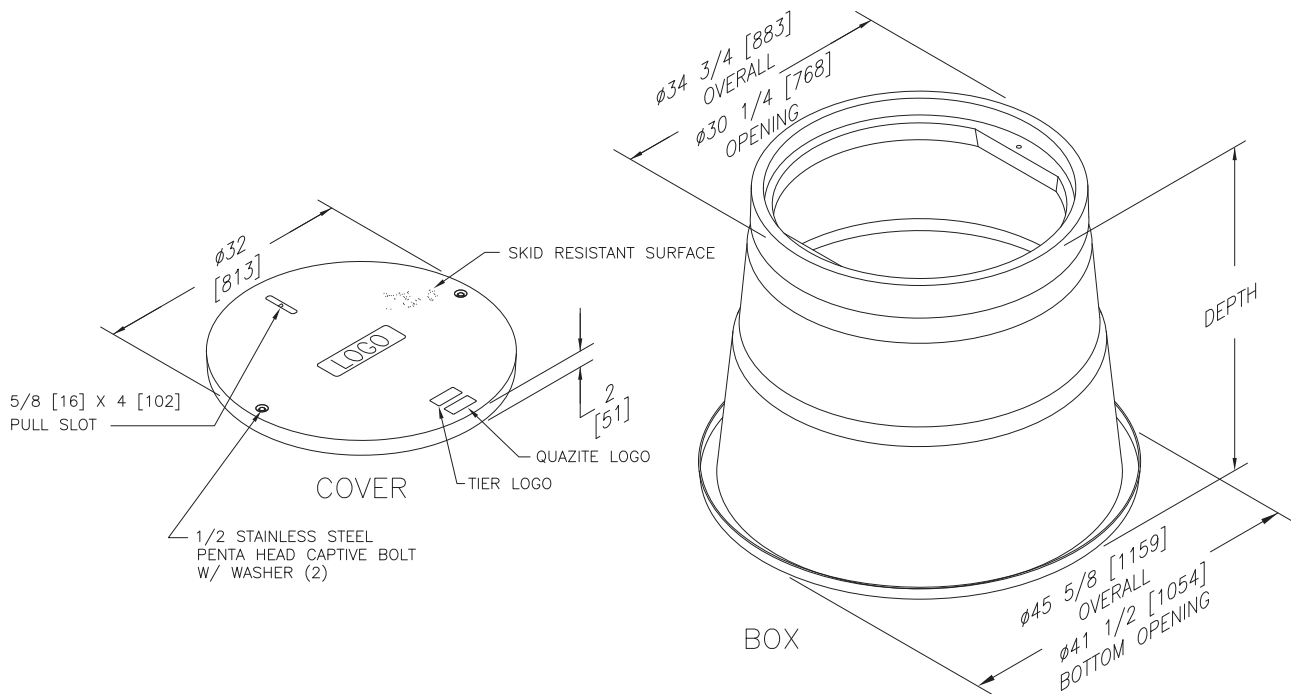
Covers					
DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 2 Bolts	8	8,000 / 12,000	50	10	C10270002A***
W/ 2 Bolts	15	15,000 / 22,500	65	10	C12270002A***
No Bolts	8	8,000 / 12,000	50	10	C00270002A***

Replace \*\*\* with a logo code found on page U133.

Boxes						
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	36"	8	8,000 / 12,000	95	5	B10270036A
	72"		8,000 / 12,000	190	1	B10270072A
Standard Open Bottom	36"	15	15,000 / 22,500	121	5	B12270036A
	72"		15,000 / 22,500	242	1	B12270072A

To order gasketed boxes, replace the last character with "G".  
72" Depth created by bolting 2-36" deep boxes bottom to bottom.  
Gaskets reduce the inflow of fluids but do not make the enclosure water tight.  
NOTE: Cover rating cannot exceed box rating.

Penta Head Bolts are Standard



UNDERGROUND  
ENCLOSURES

Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 2 Bolts	8	8,000 / 12,000	91	10	C10320002A***
W/ 2 Bolts	15	15,000 / 22,500	106	10	C12320002A***
W/ 2 Bolts	22	22,500 / 33,750	106	10	C16320002A***
No Bolts	8	8,000 / 12,000	91	10	C00320002A***

Replace \*\*\* with a logo code found on page U133.

Boxes

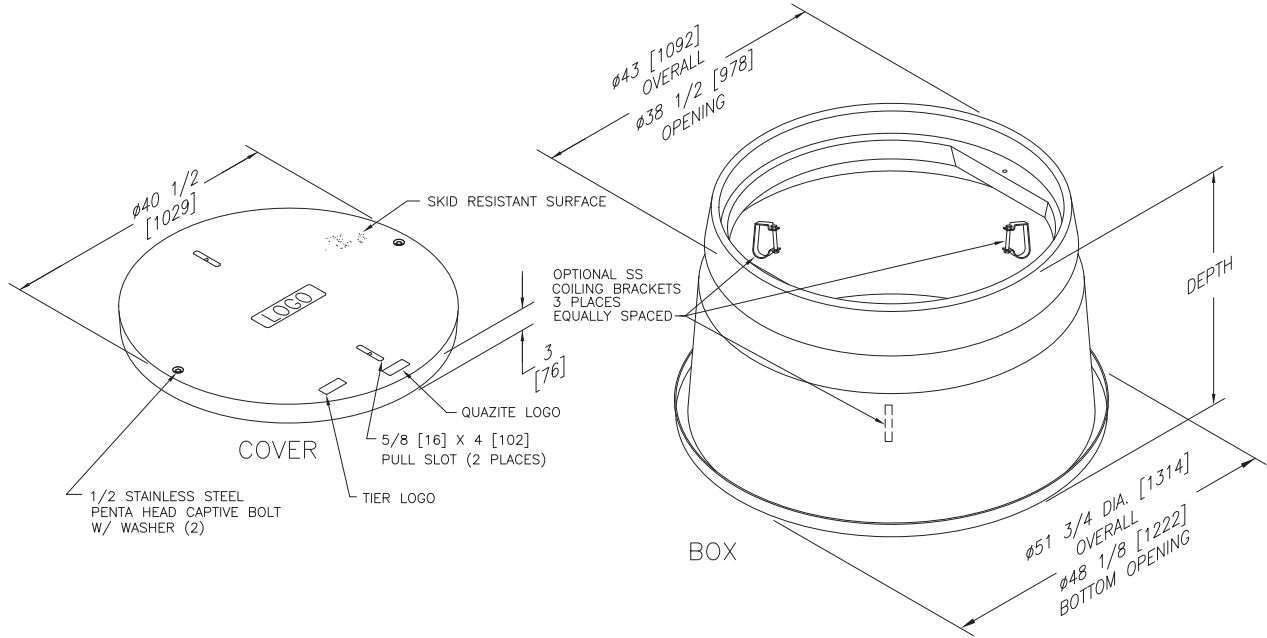
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	36"	8	8,000 / 12,000	95	5	B10320036A
Standard Open Bottom	36"	15	15,000 / 22,500	121	5	B12320036A
Standard Open Bottom	36"	22	22,500 / 33,750	121	5	B19320036A

To order gasketed boxes, replace the last character with "G".  
Gaskets reduce the inflow of fluids but do not make the enclosure water tight.  
NOTE: Cover rating cannot exceed box rating.

# Dimensions / Data

## 3900 Round Enclosure FRP (Nestable) Assembly

Penta Head Bolts are Standard



### Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 2 Bolts	8	8,000 / 12,000	200	5	C10390003A***
W/ 2 Bolts	15	15,000 / 22,500	250	5	C12390003A***
W/ 2 Bolts	22	22,500 / 33,750	250	5	C16390003A***
No Bolts	8	8,000 / 12,000	200	5	C00390003A***

Replace \*\*\* with a logo code found on page U133.

### Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Standard Open Bottom	14"	8	8,000 / 12,000	154	1	B10390014A
	30"		8,000 / 12,000	168	1	B10390030A
	36"		8,000 / 12,000	175	1	B10390036A
Standard Open Bottom	14"	15	15,000 / 22,500	158	1	B12390014A
	30"		15,000 / 22,500	179	1	B12390030A
	36"		15,000 / 22,500	190	1	B12390036A
Standard Open Bottom	14"	22	22,500 / 33,750	158	1	B19390014A
	30"		22,500 / 33,750	179	1	B19390030A
	36"		22,500 / 33,750	190	1	B19390036A

To order gasketed boxes, replace the last character with "G".

Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

NOTE: Cover rating cannot exceed box rating.



# Quazite® FRP Cover Options

Most commonly used cover logos are shown below.

Custom Logos are available. Contact your Quazite/Hubbell Representative.

## Logos

FRP & CORRUGATED LOGO CODES	DESCRIPTION
009	BLANK
010	CATV
012	COMMUNICATIONS
014	CONTROLS
017	ELECTRIC
021	FIBER OPTICS
022	FIRE ALARM
023	GAS
024	GROUND
026	HIGH VOLTAGE
029	LIGHTING
036	SECURITY
038	SIGNAL
040	STATE TRAFFIC SIGNAL
041	STREET LIGHTING
042	TELECOM
043	TELEPHONE
044	TRAFFIC
045	TRAFFIC CONTROL
046	TRAFFIC SIGNAL
048	TV
050	WATER
057	EMERGENCY
065	ILLUMINATION
081	DANGER HIGH VOLTAGE
084	POWER
092	TELECOMMUNICATIONS
03A	DOT
06B	INSTRUMENTATION
0ZA	IRRIGATION
K91	RECLAIMED WATER
KH1	FIBEROPTIC

UNDERGROUND  
ENCLOSURES

# Quazite FRP Color Options

The standard color for QUAZITE FRP products is concrete gray. Various color options allow for blending with adjacent materials or special identification of enclosures. Some commonly requested colors include:

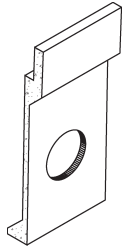
Color Sample	Description	Part No. Code
	Brick Red	R
	Munsell Green	G
	Light Green	F
	Cement Gray	C
	Charcoal Gray	D
	Black	B
	Pecan	T
	International Orange	A
	Purple	P
	BLUE	U

Note: Printed colors are reference only and do not exactly represent product colors.  
Contact your local Hubbell / Quazite representative for other special colors.  
Specify color for FRP & corrugated by inserting the code letter into the 14th digit of the cover number and the 13th digit of the box number. (Example: C22304802J009R).  
NOTE: Box color applies only to collar on FRP boxes.

# FRP Enclosure Options:

Quazite FRP features several different accessories for its boxes, including cable racks, unistrut racks, pull-eyes, knockouts, coiling brackets, and terminators. Knockouts are pre-scored at the factory, allowing for easy break out without the need for special tools. Pulleys feature a forged-steel eye-nut and a steel-reinforcing plate.

## Holes



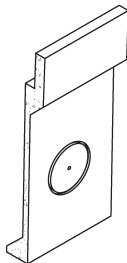
Conduit Sizes  
(For actual hole sizes and locations see page U137.)

2"  
3"  
4" Electrical  
4" Telephone  
5"  
6"

Other hole sizes available. Contact your local HUBBELL®/QUAZITE® representative for additional

Special order boxes with holes (or mouseholes, etc.) may qualify for UL Listing as long as the holes do not exceed more than 25% of the area of each sidewall and as long as the holes do not cut into a structural reinforcing rib, corner, or box lip.

## Knockouts



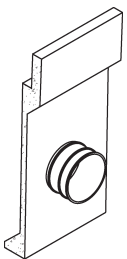
Conduit Sizes  
(For actual hole sizes and locations see page U137.)

2"  
3"  
4" Electrical  
4" Telephone  
5"  
6"

Other knockout sizes available. Contact your local HUBBELL®/QUAZITE® representative for additional

Special order boxes with holes (or mouseholes, etc.) may qualify for UL Listing as long as the holes do not exceed more than 25% of the area of each sidewall and as long as the holes do not cut into a structural reinforcing rib, corner, or box lip.

## Terminators



Conduit Sizes  
(For actual hole sizes and locations see page U137.)

2"  
3"  
4" (Electrical & Telephone)\*  
5"  
6"

\*New 4" terminator design accommodates both electrical and telephone conduit sizes. Other terminator sizes available. Contact your local HUBBELL®/QUAZITE® representative for additional

Special order boxes with holes (or mouseholes, etc.) may qualify for UL Listing as long as the holes do not exceed more than 25% of the area of each sidewall and as long as the holes do not cut into a structural reinforcing rib, corner, or box lip.

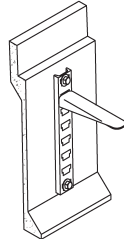
## Strut Racks



Box and cover struts available. Contact your local HUBBELL®/QUAZITE® representative for sizes.

Width x Depth  
1-5/8" x 1-5/8"

## Cable Racks & Rack Hooks - Galvanized Steel



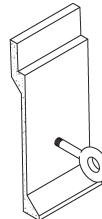
Cable Racks available in the following lengths:

12" length	C080911
18" length	C080910
24" length	C080915
30" length	C080920
36" length	C080921

See page U137 for cable rack locations.

Cable Rack Hooks	Part No.
7-1/2" length	C2031132
10" length	C080907

## Pulling Eyes



Available Ratings

1,500 lbs.  
3,000 lbs.  
10,000 lbs.

## Captive Bolts

Captive bolts are standard on all FRP products except for the 6 x 8 enclosure. Captive bolts prevent the bolt from falling out of the cover when the cover is removed.

## EZ - Locate

The EZ Locate System allows the #6 – #24 AWG ground wires / bonding harnesses or tracer wires to be quickly isolated from the grounding electrode.

The telescoping body is made from stainless steel; the isolating ground switch is made from engineering-grade thermo-plastic and tin-plated copper alloy components to prevent corrosion.

Available Sizes  
17x30 and 24x36



# FRP Enclosure Options:

## Bolt Holes

### Sizes

3/8"

1/4"

1/2"

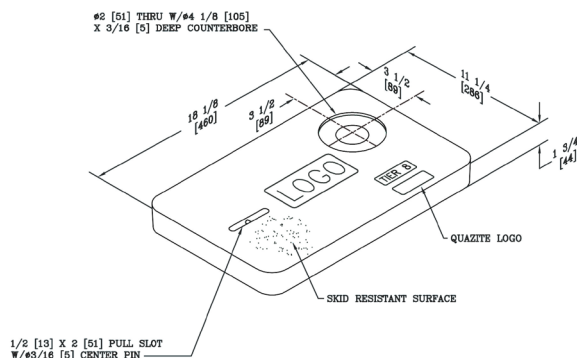
## Inserts - 18-8 Stainless Steel

### Available Sizes

3/8" or 1/2"

## Touch/Radio Read Option

Holes for touch or radio read applications can be provided in covers as needed.



## Pull Slots

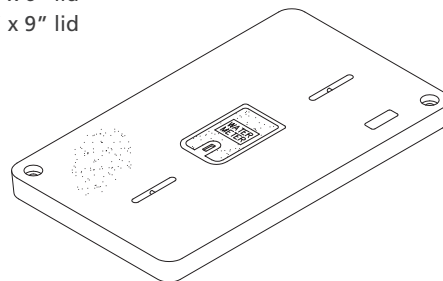
The standard cover pull slot measures 1/2" x 4". Bell cover pull slots measuring 1" x 4" are available upon request.

## Hinged Meter Lids\*

### Available Sizes

Cast iron 4" x 6" lid

Cast iron 6" x 9" lid



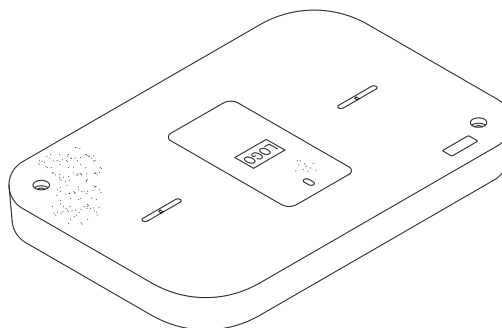
## Drop-in Meter Lids\*

### Available Sizes

Polymer concrete 6" x 9" drop-in lid

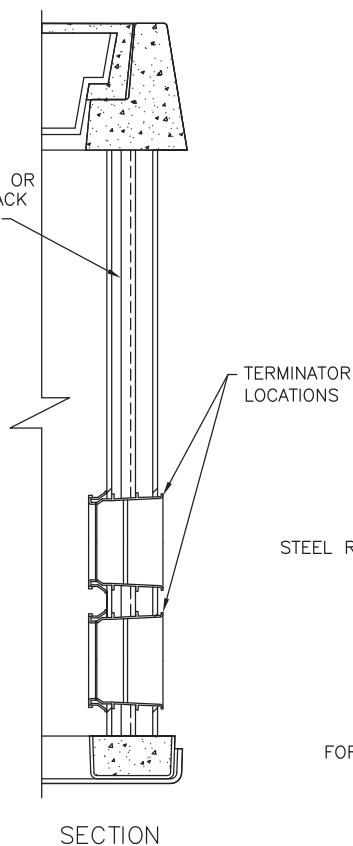
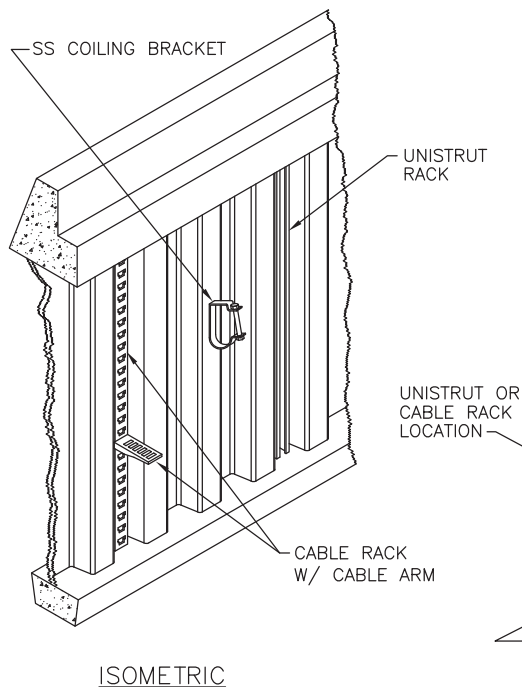
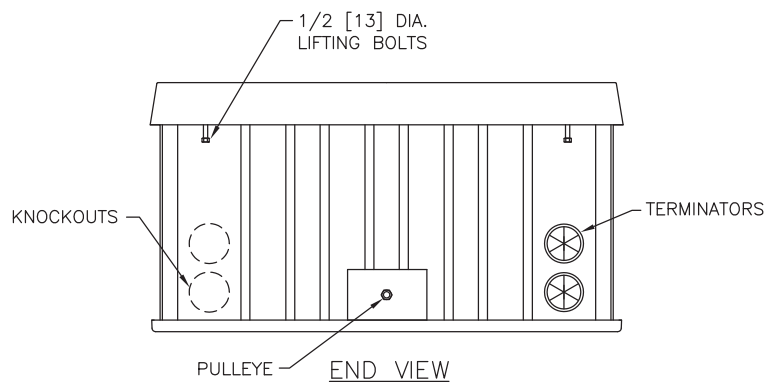
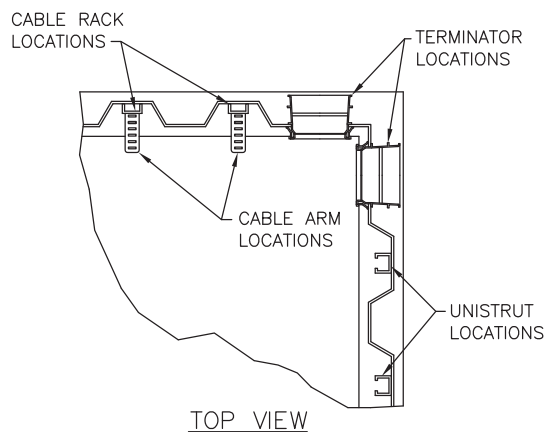
Polymer concrete 7" x 13" drop-in lid

Polymer concrete 9" x 15" drop-in lid



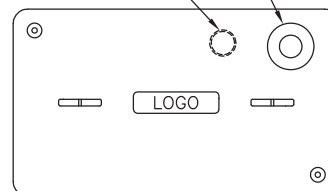
\*Select sizes available in Tier 15.  
Tier 22 not available.

# Typical Features and Details of FRP Enclosures

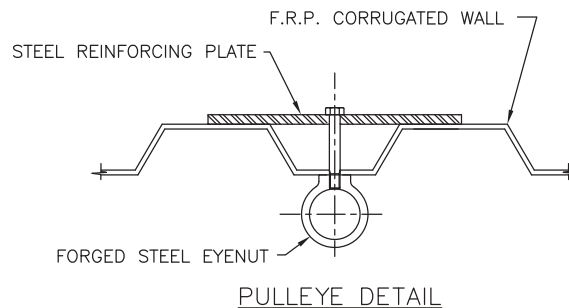


OPTIONAL 2 [51] DIA. THRU HOLE  
W/ 4 1/8 [105] DIA. X 3/16 [5] C'BORE  
TOUCH READ OR RADIO READ OPENING  
MORE SIZES ARE AVAILABLE  
CONTACT SALES ASSOCIATE  
FOR MORE INFORMATION

OPTIONAL TELEPHONE OR ELECTRIC  
EMS MARKER (CAST IN COVER)



COVER  
w/ ELECTRONIC MARKER  
& TOUCH READER OPTIONS

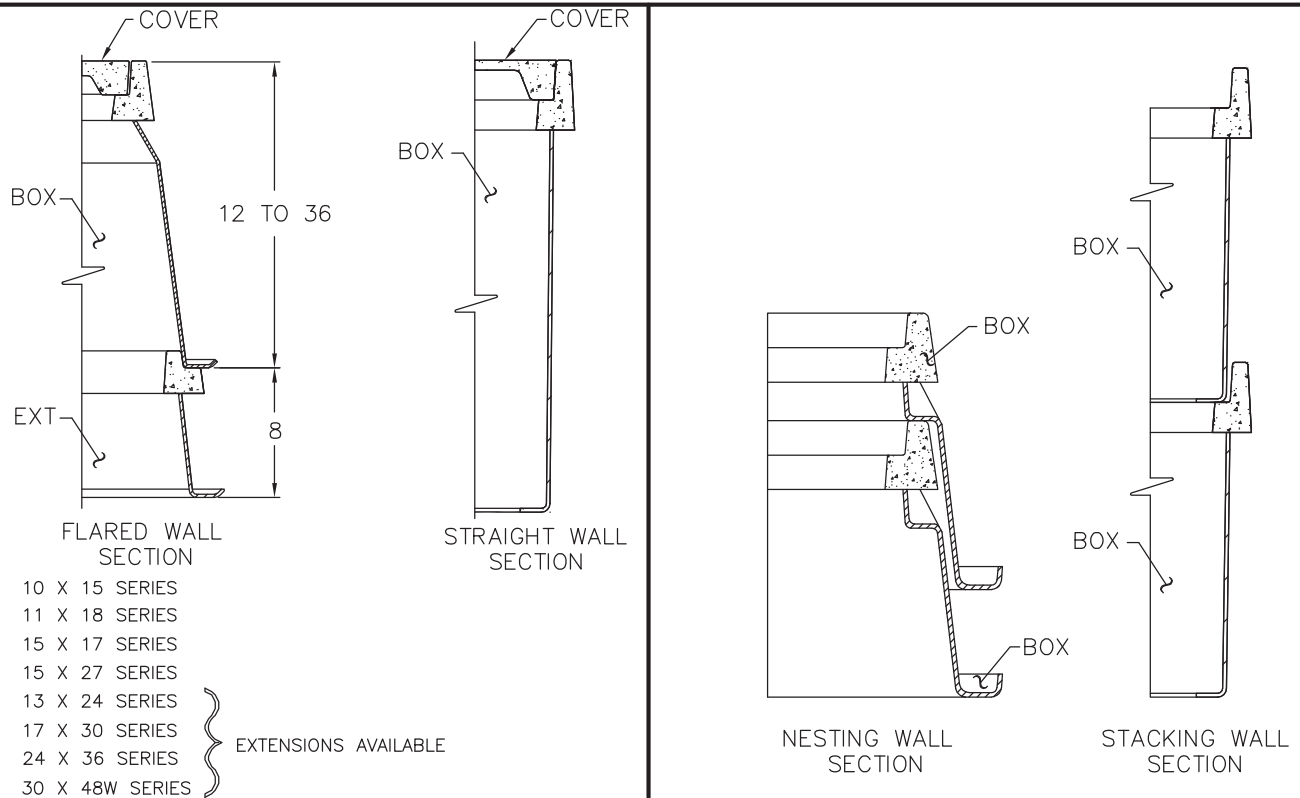
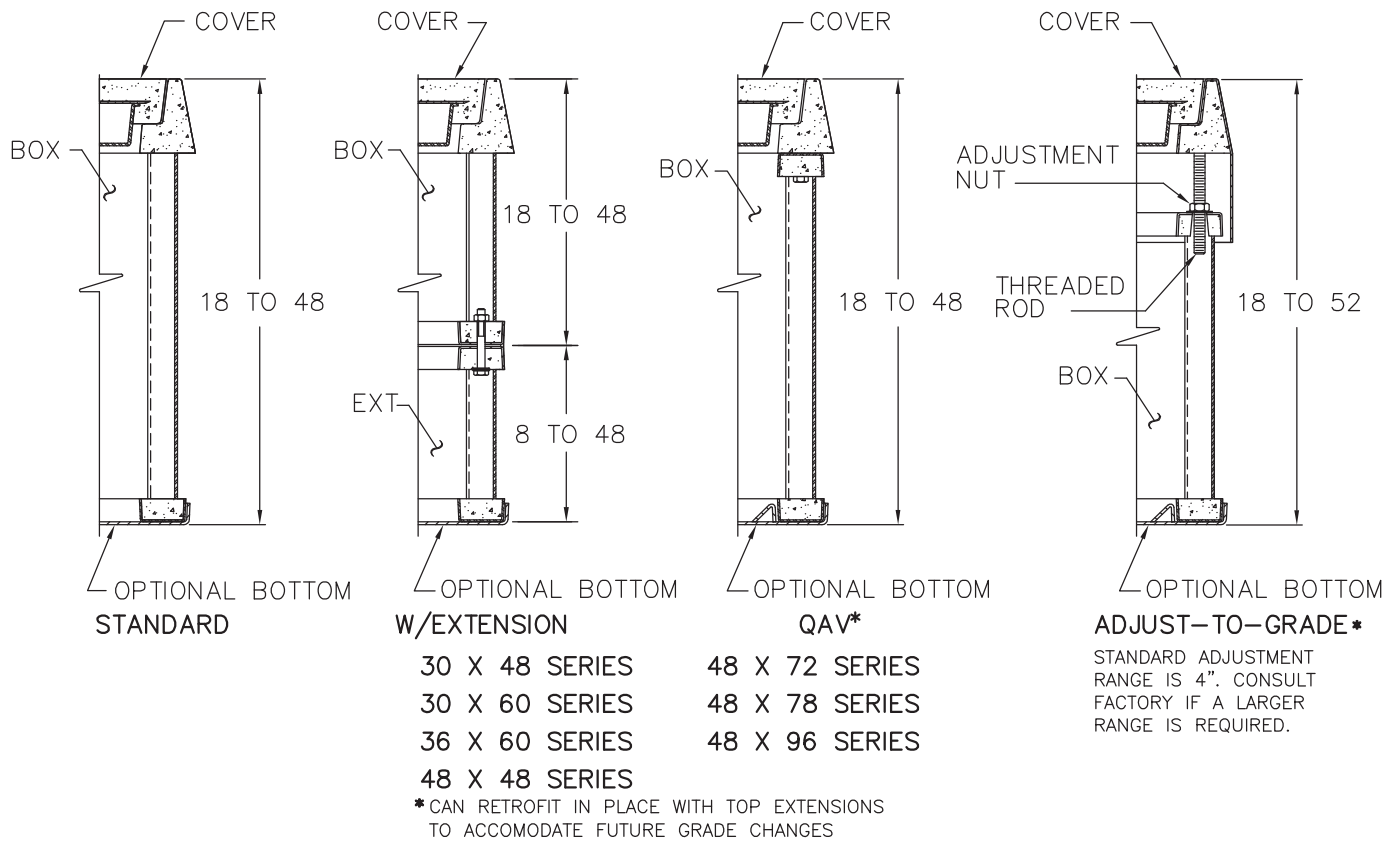


UNDERGROUND  
ENCLOSURES

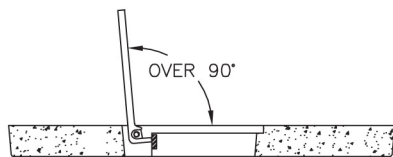
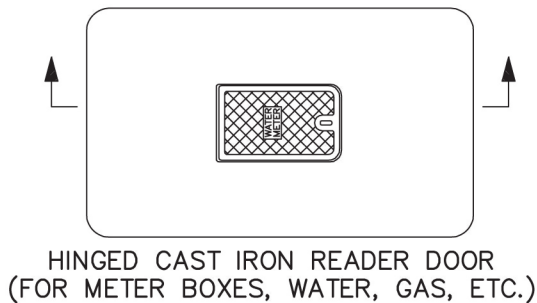


# FRP Enclosure Specifications/Data

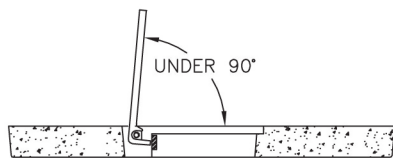
UNDERGROUND ENCLOSURES



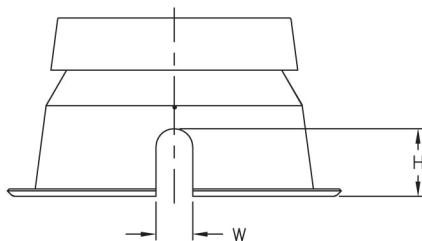
# FRP Enclosure Options



SECTION LID STAYS OPEN



SECTION SELF CLOSING LID



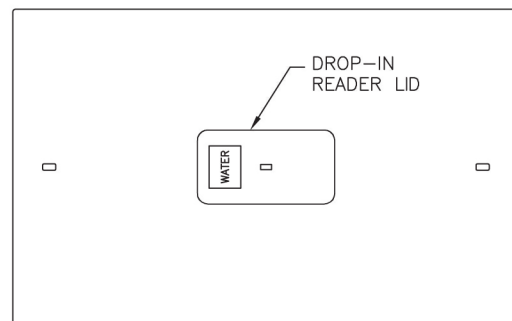
STANDARD MOUSEHOLES		
BOX SERIES	W	H
11 X 18	2-1/2	3
13 X 24	2-1/2	3
15 X 27	2-1/2	3
17 X 30	2-1/2	3
24 X 36	3	5
30 X 48	3	5
30 X 60	3	5
36 X 60 & LARGER	4	6

STANDARD READER DOOR LOCATION		
BOX SIZE	DOOR SIZE	DETAIL
11 X 18	4 X 6	A
13 X 24	4 X 6	A
15 X 27	4 X 6	A
17 X 30	6 X 9	A
24 X 36	6 X 9	A
30 X 48	6 X 9	A
36 X 60 (1PC)	6 X 9	A
36 X 60 (2PC)	6 X 9	B
48 X 78 (2PC)	6 X 9	B
48 X 96 (3PC)	6 X 9	*

\* READER DOOR CENTERED IN CENTER COVER

DETAIL "A"

DETAIL "B"



COVER



COVER SECTION

DROP IN READER LID SIZES	
6 x 9 x 1	
7 x 13 x 1	
9 x 15 x 1	

Select sizes available in Tier 15. Tier 22 not available.





Hubbell maintains a large inventory of PenCell enclosures to serve your needs.



1/2" (12)  
PULL STUD

9 3/8" (238)

STAINLESS  
STEEL W/

4" (9)

TIER LOGO

QUAZITE LOGO

COVER

.5 COEFFICIENT OF FRICTION  
SKID RESISTANT SURFACE



## NEC & Underground Enclosures

The National Electric Code states in article 314.30 that enclosures "...shall be designed and installed to withstand all loads likely to be imposed..." and addresses issues related to enclosure size, wiring entries, enclosures without bottoms, and bonding requirements for covers. "

The code references the ANSI/SCTE 77 "Specification for Underground Enclosure Integrity" National Standard, which outlines various tests that enclosures must pass to meet the standard. ANSI/SCTE 77 also provides load charts with Tier ratings to help users determine the appropriate enclosure to select based on the loadings expected in the application.

### PenCell

PenCell DT enclosures with polymer concrete covers meet or exceed the test provisions of ANSI/SCTE 77 2013. To achieve this, PenCell enclosures must pass numerous material and product performance tests before they can meet ANSI/SCTE 77 2013.

### Testing Requirements for ANSI/SCTE 77 2013

- Three-Position Load Testing to simulate actual application performance
- UV Degradation per ASTM G-154
- Fire Resistance per RUS 7CFR 1755.910 (PE-91)
- Chemical Resistance per ASTM D-543
- Water Absorption per ASTM D-570
- Impact Resistance per ASTM D2444
- Accelerated service per ASTM D-756, procedure E

## "K" rating

For projects where Tier Ratings are not required, we offer products that have been tested in our labs to meet 5K, 10K, or 20K loads. The K-load testing differs from ANSI/SCTE 77 Tier testing in that the K-load testing is a one-time, vertical cover test to ensure the enclosure can safely withstand the static load. By contrast, the ANSI/SCTE 77 Tier testing includes cyclic testing of enclosures in three positions: lateral sidewall, vertical sidewall, and vertical cover. We carefully test and periodically retest our products to ensure they meet and will continue to meet the demands of their intended use.

Currently, there is not a standard for testing enclosures with a "K" load rating designation. No association should be made stating that enclosures with this designation meet the testing requirements of any standard such as ANSI/SCTE 77, WUC 3.6 or any other.

Cover Type	Cover Rating	Test Area
Plastic	5K (5,000 lbs)	10" X 10"
Steel	10K (10,000 lbs)	10" X 10"
Polymer Concrete	20K (20,000 lbs)	10" X 10"



# PenCell Selection Guide



## Style Guide – Tailored Product Variety.

We offer a wide variety of box styles in order to meet your most specialized enclosure needs. Each style offers specific strengths and assets for diverse functionality

### • DT Style

Heavy duty straight wall enclosures made of a structurally ribbed HDPE box and a cover made from either polymer concrete or HDPE. DT series enclosures with polymer concrete covers achieve specific ANSI/SCTE 77 Tier ratings.

### • PE Style

Light duty enclosures that include round models as well as rectangular vault models. Various cover options include HDPE or galvanized diamond plate steel. Spacers and lower extensions are available on specific rectangular vault models. Most rectangular vault models are adaptable to our above-grade pedestals.

### • PM (PEM) Style

Grade level enclosures made of an HDPE foam molded box that offers modular construction. It's tapered walls prevent frost heave while allowing the units to be nested during storage. This highly versatile series can be combined with various cover options that include polymer concrete, HDPE and even split 2-piece designs. Extensions are also available.

### • PR (PEMR) Style

Round top enclosures made of an HDPE tapered box combined with a polymer concrete ring and cover. The round shape also prevents the cover from falling into the enclosure cavity.

# PenCell: Available Size Chart

UNDERGROUND  
ENCLOSURES

Style	Size	Depths	Load Rating Options
DT	11x18	9, 11, 18, 20	5K, Tier 15
	12x12	14, 16, 20, 25	5K, Tier 15
	13x24	15, 17, 18, 23, 24*	5K, Tier 15
	17x30	15, 17, 18, 24, 26, 30, 32, 36, 38*	5K, Tier 15, Tier 22 (24" & 36" depth only)
	24x36	18, 24, 36	5K, Tier 15, Tier 22
	30x48	18, 24, 36	5K, Tier 15, Tier 22
PE	6	9	5K
	9	10	5K
	10	18, 19	5K
	14	12, 17*	5K
	20	17, 19	5K, 10K
	30	12, 17, 19*	5K, 10K
	36	15	5K
PM	10x10	12	20K
	12x12	24	20K
	12x18	24	20K
	12x20	18	20K
	12x24	24	20K
	18x18	24	5K, 20K
	18x24	24	20K
	18x30	24	20K
	24x24	24*	5K, 20K
	24x36	24*	5K, 20K
	24x48	24*	5K, 20K
	24x60	24*	5K, 20K
	30x36	24*	5K, 20K
	30x48	24*	5K, 20K
	30x60	24*	5K, 20K
	36x36	24*	5K, 20K
	36x48	24*	5K, 20K
	36x60	24*	5K, 20K
	48x48	24, 30, 36, 42, 48*	20K
Round	12x12	24	20K
	18x18	24	20K

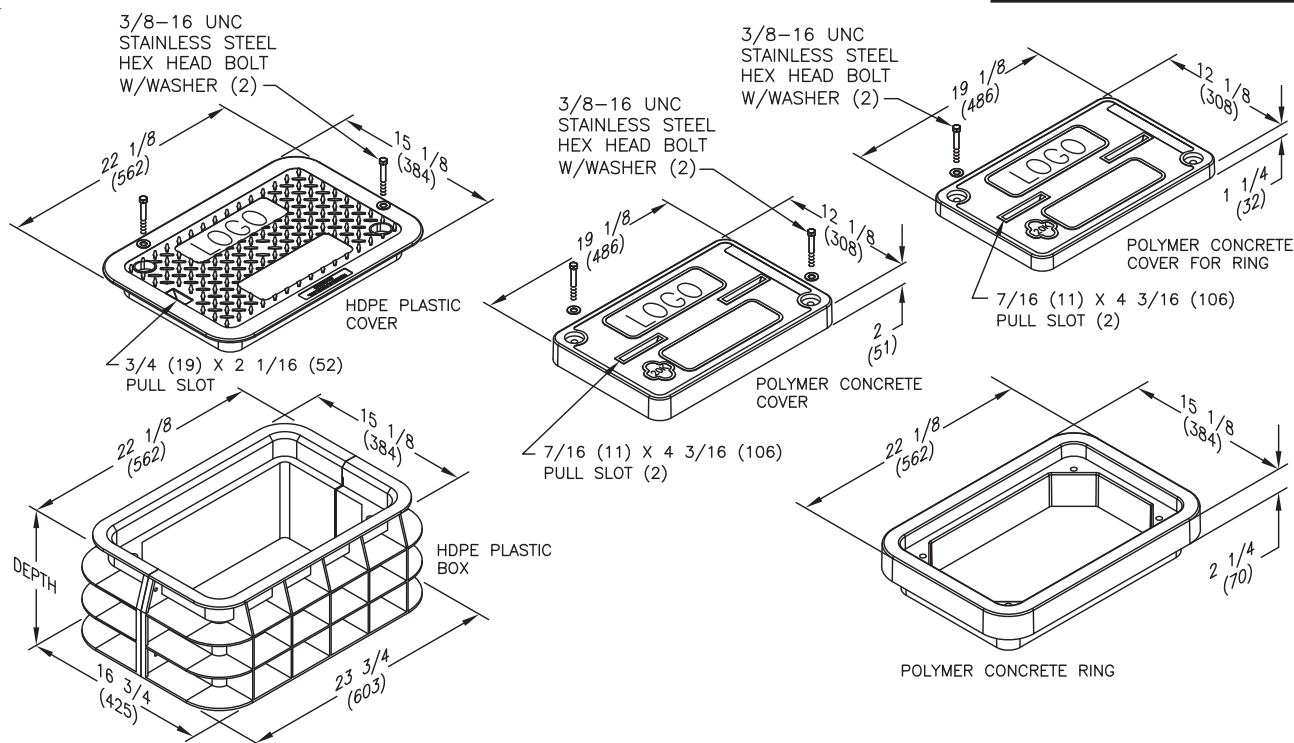
\*Extensions Available



# Dimensions / Data

11" x 18" PenCell DT

Hex Head Bolts are Standard



## Assemblies

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD	WEIGHT	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & Polymer Concrete Cover	9"	15	15,000 / 22,500	43	36	DT-2-1118PCH	DT111809PCH00***
Box w/ PC Ring & Cover	11"	15	15,000 / 22,500	62	33	DT-1118PCH	DT111812PRH00***
Box & HDPE Cover	9"	N/A	N/A / 5,000	15	54	DT-1118HD	DT111809HDH00***
Box & Polymer Concrete Cover	18"	15	15,000 / 22,500	53	18	DT-2-1118-18PCH	DT111818PCH00***
Box w/ PC Ring & Cover	20"	15	15,000 / 22,500	72	30	DT-1118-20PCH	DT111820PRH00***
Box & HDPE Cover	18"	N/A	N/A / 5,000	25	30	DT-1118-18HDH	DT111818HDH00***

## Covers & Ring

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
2" Poly Concrete W/ Bolts	15	15,000 / 22,500	33	Poly Concrete	DT-2-1118PCLH	DT1118CLH00***
1 1/4" Poly Conc W/ Bolts	15	15,000 / 22,500	22	Poly Concrete	DT-1118PCLH	DT1118CTH00***
HDPE Cover	N/A	N/A / 5,000	5	HDPE	DT-1118PLH	DT1118PLI12***
2 1/4" PC Ring	15	15,000 / 22,500	19	Poly Concrete	PCRDT1118	DT1118RR

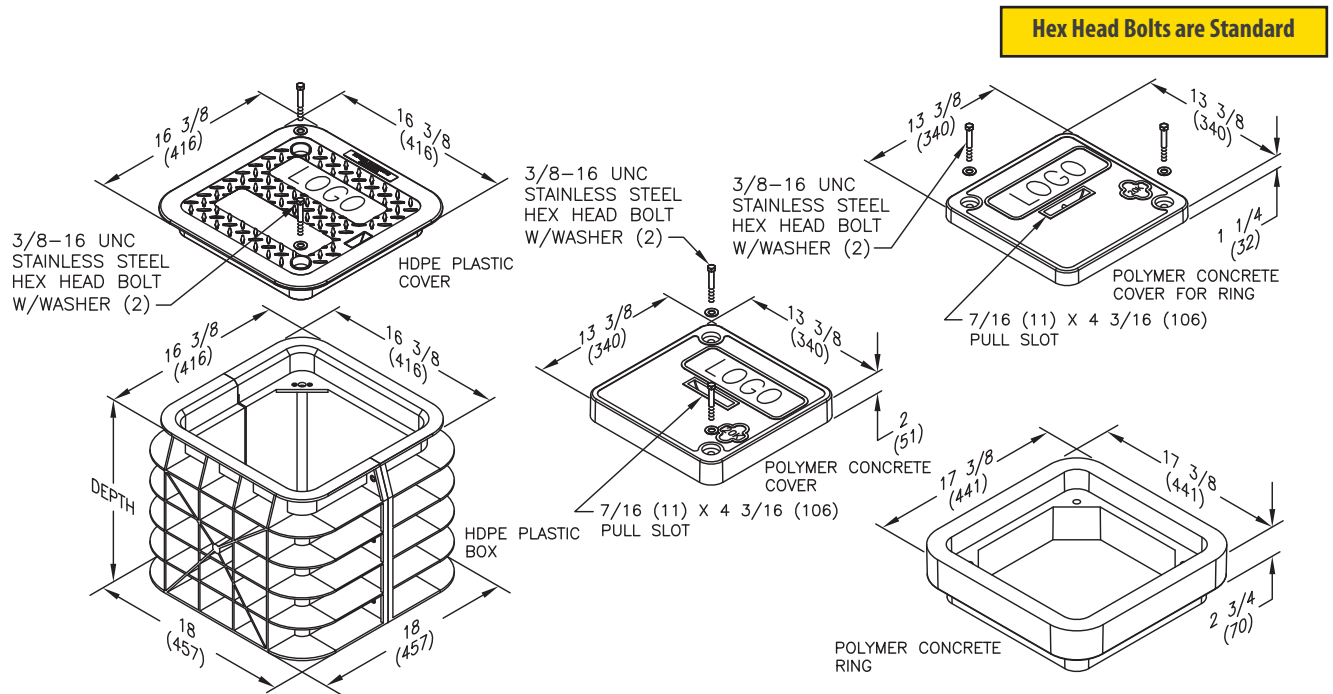
Replace \*\*\* with a logo code found on page U180.

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray Open Bottom	9"	15	15,000 / 22,500	10	40	DT-1118GS-Y	DT111809GSY
Green Open Bottom	9"	15	15,000 / 22,500	10	40	DT-1118GS	DT111809GSN

# Dimensions / Data

12" x 12" PenCell DT



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## Assemblies

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD	WEIGHT	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & Concrete Cover	14"	15	15,000 / 22,500	38	35	DT-2-1212PCH	DT121212PCH00***
Box w/ PC Ring & Cover	16"	15	15,000 / 22,500	54	35	DT-1212PCH	DT121214PRH00***
Box & HDPE Cover	14"	N/A	N/A / 5,000	18	35	DT-1212HD	DT121212HDH00***

## Covers & Ring

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
2" Poly Concrete W/ Bolts	15	15,000 / 22,500	24	Poly Concrete	DT-2-1212PCLH	DT1212CLH00***
1 1/4" Poly Conc W/ Bolts	15	15,000 / 22,500	17	Poly Concrete	DT-1212PCLH	DT1212CTH00***
HDPE Cover	N/A	N/A / 5,000	4	HDPE	DT-1212PLH	DT1212PLI12***
2 1/4" PC Ring	15	15,000 / 22,500	23	Poly Concrete	PCRD1212	DT1212RR

Replace \*\*\* with a logo code found on page U180.

## Boxes

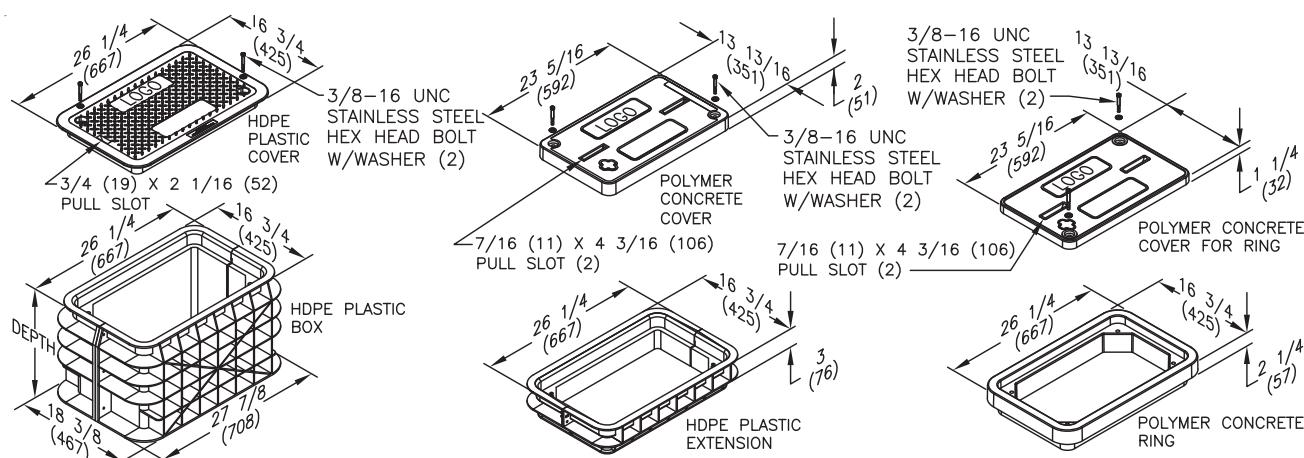
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray Open Bottom	14"	15	15,000 / 22,500	14	35	DT-1212GS-Y	DT121212GSY
Green Open Bottom	14"	15	15,000 / 22,500	14	35	DT-1212GS	DT121212GSN



# Dimensions / Data

13" x 24" PenCell DT

Hex Head Bolts are Standard



## Assemblies

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD	WEIGHT	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & Polymer Concrete Cover	15"	15	15,000 / 22,500	63	25	DT-2-1324PCH	DT132415PCH00***
Box & HDPE Cover	15"	N/A	N/A / 5,000	26	25	DT-1324HD	DT132415HDH00***
Box, Ext & Polymer Concrete Cover	18"	15	15,000 / 22,500	68	25	DT-2-1324-18PCH	DT132418PCH00***
Box w/ PC Ring & Cover	17"	15	15,000 / 22,500	85	25	DT-1324-18PCH	DT132418PRH00***
Box, Ext & HDPE Cover	18"	N/A	N/A / 5,000	31	25	DT-1324-18HDH	DT132418HDH00***
Box, (3) Ext & Polymer Concrete Cover	24"	15	15,000 / 22,500	78	20	DT-2-1324-24PCH	DT132424PCH00***
Box, (2) Ext w/ PC Ring & Cover	23"	15	15,000 / 22,500	95	20	DT-1324-24PCH	DT132424PRH00***
Box, (3) Ext & HDPE Cover	24"	N/A	N/A / 5,000	41	20	DT-1324-24HDH	DT132424HDH00***

## Covers & Ring

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
2" Poly Concrete W/ Bolts	15	15,000 / 22,500	43	Poly Concrete	DT-2-1324PCLH	DT1324CLH00***
1 1/4" Poly Conc W/ Bolts	15	15,000 / 22,500	65	Poly Concrete	DT-1324PCLH	DT1324CTH00***
HDPE Cover	N/A	N/A / 5,000	6	HDPE	DT-1324PLH	DT1324PLI12***
2 1/4" PC Ring	15	15,000 / 22,500	22	Poly Concrete	PCRDT1324	DT1324RR

Replace \*\*\* with a logo code found on page U180.

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray Open Bottom	15"	15	15,000 / 22,500	20	25	DT-1324GS-Y	DT132415GSY
Green Open Bottom	15"	15	15,000 / 22,500	20	25	DT-1324GS	DT132415GSN

## Extensions

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
HDPE Extension (Gray)	3"	15	15,000 / 22,500	5	40	DT-1324-3EXT-Y	DT132403EXY
HDPE Extension (Green)	3"	15	15,000 / 22,500	5	40	DT-1324-3EXT	DT132403EXN

### Assemblies with Concrete Covers

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD	WEIGHT	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & 2" Cover	15"	15	15,000 / 22,500	102	12	DT-2-1730PCH	DT173015PCH00***
With 3" Extension	18"	15	15,000 / 22,500	108	12	DT-2-1730-18PCH	DT173018PCH00***
Box, PC Ring & Cover	17 1/4"	15	15,000 / 22,500	123	12	DT-1730-18PCH	DT173018PRH00***
Box & 2" Cover	24"	15	15,000 / 22,500	124	12	DT-2-1730-24PCH	DT173024PCH00***
Box, PC Ring & Cover	26 1/4"	15	15,000 / 22,500	145	N/A	DT-1730-24PCH	DT173024PRH00***
With (2) 3" Extensions	30"	15	15,000 / 22,500	130	6	DT-2-1730-30PCH	DT173030PCH00***
Box, PC Ring & Cover							
With (2) 3" Extensions	32 1/4"	15	15,000 / 22,500	157	N/A	DT-1730-30PCH	DT173030PRH00***
Box & 2" Cover	36"	15	15,000 / 22,500	140	6	DT-2-1730-36PCH	DT173036PCH00***
Box, PC Ring & Cover	38 1/4"	15	15,000 / 22,500	161	N/A	DT-1730-36PCH	DT173036PRH00***

NOTE: Tier 22 available for 24" & 36" depth boxes/assemblies.

### Assemblies with HDPE Covers

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD	WEIGHT	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & Cover	15"	N/A	N/A / 5,000	35	12	DT-1730HD	DT173015HDH00***
With 3" Extension	18"	N/A	N/A / 5,000	41	12	DT-1730-HDH	DT173018HDH00***
Box & Cover	24"	N/A	N/A / 5,000	50	12	DT-1730-24HDH	DT173024HDH00***
With (2) 3" Extensions	30"	N/A	N/A / 5,000	57	6	DT-1730-30HDH	DT173030HDH00***
Box & Cover	36"	N/A	N/A / 5,000	73	6	DT-1730-36HDH	DT173036HDH00***

### Covers & Polymer Concrete Ring

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
2" with Bolts	15	15,000 / 22,500	77	Poly Concrete	DT-2-1730PCLH	DT1730CLH00***
1 1/4" with Bolts	15	15,000 / 22,500	60	Poly Concrete	DT-1730PCLH	DT1730CTH00***
HDPE Cover	N/A	N/A / 5,000	10	HDPE	DT-1730PLH	DT1730PLI12***
PC Ring	15	15,000 / 22,500	38	Poly Concrete	PCRDT1730	DT1730RR

NOTE: Tier 22 available for 24" & 36" depth boxes/assemblies.

### Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray Open Bottom	15"	15	15,000 / 22,500	25	12	DT-1730GS-Y	DT173015GSY
Green Open Bottom	15"	15	15,000 / 22,500	25	12	DT-1730GS	DT173015GSN
Gray Open Bottom	24"	15	15,000 / 22,500	47	12	DT-1730-24GS-Y	DT173024GSY
Green Open Bottom	24"	15	15,000 / 22,500	47	12	DT-1730-24GS	DT173024GSN
Gray Open Bottom	36"	15	15,000 / 22,500	63	6	DT-1730-36GS-Y	DT173036GSY
Green Open Bottom	36"	15	15,000 / 22,500	63	6	DT-1730-36GS	DT173036GSN

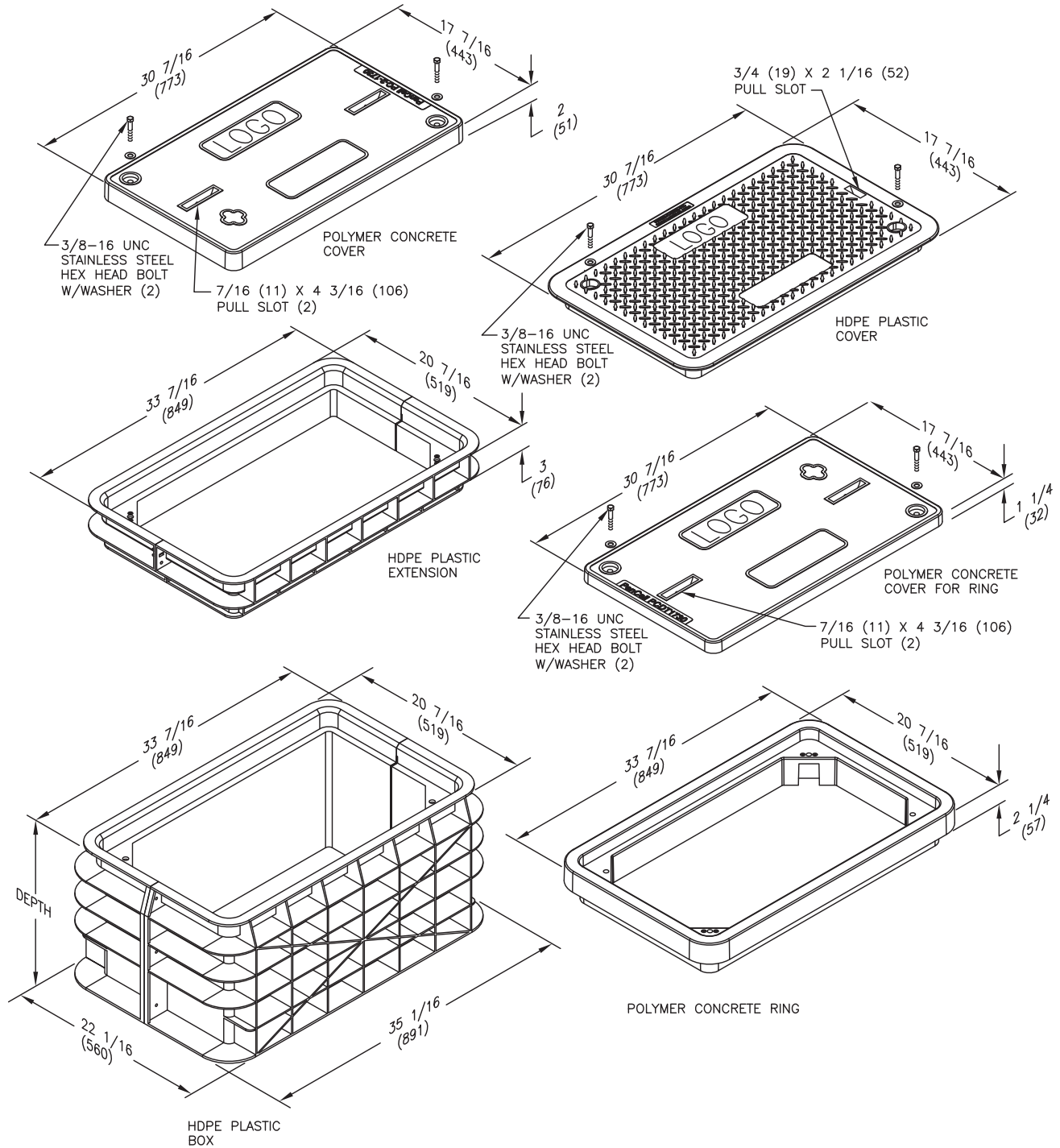
NOTE: Tier 22 available for 24" & 36" depth boxes/assemblies.

### Extensions

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray	3"	15	15,000 / 22,500	6	40	DT-1730-3EXT-Y	DT173003EXY
Green	3"	15	15,000 / 22,500	6	40	DT-1730-3EXT	DT173003EXN

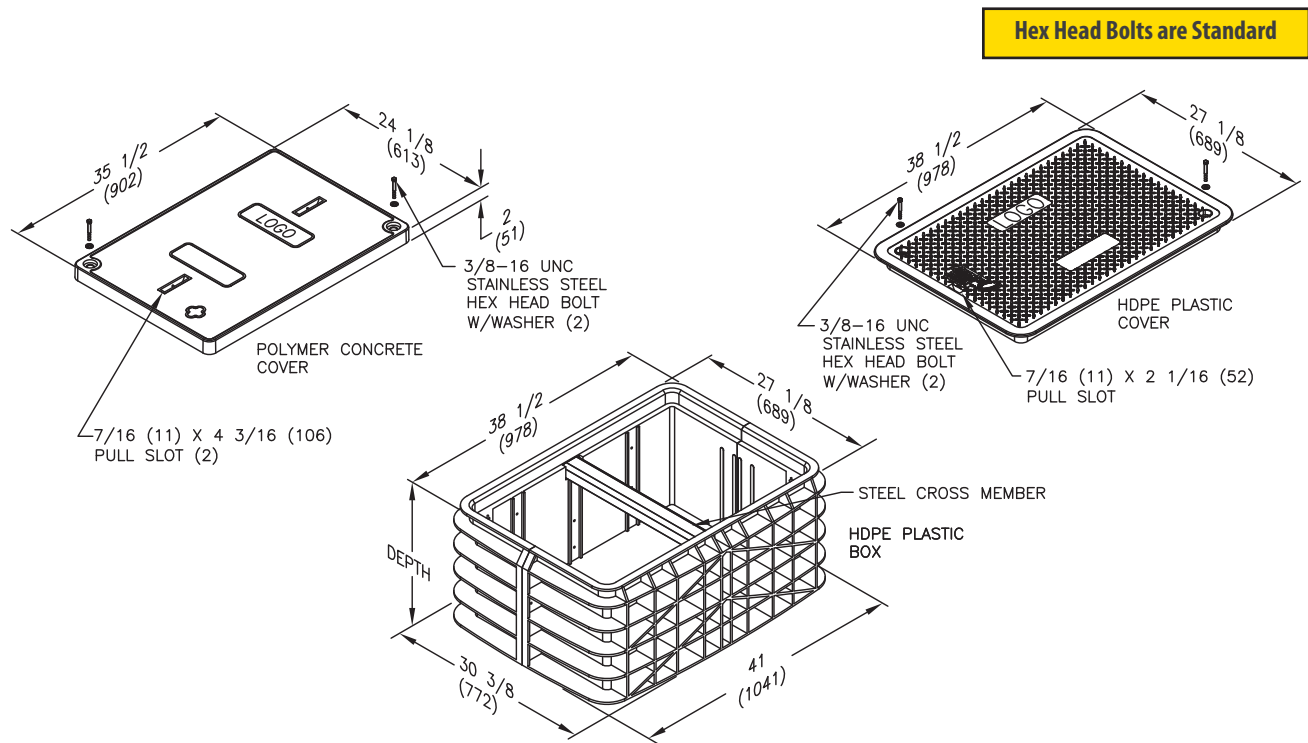
Replace \*\*\* with a logo code found on page U180.

Hex Head Bolts are Standard



# Dimensions / Data

24" x 36" PenCell DT



UNDERGROUND  
ENCLOSURES

## Assemblies

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD	WEIGHT	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & Polymer Concrete Cover	18"	15	15,000 / 22,500	164	2	DT-2-2436-18PCH	DT243618PCH00***
Box & HDPE Cover	18"	N/A	N/A / 5,000	65	6	DT-2436-18H	DT243618HDH00***
Box & Polymer Concrete Cover	24"	15	15,000 / 22,500	180	4	DT-2-2436PCH	DT243624PCH00***
Box & HDPE Cover	24"	N/A	N/A / 5,000	81	4	DT-2436HD	DT243624HDH00***
Box & Polymer Concrete Cover	36"	15	15,000 / 22,500	229	2	DT-2-2436-36PCH	DT243636PCH00***
Box & HDPE Cover	36"	N/A	N/A / 5,000	130	2	DT-2436PLH	DT243636HDH00***

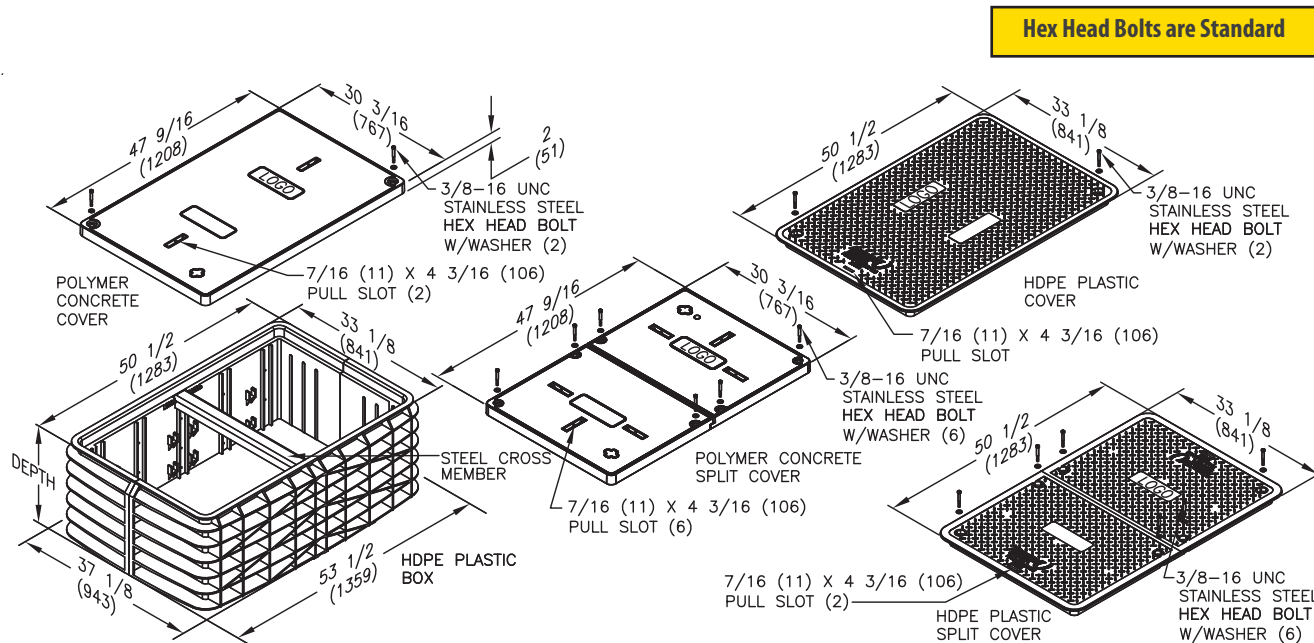
## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
2" with Bolts	15	15,000 / 22,500	117	Poly Concrete	DT-2-2436PCLH	DT2436CLH00***
HDPE with Bolts	N/A	N/A / 5,000	18	HDPE	DT-2436PLH	DT2436PLI12***

Replace \*\*\* with a logo code found on page U180. NOTE: Tier 22 available.  
Available with EZ-Locate.

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray Open Bottom	18"	15	15,000 / 22,500	47	6	DT-2436-18GS-Y	DT243618GSY
Green Open Bottom	18"	15	15,000 / 22,500	47	6	DT-2436-18GS	DT243618GSN
Gray Open Bottom	24"	15	15,000 / 22,500	63	4	DT-2436-24GS-Y	DT243624GSY
Green Open Bottom	24"	15	15,000 / 22,500	63	4	DT-2436-24GS	DT243624GSN
Gray Open Bottom	36"	15	15,000 / 22,500	112	2	DT-2436-36GS-Y	DT243636GSY
Green Open Bottom	36"	15	15,000 / 22,500	112	2	DT-2436-36GS	DT243636GSN



## Assemblies

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD	WEIGHT	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & Polymer Concrete Cover	24"	15	15,000 / 22,500	285	1	DT-2-3048-24PCH	DT304824PCH00***
Box & HDPE Cover	24"	N/A	N/A / 5,000	109	1	DT-3048-24H	DT304824HDH00***
Box & Polymer Concrete Cover	36"	15	15,000 / 22,500	322	1	DT-2-3048-36PCH	DT304836PCH00***
Box & HDPE Cover	36"	N/A	N/A / 5,000	146	1	DT-3048-36H	DT304836HDH00***

## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
2" with Bolts	15	15,000 / 22,500	200	Poly Concrete	DT-2-3048PCLH	DT3048CLH00***
HDPE with Bolts	N/A	N/A / 5,000	24	HDPE	DT-3048PLH	DT3048PLH12***
2" Split Cover	15	15,000 / 22,500	216	Poly Concrete	PCLDT-2-3048-SPL	DT3048CSH00***
HDPE Split Cover	N/A	N/A / 5,000	26	HDPE	DT-3048PLH-SPL	DT3048SPI12***

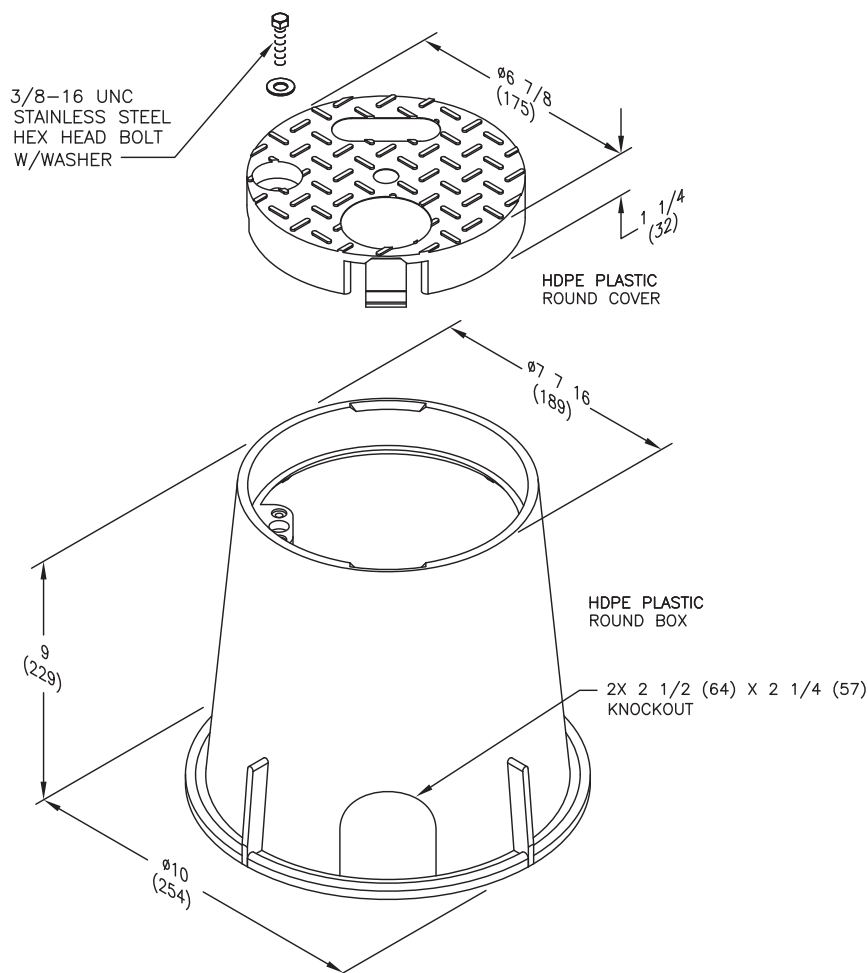
Replace \*\*\* with a logo code found on page U180. NOTE: Tier 22 available. Available with EZ-

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray Open Bottom	18"	15	15,000 / 22,500	64	N/A	DT-3048-18GS-Y	DT304818GSY
Green Open Bottom	18"	15	15,000 / 22,500	64	N/A	DT-3048-18GS	DT304818GSN
Gray Open Bottom	24"	15	15,000 / 22,500	85	4	DT-3048-24GS-Y	DT304824GSY
Green Open Bottom	24"	15	15,000 / 22,500	85	4	DT-3048-24GS	DT304824GSN
Gray Open Bottom	36"	15	15,000 / 22,500	122	2	DT-3048-36GS-Y	DT304836GSY
Green Open Bottom	36"	15	15,000 / 22,500	122	2	DT-3048-36GS	DT304836GSN



Hex Head Bolts are Standard



UNDERGROUND  
ENCLOSURES

## Assemblies

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD	WEIGHT	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & HDPE Cover	9"	N/A	N/A / 5,000	3	300	PE-6HDH	PE6HDH00***
With Knockouts	9"	N/A	N/A / 5,000	3	300	PE-6HDHK	PE6HDHK0***

## Covers

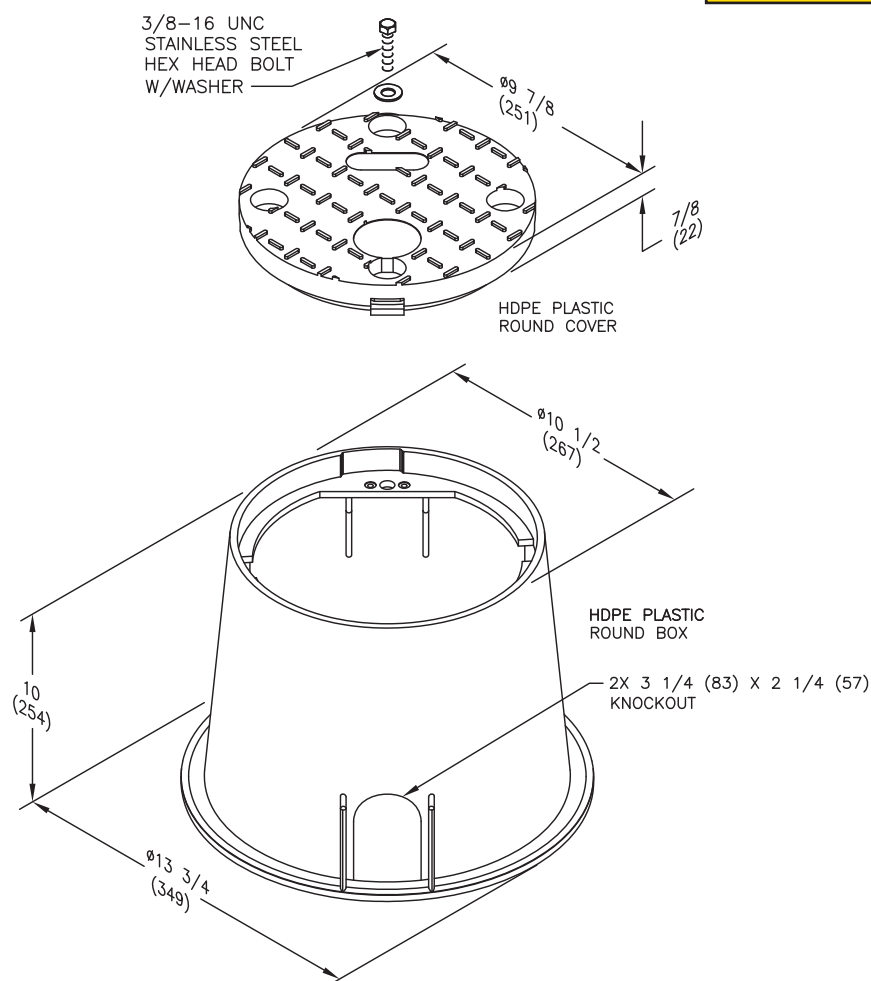
DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
HDPE	N/A	N/A / 5,000	1	HDPE	PE-6-PLH	PE6PLI12***

Replace \*\*\* with a logo code found on page U180.

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Green Open Bottom	9"	N/A	N/A / 5,000	2	300	PE-6-GS	PE6GSI01
With Knockouts	9"	N/A	N/A / 5,000	2	300	PE-6-GSK	PE6GSI05

Hex Head Bolts are Standard



## Assemblies

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD	WEIGHT	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & HDPE Cover	10"	N/A	N/A / 5,000	4	200	PE-9HDH	PE9HDH00***
With Knockouts	10"	N/A	N/A / 5,000	4	200	PE-9HDHK	PE9HDHK0***

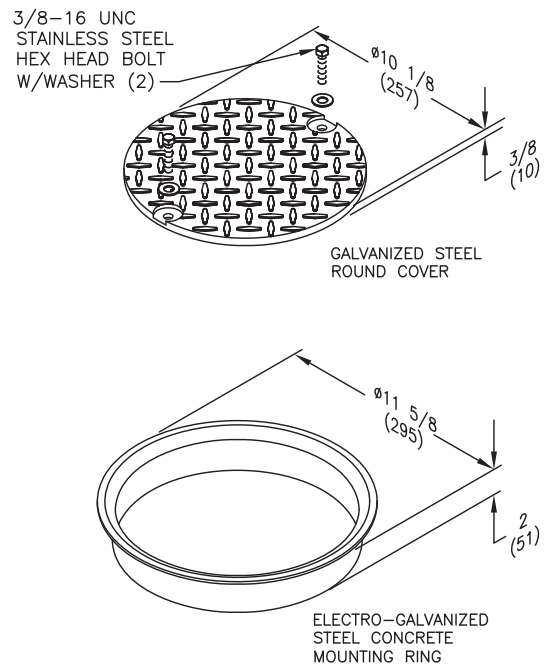
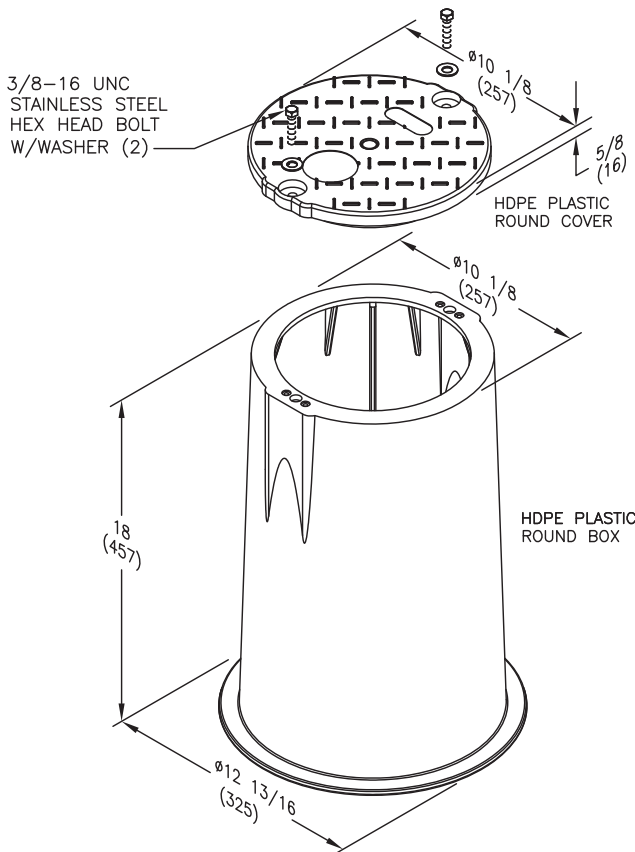
## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
HDPE	N/A	N/A / 5,000	1	HDPE	PE-9-PLH	PE9PLI12***

Replace \*\*\* with a logo code found on page U180.

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Green Open Bottom	10"	N/A	N/A / 5,000	3	200	PE-9-GS	PE9GSI01
With Knockouts	10"	N/A	N/A / 5,000	3	200	PE-9-GSK	PE9GSI05



Hex Head Bolts are Standard

UNDERGROUND ENCLOSURES

## Assemblies

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD	WEIGHT	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & HDPE Cover	18 5/8"	N/A	N/A / 5,000	7	52	PE-10HDH	PE10HDH00***
With Steel/PC Ring	19"	N/A	N/A / 5,000	9	26	PE-10HDH-4	PE10URH00***
Box & Steel Cover	18 1/4"	N/A	N/A / 10,000	15	20	PE-10-UH	PE10UPH00***
With Steel/PC Ring	19"	N/A	N/A / 10,000	17	26	PE-10-UH-4	PE10U4H00***

## Covers & Concrete Ring

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
HDPE	N/A	N/A / 5,000	2	HDPE	PE-10-PLH	PE10PL12***
Steel	N/A	N/A / 10,000	10	Steel	PE-10-SLH	PE10SLH00***
Steel/PC Ring	N/A	N/A / 10,000	2	Steel/PC	PE-10-4	RM02101

Replace \*\*\* with a logo code found on page U180.

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Green Open Bottom	18"	N/A	N/A / 5,000	5	52	PE-10-GS	PE10GSI01
Box for Steel/PC Ring	18"	N/A	N/A / 5,000	5	52	PE-10-GS	PE10GSI00

# Dimensions / Data

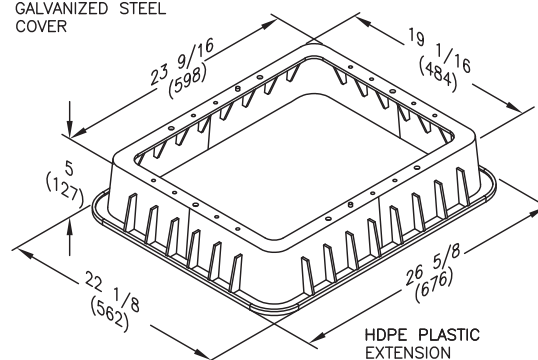
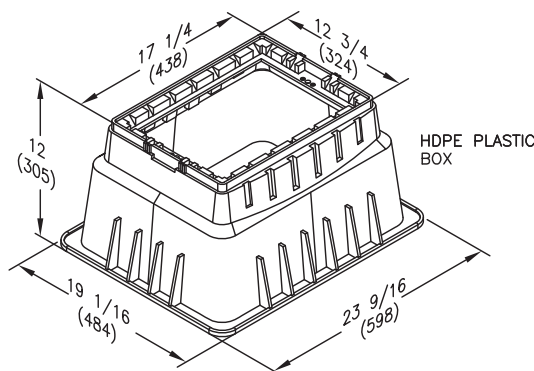
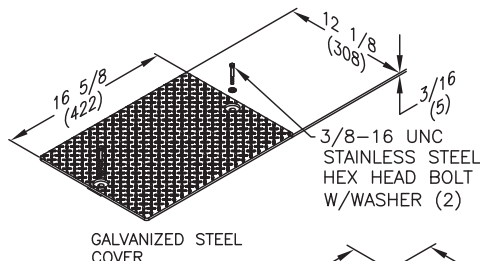
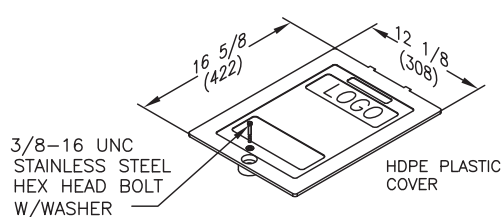
PenCell  
Option  
System

See page 193



14" PenCell PE

Hex Head Bolts are Standard



## Assemblies

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD	WEIGHT	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & HDPE Cover	12"	N/A	N/A / 5,000	13	96	PE-14HDH	PE14HDH00***
W/ Penta Bolt/Crimp	12"	N/A	N/A / 5,000	13	96	PE-14HDXCL	PE14HDXCL***
Box & Steel Cover	12"	N/A	N/A / 10,000	21	48	PE-14-UH	PE14UPH00***
With Ground Lug	12"	N/A	N/A / 10,000	21	48	PE-14-UHG	PE14UPHGR***
Box & HDPE Cover							
With 5" Bottom Ext	17"	N/A	N/A / 5,000	16	30	PE-14HDH-5	PE14H5H00***
Box & Steel Cover							
With 5" Bottom Ext	17	N/A	N/A / 5,000	24	30	PE-14-UH-5	PE14S5H00***

## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
HDPE	N/A	N/A / 5,000	3	HDPE	PE-14-PLH	PE14PLI12***
Steel	N/A	N/A / 10,000	12	Steel	PE-14-SLH	PE14SLH00***

Replace \*\*\* with a logo code found on page U180.

## Boxes

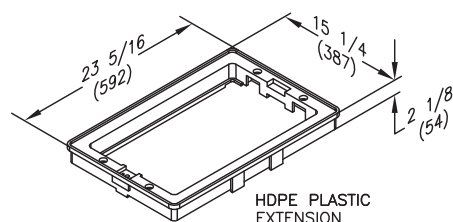
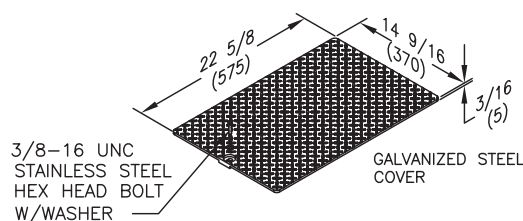
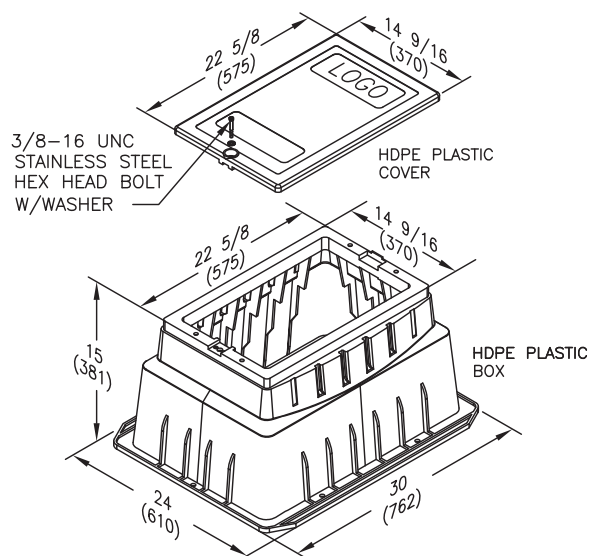
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Green Open Bottom	12"	N/A	N/A / 5,000	10	96	PE-14-GS	PE14GSI01

## Extension

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
5" Bottom	5"	N/A	N/A / 5,000	3	60	PE-14-5	PE1405EXN



Hex Head Bolts are Standard



UNDERGROUND  
ENCLOSURES

## Assemblies

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD	WEIGHT	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & HDPE Cover	17"	N/A	N/A / 5,000	23	40	PE-20HDH	PE20HDH00***
W/ Penta Bolt/Crimp	17"	N/A	N/A / 5,000	23	40	PE-20HDXCL	PE20HDXCL***
Box & Steel Cover	17"	N/A	N/A / 10,000	34	32	PE-20-UH	PE20UPH00***
With Ground Lug	17"	N/A	N/A / 10,000	34	32	PE-20-UHG	PE20UPHGR***
Box & HDPE Cover	19"	N/A	N/A / 5,000	28	32	PE-20HDH-2	PE20H2H00***
With 2" Spacer Ext	19"	N/A	N/A / 10,000	39	24	PE-20-UH-2	PE20S2H00***

## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
HDPE	N/A	N/A / 5,000	6	HDPE	PE-20-PLH	PE20PLI12***
HDPE w/ Penta	N/A	N/A / 5,000	6	HDPE	PE-20-PLXCL	PE20PLI13***
Steel	N/A	N/A / 10,000	19	Steel	PE-20-SLH	PE20SLH00***

Replace \*\*\* with a logo code found on page U180.

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Green Open Bottom	17"	N/A	N/A / 5,000	15	40	PE-20-GS	PE20GSI01
Green with Crimp Lock	17"	N/A	N/A / 5,000	15	40	PE-20-GSXCL	PE20GSI03

## Extension

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
2" Top Spacer	2"	N/A	N/A / 5,000	5	50	PE-20-2	PE20G2



# Dimensions / Data

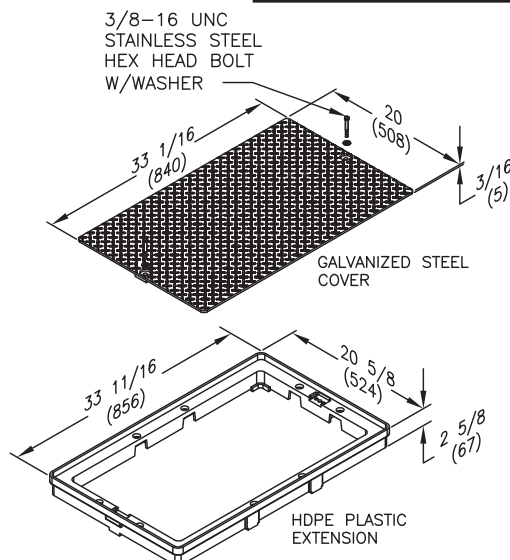
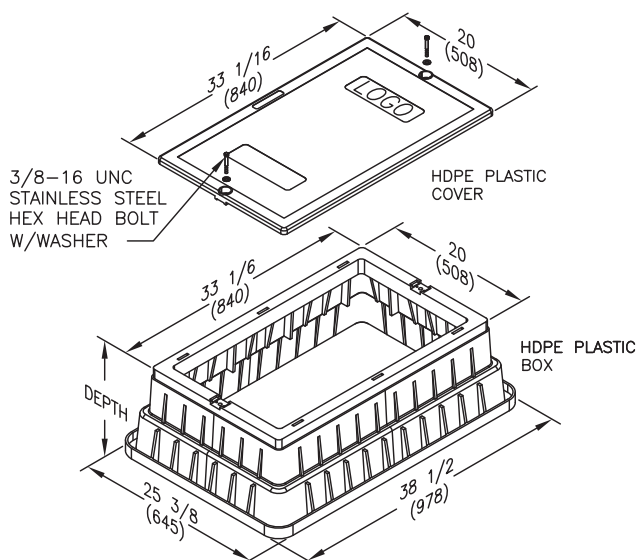
PenCell  
Option  
System

See page 193



30" PenCell PE

Hex Head Bolts are Standard



## Assemblies

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD	WEIGHT	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & HDPE Cover	12"	N/A	N/A / 5,000	35	20	PE-30-12HDH	PE3012HDH00***
Box & Steel Cover	12"	N/A	N/A / 10,000	57	14	PE-30-12UH	PE3012UPH00***
Box & HDPE Cover	17"	N/A	N/A / 5,000	38	18	PE-30-HDH	PE30HDH00***
With Penta Blt/Crimp	17"	N/A	N/A / 5,000	38	16	PE-30HDXCL	PE30HDXCL***
Box & Steel Cover	17"	N/A	N/A / 10,000	60	12	PE-30-UH	PE30UPH00***
With Ground Lug	17"	N/A	N/A / 10,000	60	12	PE-30-UHG	PE30UPHGR***
Box & HDPE Cover w/ 2"Top Ext	19"	N/A	N/A / 5,000	43	16	PE-30HDH-2	PE30H2H00***
With 2"Top Ext & GL	19"	N/A	N/A / 10,000	65	12	PE-30-UH-2	PE30S2HGR***

## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
HDPE	N/A	N/A / 5,000	13	HDPE	PE-30-PLH	PE30PLI12***
HDPE w/ Penta	N/A	N/A / 5,000	13	HDPE	PE-30-PLXCL	PE30PLI07***
Steel	N/A	N/A / 10,000	35	Steel	PE-30-SLH	PE30SLH00***

Replace \*\*\* with a logo code found on page U180.

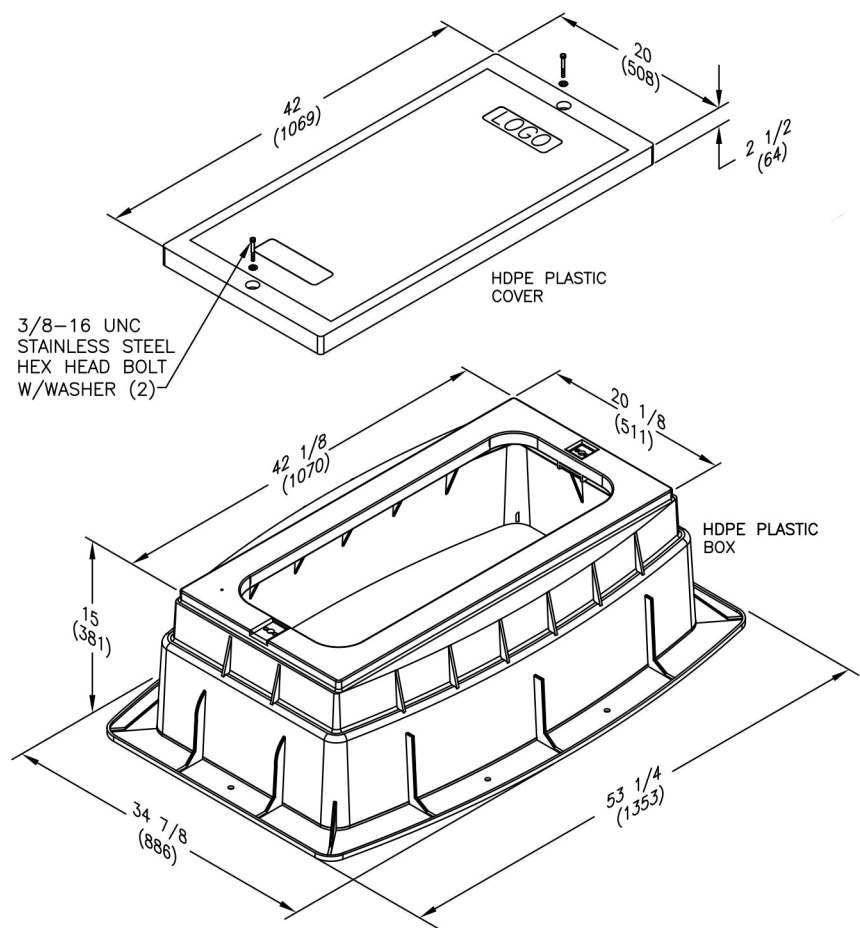
## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Open Bottom	12"	N/A	N/A / 5,000	22	20	PE-30-12GS	PE3012GSI01
Open Bottom	17"	N/A	N/A / 5,000	25	18	PE-30-GS	PE30GSI01

## Extension

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
2"Top Spacer	2"	N/A	N/A / 5,000	N/A	N/A	PE-30-2	PE30G2

Hex Head Bolts are Standard



UNDERGROUND  
ENCLOSURES

## Assemblies

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD	WEIGHT	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & HDPE Cover	15"	N/A	N/A / 5,000	45	9	PE-36HDH	PE36HDH00***

## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
HDPE	N/A	N/A / 5,000	15	HDPE	PE-36-PLH	PE36PLI12***

Replace \*\*\* with a logo code found on page U180.

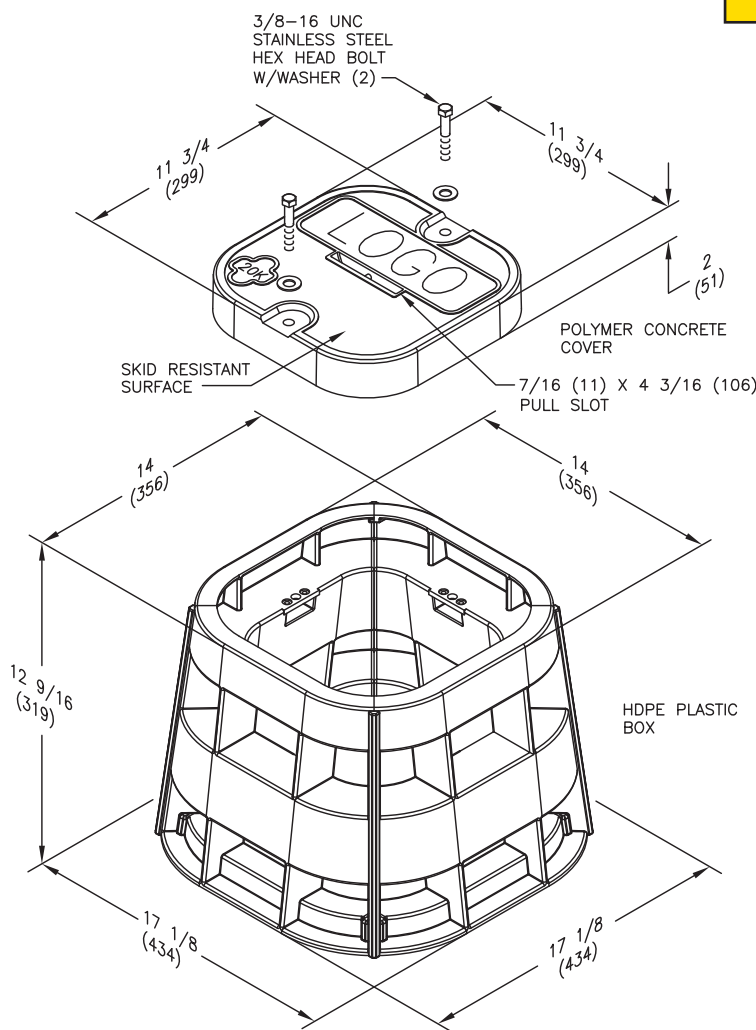
## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Open Bottom	15"	N/A	N/A / 5,000	30	9	PE-36-GS	PE36GSI01

# Dimensions / Data

10"x 10" PenCell PM (PEM 10 Series)

Hex Head Bolts are Standard



## Assembly

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & Polymer Concrete Cover	12"	N/A	N/A / 20,000	30	45	PEM-1010-PCH	PM101012PCH00***

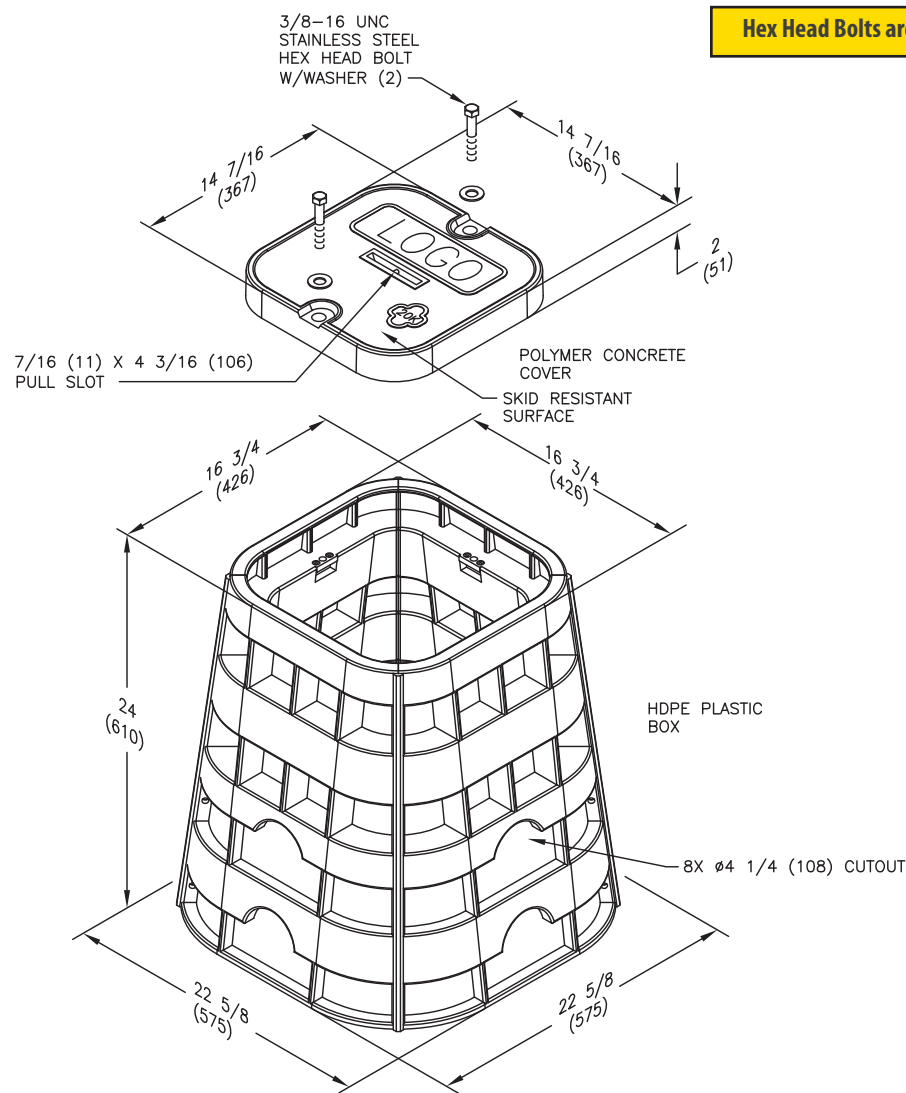
## Cover

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
1 Piece W/ 2 Bolts	N/A	N/A / 20,000	19	Poly Concrete	PEM-1010-PCLH	PM1010CLH00***

## Box

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Open Bottom	12"	N/A	N/A / 20,000	11	45	PEM-1010-GS	PM101012GSY

Replace \*\*\* with a logo code found on page U180.



Hex Head Bolts are Standard

Assembly

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & Polymer Concrete Cover	24"	N/A	N/A / 20,000	68	16	PEM-1212-PCH	PM121224PCH00***

Cover

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
1 Piece W/ 2 Bolts	N/A	N/A / 20,000	28	Poly Concrete	PEM-1212-PCLH	PM1212CLH00***

Box

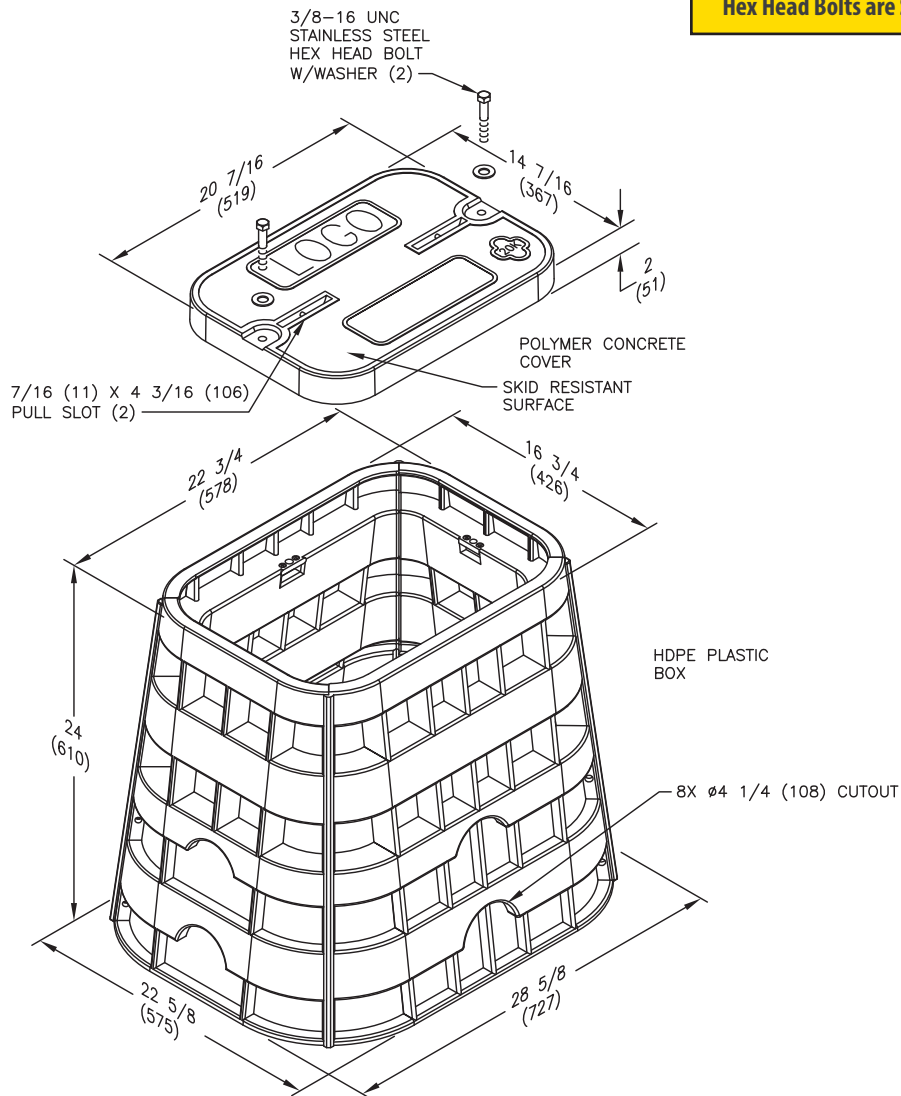
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Open Bottom	24"	N/A	N/A / 20,000	40	16	PEM-1212-GS	PM121224GSY

Replace \*\*\* with a logo code found on page U180.

# Dimensions / Data

12"x 18" PenCell PM (PEM 12 Series)

Hex Head Bolts are Standard



## Assembly

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & Polymer Concrete Cover	24"	N/A	N/A / 20,000	82	20	PEM-1218-PCH	PM121824PCH00***

## Cover

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
1 Piece W/ 2 Bolts	N/A	N/A / 20,000	45	Poly Concrete	PEM-1218-PCLH	PM1218CLH00***

## Box

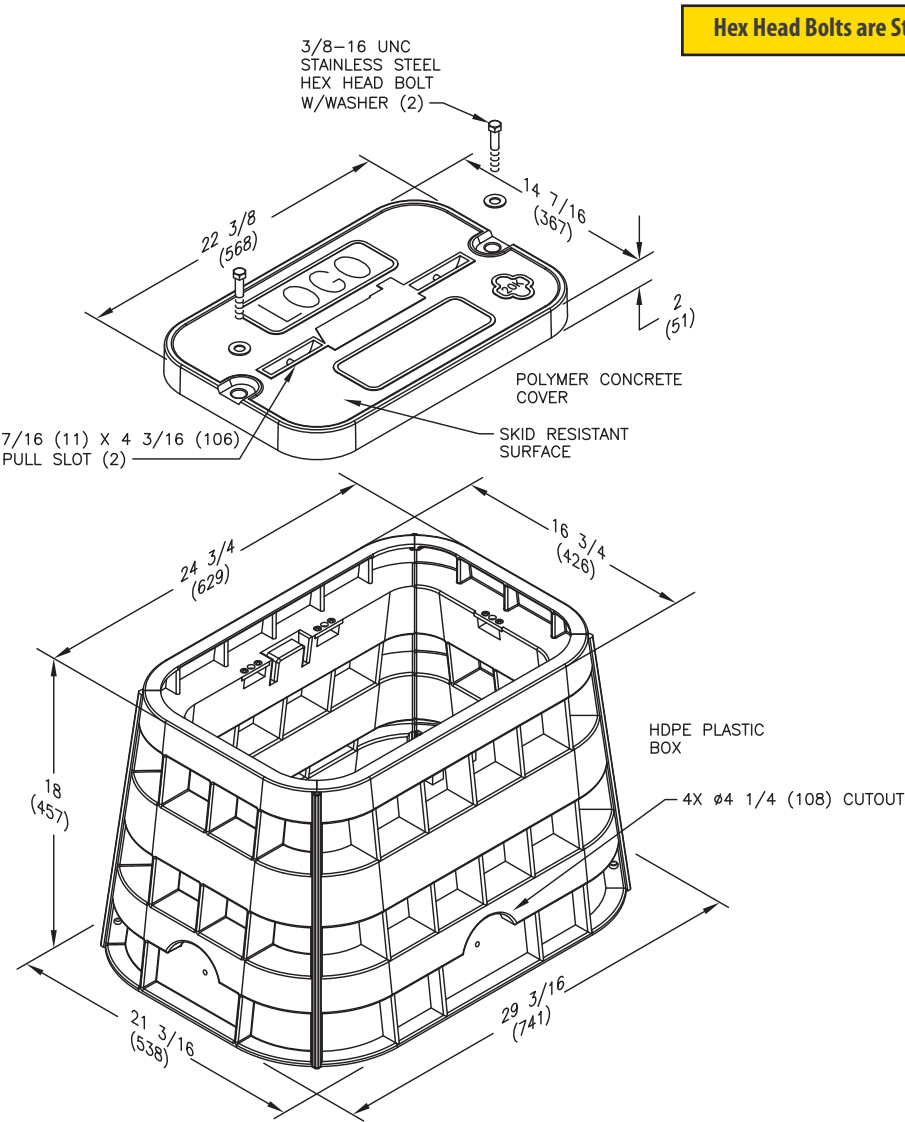
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Open Bottom	24"	N/A	N/A / 20,000	37	20	PEM-1218-GS	PM121824GSY

Replace \*\*\* with a logo code found on page U180.



# Dimensions / Data

12"x 20" PenCell PM (PEM 12 Series)



UNDERGROUND  
ENCLOSURES

## Assembly

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & Polymer Concrete Cover	18"	N/A	N/A / 20,000	92	30	PEM-1220-PCH	PM122018PCH00***

## Cover

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
1 Piece W/ 2 Bolts	N/A	N/A / 20,000	47	Poly Concrete	PEM-1220-PCLH	PM1220CLH00***

## Box

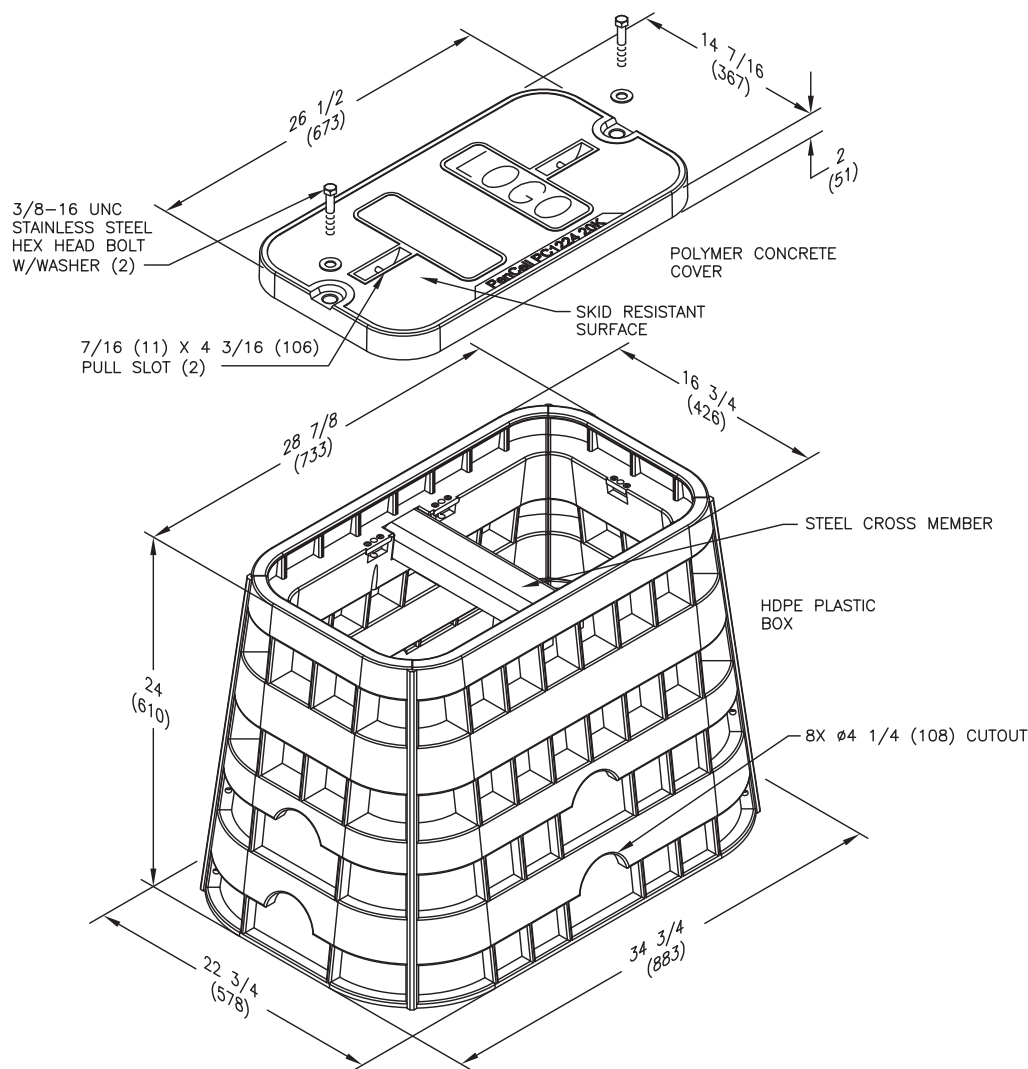
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Open Bottom	18"	N/A	N/A / 20,000	45	30	PEM-1220-GS	PM122018GSY

Replace \*\*\* with a logo code found on page U180.

# Dimensions / Data

12"x 24" PenCell PM (PEM 12 Series)

Hex Head Bolts are Standard



## Assembly

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & Polymer Concrete Cover	24"	N/A	N/A / 20,000	105	20	PEM-1224-PCH	PM122424PCH00***

## Cover

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
1 Piece W/ 2 Bolts	N/A	N/A / 20,000	54	Poly Concrete	PEM-1224-PCLH	PM122424CLH00***

## Box

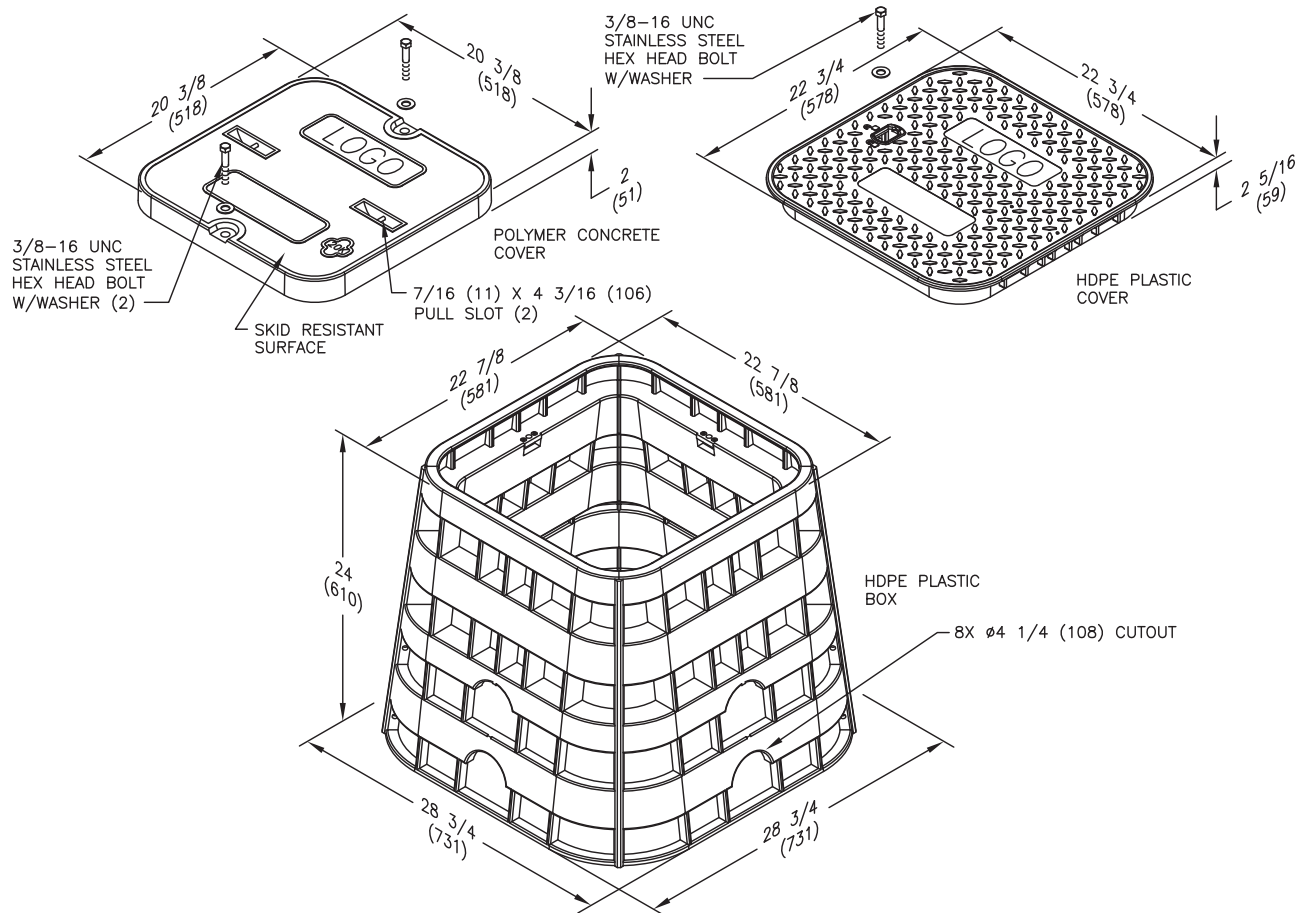
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Open Bottom	24"	N/A	N/A / 20,000	51	20	PEM-1224-GS	PM122424GSY

Replace \*\*\* with a logo code found on page U180.

# Dimensions / Data

18" x 18" PenCell PM (PEM 18 Series)

Hex Head Bolts are Standard



UNDERGROUND  
ENCLOSURES

## Assemblies

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & Polymer Concrete Cover	24"	N/A	N/A / 20,000	103	20	PEM-1818-PCH	PM181824PCH00***
Box & HDPE Cover	24"	N/A	N/A / 5,000	58	20	PEM-1818H	PM181824HDH00***

## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
1 Piece W/ 2 Bolts	N/A	N/A / 20,000	54	Poly Concrete	PEM-1818-PCLH	PM181824CLH00***
1 Piece W/ 2 Bolts	N/A	N/A / 5,000	7	HDPE	PEM-1818PLH	PM181824PLH00***

## Boxes

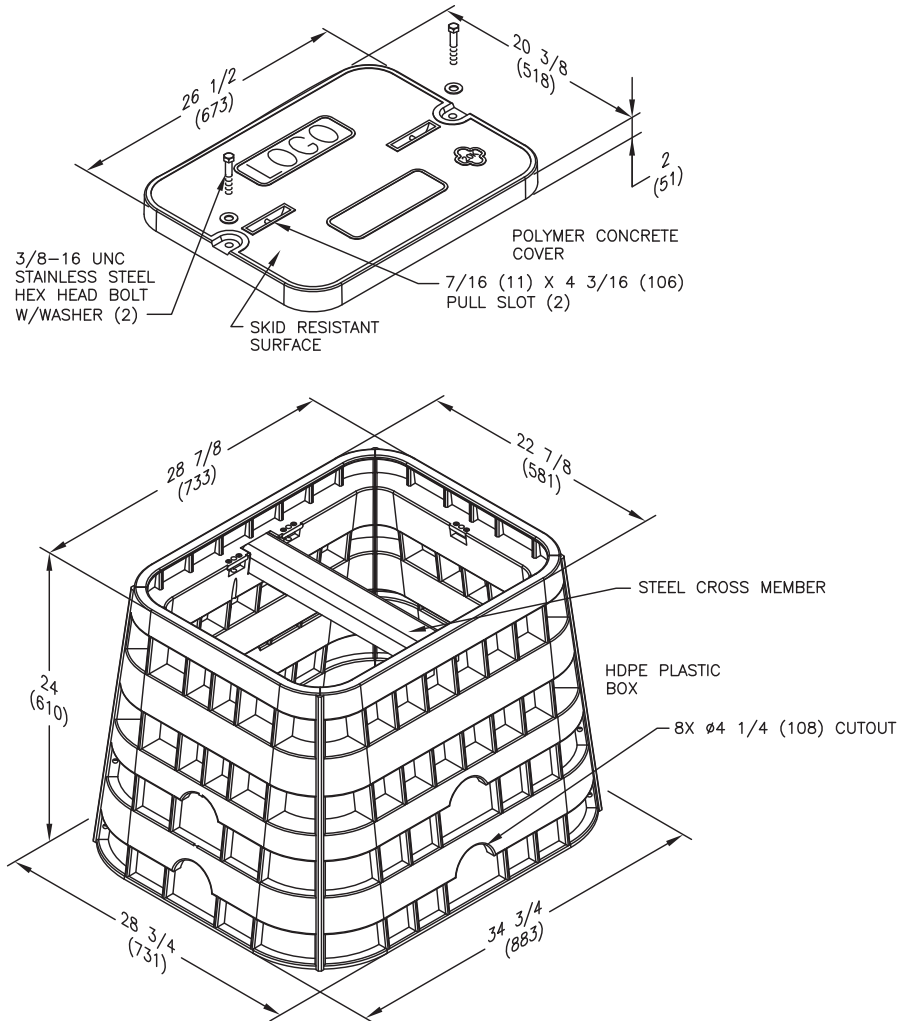
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray Open Bottom	24"	N/A	N/A / 20,000	51	20	PEM-1818-GS	PM181824GSY
Green Open Bottom	24"	N/A	N/A / 20,000	51	20	PEM-1818-GS	PM181824GSN

Replace \*\*\* with a logo code found on page U180.

# Dimensions / Data

18" x 24" PenCell PM (PEM 18 Series)

Hex Head Bolts are Standard



## Assembly

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & Polymer Concrete Cover	24"	N/A	N/A / 20,000	128	20	PEM-1824-PCH	PM182424PCH00***

## Cover

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
1 Piece W/ 2 Bolts	N/A	N/A / 20,000	62	Poly Concrete	PEM-1824-PCLH	PM1824CLH00***

## Box

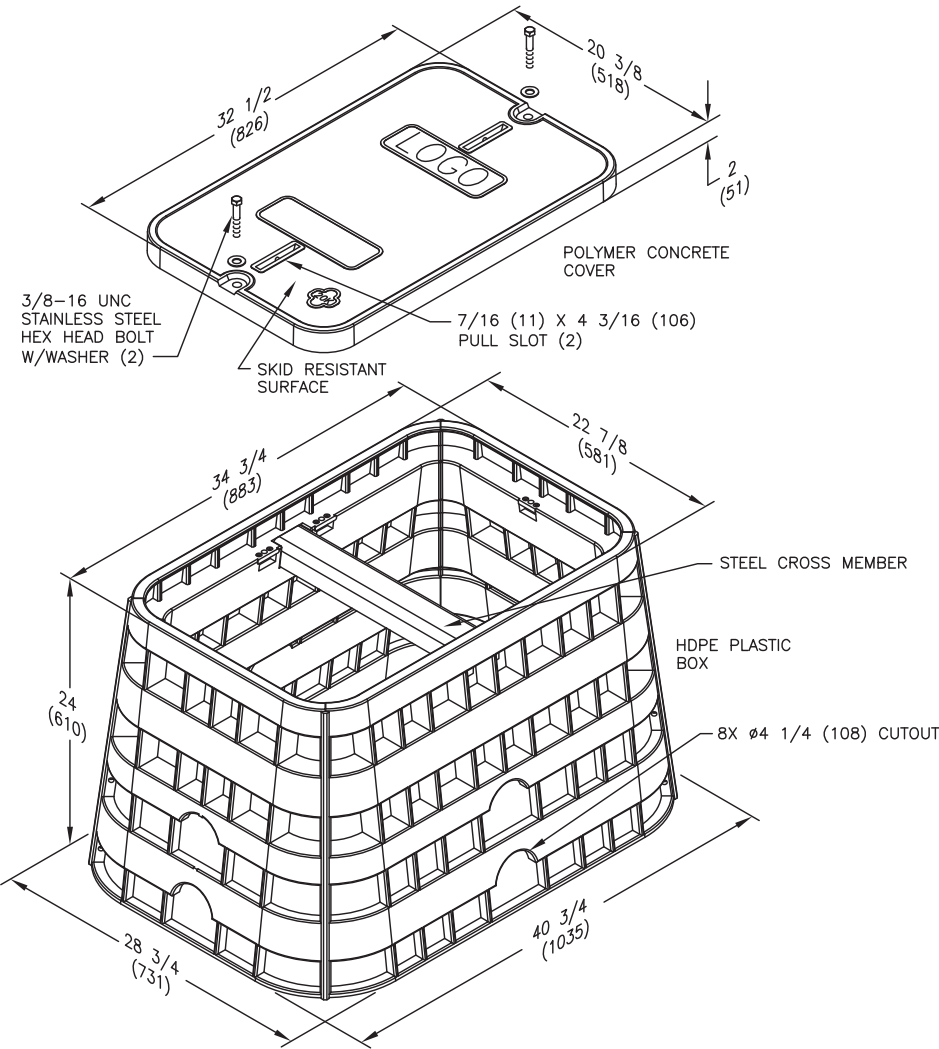
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Open Bottom	24"	N/A	N/A / 20,000	66	20	PEM-1824-GS	PM182424GSY

Replace \*\*\* with a logo code found on page U180.

# Dimensions / Data

18" x 30" PenCell PM (PEM 18 Series)

Hex Head Bolts are Standard



UNDERGROUND  
ENCLOSURES

## Assembly

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & Polymer Concrete Cover	24"	N/A	N/A / 20,000	170	20	PEM-1830-PCH	PM183024PCH00***

## Cover

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
1 Piece W/ 2 Bolts	N/A	N/A / 20,000	70	Poly Concrete	PEM-1830-PCLH	PM1830CLH00***

## Box

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Open Bottom	24"	N/A	N/A / 20,000	100	20	PEM-1830-GS	PM183024GSY

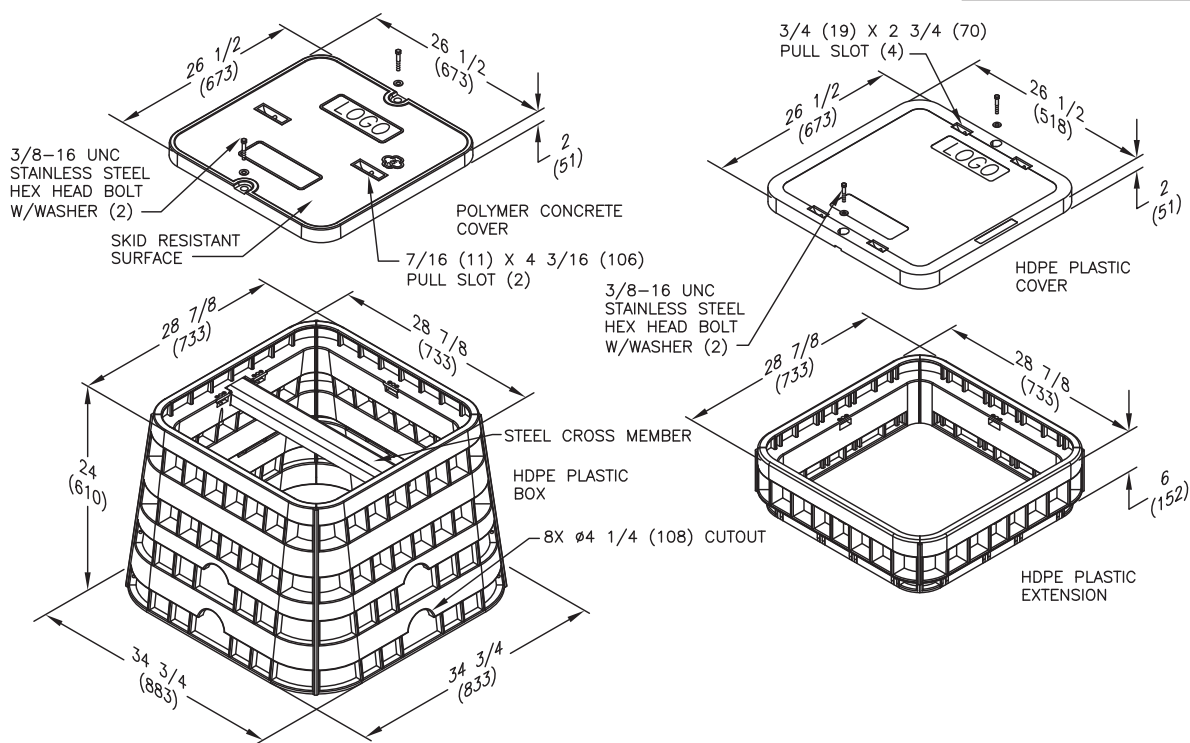
Replace \*\*\* with a logo code found on page U180.



# Dimensions / Data

24"x 24" PenCell PM (PEM 24 Series)

Hex Head Bolts are Standard



## Assemblies

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & Polymer Concrete Cover	24"	N/A	N/A / 20,000	150	6	PEM-2424-PCH	PM242424PCH00***
Box & HDPE Cover	24"	N/A	N/A / 5,000	75	10	PEM-2424H	PM242424HDH00***

## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
1 Piece W/ 2 Bolts	N/A	N/A / 20,000	100	Poly Concrete	PEM-2424-PCLH	PM242424PCLH00***
1 Piece W/ 2 Bolts	N/A	N/A / 5,000	25	HDPE	PEM-2424PLH	PM242424PLH12***

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray Open Bottom	24"	N/A	N/A / 20,000	50	10	PEM-2424-GS	PM242424GSY
Green Open Bottom	24"	N/A	N/A / 20,000	50	10	PEM-2424-GS	PM242424GSN

## Extensions

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray	6"	N/A	N/A / 20,000	20	20	PEM-2424-6	PM242406EXY
Green	6"	N/A	N/A / 20,000	20	20	PEM-2424-6	PM242406EXN

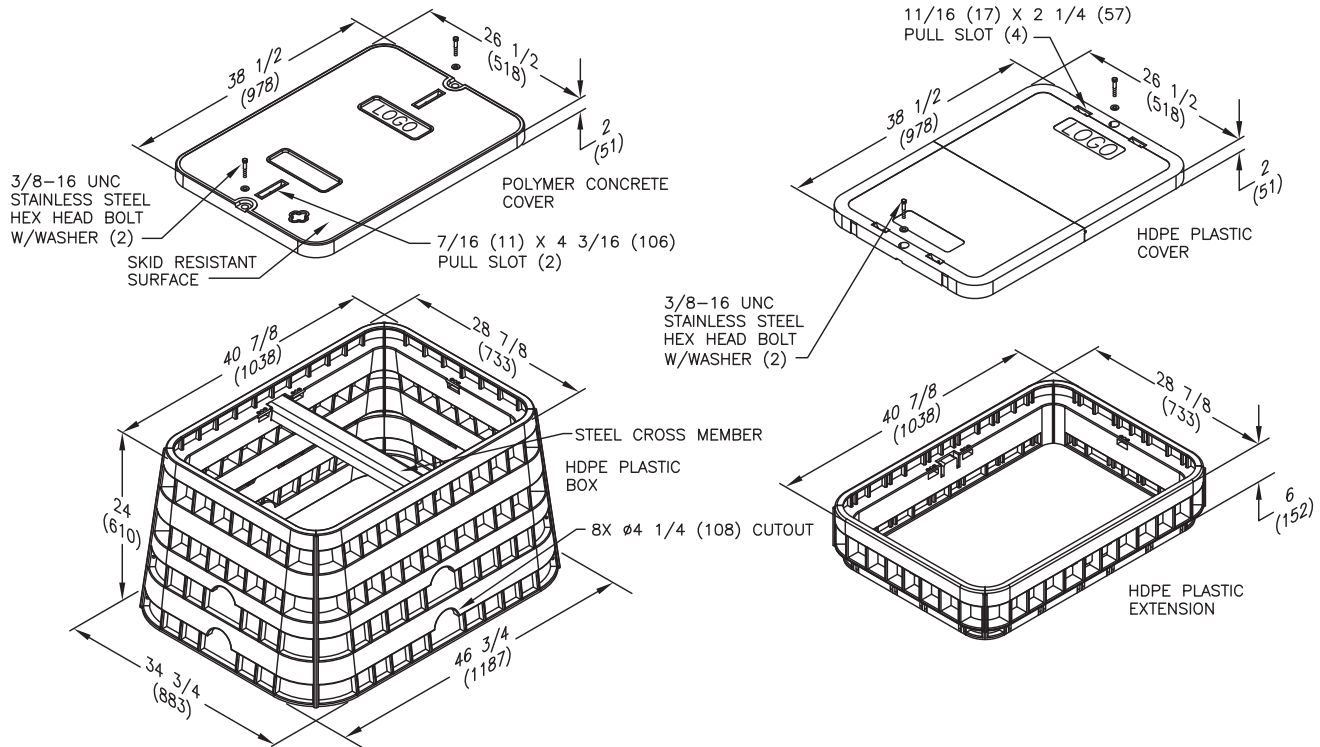
Replace \*\*\* with a logo code found on page U180.

# Dimensions / Data

24"x 36" PenCell PM (PEM 24 Series)

Hex Head Bolts are Standard

UNDERGROUND  
ENCLOSURES



## Assemblies

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & Polymer Concrete Cover	24"	N/A	N/A / 20,000	224	4	PEM-2436-PCH	PM243624PCH00***
Box & HDPE Cover	24"	N/A	N/A / 5,000	99	6	PEM-2436H	PM243624HDH00***

## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
1 Piece W/ 2 Bolts	N/A	N/A / 20,000	151	Poly Concrete	PEM-2436-PCLH	PM2436CLH00***
2 Piece W/ 2 Bolts	N/A	N/A / 5,000	26	HDPE	PEM-2436PLH	PM2436PLI12***

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray Open Bottom	24"	N/A	N/A / 20,000	73	6	PEM-2436-GS	PM243624GSY
Green Open Bottom	24"	N/A	N/A / 20,000	73	6	PEM-2436-GS	PM243624GSN

## Extensions

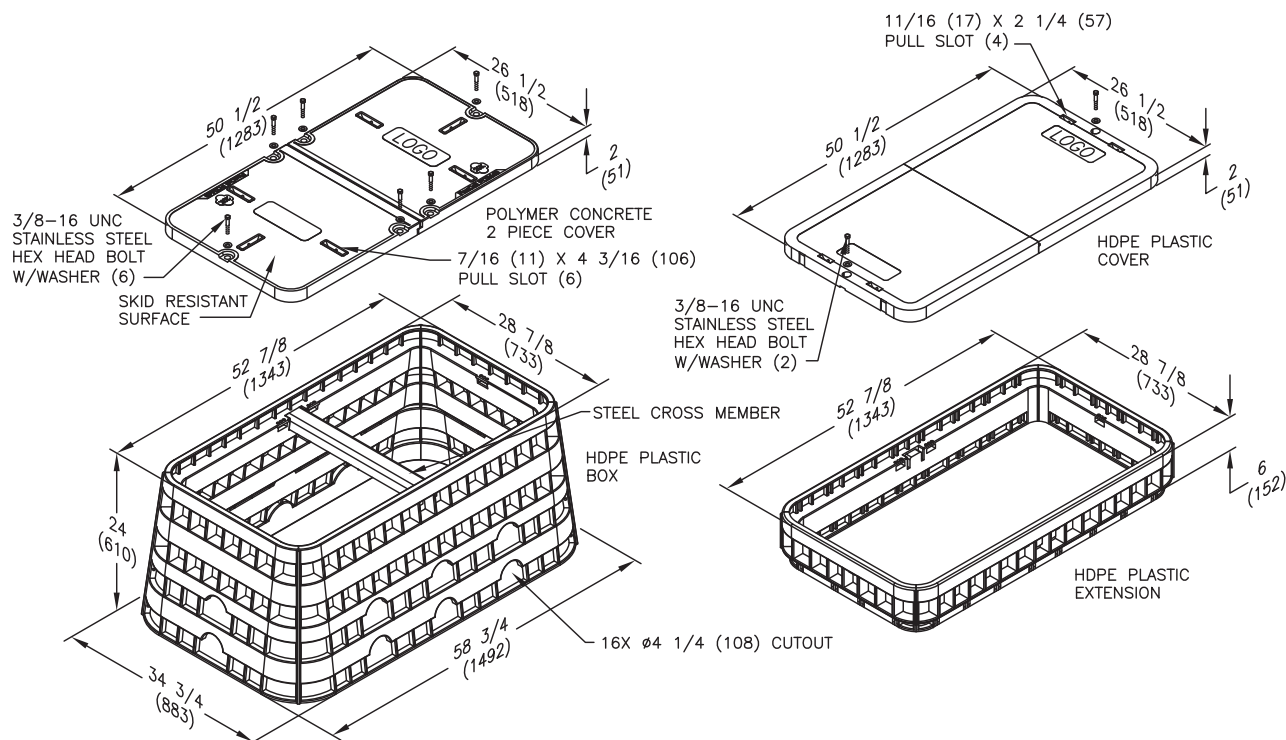
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray	6"	N/A	N/A / 20,000	30	20	PEM-2436-6	PM243606EXY
Green	6"	N/A	N/A / 20,000	30	20	PEM-2436-6	PM243606EXN

Replace \*\*\* with a logo code found on page U180.

# Dimensions / Data

24" x 48" PenCell PM (PEM 24 Series)

Hex Head Bolts are Standard



## Assemblies

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & Polymer Concrete Cover	24"	N/A	N/A / 20,000	271	1	PEM-2448-PCH	PM244824PCH00***
Box & HDPE Cover	24"	N/A	N/A / 5,000	113	2	PEM-2448H	PM244824HDH00***

## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
2 Piece W/ 6 Bolts	N/A	N/A / 20,000	187	Poly Concrete	PEM-2448-PCLH	PM2448CLH00***
2 Piece W/ 2 Bolts	N/A	N/A / 5,000	30	HDPE	PEM-2448PLH	PM2448PLI12***

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray Open Bottom	24"	N/A	N/A / 20,000	84	3	PEM-2448-GS	PM244824GSY
Green Open Bottom	24"	N/A	N/A / 20,000	84	3	PEM-2448-GS	PM244824GSN

## Extensions

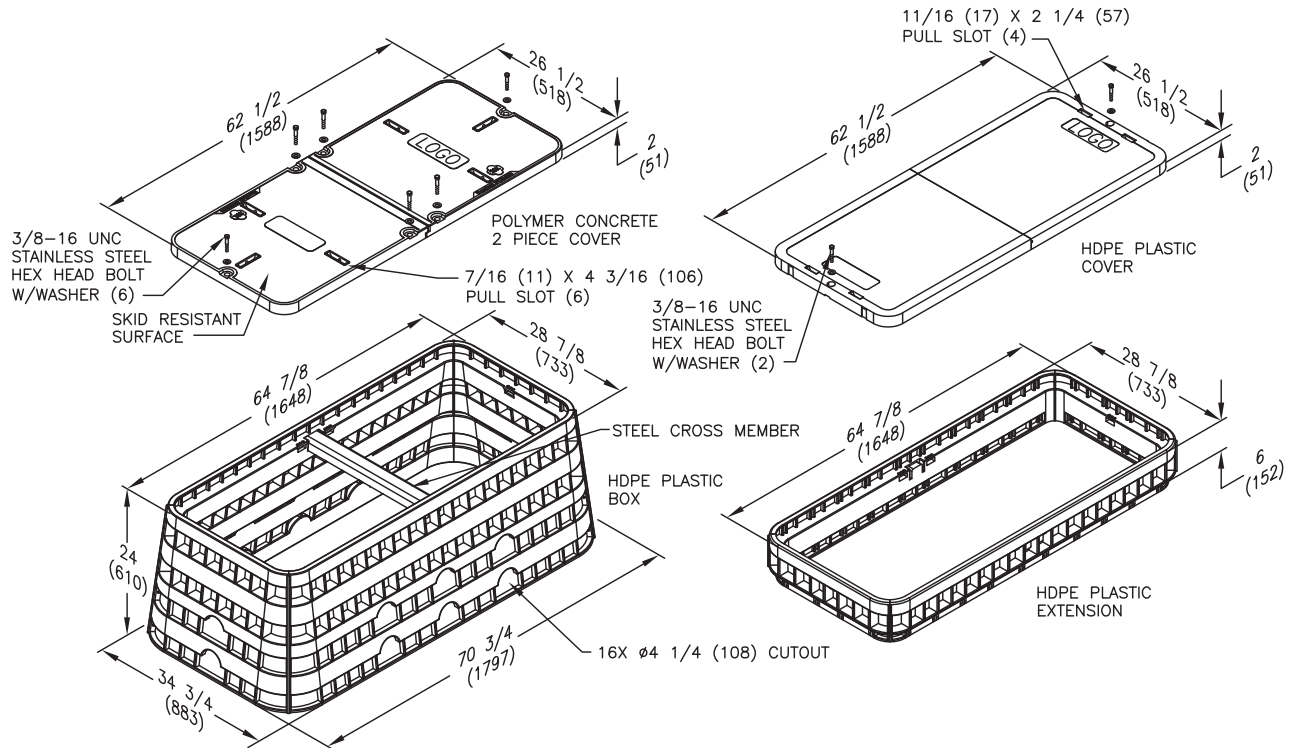
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray	6"	N/A	N/A / 20,000	35	10	PEM-2448-6	PM244806EXY
Green	6"	N/A	N/A / 20,000	35	10	PEM-2448-6	PM244806EXN

Replace \*\*\* with a logo code found on page U180.

# Dimensions / Data

24"x 60" PenCell PM (PEM 24 Series)

Hex Head Bolts are Standard



UNDERGROUND  
ENCLOSURES

## Assemblies

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & Polymer Concrete Cover	24"	N/A	N/A / 20,000	328	1	PEM-2460-PCH	PM246024PCH00***
Box & HDPE Cover	24"	N/A	N/A / 5,000	132	3	PEM-2460H	PM246024HDH00***

## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
2 Piece W/ 6 Bolts	N/A	N/A / 20,000	232	Poly Concrete	PEM-2460-PCLH	PM2460CLH00***
2 Piece W/ 2 Bolts	N/A	N/A / 5,000	37	HDPE	PEM-2460PLH	PM2460PLI12***

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray Open Bottom	24"	N/A	N/A / 20,000	96	3	PEM-2460-GS	PM246024GSY
Green Open Bottom	24"	N/A	N/A / 20,000	96	3	PEM-2460-GS	PM246024GSN

## Extensions

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray	6"	N/A	N/A / 20,000	40	10	PEM-2460-6	PM246006EXY
Green	6"	N/A	N/A / 20,000	40	10	PEM-2460-6	PM246006EXN

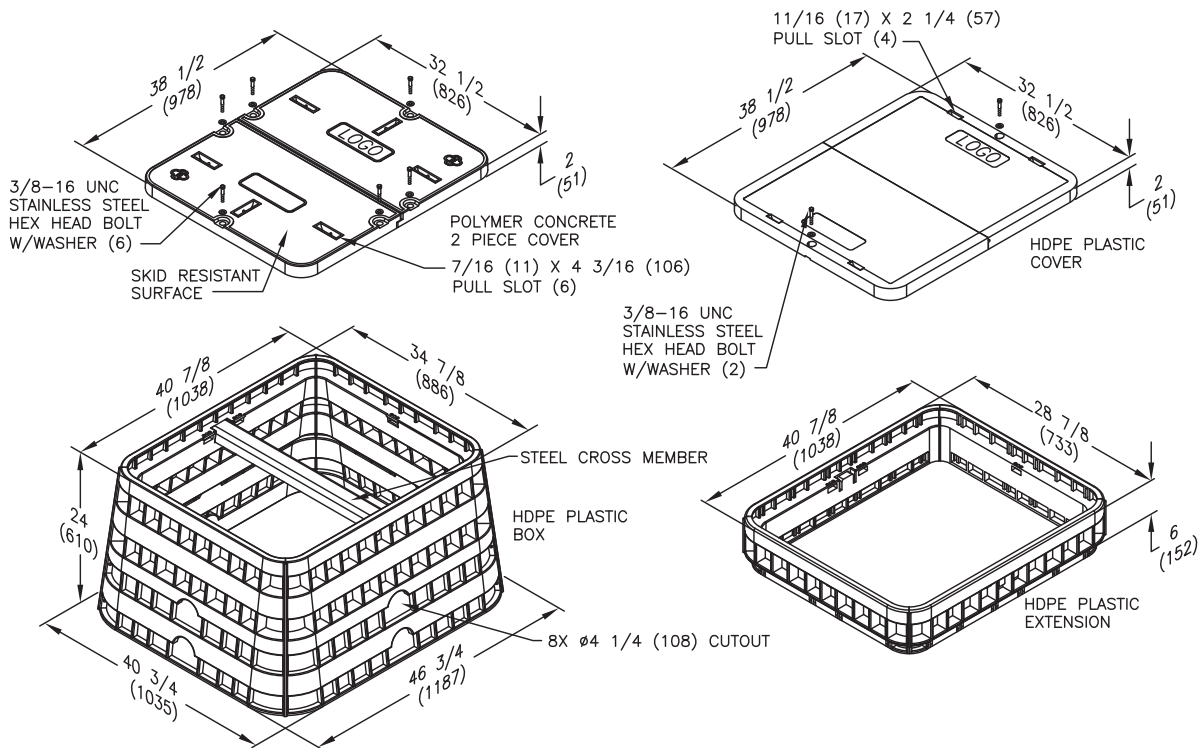
Replace \*\*\* with a logo code found on page U180.



# Dimensions / Data

30"x 36" PenCell PM (PEM 30 Series)

Hex Head Bolts are Standard



## Assemblies

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & Polymer Concrete Cover	24"	N/A	N/A / 20,000	275	2	PEM-3036-PCH	PM303624PCH00***
Box & HDPE Cover	24"	N/A	N/A / 5,000	118	3	PEM-3036H	PM303624HDH00***

## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
2 Piece W/ 6 Bolts	N/A	N/A / 20,000	186	Poly Concrete	PEM-3036-PCLH	PM3036CLH00***
2 Piece W/ 2 Bolts	N/A	N/A / 5,000	29	HDPE	PEM-3036PLH	PM3036PLI12***

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray Open Bottom	24"	N/A	N/A / 20,000	89	3	PEM-3036-GS	PM303624GSY
Green Open Bottom	24"	N/A	N/A / 20,000	89	3	PEM-3036-GS	PM303624GSN

## Extensions

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray	6"	N/A	N/A / 20,000	25	10	PEM-3036-6	PM303606EXY
Green	6"	N/A	N/A / 20,000	25	10	PEM-3036-6	PM303606EXN

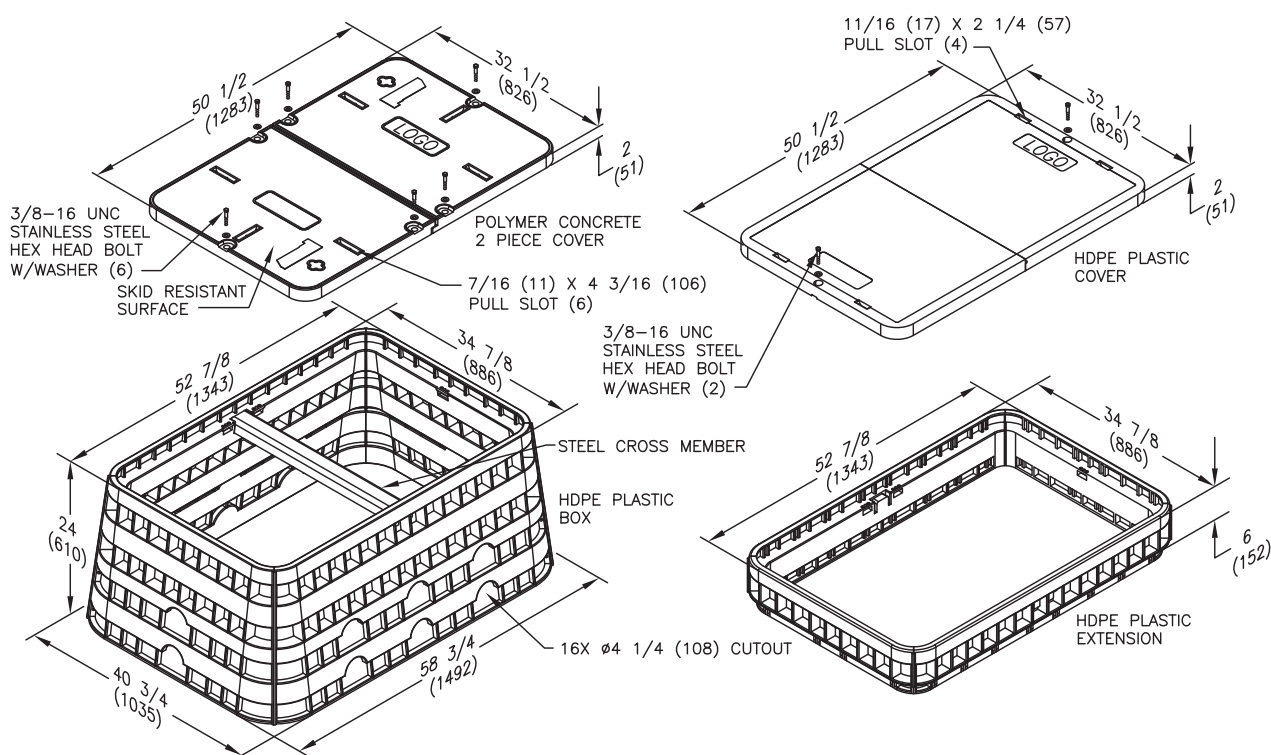
Replace \*\*\* with a logo code found on page U180.



# Dimensions / Data

30"x 48" PenCell PM (PEM 30 Series)

Hex Head Bolts are Standard



UNDERGROUND  
ENCLOSURES

## Assemblies

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & Polymer Concrete Cover	24"	N/A	N/A / 20,000	339	3	PEM-3048-PCH	PM304824PCH00***
Box & HDPE Cover	24"	N/A	N/A / 5,000	132	3	PEM-3048H	PM304824HDH00***

## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
2 Piece W/ 6 Bolts	N/A	N/A / 20,000	246	Poly Concrete	PEM-3048-PCLH	PM3048CLH00***
2 Piece W/ 2 Bolts	N/A	N/A / 5,000	39	HDPE	PEM-3048PLH	PM3048PLI12***

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray Open Bottom	24"	N/A	N/A / 20,000	93	3	PEM-3048-GS	PM304824GSY
Green Open Bottom	24"	N/A	N/A / 20,000	93	3	PEM-3048-GS	PM304824GSN

## Extensions

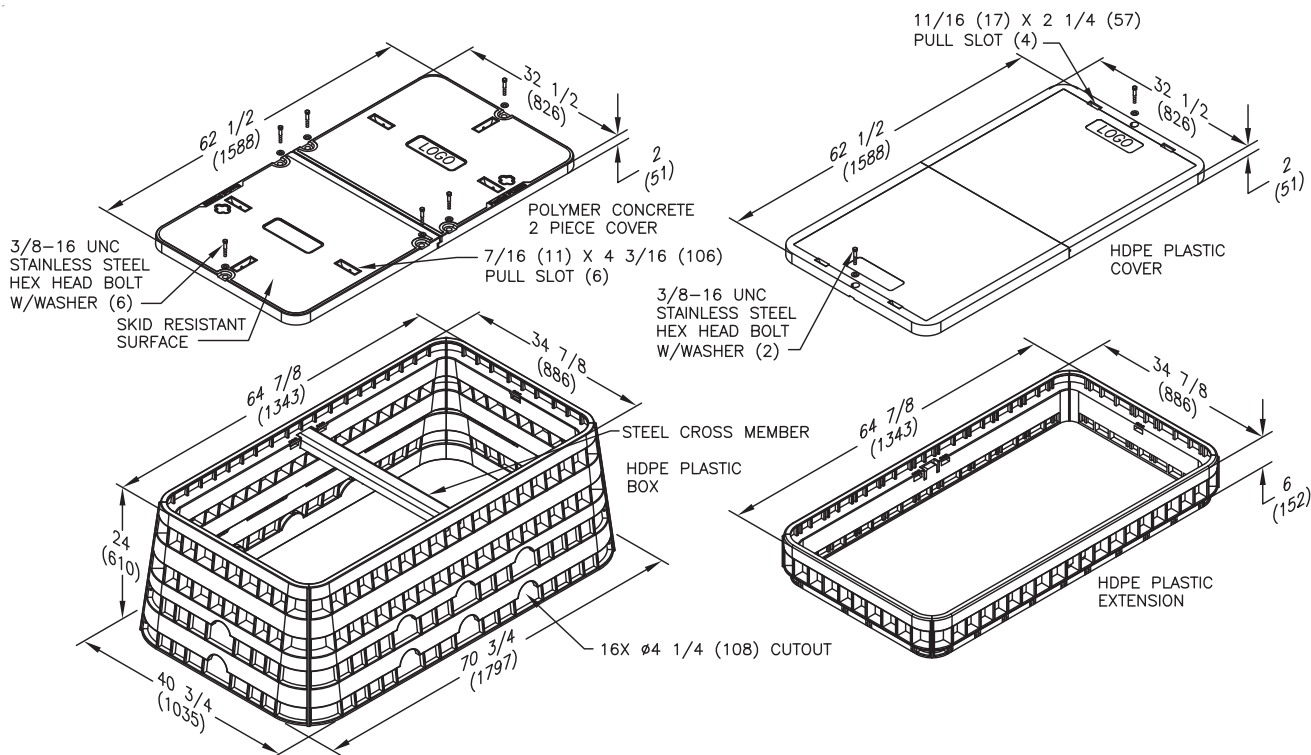
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray	6"	N/A	N/A / 20,000	40	10	PEM-3048-6	PM304806EXY
Green	6"	N/A	N/A / 20,000	40	10	PEM-3048-6	PM304806EXN

Replace \*\*\* with a logo code found on page U180.

# Dimensions / Data

30"x 60" PenCell PM (PEM 30 Series)

Hex Head Bolts are Standard



## Assemblies

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & Polymer Concrete Cover	24"	N/A	N/A / 20,000	405	1	PEM-3060-PCH	PM306024PCH00***
Box & HDPE Cover	24"	N/A	N/A / 5,000	156	3	PEM-3060H	PM306024HDH00***

## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
2 Piece W/ 6 Bolts	N/A	N/A / 20,000	297	Poly Concrete	PEM-3060-PCLH	PM3060CLH00***
2 Piece W/ 2 Bolts	N/A	N/A / 5,000	48	HDPE	PEM-3060PLH	PM3060PLI12***

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray Open Bottom	24"	N/A	N/A / 20,000	108	3	PEM-3060-GS	PM306024GSY
Green Open Bottom	24"	N/A	N/A / 20,000	108	3	PEM-3060-GS	PM306024GSN

## Extensions

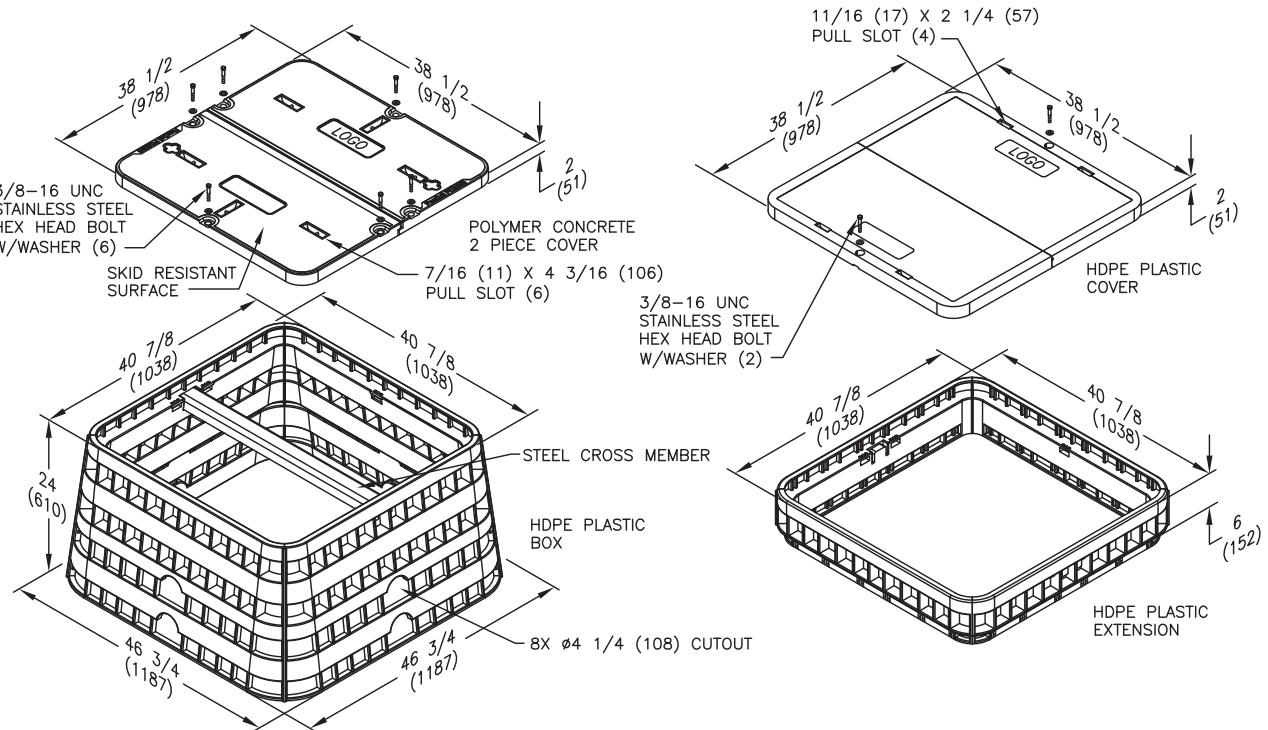
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray	6"	N/A	N/A / 20,000	45	10	PEM-3060-6	PM306006EXY
Green	6"	N/A	N/A / 20,000	45	10	PEM-3060-6	PM306006EXN

Replace \*\*\* with a logo code found on page U180.

# Dimensions / Data

36" x 36" PenCell PM (PEM 36 Series)

Hex Head Bolts are Standard



UNDERGROUND  
ENCLOSURES

## Assemblies

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & Polymer Concrete Cover	24"	N/A	N/A / 20,000	354	2	PEM-3636-PCH	PM363624PCH00***
Box & HDPE Cover	24"	N/A	N/A / 5,000	135	3	PEM-3636H	PM363624HDH00***

## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
2 Piece W/ 6 Bolts	N/A	N/A / 20,000	250	Poly Concrete	PEM-3636-PCLH	PM3636CLH00***
2 Piece W/ 2 Bolts	N/A	N/A / 5,000	31	HDPE	PEM-3636PLH	PM3636PLI12***

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray Open Bottom	24"	N/A	N/A / 20,000	104	3	PEM-3636-GS	PM363624GSY
Green Open Bottom	24"	N/A	N/A / 20,000	104	3	PEM-3636-GS	PM363624GSN

## Extensions

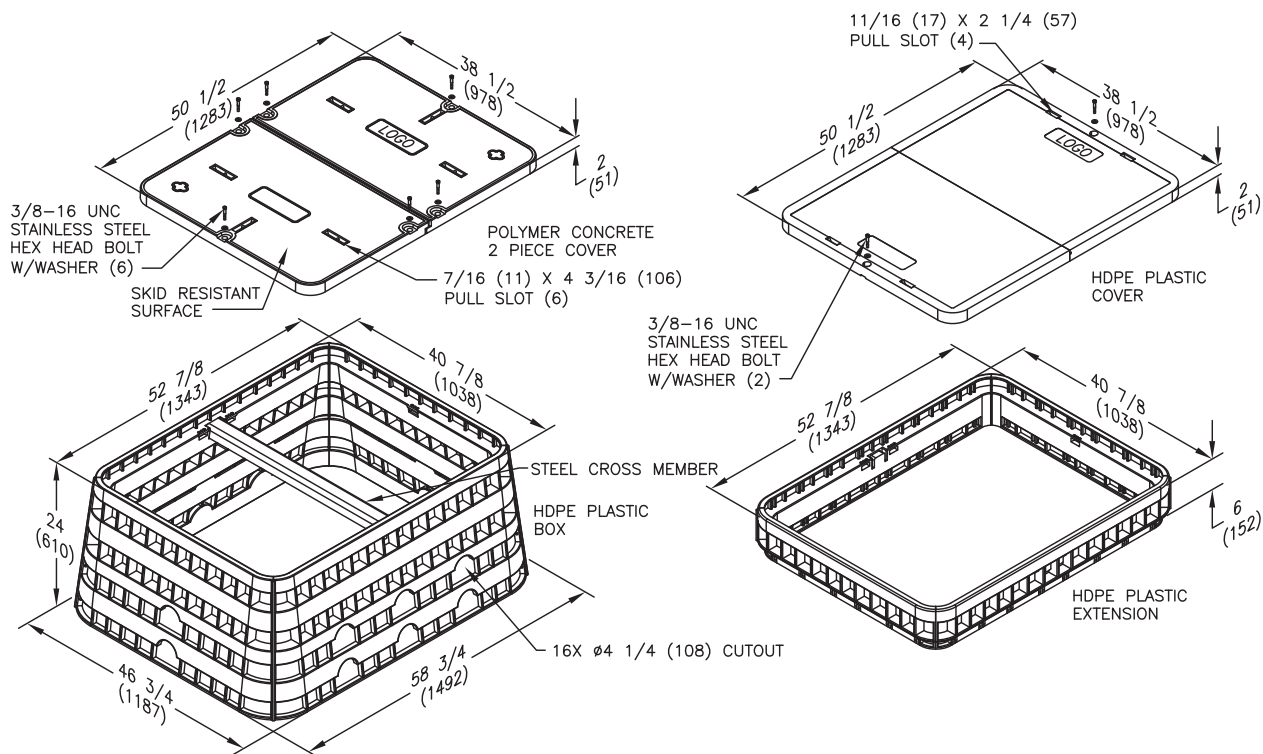
DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray	6"	N/A	N/A / 20,000	31	10	PEM-3636-6	PM363606EXY
Green	6"	N/A	N/A / 20,000	31	10	PEM-3636-6	PM363606EXN

Replace \*\*\* with a logo code found on page U180.

# Dimensions / Data

36" x 48" PenCell PM (PEM 36 Series)

Hex Head Bolts are Standard



## Assemblies

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & Polymer Concrete Cover	24"	N/A	N/A / 20,000	389	1	PEM-3648-PCH	PM364824PCH00***
Box & HDPE Cover	24"	N/A	N/A / 5,000	160	3	PEM-3648H	PM364824HDH00***

## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
2 Piece W/ 6 Bolts	N/A	N/A / 20,000	285	Poly Concrete	PEM-3648-PCLH	PM3648CLH00***
2 Piece W/ 2 Bolts	N/A	N/A / 5,000	56	HDPE	PEM-3648PLH	PM3648PLI12***

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray Open Bottom	24"	N/A	N/A / 20,000	104	3	PEM-3648-GS	PM364824GSY
Green Open Bottom	24"	N/A	N/A / 20,000	104	3	PEM-3648-GS	PM364824GSN

## Extensions

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray	6"	N/A	N/A / 20,000	32	10	PEM-3648-6	PM364806EXY
Green	6"	N/A	N/A / 20,000	32	10	PEM-3648-6	PM364806EXN

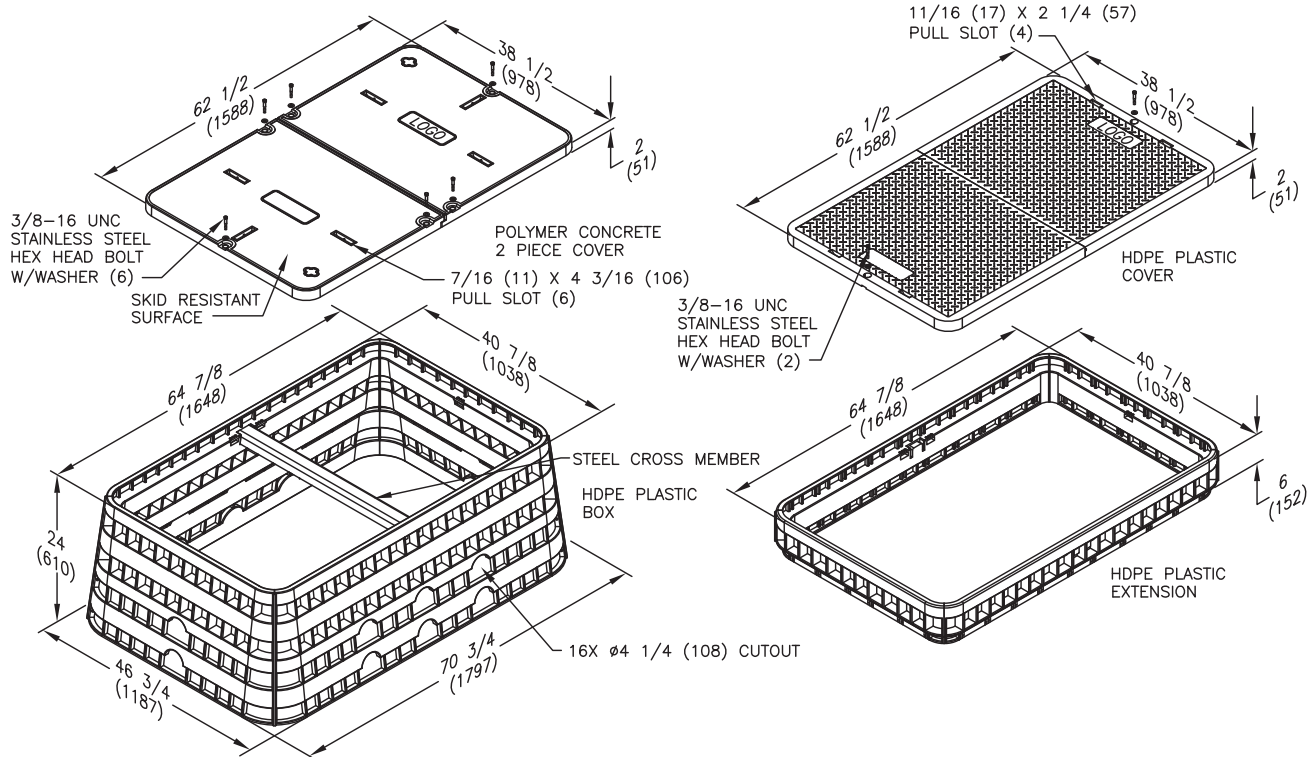
Replace \*\*\* with a logo code found on page U180.



# Dimensions / Data

36" x 60" PenCell PM (PEM 36 Series)

Hex Head Bolts are Standard



UNDERGROUND  
ENCLOSURES

## Assemblies

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & Polymer Concrete Cover	24"	N/A	N/A / 20,000	465	1	PEM-3660-PCH	PM366024PCH00***
Box & HDPE Cover	24"	N/A	N/A / 5,000	160	3	PEM-3660H	PM366024HDH00***

## Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
2 Piece W/ 6 Bolts	N/A	N/A / 20,000	350	Poly Concrete	PEM-3660-PCLH	PM3660CLH00***
2 Piece W/ 2 Bolts	N/A	N/A / 5,000	71	HDPE	PEM-3660PLH	PM3660PLI12***

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray Open Bottom	24"	N/A	N/A / 20,000	114	3	PEM-3660-GS	PM366024GSY
Green Open Bottom	24"	N/A	N/A / 20,000	114	3	PEM-3660-GS	PM366024GSN

## Extensions

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray	6"	N/A	N/A / 20,000	41	10	PEM-3660-6	PM366006EXY
Green	6"	N/A	N/A / 20,000	41	10	PEM-3660-6	PM366006EXN

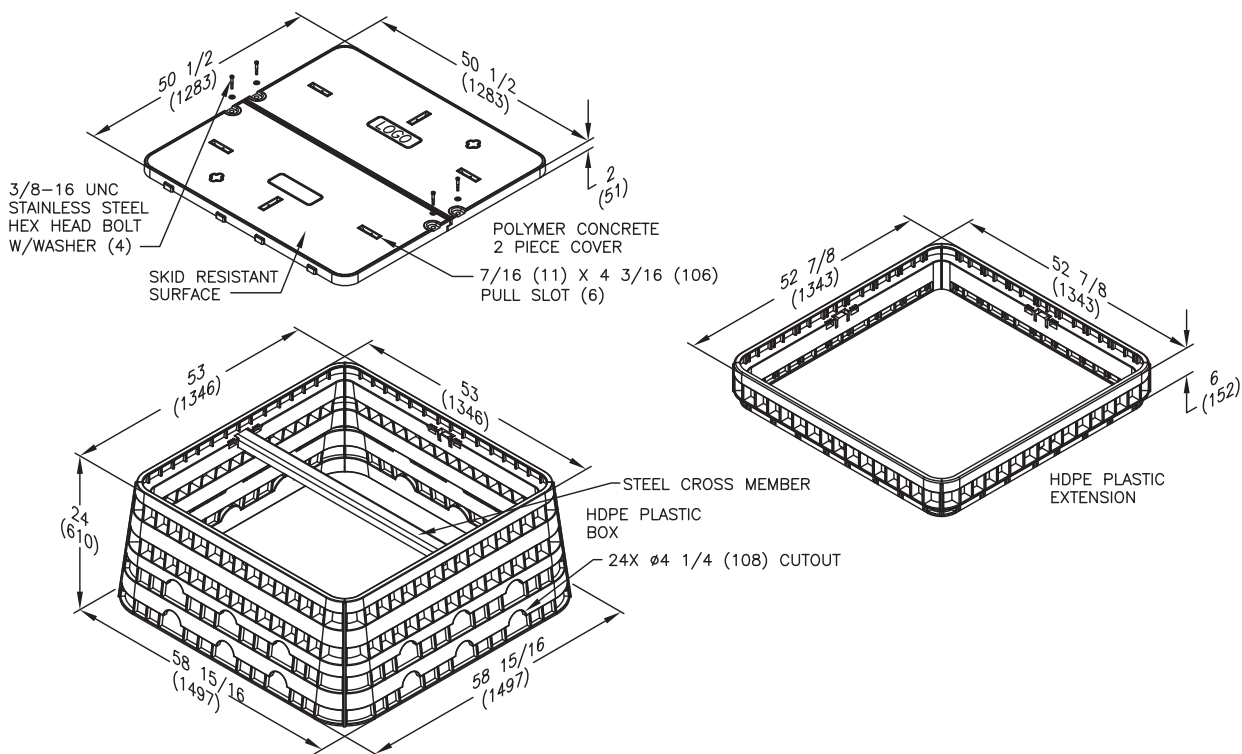
Replace \*\*\* with a logo code found on page U180.



# Dimensions / Data

48" x 48" PenCell PM (PEM 48 Series)

Hex Head Bolts are Standard



## Assemblies

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Box & Polymer Concrete Cover	24"	N/A	N/A / 20,000	465	1	PEM-4848PCH	PM484824PCH00***
With 6" Extension	30"	N/A	N/A / 20,000	507	1	PEM-4848-30PCH	PM484830PCH00***
With (2) 6" Extensions	36"	N/A	N/A / 20,000	549	1	PEM-4848-36PCH	PM484836PCH00***
With modified 2-piece GS	42"	N/A	N/A / 20,000	591	1	PEM-4848-42PCH	PM484842PCH00***
With inverted 2-piece GS	48"	N/A	N/A / 20,000	633	1	PEM-4848-48PCH	PM484848PCH00***

## Cover

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
2 Piece W/ 4 Bolts	N/A	N/A / 20,000	350	Poly Concrete	PEM-4848PCLH	PM4848CLH00***

Replace \*\*\* with a logo code found on page U180.

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray Open Bottom	24"	N/A	N/A / 20,000	114	2	PEM-4848GS	PM484824GSY

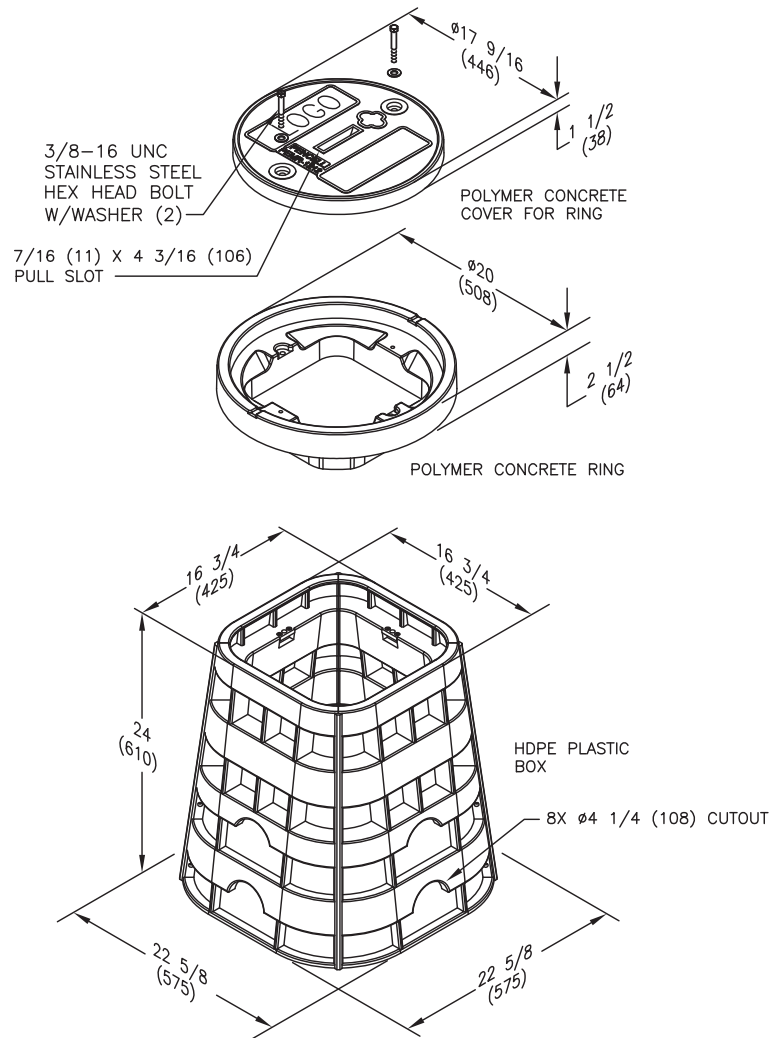
## Extension

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Gray	6"	N/A	N/A / 20,000	42	6	PEM-4848-6EXT	PM484806EXY

# Dimensions / Data

12" x 12" PenCell PR (PEMR 12)

Hex Head Bolts are Standard



UNDERGROUND  
ENCLOSURES

## Assemblies

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Box w/ Poly Conc Cover & Ring	24"	N/A	N/A / 20,000	90	4	PEMR-1212PCH	PR121224PRH00***

## Cover & Ring

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	MATERIAL	OLD PART NO.	NEW PART NO.
PC Cover & Ring	N/A	N/A / 20,000	53	Poly Concrete	PEM-1212PCLH	PR1212LRH00***

Replace \*\*\* with a logo code found on page U180.

## Boxes

DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	OLD PART NO.	NEW PART NO.
Green Open Bottom	24"	N/A	N/A / 20,000	37	4	PEMR-1212GSN	PM121224GSN

# Penell Cover Options

Most commonly used cover logos are shown below.  
Custom Logos are available. Contact your Quazite/Hubbell Representative.

## Logos

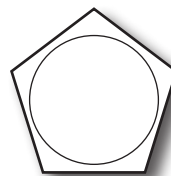
Pencell Logo Codes	Description
009	BLANK
010	CATV
012	COMMUNICATIONS
014	CONTROLS
017	ELECTRIC
021	FIBER OPTICS
022	FIRE ALARM
023	GAS
024	GROUND
026	HIGH VOLTAGE
029	LIGHTING
036	SECURITY
038	SIGNAL
040	STATE TRAFFIC SIGNAL
041	STREET LIGHTING
042	TELECOM
043	TELEPHONE
044	TRAFFIC
045	TRAFFIC CONTROL
046	TRAFFIC SIGNAL
048	TV
050	WATER
057	EMERGENCY
065	ILLUMINATION
081	DANGER HIGH VOLTAGE
084	POWER
092	TELECOMMUNICATIONS
03A	DOT
06B	INSTRUMENTATION
0ZA	IRRIGATION
K91	RECLAIMED WATER
KH1	FIBEROPTIC
5P3	ELECTRIC WARNING DO NOT OPEN

# Optional Accessories:

PenCell underground enclosures come standard with a hex-head bolt to secure the lid onto the box. For additional security, Penta Head bolts are also available. The table below shows additional options available by box style.



Hex Head

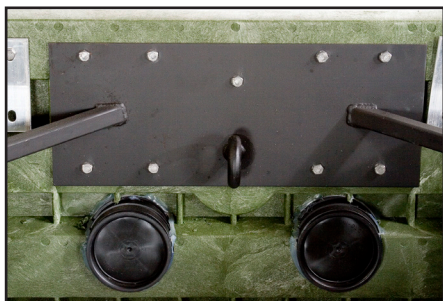


Penta Head

	Locks	Brackets						
	<i>Crimp Locks</i>	<i>Swing Arms</i>	<i>J Hooks</i>	<i>Custom</i>	<i>End Bells</i>	<i>Ground Lugs</i>	<i>Pulling Eyes</i>	<i>Temp. Service Outlet</i>
<i>DT Series</i>	<i>N/A</i>	<i>1324, 1730, 2436, 3048</i>	<i>All</i>	<i>All</i>	<i>1730, 2436, 3048</i>	<i>N/A</i>	<i>3048</i>	<i>N/A</i>
<i>PE Series</i>	<i>14, 20, 30</i>	<i>N/A</i>	<i>N/A</i>	<i>All</i>	<i>N/A</i>	<i>14, 20, 30 w/ steel lids</i>	<i>N/A</i>	<i>14, 20, 30</i>
<i>PM Series</i>	<i>N/A</i>	<i>1830 up to 3660</i>	<i>All</i>	<i>All</i>	<i>1830 and up less 24" deep</i>	<i>N/A</i>	<i>3660</i>	<i>N/A</i>

# Optional Accessories:

These and other accessories are available for your PenCell Enclosure. Contact your representative or customer service for more information.



Pulling Eyes



Terminators  
& Plastic Bolt  
Caps



3M Electronic  
Markers



Small Lifting  
Hook



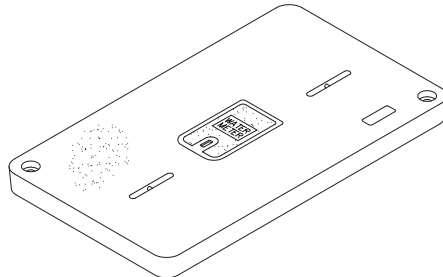
Aluminum  
J Hooks



# PenCell Enclosure Options (polymer concrete only):

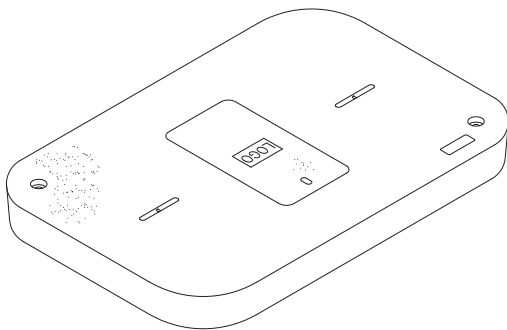
## Hinged Meter Lids\*

Available Sizes  
Cast iron 4" x 6" lid  
Cast iron 6" x 9" lid



## Drop-in Meter Lids\*

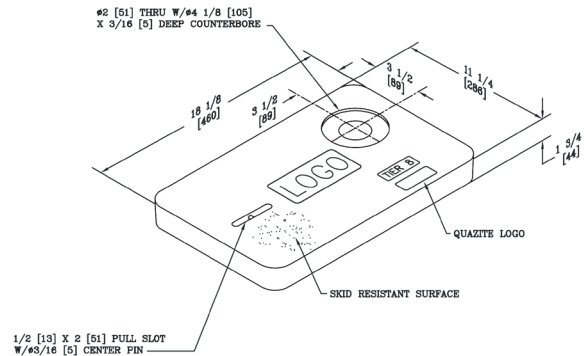
Available Sizes  
Polymer concrete 6" x 9" drop-in lid  
Polymer concrete 7" x 13" drop-in lid  
Polymer concrete 9" x 15" drop-in lid



\*Select sizes available in Tier 15.  
Tier 22 not available.

## Touch/Radio Read Option

Holes for touch or radio read applications can be provided in covers as needed.



## EZ - Locate

The EZ Locate System allows the #6 – #24 AWG ground wires / bonding harnesses or tracer wires to be quickly isolated from the grounding electrode.



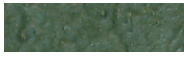







The telescoping body is made from stainless steel; the isolating ground switch is made from engineering-grade thermo-plastic and tin-plated copper alloy components to prevent corrosion.

Available Sizes  
24x36 and 30x48



# PenCell Color Options (polymer collar, ring, covers only)

Most PenCell HDPE boxes are available only in green or gray, and the standard color for polymer concrete collars and covers is concrete gray. However, polymer concrete collars and covers can be provided in various color options to allow for blending with adjacent materials or special identification of enclosures. Some commonly requested colors include:

Color Sample	Description
	Brick Red
	Forest Green
	Light Green
	Cement Gray
	Charcoal Gray
	Black
	Pecan
	International Orange
	Purple
	Blue

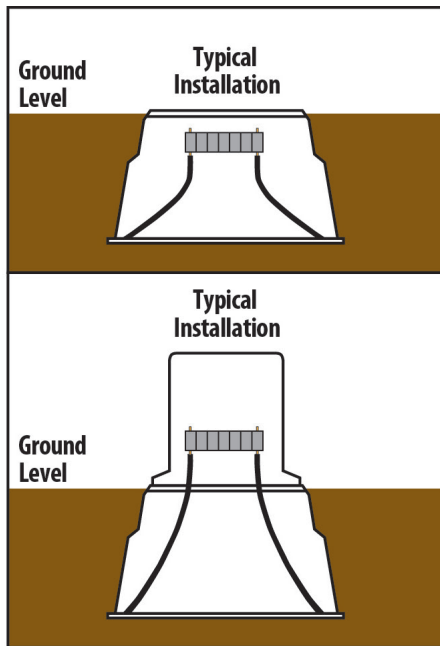
Note: Printed colors are reference only and do not exactly represent product colors. Contact your local Hubbell / PenCell representative for other special colors.

# PenCell Option System:

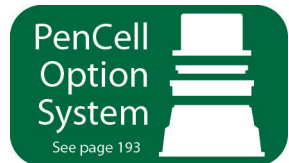
## Exclusively from PenCell

Only PenCell Plastics offers a system that accommodates your future planning.

- ◆ Change cover material
- ◆ Add above-ground pedestal

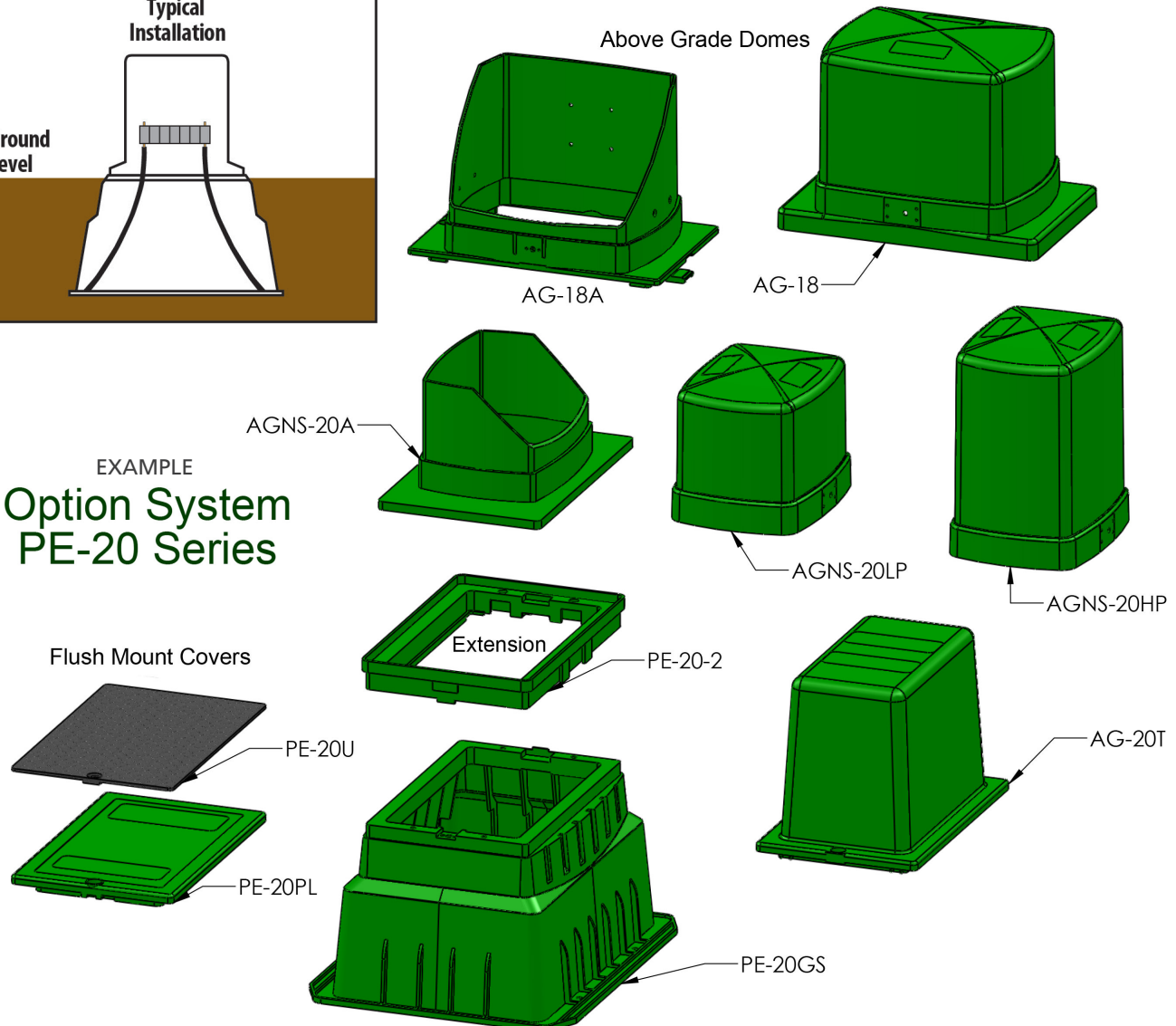


Look for this symbol throughout this section of the catalog. It identifies an Option System compatible product.



UNDERGROUND  
ENCLOSURES

## EXAMPLE Option System PE-20 Series





# Installation:

Guidelines for installing your Quazite® enclosure vary depending on size, location, and environmental factors. Quazite® enclosures are designed for non-deliberate traffic areas only.

## Small Enclosure Installation

### 1 Excavation

Excavate approximately 6 inches deeper than the depth of the enclosure. Add 6 inches of gravel or crushed rock for drainage.

### 2 Placement

Carefully lower enclosure into the hole until the top is at grade level.

### 3 Filling

Fill and compact the soil to grade level with the cover on the enclosure.

### 4 Adjustment

If the grade level is raised later, a straight-sided enclosure can be pulled up and bricks added at the bottom on one or four sides to conform to the landscape.







Attach nylon straps or chains to the lifting bolts.



Lift and position enclosure with backhoe.



Place gravel in the enclosure and around the side. Lift enclosure to let gravel run underneath.

## Install and Protect

Environmental factors should always be considered when installing enclosures of all sizes. Local conditions could dictate additions during installation, such as Concrete Collars or Internal Bracing. These additions provide security, support, and protection.

## Large Enclosure Installation

Quazite® enclosures sized 24" x 36" and larger can be safely and securely installed by following four simple steps. Quazite® enclosures are designed for non-deliberate traffic areas only.

### 1 Site Selection

Select an appropriate site or location that is suitable for an underground enclosure.

- Site features to consider prior to final selection include:
  - o Utility easements
  - o Parking lots
  - o Parking lot entrances
  - o Shipping and delivery docks
  - o Waste-removal containers (dumpsters)

### 2 Conduits and Piping Preparation

- Trench and/or plow conduit.
- Bore under road crossings & railroads.
- Mark the depth of conduit using marker tape.

### 3 Excavate

- Excavate approximately 1-2 feet longer and wider than the box, and 6-8 inches deeper than the depth of the enclosure.
- Add a rodent barrier if necessary.
- Add 6 inches of gravel or crushed rock for drainage.

### 4 Placement

- Remove enclosure from the pallet to prepare for placement.
- Place nylon straps or chains around the lifting bolts and secure it to the backhoe bucket. The angle between the strap and the enclosure should not be less than 45 degrees.
- Lift the enclosure and place it into the hole.
- Place gravel in the enclosure and around the side if necessary.
- Lift the enclosure to the proper elevation, allowing gravel to run out under the enclosure.
- Check the enclosure's elevation with a level and range pole, and make the necessary adjustments with the backhoe bucket.
- Once the enclosure is set to the proper elevation, reinstall the covers, and back fill.
- If 95% compaction is required, internal bracing should be used on all manufacturers' enclosures to prevent deflection and premature failure.



# Hole Cutting Instructions

## Methods for Cutting Holes in Hubbell Enclosures:

### Hole Saw

1. Drill a 7/8" pilot hole with a carbide tipped masonry drill.
2. Drill hole using a diamond tipped masonry hole saw.
  - This is the preferred method from engineering.
  - Estimated drilling time is 1 - 1.5 minutes.
3. Wood cutting hole saw may be used on Quazite FRP and PenCell HDPE enclosures (15 - 20 seconds).
4. Depending on the box, cutting these holes from the inside or outside may work better. Cutting on a smooth flat area of the wall vs. a ribbed uneven area works best.



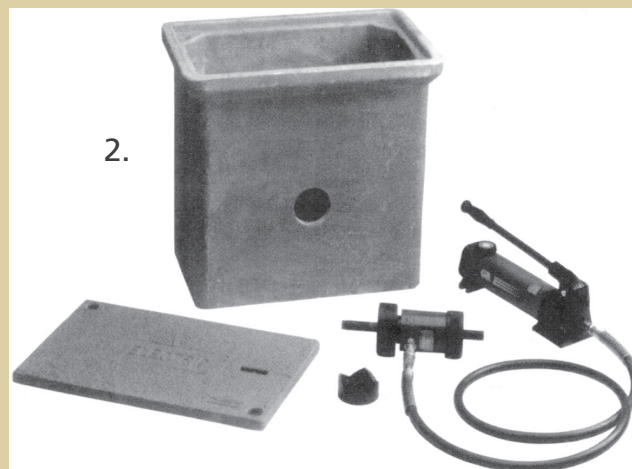
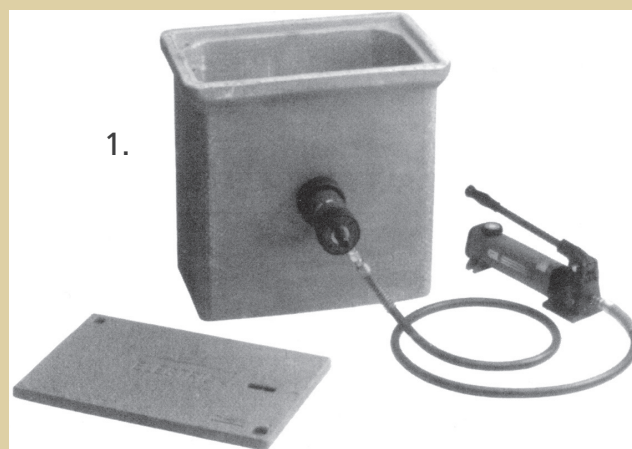
### Knockout Punch Driver

1. Set up the punch
  - 1.01 Slide the die over the pull rod.
  - 1.02 Insert pull rod into pilot hole.
  - 1.03 Thread the punch onto the pull rod.
2. Punch hole and remove
  - 2.01 Operate hand pump until the punch penetrates the surface.
  - 2.02 Open pump release valve.
  - 2.03 Remove the slug.

#### NOTES:

- 1) Quazite UL Listed enclosures with holes drilled in the field may qualify for UL Listing as long as the holes do not exceed more than 25% of the area of each sidewall and as long as the holes do not cut into a structural reinforcing rib, corner, or box lip.
- 2) Quazite FRP enclosures, follow the same guideline as #1 above.
- 3) PenCell HDPE enclosures, we recommend never removing more than 20% of the total area of any wall.

Contact your representative if there are any questions.





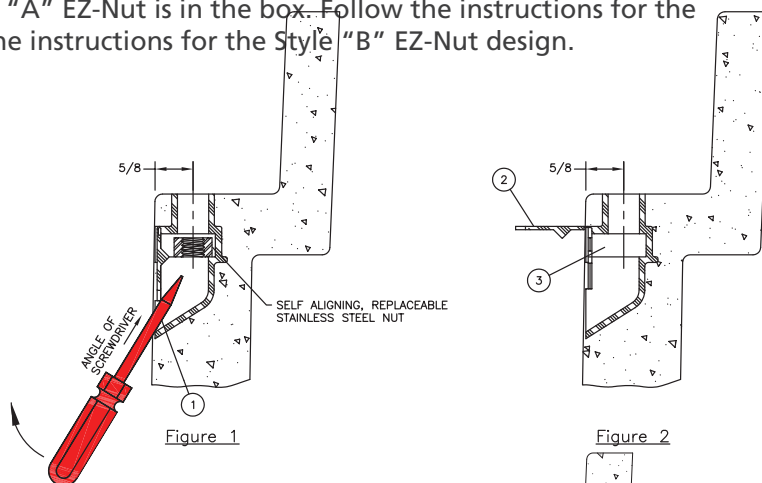
# EZ-Nut and Self-Aligning Nut Cleaning & Replacement Instructions

Quazite has redesigned the EZ-Nut assembly (Style "B") to provide a 40% greater drainage opening area and enable quicker and easier nut replacement. This Style "B" design will be included in new production, but existing inventories may have the older Style "A" EZ-Nut assembly. These instructions are provided in the event it is necessary to replace an existing nut.

\*To determine which EZ-Nut design is in any box, insert a screwdriver into the drainage opening and pull upward. If the door does not pop open, the Style "A" EZ-Nut is in the box. Follow the instructions for the Style "A" design. If the door pops open, follow the instructions for the Style "B" EZ-Nut design.

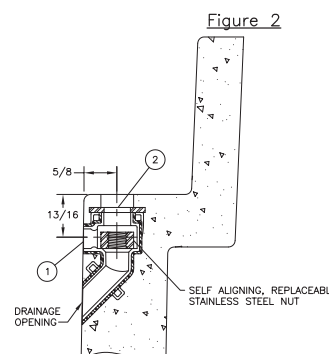
## Style "B" EZ-Nut replacement procedure\*

1. Locate the drainage opening in the area containing the insert. Insert a screwdriver into the opening at approximately the angle shown in Figure 1.
2. After inserting the screwdriver into the drainage opening, pull upward on the handle of the screwdriver in order to pry open the door of the insert as shown in Figure 2.
3. If necessary, remove any remaining debris from the opening. After the opening is clear, remove existing nut and replace with a nut of the required size.



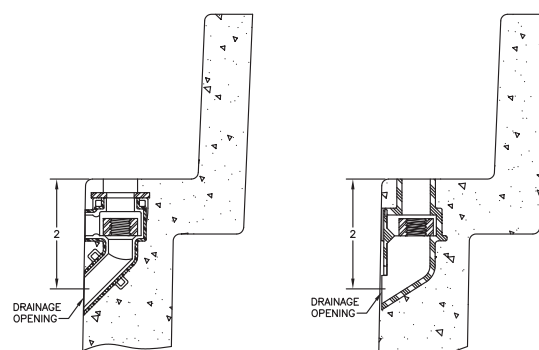
## Style "A" EZ-Nut replacement procedure\*

1. Measure 13/16" down from bearing ledge of the enclosure. Using a screwdriver and hammer, punch a hole into the cavity of the insert. Clear excess material out of the opening.
2. Insert a screwdriver into the top opening and push the square nut out of the opening just created. Replace with a new square nut and plug the cavity in the sidewall if necessary.



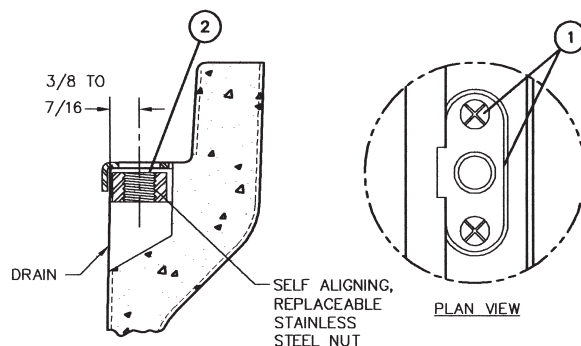
## EZ-Nut Cleanout Procedure

1. Make certain drain hole is clear. If it is not, scrape off material with a flat edge and remove any visible obstruction(s). The drain hole is located approximately 2" below the bearing ledge.
2. Insert flat head screw driver into insert. Scrape dirt off of threads and clean out any excess dirt.
3. (Optional) Spray WD-40® or equivalent lubricant into insert to lubricate the threads and help loosen any remaining debris.
4. Replace cover and secure bolts into insert.



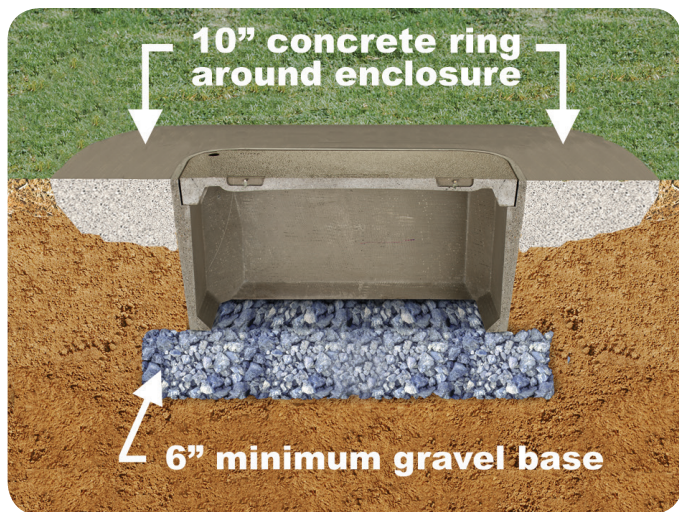
## Self-Aligning Nut Replacement:

1. Remove screws using a phillips screwdriver. Then remove the retainer clip.
2. Remove square nut and replace it with a new square nut.
3. Replace the retainer clip and screws.





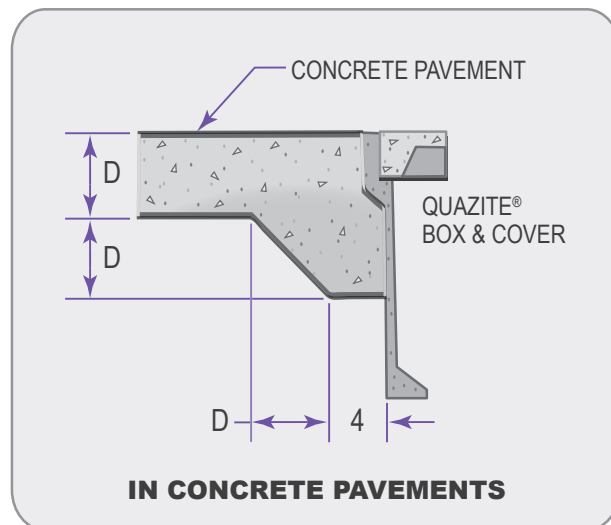
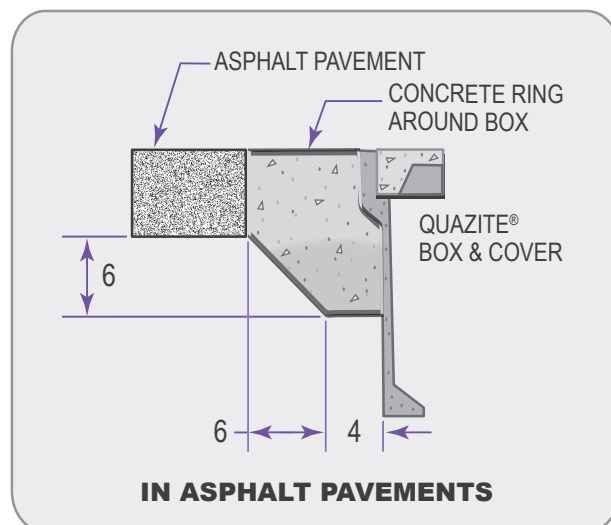
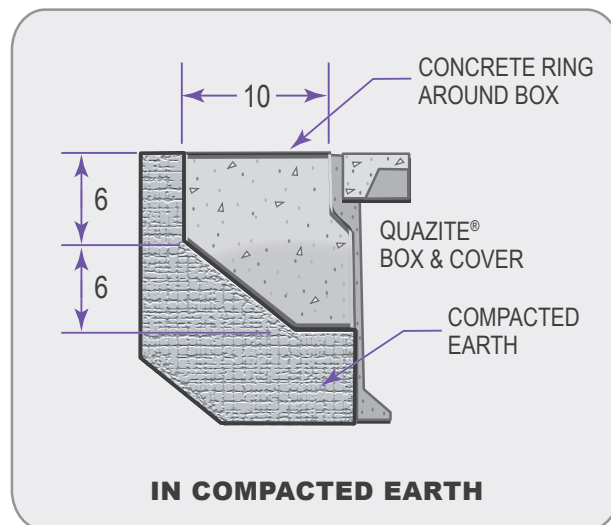
# Concrete Collar Application:



Concrete collars may be desired to give added protection to Hubbell enclosures installed by driveways, parking lots, and off-roadway areas that are subject to occasional non-deliberate traffic. Concrete collars are not necessary in grassy areas or areas subject solely to pedestrian traffic.

## \*Notes:

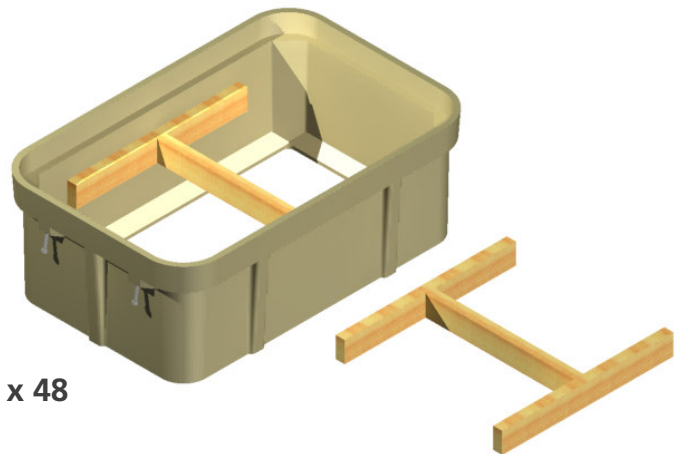
- Concrete encasement to be 3,000 psi minimum
- Concrete encasement collar dimension, D, to be equal to design pavement depth
- Pavement and subgrade to be as shown on the engineering plans



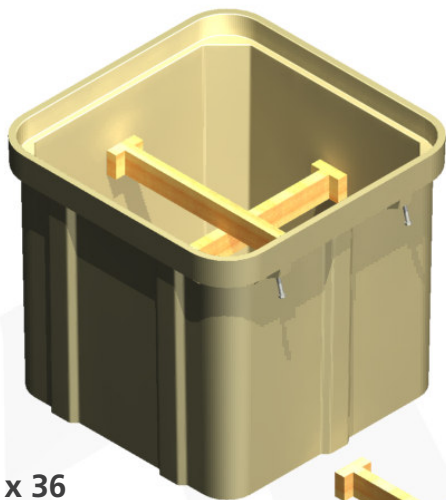
# Internal Bracing: Polymer Concrete

Internal bracing may be warranted for any manufacturer's underground enclosure. If 95% compaction is required, or if heavy vehicles will be present during construction and/or throughout the life of the enclosure, internal bracing during backfilling operations will ensure minimal box sidewall deflections. This applies to enclosures made from any material to maintain the original sidewall geometry. Supports should be 2 x 4s or similar material sized to hold at mid-depth.

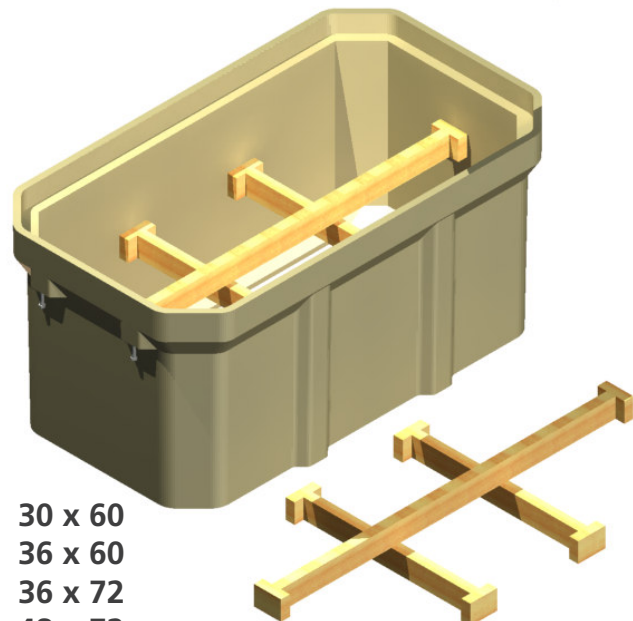
NOTE: Applicable PenCell enclosures come standard with bracing.



30 x 48



36 x 36  
48 x 48

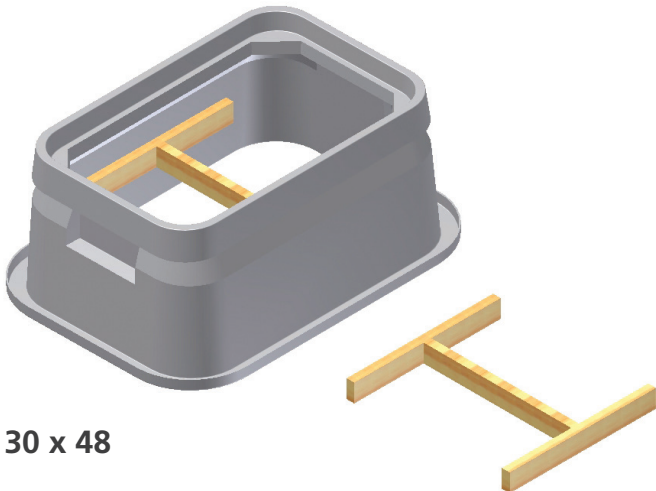
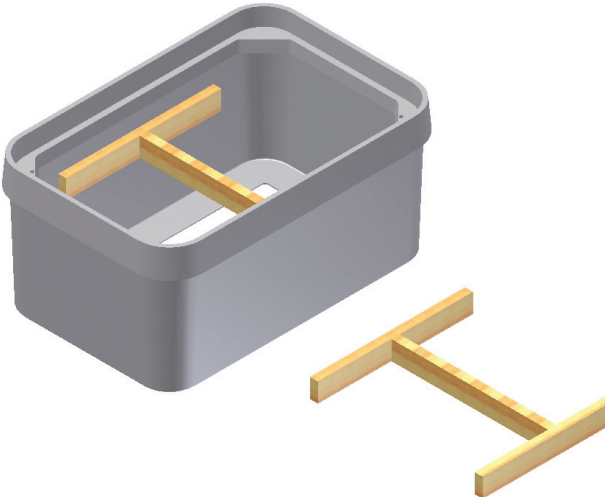


30 x 60  
36 x 60  
36 x 72  
48 x 72  
48 x 96

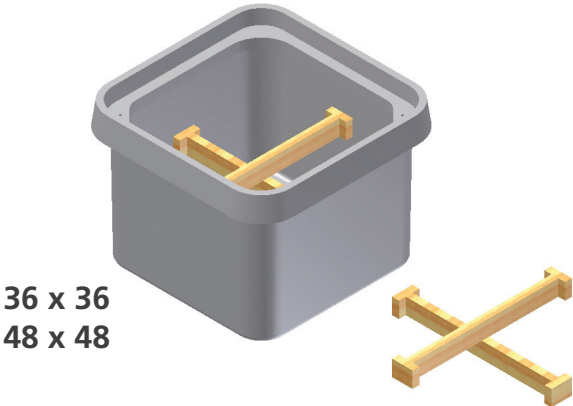


# Internal Bracing: FRP

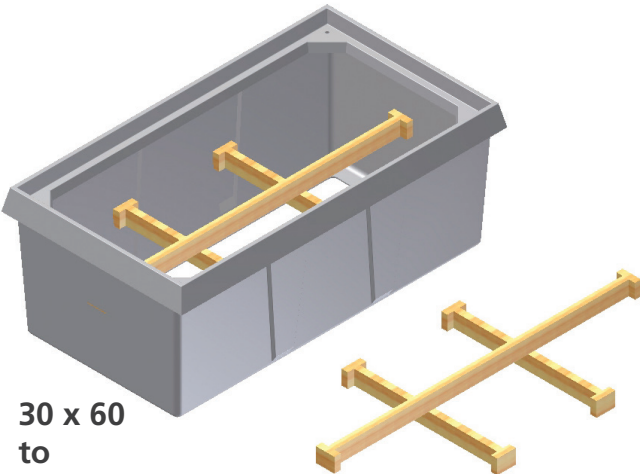
UNDERGROUND  
ENCLOSURES



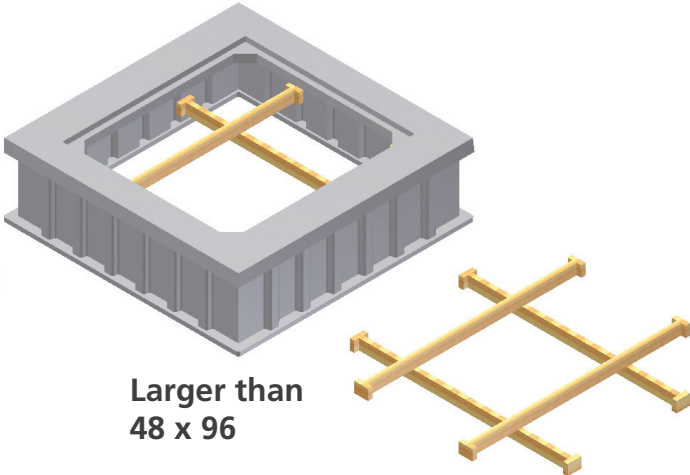
30 x 48



36 x 36  
48 x 48



30 x 60  
to  
48 x 96



Larger than  
48 x 96

# Polymer Concrete Catalog Numbering System for Boxes and Covers

1	2	3,4,5,6	7	8	9	10	11, 12	13	14
Weight	Style	Size	Item - Covers	Item - Covers	Cover Variation	Cover Variation	Logo Field	Item / Logo Field	Item
L (LW PC)	A (Special Covers)	0608	C (Standard)	A (Standard)	0 (Standard Cover)	0 (Standard Cover)	09 = Blank	1-9 (for 3 Digit Logos)	
P (PC)	C (Box Straight Sides w/ 3/4" cover)	0818	**H (H.D. 22,500# Test)	C (Overlapping)	A (Aluminum)	1 (Opens Over 90°)	17 = Electric		
	D (Flared Box w/ 1" Paper w/ 2" or 3" cover)	0914	S (Steel Cover)	G (Gasketed)	B (Captive Bolt)	2 (Opens Under 90°)	50 = Water	A (Cast Part for 2 Digit Logos)	A (See Reference Chart Below)
	G (Box Straight Sides 1-1/2", 1-11/16", 2", or 3" cover)	0915	W (Non-Bolt down Cover)	***H (33,750# Test)	D (Deep C'Bores for Locking Cylinders)	M (Metal Locator)		B (3/8" UNC Hex Bolt)	B (3/8" UNC Hex Bolt)
	R (Round Enclosure)	1015		J (Grade Adjustable Frame)	G (Galvanized)	R (Rockwell Touch Reader)	Other logos are available.	C (1/2" Coil Lg. PentaHead)	C (1/2" Coil Lg. PentaHead)
	T (Flared Box w/ 2" or 3" cover)	1016		S (Split Cover)	K (6"x9" Polymer Drop in Lid)		See logo listing.	H (3/8" Auger Bolt Hex)	H (3/8" Auger Bolt Hex)
	X (Replacement Cover or PX box 3/4" cover)	1118		T (Torsion Cover)	L (7"x13 1/2" Polymer Drop in Lid)	<b>Markers</b>		J (1/2" UNC Bolt Hex)	J (1/2" UNC Bolt Hex)
		1212			P (Cl 6" x 9" Meter Lid)	G (Gas)		K (1/2" Auger Bolt Hex)	K (1/2" Auger Bolt Hex)
		1324			Q (Cl 9" x 12" Meter Lid)	P (Power)		L (1/2" Auger Bolt Penta)	L (1/2" Auger Bolt Penta)
		1730			R (Cl 4 1/2" x 7 1/2" Meter Lid)	S (Sanitary)		P (Auger Bolt Penta)	P (Auger Bolt Penta)
		2042			S (Thru Slot 1/2" x 1")	T (Telephone)		R (3/8" UNC Bolt Sm. Penta)	R (3/8" UNC Bolt Sm. Penta)
		2424			T (1" x 4" Pull Slot)	W (Water)		S (1/2" UNC Bolt Penta)	S (1/2" UNC Bolt Penta)
		2436			V (Cl 4 7/8" x 4 7/8" Vented Meter Lid)			T (3/8" UNC Bolt Lg. Penta)	T (3/8" UNC Bolt Lg. Penta)
		2700							
		2733		<b>Item - Boxes</b>	<b>Item - Boxes</b>	<b>Box Depth</b>	<b>Box Depth</b>		
		3048	B (Box Open Base)	A (Standard)		1		B (Box with 3/8-16 insert)	
		3060	D (Solid Base)	B (Std. Mouseholes)		1		J (Box with 1/2-13 insert)	
		3660	E (Extension)	C (Divided)		2			
		3672	J (Footed Box)	G (Gasketed)		3			
		3943	R (Extension w/ Solid Base)						
		4848							
		4872	Z (Assembly)						
		4896							
		*							

L = Lightweight  
P = Standard

\* Designates a special color - R=Red, G=Green, etc.

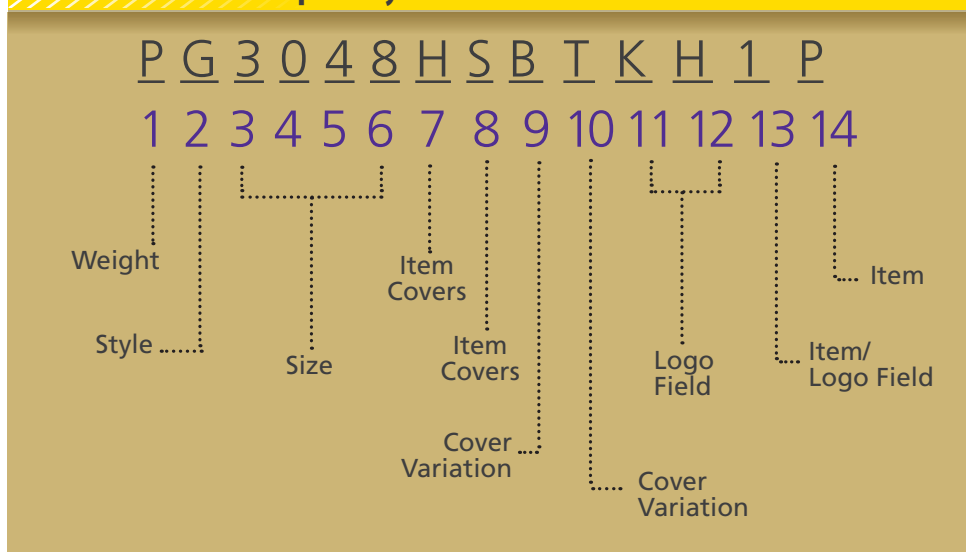
\*\* This load is tested over a 10"x10" area

\*\*\* This load is tested over a 10"x20" area

### Penta Head Auger Bolt Reference Chart

Item 13 OR Item 14	Part No.	Length	Thread Size	Application
P	C080033 (small head)	2.00"	3/8 7	PC0516, PC0608, PC0808, PC0818, PC1012, PC1118, PC1212, PC1324, PC1730, PX1324, PX1730
	C080034	2.00"	3/8 7	PR2700
	C080049	3.00"	3/8 7	PG1015, PG1118, PG1120, PG2424, PT1324, PT1730, PR3900
	C080154	3.50"	3/8 7	PG1324, PG1730
	C080054	4.00"	3/8 7	PG2436, PG3048, PG3636
	C080169	3.00"	1/2 6	PG3660, PR2200
	C080165	4"	1/2 6	PG3060, PG3672, PG4848, PG4872, PG4896, PG3660 (overlapping)
	C080166	5"	1/2 6	PG3060 (overlapping)

### Sample Polymer Concrete Part Number



# FRP & Corrugated Catalog Numbering System for Boxes and Covers

UNDERGROUND  
ENCLOSURES

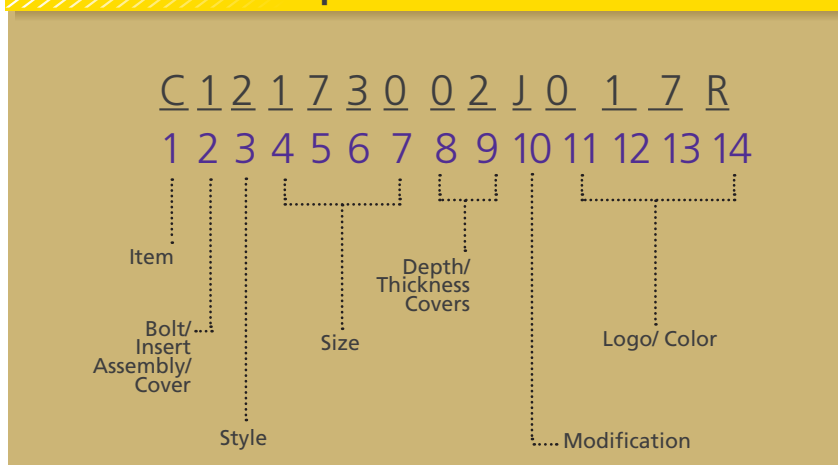
1 Item	2 Bolt/Insert Assembly/Cover	3 Style	4,5, 6,7 Size	8, 9 Depth/ Thickness Covers	10 Modification - Cover	11, 12, 13 Cover Logo	14 Cover Color
A (Assembly)	0 (Non Bolting)	0 (Flared Wall Box/Cover - Tier 8)	0608	01	A (Standard)	009 = Blank	A (Orange)
B (Box)	1 (1/2-13 UNC Bolt Penta)	2 (Flared Wall Box/Cover - Tier 15)	1015	02	C (4"x6" Cast Iron Reader Door Over 90) D (4"x6" Cast Iron Reader Door Under 90)	017 = Electric	G (Green)
C (Cover)	2 (1/2-13 UNC Bolt Hex)	3 (Straight Wall Box - Tier 8)	1118	03	E (6"x9" Cast Iron Reader Door Over 90) F (6"x9" Cast Iron Reader Door Under 90) G (Gasket) J (Power Marker)	050 = Water	P (Purple)
E (Extension)	3 (3/8-16 UNC Bolt Hex & Washer)	4 (Straight Wall Box - Tier 15)	1121	Boxes/ Extensions	K (Torsion Cover) L (Telephone Marker)	Other logos are available See logo listing	R (Red)
	4 (3/8-16 UNC Bolt Penta & Washer)	6 (Straight Wall Box/Cover - Tier 22)	1132		M (Metal Locator) N (Round Cover Insert)		T (Government Tan)
	5 (1/2-6 Coil Thread Bolt Penta)	7 (Cover/Assembly - Pedestrian Traffic)	1212	12	P (Touch Read) Q (1/2"x 1" Pick Holes)	Color - Box	U (Blue)
	6 (1/2-6 Auger Bolt Hex)	8 (Cover/Assembly - Tier 5)	1324	18	R (Radio Read)		X (Requires CDR Brand Logo on Cover/Assembly)
	7 (1/2"-6 Auger Bolt Penta)	9 (Flared Wall Box - Tier 22)	1517	22	S (Split Cover (2436 and smaller)) T (6"x9" Polymer Drop-in Lid)	G (Green)	
	Box	A (Corrugated Wall Box/Square Corner Cover - Tier 8)	1527	24	U (7"x13" Polymer Drop-in Lid) V (9"x15" Polymer Drop-in Lid)	P (Purple)	
		B (Corrugated Wall Box/Square Corner Cover - Tier 15)	1622	30	Y (1 pc Panel Cover (3048 thru 3672)) Z (2 pc Panel Cover (3048 thru 3672))	R (Red)	
	1 (1/2-13 UNC Insert)	C (Corrugated Wall Box/Square Corner Cover - Tier 22)	1730	34		T (Government Tan)	
	3 (3/8-16 UNC Insert)	D (Corrugated Wall Assembly/Square Corner Cover - Pedestrian Traffic)	2424	36		U (Blue)	
	5 (1/2-6 Coil Thread Insert)	E (Corrugated Wall Assembly/Square Corner Cover - Tier 5)	2436	42			
			2460	48	H (QAV III)		
			3048		L (Oversized Shell)		
			3060		M (Standard Mouseholes)		
			3636		P (Intercept Panel) R (Collar for Round Cover)		
			3660		T (Top Extension)		
			3672		W (Grade Adjustable)		
			3696		X (Separate Base)		

Note: Cover rating can not exceed box rating.

### Bolt Reference Chart

Item 2	Thread Size	Head Style	Length	Application	Part No.
1	1/2-13 UNC	Penta	3.00"	1015, 1118, 1212, 1324, 1517, 1622, 1730, 2424, 2460	C080127
1	1/2-13 UNC	Penta	4.50"	2436 & Larger	C080130
2	1/2-13 UNC	Hex	2.50"	1015, 1118, 1212, 1517	C080110
2	1/2-13 UNC	Hex	3.00"	1324, 1622, 1730, 2424, 2460	C080120
2	1/2-13 UNC	Hex	4.00"	2436 & Larger	C080119
3	3/8-16 UNC	Hex	2.50"	1015, 1118, 1212, 1517	C080012
3	3/8-16 UNC	Hex	3.00"	1324, 1622, 1730, 2424, 2460	C080036
3	3/8-16 UNC	Hex	4.00"	2436 & Larger	C080018
4	3/8-16 UNC	Penta	2.50"	1015, 1118, 1212, 1517	C080026
4	3/8-16 UNC	Penta	3.00"	1324, 1622, 1730, 2424, 2460	C080028
4	3/8-16 UNC	Penta	4.00"	2436 & Larger	C080032

### Sample FRP Part Number





## UNDERGROUND ENCLOSURES

Notes:

- It is not possible to order a custom part by building your own part number from this table.



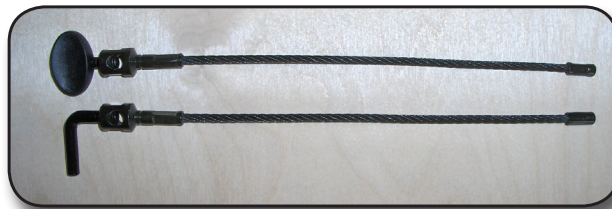
### Sample PenCell Part Number

D	T	2	4	3	6	1	8	H	D	H	0	0	9		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Style		Size				Depth		Type		Options					
											Bolt/Hardware				

# Cobra Locks – Proven Security



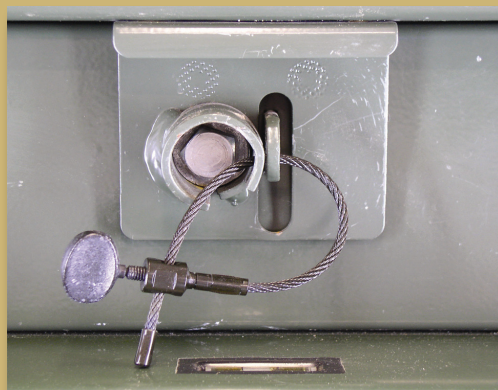
Cobra Locks are flexible, versatile, and most importantly, exceptionally secure. A lock's worth depends ultimately on its strength, and both Cobra Locks are proven in their ability to provide the ultimate in protection.



## Many Benefits:

- **Innovative** - Cobra Locks feature an innovative, one-piece design, which means there are no parts to lose. In addition to the many features and benefits of the Cobra Lock is the first tool-less equipment lock with a unique pan-shaped bolt head that easily breaks off by twisting with your hand at only 15 in-lbs.
- **Versatile** - Designed to be flexible, adjustable, and tamper-proof, Cobra Locks provide limitless versatility for use in tight installations, bent hinges, frozen hasps, and other challenging installations.
- **Secure** - Cobra Locks are constructed of high-quality aircraft cable. This provides high security, because commonly available tools such as pliers, snips, cutters, etc., are unable to cut through the cable. It requires powerful equipment such as grinders, heavy-duty bolt cutters, or high-quality lineman's cutters to cut the cable or remove the lock.
- **Resilient** - Cobra Locks are constructed with corrosion-resistant anodized ends and finish to endure the elements and ensure long life.
- **Strength** - Cobra Locks have been pull-tested to more than 2,000 pounds of resistance to ensure strength and reliability.

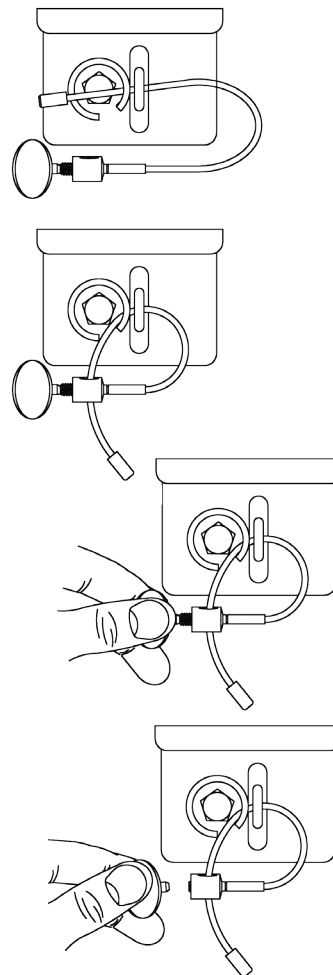
## Secure in a Snap!



# Cobra Locks – Installation Instructions

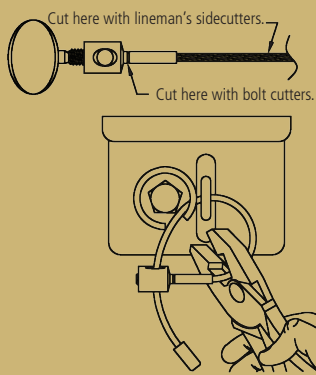
Cobra Locks are easy to put in place and remove by following these simple instructions:

1. Slip the loose end of the cable through the item to be locked.
2. Place the loose end through the eye of the lock body itself.
3. Temporarily secure the lock by tightening the bolt with your fingers.
4. To permanently lock the Cobra Lock, either grasp the lock body with pliers and turn set bolt with a wrench until the bolt head breaks off, or, twist the bolt head with your fingers until it breaks off.



## Removal Instructions

To remove a lock, cut it at the groove with a grinder or heavy-duty pair of bolt cutters, or cut the cable with high-quality lineman's cutters. Commonly available tools such as pliers, snips, and cutters will not be effective against the high quality cable.



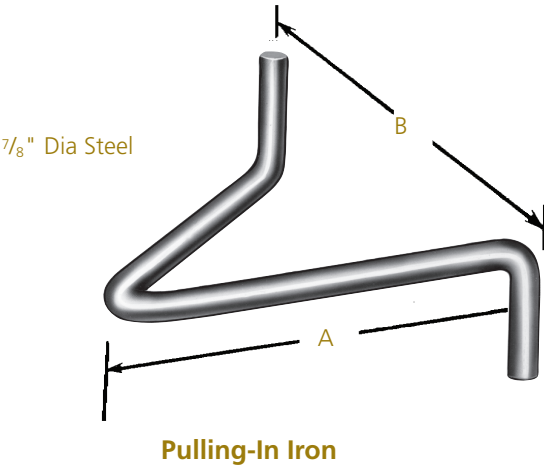
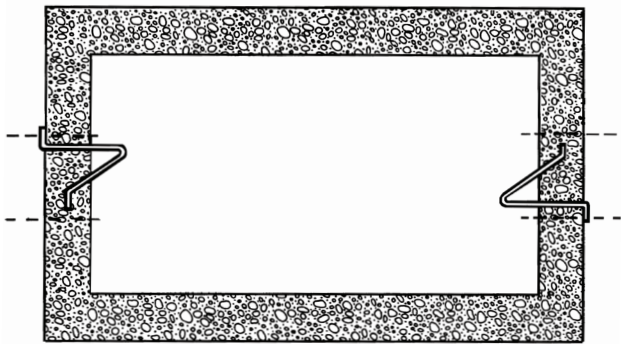
# Pulling-In Irons

UNDERGROUND  
ENCLOSURES

Provides a strong and easy-to-get-at attachment for the pulling-in blocks when installing or removing cables. Pulling-In Irons are set into the brick or concrete walls of street vaults opposite all duct entrances. Hot-dip galvanized.

Catalog Number	Dimensions Inches			Approx Ship Wt lb Each
	Steel Size	A	B	
8119 <sup>(1)</sup>	7/8 Rd.	9	8 3/8	5.40
8120 <sup>(1)</sup>	7/8 Rd.	12	10 3/8	5.80

(1) RUS listed.





# Markers

## GROUND-LEVEL CABLE ROUTE MARKERS

### Easy Location of Buried Cable.

This short anchor has an identification plate that can be used to mark locations of buried power, telephone or CATV cables. The anchor is screwed into the ground until the top plate is flush with the ground level (use installing tool CWFA). The 3" diameter helix and rod are galvanized steel. Holding power is approximately 750 pounds in average soil.

The top plate is made of copper alloy for high corrosion resistance and long life. The top is lettered with various information including an arrow pointing to the direction of the next connection.

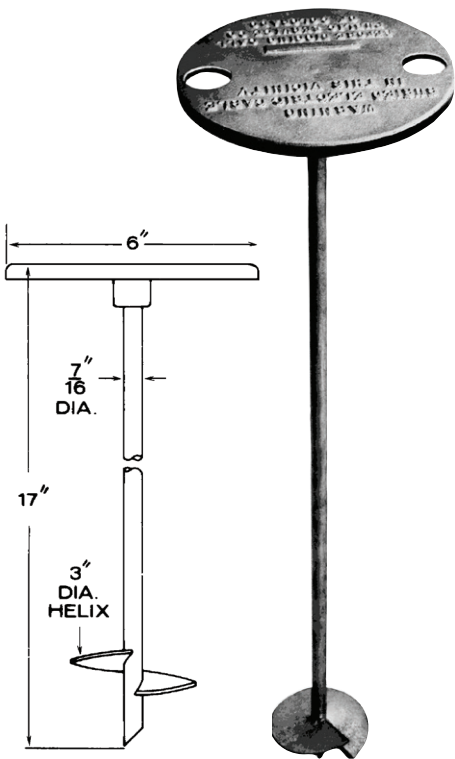


Ordering Information		
Catalog Number	Lettering on Top Plate Insert	Approx Ship Wt lb Each
C5540001 <sup>(1)</sup>	Electric Company	2.81
T5540196	Telephone Company	2.81

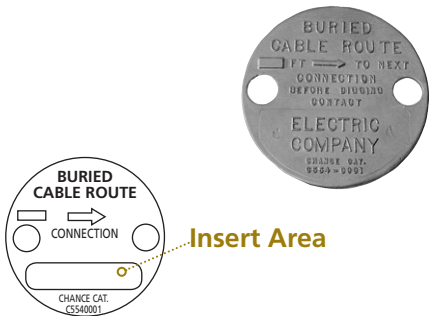
(1) RUS listed.

### Special Lettering for Insert Area.

For special lettering in INSERT AREA other than standard, order by description. These are available at an additional charge. Special lettering may be cast with 2 lines of letters 3/8" high (11 letters on top line, 10 letters on next line) or 3 lines of letters 1/4" high (16 letters on top two lines, 15 letters on bottom line). The entire top can also be special lettered at additional cost. Contact HPS Customer Service for further details.



UNDERGROUND ENCLOSURES









# Service Pedestals Product Selection Guide

## Service Pedestals

Hubbell offers a wide variety of service pedestals in order to meet your most specialized needs. Hubbell is sure to have a core product that satisfies even your toughest application requirements. In addition to a wide range of core products and options, Hubbell can help customize a solution to achieve your goals.

### AG - Style

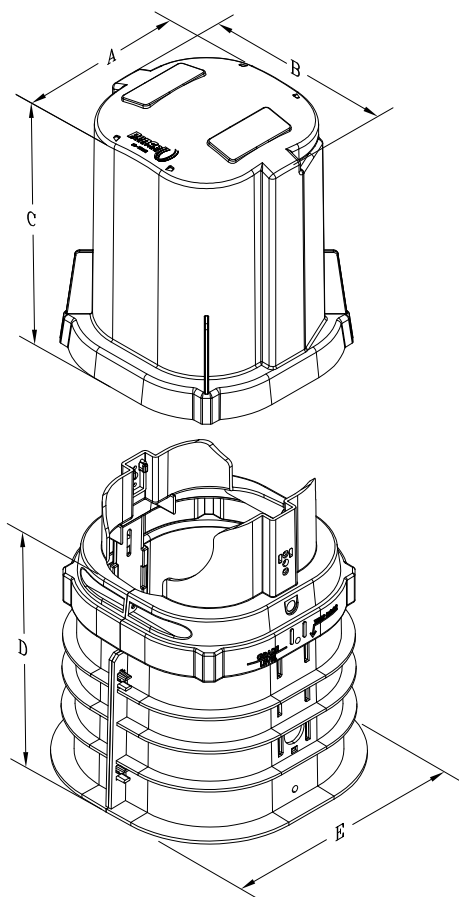
Pedestal dome, base, and adapter (if applicable) are constructed of high-density polyethylene (HDPE) structural foam. Flared base walls prevent frost heave.



### AV - Style

Pedestal dome is low-density polyethylene (LDPE) roto-molded, with base constructed of high-density polyethylene (HDPE) structural foam. Flared base walls prevent frost heave.





Key Features and Benefits

- Designed to meet requirements of Communications, CATV and Electric Service
- The pedestal dome and base are constructed from High Density Polyethylene structural foam
- Double lock option available
- Excellent environmental resistance
- Complete unit includes base, dome, and bracket
- RDUP accepted material
- 360° access

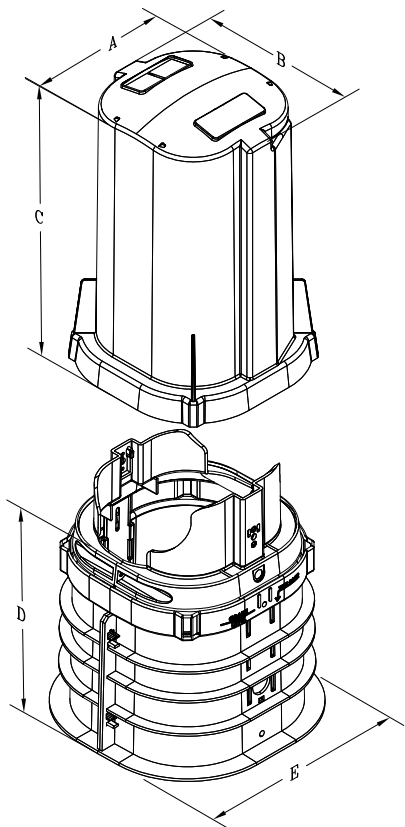
Options Available

- Venting available
- Various mounting brackets available

PEDESTALS

Product Specifications							
PART NUMBER	DESCRIPTION	DOME DIMENSIONS (in.)			BASE DIMENSIONS (in.)		WEIGHT (lbs.)
		DOM WIDTH DIM "A"	DOM DEPTH DIM "B"	DOM HEIGHT DIM "C"	BASE HEIGHT DIM "D"	BASE DIAMETER DIM "E"	
AG101015	HDPE structural foam 10x10x15 dome and base	10 5/8	12 1/4	15 1/2	12	15 5/8	15





Key Features and Benefits

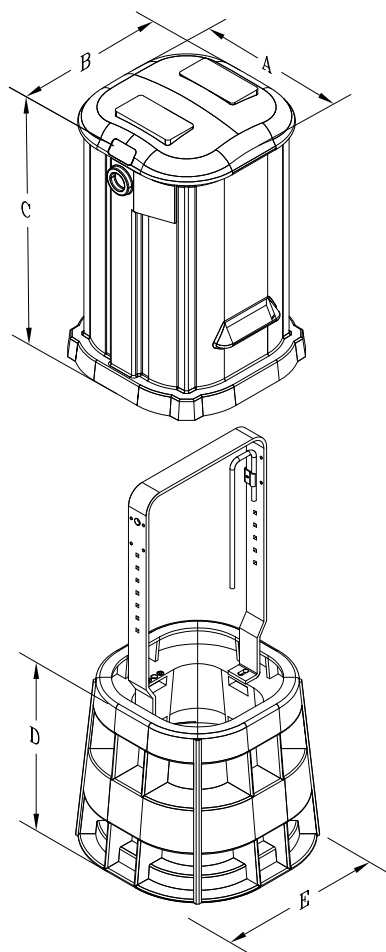
- Designed to meet requirements of Communications, CATV and Electric Service
- The pedestal dome and base are constructed from High Density Polyethylene structural foam
- Double lock option available
- Excellent environmental resistance
- Complete unit includes base, dome, and bracket
- RDUP accepted material
- 360° access

Options Available

- Venting available
- Various mounting brackets available

Product Specifications

PART NUMBER	DESCRIPTION	DOME DIMENSIONS (in.)			BASE DIMENSIONS (in.)		WEIGHT (lbs.)
		DOM WIDTH DIM "A"	DOM DEPTH DIM "B"	DOM HEIGHT DIM "C"	BASE HEIGHT DIM "D"	BASE DIAMETER DIM "E"	
AG101020	HDPE structural foam 10 x 10 x 20 dome and base	10 5/16	11 15/16	20	12	15 5/8	15



**Key Features and Benefits**

- Designed to meet requirements of Communications, CATV and Electric Service
- The pedestal dome is Low Density Polyethylene roto-molded and the base is High Density Polyethylene structural foam
- All stainless steel hardware
- Excellent environmental resistance
- Complete unit includes base, dome, and bracket
- RDUP accepted material
- 360° access
- Vented

**Options Available**

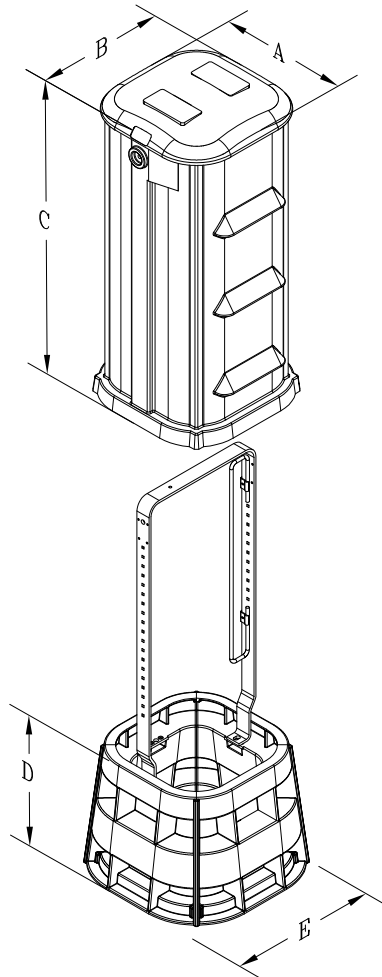
- Custom colors are available
- Various mounting brackets available
- Hasp bracket

**Lock Options**

- (HB) Hex Head Bolt
- (HF) Highfield Lock
- Self Locking Slam Lock (various actuators available)
  - (PT) Pin Torx
  - (HS) Hex Slam Lock
  - (PA) Pin Allen
  - (PL) Pencil Lock

PEDESTALS

Product Specifications							
PART NUMBER	DESCRIPTION	DOME DIMENSIONS (in.)			BASE DIMENSIONS (in.)		WEIGHT (lbs.)
		DOME WIDTH DIM "A"	DOME DEPTH DIM "B"	DOME HEIGHT DIM "C"	BASE HEIGHT DIM "D"	BASE DIAMETER DIM "E"	
AV101020	LDPE roto-molding 10x10x20 dome and HDPE structural foam base	12 9/16	12 9/16	20 1/4	12 1/2	14 3/8	20



### Key Features and Benefits

- Designed to meet requirements of Communications, CATV and Electric Service
- The pedestal dome is Low Density Polyethylene roto-molded and the base is High Density Polyethylene structural foam
- All stainless steel hardware
- Excellent environmental resistance
- Complete unit includes base, dome, and bracket
- RDUP accepted material
- 360° access
- Vented

### Options Available

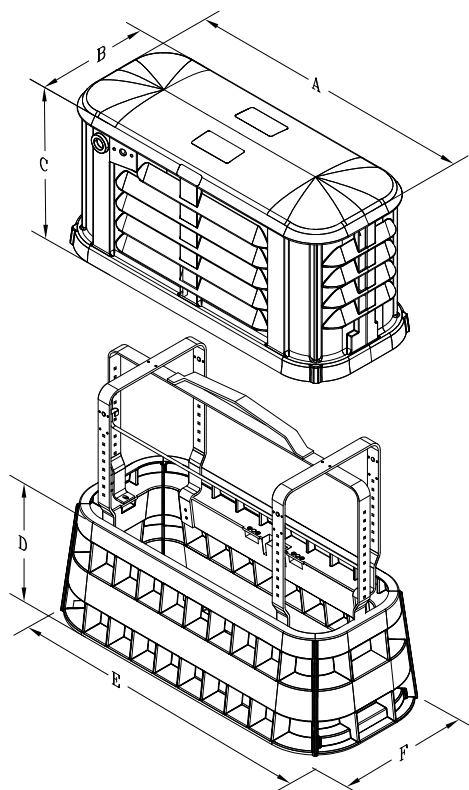
- Custom colors are available
- Various mounting brackets available
- Hasp bracket

### Lock Options

- (HB) Hex Head Bolt
- (HF) Highfield Lock
- Self Locking Slam Lock (various actuators available)
  - (PT) Pin Torx
  - (HS) Hex Slam Lock
  - (PA) Pin Allen
  - (PL) Pencil Lock

### Product Specifications

PART NUMBER	DESCRIPTION	DOME DIMENSIONS (in.)			BASE DIMENSIONS (in.)		WEIGHT (lbs.)
		DOME WIDTH DIM "A"	DOME DEPTH DIM "B"	DOME HEIGHT DIM "C"	BASE HEIGHT DIM "D"	BASE DIAMETER DIM "E"	
AV121230	LDPE roto-molding 12x12x30 dome and HDPE structural foam base	14 7/16	14 7/16	31 15/16	12 9/16	17 1/8	25



### Key Features and Benefits

- Designed to meet requirements of Communications, CATV and Electric Service
- The pedestal dome is Low Density Polyethylene roto-molded and the base is High Density Polyethylene structural foam
- All stainless steel hardware
- Excellent environmental resistance
- Complete unit includes base, dome, and bracket
- RDUP accepted material
- 360° access

### Options Available

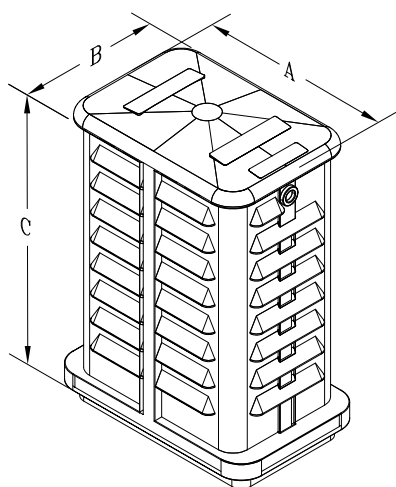
- Multiple colors are available
- Vented standard, non-vented available
- Various mounting brackets available
- Hasp provision for use of customer specific lock

### Lock Options

- (HB) Hex Head Bolt
- (HF) Highfield Lock
- Self Locking Slam Lock (various actuators available)
  - (PT) Pin Torx
  - (HS) Hex Slam Lock
  - (PA) Pin Allen
  - (PL) Pencil Lock

### Product Specifications

PART NUMBER	DESCRIPTION	DOME DIMENSIONS (in.)			BASE DIMENSIONS (in.)			WEIGHT (lbs.)
		DOME WIDTH DIM "A"	DOME DEPTH DIM "B"	DOME HEIGHT DIM "C"	BASE HEIGHT DIM "D"	BASE DIAMETER DIM "E"	BASE WIDTH DIM "F"	
AV123018	LDPE roto-molding 12x30x18 dome and HDPE structural foam base	35 1/4	14 7/16	18	12 9/16	37 7/8	17 1/8	34



Key Features and Benefits

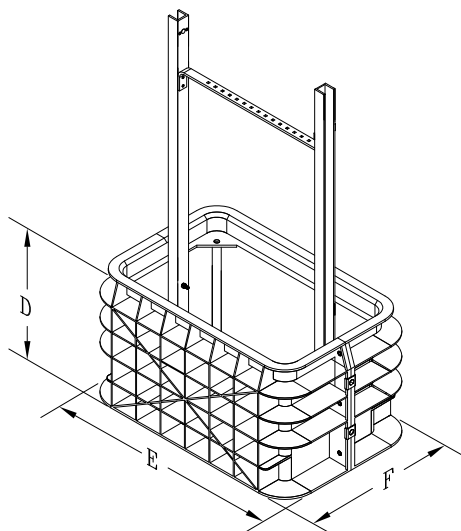
- Designed to meet requirements of Communications, CATV and Electric Service
- The pedestal dome is Low Density Polyethylene roto-molded and the base is High Density Polyethylene structural foam.
- All stainless steel hardware
- Excellent environmental resistance
- Complete unit includes base, dome, and bracket
- RDUP accepted material
- 360° access
- Vented

Options Available

- Custom colors are available
- Various mounting brackets available

Lock Options

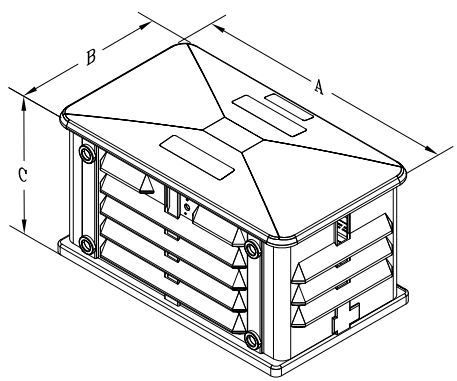
- (HB) Hex Head Bolt
- (HF) Highfield Lock
- Self Locking Slam Lock (various actuators available)
  - (PT) Pin Torx
  - (HS) Hex Slam Lock
  - (PA) Pin Allen
  - (PL) Pencil Lock



Product Specifications

PART NUMBER	DESCRIPTION	DOME DIMENSIONS (in.)			BASE DIMENSIONS (in.)			WEIGHT (lbs.)
		DOME WIDTH DIM "A"	DOME DEPTH DIM "B"	DOME HEIGHT DIM "C"	BASE HEIGHT DIM "D"	BASE DIAMETER DIM "E"	BASE WIDTH DIM "F"	
AV142034	LDPE roto-molding 14x20x34 dome and HDPE structural foam base	23 15/16	16 3/4	34 1/2	15	27 7/8	18 3/8	48





Key Features and Benefits

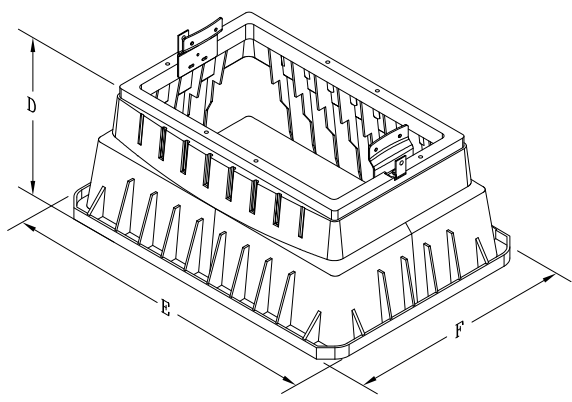
- Designed to meet requirements of Electric Service
- The pedestal dome is Low Density Polyethylene roto-molded and the base is High Density Polyethylene structural foam
- All stainless steel hardware
- Excellent environmental resistance
- Complete unit includes base, dome, bracket and locking hardware
- RDUP accepted material
- 360° access

Options Available

- Custom colors are available
- Venting available

Lock Options

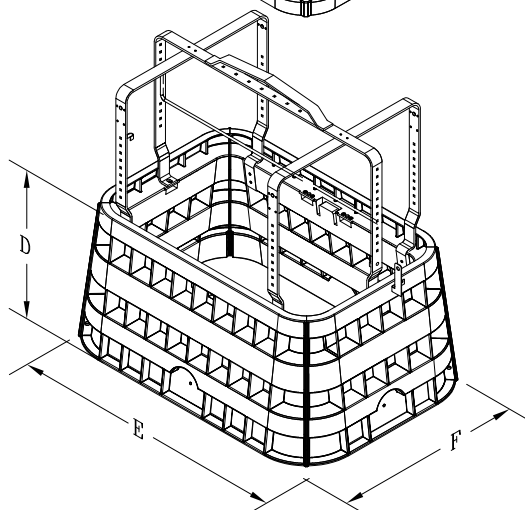
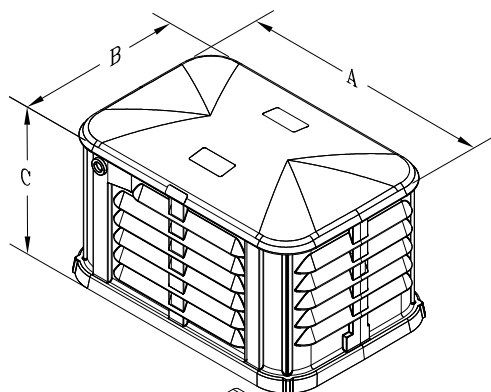
- Brass Penta Head Lock



PEDESTALS

Product Specifications

PART NUMBER	DESCRIPTION	DOME DIMENSIONS (in.)			BASE DIMENSIONS (in.)			WEIGHT (lbs.)
		DOME WIDTH DIM "A"	DOME DEPTH DIM "B"	DOME HEIGHT DIM "C"	BASE HEIGHT DIM "D"	BASE DIAMETER DIM "E"	BASE WIDTH DIM "F"	
AV173016	LDPE roto-molding 17x30x16 dome and HDPE structural foam base	35 1/4	20 3/8	18 5/8	16 1/6	41 1/6	29 1/2	48



### Key Features and Benefits

- Designed to meet requirements of Communications, CATV and Electric Service
- The pedestal dome is Low Density Polyethylene roto-molded and the base is High Density Polyethylene structural foam
- All stainless steel hardware
- Excellent environmental resistance
- Complete unit includes base, dome, and bracket
- RDUP accepted material
- 360° access

### Options Available

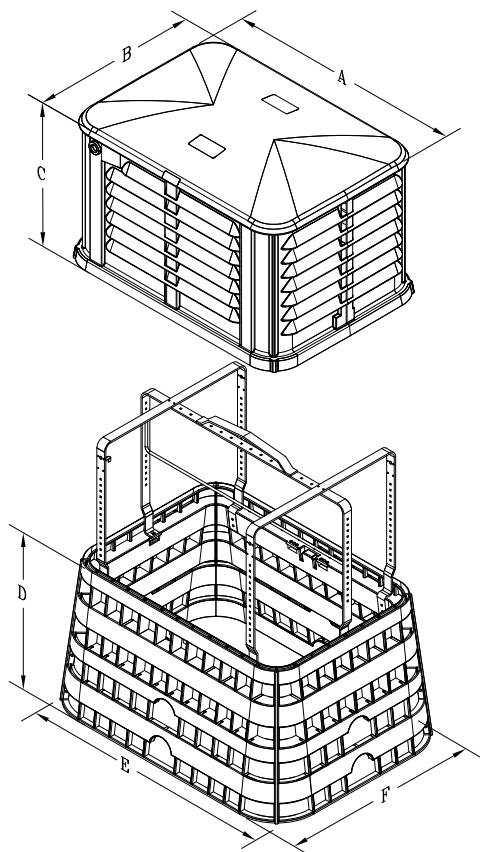
- Custom colors are available
- Venting available
- Various mounting brackets available
- Hasp bracket

### Lock Options

- (HB) Hex Head Bolt
- (HF) Highfield Lock
- Self Locking Slam Lock (various actuators available)
  - (PT) Pin Torx
  - (HS) Hex Slam Lock
  - (PA) Pin Allen
  - (PL) Pencil Lock

### Product Specifications

PART NUMBER	DESCRIPTION	DOME DIMENSIONS (in.)			BASE DIMENSIONS (in.)			WEIGHT (lbs.)
		DOMED WIDTH DIM "A"	DOMED DEPTH DIM "B"	DOMED HEIGHT DIM "C"	BASE HEIGHT DIM "D"	BASE DIAMETER DIM "E"	BASE WIDTH DIM "F"	
AV183218	LDPE roto-molding 18x32x18 dome and HDPE structural foam base	35 3/8	23 7/16	21	12	39 3/16	27 3/16	48



### Key Features and Benefits

- Designed to meet requirements of Communications, CATV and Electric Service
- The pedestal dome is Low Density Polyethylene roto-molded and the base is High Density Polyethylene structural foam
- All stainless steel hardware
- Excellent environmental resistance
- Complete unit includes base, dome, and bracket
- RDUP accepted material
- 360° access

### Options Available

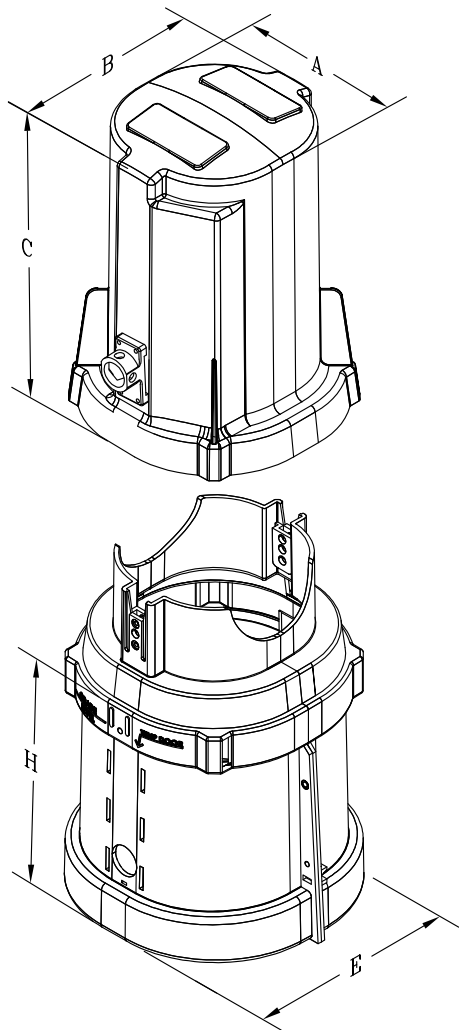
- Custom colors are available
- Venting available
- Various mounting brackets available
- Hasp bracket

### Lock Options

- (HB) Hex Head Bolt
- (HF) Highfield Lock
- Self Locking Slam Lock (various actuators available)
  - (PT) Pin Torx
  - (HS) Hex Slam Lock
  - (PA) Pin Allen
  - (PL) Pencil Lock

### Product Specifications

PART NUMBER	DESCRIPTION	DOME DIMENSIONS (in.)			BASE DIMENSIONS (in.)			WEIGHT (lbs.)
		DOME WIDTH DIM "A"	DOME DEPTH DIM "B"	DOME HEIGHT DIM "C"	BASE HEIGHT DIM "D"	BASE DIAMETER DIM "E"	BASE WIDTH DIM "F"	
AV243626	LDPE roto-molding 24x36x26 dome and HDPE structural foam base	41 1/2	29 7/16	26	24	46 3/4	34 3/4	75



Key Features and Benefits

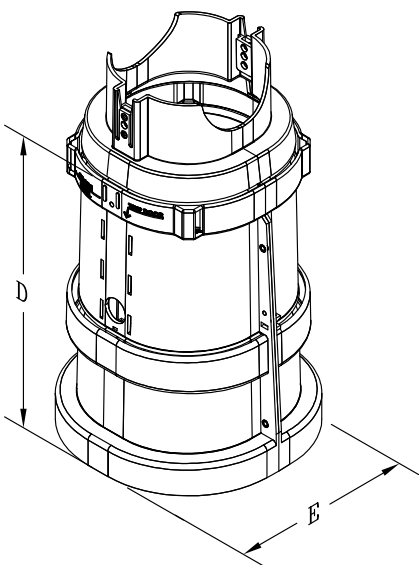
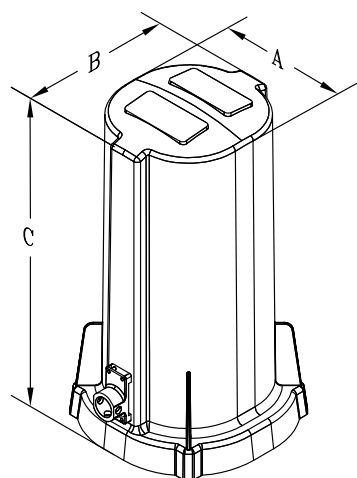
- Designed to meet requirements of Communications, CATV and Electric Service
- The pedestal dome and base are constructed from High Density Polyethylene structural foam
- Double lock option available
- Excellent environmental resistance
- Complete unit includes base, dome, and bracket
- RDUP accepted material
- 360° access

Options Available

- Various mounting brackets available

Product Specifications

PART NUMBER	DESCRIPTION	DOME DIMENSIONS (in.)			BASE DIMENSIONS (in.)		WEIGHT (lbs.)
		DOME WIDTH DIM "A"	DOME DEPTH DIM "B"	DOME HEIGHT DIM "C"	BASE HEIGHT DIM "D"	BASE DIAMETER DIM "E"	
AG8815	HDPE structural foam 8x8x15 dome and base	8 7/16	9 15/16	15 1/8	12	12 5/16	10



**Key Features and Benefits**

- Designed to meet requirements of Communications, CATV and Electric Service
- The pedestal dome and base are constructed from High Density Polyethylene structural foam
- Double lock option available
- Excellent environmental resistance
- Complete unit includes base, dome, and bracket
- RDUP accepted material
- 360° access

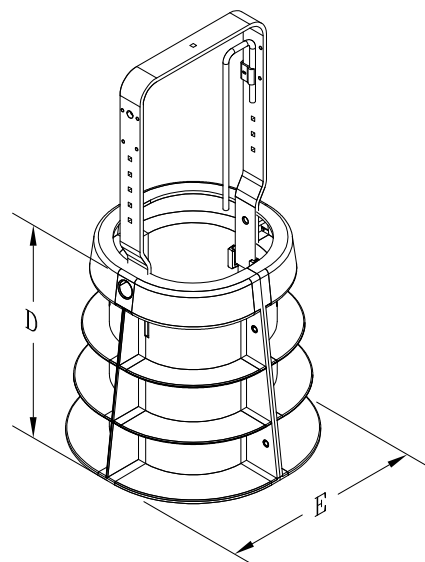
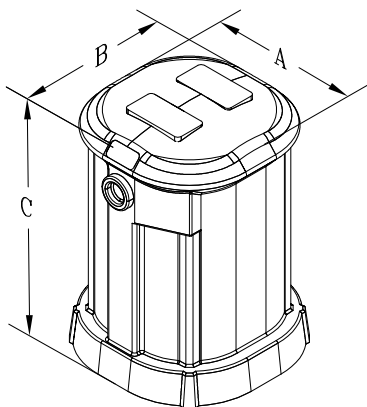
**Options Available**

- Various mounting brackets available

**Product Specifications**

PART NUMBER	DESCRIPTION	DOME DIMENSIONS (in.)			BASE DIMENSIONS (in.)		WEIGHT (lbs.)
		DOME WIDTH DIM "A"	DOME DEPTH DIM "B"	DOME HEIGHT DIM "C"	BASE HEIGHT DIM "D"	BASE DIAMETER DIM "E"	
AG8820	HDPE structural foam 8x8x20 dome and base	8 5/16	9 13/16	20	18	13 1/2	12





### Key Features and Benefits

- Designed to meet requirements of Communications, CATV and Electric Service
- The pedestal dome is Low Density Polyethylene roto-molded and the base is High Density Polyethylene structural foam
- All stainless steel hardware
- Excellent environmental resistance
- Complete unit includes base, dome, and bracket
- RDUP accepted material
- 360° access

### Options Available

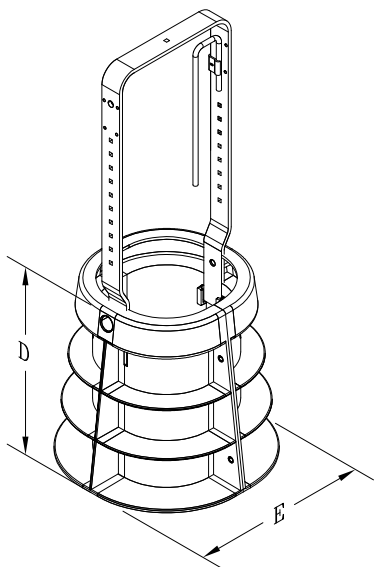
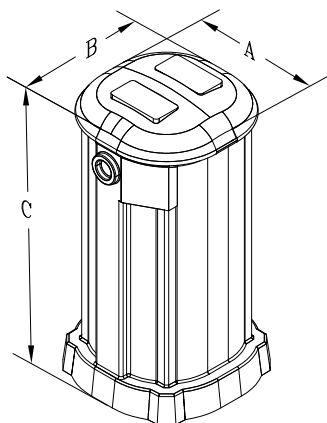
- Custom colors are available
- Venting available
- Various mounting brackets available
- Hasp bracket

### Lock Options

- (HB) Hex Head Bolt
- (HF) Highfield Lock
- Self Locking Slam Lock (various actuators available)
  - (PT) Pin Torx
  - (HS) Hex Slam Lock
  - (PA) Pin Allen
  - (PL) Pencil Lock

### Product Specifications

PART NUMBER	DESCRIPTION	DOME DIMENSIONS (in.)			BASE DIMENSIONS (in.)		WEIGHT (lbs.)
		DOME WIDTH DIM "A"	DOME DEPTH DIM "B"	DOME HEIGHT DIM "C"	BASE HEIGHT DIM "D"	BASE DIAMETER DIM "E"	
AV8815	LDPE roto-molding 8x8x15 dome and HDPE structural foam base	10 13/16	10 13/16	15 7/16	12	13	10



Key Features and Benefits

- Designed to meet requirements of Communications, CATV and Electric Service
- The pedestal dome is Low Density Polyethylene roto-molded and the base is High Density Polyethylene structural foam
- All stainless steel hardware
- Excellent environmental resistance
- Complete unit includes base, dome, and bracket
- RDUP accepted material
- 360° access

Options Available

- Custom colors are available
- Venting available
- Various mounting brackets available
- Hasp bracket

Lock Options

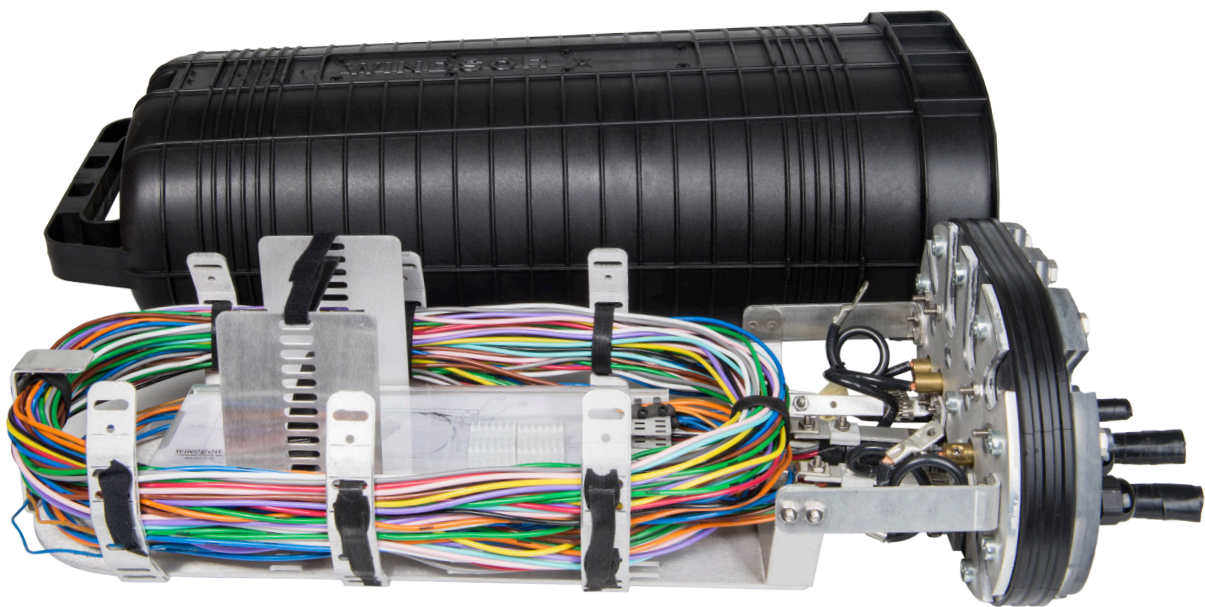
- (HB) Hex Head Bolt
- (HF) Highfield Lock
- Self Locking Slam Lock (various actuators available)
  - (PT) Pin Torx
  - (HS) Hex Slam Lock
  - (PA) Pin Allen
  - (PL) Pencil Lock

PEDESTALS

Product Specifications							
PART NUMBER	DESCRIPTION	DOME DIMENSIONS (in.)			BASE DIMENSIONS (in.)		WEIGHT (lbs.)
		DOME WIDTH DIM "A"	DOME DEPTH DIM "B"	DOME HEIGHT DIM "C"	BASE HEIGHT DIM "D"	BASE DIAMETER DIM "E"	
AV8820	LDPE roto-molding 8x8x20 dome and HDPE structural foam base	10 13/16	10 5/16	15 9/16	12	13	12



# Windsor Splice Closures



Hubbell Power Systems’ Windsor splice closures are designed by former splice technicians with flexibility and ease of workmanship in mind. All splice closures are sold fully assembled to reduce labor costs, splicing time, and chances of craft error. With over 30 years of splicing product design and manufacturing experience and proven field performance, Windsor closures are the ideal choice for your fiber networks.

### KEY FEATURES

- Shipped Fully Assembled
- For Dielectric, Armored, and OPGW Cables
- All Ports are Slotted for no trapped cables, easy cable additions, and mid-sheath splices
- Unsurpassed buffer tube storage capacity
- IG closures can tone isolated cables without needing to re-enter the closure
- Assembled in the USA

### THREE END PLATE OPTIONS:

- Dielectric
- Isolated Ground
- OPGW

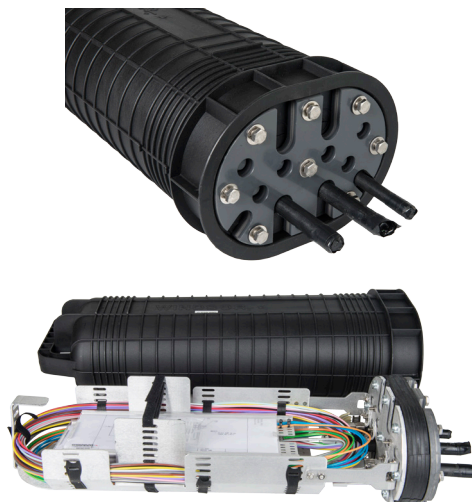
SPICE  
ENCLOSURES

MODEL	SPICE CAPACITY		DOME DIMENSIONS		CABLE PORTS
	SINGLE	RIBBON	OPENING	LENGTH	
570	192	576	5.5"X 8"	22"	6
790	576	1728	7.5"X 10"	24"	8

# 570 Series

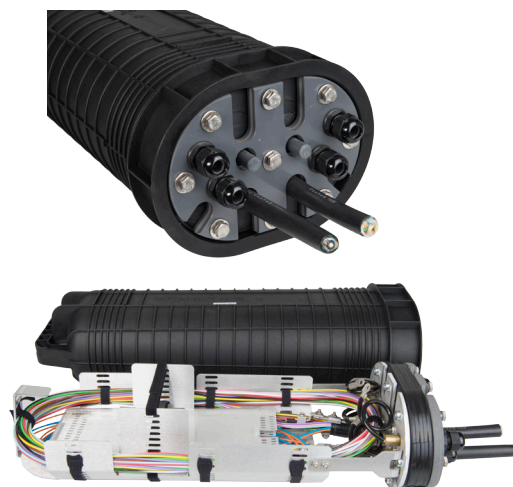
## 570 DIELECTRIC END PLATE:

- 6 Cable Entry Ports
  - 4 Backbone ports accept cable up to 0.875"
  - 2 Lateral ports accept up to 0.750" OD
- Split Seal
  - All Ports accessible without service interruption



## 570 ISOLATED GROUND END PLATE:

- 6 Isolated Ground Ports
- Connect or disconnect armor ground on outside of the closure
- Water tight compression connector seals around ground wires



## 570 OPGW END PLATE:

- 6 Cable Entry Ports
  - 4 OPGW
  - 2 ADSS or buried lateral cable
- Split Seal
- OPGW clamping system has substantial torque resistance and 1000 lbs pull out strength





# 790 Series

## 790 DIELECTRIC END PLATE:

- 8 Cable Entry Ports
  - 4 Backbone ports accept cable up to 1.25"
  - 4 Lateral ports accept up to 0.875" OD
- Split Seal
  - All ports accessible without service interruption

*Image shown with optional Express Bracket*



## 790 ISOLATED GROUND END PLATE:

- 8 Isolated Ground Ports
  - 4 Backbone ports accept cable up to 1.25"
  - 4 Lateral ports accept up to 0.875" OD
- Connect or disconnect armor grounds on outside of the closure
- Water tight compression connector seals around ground wires

*Image shown with optional Express Bracket*



## 790 OPGW END PLATE:

- 8 Cable Entry Ports
  - 4 OPGW
  - 4 ADSS or buried lateral cable
- Split Seal
- OPGW clamping system has substantial torque resistance and 1000 lbs pull out strength



SPLICE  
ENCLOSURES

# Closure Ordering Information

## ADSS OR ISOLATED GROUND END CAP

Example Part Number: PSCA790WEB

Hubbell Prefix

Closure Type

A - ADSS

I - Isolated Grounds

Closure Size

570

790

Tray Capacity

S - Standard for 12, 18, 24

W - Wide for 36, 48 (790 only)

Express Bracket (790 only)

EB

## OPGW END CAP

Example Part Number: PSCO7904300000WEB

Hubbell OPGW Prefix

Closure Size

570

790

Number of OPGW Ports

4 Maximum

Outer Diameter of OPGW

Decimal Inches

Diameter of Al Tube

Decimal Inches (if SS Tubes, "000")

Tray Capacity

S - Standard for 12, 18, 24

W - Wide for 36, 48 (790 only)

Express Bracket (790 only)

EB

PSC

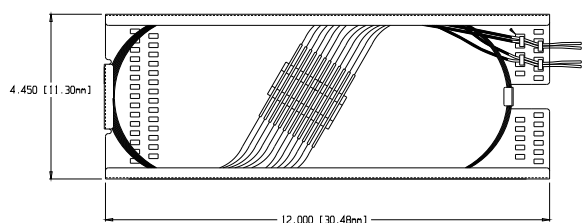
PSCO

SPLICE  
ENCLOSURES

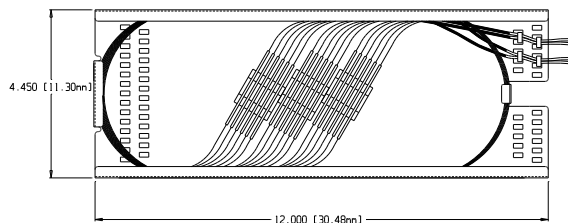
# Splice Trays

## OPTION #

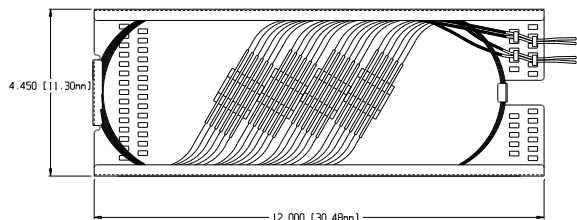
1	PSC20512	12 FIBER STANDARD SPLICE TRAY SINGLE FIBER SPLICE
2	PSC20518	18 FIBER STANDARD SPLICE TRAY SINGLE FIBER SPLICE
3	PSC20524	24 FIBER STANDARD SPLICE TRAY SINGLE FIBER SPLICE
4	PSC20548	48 FIBER WIDE SPLICE TRAY FOR 790 ONLY
5	PSC205144	SPLICE TRAY 144 RIBBON FIBER W/ HEAT SHRINK FUSION CHIP
6	PSC20514TT	TRANSITION TRAY FOR SEPARATING FIBERS (SINGLE OR RIBBON)
1, 2, 3, 4	PSC10002	HEAT SHRINK SLEEVE SINGLE FUSION 2.375" LENGTH
5	PSC10002F	HEAT SHRINK SLEEVE MASS FUSION 1.5" LENGTH



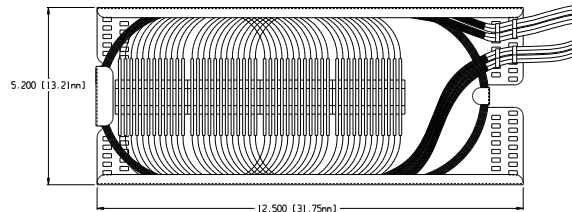
OPTION 1



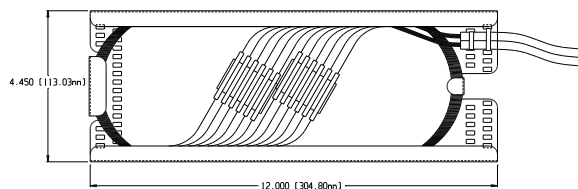
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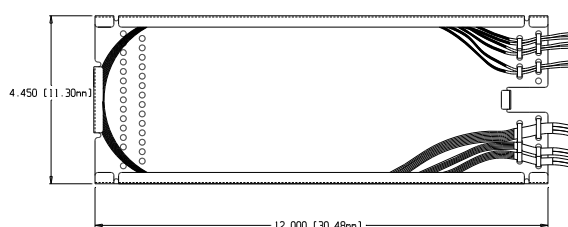
OPTION 3



OPTION 4



OPTION 5



OPTION 6

SPLICE  
ENCLOSURES

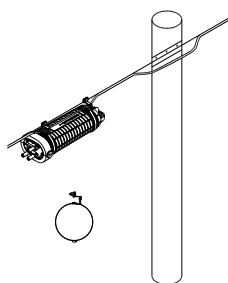
# Mounting Options and Accessories

## OPTION #

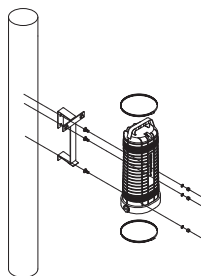
1	PSC570AB	570 AERIAL HANGING BRACKET ADJUSTABLE
1	PSC790AB	790 AERIAL HANGING BRACKET ADJUSTABLE
2	PSC700VCB	VERTICAL CLOSURE BRACKET FOR POLE OR WALL MOUNT
3	PSC730CB	COIL STORAGE BRACKET 60" FOR OPGW USED WITH VERTICAL CLOSURE BRACKET
3	PSC730CB3	COIL STORAGE BRACKET 30" FOR ADSS USED WITH VERTICAL CLOSURE BRACKET
4	PSC570BRC	570 14GA STAINLESS STEEL BULLET RESISTANT CANNISTER
4	PSC790BRC	790 14GA STAINLESS STEEL BULLET RESISTANT CANNISTER
5	PSC730TPMB	TOWER POST MOUNTING BRACKET

## ADD ONS AND ACCESSORIES

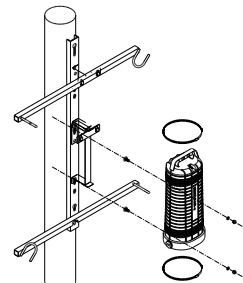
PSC570IGCBO	570 CABLE BUILD OUT KIT FOR 2 ADDITIONAL ARMORED CABLES W/ GROUNDS
PSC570ADCBO	570 CABLE BUILD OUT KIT FOR 2 ADDITIONAL DIELECTRIC CABLES
PSC790IGCBO	790 CABLE BUILD OUT KIT FOR 2 ADDITIONAL ARMORED CABLES W/ GROUNDS
PSC790ADCBO	790 CABLE BUILD OUT KIT FOR 2 ADDITIONAL DIELECTRIC CABLES
PSC570OPGWCLAMPS	570 SET OF OPGW CLAMPS FOR ADDITIONAL 3RD OR 4TH CABLE ENTRY
PSC57010CK	570 CONDUIT KIT
PSC79010CK	790 CONDUIT KIT
PSC730PKS4	OPGW POTTING KIT FOR UP TO 4 TRAYS
	2 - LARGE POTTING KIT MOLDS (>.750")
	2 - SMALL POTTING KIT MOLDS (<.750")
	8 - 48" NYLON TUBES
	6 - 8" POLY TUBES
PSC730PKS8	OPGW POTTING KIT FOR UP TO 8 TRAYS
	2 - LARGE POTTING KIT MOLDS (>.750")
	2 - SMALL POTTING KIT MOLDS (<.750")
	16 - 48" NYLON TUBES
	6 - 8" POLY TUBES



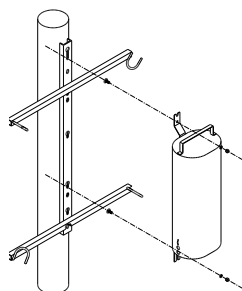
OPTION 1



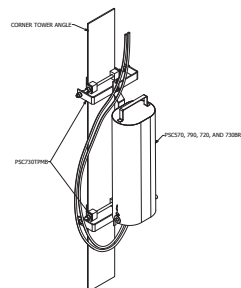
OPTION 2



OPTION 3A & B



OPTION 4



OPTION 5





## Safe and Effective Solutions

Hubbell Power Systems offers a broad range of innovative and dependable bonding and grounding products. Engineering expertise and leading-edge manufacturing facilities provide our customers with continuous design improvements for a worry-free equipment installation.

Our products meet all applicable standards and certifications and come with technical support for smooth, safe operation. Our quality assurance practice is peace of mind that comes with the HPS and Electric Motion Company brands.

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)



# Ground Rods

## COPPER BONDED

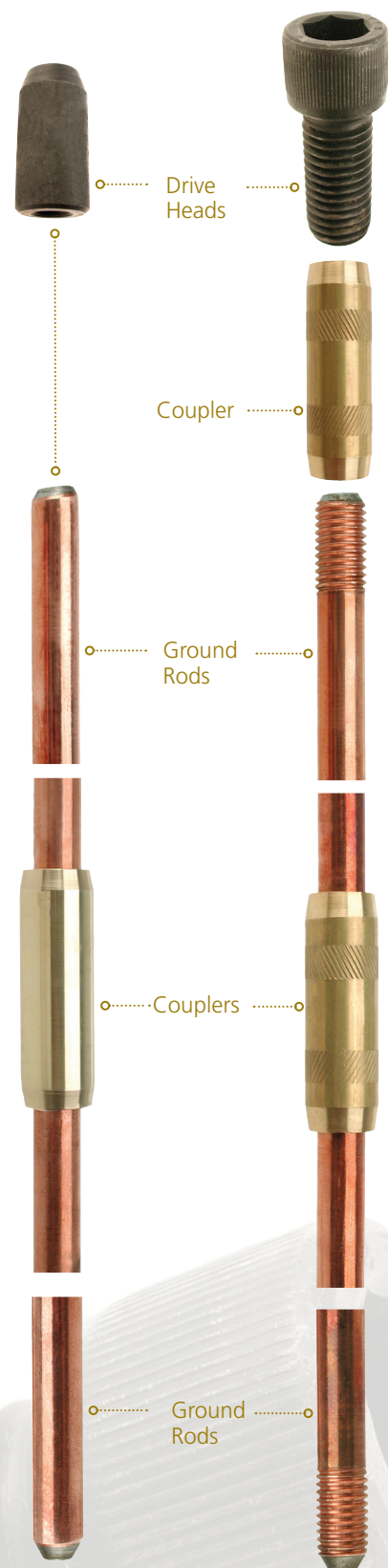
- Manufactured by molecularly bonding 99.95% pure electrolytic copper to high-strength steel core rod.
- Core rod is rated for 80,000 lb tensile strength for driving into hard soils.
- Satisfies the requirements of UL and NEMA GR-1 specifications.
- Threaded and non-threaded Ground Rods are offered in both 10 mil and 13 mil (RUS specified) plating thickness.
- Each rod permanently marked with company designation (HPS) and catalog number.
- Available accessories include couplers, drive heads, drive tips, ground rod clamps and conductive paste.
- A complete line of bronze ground rod clamps are available for connecting copper cable in parallel with the copper bonded Ground Rod.
- A heavy-duty clamp is available for high-pressure applications.

### Copper Bonded Ground Rods – Non-Threaded

Catalog Number	Plating <sup>(1)(2)</sup> Thickness mil	Rod Diameter Inches	Rod Length ft	Approx Ship Wt lb Per Each
C615885	5	5/8	8	6.80
C615855	5	5/8	5	4.20
C611380	10	1/2	8	5.40
C611300	10	1/2	10	7.06
C615840	10	5/8	4	3.20
C615850	10	5/8	5	4.20
C615860	10	5/8	6	5.20
C615880	10	5/8	8	6.80
C615800	10	5/8	10	8.60
C613450	10	3/4	5	8.60
C613460	10	3/4	6	7.88
C613480	10	3/4	8	9.80
C613400	10	3/4	10	12.00
C615883	13	5/8	8	6.80
C615803	13	5/8	10	8.60
C613483	13	3/4	8	9.80

(1) 10 mil plating thickness meets the requirements of ANSI/UL 467-1984 and ANSI/NEMA GR-1.

(2) 13 mil plating thickness meets the requirements of ANSI/UL 467-1984 and ANSI/NEMA GR-1.



Non-Threaded

Threaded

# Ground Rods

## COPPER BONDED

### Coupler for Non-Threaded Ground Rods

Catalog Number	Rod Diameter Inches	Approx Ship Wt lb Per Each
CCC12	1/2	0.40
CCC58	5/8	0.56
CCC34	3/4	0.60

### Drive Head for Non-Threaded Ground Rods

Catalog Number	Rod Diameter Inches	Approx Ship Wt lb Per Each
CDH12	1/2	0.70
CDH58	5/8	0.56
CDH34	3/4	0.50

### Threaded Ground Rods

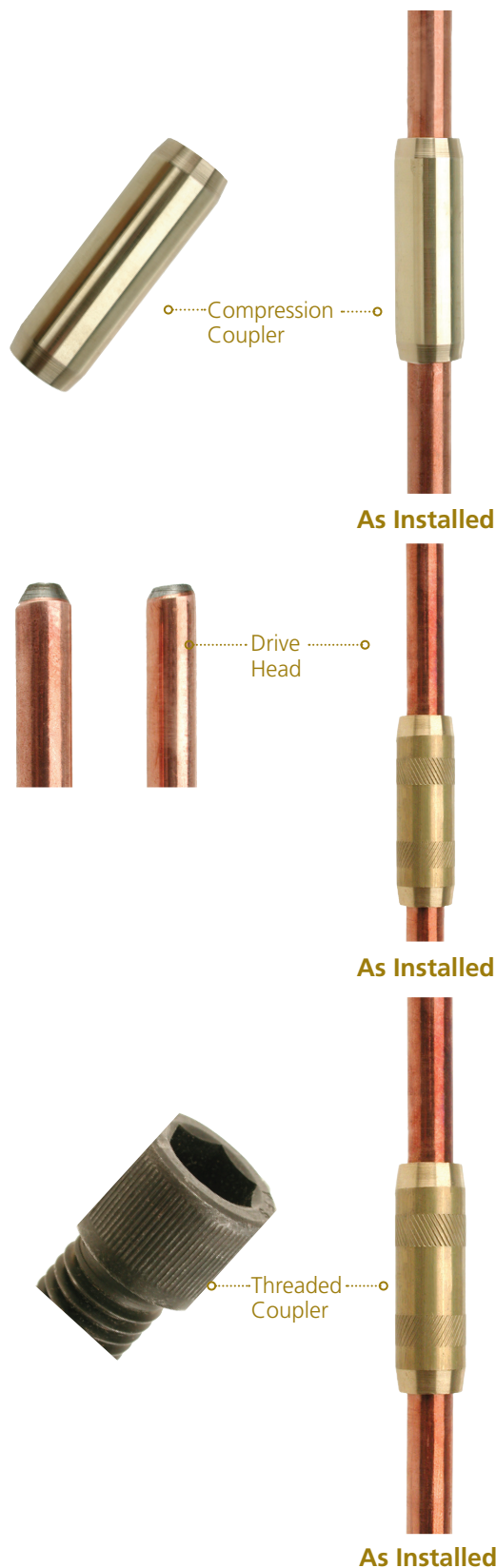
Catalog Number	Plating Thickness mil <sup>(1) (2)</sup>	Rod Diameter Inches	Rod Length ft	Approx Ship Wt lb Per Each
C631380	10	1/2	8	5.50
C631300	10	1/2	10	6.50
C635840	10	5/8	4	3.20
C635850	10	5/8	5	4.20
C635860	10	5/8	6	5.00
C635880	10	5/8	8	6.80
C635800	10	5/8	10	8.60
C633460	10	3/4	6	7.88
C633480	10	3/4	8	9.80
C633400	10	3/4	10	12.00
C635883	13	5/8	8	7.05

(1) 10 mil plating thickness meets the requirements of ANSI/UL 467-1984 and ANSI/NEMA GR-1.

(2) 13 mil plating thickness meets the requirements of ANSI/UL 467-1984 and ANSI/NEMA GR-1.

### Coupler for Threaded Ground Rods

Catalog Number	Rod Diameter Inches	Approx Ship Wt lb Per Each
CTC12	1/2	0.40
CTC58	5/8	0.56
CTC34	3/4	0.60



BONDING &  
GROUNDING

# Ground Rods

## COPPER BONDED

### Drive Head for Threaded Ground Rods

Catalog Number	Rod Diameter Inches	Approx Ship Wt lb Per Each
CTDH12	1/2	0.12
CTDH58	5/8	0.12
CTDH34	3/4	0.40

### Ground Rod or Pipe Clamp – AL/Cu

Catalog Number	Type	Rod Diameter Inches	Weight Each lb (kg)
GC1	Standard	3/8 - 1	.11 (.05)

NOTE: Refer to Anderson & Fargo Connector Catalog for additional information.

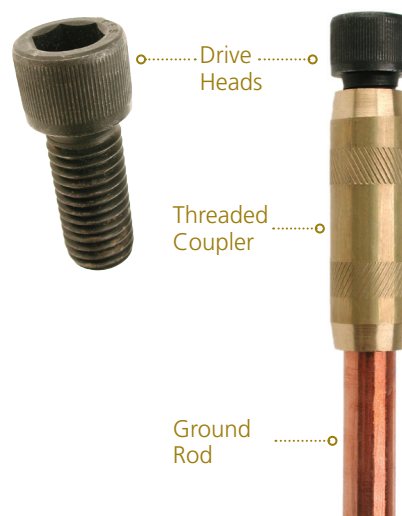
### Ground Rod Clamps – Bronze

Catalog Number	Type	Rod Diameter Inches	Weight Each lb (kg)
GC4	Normal Duty	1/2	.09 (.04)
GC5G5	Normal Duty	5/8	.11 (.05)
GC6	Normal Duty	3/4	.13 (.06)
GC10301	Heavy Duty	1/2	.24 (.11)
GC10302	Heavy Duty	5/8	.38 (.17)
GC10303	Heavy Duty	3/4	.51 (.23)

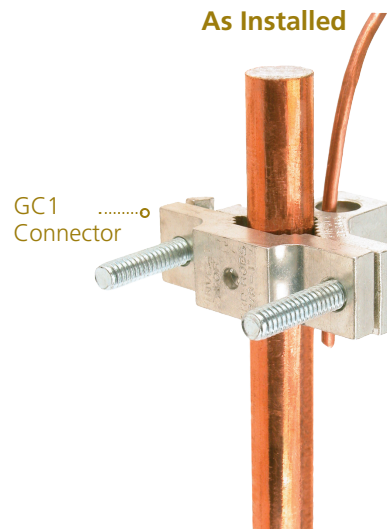
NOTE: Refer to Anderson & Fargo Connector Catalog for additional information.

### Conductive Paste

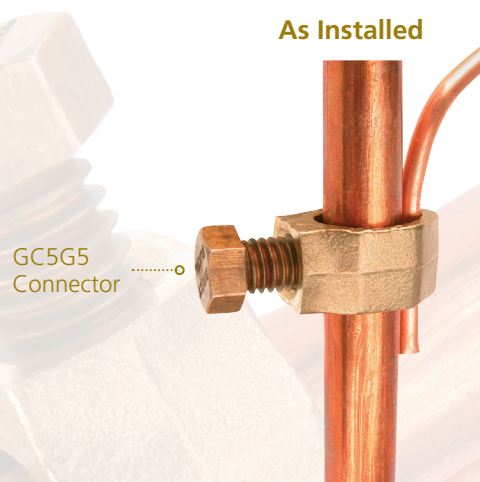
Catalog Number	Description	Standard Package
CP113	8 oz Bottle	12 pcs



As Installed



As Installed



As Installed

# Ground Rods

## GALVANIZED

- Ground Rods are available with or without copper wire.
- Made of high-carbon, open-hearth steel for maximum strength to resist bending.
- Hot dip galvanized steel rod.

Catalog Number			Dia Inches	Length ft	Approx Ship Wt lb Per Each
Standard	Standard With Electro- Brazed Pigtail <sup>(2)</sup>	Drive Head Bolt-Type <sup>(3)(4)</sup>			
8565	—	—	1/2	5	3.40
8566	—	—	1/2	6	4.00
8576	—	—	5/8	6	6.00
8578 <sup>(1)</sup>	C2030107 <sup>(1)</sup>	C2030377 <sup>(1)</sup>	5/8	8	8.00/8.60/8.93
8580	—	—	5/8	10	10.24
8618 <sup>(1)</sup>	—	—	3/4	8	12.00
8620	—	—	3/4	10	14.60

- (1) RUS listed.  
(2) The electro-brazed pigtail is No. 6 tinned copper on 5/8" and 3/4" rod.  
(3) Bolt-Type Drive Head Ground Rods have surfaces of head and integral clamp tinned.  
(4) Non-ferrous bolt with lockwasher accommodates No. 3 to No. 8 stranded wire.



Bolt-Type  
Drive Head



Standard  
Electro-Brazed  
Pigtail



BONDING &  
GROUNDING

tough



# Ground Rods

## GALVANIZED SECTIONAL

- Made of high-carbon steel as standard.
- All rods have a  $\frac{5}{8}$ " cut thread on top and bottom.
- Hot dip galvanized.

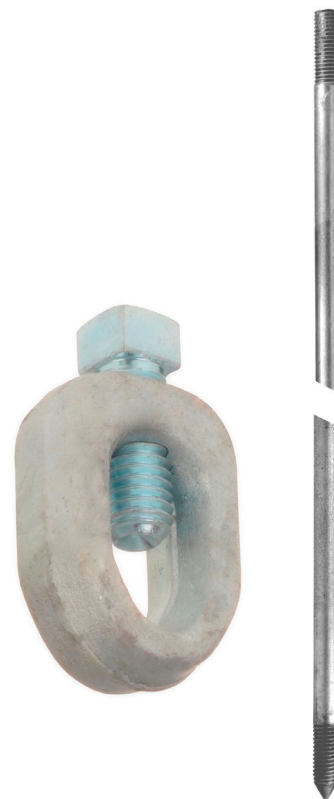
Catalog Number	Description	Dimensions		Approx Ship Wt lb Per Each
		Diameter Inches	Length	
C2030227	Cone Point with $\frac{5}{8}$ " Thread	$\frac{5}{8}$	5'	5.20
C2030052 <sup>(1)</sup>	Cone Point with $\frac{5}{8}$ " Thread	$\frac{5}{8}$	8'	8.60
8512 <sup>(1)</sup>	Cone Point with $\frac{5}{8}$ " Thread	$\frac{5}{8}$	10'	10.43
8611 <sup>(1)</sup>	Coupling for Above	$\frac{5}{8}$	2"	0.18
C2030453	Threadless Sectional Rod	$\frac{5}{8}$	8'	8.00
C2030430	Threadless Sectional Rod	$\frac{5}{8}$	10'	10.00
C2030458	Threadless Coupling	$\frac{5}{8}$	—	1.50

(1) RUS listed.

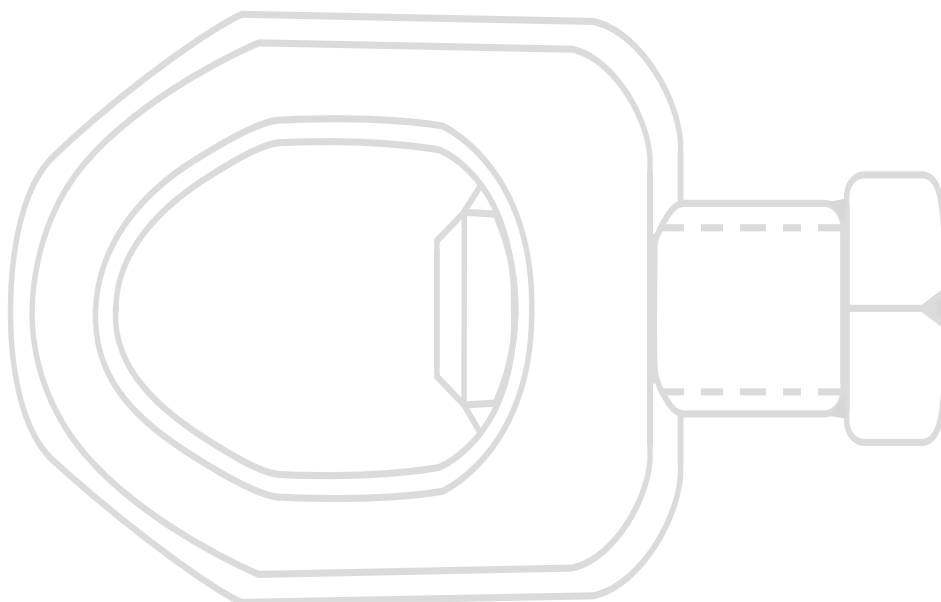
## CLAMPS

- Heavy duty forged steel clamps provide secure, low resistance connections. One piece bodies.
- $\frac{1}{2}$ " square-head cup point set screw is hot dip galvanized.

Catalog Number	Rod Diameter Inches	Wire Diameter Minimum	Wire Diameter Maximum	Approx Ship Wt lb Per Each
C2030344	$\frac{5}{8}$	.128	.460	0.34
C2030345	$\frac{3}{4}$	.128	.460	0.36



No. 8512





# Bonding & Grounding Straps, Harnesses & Braid

## BONDING BRAID

### Plain Bonding Braid

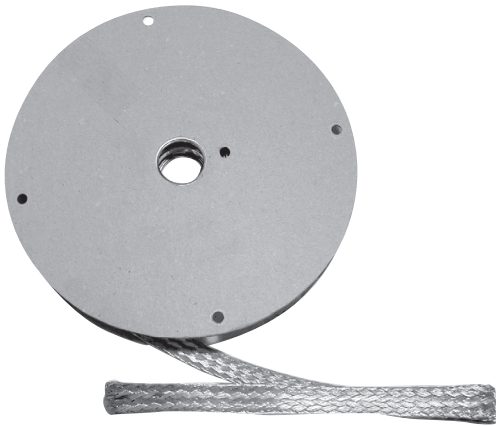
A roll of flexible, woven, tinned copper wire, equivalent to a #6 AWG.

#### APPLICATIONS

- Provides shield continuity across cable openings
- Ideal for use with heat shrinkable material

#### FEATURES

- Can be cut to any desired length
- Tinned to reduce the rate of corrosion
- Flexibility allows movement of cable without loosening of bond clamps
- EM 2075 has blue webbed covering pre-installed at factory before spooling



#### Ordering Information

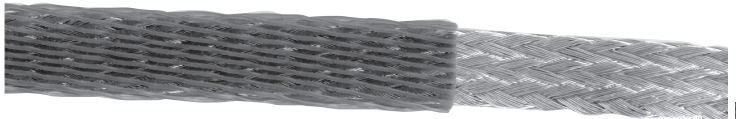
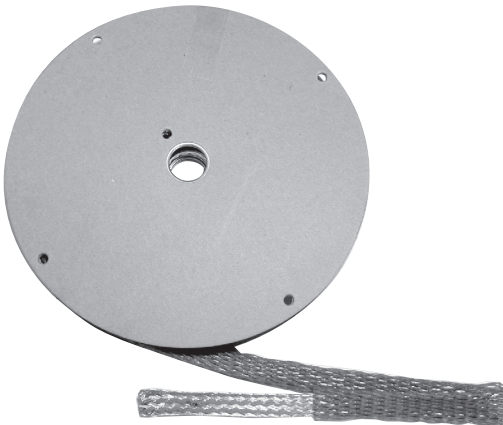
**EM 2004** 25-foot spool

*Standard packaging: 2.7 lb / sp, 10 sp/bx.*

**EM 2005** 100-foot spool

*Standard packaging: 9 lb / sp, 2 sp/bx.*

**EM 2004-1-100** 100-foot spool with black PVC covering



#### Ordering Information

**EM 2075** 25-foot spool with blue web insulator

*Standard packaging: 3.4 lb / sp, 10 sp/bx.*

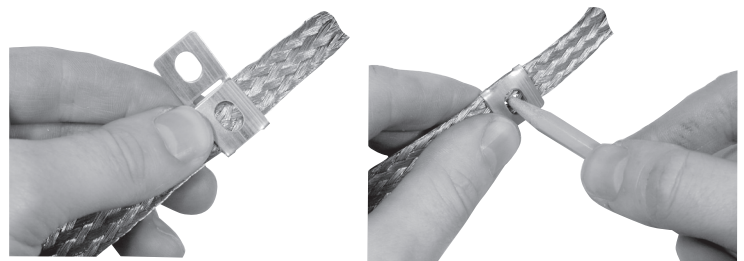
Add suffix **-G** for green web insulator.

### Braid Ferrule

When using plain braid, the tinned copper ferrule surrounds all of the strands at the termination point.

#### Ordering Information

**EM C4000** Braid Ferrule



For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)

# Bonding & Grounding Straps, Harnesses & Braid

## BONDING BRAID, CONTINUED

### Bonding Braid with Eyelets

#6 AWG braided tinned copper wire with factory-installed eyelets, 3" spacing, hole diameter 1/4".



#### APPLICATIONS

- Rehab of pedestals and aerial closures
- Provides bond when using heat shrinkable material

#### FEATURES

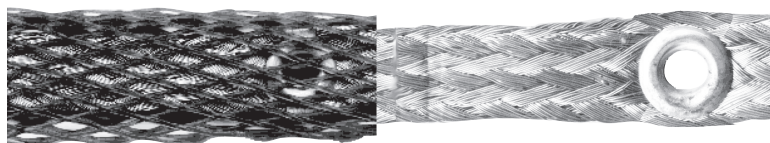
- Coils can be cut to length (no waste)
- Low profile design on eyelet
- Braid flexibility allows cables to move
- EM 2030 has blue webbed covering pre-installed at factory before spooling



#### Ordering Information

**EM 2025** 25-foot spool uninsulated

Standard packaging: 2.8 lb / sp, 10 sp/bx.



#### Ordering Information

**EM 2030** 25-foot spool with blue web insulator

Standard packaging: 3.5 lb / sp, 10 sp/bx.

Add suffix **-G** for green web insulator.

# Bonding & Grounding Straps, Harnesses & Braid

## BONDING BRAID, CONTINUED

### Ultrabond

#6 AWG braided copper wire with factory-installed eyelets with arms, solder-connected, 3" spacing, hole diameter 1/4".

#### APPLICATIONS

- Rehab of pedestals and aerial closures
- Provides bond when using heat shrinkable material

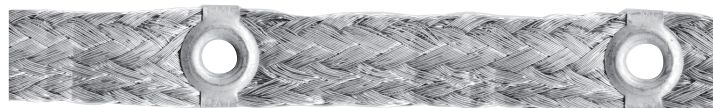
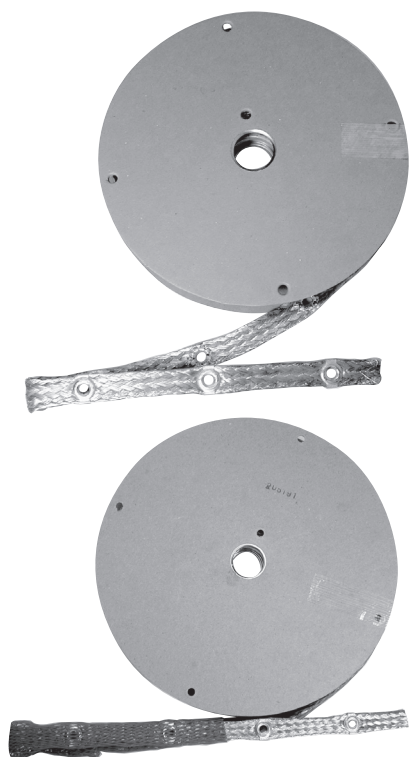
#### FEATURES

- Compact design
- Gas-tight crimp maximizes conductivity by reducing cold flow and corrosion

- Easily trimmed to the desired length with splicer's scissors; eliminates waste
- Flexibility allows movement of cable without loosening connections
- Factory-installed terminations provide maximum pull-out strength
- Prepunched mounting holes are safer, eliminating the need to use a sharp instrument



RUS Listed



#### Ordering Information

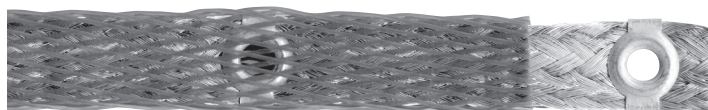
**EM 2050** 25-foot spool

*Standard packaging: 3.3 lb / sp, 10 sp/bx.*

**EM 2052** 50-foot spool

*Standard packaging: 6.2 lb / sp, 10 sp/bx.*

**EM 2050-6** 6" eyelet spacing, 25-foot spool



#### Ordering Information

**EM 2051** 25-foot spool with blue web insulator

*Standard packaging: 3.5 lb / sp, 10 sp/bx.*

**EM 2053** 50-foot spool with blue web insulator

*Standard packaging: 7 lb / sp, 10 sp/bx.*

### Double-Hole Ultrabond

#10 AWG braided copper wire with factory-installed eyelets with arms, solder-connected, 2-1/2" hole diameter #10.



#### Ordering Information

**EM 2070** 25-foot spool

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)



# Bonding & Grounding Straps, Harnesses & Braid

## BONDING BRAID, CONTINUED

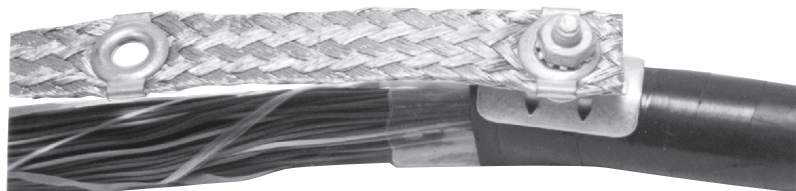
### Ultrabond II with gas-tight crimped connections



#6 AWG braided tinned copper wire with factory-installed eyelets, 3" spacing, hole diameter 1/4".

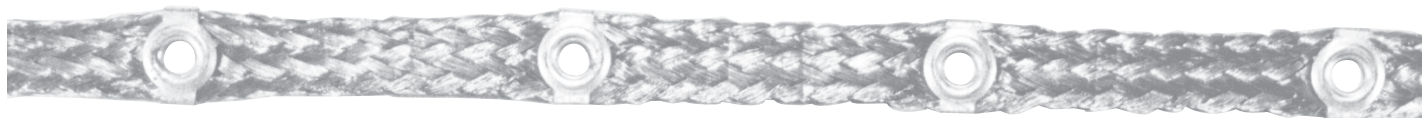
#### FEATURES

- One-piece eyelet with arms will not spin or rotate during installation
- Gas-tight crimp maximized conductivity by reducing cold flow and corrosion
- Easily trimmed to the desired length with splicer's scissors; eliminates waste
- Simple design provides for easy, foolproof installation, terminates like any standard connection
- Flexibility allows movement of cable without loosening connections
- Factory-installed terminations provide maximum pull-out strength; no need to carry special tools
- Pre-punched mounting holes are safer, eliminating the need to use a sharp instrument
- Solderless termination
- Unique patented design



#### APPLICATIONS

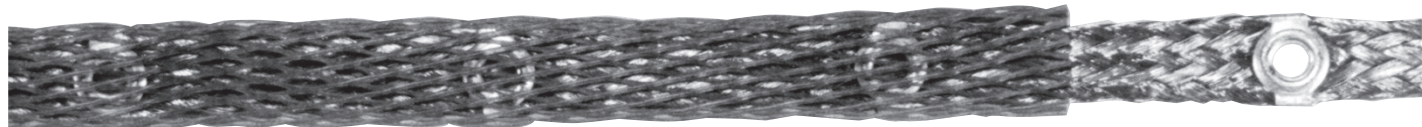
- Grounding and bonding in pedestals and aerial closures
- Provides bond when using heat-shrinkable material
- Provides bond when using closures not equipped with bonding harnesses



#### Ordering Information

**EM 2080** 25-foot spool

Standard packaging: 3.3 lb / sp, 10 sp/box.



#### Ordering Information

**EM 2081** 25-foot spool with blue web insulator

Standard packaging: 3.6 lb / sp, 10 sp/bx.

Add suffix **-G** for green web insulator.

**EM 2012-3SD** Ultrabond II with 3/8" holes instead of 1/4"

**EM 2010-3AU-25** Same as above, except packaged in a dispenser box instead of on a spool

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)

# Bonding & Grounding Straps, Harnesses & Braid

## BONDING BRAID, CONTINUED

### Double Hole Bonding Braids, #6 AWG

Any bonding braids or harnesses are available in double-hole versions by specifying the usual part number and adding the suffix **-4DH**; e.g., **EM 2050-4DH**. Double eyelets are 3/8" center to center; spacing between sets of eyelets is 4". These will fit standard double-studded shield connectors and ground bars. 25' spool is standard; for other lengths, add suffix after 4DH, e.g., **EM 2050-4DH-1000** for 1000' spool.



### Braid Assemblies, #6 AWG

For bonding across splices.

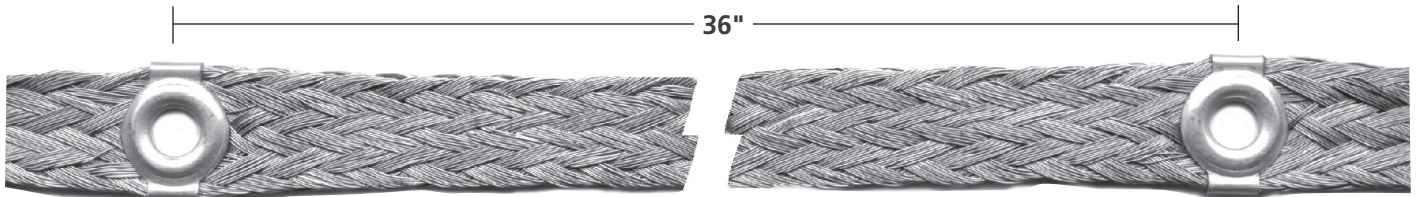
#### Ordering Information

**EM 2111** – 36" Bonding Harness, 1/4" eyelet in each end.

*Standard packaging: 50/lb, 15 lb/lb.*

**EM 2112** – 36" Bonding Harness with Solder-Dipped Ends, 1/4" eyelet in each end.

*Standard packaging: 1/lb, 100/lb, 30 lb/lb.*



### Smaller Braid Assemblies

Other braid is available in gauges from #6–#14 AWG, in various length assemblies or rolls, with various size eyelets or terminations. Call for samples or further information.

Shown below: #10 AWG braid, 18", 24/4/30, with double-hole, tin-plated copper terminals with 5/16" diameter holes, 7/8" spacing.



#### Ordering Information

**EM 1018-.875DH.312**

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)



# Bonding & Grounding Straps, Harnesses & Braid

## BONDING BRAID, CONTINUED

### Braid Assemblies



Constructed of solid, tin-plated copper.

### Braid Numbering System

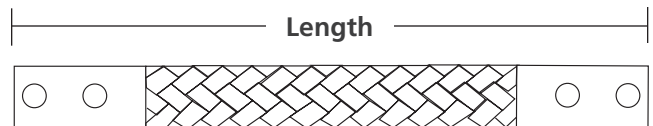
EM	CMA P/N Designation	Length	Hole Spacing	Hole Diameter
----	---------------------	--------	--------------	---------------

**Example: EM B3-24-134-916**

is three braids in a ferrule, CMA 463,000, 24" long, with 1-3/4" hole spacing and 9/16" hole diameter.

For part numbering purposes, please convert measurements according to the following examples:

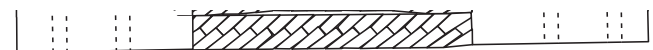
1/2 = 12	1-1/4 = 114
5/8 = 58	1-1/2 = 112
9/16 = 916	1-3/4 = 134
1 = 100	2 = 200



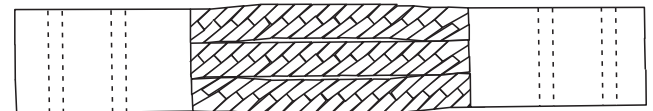
**No. of Braids in Ferrule:**  
1



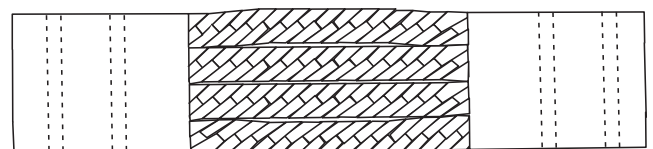
2



3



4



**Please call the factory at 860/379-8515 to discuss custom braids.**

CMA P/N Designation	No. of Braids in Ferrule	Total Circular Mils in Braid (approx.)	Ampere Rating (indoors)
A1	1	77,000	190
A2	2	154,500	340
A3	3	231,500	470
A4	4	309,000	600
B1	1	154,500	330
B2	2	309,000	530
B3	3	463,000	700
B4	4	617,500	850
C1	1	231,500	360
C2	2	463,000	600
C3	3	694,500	820
C4	4	926,000	1,000
D1	1	309,000	415
D2	2	617,500	700
D3	3	926,000	960
D4	4	1,235,000	1,200

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Bonding & Grounding Straps, Harnesses & Braid

## GROUNDING HARNESSES

### #6 AWG Insulated and Bare Flexible Harnesses

Standard lengths: 6", 11", and 18", all RUS listed. Ring terminals, standard hole size #10, insulated and bare versions. For bonding and grounding in pedestal new construction and retrofitting. Please see chart on pages G17 & G18 for other ordering options.



RUS Listed



LISTED  
93D6



#### Ordering Information

**EM 8100-18.10** – 18", insulated

Standard packaging: 20/bd, 200/bx, 35 lb/bx.



#### Ordering Information

**EM 8100-11.10** – 11", insulated

Standard packaging: 20/bd, 200/bx, 23 lb/bx.



#### Ordering Information

**EM 8100-18B.10** – 18", insulated

Standard packaging: 20/bd, 200/bx, 32 lb/bx.



#### Ordering Information

**EM 8100-6.10** – 6", insulated

Standard packaging: 20/bd, 200/bx, 14 lb/bx.



#### Ordering Information

**EM 8100-6B.10** – 6", insulated

Standard packaging: 20/bd, 200/bx, 12 lb/bx.



#### Ordering Information

**EM 8100-11B.10** – 11", insulated

Standard packaging: 20/bd, 200/bx, 19 lb/bx.

BONDING &  
GROUNDING

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)

# Bonding & Grounding Straps, Harnesses & Braid

## GROUNDING HARNESSES, CONTINUED

### #6 AWG Flexible Harnesses with Colored Insulation for Multi-Directional Cable Identification



Ring terminals, standard mounting hole sizes #10 and 1/4".

Colors available: Blue (central office), Orange (north), Brown (south), Slate (west), Green (east), Red (house). For bonding and grounding in pedestal new construction and retrofitting.

Also available as a pedestal kit: five of a fixed length of harness, one each blue, orange, brown, slate, and green.



#### Ordering Information :

EM 8100 - \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_  
Length of harness      Ring terminal      Color of insulation  
in inches                  mounting hole size      BL = blue, OR = orange, BR = brown,  
   .25 or .10                  SL = slate, GR = green, R = red

If kit is desired (five colors—does not include red), add the suffix KIT at end instead of color code.

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Bonding & Grounding Straps, Harnesses & Braid

## MICROBOND

### Ground Straps on a Roll with clear, see-through insulation

Construction: Tinned copper rope-lay with pure copper termination clip. Equivalent to a #6 AWG. Standard terminations every 4 inches, with 1/4" diameter mounting holes.

#### FEATURES

- Comes with clear PVC insulation in order to locate mounting holes easily
- Clear insulation can come in any color. Various cables in a closure can be identified by colors of bonding harnesses
- Insulation is tight to harness, creates a neater look
- One-piece terminal clip for greater conductivity
- Gas-tight crimp minimizes corrosion
- Comes on a roll—can be cut to length with splicer's snips
- Simple design provides for easy, foolproof installation, terminates like any standard connection
- Flexibility allows movement of cable without loosening connections
- Factory-installed terminations provide maximum pull-out strength, no need to carry special tools
- Pre-punched mounting holes are safer, eliminating the need to use a sharp instrument
- Solderless termination
- Unique patented design



#### APPLICATIONS

- Continuous looping of ground wire from ground point to ground point with no breaks
- Grounding machinery needing flexible ground because of vibration
- Fence and gate electrical grounding to create various lengths at a site
- Provides bond when using heat shrinkable material
- Provides bond when using closure not equipped with bonding hardware

#### Ordering Information

**EM 06MB-25B-4.25**, uninsulated Microbond) can be used for bonding Tyco FOSC® closures.

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com



# Bonding & Grounding Straps, Harnesses & Braid

## MICROBOND, CONTINUED



Ordering Information **EM 06MB-25CBL-4.25** – 25' roll, with clear blue insulation, UV inhibitor.  
Standard packaging: 10 sp/lbx, 33 lb/lbx.



Ordering Information **EM 06MB-25COR-4.25** – 25' roll, with clear orange insulation, UV inhibitor.  
Standard packaging: 10 sp/lbx, 33 lb/lbx.



Ordering Information **EM 06MB-25CBR-4.25**– 25' roll, with clear brown insulation, UV inhibitor  
Standard packaging: 10 sp/lbx, 33 lb/lbx.



Ordering Information **EM 06MB-25CSL-4.25**– 25' roll, with clear slate insulation, UV inhibitor  
Standard packaging: 10 sp/lbx, 33 lb/lbx.



Ordering Information **EM 06MB-25CG-4.25**– 25' roll, with clear green insulation, UV inhibitor.  
Standard packaging: 10 sp/lbx, 33 lb/lbx.

All these colors are also available as a kit: 5 rolls, one of each color, in a dispenser box.  
Ordering information **EM 06MB-25KIT-4.25**



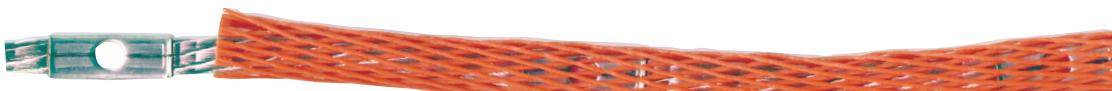
Ordering Information **EM 06MB-25C-4.25**– 25' roll, with clear insulation, UV inhibitor  
Standard packaging: 10 sp/lbx, 33 lb/lbx.



Ordering Information **EM 06MB-25B-4.25**– 25' roll, uninsulated  
Standard packaging: 10 sp/lbx, 31 lb/lbx.



Ordering Information **EM 06MB-25I-4.25**– 25' roll, insulated  
Standard packaging: 10 sp/lbx, 35 lb/lbx.



Ordering Information **EM 06MB-25W-4.25**– 25' roll, with web covering  
Standard packaging: 10 sp/lbx, 34 lb/lbx.

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com



# Bonding & Grounding Straps, Harnesses & Braid

## #6 AWG BONDING HARNESS ORDERING GUIDE

Please note: "XX" in item numbers denotes assembly length.

### Untinned Standard

#### EM 3200 Series –Solid

Solid soft copper wire with a ring terminal on each end.



UNINSULATED

INSULATED

#### EM 3400 Series – 7-Strand

7-stranded wire with a ring terminal on each end.  
Standard "D" bond straps.



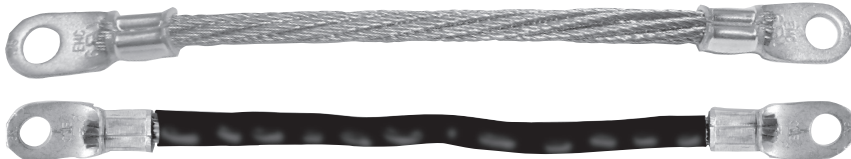
UNINSULATED

INSULATED

### Tinned Standard

#### EM 3600 Series – 49-Strand, 7 x 7/22 Rope-Lay Cable

Rope-Lay Cable 49 strands,  
rope-lay cable with a ring  
terminal on each end.

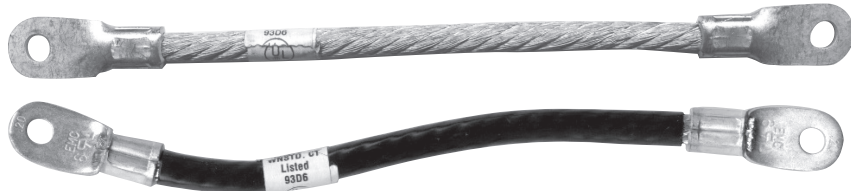


UNINSULATED

INSULATED

#### EM 8200 Series – 133-Strand, 7 x 19/27 Rope-Lay Cable

133 strands, rope-lay  
cable with a ring  
terminal on each end.

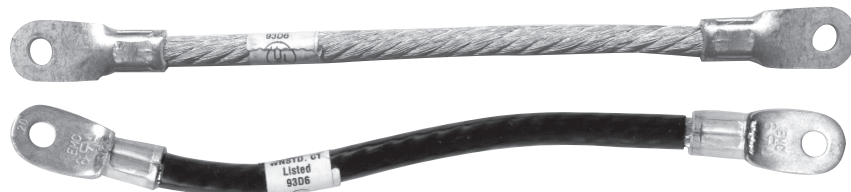


UNINSULATED

INSULATED

#### EM 8100 Series – 427-Strand, 7 x 61/32 Rope-Lay Cable

427 strands, rope-lay  
cable with a ring  
terminal on each end.

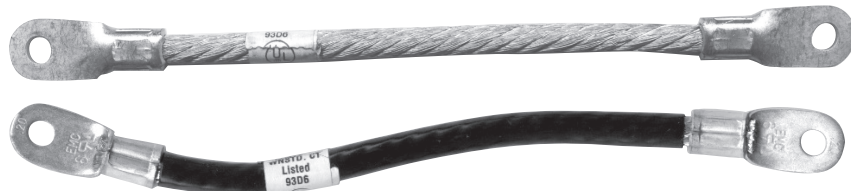


UNINSULATED

INSULATED

#### EM 7000 Series – 665-Strand, 7 x 95/34 Rope-Lay Cable

665 strands, rope-lay  
cable with a ring  
terminal on each end.

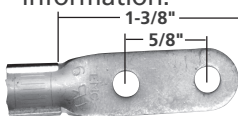


UNINSULATED

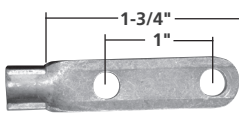
INSULATED

BONDING &  
GROUNDING

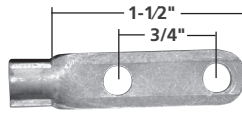
The harnesses above are also available with any of the terminals below. Please call our sales office for ordering information.



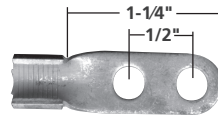
double #10 mounting  
hole ring terminal  
5/8" spacing:  
.625DH.10



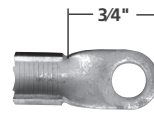
double 1/4" mounting  
hole ring terminal  
1" spacing:  
-1.DH



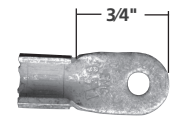
double 1/4" mounting  
hole ring terminal  
3/4" spacing:  
-DHT.75



double 1/4" mounting  
hole ring terminal  
1/2" spacing:  
-DHT.5



single 5/16"  
mounting hole  
ring terminal:  
.312







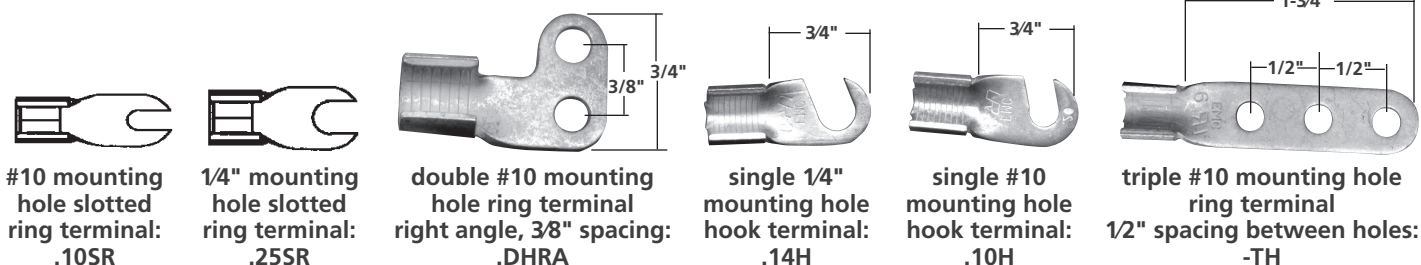
single #8  
mounting hole  
ring terminal:  
.8

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Bonding & Grounding Straps, Harnesses & Braid

## #6 AWG BONDING HARNESS ORDERING GUIDE, CONTINUED

 single 1/4" mounting hole ring terminal both ends	 double 1/4" mounting hole ring terminal both ends, 5/8" spacing	 single #10 mounting hole ring terminal both ends	 single 3/8" mounting hole ring terminal both ends	Insulation Color
EM 3200-XX EM 3205-XX	EM 3200-XX-DHDH EM 3205-XX-DHDH	EM 3200 (18") EM 3224 (24") EM 3205-XX.10	EM 3200-XX.375 EM 3205-XX.375	Standard insulation color is Black; please use the part numbers in the "INSULATED" rows at left for black insulation. For other colors, please add the following suffixes:  BL = Blue OR = Orange BR = Brown SL = Slate GR = Green GY = Green w/Yellow Stripe R = Red
EM 34XX EM 34XX-1	EM 34XX-DHDH EM 34XX-1-DHDH	EM 34XX-10 EM 34XX-1.10	EM 34XX.375 EM 34XX-1.375	
EM 36XX EM 36XX-1	EM 36XX-DHDH EM 36XX-1-DHDH	EM 36XX.10 EM 36XX1.10	EM 36XX.375 EM 36XX-1.375	
EM 8200-XXB.25 EM 8200-XX.25	EM 8200-XXB-DHDH EM 8200-XX-DHDH	EM 8200-XXB.10 EM 8200-XX.10	EM 8200-XXB.375 EM 8200-XX.375	
EM 8100-XXB-25 EM 8100-XX.25	EM 8100-XXB-DHDH EM 8100-XX-DHDH	EM 8100-XXB.10 EM 8100-XX.10	EM 8100-XXB.375 EM 8100-XX.375	
EM 7000-XXB.25 EM 7000-XX	EM 7000-XXB-DHDH EM 7000-XX-DHDH	EM 7000-XXB.10 EM 7000-XX.10	EM 7000-XXB.375 EM 7000-XX.375	



For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Bonding & Grounding Straps, Harnesses & Braid

## #6 AWG BOND STRAPS

Solid, soft bare copper wire with a 1/4" compression terminal on each end. Standard lengths: 6", 11", and 18". Please see chart on pages G17 and G18 for other ordering options.



### Ordering Information

**EM 3200-18** – 18", Standard packaging: 20/bd, 200/bx, 33 lb/bx.

**EM 3200-11** – 11", Standard packaging: 20/bd, 200/bx, 19 lb/bx.

**EM 3200-6** – 6", Standard packaging: 20/bd, 200/bx, 12 lb/bx.

## "D" BOND STRAPS

Seven strands, uninsulated stranded wire with a ring terminal on each end. Standard "D" bond straps. Standard lengths: 6", 11", and 18". Please see chart on pages G17 and G18 for other ordering options.



### Ordering Information

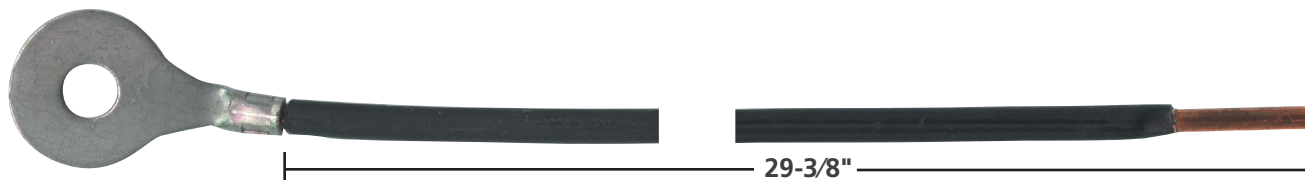
**EM 3418-18** – 18", Standard packaging: 20/bd, 200/bx, 30 lb/bx.

**EM 3411-11** – 11", Standard packaging: 20/bd, 200/bx, 19 lb/bx.

**EM 3406-6** – 6", Standard packaging: 20/bd, 200/bx, 12 lb/bx.

## JOINT PEDESTAL BOND STRAPS

Solid #6 AWG with black insulation, 1" strip at one end, 3/8" inside diameter ring terminal at the other. 29-3/8" long from end of conductor to barrel of crimp connector.



### Ordering Information

**EM 3205-29.375**, Standard packaging: 10/bg, 100/bx, 27 lb/bx.

## #4 AWG FLEXIBLE HARNESSES

#4 AWG rope-lay 7 x 85 x 32 bare tinned harnesses, with 1/4" ring terminals on each end. 16" long center to center.



### Ordering Information








**EM 04-16.25**

# Bonding & Grounding Straps, Harnesses & Braid

## COPPER GROUND WIRE

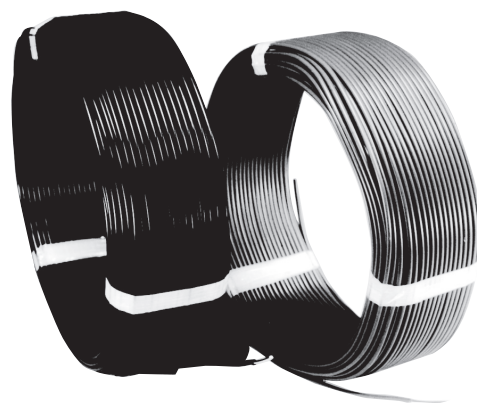
### Ordering Information

To create a part number, use the following guide. Standard products are indicated in bold type.

Basic Product	Add Plating	Add Insulation	Add Length in Feet
<b>EM 0140</b> (solid #14 AWG)	T - tinned <b>B - bare</b>	<b>N - none</b> <b>B - black</b> <b>SL - slate*</b> <b>G - green</b>	<b>XX</b>
<b>EM 1200</b> (solid #12 AWG)  LISTED 84D8	T - tinned <b>B - bare</b>	<b>N - none</b> <b>B - black</b> <b>SL - slate</b> <b>G - green</b>	<b>XX</b>
<b>EM 3226</b> (solid #10 AWG)  LISTED 84D8	T - tinned <b>B - bare</b>	<b>N - none</b> <b>B - black</b> <b>SL - slate</b> <b>G - green</b>	<b>XX</b>
<b>EM 3227</b> (solid #8 AWG)  LISTED 84D8	<b>B - bare</b>	<b>N - none</b> <b>B - black</b> <b>SL - slate</b> <b>G - green</b>	<b>XX</b>
<b>EM 3225</b> (solid #6 AWG)  LISTED 84D8	T - tinned <b>B - bare</b>	<b>N - none</b> <b>B - black</b> <b>SL - slate</b> <b>G - green</b>	<b>XX</b>
<b>EM 4500</b> (solid #6 AWG waterproof)	<b>B - bare</b>	<b>B - black</b> <b>G - green</b>	<b>XX</b>
<b>EM 4560</b> (solid #6 AWG with .120 thick PVC insulation)	T - tinned <b>B - bare</b>	<b>B - black</b> <b>G - green</b> <b>SL - slate</b>	<b>XX</b>
<b>EM 3400</b> (#6 AWG 7-strand)  LISTED 84D8	T - tinned <b>B - bare</b>	<b>B - black</b> <b>N - none</b> <b>SL - slate</b> <b>G - green</b>	<b>XX</b>
<b>EM 4000</b> (solid #4 AWG)  LISTED 84D8	T - tinned <b>B - bare</b>	<b>N - none</b> <b>B - black</b> <b>SL - slate</b> <b>G - green</b>	<b>XX</b>
<b>EM 2223</b> (solid #2 AWG)  LISTED 84D8	T - tinned <b>B - bare</b>	<b>N - none</b> <b>B - black</b> <b>SL - slate</b> <b>G - green</b>	<b>XX</b>

\*formerly GR - gray

Copper ground wire is available from Electric Motion in bare, tinned, insulated, and waterproof versions of various lengths. These are generally available in #12, #10, #8, #6, #4, or #2 AWG, hand coiled or on a spool.



### Loose Piece Crimp Terminals

#### Ordering Information

##### EM 6-10-R

#6 AWG Tin-Plated Copper Ring

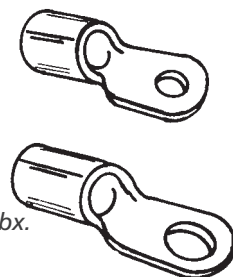
#10 mounting hole.

Standard packaging:

100/sm bx,

1000/lg bx,

1.5 lb/sm bx, 13 lb/lg bx.

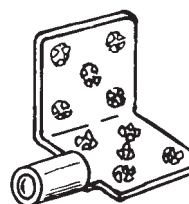


##### EM 6-25-R

#6 AWG Tin-Plated Copper Ring

1/4" mounting hole.

Standard packaging: 100/sm bx, 1000/lg bx, 1.5 lb/sm bx, 13 lb/lg bx.



##### EM 14-TF

#14 AWG TERMI-FOIL®

Standard packaging: 100/bg, 1000/bx, 1.16 lb/bg.

##### EM 10-TF

#10 and #12 AWG TERMI-FOIL®

Standard packaging: 100/bg, 1000/bx.

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com



# Bonding & Grounding Straps, Harnesses & Braid

## WATERPROOF #6 AWG GROUND WIRE FOR SEALED PLANT



### Features

- #6 AWG solid conductor
- Polyethylene insulation
- Insulation is bonded to the conductor for sealed plant
- Passes eight foot water head test
- Bonded construction prevents jacket from "acting like a water pipe" to buried splices in long-term field use

### Applications

- Ideal for fiber optic splice grounding because moisture adversely affects fiber strength and long-term reliability
- Maintains shield integrity when toning cables

### Ordering Information

#### EM 4500-BB500

500' coil, black insulation.

Standard packaging: 46 lb/coil. No minimum order.

BONDING &  
GROUNDING



# Bonding & Grounding Straps, Harnesses & Braid

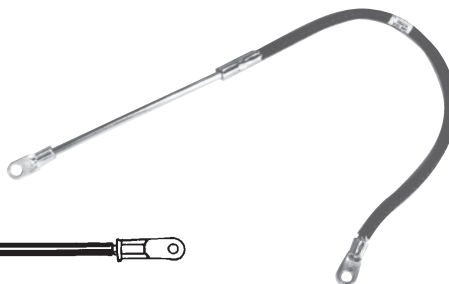
## #6 AWG FLEXIBLE/SOLID GROUND STRAPS

A combination solid #6 AWG and flexible #6 AWG ground strap with 1/4" ring terminal on each end. For bonding and grounding in sealed plant pedestals, closures, and PedCap RM™ closures. Combining solid, bare wire with stranded provides a flexible and airtight connection.

### Ordering Information

**EM 3210** – 6" solid, 12" stranded #6 AWG

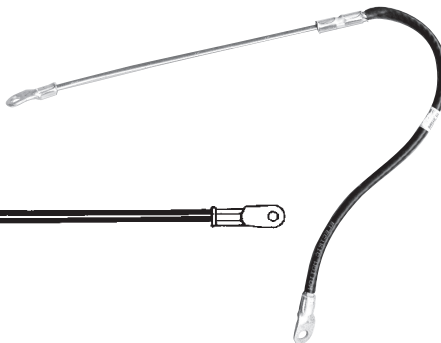
Standard packaging: 20/bd, 200/bx, 35 lb/bx.



### Ordering Information

**EM 3220** – 9" solid, 9" stranded #6 AWG

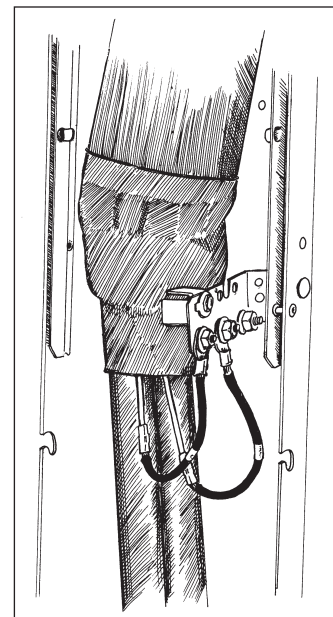
Standard packaging: 20/bd, 200/bx, 32 lb/bx.



### Ordering Information

**EM 3230** – 10" solid, 8" stranded #6 AWG

Standard packaging: 20/bd, 200/bx, 32 lb/bx.



### Ordering Information

**EM 3250** – 6" solid, 14" stranded #6 AWG

Standard packaging: 20/bd, 200/bx, 42 lb/bx.



**EM 3270** – 6" solid, 24" stranded #6 AWG

Standard packaging: 20/bd, 100/bx, 30 lb/bx. Minimum order 1 bundle.

**EM 3275** – 6" solid, 32" stranded #6 AWG

Standard packaging: 20/bd, 100/bx.

To order colored insulation for any of these straps, add the following suffixes:

**BL** = Blue

**BR** = Brown

**GR** = Green

**OR** = Orange

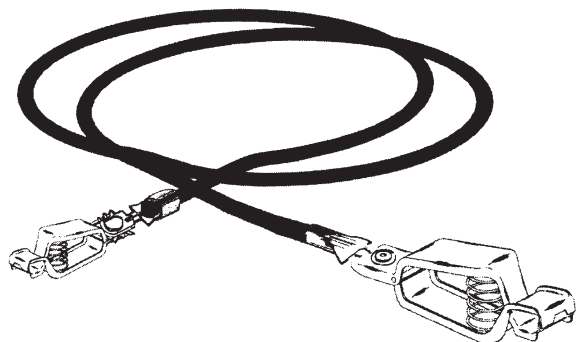
**SL** = Slate

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Bonding & Grounding Straps, Harnesses & Braid

## TEMPORARY BOND STRAPS

Available in 2-foot and 5-foot lengths, for temporary bonding across splices, to strand, and to streetlight fixtures. 5-foot bond provides shield continuity across cable openings during splicing operations. 2-foot bond can be used as a ground lead from one side of splice to the strand.



### Features

- #14 AWG conductor
- #24A and #11A test clips

### Ordering Information

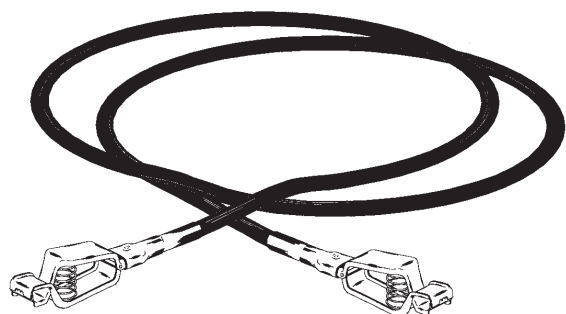
**EM 4009** – 2-foot strap

Standard packaging: 1/bg, 25/bx, 14 lb/bx.

**EM 4008** – 5-foot strap

Standard packaging: 1/bg, 25/bx, 15 lb/bx.

**EM 4008-04TPR** – #4 AWG conductor, 5-foot strap with black TPR insulation.



### Features

- #12 AWG conductor
- #27 test clips
- Type S wire

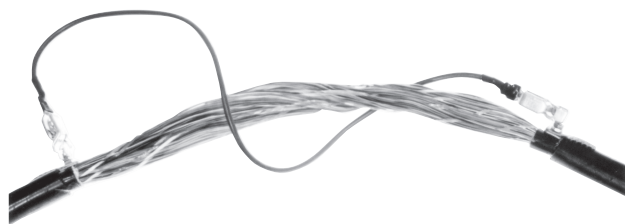
### Ordering Information

**EM 4011** – 2-foot strap

Standard packaging:  
10/bd, 100/bx, 17.45 lb/bx.

**EM 4010** – 5-foot strap

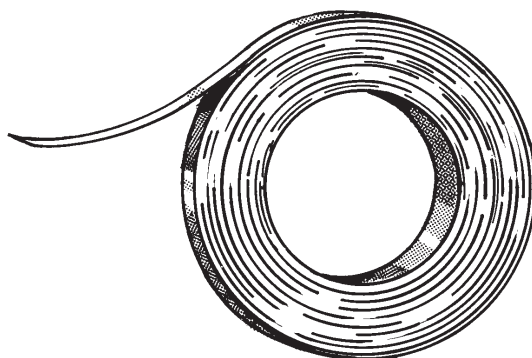
Standard packaging:  
100/bx, 28 lb/bx.



## Copper Strapping

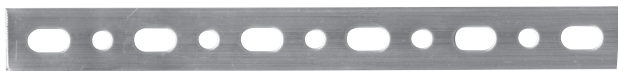
### Ordering Information

**EM 4470-XXX ft.** Copper strapping, tin-plated. 1-3/4" x .062.



# Bonding & Grounding Straps, Harnesses & Braid

## PERFORATED BONDING RIBBON



A tinned copper strip perforated with alternating slots and holes. Equivalent to a #6 AWG conductor (26,244 circular mil area). Available as a standard in 25-foot coils.

### Applications

- Provides bond when using heat-shrinkable material
- Bonding in cable vaults
- Replaces missing or defective bonds in the rehabilitation of pedestals and aerial closures

### Features

- Easily trimmed to the desired length with splicer's scissors, eliminating waste
- Simple construction provides for easy foolproof installation
- Replaces missing or defective bonds in the rehabilitation of pedestals and aerial closures

### Ordering Information

**EM 4425** – 25-ft. coil

Standard packaging: 10 coils/bx, 27 lb/bx.

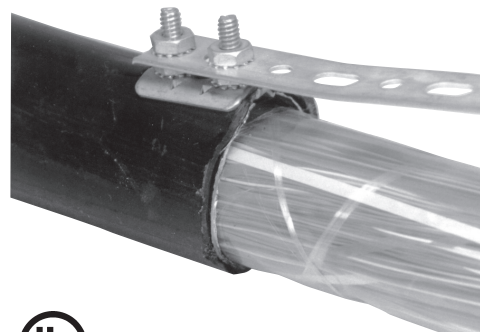
**EM 4527** – 100-ft. roll

Standard packaging: 3 rolls/bx, 12 lb/l.

**EM 4425-ET** – 25-ft. coil, tin-plated after processing

Standard packaging: 10 coils/bx, 27 lb/bx.

**EM 4425I** – 225-ft. coil with black PVC jacket



LISTED 84D8

## BOND BAR/BOND BAR WITH TUBING

A roll of soft tin-plated electrical grade copper with alternate round and slotted holes.

### Applications

For bonding across splices, shield continuity, and general grounding.

### Features

- Can be cut to length
- Available with black PVC insulator pre-installed at the factory
- Easily sealed against "B" sealing tape when exiting splice case
- Soft temper helps material form easily for neater installation

### Ordering Information

**EM 4420** – 25-ft. coil, tin-plated, no insulator

Standard packaging: 10 sp/bx, 20 lb/bx.

**EM 4420-100** – 100-ft. coil, tin-plated, no insulator

Standard packaging: 5 sp/bx, 41 lb/bx.

**EM 4422** – 25-ft. spool, with PVC insulator

Standard packaging: 10 sp/bx, 36 lb/bx.



LISTED 84D8



For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

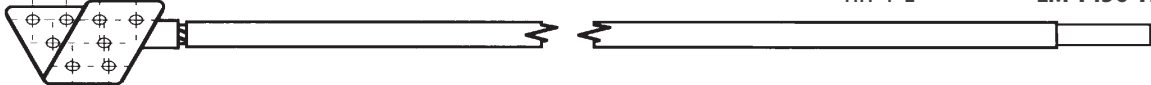

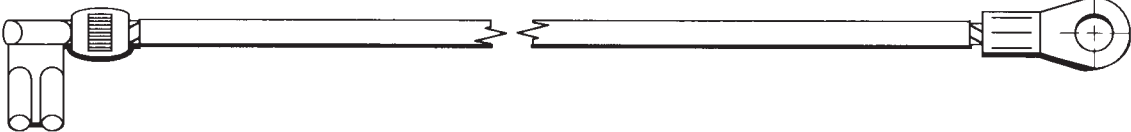

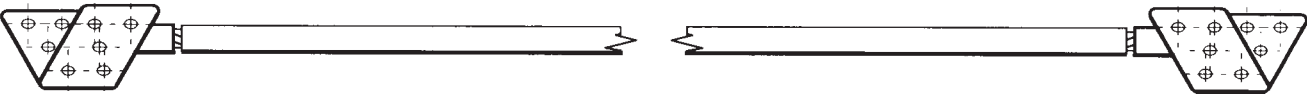

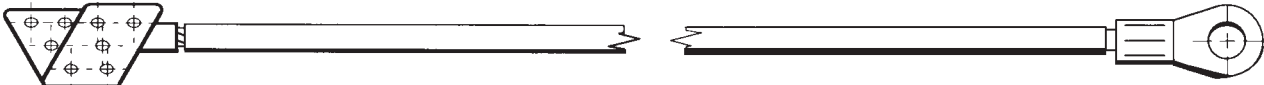
# Bonding & Grounding Straps, Harnesses & Braid

## WIRE AND CABLE BONDING/GROUNDING PRODUCTS

#14 AWG (unless otherwise noted) with green insulation. Other lengths, terminal combinations, and insulation colors are available; please call our sales office.

### Ordering Information

(25/lb, 200/bx. Standard packaging listed after part number; required.)

	former Jamac catalog number	EMC part number
TERMI-FOIL®* type for buried plant housings (solid conductor)	HH-1 HH-1-L	<b>EM 1415-TFP</b> (15") 7 lb/bx <b>EM 1436-TFP</b> (36") 14 lb/bx
		
Ring type for buried plant housings (solid conductor)	HH-2 HH-3	<b>EM 1415-RP</b> (15") 6 lb/bx <b>EM 1436-RP</b> (36") 12 lb/bx
		
Flag/ring type for cable in buried plant housings employing tab connectors (stranded conductor)	HH-4 HH-5	<b>EM 1415-FLR</b> (15") 6 lb/bx <b>EM 1436-FLR</b> (36") 14 lb/bx
		
Flag/TERMI-FOIL® type for service wire in buried plant housings employing tab connectors (stranded conductor)	HH-6 HH-6-L	<b>EM 1415-FLT</b> (15") 6 lb/bx <b>EM 1436-FLT</b> (36") 15 lb/bx
		
TERMI-FOIL® type for splices	HS-11	<b>EM 1420-TFTF</b> (20") 8 lb/bx
		
Ring type for cable splices	HS-13 HS-14	<b>EM 1410-RR</b> (10") 4 lb/bx <b>EM 1420-RR</b> (20") 7 lb/bx
		
TERMI-FOIL®/Ring type		<b>EM 1412-TFR</b> (12") <b>EM 1415-TFR</b> (15") <b>EM 1008-TFR</b> (8", #10 AWG)
		

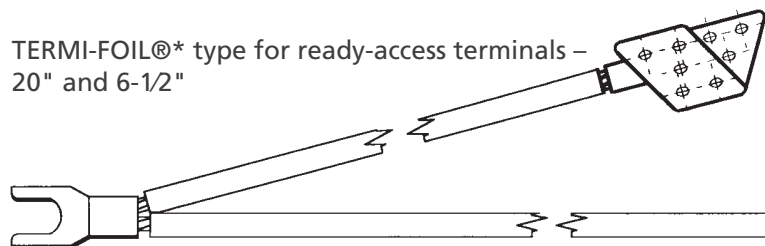
\*TERMI-FOIL® is a registered trademarks used by TE Connectivity Incorporated.

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Bonding & Grounding Straps, Harnesses & Braid

## WIRE AND CABLE BONDING/GROUNDING PRODUCTS (CONTINUED)

TERMI-FOIL®\* type for ready-access terminals – 20" and 6-1/2"



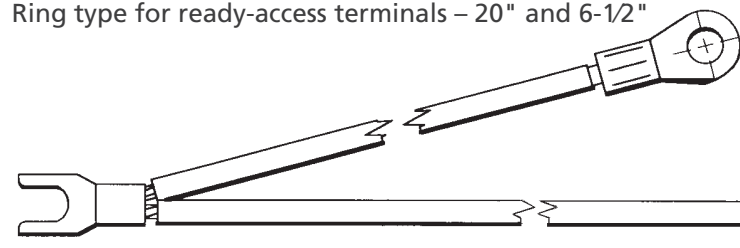
former Jamac  
catalog number

HT-21

EMC  
part number

EM 1426.5 2-TFFR

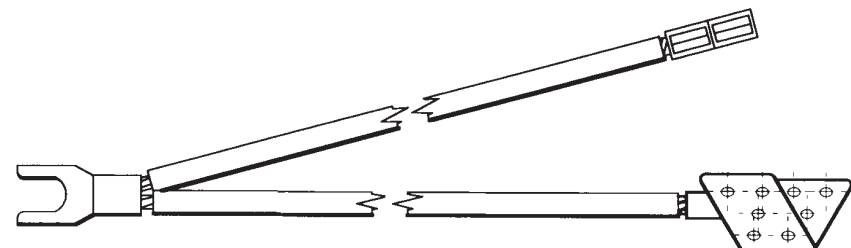
Ring type for ready-access terminals – 20" and 6-1/2"



HT-22

EM 1426.5 2RFR 10 lb/bx

TERMI-FOIL® type for buried wire at station protectors – 3-1/2"



HP-31

EM 143.5-BTFFR 6 lb/bx

TERMI-FOIL® type buried wire at station protectors employing tab connectors (stranded conductor)



HP-32

HP-33

EM 1403-TFFR (3") 3 lb/bx  
EM 1407-TFFR (7") 4.2 lb/bx  
EM 1420-TFFR (20")  
EM 1007-TFFR (7", #10 AWG)  
EM 1018-TFFR (18", #10 AWG)

\*TERMI-FOIL® is a registered trademarks used by TE Connectivity Incorporated.

## PEDESTAL BONDING CONNECTOR

### Ordering Information

EM 1400 (formerly SL-1)

Pedestal Bonding Connector  
(90° angle bracket)

Standard packaging: 10/lbg, 100/bx, 7 lb/bx.

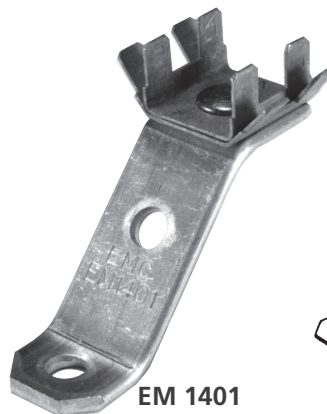
EM 1401 (formerly SL-2)

Pedestal Bonding Connector  
(45° angle bracket)

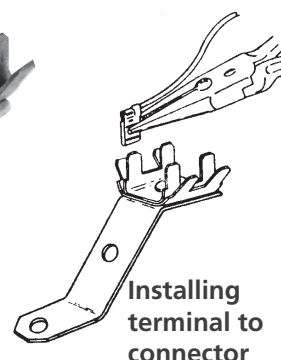
Standard packaging: 10/lbg, 100/bx, 7 lb/bx.



EM 1400



EM 1401



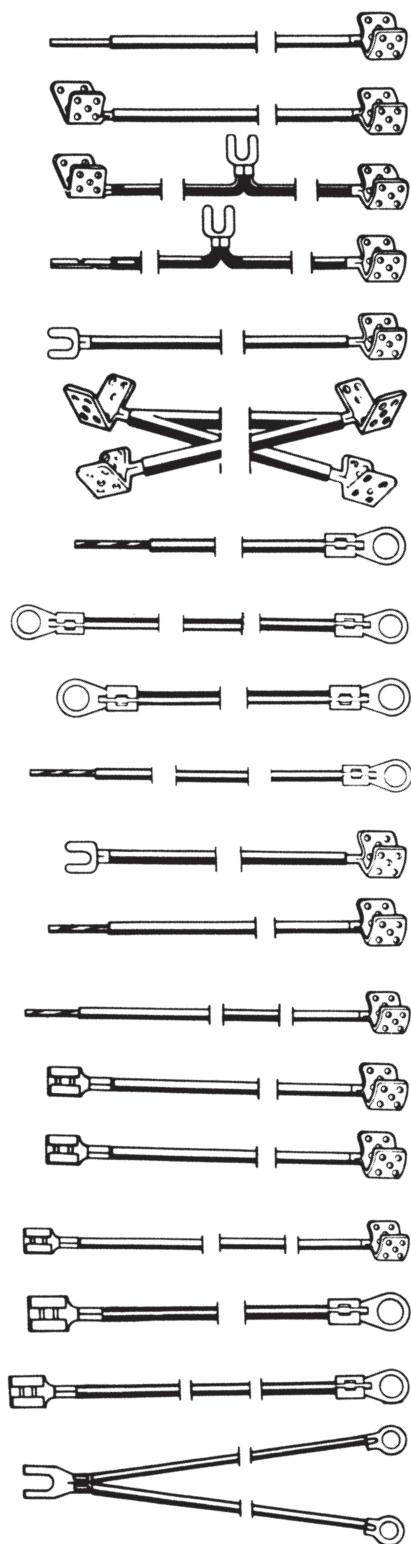
Installing  
terminal to  
connector

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com



# Bonding & Grounding Straps, Harnesses & Braid

## GROUNDING HARNESS CROSS REFERENCE



Harness Length	Siecor/CAC	Siecor	EMC	JAMAC
16-1/2"	GH-1*	27-001-14	EM GH-1*	
20"	GH-2	27-002-14	EM 1420-TFTF	HS-11
21"/7"	GH-3	27-003-14	EM 1426.52-TFFR	
4"/4"	GH-4	27-004-14	EM 143.5-BTFFR	HP-31
3"	GH-7*	27-007-14	EM 1403-TFFR	HP-32
6"	GH-8	27-009-14	EM GH-8	
16"	GH-9	27-010-14	EM GH-9	
20-1/2"	GH-10	27-012-14	EM 1420-RR	HS-14
10"	GH-11	27-013-14	EM 1410-RP	HS-13
36"	GH-12	27-019-14	EM 1436-RP	
7"	GH-13	27-020-14	EM 1407-TFFR	HS-33
15"	GH-14	27-021-14	EM 1415-TFP	
36"	GH-15	27-022-14	EM 1436-TFP	
13"			EM 1413-DSTF	
15"	GH-16	27-023-14	EM 1415-DSTF	
36"	GH-17	27-024-14	EM GH-17	
15"	GH-18	27-025-14	EM 1415-DSR	
36"	GH-19	27-026-14	EM GH-19	
21"/21"	GH-20	27-027-14	14 EM 1442-RRFR	

\* Indicates solid conductors; all others stranded conductors.

BONDING &  
GROUNDING

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Bonding & Grounding Straps, Harnesses & Braid

## GROUNDING HARNESSSES

### EM GH-1 Grounding Harness

(former Siecor # 27-001-14)



The EM GH-1 grounding harness is designed to connect and ground the shield of buried cable and service wire to screw-type grounding connectors employed in selected types of buried plant housings. The harness consists of a tinned TERMINAL-FOIL® connector crimped to one end of a green PVC insulated #14 AWG solid tinned copper wire. Overall length is 16-1/2 inches.

*Ordering Information* **EM GH-1** Standard packaging: 25 units per bag, shipping weight 12 oz. approx.

### EM GH-2 Grounding Harness

(former Siecor # 27-002-14)



The EM GH-2 grounding harness is designed to interconnect the shields of spliced cables in butt or inline type closures. The harness consists of a tinned TERMINAL-FOIL® connector crimped to each end of a green PVC insulated #14 AWG stranded tinned copper wire. Overall length is 20 inches.

*Ordering Information* **EM GH-2** Standard packaging: 25 units per bag, shipping weight 17 oz. approx.

### EM GH-3 Grounding Harness

(former Siecor # 27-003-14)



The EM GH-3 grounding harness is designed to interconnect and ground the shields of spliced cables and buried service wire to common grounding studs. The harness consists of two lengths of green PVC insulated #14 AWG stranded tinned copper wire joined together with a tinned spade terminal. A tinned TERMINAL-FOIL® connector is crimped to the opposite end of each wire. Overall length of each wire is 7 and 21 inches respectively.

*Ordering Information* **EM GH-3** Standard packaging: 25 units per bag, shipping weight 22 oz. approx.

### EM GH-4 Grounding Harness

(former Siecor # 27-004-14)



The EM GH-4 grounding harness is designed to interconnect and ground the shield of buried service wire, with station protector ground wire, to the grounding stud of a station protector. The harness consists of two lengths of green PVC insulated #14 AWG stranded tinned copper wire joined together with a tinned spade terminal. A tinned TERMINAL-FOIL® connector is crimped to the opposite end of one wire, and a tinned butt-splice (ferrule) connector is crimped to the opposite end of the other wire. Overall length of each wire is 4 inches.

*Ordering Information* **EM GH-4** Standard packaging: 25 units per bag, shipping weight 9 oz. approx.

### EM GH-7 Grounding Harness

(former Siecor # 27-007-14)



The EM GH-7 grounding harness is designed to interconnect and ground the shield of buried service wire to the grounding stud of a station protector. The harness consists of a tinned TERMINAL-FOIL® connector, crimped to one end of a green PVC insulated #14 AWG solid tinned copper wire, and a tinned spade terminal, crimped to the opposite end. Overall length is 3 inches.

*Ordering Information* **EM GH-7** Standard packaging: 25 units per bag, shipping weight 4 oz. approx.

\*TERMI-FOIL® is a registered trademark of TE Connectivity.

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Bonding & Grounding Straps, Harnesses & Braid

## GROUNDING HARNESSES (CONTINUED)

### EM GH-8 Grounding Harness

(former Siecor # 27-009-14)



The EM GH-8 grounding harness is designed to interconnect the shields of double jacketed, double shielded cables in butt or inline type splice closures. The harness consists of four tinned TERMI-FOIL® connectors crimped to three interconnecting lengths of green PVC insulated #14 AWG stranded tinned copper wire. Overall length of each wire is 6 inches.

*Ordering Information* **EM GH-8** Standard packaging: 25 units per bag, shipping weight 18 oz. approx.

### EM GH-9 Grounding Harness

(former Siecor # 27-010-14)



The EM GH-9 grounding harness is designed to interconnect the ground stud of a shield bonding connector, installed on buried cable, to screw-type grounding connectors employed in selected types of buried plant housings. The harness consists of a tinned ring terminal crimped to one end of a green PVC insulated #14 AWG stranded tinned copper wire. Overall length is 16 inches.

*Ordering Information* **EM GH-8** Standard packaging: 25 units per bag, shipping weight 11 oz. approx.

### EM GH-10 Grounding Harness

(former Siecor # 27-012-14)



The EM GH-10 grounding harness is designed to interconnect the ground studs of shield bonding connectors, installed on spliced cables, in butt or inline type splice closures. The harness consists of a tinned ring terminal crimped to each end of a green PVC insulated #14 AWG stranded tinned copper wire. Overall length is 20 inches.

*Ordering Information* **EM GH-10** Standard packaging: 25 units per bag, shipping weight 8 oz. approx.

### EM GH-11 Grounding Harness

(former Siecor # 27-013-14)



The EM GH-11 grounding harness is designed to interconnect the ground studs of shield bonding connectors, installed on spliced cables, in butt or inline type splice closures. The harness consists of a tinned ring terminal crimped to each end of a green PVC insulated #14 AWG stranded tinned copper wire. Overall length is 10 inches.

*Ordering Information* **EM GH-11** Standard packaging: 25 units per bag, shipping weight 8 oz. approx.

### EM GH-12 Grounding Harness

(former Siecor # 27-019-14)



The EM GH-12 grounding harness is designed to interconnect the ground stud of a shield bonding connector, installed on buried cable, to screw-type grounding connectors employed in selected types of buried plant housings. The harness consists of a tinned ring terminal crimped to one end of a green PVC insulated #14 AWG stranded tinned copper wire. Overall length is 36 inches.

*Ordering Information* **EM GH-12** Standard packaging: 25 units per bag, shipping weight 24 oz. approx.

\*TERMI-FOIL® is a registered trademark of TE Connectivity

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Bonding & Grounding Straps, Harnesses & Braid

## GROUNDING HARNESSSES (CONTINUED)

### EM GH-13 Grounding Harness

(former Siecor # 27-020-14)



The EM GH-13 grounding harness is designed to connect and ground the shield of buried service wire to the grounding stud of a station protector. The harness consists of a tinned TERMI-FOIL® connector, crimped to one end of a green PVC insulated #14 AWG stranded tinned copper wire, and a tinned spade terminal, crimped to the opposite end. Overall length is 7 inches.

*Ordering Information* **EM GH-1** Standard packaging: 25 units per bag, shipping weight 18 oz. approx.

### EM GH-14 Grounding Harness

(former Siecor # 27-021-14)

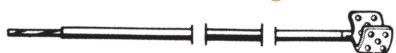


The EM GH-14 grounding harness is designed to connect and ground the shield of buried cable and service wire to screw-type grounding connectors employed in selected types of buried plant housings. The harness consists of a tinned TERMI-FOIL® connector crimped to one end of a green PVC insulated #14 AWG stranded tinned copper wire. Overall length is 15 inches.

*Ordering Information* **EM GH-2** Standard packaging: 25 units per bag, shipping weight 12 oz. approx.

### EM GH-15 Grounding Harness

(former Siecor # 27-022-14)



The EM GH-15 grounding harness is designed to connect and ground the shield of buried cable and service wire to screw-type grounding connectors employed in selected types of buried plant housings. The harness consists of a tinned TERMI-FOIL® connector crimped to one end of a green PVC insulated #14 AWG stranded tinned copper wire. Overall length is 36 inches.

*Ordering Information* **EM GH-3** Standard packaging: 25 units per bag, shipping weight 25 oz. approx.

### EM GH-16 Grounding Harness

(former Siecor # 27-023-14)

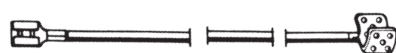


The EM GH-16 grounding harness is designed to connect and ground the shield of buried service wire to the spring action type grounding contacts employed in buried plant housings. The harness consists of a tinned TERMI-FOIL® connector, crimped to one end of a green PVC insulated #14 AWG stranded tinned copper wire, and a tinned spring action contact, crimped to the opposite end. Overall length is 15 inches.

*Ordering Information* **EM GH-4** Standard packaging: 25 units per bag, shipping weight 12 oz. approx.

### EM GH-17 Grounding Harness

(former Siecor # 27-024-14)



The EM GH-17 grounding harness is designed to connect and ground the shield of buried service wire to the spring action type grounding contacts employed in buried plant housings. The harness consists of a tinned TERMI-FOIL® connector, crimped to one end of a green PVC insulated #14 AWG stranded tinned copper wire, and a tinned spring action contact, crimped to the opposite end. Overall length is 36 inches.

*Ordering Information* **EM GH-7** Standard packaging: 25 units per bag, shipping weight 26 oz. approx.

\*TERMI-FOIL® is a registered trademark of TE Connectivity.

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Bonding & Grounding Straps, Harnesses & Braid

## GROUNDING HARNESSSES (CONTINUED)

### EM GH-18 Grounding Harness

(former Siecor # 27-025-14)

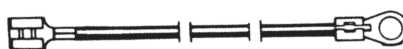


The EM GH-18 grounding harness is designed to interconnect the ground stud of a shield bonding connector, installed on buried cable, to the spring action type grounding contacts employed in buried plant housings. The harness consists of a tinned ring terminal, crimped to one end of a green PVC insulated #14 AWG stranded tinned copper wire, and a tinned spring action contact, crimped to the opposite end. Overall length is 15 inches.

*Ordering Information* **EM GH-18** Standard packaging: 25 units per bag, shipping weight 12 oz. approx.

### EM GH-19 Grounding Harness

(former Siecor # 27-026-14)

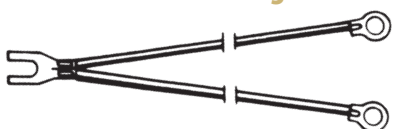


The EM GH-19 grounding harness is designed to interconnect the ground stud of a shield bonding connector, installed on buried cable, to the spring action type grounding contacts employed in buried plant housings. The harness consists of a tinned ring terminal, crimped to one end of a green PVC insulated #14 AWG stranded tinned copper wire, and a tinned spring action contact, crimped to the opposite end. Overall length is 36 inches.

*Ordering Information* **EM GH-19** Standard packaging: 25 units per bag, shipping weight 24 oz. approx.

### EM GH-20 Grounding Harness

(former Siecor # 27-027-14)

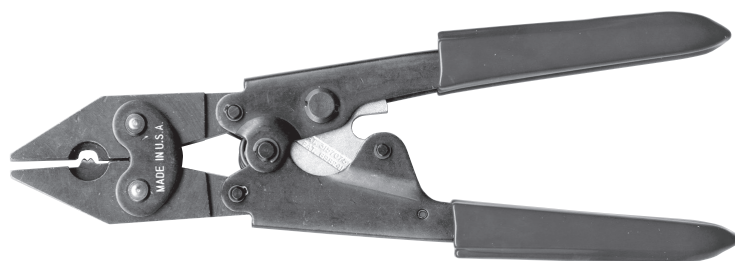


The EM GH-20 grounding harness is designed to interconnect and ground the shields of spliced cables, employing shield bonding connectors with studs, to common grounding studs. The harness consists of two lengths of green PVC insulated #14 AWG stranded tinned copper wire, joined together with a tinned spade terminal. A tinned ring terminal is crimped to the opposite end of each wire. Overall length of each wire is 21 inches.

*Ordering Information* **EM GH-20** Standard packaging: 25 units per bag, shipping weight 2 lb. approx.

### EM GHT-1 Compression Tool

(former Siecor # 27-001-15)



The EM GHT-1 compression tool is designed to insure a high degree of reliability in making the ground harness to shield bond for harnesses employing TERMI-FOIL® type connectors. The EM GHT-1 is equipped with a special ratchet which controls, and assures, correct pressure at the shield bond before the tool will release.

*Ordering Information* **EM GHT-1** Standard packaging: one tool per box, shipping weight 21 oz. approx.

\*TERMI-FOIL® is a registered trademark of TE Connectivity.



# Bonding & Grounding Straps, Harnesses & Braid

## HAND-HELD CRIMP TOOL

#8–#2 AWG conductor range covers red, blue, grey, and brown compression lugs that are made from tubing. Ergonomic design features cushioned grips, easy-grip jaws, and rotating tool nest. Manufactured in the U.S.A.

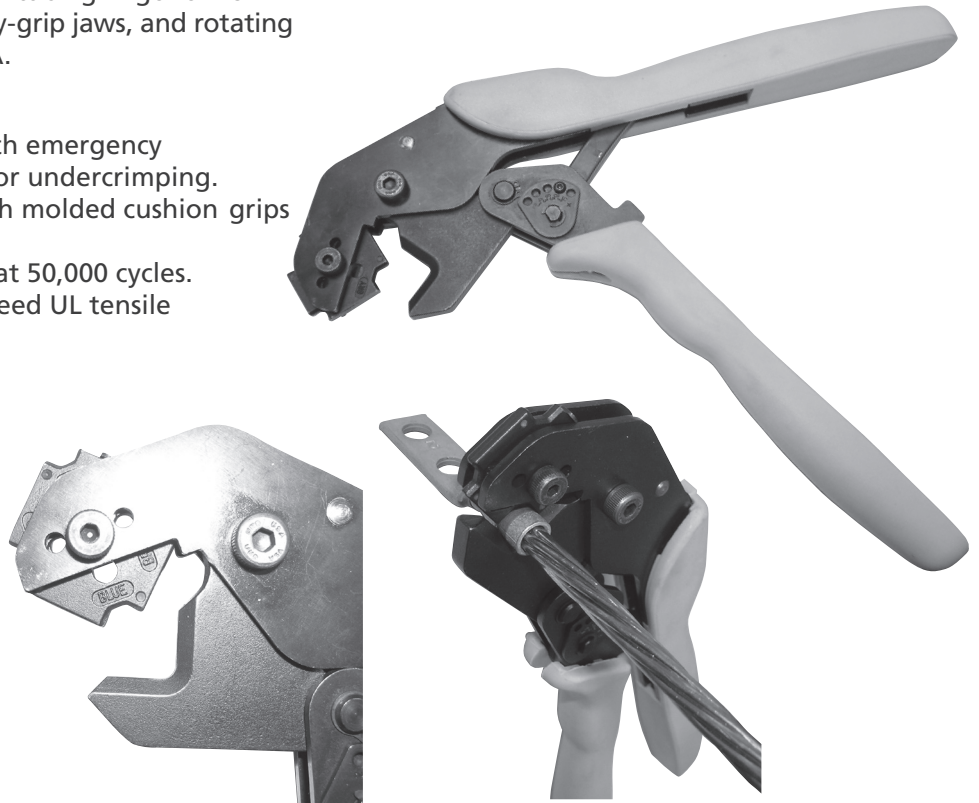
### FEATURES

- Positive ratcheting assembly with emergency release, prevents overcrimping or undercrimping.
- High mechanical advantage with molded cushion grips minimize user fatigue.
- Tool life is conservatively rated at 50,000 cycles.
- Crimps designed to meet or exceed UL tensile requirements.

### Ordering Information

**EM 4290CT** –  
Hand-Held Crimp Tool,  
#8–#2 AWG

Die Index Number	Gage Die (In.) Min. - Max.		Wire Size
Red	.178	.200	8
Blue	.220	.238	6
Gry	.265	.275	4
Brn	.325	.347	2



## CRIMP TOOL

For crimping #8–1/0 AWG crimp lugs and splices. Rotating crimp dies are color coded for easy identification and selection. Long handles and compound lever action provide superb mechanical advantage and positive stop at the end of the crimp cycle.

### Ordering Information

**EM 080CT**

Standard packaging:

1 / bx, 9 lb / bx

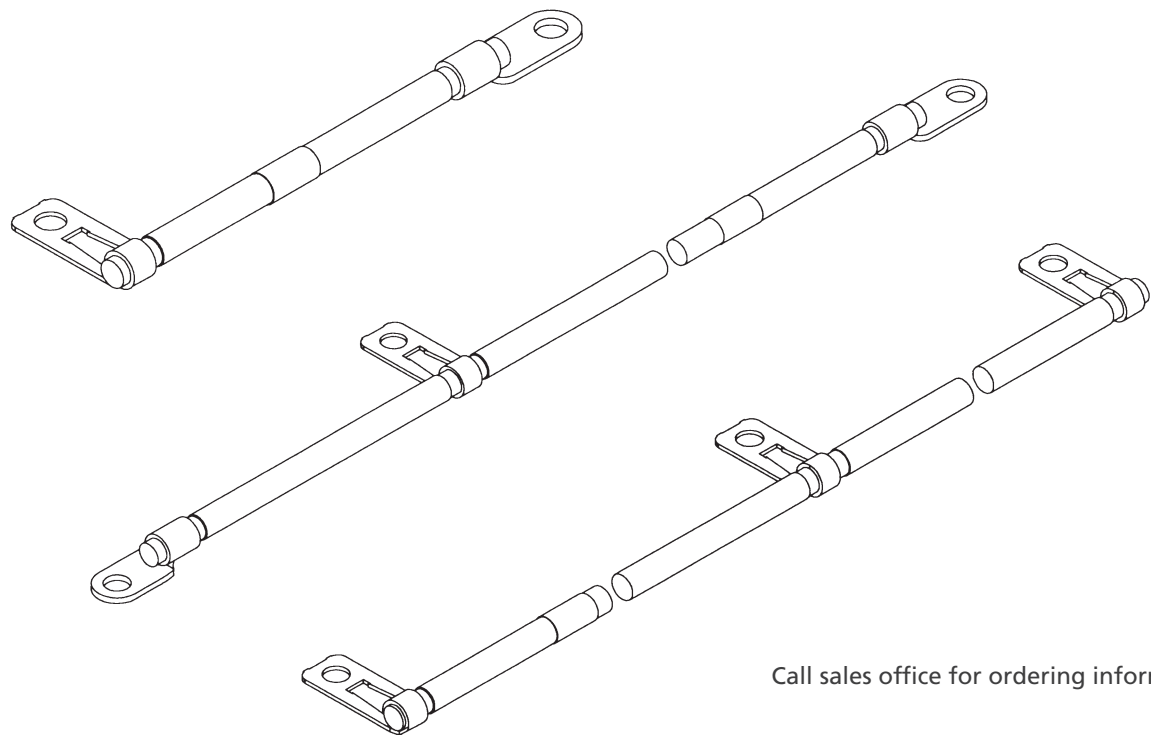


For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)

# Bonding & Grounding Straps, Harnesses & Braid

## #6 AWG HARNESSES WITH FLAG TERMINALS

Insulated rope-lay, various lengths available, various combinations of flag/ring terminals available.



Call sales office for ordering information.

BONDING &  
GROUNDING

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)

# Connectors

# Connectors – Pedestal Ground Brackets

## PEDESTAL GROUND BRACKETS

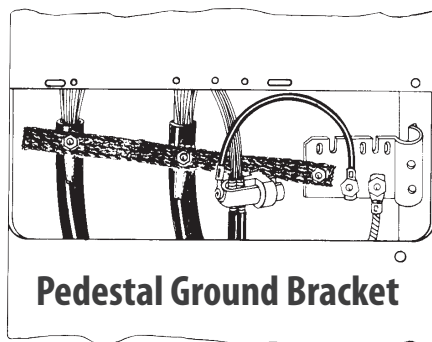
All stainless steel. Studs are pressed in and staked.

### APPLICATIONS

New installations and rehabilitation of pedestal grounds to accept new #6 AWG bonding harnesses or braid.

### FEATURES

- Includes hardware to connect bonding harnesses or ground braid
- Slots and holes can mount standard BSW shield connectors.



### Ordering Information

**EM 6300-01** – Studs protrude away from angle

Standard packaging: 200/bx, 25 lb/bx

**EM 6300-02** – Studs protrude toward angle

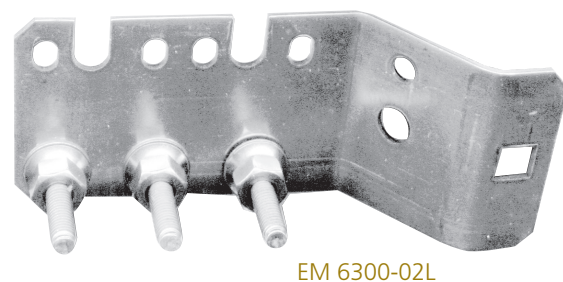
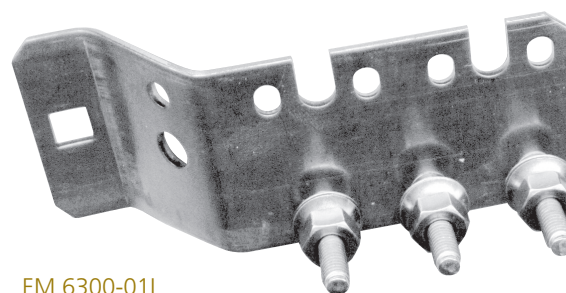
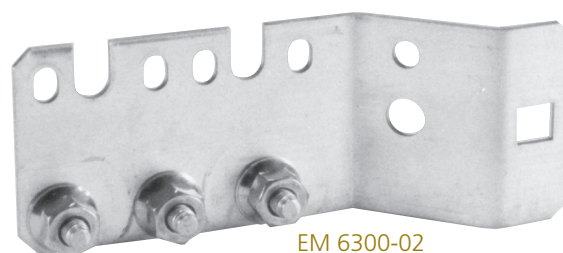
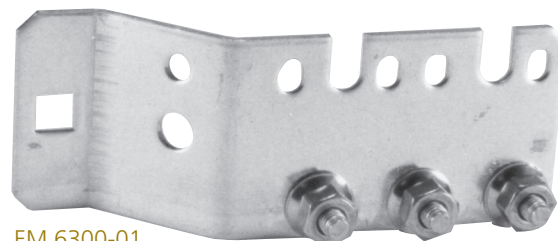
Standard packaging: 200/bx, 25 lb/bx

Add suffix **-TC** for a tinned copper bracket.

Add suffix **-TB** for a tinned brass bracket.

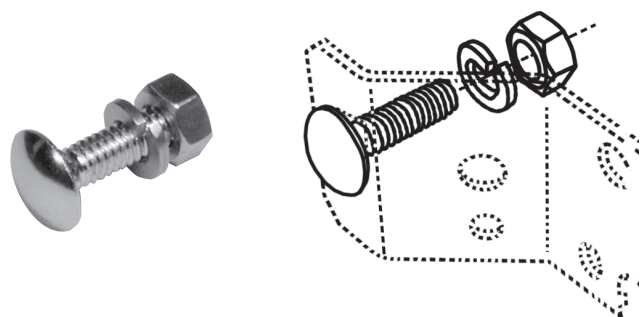
Add suffix **-L** for longer studs.

Add suffix **-NBL** to include nut, bolt, and lock washer (opposite page, EM 63NBL).

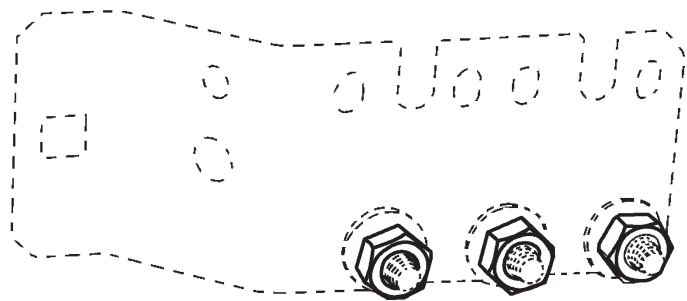




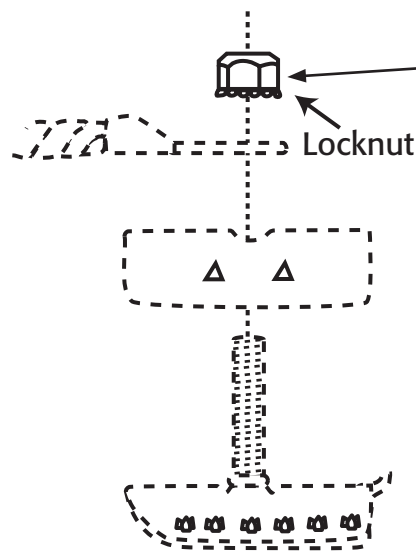
# Connectors



**EM 63NBL** – Stainless steel nut, carriage bolt, and lock washer used to attach pedestal ground brackets to pedestal. See page G36.

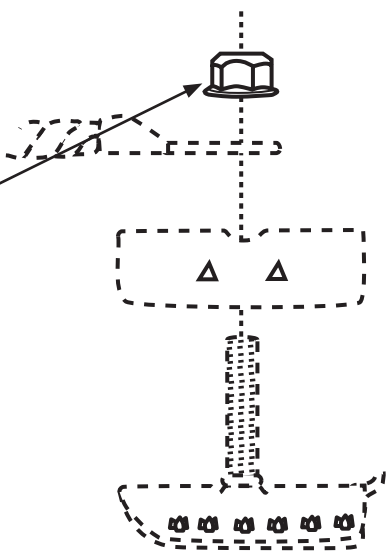


**EM 63NUT** – Stainless steel conical Keps nut. See page G36.



**EM BNUT**  
10–24 coarse thread tinned bronze locknut for B-bond clamp cable shield connector. See pages G104 and G105.

**EM 10NBC**  
10–32 fine thread whiz nut, zinc-plated steel, for B-bond clamp cable shield connector. See pages G104 and G105.



# Connectors – Pedestal Ground Brackets

## PEDESTAL GROUND BRACKET STUD EXTENDER

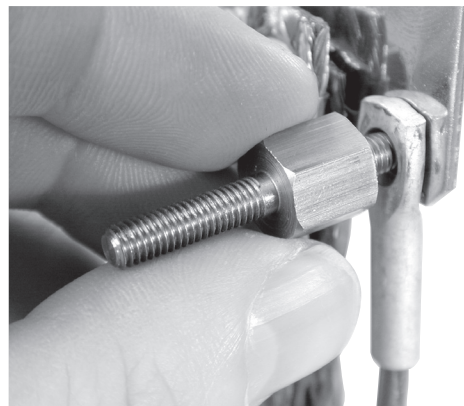
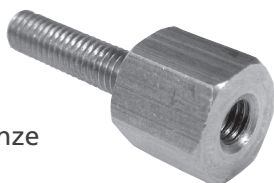
This can be used when the existing ground bracket studs are full. Simply remove the existing nut, thread on the stud extender (see picture, right). This gives 3/4" additional stud length. The nut that was removed is now used to capture the bonds on the stud extender.

### Ordering Information

EM 63MG-SS – Stainless steel

EM 63MG-TB – Tinned brass

EM 63MG-TSB – Tinned silicon bronze

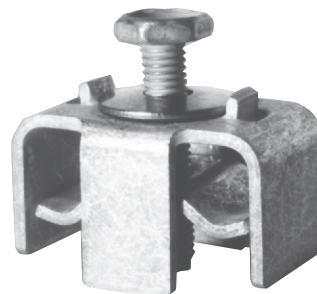


## "C" SERVICE WIRE CLAMP

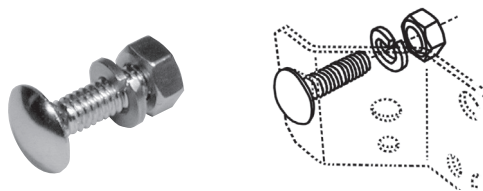
Buried service wire connector for pedestal applications. Attaches to the ground brackets on opposite page.

### Ordering Information EM 6250

Standard packaging: 10/lb, 100/bx, 7 lb/bx.

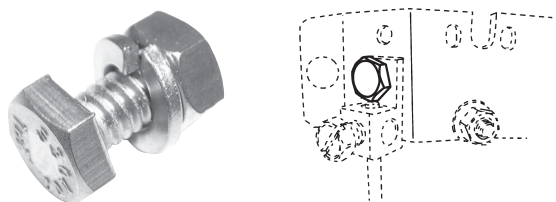


## HARDWARE



Stainless steel nut, carriage bolt, and lock washer used to attach pedestal ground brackets (opposite page) to pedestal.

### Ordering Information EM 63NBL



1/4-20 x 1/2 hex head cap screw with nut and lockwasher, for attaching cast ground lug to ground bracket.

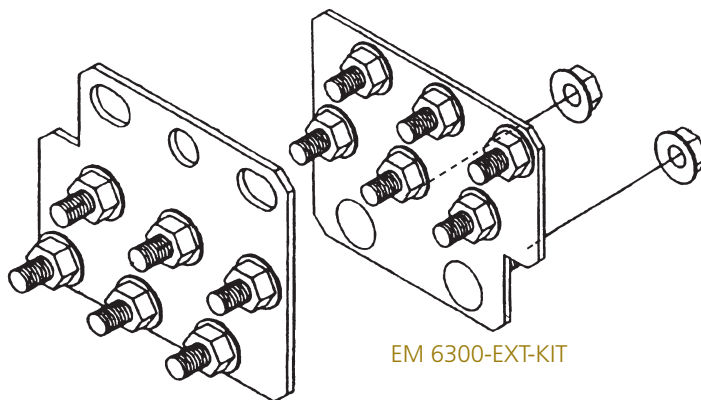
### Ordering Information

EM 63SS – Stainless steel

EM 63BR – Brass/bronze

EM 63TBR – Tinned brass bronze

## PEDESTAL GROUND BRACKET EXTENDERS



### Ordering Information

EM 6300-EXT – Stainless steel plate with 6 short studs staked into it; also 6 Keps nuts.

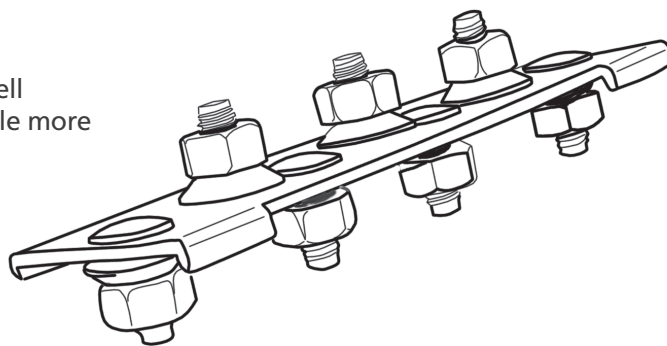
EM 6300-EXT-KIT – Stainless steel plate with 6 short studs staked into it, and 2 extra mounting studs; also 8 Keps nuts.

Add suffix -TC for a tinned copper bracket extender (studs and nuts still stainless steel).

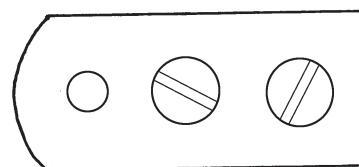
# Connectors – Pedestal Ground Brackets

## PEDESTAL GROUND BAR EXTENDER FOR CHANNELL MAH PEDESTALS

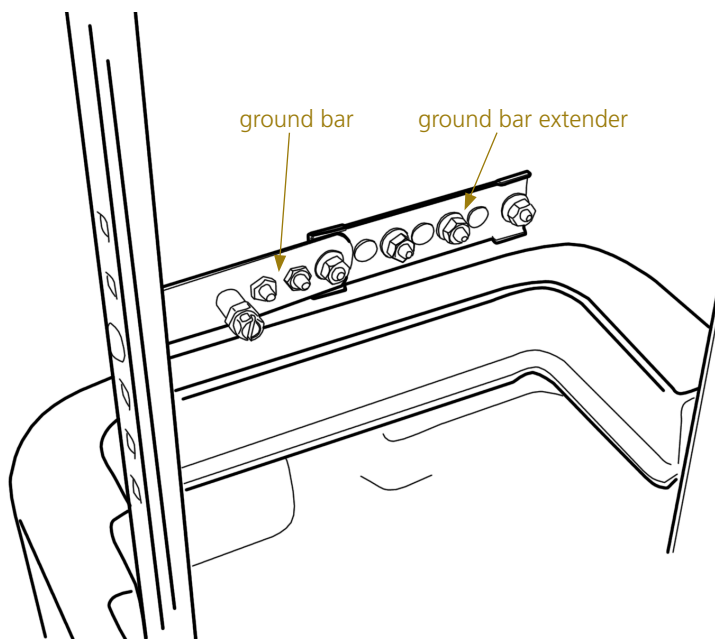
The Ground Bar Extender EM 6305 is to be used in Channell pedestals to increase the capacity of the pedestal to handle more buried service wires and cables.



The existing Channell ground bar has a single hole in the end. Mount one of the end studs in that hole, and the ground bar extension gives the installer three more studs for BSW floating bond shield connectors (SSI/PID # 700244330) on the BSW side. The opposite side will provide three additional studs to connect cable shield flexible bond straps SSI/PID # 001460997.



*Shown: EM 6305  
used in MAH1010*



### Ordering Information

**EM 6305** – Pedestal Ground Bar Extender (6 extra studs).

**EM 6308** – Pedestal Ground Bar Extender (14 extra studs).

# Connectors – Screw-on Terminals

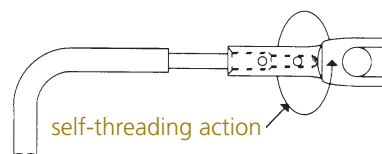
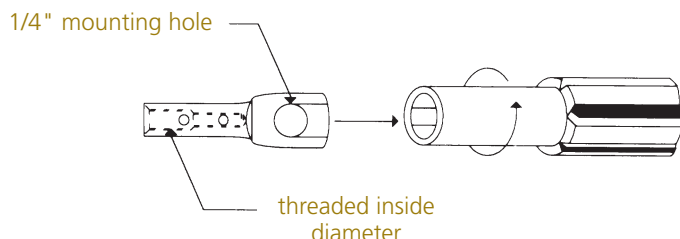
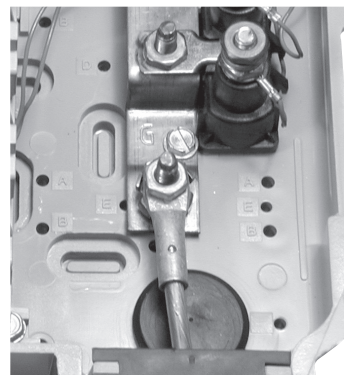


## SCREW-ON TERMINALS


















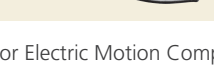


Tin-plated copper connector with internal self-cutting threads, for terminating solid wires at connecting points. These small terminals are applied with a can wrench. They cut their own thread on solid #6 or #10 AWG copper ground wire.

### FEATURES

- Installs with a standard (3/8") terminal wrench
- Self-threading terminal cuts through any oxidation
- Threaded connection will not vibrate loose
- 1/4" hole fits #10 through 1/4" studs
- Tin plated for corrosion resistance
- Copper alloy construction



### Ordering Information :

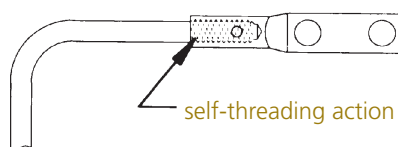
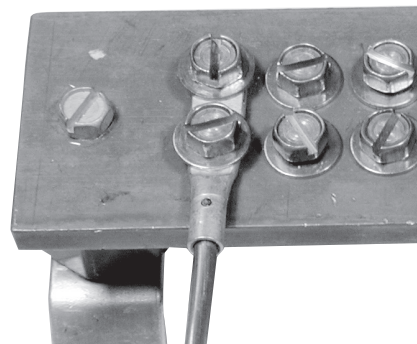
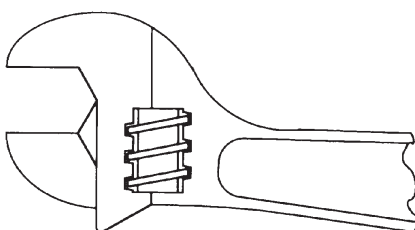
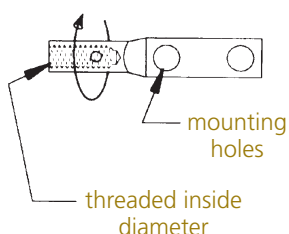
	<b>EM 2525</b>	Screw-on ring terminal for solid #6 AWG. Standard packaging: 10/bg, 100/sm bx, 1000/lg bx, 2 lb/sm bx.	
	<b>EM 2525.10</b>	Same as above, with #10 mounting hole.	
	<b>EM 2525.375</b>	Same as above, with 3/8" diameter ring terminal.	
	<b>EM 2525T.3125</b>	Screw-on ring terminal for solid #6 AWG, with thin blade and 5/16" diameter hole. Standard packaging: 10/bg, 100/sm bx, 1000/lg bx, 2 lb/sm bx.	
	<b>EM 2510</b>	Screw-on ring terminal for solid #10 AWG. Standard packaging: 10/bg, 100/sm bx, 1000/lg bx, 2 lb/sm bx.	
	<b>EM 2510.10</b>	Same as above, with #10 stud mounting hole.	
	<b>EM 2510SI</b>	Screw-on ring terminal for solid #10 AWG. Standard packaging: 10/bg, 100/sm bx, 1000/lg bx, 2 lb/sm bx.	
	<b>EM 2610</b>	Combination screw-on ring terminal for either #6 or #10 AWG. Standard packaging: 10/bg, 100/sm bx, 1000/lg bx, 16 lb/lg bx.	
	<b>EM 2610.375</b>	Same as above, 3/8" diameter hole.	
	<b>EM 2610.375THIN</b>	Same as above, with thin blade and 3/8" diameter hole. Standard packaging: 10/bg, 100/sm bx, 1000/lg bx, 2 lb/sm bx.	
	<b>EM 2610BS</b>	Combination screw-on terminal #6 and #10 AWG with break-away into spade. Standard packaging: 10/bg, 100/sm bx, 1000/lg bx, 2.3 lb/sm bx.	
	<b>EM 2610BH</b>	Combination screw-on terminal #6 and #10 AWG with break-away into hook. Standard packaging: 10/bg, 100/sm bx, 1000/lg bx, 2 lb/sm bx.	
	<b>EM 2610T.3125</b>	Combination screw-on terminal #6 and #10 AWG, with thin blade and 5/16" diameter hole. Standard packaging: 10/bg, 100/sm bx, 1000/lg bx, 2 lb/sm bx.	

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Connectors – Screw-on Terminals

## LARGER SCREW-ON TERMINALS

These larger and double-hole terminals are applied with an adjustable wrench. They cut their own thread on solid #2, #4, and #6 copper ground wire.



### Ordering Information :



**EM 2522SH**

Screw-on ring terminal, single 5/16" hole, for solid #2 AWG.  
Standard packaging: 10/lbg, 50/sm bx, 500/lbg bx, 21.8 lb/lbg bx



**EM 2522DH.75.10**

Screw-on ring terminal, double #10 holes, 3/4" spacings, for solid #2 AWG.



**EM 2522DH1.000**

Screw-on ring terminal, double 5/16" holes, 1" spacings, for solid #2 AWG.



**EM 2522DH1.750**

Screw-on ring terminal, double 5/16" holes, 1-3/4" spacings, for solid #2 AWG.



**EM 2522DH.625**

Screw-on ring terminal, double 5/16" holes, 5/8" spacings, for solid #2 AWG.  
Standard packaging: 5/lbg, 50/sm bx, 500/lbg bx, 33 lb/lbg bx



**EM 2522DH.75.312**

Screw-on ring terminal, double 5/16" holes, 3/4" spacings, for solid #2 AWG.  
Standard packaging: 5/lbg, 50/sm bx, 500/lbg bx, 33 lb/lbg bx

BONDING &  
GROUNDING

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com



# Connectors – Screw-on Terminals

## LARGER SCREW-ON TERMINALS (CONTINUED)



**EM 2522DH.875** Screw-on ring terminal, double 5/16" holes, 7/8" spacings, for solid #2 AWG.  
Standard packaging: 5/lbg, 50/sm bx, 500/lbg bx, 33 lb/lbg bx



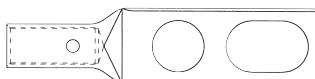
**EM 2522DH.875.625** Screw-on ring terminal, 5/16" hole and 5/16" slot, for solid #2 AWG, fits studs spaced 5/8"–7/8".  
Standard packaging: 5/lbg, 50/sm bx, 500/lbg bx, 44 lb/lbg bx



**EM 2522DH.625.437** Screw-on ring terminal, double 7/16" holes, 5/8" spacing, for solid #2 AWG.



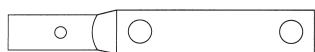
**EM 2522DH1.000.437** Screw-on ring terminal, double 7/16" holes, 1" spacing, for solid #2 AWG.



**EM 2522DH.875-.625.437** Screw-on ring terminal, 7/16" hole and 7/16" slot, for solid #2 AWG, fits studs spaced 5/8"–7/8".



**EM 2524SH** Screw-on ring terminal, single 1/4" hole, for solid #4 AWG.  
Standard packaging: 10/lbg, 50/sm bx, 500/lbg bx, 22 lb/lbg bx



**EM 2524DH1.750** Screw-on ring terminal, double 1/4" holes, 1 3/4" spacings, for solid #4 AWG.



**EM 2524DH.625** Screw-on ring terminal, double 1/4" holes, 5/8" spacings, for solid #4 AWG.



**EM 2525DH.625** Screw-on ring terminal, double 1/4" holes, 5/8" spacings, for solid #6 AWG (can also be applied with can wrench).  
Standard packaging: 10/lbg, 50/sm bx, 500/lbg bx, 13 lb/lbg bx



**EM 2526** Screw-on terminal, 5/8" spade, for solid #6 AWG.  
Standard packaging: 10/lbg, 50/sm bx, 500/lbg bx, 38.4 lb/lbg bx



**EM 2627R** Screw-on ring terminal, 3/8" mounting hole, for solid #6 AWG.

Please see next page for at-a-glance comparison of all screw-on terminals.

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Connectors – Screw-on Terminals

## ALL SCREW-ON TERMINALS (CONTINUED)

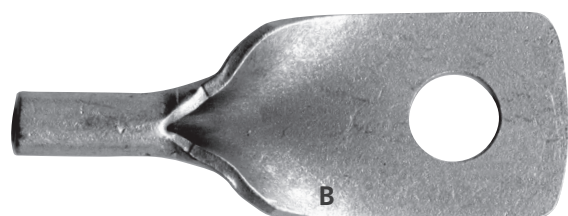
At a glance . . .				
PART NUMBER	ACCOMMODATES	MOUNTING HOLE(S)	SPACING	LISTING
EM 2525	#6 AWG	1/4"		
EM 2525.10	#6 AWG	#10		
EM 2525.375	#6 AWG	3/8"		
EM 2525T.3125	#6 AWG	5/16", thin blade		
EM 2510	#10 AWG	1/4"		
EM 2510.10	#10 AWG	#10		
EM 2510SI	#10 AWG	1/4", insulated barrel		
EM 2610	#6 & #10 AWG	1/4"		
EM 2610.375	#6 & #10 AWG	3/8"		
EM 2610BS	#6 & #10 AWG	1/4", breakaway into spade		
EM 2610BH	#6 & #10 AWG	1/4", breakaway into hook		
EM 2610T.3125	#6 & #10 AWG	5/16", thin blade		
EM 2522SH	#2 AWG	5/16"		
EM 2522DH.75.10	#2 AWG	double #10	3/4"	
EM 2522DH1.000	#2 AWG	double 5/16"	1"	
EM 2522DH.875-.625.437	#2 AWG	7/16" hole, 7/16" slot	5/8"–7/8"	
EM 2522DH1.750	#2 AWG	double 5/16"	1-3/4"	
EM 2522DH.625	#2 AWG	double 5/16"	5/8"	
EM 2522DH.75.312	#2 AWG	double 5/16"	3/4"	
EM 2522DH.875	#2 AWG	double 5/16"	7/8"	
EM 2522DH.875.625	#2 AWG	5/16" hole, 5/16" slot	5/8"–7/8"	
EM 2522DH.625.437	#2 AWG	7/16"	5/8"	
EM 2522DH1.000.437	#2 AWG	7/16"	1"	
EM 2524SH	#4 AWG	1/4"		
EM 2524DH1.750	#4 AWG	double 1/4"	1-3/4"	
EM 2524DH.625	#4 AWG	double 1/4"	5/8"	
EM 2525DH.625	#6 AWG	double 1/4"	5/8"	
EM 2526	#6 AWG	5/8" spade		
EM 2627R	#6 AWG	3/8"		

BONDING &  
GROUNDING

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Connectors – Self-Tapping Terminals

## LARGER-HOLED SELF-TAPPING TERMINALS



*Screw-on terminals cut their own thread on solid copper ground wire.*

*Ordering Information:*

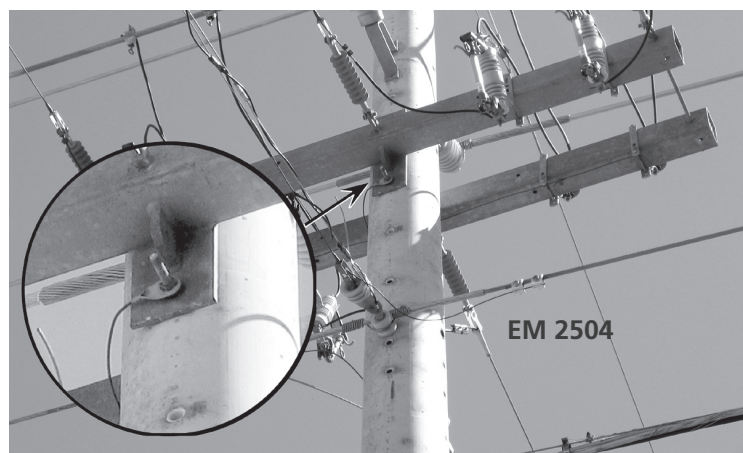
**EM 250** -

**Gauge:**  
2, 4, or 6

**Size/shape:**  
A, B, or C (see  
pictures,  
above left)

**Mounting hole size:**  
insert fraction, (e.g.,  
EM 2506B.5/16 has a  
5/16" mounting hole).

**Note:** Size B will accommodate a mounting hole up to 5/8".



For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Connectors

## SPLICE CASE BONDING AND GROUNDING KIT WITH ULTRABOND



A kit of parts consisting of a 36" piece of covered Ultrabond, a plug, braid and stud assembly, an insulator, and a "DO NOT REMOVE" tag. For use in metal splice cases for building entrances, for use with Type 50 cases in manholes (for external bonding and grounding).

### APPLICATION

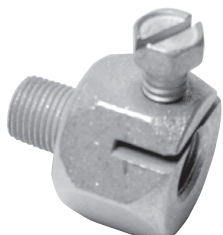
- Can be used in 50 Type plastic/fiberglass case (does not pass through the "B sealing tape" to possibly cause leaks).
- Replaces the inner sheath ring connector in metal splice cases for building entrances.
- Can be used in manholes. External ground plug allows continuous bonding, case to case, without soldering.
- Allows tasteful grounding method when connecting double shielded cable to single shielded (external plug is bonded to outer shield).

### FEATURES

- Greatly reduces installation time
- Provides more reliable, positive bond and ground
- Less chance of air/water leak
- Keyway-shaped hole in external ground plug allows connection of all ground wires including solid #6, plain bond ribbon, Ultrabond, etc.

Ordering Information **EM 3042**

Standard packaging: 20/bx, 12 lb/bx.



## UNIVERSAL BOND FITTING

Allows bonding of the splice case with either ribbon (through the slot) or a #6 with a lug (under the head of the screw), and you can still pressurize using the pipe threads.

Ordering Information **EM 3039**

## SPLICE CASE BONDING AND GROUNDING KIT

A kit of parts consisting of a pipe plug with 48" braid, insulator tubing, a "DO NOT REMOVE" tag, plastic wrap, and two ties. Replaces the inner sheath rings on metal splice cases, or provides an alternative means of externally grounding 50 Type plastic/fiberglass splice cases.

### FEATURES

- Greatly reduces installation time
- Provides more reliable, positive bond and ground
- Less chance of air/water leak

Ordering Information **EM 3040**

Standard packaging: 20/bx, 35 lb/bx.



BONDING &  
GROUNDING

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com



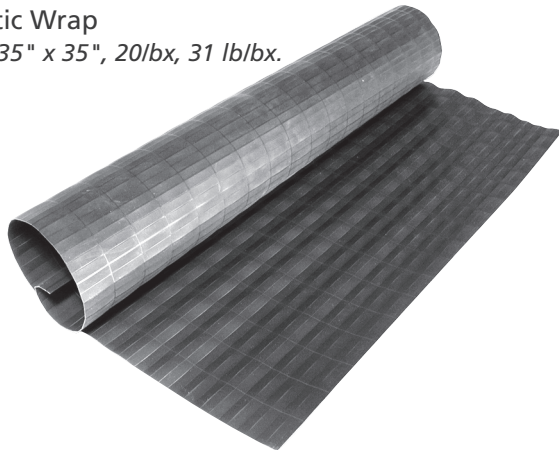
# Connectors

## BLACK PLASTIC WRAP AND CORRUGATED WRAP

### Ordering Information

**EM 3035** Black Plastic Wrap

Standard packaging: 35" x 35", 20/lbx, 31 lb/lbx.



**EM 8422** Corrugated Wrap, clear plastic, 21" x 33"

## GROUND WIRE CONNECTOR

Inline connector with breakaway hex heads. Available for #6 or #10 AWG solid.

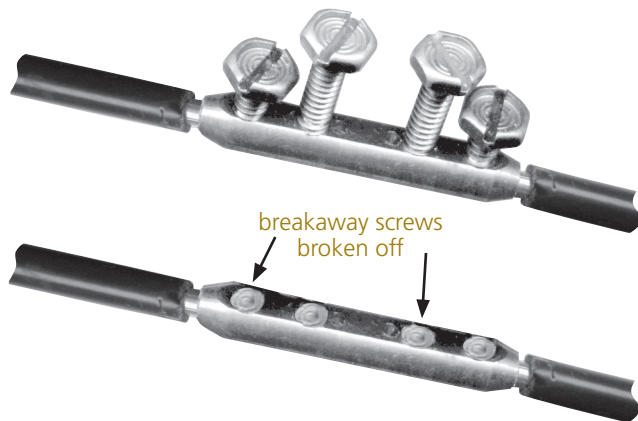
### Ordering information

**EM 4544** Accommodates #6 AWG

**EM 4542** Accommodates #10 AWG

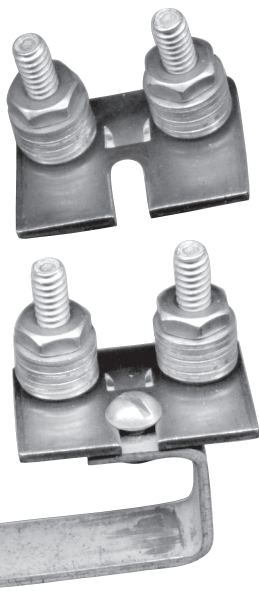
**EM 4542-1010** Accommodates three #10 AWG

Standard packaging: 2/lbg, 50/lbx, 5 lb/lbx.



## GROUND STRIPS

A plate equipped with two binding posts and washers. The plate has a "U"-shaped slot to receive the mounting screw and a depressed tab which serves to prevent turning after installation. The Ground Strip is intended for use in terminals equipped with G type or H type binding post chambers, or LA type or LB type fuse chambers.



### Ordering Information

**EM 2A** Ground Strip

Standard packaging: 100/lbx, 7 lb/lbx.

**EM 2B** Ground Strip with Bracket added

Standard packaging: 100/lbx, 9 lb/lbx.

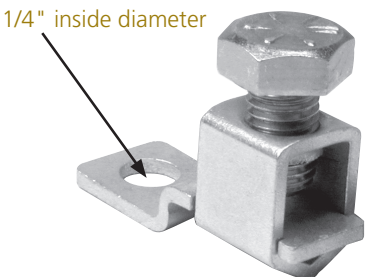




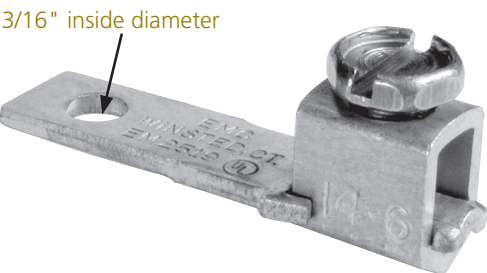
# Connectors – Ground Lugs

## SOLDERLESS GROUND LUGS

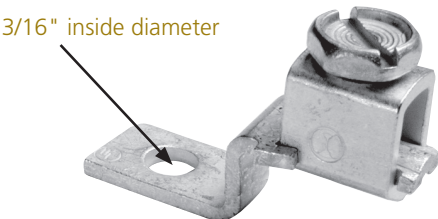
Ordering Information required.



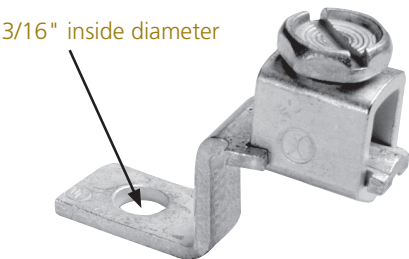
**EM 2513** – Fits #14–#4 AWG.  
Tin-plated copper housing and  
mounting tang. 1/4" mounting  
hole.



**EM 2519-01** – Fits solid #10–#6  
AWG. Copper housing and  
mounting tang.  
Standard packaging: 1000/bx, 25 lb/bx



**EM 2519-03** – Fits #12–#6 AWG,  
90° bend in mounting tang.  
Copper housing, tin-plated copper  
mounting tang.



**EM 2519-04** – Fits #12–#6 AWG,  
90° bend in mounting tang.  
Copper housing, tin-plated  
copper mounting tang.

BONDING &  
GROUNDING

### At a glance ...

PART NUMBER	ACCOMMODATES	MOUNTING TANG LENGTH/ANGLE/HT.	MOUNTING HOLE DIA./ SPACING	SCREW	LISTING
EM 2513	#14–4	1" / 90° bend / 1/4"	1/4"	1/2" hex head	none
EM 2519-01	solid #10–6	1" / straight	3/16"	3/8" hex head	UL
EM 2519-03	#12–6	3/4" / 90° bend / 1/2"	3/16"	3/8" hex head	none
EM 2519-04	#12–6	3/4" / 90° bend / 7/8"	3/16"	3/8" hex head	none

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Connectors – Ground Lugs

## SOLDERLESS GROUND LUGS (CONTINUED)

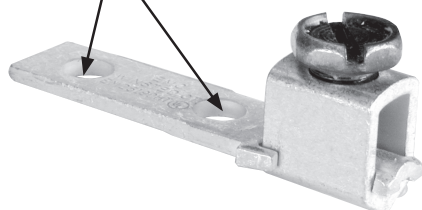
Ordering Information required.

3/16" inside diameter



**EM 2519-05** – Fits #12–#6 AWG, 90° bend in mounting tang. Tin-plated copper housing and mounting tang.

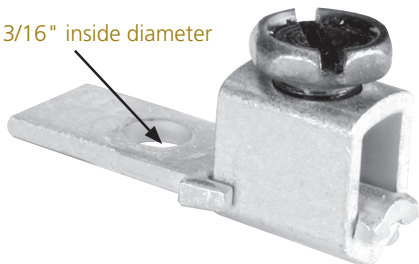
3/16" inside diameter



**EM 2519DHT-01** – Fits #10–#6 AWG, double hole, 5/8" spacing. Tin-plated copper housing and mounting tang.  
Standard packaging: 1000/bx, 28 lb/bx



3/16" inside diameter



**EM 2519HT** – Fits #12–#6 AWG. Tin-plated copper housing and mounting tang.  
Standard packaging: 1000/bx, 28 lb/bx

3/16" inside diameter



**EM 2519DHT-02** – Fits #10–#6 AWG, double hole, 1" spacing, offset bend in mounting tang. Tin-plated copper housing and mounting tang.  
Standard packaging: 500/bx, 19 lb/bx



### PART NUMBER At a glance ...

PART NUMBER At a glance ...	ACCOMMODATES	MOUNTING TANG LENGTH/ANGLE/HT.	MOUNTING HOLE DIA./ SPACING	SCREW	LISTING
EM 2519-05	#12–6	5/8" / 90° bend / 3/8"	3/16"	3/8" hex head	none
EM 2519DHT-01	#10–6	1-3/16" / straight	3/16" / 5/8"	3/8" hex head	UL
EM 2519HT	#12–6	1/2" / straight	3/16"	3/8" hex head	none
EM 2519DHT-02	#10–6	1-1/2" / 90° bend / 3/8"	3/16" / 1"	3/8" hex head	UL

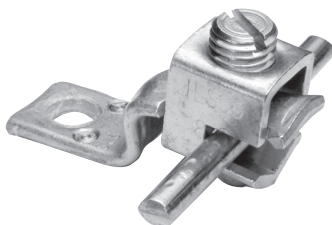
For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Connectors – Ground Lugs

## SOLDERLESS GROUND LUGS (CONTINUED)

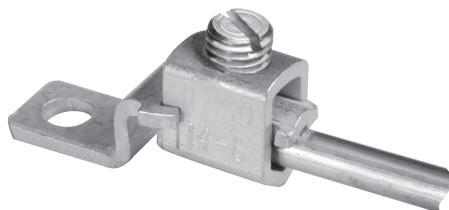
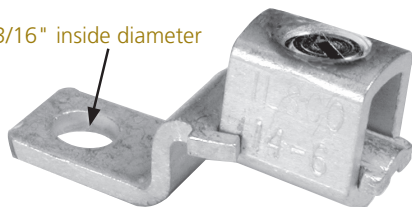
Ordering Information required.

1/4" inside diameter



**EM 2518** – Fits solid #6 AWG at right angle. Copper housing and mounting tang.  
*Standard packaging: 100/bx, 6 lb/bx*  
Add suffix **-NBL** for nut, bolt, and lockwasher, to attach to a pedestal grounding bracket.

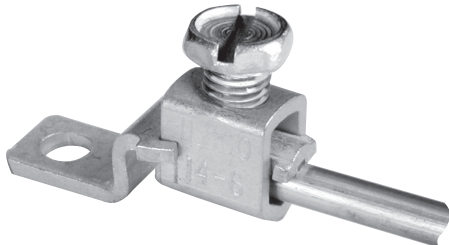
3/16" inside diameter



**EM 2519-06** – Fits solid #10–#6 AWG, offset bend in mounting tang. Tin-plated copper housing and mounting tang.

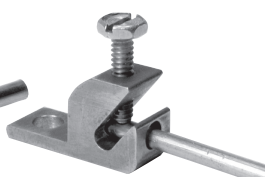
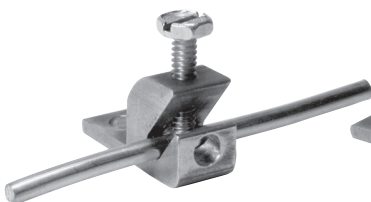
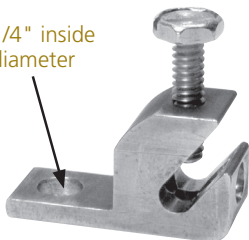


3/16" inside diameter



**EM 2519-06HH** – Fits solid #12–#6 AWG, offset bend in mounting tang. Tin-plated copper housing and mounting tang.

1/4" inside diameter



**EM 2512** – Extruded connector fits solid and stranded #6 AWG. Wire can be connected in either direction.  
**EM 2512T** – EM 2512, with tin-plated copper body and tin-plated screw.

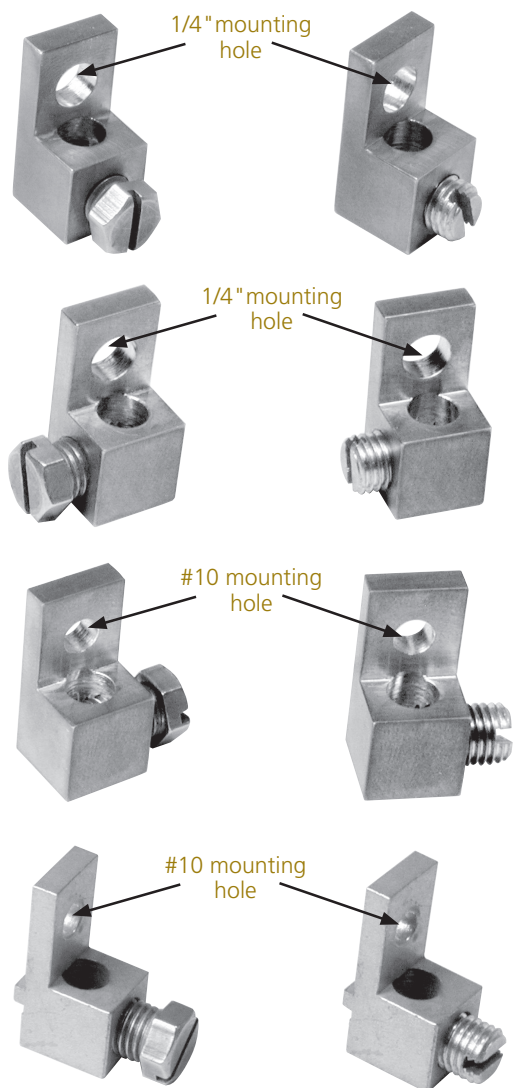
### At a glance . . .

PART NUMBER	ACCOMMODATES	MOUNTING TANG LENGTH/ANGLE/HT.	MOUNTING HOLE DIA./ SPACING	SCREW	LISTING
EM 2518	solid #6	5/8" / 90° bend / 3/8"	3/16"	9/32" slotted	none
EM 2519-06	#10–6	1/2" / 90° bend / 3/8"	3/16"	9/32" slotted	UL
EM 2519-06HH	#12–6	1/2" / 90° bend / 3/8"	3/16"	3/8" hex head	none
EM 2512	solid/stranded #6	3/4" / straight	1/4"	3/8" hex head	none
EM 2512T	solid/stranded #6	3/4" / straight	1/4"	3/8" hex head	none

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Connectors – Ground Lugs

## L-SHAPED GROUND LUGS



L-shaped ground lugs accommodate ground wires from #14–6 AWG. 3/8" hex head bolts fit standard 216B tool. All lugs are available with either 1/4" or #10 size mounting hole.



### Ordering information

**EM 6620** L-shaped ground lug with hex head bolt in front

**EM 6621** L-shaped ground lug with headless set screw in front

*1/4" mounting hole is standard on these two products. For #10 size hole, please add suffix .10.*

**EM 6622** L-shaped ground lug with hex head bolt on left.

**EM 6622HL** L-shaped ground lug with headless set screw on left

*1/4" mounting hole is standard on these two products. For #10 size hole, please add suffix .10.*

**EM 6624** L-shaped ground lug with hex head bolt on right

**EM 6625** L-shaped ground lug with headless set screw on right

*#10 size mounting hole is standard on these two products. For 1/4" hole, please add suffix .25.*

**EM 6626** L-shaped ground lug with hex head bolt in front, and lip in back to prevent rotation on ground bar or bracket

**EM 6627** L-shaped ground lug with headless set screw in front, and lip in back to prevent rotation on ground bar or bracket

*#10 size mounting hole is standard on these two products. For 1/4" hole, please add suffix .25.*

*Add suffix -NBL for nut, bolt, and lockwasher, to attach any of the above ground lugs to a pedestal grounding bracket.*

### At a glance ...

PART NUMBER	BOLT/SCREW LOCATION	BOLT/SCREW HEAD	MOUNTING HOLE SIZE	DISTINGUISHING FEATURE	LISTING
EM 6620	front	hex head	1/4"	none	UL
EM 6621	front	headless	1/4"	none	UL
EM 6622	left	hex head	1/4"	none	UL
EM 6622HL	left	headless	1/4"	none	UL
EM 6624	right	hex head	#10	none	UL
EM 6625	right	headless	#10	none	UL
EM 6626	front	hex head	#10	anti-rotation lip	UL
EM 6627	front	headless	#10	anti-rotation lip	UL

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com



# Connectors – Ground Lugs

## GROUND LUG

For attaching #6 AWG solid or stranded ground wires to cabinets, closures, terminals, etc. Headless set screw comes in from the side.

Ordering information – EM 3538



## DOUBLE-HOLE GROUND LUGS

Plated zinc die cast alloy for mechanical strength and electrical conductivity. Accommodate #6–#2 AWG ground wires, solid or stranded.

Ordering information

**EM 6630** Double-Hole Ground Lug

**EM 6631** Double-Hole Ground Bar Lug with parallel mounting tang.



## TRANSFORMER (TANK) GROUND LUGS

### APPLICATION

For bonding telco plant to the electrical transformer in joint use situations. Hex-shaped body installs with typical hand tools and captures #6 AWG solid copper conductor.

- Brass components for electrical conductivity and corrosion resistance
- Installed with typical hand tools
- #6 AWG solid copper compatibility
- Available in two sizes to fit most transformers

Ordering information

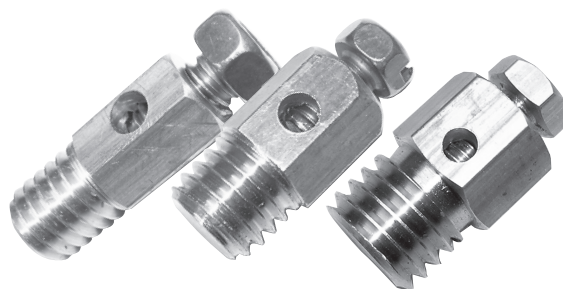
**EM TGL38** Transformer Ground Lug, 3/8"

**EM TGL48** Transformer Ground Lug, 1/2"

**EM TGL58** Transformer Ground Lug, 5/8"

**EM TGL58.240** Transformer Ground Lug, 5/8" with .240 diameter hole to accommodate #4 AWG

Add suffix **-T** for tin plating.



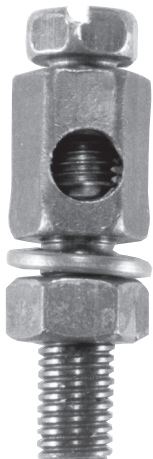
BONDING &  
GROUNDING

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com



# Connectors – Ground Lugs

## PEDESTAL GROUND LUG



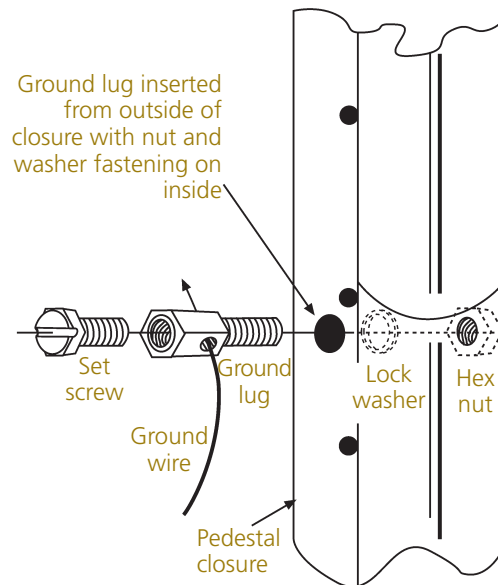
For bonding closures adjacent to power sources; connects #6 AWG solid or stranded ground wires.

**Ordering information EM 3535**

Standard packaging: 1/lb, 100/bx, 6 lb/bx.



Other designs are available;  
call for information



## PEDESTAL GROUND LUG



The EM 5900SB can be used in a ground bar or bracket, or through the housing of a pedestal or cabinet. All copper alloy construction. Can also be tin plated, and is also available with a lock washer and nut.

### FEATURES

- 1/4-20 x 1/2 threaded shank
- Captures #6 AWG and smaller
- Silicon bronze construction for strength, electrical conductivity, and corrosion resistance

**Ordering information**

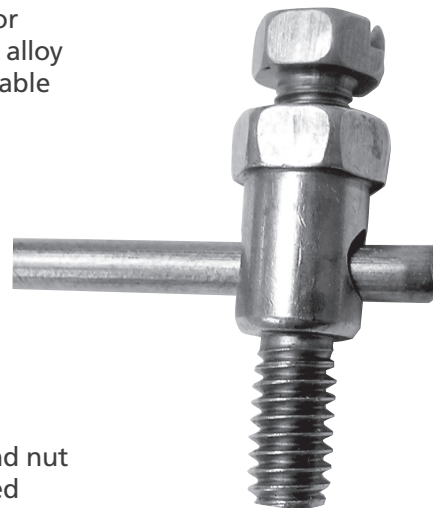
**EM 5900SB** Pedestal Ground Lug

**EM 5900SB-LN** Pedestal Ground Lug with lock washer and nut

**EM 5900SBXL-LN** Pedestal Ground Lug with 3/4" threaded shank, with lock washer and nut



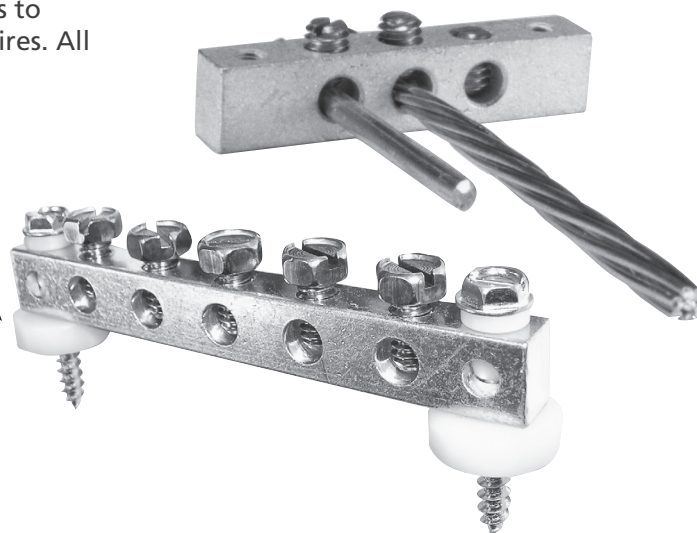
Add suffix -T for tin plating.



# Connectors – Ground Blocks

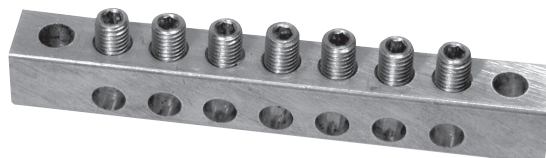
## GROUND BLOCKS

Can be mounted in terminals, cabinets, and enclosures to provide a convenient means for connecting ground wires. All ground blocks are copper, unless otherwise noted. Add suffix **-MSK** to include mounting screws. Add suffix **-ISK** to include isolator mounting screws.

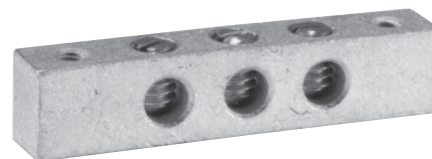


### Ordering information

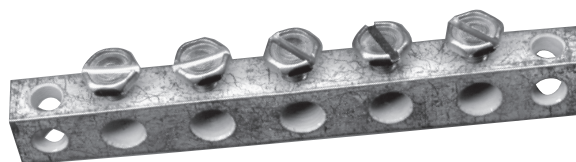
**EM 4200-7-0** 7-position ground block, copper, 1/2" x 1/2", set screws with Allen heads, 1/4" mounting holes.  
*Standard packaging: 250/bx, 30 lb/bx.*



**EM 4201** 3-position ground block, #8–32 mounting holes.  
*Standard packaging: 250/bx, 30 lb/bx.*



**EM 4201-5S** 5-position ground block with screws, .219" mounting holes.  
*Standard packaging: 250/bx.*



BONDING &  
GROUNDING

# Connectors – Ground Blocks

## GROUND BLOCKS (CONTINUED)

### Ordering information

**EM 4201-12S** 12-position ground block made from 3/8" x 1/2", 10 x 32 threads, with screws, .220" mounting holes.  
*Standard packaging: 100/bx, 36 lb/bx.*



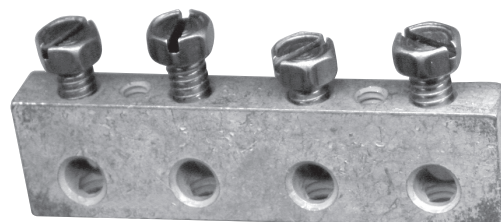
**EM 4202** Multiport ground block, with headless set screws, #10–32 mounting holes.  
*Standard packaging: 100/bx, 22 lb/bx.*



**EM 4203** 4-position ground block made from 1/2" x .375" with 1/4 x 20 tapped holes all the way through, and headless set screws, #10–24 mounting holes.  
*Standard packaging: 200/bx.*



**EM 4204** 4-position ground block made from 3/8" x 3/4", brass hex head screws, #10–24 mounting holes.

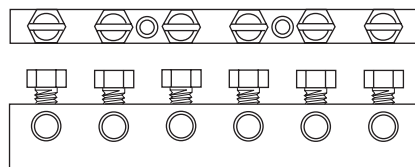


# Connectors – Ground Blocks

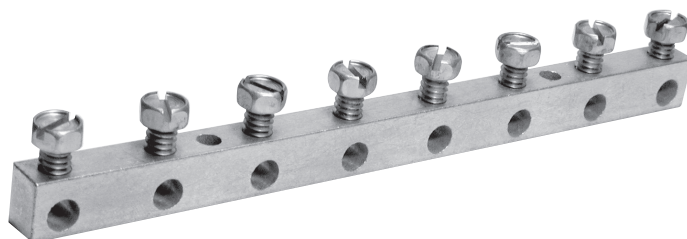
## GROUND BLOCKS (CONTINUED)

### Ordering information

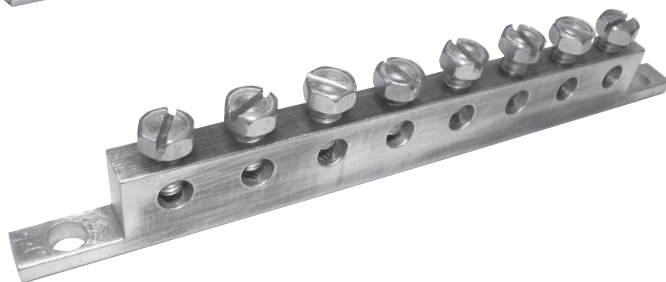
**EM 4204-6BOH** 6-position ground block made from 3/8" x 3/4", tin-plated brass hex cap screws, #10–32 mounting holes.



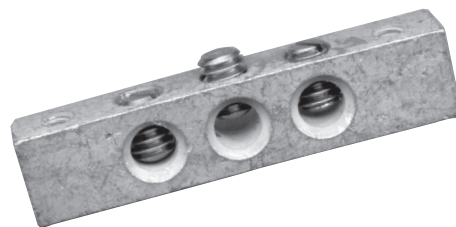
**EM 4250-8H** 8-position ground block with 1/4–20 hex cap screws, #10–24 mounting holes.



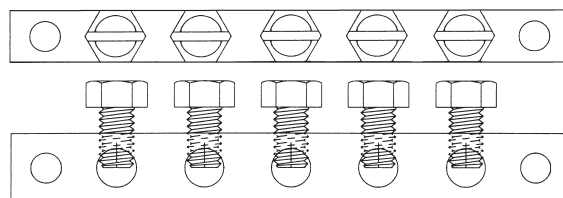
**EM 4250-8HAS** 8-position ground block, 360 brass, with 1/4–20 hex cap screws with slots, through holes, 1/4" mounting holes.



**EM 4250-3SSO** Ground block, three screws, stainless steel oval point set screws, #8–32 mounting holes.  
*Standard packaging: 250/bx, 27 lb/bx.*



**EM 4250-5BOH** 5-position ground block with 1/4 - 20 x 7/16 slotted brass hex head screws, .219" mounting holes.  
*Standard packaging: 50/bx, 12 lb/bx.*



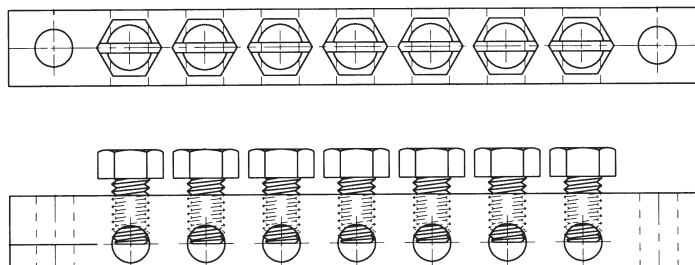
BONDING &  
GROUNDING

# Connectors – Ground Blocks

## GROUND BLOCKS (CONTINUED)

### Ordering information

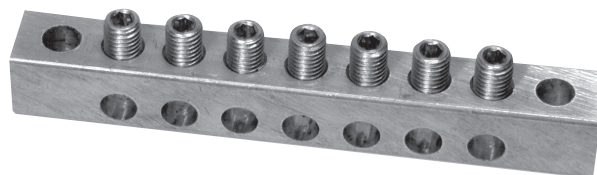
**EM 4251-7-BOH** 7-position ground block, 1/2" x 1/2" with 1/4" mounting holes, brass hex head screws with slots.



**EM 4251-7-SS-O** 7-position ground block, 1/2" x 1/2", oval point Allen 1/4-28 set screws, stainless steel, copper material, no tin, 1/4" mounting holes.



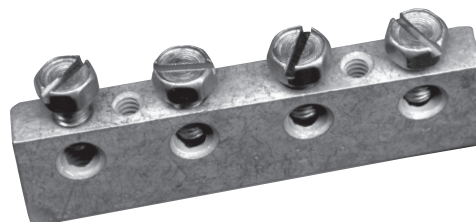
*Standard packaging: 250/bx, 46 lb/bx.*



**EM 4254-12** 12-position aluminum ground block with 1/4 - 28 slotted stainless steel screws, oval point. #10 mounting holes.



**EM 4255-4BOM** 4-position ground block, 3/8" x 3/4" with brass hex head screws. #10-32 mounting holes.



*Please see next page for at-a-glance comparison of all ground blocks.*

Other designs are available; call for information, or see next page for specifying custom ground blocks. Add suffix -MSK to include mounting screws. Add suffix -ISK to include isolator mounting screws.



# Connectors – Ground Blocks

## GROUND BLOCKS (CONTINUED)

### At a glance ...

PART NUMBER	POSITIONS	DIMENSIONS	MOUNTING HOLES	MOUNTING HOLE SPACING	SCREWS	LISTING
EM 4200-7-0	7	1/2" x 1/2" x 3-3/4"	.25"	3-1/4"	Allen	none
EM 4201	3	3/8" x 1/2" x 2-1/4"	#8-32	1-3/4"	Headless set screws	none
EM 4201-SS	5	3/8" x 1/2" x 4"	.219"	3-1/2"	Hex head	none
EM 4201-12S	12	3/8" x 1/2" x 8"	.220"	7-1/2"	Hex head	none
EM 4202	3	9/16" x 9/16" x 2-7/8"	#10-32	2-3/8", 1-15/16"	Headless set screws	none
EM 4203	4	3/8" x 1/2" x 2-1/2"	#10-24	1-3/16"	Headless set screws	none
EM 4204	4	3/8" x 3/4" x 3"	#10-24	1-1/2"	Brass hex head	none
EM 4204-6BOH	6	3/8" x 3/4" x 4-1/2"	#10-32	1-1/2"	Tin-plated brass hex head	none
EM 4250-8H	8	3/8" x 1/2" x 6-3/4"	#10-24	3-1/2"	Hex cap	none
EM 4250-8HAS	8	3/8" x 3/4" x 6-5/8"	1/4"	5-7/8"	Hex cap	none
EM 4250-3SSO	3	3/8" x 1/2" x 2-1/4"	#8-32	1-3/4"	Stainless steel oval point	UL
EM 4250-5BOH	5	3/8" x 1/2" x 4"	.219"	3-1/2"	Brass hex head	none
EM 4251-7-BOH	7	1/2" x 1/2" x 4-1/2"	1/4"	4"	Brass hex head	none
EM 4251-7-SS-O	7	1/2" x 1/2" x 3-3/4"	1/4"	3-1/4"	Oval point, Allen	UL
EM 4254-12	12	5/16" x 7/16" x 4-7/16"	#10	4"	Oval point, stainless, slotted	none
EM 4255-4BOM	4	3/8" x 3/4" x 3"	#10-32	1-1/2"	Brass hex head	none

## CUSTOM GROUND BLOCKS

**EM 4250-XYZ** Ground block made from 3/8" x 1/2" material:  
**X** = number of positions (1-24)  
**Y** = material of set screw (B = brass, S = steel, SS = stainless)  
**Z** = type of point on set screw (O = oval, C = cup)

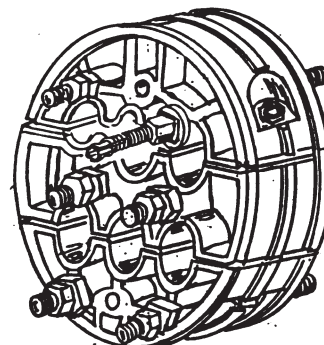
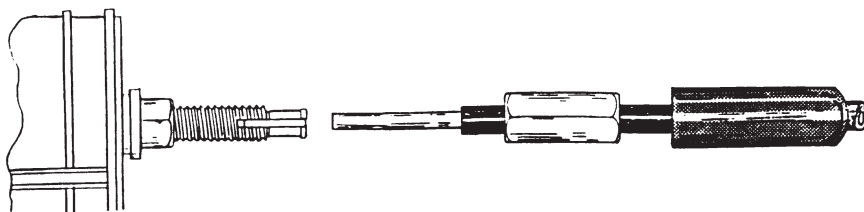


**EM 4252-XYZ** Ground block made from 9/16" x 9/16" material, UL listed:  
**X** = number of positions (1-24)  
**Y** = material of set screw (B = brass, S = steel, SS = stainless)  
**Z** = type of point on set screw (O = oval, C = cup)

# Connectors

## IN-LINE CONNECTOR (STUD - #6 AWG)

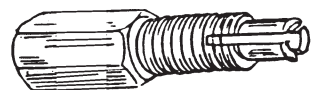
The EM 0366WR In-Line Ground Connector allows the installer to make a low-resistance, externally removable ground wire connection to the outside of a PLP Coyote Splice™ closure.



### Ordering information

**EM 0366WR** In-Line Connector

**EM 0366WRL** Longer In-Line Connector (actual in-line connector is 1/2" longer than EM 0366WR)



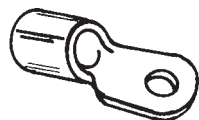
## LOOSE PIECE CRIMP TERMINALS

### Ordering information

**EM 6-10-R**

#6 AWG Tin-Plated Copper Ring, #10 mounting hole.

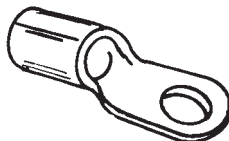
Standard packaging: 100/sm bx, 1000/lg bx, 1.5 lb/sm bx, 13 lb/lg bx.



**EM 6-25-R**

#6 AWG Tin-Plated Copper Ring, 1/4" mounting hole.

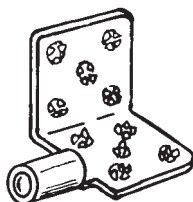
Standard packaging: 100/sm bx, 1000/lg bx, 1.5 lb/sm bx, 13 lb/lg bx.



**EM 14-TF**

#14 AWG TERMI-FOIL®.

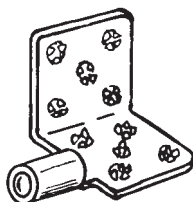
Standard packaging: 100/lbg, 1000/bx, 1.16 lb/lbg.



**EM 10-F**

#10 and #12 AWG TERMI-FOIL®.

Standard packaging: 100/lbg, 1000/bx.



## BUNCH & GROUND HARNESS

103"-long insulated harness, double hole ring on one end, butt splice with a set screw on the other. For grounding out unused pairs.

### Ordering information

**EM 8100-103DHBSS**



close-up



For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

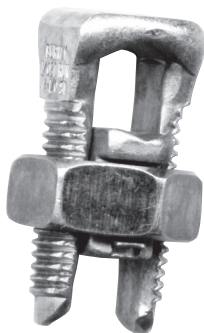
# Connectors

## SPLIT BOLT CONNECTOR

For 10M strand.

Ordering information **EM 1010**

Standard packaging: 250/lbx, 44 lb/lbx.



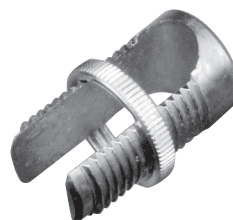
## ZINC SPLIT BOLT CONNECTOR

Zinc die-cast split bolt-type connectors with aluminum knurled nuts. Typically used for bonding two buried service wire shields together..

Ordering information

**EM 4064** - 1/4" inside slot width, 15/16" inside length, 1" overall length, 1/2"-20 thread

**EM 4066** - 13/32" inside slot width, 11/16" inside length, 13/16" overall length, 5/8" thread



## CATV SPLITTER GROUND BOLT

A brass bolt designed to replace the existing ground set screw in a splitter assembly, enabling the installer to connect an additional ground wire.

### APPLICATIONS

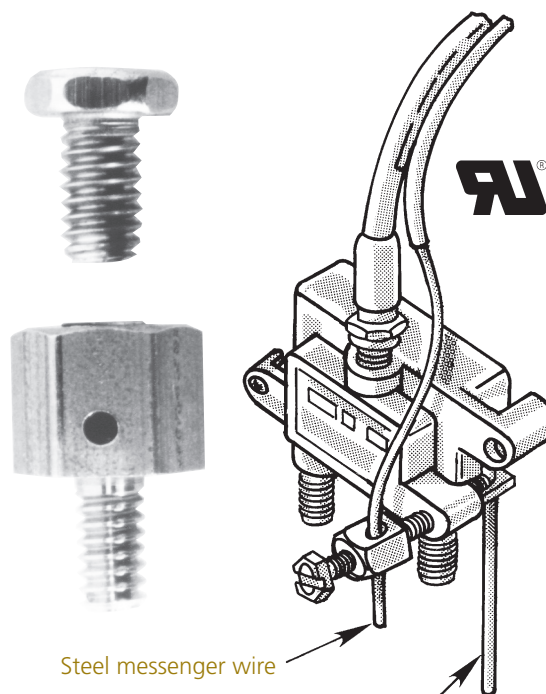
- For bonding the steel messenger wire of "figure 8" cable to the subscriber ground
- For installation of a second ground wire

### FEATURES

- Installs with a standard terminal wrench
- All brass for greater conductivity
- Can be used to connect two dissimilar ground wires
- Available in a tin-plated version, or with a larger cross hole

Ordering information **EM 1114**

Standard packaging: 100/lbg, 1000/lbx, 25 lb/lbx.



Steel messenger wire

Ground wire

BONDING &  
GROUNDING

# Connectors

## TANG AND COLLAR LUGS, SINGLE AND DOUBLE MOUNTING HOLES – OFFSET TYPE DE & 2DE

### FEATURES

- Electrolytic copper tang and collar
- Unplated; for tin plating, add suffix -P to end of catalog number.

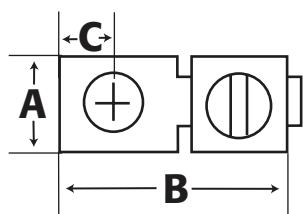
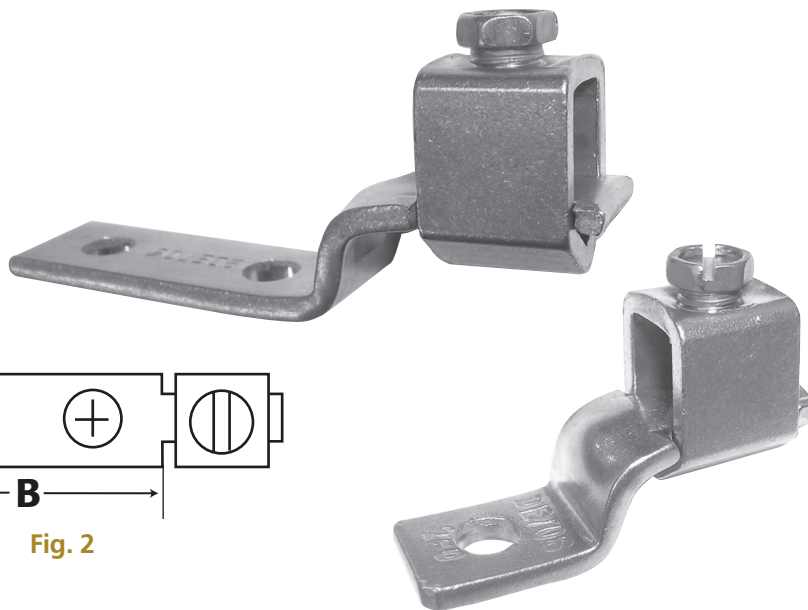


Fig. 1

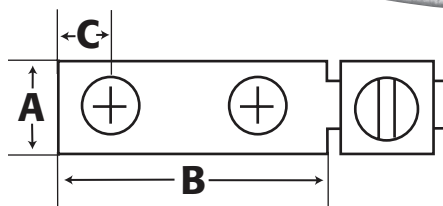


Fig. 2



Fig. 3



### Ordering Information

FIGURE	A	B	C	D	T	WIRE RANGE	AMP	MOUNTING HOLES		CATALOG NUMBER
								HOLE SIZE	C TO C	
1	5/16"	3 1/32"	3/16"	3/4"	1/16"	10–14 str.	25	#6	-	*DE-703
1	3/8"	1-1/4"	7/32"	25/32"	1/16"	6–14 str.	35–50	#10	-	DE-704
1	1/2"	1-1/2"	9/32"	1-1/16"	5/64"	2–8 str.	70–90	1/4	-	*DE-705
1	5/8"	1-7/8"	3/8"	1-11/32"	1/8"	1/0–6 str.	125	1/4	-	DE-706
1	1"	2-3/4"	1/2"	1-3/4"	1/8"	4/0–2 str.	225	5/16	-	*DE-707
1	1-1/2"	4-1/4"	15/16"	2-45/64"	3/16"	500 MCM–1/0 str.	400	3/8	-	*DE-708
1	2"	4-5/8"	1-3/16"	3-7/8"	1/4"	1000–600 MCM	650	1/2	-	DE-709
2	5/16"	1-23/32"	3/16"	3/4"	1/16"	10–14 str.	25	#6	3/4	2DE-703
2	3/8"	2-1/4"	7/32"	25/32"	1/16"	6–14 str.	35–50	#10	1	2DE-704
2	1/2"	2-7/16"	1/4"	1-1/16"	5/64"	2–8 str.	70–90	1/4	1	2DE-705
2	5/8"	2-15/16"	7/16"	1-11/32"	1/8"	1/0–6 str.	125	1/4	1	2DE-706
2	1"	3-5/8"	1/2"	1-3/4"	1/8"	4/0–2 str.	225	5/16	1	2DE-707
2	1-1/2"	6"	3/4"	2-45/64"	3/16"	500 MCM–1/0 str.	400	1/2	1-3/4	2DE-708
2	2"	6-1/4"	3/4"	3-7/8"	1/4"	1000–600 MCM	650	1/2	1-3/4	2DE-709

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Connectors

## TANG AND COLLAR LUGS, SINGLE AND DOUBLE MOUNTING HOLES – STRAIGHT TYPE DE & 2DE

### FEATURES

- Electrolytic copper tang and collar
- Unplated; for tin plating, add suffix -P to end of catalog number.
- Sizes 704 and 706 not UL listed

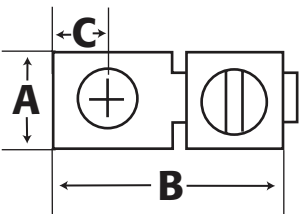
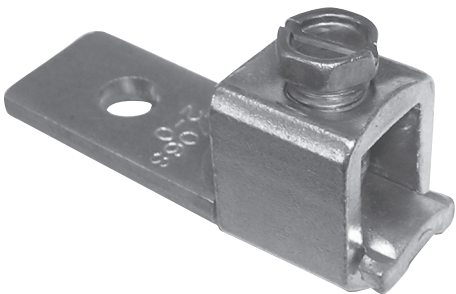


Fig. 1

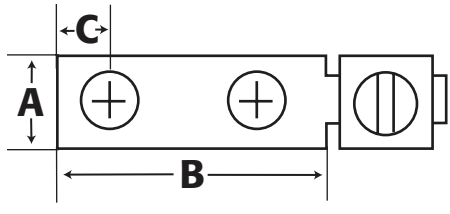


Fig. 2



Fig. 3



Ordering Information										
FIGURE	A	B	C	D	T	WIRE RANGE	AMP	MOUNTING HOLES		CATALOG NUMBER
								HOLE SIZE	C TO C	
1	5/16"	61/64"	3/16	3/4"	1/16"	10–14 str.	25	#8	-	*DES-703
1	3/8"	1-1/4"	7/32"	3/4"	1/16"	6–14 str.	35–50	#10	-	DES-704
1	1/2"	1-1/2"	9/32"	1-3/32"	5/64"	2–8 str.	70–90	1/4	-	*DES-705
1	5/8"	1-7/8"	3/8"	1-25/32"	1/8"	1/0–6 str.	125	1/4	-	DES-706
1	1"	2-3/8"	1/2"	1-27/32"	1/8"	4/0–2 str.	225	5/16	-	*DES-707
1	1-1/2"	3-7/8"	15/16"	2-9/16"	3/16"	500 MCM–1/0 str.	400	3/8	-	*DES-708
1	2"	5-1/8"	1-3/16"	3-3/4"	1/4"	1000–600 MCM	650	1/2	-	*DES-709
2	5/16"	1-5/64"	3/16"	3/4"	1/16"	10–14 str.	25	#8	3/4	2DES-703
2	3/8"	2-1/4"	7/32"	3/4"	1/16"	6–14 str.	35–50	#10	1	2DES-704
2	1/2"	2-7/16"	1/4"	1-3/32"	5/64"	2–8 str.	70–90	1/4	1	2DES-705
2	5/8"	2-15/16"	7/16"	1-25/32"	1/8"	1/0–6 str.	125	1/4	1	2DES-706
2	1"	3-5/8"	1/2"	1-27/32"	1/8"	4/0–2 str.	225	5/16	1	2DES-707
2	1-1/2"	5-5/8"	3/4"	2-9/16"	3/16"	500 MCM–1/0 str.	400	1/2	1-3/4	2DES-708
2	2"	6-7/8"	3/4"	3-3/4"	1/4"	1000–600 MCM	650	1/2	1-3/4	2DES-709

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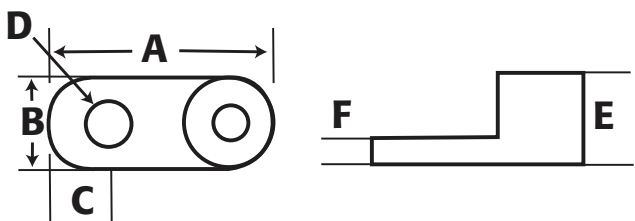


# Connectors

## SINGLE TERMINAL LUG FOR COPPER CONDUCTOR – TYPE TL FOR CABLE TO STUD OR SCREW

### FEATURES

- Forged high-conductivity copper mechanical lugs
- Suffix -P indicates tin plating.



### Ordering Information

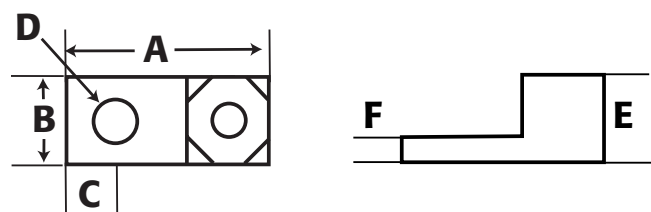
AMP RATING	CONDUCTOR RANGE		A	B	C	D	E	F	BOLT SIZE	SCREW STYLE	STANDARD CARTON	CATALOG NUMBER
	MAXIMUM	MINIMUM										
35	8 str.	14 sol.	53/64	3/8	7/32	13/64	31/64	3/32	#10	slotted	100	*TL-1
35	8 str.	14 sol.	53/64	3/8	7/32	13/64	31/64	3/32	#10	slotted	100	*TL-1-P
70	4 str.	14 sol.	1-1/8	17/32	9/32	9/32	9/16	7/64	1/4	slotted	100	*TL-2
70	4 str.	14 sol.	1-1/8	17/32	9/32	9/32	9/16	7/64	1/4	slotted	100	*TL-2-P
125	1/0 str.	6 sol.	1-31/64	23/32	3/8	21/64	49/64	7/64	5/16	socket	100	*TL-3
125	1/0 str.	6 sol.	1-31/64	23/32	3/8	21/64	49/64	7/64	5/16	socket	100	*TL-3-P
125	1/0 str.	6 sol.	1-31/64	23/32	3/8	21/64	61/64	7/64	5/16	hex	50	*TL-4
125	1/0 str.	6 sol.	1-31/64	23/32	3/8	21/64	61/64	7/64	5/16	hex	50	*TL-4-P
250	250 MCM	2/0 str.	1-63/64	61/64	31/64	25/64	1-1/16	1/8	3/8	socket	25	*TL-5
250	250 MCM	2/0 str.	1-63/64	61/64	31/64	25/64	1-1/16	1/8	3/8	socket	25	*TL-5-P
250	250 MCM	2/0 str.	1-63/64	61/64	31/64	25/64	1-15/16	1/8	3/8	hex	12	*TL-6
250	250 MCM	2/0 str.	1-63/64	61/64	31/64	25/64	1-15/16	1/8	3/8	hex	12	*TL-6-P

# Connectors

## CAST TERMINAL LUGS – TYPE CTL FOR CABLE TO STUD OR SCREW

### FEATURES

- Forged high-conductivity copper mechanical lugs
- Suffix -P indicates tin plating.
- Add suffix -H for hex head screw.



### Ordering Information

CONDUCTOR RANGE		A	B	C	D	E	F	BOLT SIZE	SCREW STYLE	STANDARD CARTON	CATALOG NUMBER
MAXIMUM	MINIMUM										
1 str.	4 str.	1-1/2	3/4	13/32	1/4	13/16	3/16	1/4	socket	50	CTL-1
1 str.	4 str.	1-1/2	3/4	13/32	1/4	13/16	3/16	1/4	socket	50	CTL-1-P
1/0 str.	4 str.	1-15/32	3/4	13/32	11/32	13/16	3/16	5/16	socket	50	CTL-1/0
1/0 str.	4 str.	1-15/32	3/4	13/32	11/32	13/16	3/16	5/16	socket	50	CTL-1/0-P
2/0 str.	4 str.	1-3/4	3/4	3/8	13/32	7/8	3/16	3/8	socket	25	CTL-2/0
2/0 str.	4 str.	1-3/4	3/4	3/8	13/32	7/8	3/16	3/8	socket	25	CTL-2/0-P
4/0 str.	1 str.	1-13/16	1	7/16	13/32	1-1/32	7/32	3/8	socket	12	CTL-4/0
4/0 str.	1 str.	1-13/16	1	7/16	13/32	1-1/32	7/32	3/8	socket	12	CTL-4/0-P
500 MCM	4/0 str.	3-1/16	1-7/16	3/4	9/16	1-1/2	7/32	3/8	socket	6	CTL-500
500 MCM	4/0 str.	3-1/16	1-7/16	3/4	9/16	1-1/2	7/32	3/8	socket	6	CTL-500-P

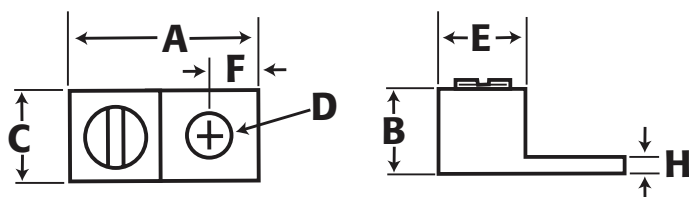
For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Connectors

## UNIVERSAL TERMINAL – FOR SINGLE ALUMINUM AND COPPER CONDUCTOR

### FEATURES

- Dual-rated, one-conductor lugs
- Constructed from high-strength, high-conductivity aluminum alloy
- Electro-tin plated for low-contact resistance



### Ordering Information

SCREW TYPE	WIRE RANGE AL9CU	A	B	C	D	E	F	H	CATALOG NUMBER
slotted	4–14	0.835	0.5	0.375	0.193	0.375	0.25	0.1	6T
slotted	4–14	1.062	0.5	0.5	0.265	0.375	0.25	0.094	4T
slotted	4–14	1.156	0.56	0.5	0.265	0.47	0.25	0.1	2T
slotted	1/0–14	1.468	0.781	0.625	0.265	0.625	0.437	0.187	0T
slotted	1/0–14	1.171	0.671	0.625	0.265	0.578	0.25	0.13	0T1
hex socket	2/0–14	1.468	0.781	0.625	0.265	0.625	0.437	0.187	2/0T
hex socket	2/0–14	1.625	0.75	0.656	0.265	0.625	0.437	0.25	2/0T1
hex socket	3/0–6	1.875	0.89	0.7	0.265	0.88	0.5	0.145	3/0T
hex socket	250 MCM–6	2	1.125	1	0.328	1	0.406	0.25	250T
hex socket	300 MCM–6	2	1.125	1	0.281	1	0.5	0.25	300T
hex socket	350 MCM–6	2.25	1.25	1.125	0.406	1.125	0.5	0.25	350T
hex socket	500 MCM–4	2.812	1.562	1.5	0.406	1.218	0.875	0.312	500T
hex socket	600 MCM–2	3.125	1.562	1.5	0.531	1.375	0.875	0.437	600T
hex socket	750 MCM–4/0	3.375	1.937	1.625	0.531	1.625	0.875	0.5	750T
hex socket	800 MCM– 300 MCM	3.375	1.937	1.575	0.656	1.625	0.875	0.5	800T
hex socket	1000 MCM– 500 MCM	3.375	1.937	1.75	0.656	1.625	0.875	0.5	1000T

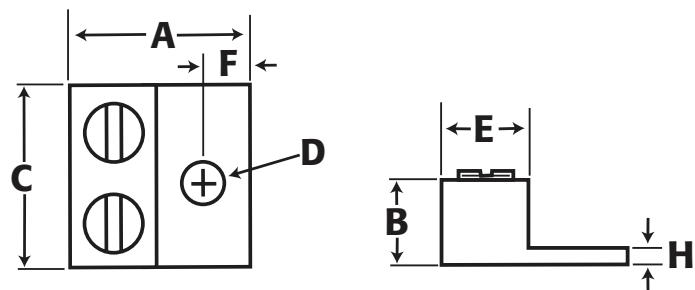
For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Connectors

## UNIVERSAL TERMINAL – FOR DOUBLE ALUMINUM AND COPPER CONDUCTOR

### FEATURES

- Dual-rated, two-conductor lugs
- Constructed from high-strength, high-conductivity aluminum alloy
- Electro-tin plated for low-contact resistance



Ordering Information									
SCREW TYPE	WIRE RANGE AL9CU	A	B	C	D	E	F	H	CATALOG NUMBER
slotted	Two 2–14	1.156	0.56	0.906	0.272	0.47	0.25	0.1	2-2T
slotted	Two 1/0–14	1.468	0.781	1.12	0.265	0.625	0.328	0.187	2-0T
hex socket	Two 2/0–14	1.468	0.781	1.12	0.265	0.625	0.328	0.187	2-2/0T
hex socket	Two 3/0–6	1.75	0.844	1.375	0.266	0.78	0.468	0.187	2-3/0T
hex socket	Two 250 MCM–6	2.562	1.187	1.625	0.391	1	0.875	0.25	2-250T
hex socket	Two 350 MCM–6	2.875	1.25	1.937	0.562	1.125	0.875	0.25	2-350T
hex socket	Two 500 MCM–4	2.812	1.562	2.266	0.562	1.218	0.875	0.312	2-500T
hex socket	Two 600 MCM–2	3.125	1.562	2.406	0.531	1.375	0.625	0.437	2-600T
hex socket	Two 750 MCM–4/0	3.375	1.937	2.875	0.531	1.625	0.875	0.5	2-750T
hex socket	Two 800 MCM–300 MCM	3.375	1.937	2.925	0.656	1.625	0.875	0.5	2-800T
hex socket	Two 1000 MCM–500 MCM	3.375	1.937	3.187	0.656	1.625	0.875	0.5	2-1000T

BONDING & GROUNDING

# Connectors

## HAND-HELD CRIMP TOOL

#8–#2 AWG conductor range covers red, blue, grey, and brown compression lugs that are made from tubing. Ergonomic design features cushioned grips, easy-grip jaws, and rotating tool nest. Manufactured in the U.S.A.

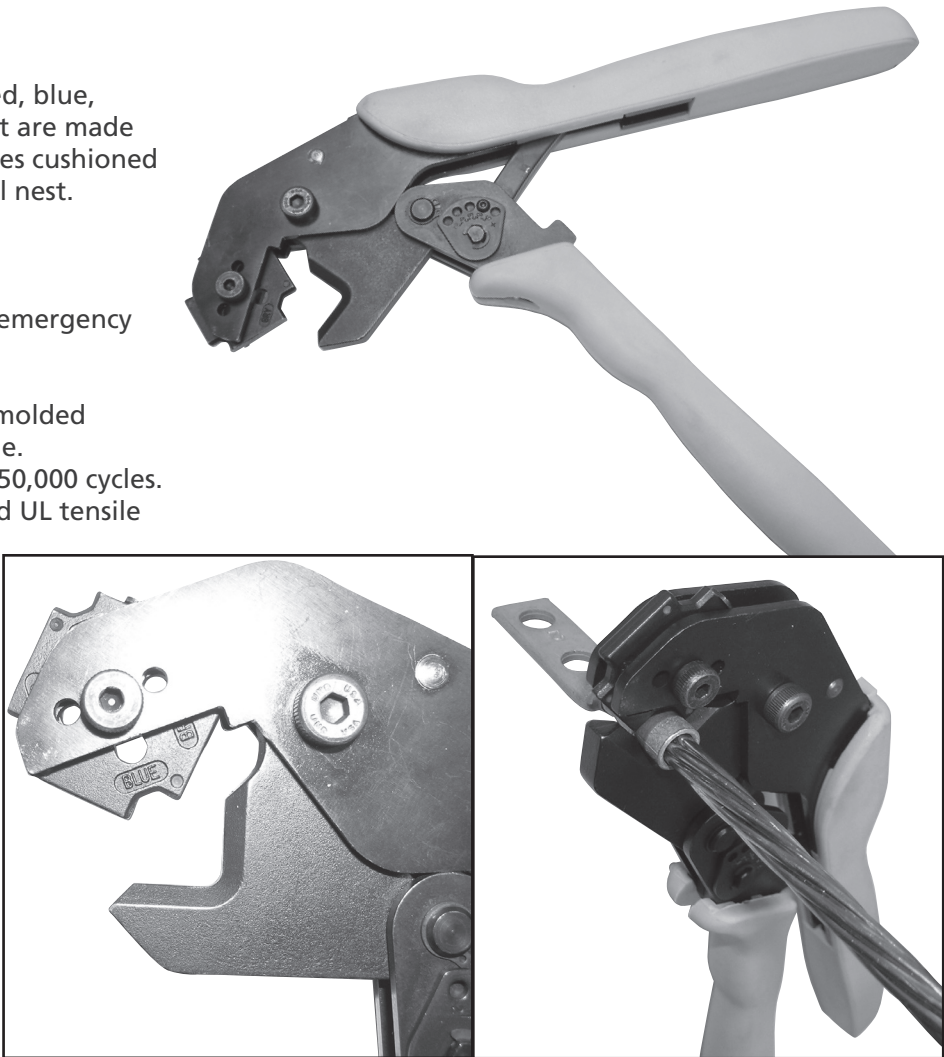
### FEATURES

- Positive ratcheting assembly with emergency release, prevents overcrimping or undercrimping.
- High mechanical advantage with molded cushion grips minimize user fatigue.
- Tool life is conservatively rated at 50,000 cycles.
- Crimps designed to meet or exceed UL tensile requirements.

### Ordering information

**EM 4290CT**  
Hand-Held Crimp Tool, #8–#2 AWG

DIE INDEX NUMBER	GAGE DIE (IN.)		WIRE SIZE
	MIN.	MAX	
Red	.178	.200	8
Blue	.220	.238	6
Grey	.265	.275	4
Brown	.325	.347	2

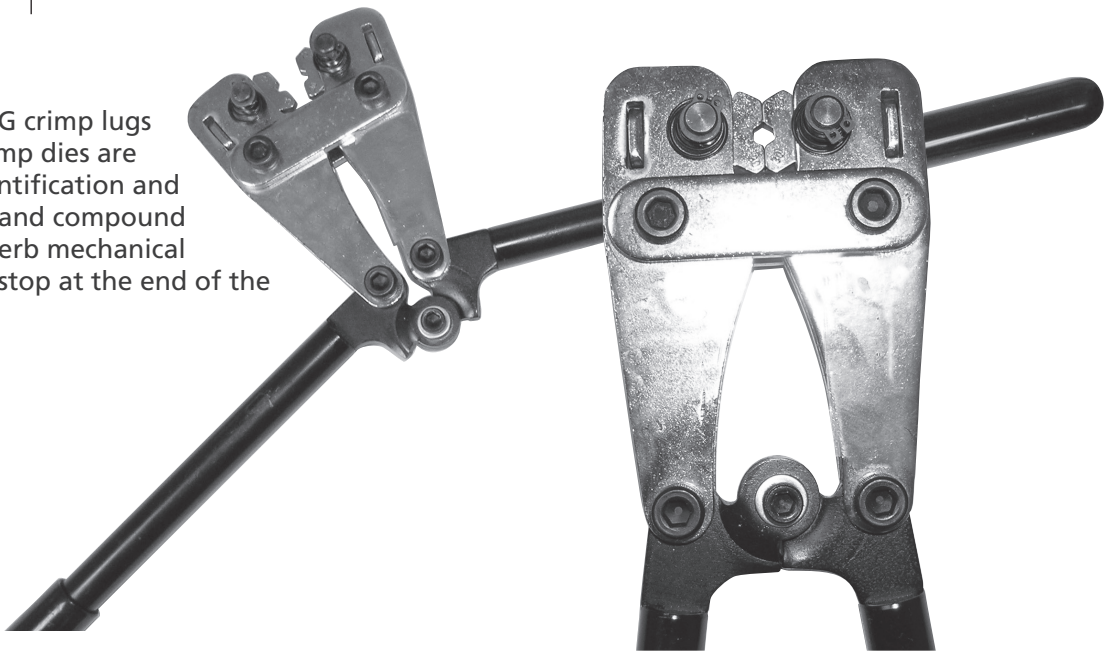


## CRIMP TOOL

For crimping #8–1/0 AWG crimp lugs and splices. Rotating crimp dies are color coded for easy identification and selection. Long handles and compound lever action provide superb mechanical advantage and positive stop at the end of the crimp cycle.

### Ordering information

**EM 080CT**  
Standard packaging:  
1/bx, 9 lb/bx



For Electric Motion Company (EMC) part numbers starting with “EM” please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)



# Clamps – Bronze Vise Type Connectors

## BRONZE VISE TYPE CONNECTORS

Silicon bronze clamps adjustable by single hex head screws, used to connect various size grounding conductors, as well as pole line apparatus to grounding conductors.

### FEATURES

- Casting and bolt are both made of silicon bronze for greater strength, conductivity, and corrosion resistance.
- Install using the standard can wrench.

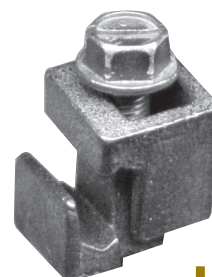
### Ordering information

**EM 2370** is manufactured to Bell Spec CA08980 (H1). It accommodates:

- Single or multiple #6 AWG wires solid or stranded
- #6 AWG to #10 or #12 AWG
- From single 2-pair BSW metallic shield, to three 2-pair BSW metallic shields

Standard packaging: 100/bx, 8 lb/bx.

**EM 2370NS** Same as above, with no slot.



**H1**



### Ordering information

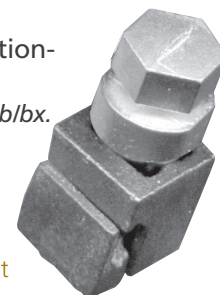
**EM 2371** Silicon Bronze Clamp  
Standard packaging: 5/bg, 100/bx, 10 lb/bx.

**EM 2371-2** Silicon Bronze Clamp with a vibration-resistant screw  
Standard packaging: 5/bg, 100/bx, 9 lb/bx.

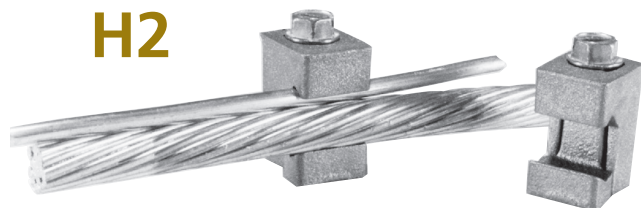
**EM 2371** is similar to the EM 2370, only with the addition of “tongue and groove” type alignment channels to keep the two halves of the clamp in proper alignment with each other.

Add suffix -T for a tin-plated clamp.  
Add suffix -BA for a torque shear head.

EM 2371 with torque shear head bolt



**H2**



### Ordering information

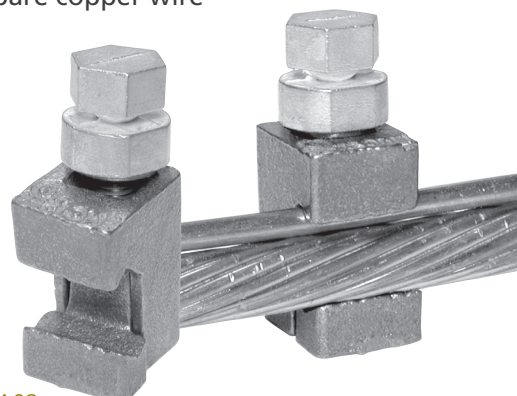
**EM 2372** H2 Silicon Bronze Clamp.  
Standard packaging: 5/bg, 100/bx, 15lb/bx.

**EM 2372-2** H2 Silicon Bronze Clamp with a vibration-resistant screw

**EM 2372-BA02** H2 Silicon Bronze Clamp with a vibration-resistant screw and torque shear head

### Accommodates:

- #12–#4 AWG solid
- #1/0 B, C, or D stranded copper to #6, #8, #10, #12 AWG solid bare copper wire
- 6.6–10M support strand to #6, #8, #10, #12 AWG solid bare copper wire



EM 2372-BA02

Add suffix -T for a tin-plated clamp.

BONDING &  
GROUNDING

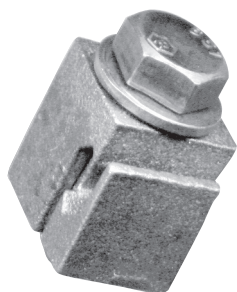
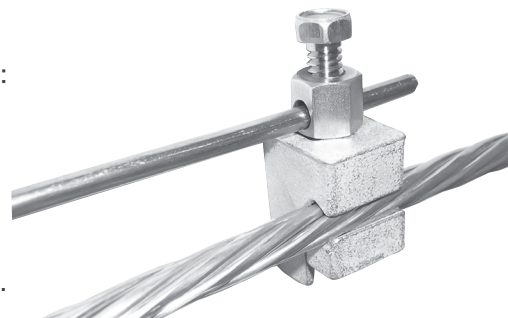
For Electric Motion Company (EMC) part numbers starting with “EM” please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Clamps – Bronze Vise Type Connectors

## BRONZE VISE TYPE CONNECTORS (CONTINUED)

EM 2372CC is similar to EM 2372 (see previous page), with the addition of:

- Tin plating for corrosion resistance and compatibility with aluminum;
- Additional wire termination point for capturing extra wires, to allow the connection of dissimilar wires, such as copper and aluminum.;
- Stainless steel bolt for mechanical strength and corrosion resistance.



**EM 2374** is used for attaching a solid or stranded #4 AWG through #8 AWG wire to a #4 AWG conductor run.

*Standard packaging: 100/bx, 16 lb/bx.*

Add suffix **-SH** for a shear-off bolt.

Add suffix **-BR** for a shear-off zinc cap.

Add suffix **-BV** for a shear-off zinc cap and anti-loosening device.

Add suffix **-P** for tin plating.



**EM 2375** is used for attaching a solid or stranded #2 AWG through #6 AWG wire to a #2 AWG conductor run.

*Standard packaging: 100/bx, 3 lb/bx.*

Add suffix **-SH** for a shear-off bolt.

Add suffix **-BR** for a shear-off zinc cap.

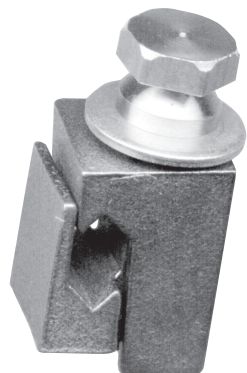
### At a glance . . .

PART NUMBER	ACCOMMODATES	DISTINGUISHING FEATURES	LISTING
EM 2370	#6–#6, #10, #12; up to 3 2-pair BSW	Mfd to Bell Spec CA08980 (H1)	
EM 2371	(same)	Tongue & groove channels	UL
EM 2371-2	(same)	Vibration-resistant screw	
EM 2372	#12–#4 AWG solid; 1/0 B, C, or D stranded to #6–#12 AWG solid; 6.6–10M support strand to #6–#12 AWG solid	H2—Mfd. to Bell Spec CA08980	UL
EM 2372-2	(same)	Vibration-resistant screw	
EM 2372-BA02	(same)	Vibration-resistant screw, torque shear head	
EM 2372CC	(same in the jaws) #6–#14 AWG solid or stranded in the bolt head	Tin plating; stainless steel bolt; additional wire termination point	
EM 2374	#4–#8 AWG to #4 AWG conductor run		
EM 2374-SH	(same)	Shear-off bolt	
EM 2374-BR	(same)	Shear-off zinc cap	
EM 2374-BV	(same)	Shear-off zinc cap, anti-loosening	
EM 2375	#2–#6 AWG to #4 AWG conductor run		
EM 2375-SH	(same)	Shear-off bolt	
EM 2375-BR	(same)	Shear-off zinc cap	

For Electric Motion Company (EMC) part numbers starting with “EM” please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Clamps – Bronze Vise Type Connectors

## BRONZE VISE TYPE CONNECTORS (CONTINUED)



Accommodates #6 AWG–#2 AWG str., .162"–.320" (4.12–8.14 mm)

*Ordering information*

**EM 2376-SH**

Add suffix **-SS** for a stainless steel bolt.

Remove suffix **-SH** for a clamp without torque shear head.

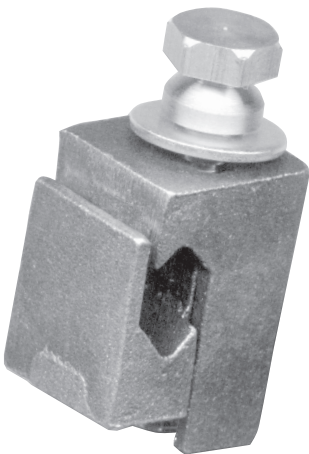
Accommodates #2 AWG solid–#2/0 AWG str., .286"–.438" (7.28–11.15mm)

*Ordering information*

**EM 2377-SH**

Add suffix **-SS** for a stainless steel bolt.

Remove suffix **-SH** for a clamp without torque shear head.



Accommodates #1/0 AWG str–#4/0 AWG str .390"–.552" (9.93–14.05mm)

*Ordering information*

**EM 2379-SH**

Add suffix **-SS** for a stainless steel bolt.

Remove suffix **-SH** for a clamp without torque shear head.

### At a glance ...

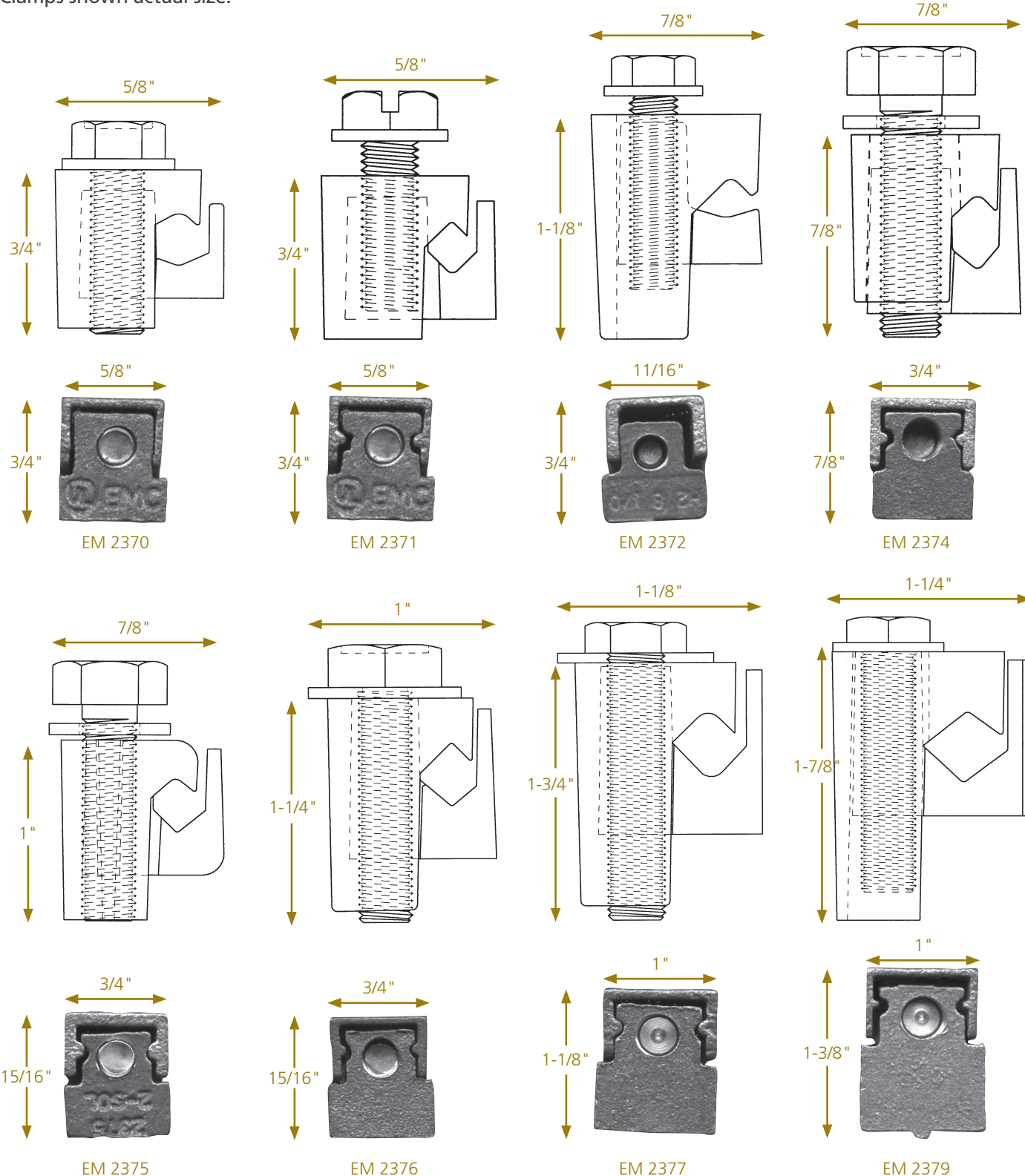
PART NUMBER	ACCOMMODATES	DISTINGUISHING FEATURES	LISTING
EM 2376	#6–#2 AWG str., .162"–.320" (4.12–8.14mm)		
EM 2376-SH	(same)	Torque shear head	
EM 2376-SS	(same)	Stainless steel bolt	
EM 2377	#2 solid–#2/0 AWG str., .286"–.438" (7.28–11.15mm)		
EM 2377-SH	(same)	Torque shear head	
EM 2377-SS	(same)	Stainless steel bolt	
EM 2379	#1/0–#4/0 AWG str., .390"–.552" (9.93–14.05mm)		
EM 2379-SH	(same)	Torque shear head	
EM 2379-SS	(same)	Stainless steel bolt	

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Clamps – Bronze Vise Type Connectors

## Size at a glance . . .

Clamps shown actual size.



For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)

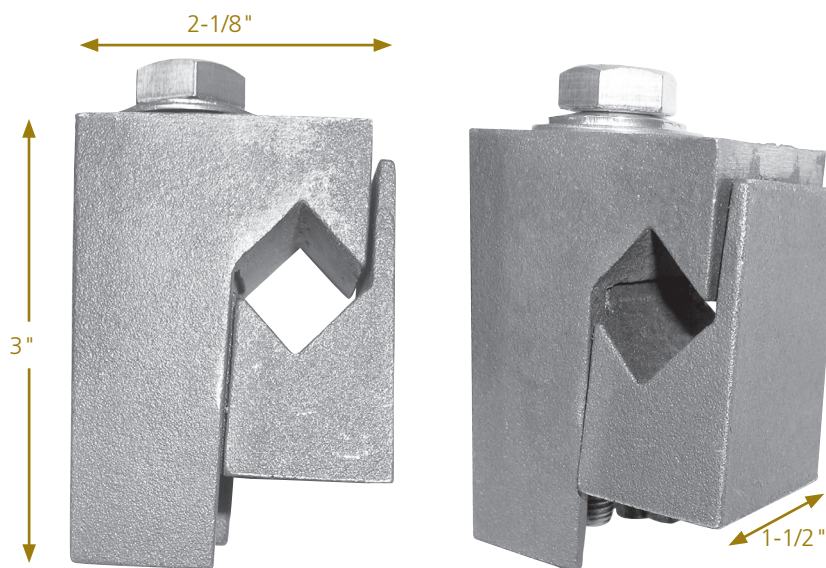
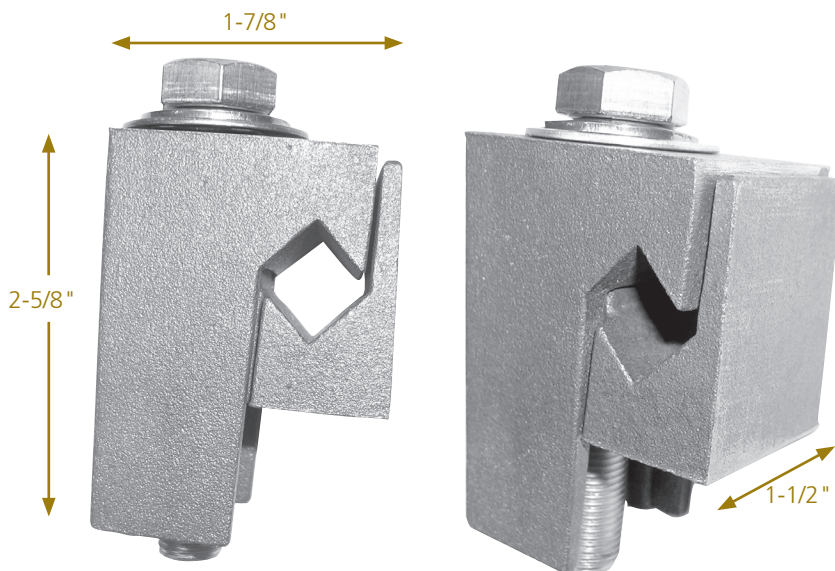


# Clamps – Bronze Vise Type Connectors

## BRONZE VISE TYPE CONNECTORS (CONTINUED)

Accommodates two conductors, 1/0 str–350 kcmil, .325"–.710" (8.27–18.07mm). 1/2–20 bolt, 3/4" hex head. Stainless steel bolt and Belleville washer.

*Ordering information*  
**EM 2380**



Accommodates two conductors, 4/0 str–500 kcmil, .522"–.813" (13.28–20.69mm). 1/2–20 bolt, 3/4" hex head. Stainless steel bolt and Belleville washer.

*Ordering information*  
**EM 2381**

BONDING &  
GROUNDING

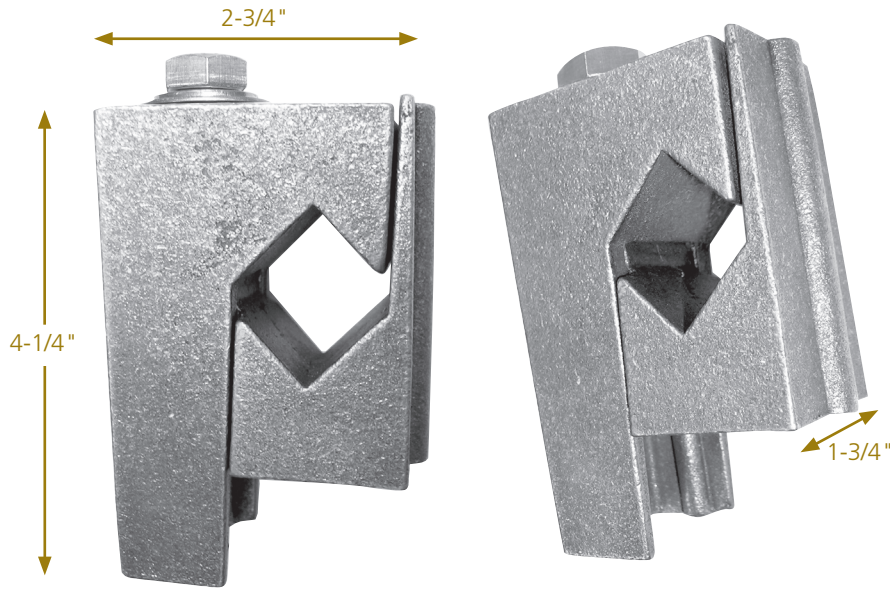
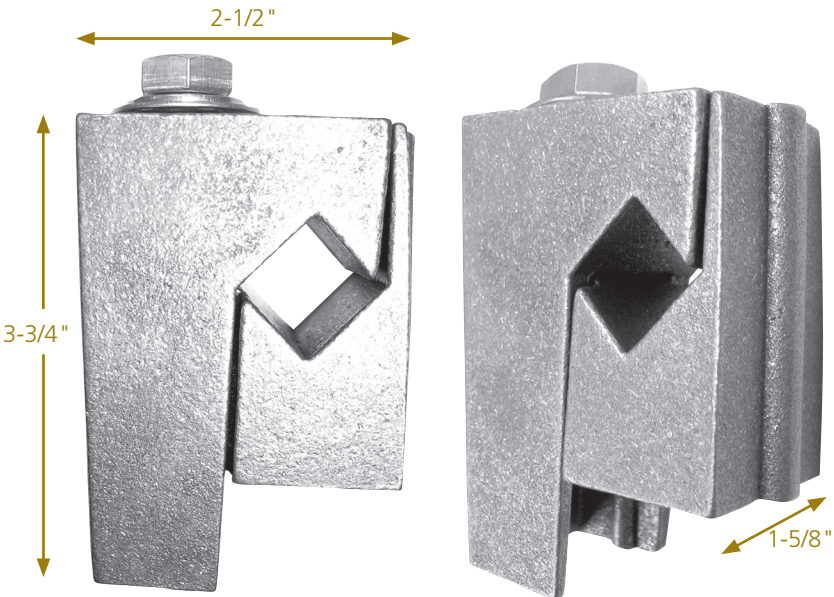


# Clamps – Bronze Vise Type Connectors

## BRONZE VISE TYPE CONNECTORS (CONTINUED)

Accommodates two conductors, 250–750 kcmil, .550"–.998" (14.00–25.40mm). 1/2–20 bolt, 3/4" hex head. Stainless steel bolt and Belleville washer.

Ordering information  
**EM 2382**



Accommodates two conductors, 400–1000 kcmil, .726"–1.152" (18.48–29.32mm) 1/2–20 bolt, 3/4" hex head. Stainless steel bolt and Belleville washer.

Ordering information  
**EM 2383**

### At a glance ...

PART NUMBER	ACCOMMODATES
EM 2380	2 conductors, #1/0 solid–350 kcmil
EM 2381	2 conductors, #4/0 str–500 kcmil
EM 2382	2 conductors, 250–750 kcmil
EM 2383	2 conductors, 400–1000 kcmil

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

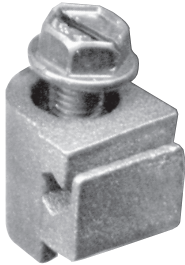
# Clamps – Bronze Vise Type Connectors

## BRONZE VISE TYPE CONNECTORS (CONTINUED)

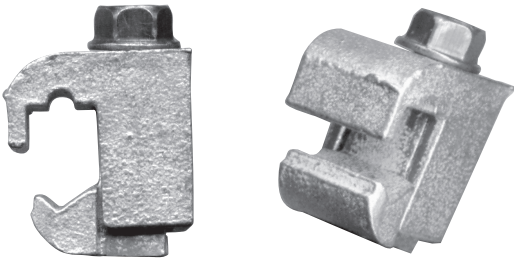
### Ordering information

**EM 0174P**  
Connector for #1/0 str. and #6 AWG or plain bonding ribbon.  
Standard packaging: 100/bx, 14 lb/bx.

**EM 0174PBV**  
With shear-off zinc cap and anti-loosening device.



- EM 2360**  
Round body clamp for:
- Single or multiple #6 AWG wires solid or stranded
  - #6 AWG to #10 or #12 AWG
  - From single 2-pair BSW metallic shield, to three 2-pair BSW metallic shields



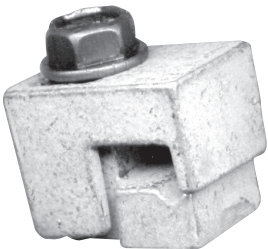
**EM 0164**  
Connector for plain bonding ribbon to plain bonding ribbon, or ribbon to #6 AWG solid ground wire  
Standard packaging: 5/lbg, 100/bx, 12 lb/bx.

**EM 0164P**  
Tin plated

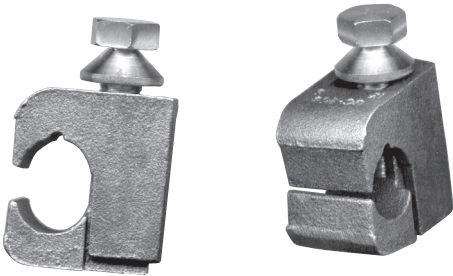
**EM 0164BV**  
With shear-off zinc cap and anti-loosening device

**EM GC-268**  
Bronze Grounding Connector, for conductor to 1/4"–5/8" ground rod. #6 solid AWG–#10 solid AWG

**EM GC-268-SS**  
Same as EM GC-268 (above), with stainless steel bolt, non-breakaway head, and washer



RUS Listed



### At a glance ...

PART NUMBER	ACCOMMODATES	DISTINGUISHING FEATURES	LISTING
EM 0174P	#1/0 and #6 AWG, or bonding ribbon		
EM 0174PBV	(same)	Shear-off zinc cap, anti-loosening	
EM 2360	#6–#6, #10, #12; up to 3 2-pair BSW	Round body clamp	UL
EM 0164	Plain bond ribbon to round #6 AWG		UL
EM 0164P	(same)	Tin plated	UL
EM 0164BV	(same)	Shear-off zinc cap, anti-loosening	
EM GC-268	1/4"–5/8" ground rods		
EM GC-268-SS	(same)	Stainless steel bolt and washer, non-breakaway bolt head	

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Clamps – Bronze Vise Type Connectors

## C CONNECTOR

*Ordering information*

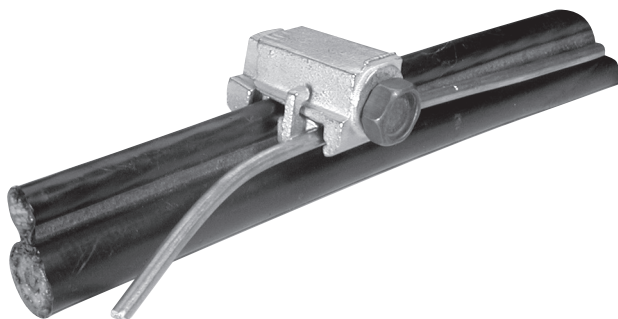
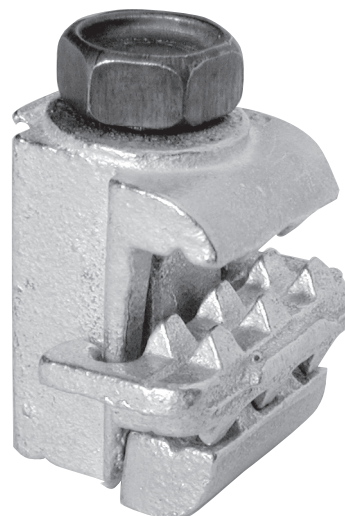
### EM 0167

Tin-plated bronze connector with teeth for piercing the messenger insulation of Figure 8 cable. For messenger diameters of .146"–.312" (3.71–7.94mm) and ground conductor range of .146"–.312". Available with stainless steel or bronze bolt.

*Standard packaging: 100/lbx, 23 lb/lbx.*

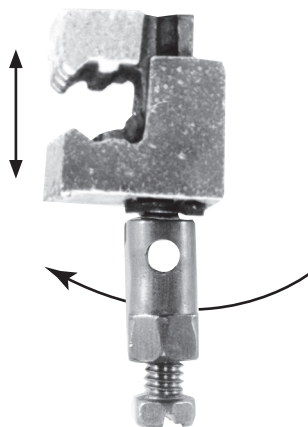
### EM 0167BV

With shear-off zinc cap and anti-loosening device

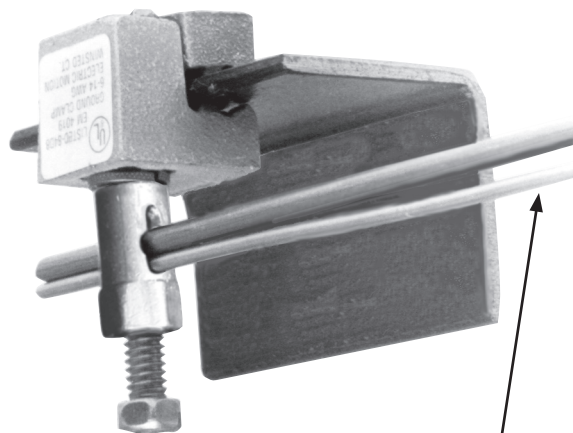


# Clamps – Trailer I-Beam Clamps

## TRAILER I-BEAM CLAMPS



**EM 4015**  
Side view,  
open position



**EM 4019**  
Insert stranded or solid  
#6, #10, #12, or #14 AWG

A tin-plated bronze casting with teeth; brass hex thru-bolt with hole, brass set screw, and bronze lockwasher.

### Applications

- Grounding to metal buildings, bridges
- Provides connection for bonding and grounding wires, ribbons, and braid to I-beams
- Also used as strand clamp (electrical)

### Features

- Teeth penetrate through oxidation or undercoating for positive ground.
- Applied with the standard terminal wrench
- Tin plate reduces corrosion
- Silicon bronze for greater strength and conductivity
- Perforated bonding ribbon or braid with eyelets attaches under set screw.

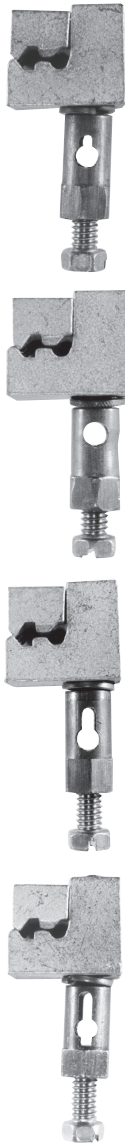
BONDING &  
GROUNDING



# Clamps – Trailer I-Beam Clamps

## TRAILER I-BEAM CLAMPS (CONTINUED)

Ordering information :



**EM 4014** – With ground wire hole and short slot, enabling connection of #6 and #10 AWG simultaneously, as well as #6–#14 AWG individually.  
Standard packaging: 10/bg, 100/lbx, 23 lb/lbx



**EM 4015** – With plain round ground wire hole to accept #6–#14 AWG.  
Standard packaging: 10/bg, 100/lbx, 23 lb/lbx



**EM 4015C** – Larger diameter cross hole accommodates stranded #6 AWG ground wire, .228 diameter, and down to #14 AWG.



**EM 4018** – With ground wire hole for #6–#14 AWG, and long slot to also connect plain bond ribbon.  
Standard packaging: 10/bg, 100/lbx, 24 lb/lbx



**EM 4019** – Hole and slot combinations accept ribbon, two wires simultaneously, or #6–#14 AWG individually.  
Standard packaging: 10/bg, 100/lbx, 24 lb/lbx

### At a glance ...

PART NUMBER	ACCOMMODATES	DISTINGUISHING FEATURES	LISTING
EM 4014	#6 and #10 AWG simultaneously #6–#14 AWG individually	hole and short slot	UL, CSA
EM 4015	#6–#14 AWG		UL, CSA
EM 4015C	#6 stranded–#14 AWG	larger hole	
EM 4018	Ground wire and plain bond ribbon #6–#14 AWG	hole and long slot	UL, CSA
EM 4019	Ground wire, bond ribbon, and #6–#14 AWG individually	hole, long and short slots	UL, CSA

For Electric Motion Company (EMC) part numbers starting with “EM” please contact EMC customer service at 860-379-8515 or cs110@hubbell.com



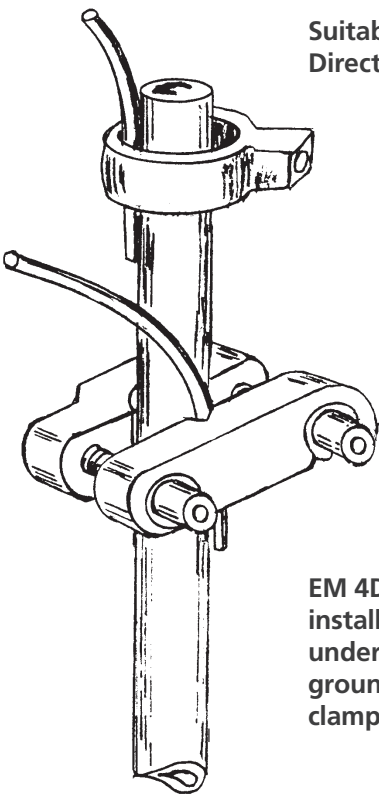
# Ground Rod Clamps

## GROUND ROD CLAMPS AND CLOSURE

A cast silicon bronze clamp for use on 1/2"–5/8" ground rods.

### Features

- Swivel design (EM 4DBs) or removable bolt designs allow installation anywhere on a ground rod, above or below an existing clamp.
- One size fits all variations of 1/2"–5/8" copper clad and galvanized ground rods.
- Foolproof installation—optional torque shear heads breakaway at a predetermined torque to prevent over- or undertorquing.
- No loosening of bolts—nylon lock mechanism maintains constant tension.
- Quick installation—"V"-shaped halves keep wire automatically centered on ground rod.
- Low resistance—wire comes in direct contact with ground rod, making best possible connection.
- No reversing necessary—design fits tightly on small size 1/2" rods, does not bottom out.
- Optional grease-filled closure helps prevent corrosion.
- Accommodates #12–#6 AWG solid ground wires.



Suitable for  
Direct Burial

EM 4DB-01  
installed  
under existing  
ground rod  
clamp

At a glance ...				
PART NUMBER	GROUND ROD	WIRE SIZE	DISTINGUISHING FEATURE	LISTING
EM 4DB	5/8" & 1/2"	#12–6 sol.	Swivel unit	cULus, RUS
EM 4DB-01	5/8" & 1/2"	#12–6 sol.	Swivel unit, Torque shear heads, Anti-loosening	cULus, RUS
EM 4DB-02	5/8" & 1/2"	#12–6 sol.	Swivel unit, 1/2" torque shear heads, Anti-loosening	cULus, RUS
EM 4DB-02NB	5/8" & 1/2"	#12–6 sol.	Swivel unit, 1/2" hex heads	
EM 4DBBR	5/8" & 1/2"	#12–6 sol.	Swivel unit, Torque shear heads, Anti-loosening, Removable	cULus, RUS

# Ground Rod Clamps

## GROUND ROD CLAMPS AND CLOSURE (CONTINUED)

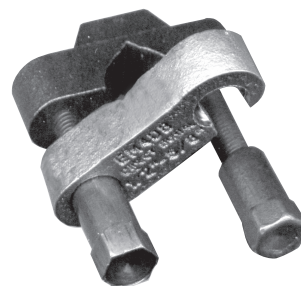
Ordering information :

### EM 4DB

- 1/2"–5/8" ground rod clamp
- swivel unit
- regular 7/16" hex bolts
- non-breakaway
- no anti-loosening device
- accommodates #12–#6 AWG ground wires

Standard packaging: 10/bg, 100/lbx, 40 lb/bx

RUS  
Listed  
c  US  
LISTED  
84D8

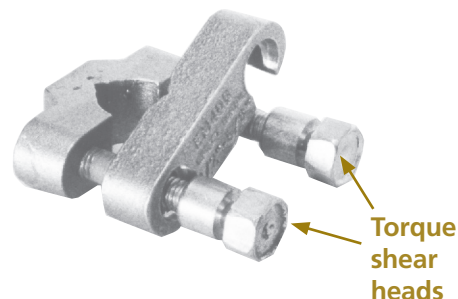


### EM 4DB-01

- 1/2"–5/8" ground rod clamp
- swivel unit
- 7/16" torque shear heads
- anti-loosening device
- accommodates #12–#6 AWG ground wires

Standard packaging: 10/bg, 100/lbx, 41 lb/bx

RUS  
Listed  
c  US  
LISTED  
84D8

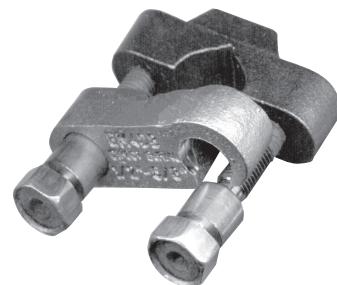


### EM 4DB-02

- 1/2"–5/8" ground rod clamp
- swivel unit
- 1/2" torque shear heads
- anti-loosening device
- accommodates #12–#6 AWG ground wires
- add suffix -NB for no torque shear heads, no anti-loosening device

Standard packaging: 10/bg, 100/lbx, 42 lb/bx

RUS  
Listed  
c  US  
LISTED  
84D8

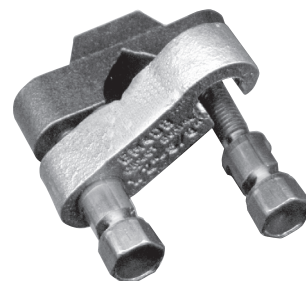


### EM 4DBBR

- 1/2"–5/8" ground rod clamp
- swivel unit
- 7/16" torque shear heads (later removable)
- anti-loosening device
- accommodates #12–#6 AWG ground wires

Standard packaging: 10/bg, 100/lbx, 35 lb/bx

RUS  
Listed  
c  US  
LISTED  
84D8



For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Ground Rod Clamps

## GROUND ROD CLAMP WITH CONNECTOR FOR LOCATING WIRE

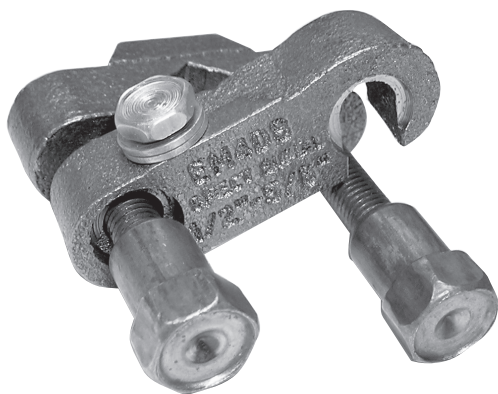
This clamp is perfect for FTTH. The swivel-open design allows placement under the existing power utility ground rod clamp, which is today's first choice. Made from silicon bronze castings, it is UL listed and direct buriable.

The separate connection for Mule Tape Locating Wire is convenient to disconnect and reconnect, for locating safely while maintaining a continuous ground.

### EM 4DB-V22

- 1/2"–5/8" ground rod clamp
- swivel unit
- 7/16" torque shear heads (later removable)
- anti-loosening device
- accommodates #10–#6 AWG, plus #22 AWG ground wires

*Standard packaging: 10/bg, 100/bx, 35 lb/bx*



# Ground Rod Clamps

## GROUND ROD CLAMPS

Cast bronze, accommodate #12–1/0 AWG (unless otherwise noted).

### Features

- Two diameters allow for placement before or after the ground rod has been driven. (A peened-over ground rod is passed through the larger opening and secured in the smaller diameter.)
- Optional locking device prevents the bolt from loosening.
- Bronze material keeps corrosion to a minimum.
- Optional breakaway features provide for foolproof installation.

Clamps marked UL listed, and with a ground wire range of #12–1/0 solid or stranded, are listed as suitable for direct burial and the following ground wire combinations:

**Single wire** - #12 AWG–1/0 AWG

**Two like wires** - #6, #10, #12 AWG

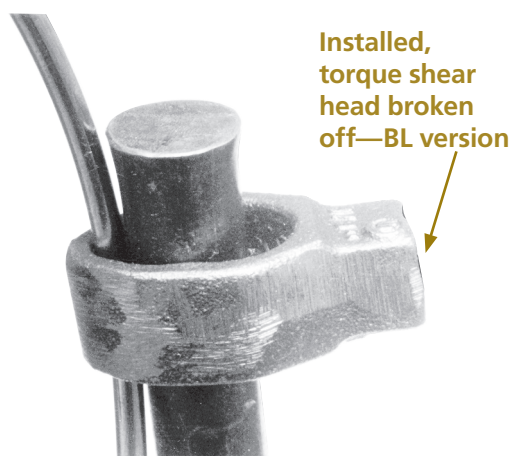
**Three like wires** - #6, #10, #12 AWG

### Unlike wire combinations:

Two #2 AWG with one #6 AWG

One or two #10 AWG with one #12 AWG

One or two #12 AWG with one #10 AWG



### At a glance ...

PART NUMBER	GROUND ROD	WIRE SIZE	DISTINGUISHING FEATURES	LISTINGS
EM 1DB	1/2"	#12–1/0	None—Standard clamp	cULus, RUS
EM 1DB-BL	1/2"	#12–1/0	Torque shear head, Nonremovable	cULus, RUS
EM 1DB-BF-04	1/2"	#12–1/0	Torque shear head, Removable	RUS
EM 2DB-01	5/8"	#12–1/0	None—Standard clamp	cULus, RUS
EM 2DB	5/8"	#12–1/0	Anti-loosening	cULus, RUS
EM 2DB-BL-01	5/8"	#12–1/0	Anti-loosening, Torque shear head, Nonremovable	cULus, RUS
EM 2DB-BF-03	5/8"	#12–1/0	Anti-loosening, Breakaway cap, Removable	cULus
EM 2DB-BF-04	5/8"	#12–1/0	Anti-loosening, Breakaway cap, Removable, Longer bolt	cULus, RUS
EM 6DB	5/8" & 1/2"	#12–2	Breakaway cap, Anti-loosening, Removable	cULus
EM 6DBP	5/8" & 1/2"	#12–2	None—Standard clamp	cULus
EM 58ZY	5/8"	#6–10	Plated zinc die-cast alloy	None

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Ground Rod Clamps

## GROUND ROD CLAMP (CONTINUED)

### Ordering information

#### EM 1DB

- 1/2" ground rod clamp
- no breakaway
- no anti-loosening
- accommodates #12–1/0 AWG

Standard packaging: 10/bg, 100/bx, 16 lb/bx.



#### EM 1DB-BL

- 1/2" ground rod clamp
- torque shear head at proper installation torque (nonremovable)
- accommodates #12–1/0 AWG

Standard packaging: 10/bg, 100/bx, 17 lb/bx.



#### EM 1DB-BF-04

- 1/2" ground rod clamp
- torque shear head at proper installation torque (removable with adjustable wrench)
- accommodates #12–1/0 AWG

Standard packaging: 10/bg, 100/bx, 16 lb/bx.



#### EM 2DB-01

- 5/8" ground rod clamp
- no breakaway
- no anti-loosening
- accommodates #12–1/0 AWG



#### EM 2DB

- 5/8" ground rod clamp
- anti-loosening device
- accommodates #12–1/0 AWG

Standard packaging: 10/bg, 100/bx, 16 lb/bx.



BONDING &  
GROUNDING



# Ground Rod Clamps

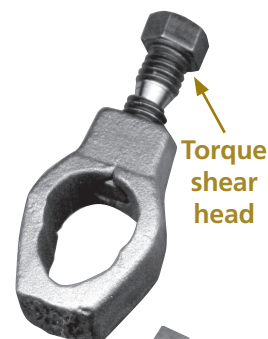
## GROUND ROD CLAMP (CONTINUED)

### Ordering information

#### EM 2DB-BL-01

- 5/8" ground rod clamp
- torque shear head at proper installation torque (nonremovable)
- anti-loosening device
- accommodates #12–1/0 AWG

Standard packaging: 10/lb, 100/bx, 19 lb/bx.



#### EM 2DB-BF-04

- 5/8" ground rod clamp
- long bolt (1")
- zinc breakaway cap at proper installation torque (removable with adjustable wrench)
- anti-loosening device
- accommodates #12–1/0 AWG

Standard packaging: 10/lb, 100/bx, 19 lb/bx.



#### EM 6DB

- 5/8" and 1/2" ground rod clamp
- 1" long bolt
- anti-loosening device
- zinc breakaway cap at proper installation torque (removable with adjustable wrench).
- accommodates #12–2 AWG solid or stranded.



#### EM 6DBP

- 5/8" and 1/2" ground rod clamp
- 1" long bolt
- accommodates #12–2 AWG.



## 5/8" GROUND ROD CLAMP

Plated zinc die cast alloy for mechanical strength and electrical conductivity.  
Accommodates #6–#10 AWG wire.

### Ordering information

#### EM 58ZY



For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Ground Rod Clamps

## TWO-BOLT GROUND ROD CLAMPS FOR GROUND RINGS

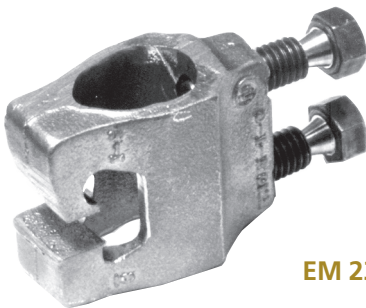
Heavy-duty cast silicon bronze body, headed silicon bronze clamping bolts, and nylon locking collars.

### Applications

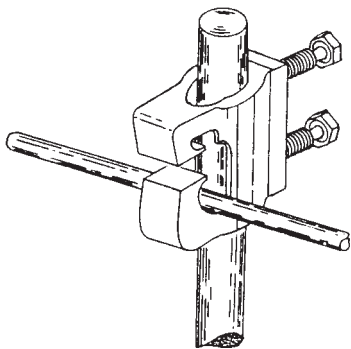
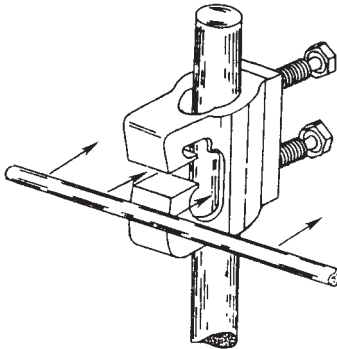
- Ground rings for equipment huts
- Any installation where added security of double bolts is necessary
- 5/8" ground rods

### Features

- Can accept ground wires from #10–1/0 AWG
- Available with a front “J” slot to accept #1, #2, or #6 AWG in a continuous “ring” around an equipment hut or building
- Available with pre-set torque shear heads for a pre-determined installation torque and to prevent vandalism
- Nylon locking collar prevents inadvertent loosening of bolts
- Uncomplicated design, craftfriendly, low-cost product



EM 2301-01



### Ordering information

**EM 2301-01** – 5/8" ground rod clamp, two-bolt type with “J” slot, torque shear heads (150 inch/lbs.), nylon lock collars. Connects #1, #2, or #6 AWG in the “J” slot.

Standard packaging: 5/lbg, 25/lbx, 14 lb/bx.

**EM 2301-01NB** – Same as above, with no torque shear heads.

**EM 2301.75** – Same as EM 2301-01, but accommodates 3/4" ground rod.



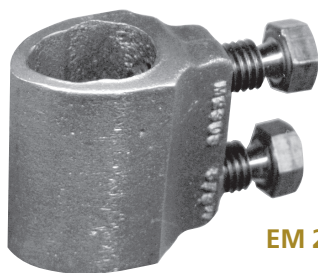
### At a glance ...

PART NUMBER	GROUND ROD	WIRE SIZE	DISTINGUISHING FEATURES	LISTINGS
EM 2301-01	5/8"	#1, 2, 6	Torque shear heads	cULus, CSA
EM 2301-01NB	5/8"	#1, 2, 6	None	CSA
EM 2301.75	3/4"	#12–1/0	Torque shear heads	CSA

For Electric Motion Company (EMC) part numbers starting with “EM” please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Ground Rod Clamps

## TWO-BOLT GROUND ROD CLAMPS FOR GROUND RINGS (CONTINUED)



EM 2303

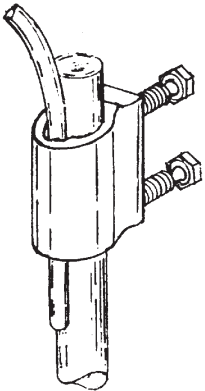


### Ordering information

**EM 2303** – 5/8" ground rod clamp, two-bolt type with solid body. Torque shear heads at proper installation torque. Connects #12–1/0 AWG solid or stranded parallel to rod. Standard packaging: 5/lbg, 25/lbx, 12 lb/lbx.

**EM 2303-NB** – Same as above, with no torque shear heads.

**EM 2303.75.02** – Connects #2/0 to 1/2" or 5/8" rod. Torque shear heads and anti-loosening device.

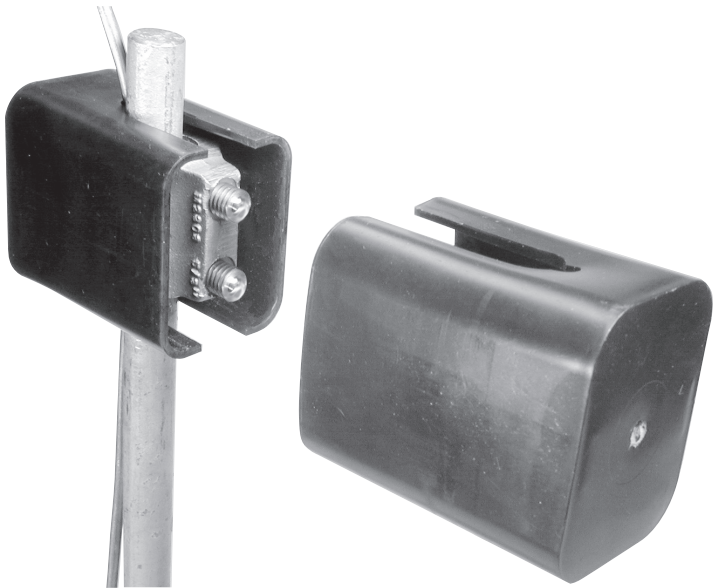


### Ordering information

**EM 2303-C** – 5/8" ground rod clamp, two-bolt type with solid body, torque shear heads, and gel-filled closure. Connects #12–1/0 AWG solid parallel to rod.

Standard packaging: 1/lbg, 20/lbx, 21 lb/lbx.

**EM 23-C** – Gel-filled closure only



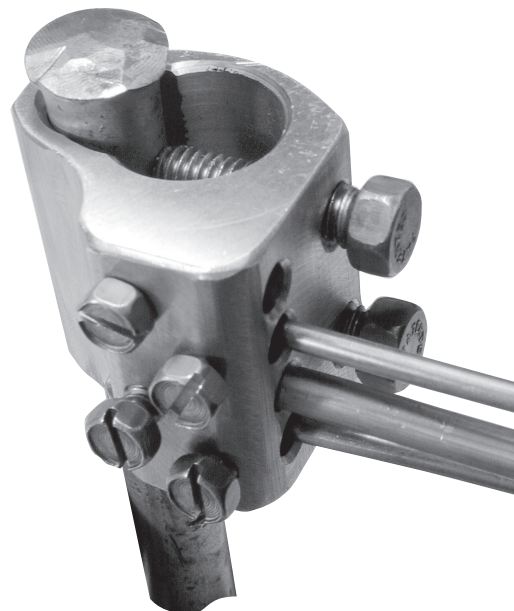
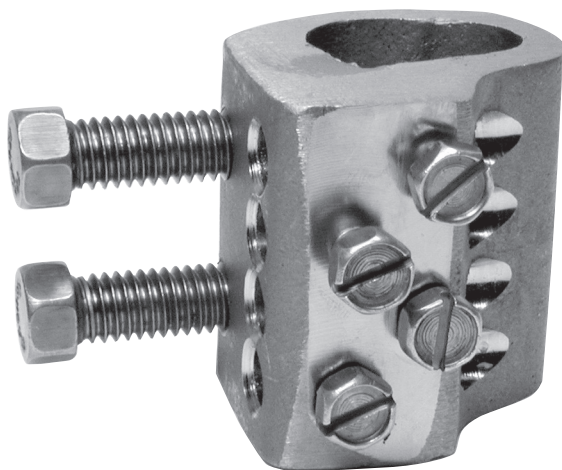
### At a glance ...

PART NUMBER	GROUND ROD	WIRE SIZE	DISTINGUISHING FEATURES	LISTINGS
EM 2303	5/8"	#12–1/0	Torque shear heads	cULus
EM 2303-NB	5/8"	#12–1/0	None	None
EM 2303.75.02	5/8" or 1/2"	#2/0	Torque shear heads, anti-loosening	None
EM 2303-C	5/8"	#12–1/0	Torque shear heads, gel-filled closure	None
EM 23-C			Gel-filled closure only	None

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Ground Rod Clamps

## HEAVY DUTY GROUND ROD CLAMP



### Description

A cast bronze two-bolt ground rod clamp for 5/8" or 3/4" diameter rods that will connect one or a multiple of ground wires. Accepts #2 AWG–#10 AWG.

### Features

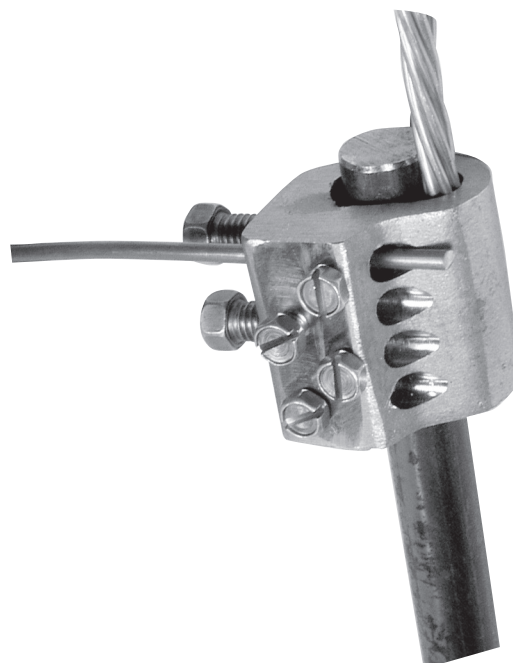
- Cast bronze for superior strength, electrical conductivity, and corrosion resistance.
- Ground wires are captured individually to simplify isolation and location.
- Enlarged opening allows for the "mushroomed" head of a ground rod to pass through without interference.

### Applications

Remote sites, central offices, repeater housings, substations — anywhere a single or multiple of ground wires are used.

### Ordering information

**EM 2306SIET** – HD bronze two-bolt clamp for 5/8"–3/4" ground rod.



BONDING &  
GROUNDING

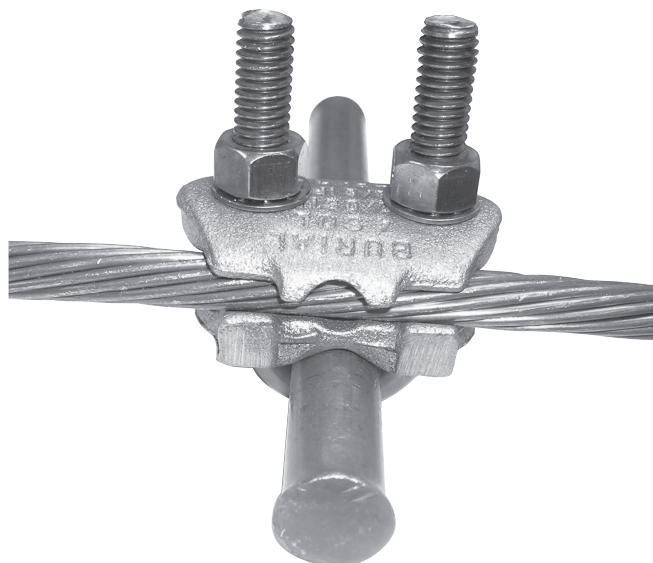
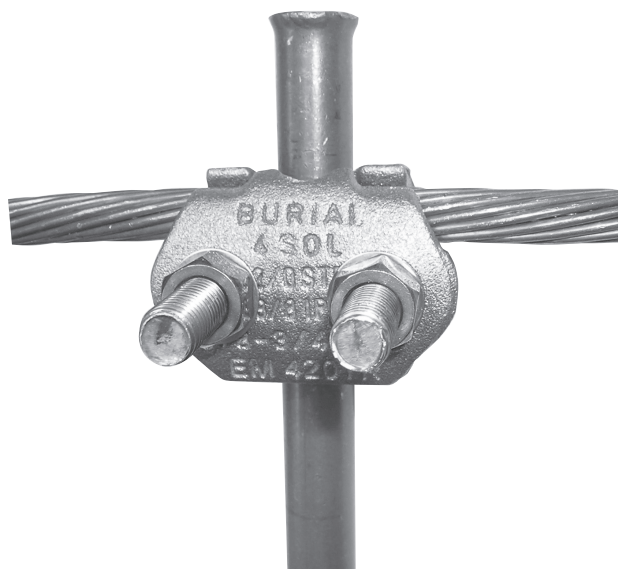


# Ground Rod Clamps

## HEAVY DUTY GROUND ROD CLAMP (CONTINUED)

### Features

- For parallel or 90° copper cable connections
- Acceptable for direct burial
- Installs with one wrench
- Silicon bronze hardware
- Tube IPS 3/8
- 5/8"-3/4" ground rod size
- Cable size #4-2/0 str (.126-.414)
- Installation torque 240 in./lb.



### Ordering information

EM 420TR

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)



# Ground Clamps

## UNIVERSAL GROUND CLAMPS

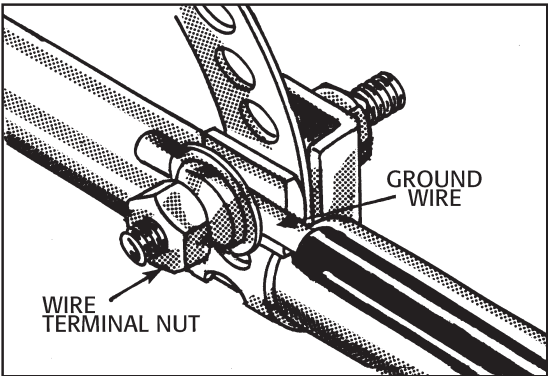
A 12" or 7" copper strip with a brass bolt assembly.

### Applications

Connecting ground wires to water pipes, ground rods, and power masts.

### Features

- Fits around any size water pipe, ground rod, or power mast
- Works with all the materials commonly used in grounding electrodes, i.e. copper water pipes, galvanized pipes, copper clad ground rods, plain steel ground rods
- Connects all the ground wire sizes from #14 AWG to solid #6
- Flat bottom on dome-shaped washer will not nick small gauge wire.
- Can be daisy-chained to be able to fit around very large diameter pipes
- Ground wires can be added or changed without removing ground clamp.
- Tin-plated version available to be used with aluminum power masts
- EM 5510 and EM 5517 versions have two extra flat washers so that small gauge (#10, #12, #14 AWG) wires can be connected between washers while #6 solid bond wire is captured in through hole. Therefore, one ground clamp can be used where two were necessary before.



### Ordering information

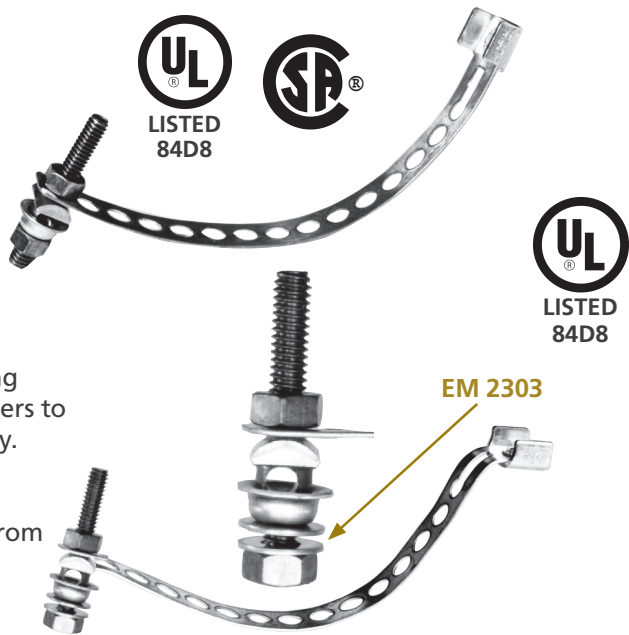
**EM 5500** – 12" long strap connects #6–#14 AWG, fits all grounding electrodes 3/8"–3 1/2" OD.  
Standard packaging: 10/lbg, 100/lbx, 15 lb/lbx.

**EM 5507** – 7" version connects #6–#14 AWG, fits all grounding electrodes 3/8"–2" OD.  
Standard packaging: 10/lbg, 100/lbx, 13 lb/lbx.  
Add suffix -T for tin-plated version.

### Ordering information

**EM 5510** – 12" version, connects #6–#14 AWG wires for grounding electrodes from 3/8" to 3 1/2" OD. Clamp has two extra flat washers to connect both station ground wires and bond wire simultaneously.  
Standard packaging: 10/lbg, 100/lbx, 15 lb/lbx.

**EM 5517** – 7" version, same as above, for grounding electrodes from 3/8" to 2" OD.  
Standard packaging: 10/lbg, 100/lbx, 13 lb/lbx.  
Add suffix -T for tin-plated version.



### At a glance ...

PART NUMBER	GROUNDING ELECTRODES	WIRE SIZE	LENGTH	DISTINGUISHING FEATURES	LISTINGS
EM 5500	3/8"–3-1/2" OD	#6–#14 AWG	12"		CSA, UL
EM 5507	3/8"–2" OD	#6–#14 AWG	7"		CSA, UL
EM 5510	3/8" to 3-1/2" OD	#6–#14 AWG	12"	extra flat washers	UL
EM 5517	3/8" to 2" OD	#6–#14 AWG	7"	extra flat washers	UL

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Ground Clamps

## UNIVERSAL GROUND CLAMP WITH CLIP NUT



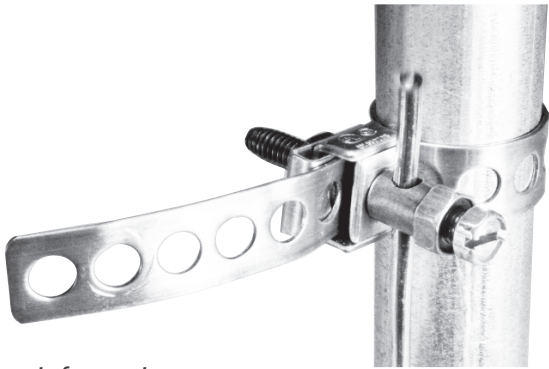
A perforated copper strap with a threaded clip and bronze bolt assembly. Offered in lengths of 7, 9, 12, or 14 inches.

### Application

Connecting ground wires to water pipes, ground rods, and power masts.

### Features

- Fits around any size water pipe, ground rod, or power mast.
- Works with all the materials commonly used for grounding electrodes, i.e., copper water pipes, galvanized pipes, copper clad ground rods, plain steel ground rods.
- Connects all the ground wire sizes from #14–#6 AWG solid or stranded.
- Can be daisy-chained to be able to fit around very large diameter pipes.
- Ground wires can be added or changed without removing ground clamp.
- Tin-plated version available to be used with aluminum power masts.
- Clamp is installed and wire is attached from the same side, making application easier in confined spaces.
- Available with a slotted ground wire hole to accommodate two wires simultaneously.
- Available as “suitable for direct burial.”



### Ordering information

**EM 5907** 7-inch strap, for grounding electrodes 3/8"–2" diameter.

*Standard packaging: 10/bg, 100/bx, 13 lb/bx.*

**EM 5907-2** 7-inch strap, for grounding electrodes 3/8" – 2" diameter, larger hole accommodates #2–14 AWG.

**EM 5909** 9-inch strap, for grounding electrodes 3/8"–2-3/4" diameter.

*Standard packaging: 10/bg, 100/bx, 15 lb/bx.*

**EM 5912** 12-inch strap, for grounding electrodes 3/8"–3 1/2" diameter.

*Standard packaging: 10/bg, 100/bx, 17 lb/bx.*

**EM 5914** 14-inch strap, for grounding electrodes 3/8"–4" diameter.

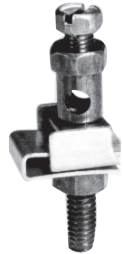
*Standard packaging: 10/bg, 100/bx, 18 lb/bx.*

**EM 5924** 24-inch strap, for grounding electrodes 3/8"–6.5" diameter.

Add suffix -T for tin-plated version.

### Suffix

–S added to any of the above part numbers denotes a slotted ground wire hole to accommodate two ground wires simultaneously (#6 AWG with a #10 AWG).



### At a glance . . .

PART NUMBER	GROUNDING ELECTRODES	WIRE SIZE	LENGTH	DISTINGUISHING FEATURES	LISTINGS
EM 5907	3/8"–2" OD	#6–#14 AWG	7"		cULus
EM 5907-2	3/8"–2" OD	#2–#14 AWG	7"	larger ground wire hole	cULus
EM 5909	3/8"–2-3/4" OD	#6–#14 AWG	9"		cULus
EM 5912	3/8"–3-1/2" OD	#6–#14 AWG	12"		cULus
EM 5914	3/8"–4" OD	#6–#14 AWG	14"		cULus
EM 5924	3/8"–6.5" OD	#6–#14 AWG	24"		cULus

For Electric Motion Company (EMC) part numbers starting with “EM” please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Ground Clamps

## UNIVERSAL GROUND CLAMPS

For ground wire sizes up to #2 stranded AWG

Perforated, tin-plated copper straps with threaded clip and bronze bolt assembly. They are available with a smooth strap, or with teeth to bite into the grounding electrode.

### Application

Connecting ground wires to water pipes, ground rods, power masts, and conduits.

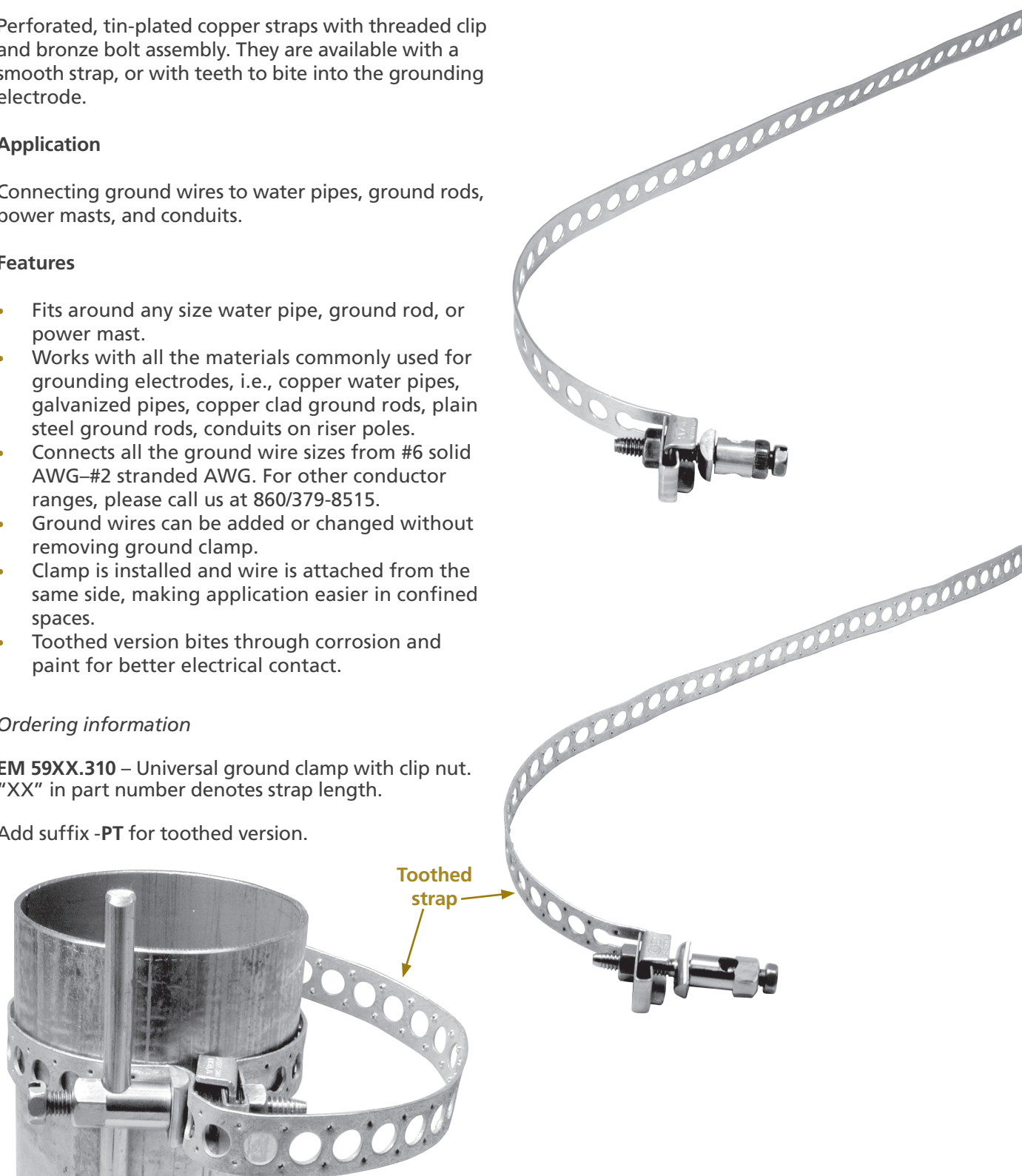
### Features

- Fits around any size water pipe, ground rod, or power mast.
- Works with all the materials commonly used for grounding electrodes, i.e., copper water pipes, galvanized pipes, copper clad ground rods, plain steel ground rods, conduits on riser poles.
- Connects all the ground wire sizes from #6 solid AWG–#2 stranded AWG. For other conductor ranges, please call us at 860/379-8515.
- Ground wires can be added or changed without removing ground clamp.
- Clamp is installed and wire is attached from the same side, making application easier in confined spaces.
- Toothed version bites through corrosion and paint for better electrical contact.

### Ordering information

**EM 59XX.310** – Universal ground clamp with clip nut.  
"XX" in part number denotes strap length.

Add suffix **-PT** for toothed version.



# Clamps

## CLAMP FOR PIPE AND TUBING

Plated zinc die cast alloy for mechanical strength and electrical conductivity. 1/2"-1" diameter. #6 AWG-#2 AWG wires.

*Ordering information*

**EM 2830Z**



## DREWES METER BOX CLAMP

With toothed strap and clip nut, designed to attach to the hub of an electrical meter box.

### Features

- Will not damage the factory-painted surface of meter box
- Will not collapse the box because it mounts on the strongest part of the box, the hub
- Neat low profile, inconspicuous appearance
- Does not inhibit entry to meter box
- Accommodates any cylindrical hub mounting
- Perforations on strap bite through corrosion and paint for better electrical contact.
- Accommodates ground wires #14-#6 AWG
- Simple two-piece construction for easy installation
- A copper and brass material for high conductivity
- Tin plated for corrosion resistance



*Ordering information*

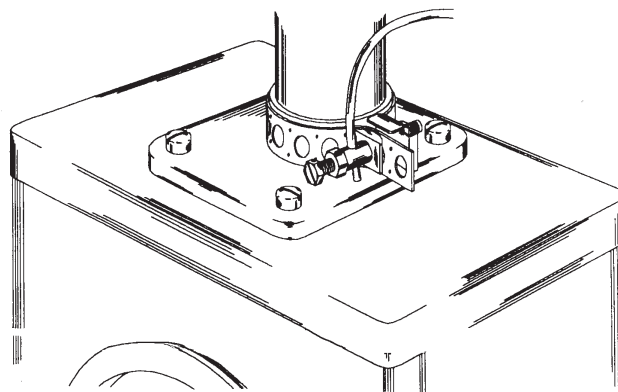
**EM 5907PT** – 7" strap, #12-#16 AWG, 1/2"-2" OD

Standard packaging: 10/bg, 100/bx, 14 lb/bx.

**EM 5912PT** – 12" strap, #12-#6 AWG, 1/2"-3 1/2" OD

Standard packaging: 10/bg, 100/bx, 17 lb/bx.

**EM 59XXPT** – XX = length of strap (1"-120"), #12-#6 AWG, 1/2"-38" OD





# Meter Box Clamps

## METER BOX CLAMPS WITH BOTTOM-TIGHTENING GROOVE CONTACT POINT

### Description

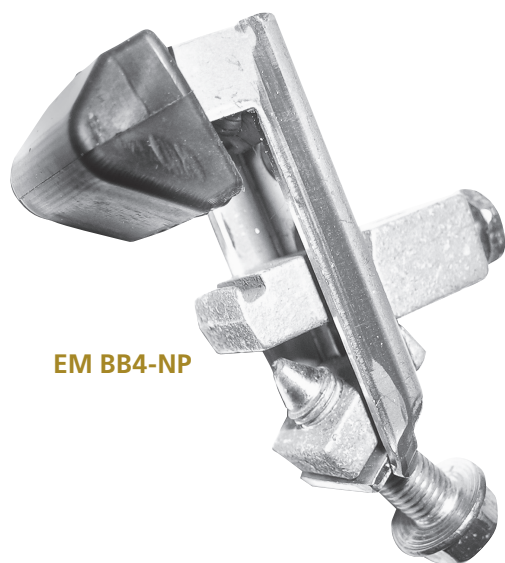
Meter box bonding and grounding connector.

### Application

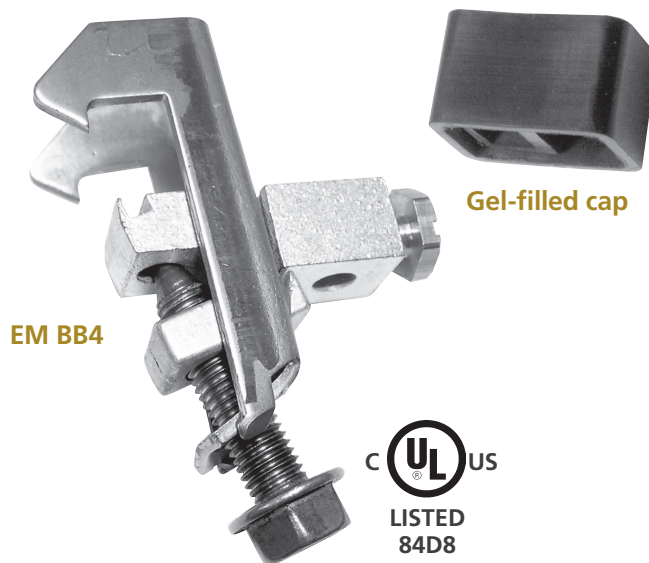
Bonding and grounding telco and CATV to power ground.

### Features

- Stainless steel to reduce corrosion
- Applies with a standard terminal wrench—no special tools
- Gel-filled cap prevents corrosion on the locating points.
- UL listed for public safety
- Easy, foolproof installation
- Mounts on the side—does not interfere with the cover or collapse the sides
- Small and inconspicuous
- Accommodates #6–#14 AWG solid or stranded ground wire



EM BB4-NP



EM BB4

Gel-filled cap



### Ordering information

**EM BB4-NP** – Meter Box Clamp, silicon bronze bolt, bottom-tightening groove contact point, alternate cap (not gelfilled) to cover the prongs

**EM BB4** – Meter Box Clamp, silicon bronze bolt, bottom-tightening groove contact point, gel-filled cap

*For more meter box clamps, see the Intersystem Bonding Terminal section, starting on page G94.*

For Electric Motion Company (EMC) part numbers starting with “EM” please contact EMC customer service at 860-379-8515 or cs110@hubbell.com



# Meter Box Clamps

## METER BOX CLAMPS WITH TOP-TIGHTENING GROOVE CONTACT POINT

### Description

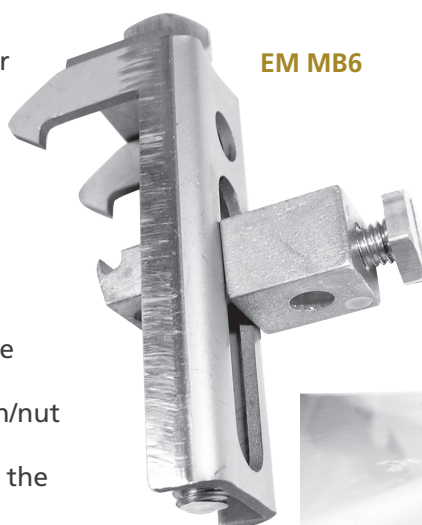
Meter box bonding and grounding connector

### Application

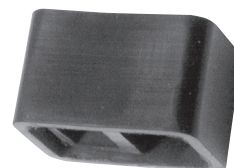
Bonding and grounding telco and CATV to power ground.

### Features

- Stainless steel and copper alloy to reduce corrosion.
- Applies with a standard terminal wrench/nut runner—no special tools.
- Gel-filled cap helps prevent corrosion at the piercing points.
- Easy, foolproof installation.
- Mounts on the side—does not interfere with the cover or collapse the sides.
- Small and inconspicuous.
- Accommodates #6–#14 AWG solid or stranded ground wire.
- Makes electrical contact under the drip cap of the box, on bare, unpainted metal.
- Available with an extra-long body, to accommodate meter boxes with an extended lip on the top cover.



EM MB6



Gel-filled cap



### Ordering information

**EM MB6** – Meter Box Clamp with top-tightening groove contact point and gel-filled cap

**EM MB6-NP** – Meter Box Clamp with top-tightening groove contact point and alternate cap (not gel-filled) to cover the prongs and bottom.

Add suffix -XL for extra-long body.



EM BB4-NP



*For more meter box clamps, see the Intersystem Bonding Terminal section, starting on page G94.*

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Meter Box Clamps

## METER BOX CLAMPS WITH TOP-TIGHTENING SPADE WEDGE CONTACT POINT

### Description

Meter box bonding and grounding connector

### Application

Bonding and grounding telco and CATV to power ground.

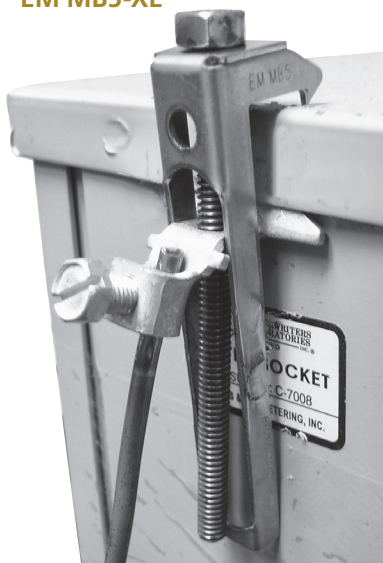
### Features

- Stainless steel and copper alloy construction to reduce corrosion
- Applies with a standard terminal wrench/nut runner— no special tools
- Gel-filled cap helps prevent corrosion at the piercing points.
- Easy, foolproof installation
- Mounts on the side—does not interfere with the cover or collapse the sides.
- Small and inconspicuous
- Accommodates #6–#14 AWG solid or stranded ground wire
- Makes electrical contact under the drip cap of the box, on bare, unpainted metal
- Available with an extra-long body, to accommodate meter boxes with an extended lip on the top cover

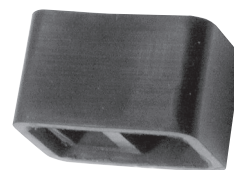
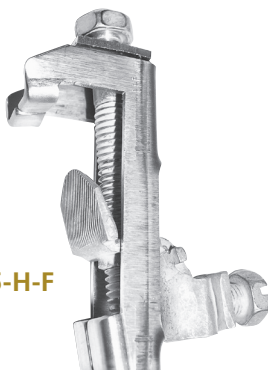
EM MB5-NP



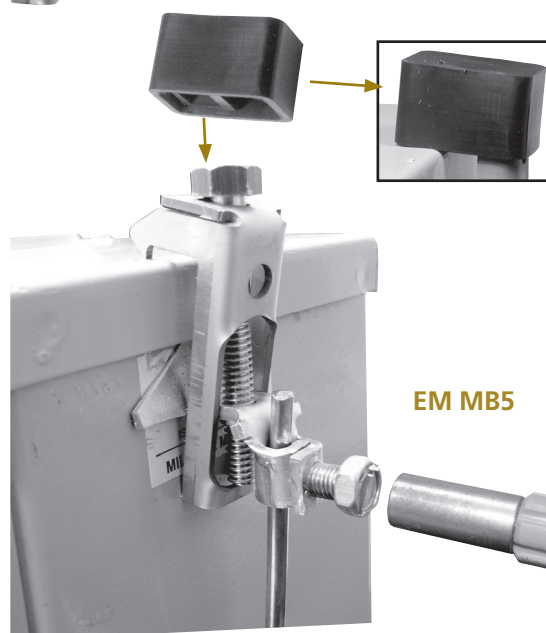
EM MB5-XL



EM MB5-H-F



Gel-filled cap



EM MB5

### Ordering information

**EM MB5** – Meter Box Clamp with top-tightening spade wedge contact point and gel-filled cap

**EM MB5-NP** – Meter Box Clamp with top-tightening spade wedge contact point and alternate caps (not gel-filled) to cover the prongs and bottom

**EM MB5-H-F** – Meter Box Clamp with top-tightening narrow spade wedge contact point and flat top and bottom (no need for caps)

Add suffix -XL for extra-long body.

For more meter box clamps, see the Intersystem Bonding Terminal section, starting on page G94.

BONDING &  
GROUNDING

# Intersystem Bonding

## METER BOX GROUND CLAMP FOR INTERSYSTEM BONDING WITH TOP-TIGHTENING SPADE WEDGE CONTACT POINT, THREE GROUND WIRE CONNECTION POINTS

### Description

Meter box bonding and grounding connector for intersystem bonding

### Application

Bonding and grounding telco and CATV to power ground.

### Features

- Stainless steel and copper alloy construction to reduce corrosion
- Applies with a standard terminal wrench/nut runner—no special tools
- Gel-filled cap helps prevent corrosion at the piercing points
- Easy, foolproof installation
- Mounts on the side—does not interfere with the cover or collapse the sides.
- Accommodates #6–#14 AWG solid or stranded ground wire
- Makes electrical contact under the drip cap of the box, on bare, unpainted metal.
- Available with an extra-long body, to accommodate meter boxes with an extended lip on the top cover



### NEC® Section 250.94 Requirements

- An intersystem bonding termination for connecting intersystem bonding and grounding connectors required for other systems shall be provided external to enclosures at the service equipment and at the disconnecting means for any additional buildings or structures.
- The intersystem bonding termination device shall not interfere with opening a service or metering equipment enclosure.
- **The intersystem bonding termination shall have the capacity for connection of not less than three intersystem bonding conductors.**

### Ordering information

#### EM MB5-3 – Meter Box Ground Clamp

Add suffix **-NP** for alternate caps (not gel-filled) to cover the prongs and bottom.  
Add suffix **-XL** for extra-long body.  
Add suffix **-H** for narrow wedge.  
Add suffix **-F** for flat points (top and bottom).

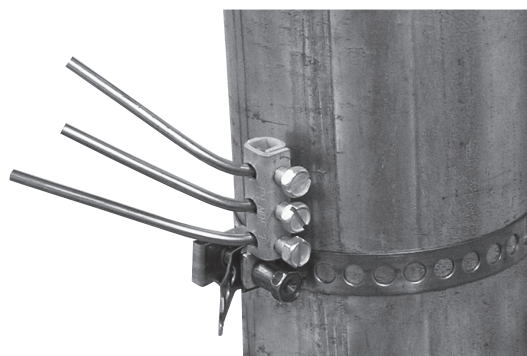


# Intersystem Bonding

## INTERSYSTEM BONDING TERMINAL FOR POWER CONDUITS UP TO 4-1/2" DIAMETER



**EM 5918-3**



**EM 5918-3B**

### Description

Under the latest NEC, use of these devices is encouraged. Device is placed on power service metallic mast (conduit). Three ground-wire connecting holes can accept wires up to #6 AWG. Telephone, cable TV, and broadband services are then attached and grounded by the same device, directly to power, no differences in potential. Once device is installed, this leapfrogs all other choices.

### Application

Grounding CATV, telephone, and broadband installations at residences.

### Features

- All copper alloy construction
- Fits any round conduit up to 4 1/2" diameter
- Applies with standard terminal wrench
- Available also with teeth to bite through paint, or tin-plated for aluminum
- Accommodates #6-#14 sol or str.

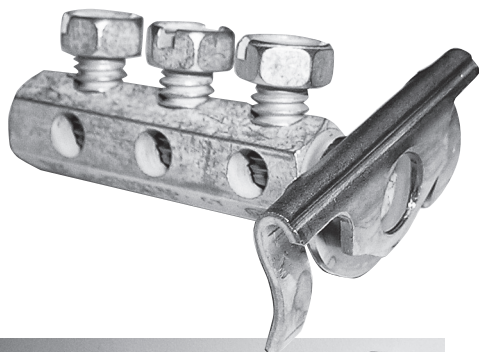
### Ordering information

**EM 5918-3** – 18"-long copper strap. Ground wire holes run parallel to the strap.

**EM 5918-3B** – 18"-long copper strap. Ground wire holes run perpendicular to the strap.

# Intersystem Bonding

## INTERSYSTEM BONDING TERMINAL SERVICE DISCONNECT BOX CONNECTOR



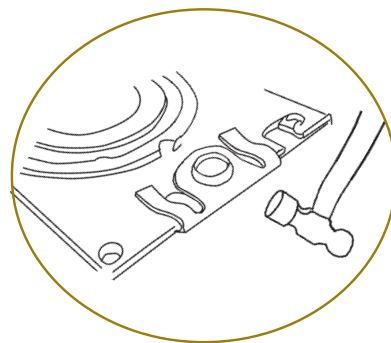
### NEC® Section 250.94 Requirements

- An intersystem bonding termination for connecting intersystem bonding and grounding connectors required for other systems shall be provided external to enclosures at the service equipment and at the disconnecting means for any additional buildings or structures.
- The intersystem bonding termination device shall not interfere with opening a service or metering equipment enclosure.
- **The intersystem bonding termination shall have the capacity for connection of not less than three intersystem bonding conductors.**

### Features

- Can be used on galvanized steel or powder-coated steel
- Becomes first choice for telephone, cable TV, or broadband

1. The service disconnect box connector is to be applied only to either side of the box, including both top and bottom of the box, never to the front.
2. Position the connector at a side of the service disconnect box. Insert the pointed part of the clamp (without the bolt) between the weld points and tap the wedge into place, using a small hammer.
3. Insert the bolt into the clamp threads and turn clockwise. Tighten to 20 in-lb.
4. Secure ground wire in appropriate hole.
5. This device can be used with solid and stranded 6–14 AWG copper ground conductors.



### Ordering information

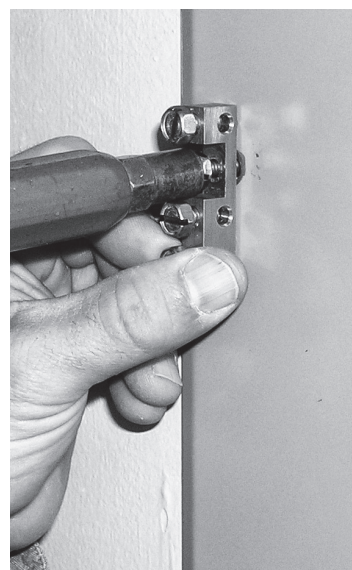
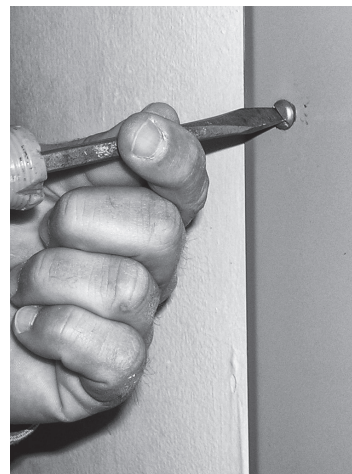
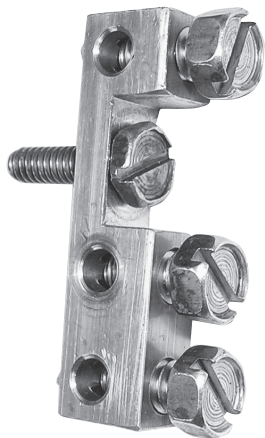
**EM SDS-SUB-3** – Service Disconnect Box Connector

For Electric Motion Company (EMC) part numbers starting with “EM” please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)



# Intersystem Bonding

## SERVICE DISCONNECT BOX GROUND CONNECTOR FOR INTERSYSTEM BONDING



### Description

A ground connector that mounts to the front of the service disconnect cabinet. Provides connection holes for three ground wires.

### Application

Provides convenient access to ground for telephone systems, cable TV, or broadband. One location, all system grounds commonly connected.

### Features

- Meets 2008 NEC (see left)
- Becomes first choice for grounding when installed
- Easily installed
- Remove one cover screw, replace with new screw and connector body.
- Accommodates #6–#14 AWG

### Ordering information

**EM SDF-B-3** – Service disconnect box ground connector

# Underground Hardware

## CABLE RACK BOND CLAMPS

A mechanically galvanized steel clamp assembly.

### Application

For use when bonding cable racks to a ground point common with other hardware to aid in corrosion prevention.

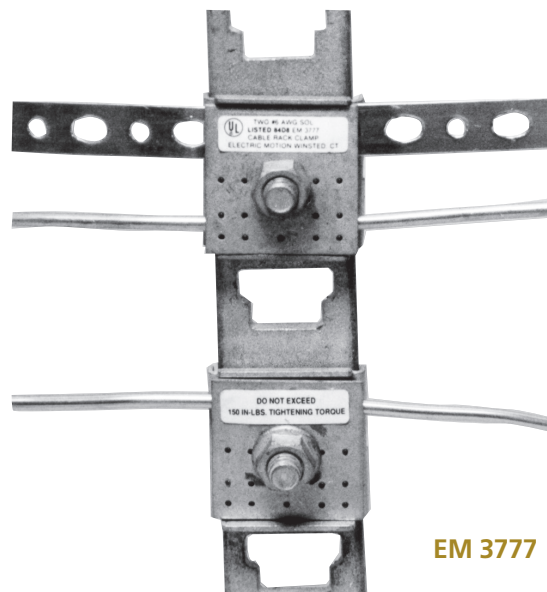
### Features

- For use with all standard cable racks
- Works with a variety of conductors, i.e., solid or stranded #6AWG, bonding ribbons, and round or flat braid
- Eliminates "sandwiching" the conductor between two flatwashers
- Can be used with one conductor, or to connect two conductors
- Easily installed by hanging the clamp in a hook hole, inserting the conductor(s) and tightening
- Mechanically zinc plated for corrosion resistance

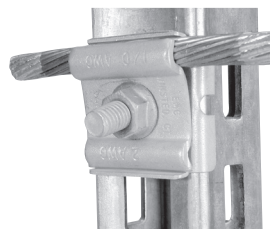
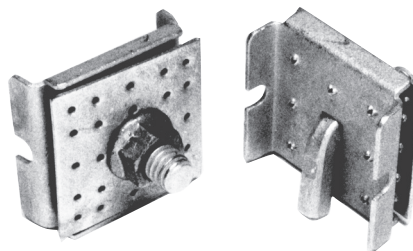
### Ordering information :

**EM 3777** – for bonding ribbon or #6 AWG wire to cable racking

Standard packaging: 10/bg, 100/bx, 19 lb/bx

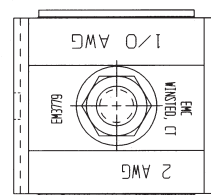
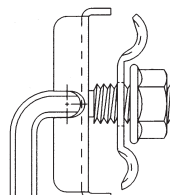


EM 3777



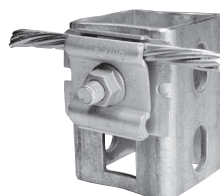
**EM 3778** – for #1 & #2 AWG wire

Standard packaging: 100/bx, 25 lb/bx



**EM 3779** – for Unistrut P16F cable entrance facilities, #1 & #2 AWG wire

Standard packaging: 100/bx, 18 lb/bx



**EM 3779-1** – for Unistrut P21H cable entrance facilities, 2-1/4" and 1-3/4"; flat back plate, with extra tang to keep back plate from slipping out of place

Standard packaging: 100/bx, 18 lb/bx

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Underground Hardware

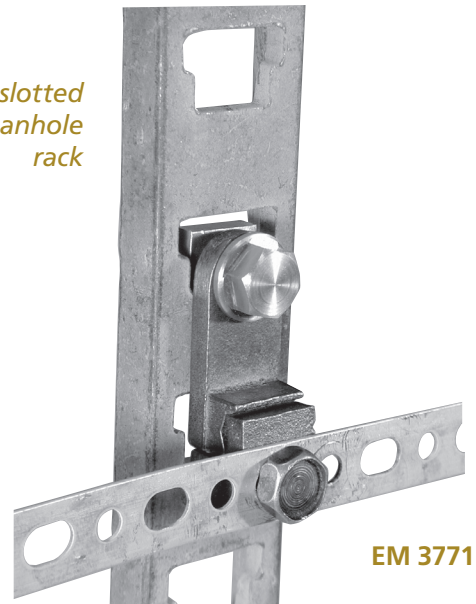
## CABLE RACK CLAMPS

For T-slotted underground manhole racks and Unistrut P16F and P21H racks (both clamps fit all racks). For ground wires #6 through #1/0 AWG, 3/8" plain bonding ribbon, and perforated bonding ribbon.

### Ordering information

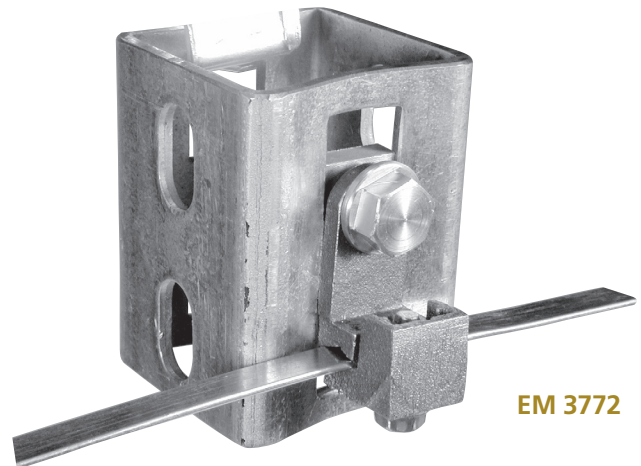
**EM 3771** – Cable Rack Clamp with side-mounted 5/16" bolt for clamping conductor.

*T-slotted  
manhole  
rack*



**EM 3771**

**EM 3772** – Cable Rack Clamp with bottom-mounted 5/16" bolt for clamping conductor. Add suffix -T for tin plating.



**EM 3772**

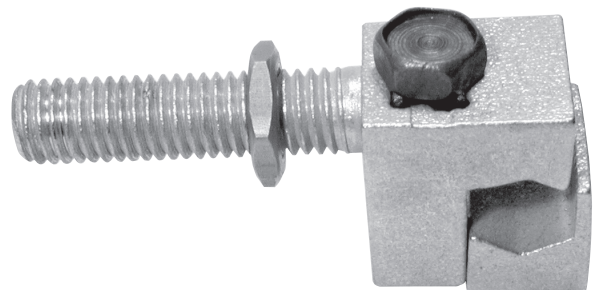
*either Unistrut rack*

## CABLE RACK BOND CLAMP

For ground wires #3 AWG solid through #4/0 AWG stranded. Tinned.

### Ordering information

**EM 3773** – Cable Rack Bond Clamp



BONDING &  
GROUNDING

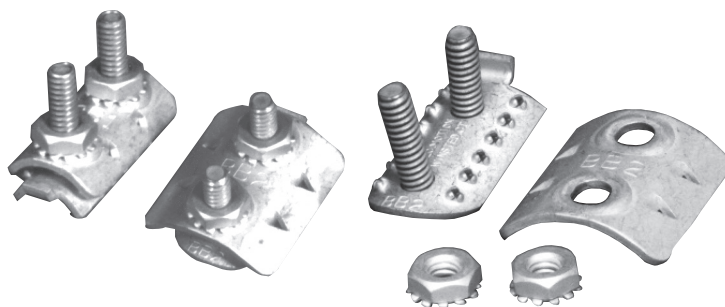
For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)

# B Bonds

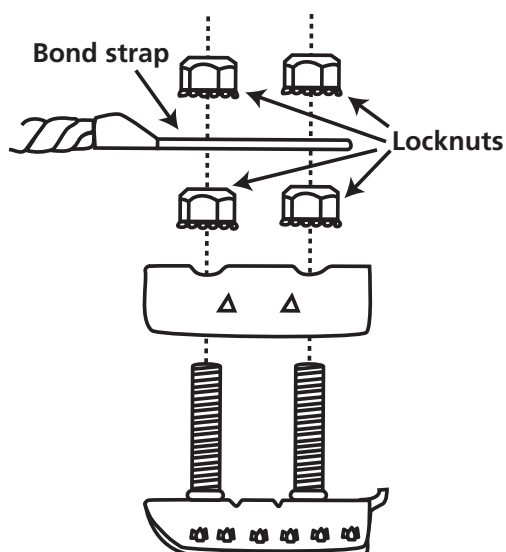
## B BOND CLAMPS – DOUBLE STUD

### Features

- Tin-plated bronze and copper construction for high conductivity
- 3/8" nuts fit standard terminal wrench.
- Piercings in bottom plate penetrate Mylar lining on inner surface of shield.
- Can be used with or without punching holes in sheath
- When cable shield is tabbed and punched, one size works on all cables.
- Two studs prevent loosening of connections due to counterclockwise movement of bond strap.
- Two studs offer lower resistance and higher current carrying capacity. This enables use of a smaller size shield connector.
- Two studs offer higher pullout strength.



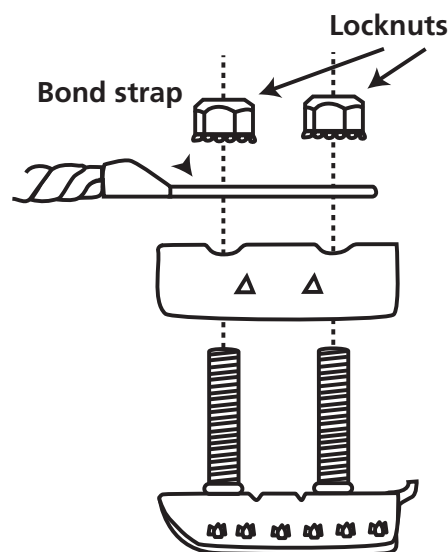
See page G140 for the double hole punch to go with these double stud B bonds.



### Ordering information

#### Double stud with double nut per stud

EM 2BBM – up to .5" cable  
EM 2BB1 – .5"–.8" cable  
EM 2BB2 – .8"–1.6" cable  
EM 2BB3 – 1.6"–up



### Ordering information

#### Double stud with single nut per stud

EM 1BBM – up to .5" cable  
EM 1BB1 – .5"–.8" cable  
EM 1BB2 – .8"–1.6" cable  
EM 1BB3 – 1.6"–up

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

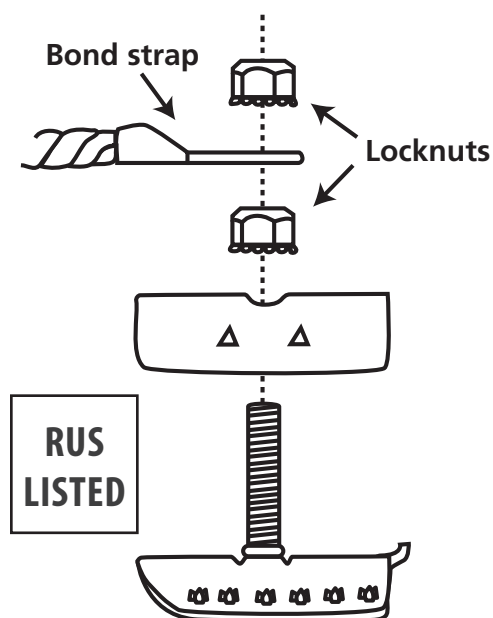


# B Bonds

## B BOND CLAMPS – SINGLE STUD

### Features

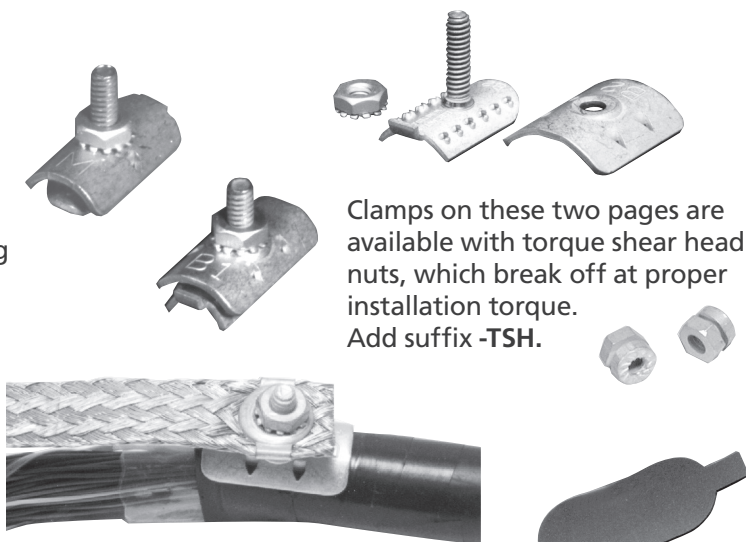
- Tin-plated bronze and copper construction for high conductivity
- 3/8" nuts fit standard terminal wrench.
- Piercings in bottom plate penetrate Mylar lining on inner surface of shield.
- Can be used with or without punching holes in sheath
- When cable shield is tabbed and punched, one size works on all cables.



### Ordering information

#### Single stud with double nut per stud

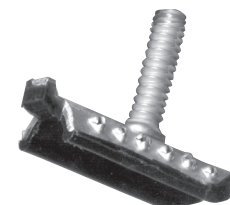
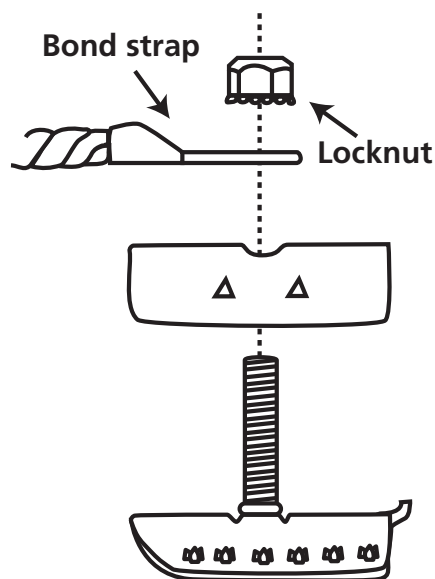
**EM 20BM** – up to .5" cable. *Standard packaging: 1/bg, 10/pkg, 500/bx, 22 lb/bx*  
**EM 20B1** – .5"–.8" cable. *Standard packaging: 1/bg, 10/pkg, 500/bx, 23 lb/bx*  
**EM 20B2** – .8"–1.6" cable. *Standard packaging: 1/bg, 10/pkg, 500/bx, 28 lb/bx*  
**EM 20B3** – 1.6"–up. *Standard packaging: 1/bg, 10/pkg, 500/bx, 27 lb/bx*



Clamps on these two pages are available with torque shear head nuts, which break off at proper installation torque. Add suffix **-TSH**.

For optional flat plastic pair saver, add suffix **-P**.

To order the flat plastic pair saver separately, use part number **EM PSAVER**.



For optional pair saver molded to bottom plate, add suffix **-MP**.

### Ordering information

#### Single stud with single nut per stud

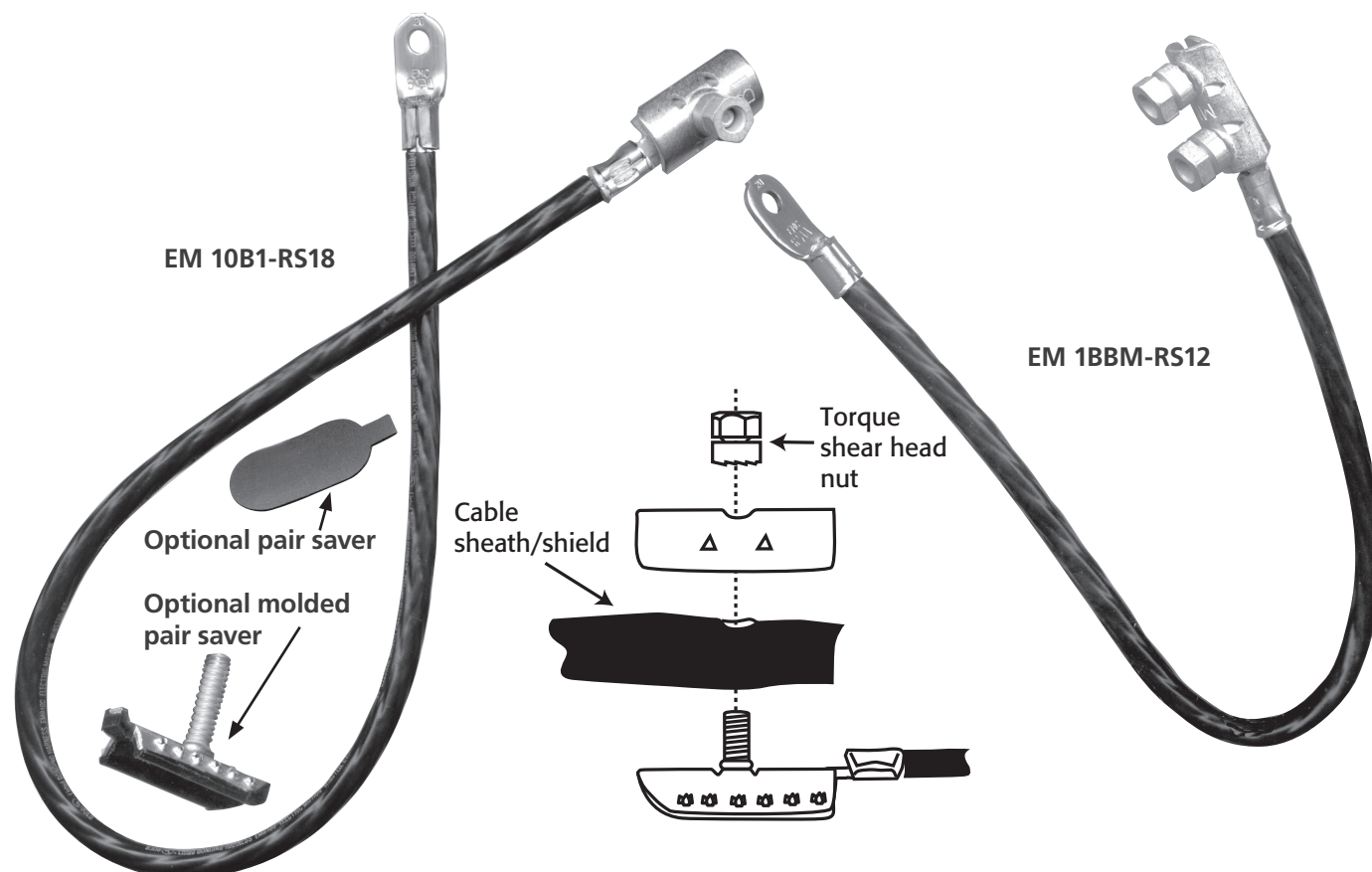
**EM 10BM** – up to .5" cable. *Standard packaging: 1/bg, 500/bx, 20 lb/bx*  
**EM 10B1** – .5"–.8" cable. *Standard packaging: 1/bg, 500/bx, 22 lb/bx*  
**EM 10B2** – .8"–1.6" cable. *Standard packaging: 1/bg, 500/bx, 26 lb/bx*  
**EM 10B3** 1.6"–up. *Standard packaging: 1/bg, 500/bx, 26 lb/bx*

Longer studs: For 1" studs, add suffix **-XL1**. For 1.1" studs, add suffix **-XL1.1**.



# RS Shield Connectors

## RS B-BOND SHIELD CONNECTOR – WITH ATTACHED HARNESS FOR PEDESTALS



### Description

The bottom plate of a B-Bond shield connector (see variations below) is attached to a #6 AWG harness, with a #10 stud hole ring terminal on the other end. Nuts have torque shear heads standard, or add suffix -2 for optional star locknuts.



## Part Numbering Variations Matrix

EM				-	RS				-		
Number of nuts per stud (choose 1 or 2)			Cable shield connector size: <i>M (mini)</i> up to .5" cable. 1 .5"-.8" cable.		<i>L</i> = optional long stud		Length of harness in inches			-2 = star locknuts	<i>H</i> = .10 hook terminal
		Single stud = <i>OB</i> Double stud = <i>BB</i>					<i>P</i> = optional pair saver <i>MP</i> = optional molded pair saver (molded to bottom plate)				

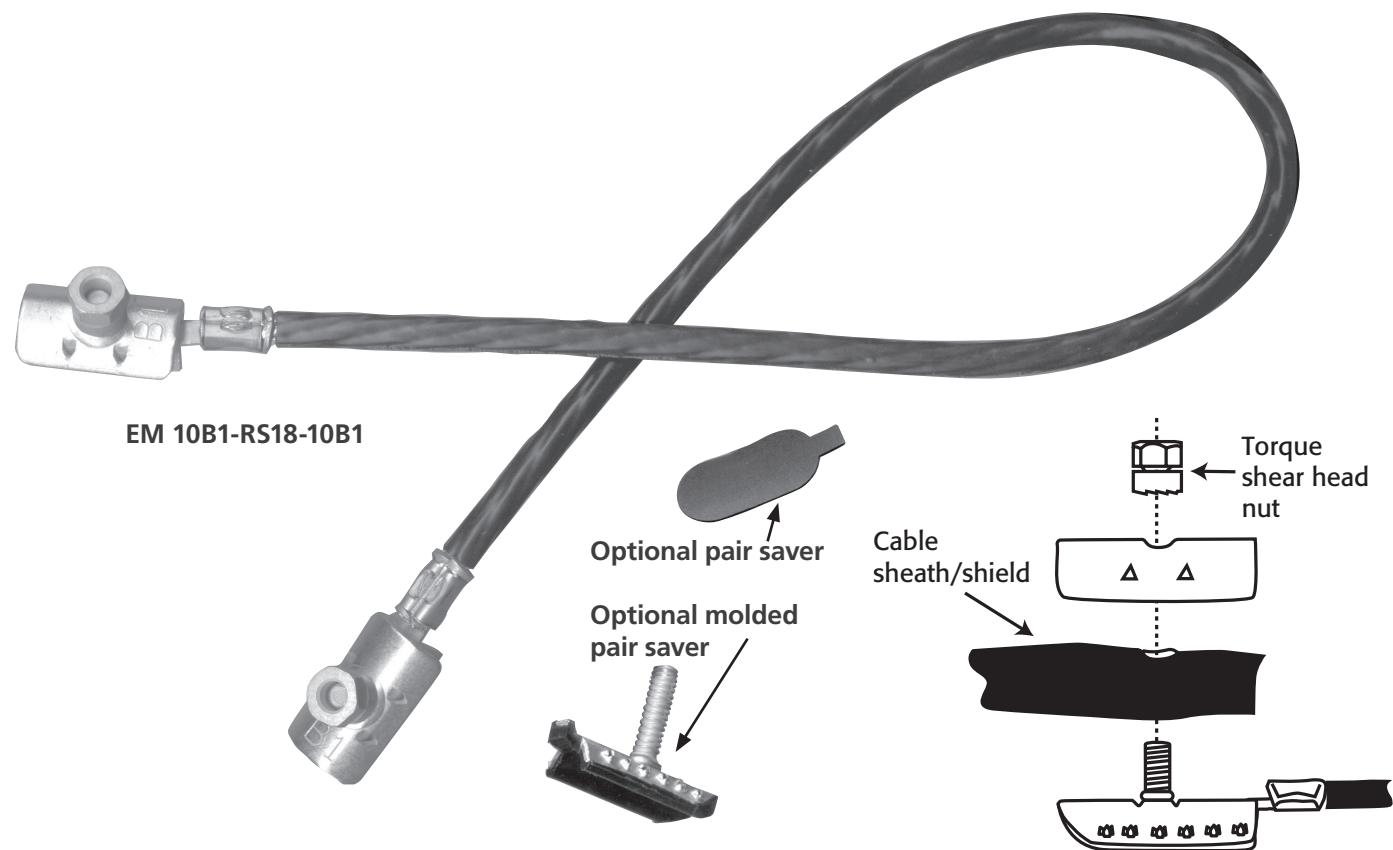
### Example:

**EM 2BBM-RSLP18-2**

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# RS Shield Connectors

## DOUBLE RS B-BOND SHIELD CONNECTOR – WITH ATTACHED HARNESS FOR SPLICE CASES



### Description

The bottom plate of a B-Bond shield connector (see variations below) is attached to either end of a #6 AWG harness. Nuts have torque shear heads standard, or add suffix -2 for optional star locknuts.

### Part Numbering Variations Matrix

EM		- RS							
Number of nuts per stud (choose 1 or 2)		Cable shield connector size: <i>M (mini)</i> up to .5" cable. 1 .5"-.8" cable.		<i>L</i> = optional long stud <i>P</i> = optional pair saver <i>MP</i> = optional molded pair saver (molded to bottom plate)		Single stud = <i>OB</i> Double stud = <i>BB</i>		-2 = star locknuts	
Single stud = <i>OB</i> Double stud = <i>BB</i>		Length of harness in inches		Number of nuts per stud (choose 1 or 2)		Cable shield connector size: <i>M (mini)</i> up to .5" cable. 1 .5"-.8" cable.			

Example:  
EM 2BBM-RSLP18-2BBM-2

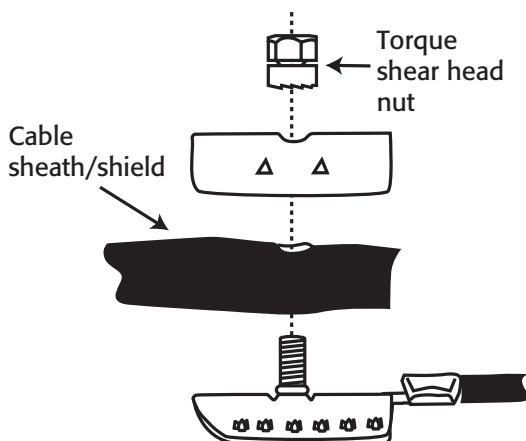
For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# RS Shield Connectors

## RS B-BOND SHIELD CONNECTOR – WITH ATTACHED HARNESS FOR NIDS



EM 10BM-RS2.5H



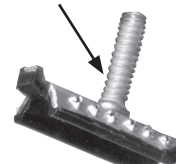
### Description

The bottom plate of a Mini B-Bond shield connector (accommodates up to .5" cable) is attached to a 2.5" #6 AWG harness (standard length; others are available), with a hook terminal on the other end. Nuts have torque shear heads standard, or add suffix -2 for optional star locknuts.



Optional pair saver

Optional molded pair saver



### Part Numbering Variations Matrix

EM

M - RS

H -

Number of nuts per stud (choose 1 or 2)

Single stud = OB  
Double stud = BB

Length of harness in inches

P = optional pair saver  
MP = optional molded pair saver (molded to bottom plate)

-2 = star locknuts

Example:  
EM 2BBM-RSP2.5H-2

## B-BOND SHIELD CONNECTOR – WITH SHORT STUD AND HARNESS

Top plate of 10B1 shield connector (see p. 169) is connected to a #6 AWG harness. The free terminal of the harness has paint-penetrating teeth to bite through powder coating.

### Ordering information

EM 10B1/8100-6 HUB 6" harness

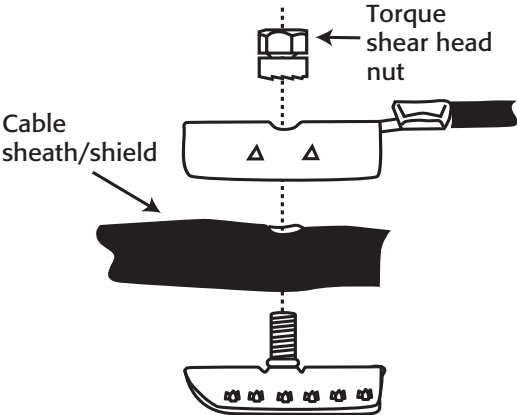
EM 10B1/8100-10 HUB 10" harness



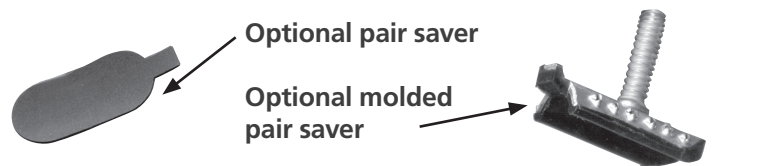
For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# TS Shield Connectors

## TS CABLE SHIELD CONNECTOR WITH ATTACHED HARNESS



**Description**  
The top plate of the TS cable shield connector (see variations below) is attached to a #6 AWG harness, with a #10 stud hole ring terminal on the other end. Nuts have torque shear heads standard, or add suffix -2 for optional locknut washer.



## Part Numbering Variations Matrix

EM				-	TS			
<div>Number of nuts per stud (choose 1 or 2)</div> <div>Single stud = OB Double stud = BB</div>					<div>L = optional long stud</div> <div>P = optional pair saver MP = optional molded pair saver (molded to bottom plate)</div>			
<div>Cable shield connector size:</div> <div>M (mini) up to .5" cable.</div> <div>1 .5"-.8" cable. 2 .8"-1.6" cable. 3 1.6"-up.</div>					<div>Length of harness in inches</div>			

**Example:**  
**EM 2BBM-TSLP18**

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# U-Shaped BSW Shield Connectors

## U-SHAPED BURIED SERVICE WIRE SHIELD CONNECTORS – WITH OPTIONAL PAIR PROTECTION

Electric Motion's shield connector, complete with pair protection, is designed to provide customers with a versatile, craft-friendly system for terminating all types of industry standard shielded buried service wires.

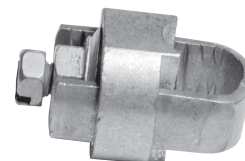
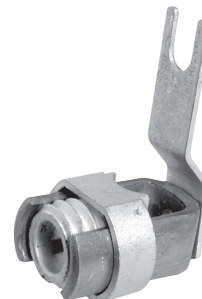
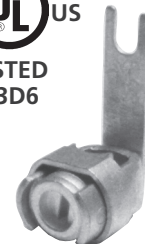
### Applications

- Permits easy and reliable termination of metallic shields at network interface devices (NIDs), station protector devices, pedestals, optical network unit and terminal locations.
- Facilitates termination of all corrugated or flat-shield buried service wire designs.

### Features

- Multi-functional and customized for customer's specific application.
  - Preparation of the buried service wire and installation of each connector follows the same basic procedures.
  - Results in faster on-site connections. Provides anti-crush protection and excellent strain relief.
  - Connectors stay securely fastened long after connections are made.
  - Provides superior pullout strength during subsequent wiring or repair activity.

- Pairs are insulated from sharp edges of metallic shield; virtually eliminates metallic troubles at the shield/connector interface.
- Pair protectors are available to accommodate the various shield designs, multiple or single wire applications, and different wire sizes: 2, 3, 4, 5, 6, & 12 pairs, 19/22 AWG.
- Available in fork, hook, ring, and flag terminal end configurations.
- All metallic components are constructed of brass, tin-plated or die-cast zinc to provide low-resistance connections even in the harshest outside plant environments.
  - Strong, corrosion-resistant components
  - Re-useable
  - High quality



For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)



# U-Shaped BSW Shield Connectors

## EM 3955 SERIES – CONNECTORS WITH FLOATING BONDING HARNESSSES

### Ordering information

**EM 3955-10S** U-shaped BSW connector with 6 inches of #10 AWG lead wire and 1-inch long yoke for one or two service wires.

*Standard packaging: 10/bg, 100/bx, 11 lb/bx.*

Also available: **EM 3955-10L** – Same as above, with 11/2-inch long yoke for multiple service wires.

### EM 3955-6L

U-shaped BSW connector with 6 inches of #6 AWG lead wire and 11/2-inch long yoke for multiple service wires.

*Standard packaging: 10/bg, 100/bx, 15 lb/bx.*

Also available: **EM 3955-6S** – Same as above, with 1-inch long yoke for one or two service wires.



## PEDESTAL BURIED SERVICE WIRE – SHIELD CONNECTORS WITH TEETH

### Ordering information

#### EM 3955-10S (BT)

U-shaped BSW connector with 6 inches of #10 AWG lead wire, 1-inch long yoke for one or two service wires, and baby teeth both inside bottom of fork and inside back of pusher ring.

*Standard packaging: 100/bx, 10 lb/bx.*

#### EM 3955-10SPB (BT)

Same as above, with pair protector and rectangular boot.

#### EM 3955-SP (BT)

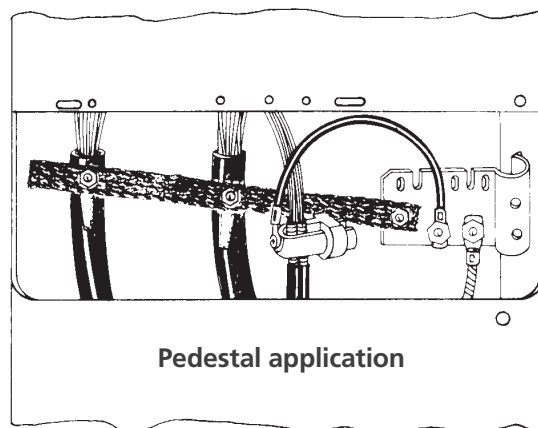
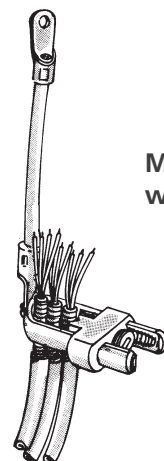
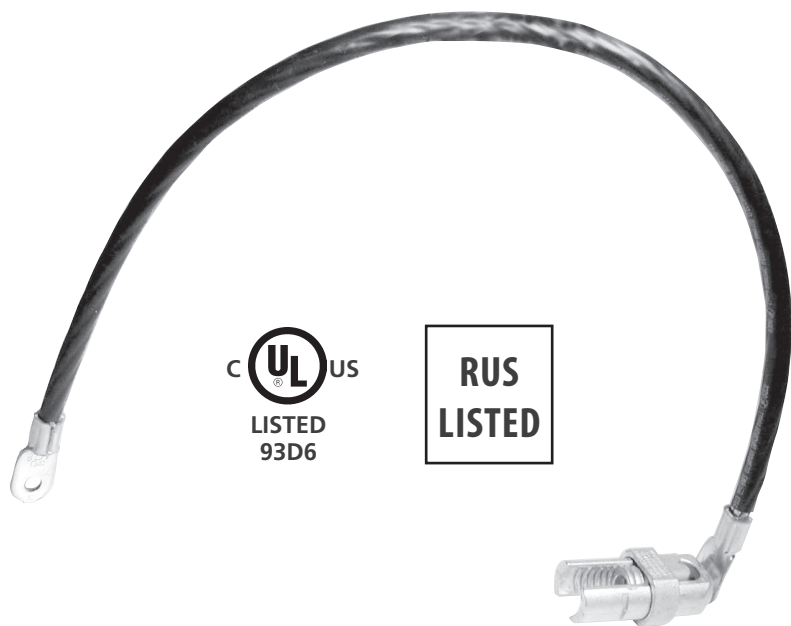
Just the yoke and pusher ring with baby teeth and pair protector, but without the lead or the boot.



BONDING &  
GROUNDING

# U-Shaped BSW Shield Connectors

## EM 3955 SERIES – PEDESTAL BURIED SERVICE WIRE SHIELD CONNECTOR #6 AWG WITH FLOATING BONDING HARNESS



### Application

For bonding and grounding buried service wire shields in pedestals.

### Features

- Long version of connector allows the installer to stack multiples of buried service wires.
- Connector screw end is removable to allow easy adding of new buried service wires or easy toning.
- #6 AWG allows maximum current capacity.
- Flexible lead allows for bonds to float so connection will not loosen.
- UL and RUS listed for safety

### Ordering information

#### EM 3955-6L/8100-15

Connector assembly with 15" #6 AWG lead.  
Standard packaging: 00/bx, 23 lb/bx.

#### EM 3955-6L/8100-36

Connector assembly with 36" #6 AWG lead.  
Standard packaging: 100/bx, 39 lb/bx.

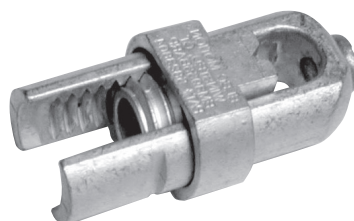
## CONNECTOR WITH SCREW

### Ordering information

#### EM 3955-L

Long U-shaped connector with screw for mounting to your own harness or mounting bracket. Can accommodate 1–3 BSWs.

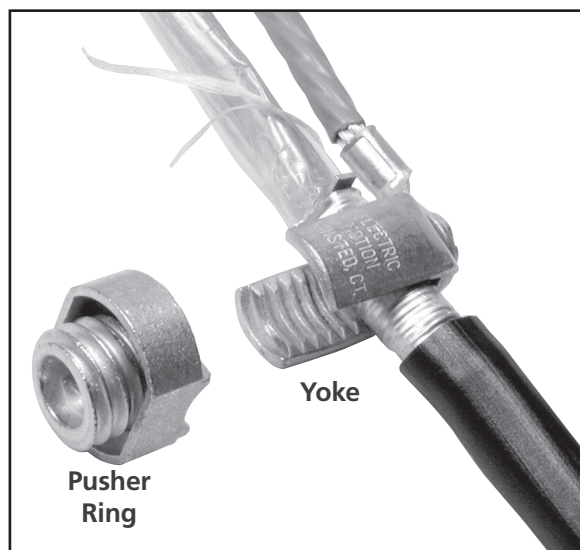
Standard packaging: 10/bg, 100/bx, 9 lb/bx.



For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# U-Shaped BSW Shield Connectors

## EM 3956 SERIES – SHORT U-SHAPED BURIED SERVICE WIRE CONNECTORS WITH FLOATING BONDING HARNESSSES



Order from the connectors listed on the next few pages, or customize your own connectors:

- Wire gauge can be changed with the first number suffix: **EM 3956-S** (#10, #6), e.g., *EM 3956-10S*.
- Yoke length can be changed with the first letter suffix: **EM 3956-10-S** (S = short, L = long), e.g., *EM 3956-10S*.
- Wire length can be changed by adding a number suffix: **EM 3956-10S-18** (inches), e.g., *EM 3956-10S-18*.
- Terminal type can be changed by adding a letter suffix: **EM 3956-10S-18-R** (R = ring, F = fork, H = hook), e.g., *EM 3956-10S-18-F*.



F = fork



H = hook



R = ring



FL = flag

### CONNECTOR WITH 6" LEAD, #10 AWG

#### Ordering information

#### EM 3956-10S

Short U-shaped BSW shield connector with 6 inches of #10 AWG flexible lead wire, hook terminal.

Standard packaging: 10/lbg, 100/lbx, 7 lb/lbx.

#### EM 3956-10SP

Above connector with pair protector.



UL US  
LISTED  
93D6

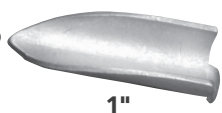
BONDING &  
GROUNDING

### OPTIONAL ACCESSORIES

#### Pair Protector

Ordering information **EM 3905** Standard packaging: 100/lbg, 1000/lbx, 6 lb/lbx.

Also available singly with any connector shown by adding the suffix **-P** to the part number.

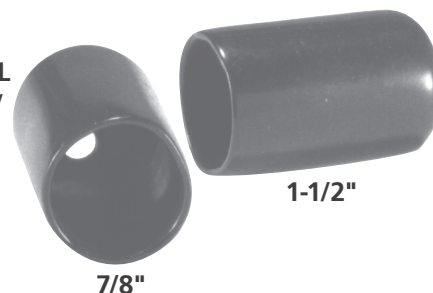


1"

#### Vinyl Boot Insulator

Ordering information **EM 3901-L** Standard packaging: 25/lbg, 100/lbx, 2 lb/lbx.

Also available singly with any connector shown by adding the suffix **-B** to the part number.



7/8"

1-1/2"

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# U-Shaped BSW Shield Connectors

## EM 3956 SERIES – SHORT U-SHAPED BURIED SERVICE WIRE CONNECTORS WITH FLOATING BONDING HARNESSSES



### CONNECTOR WITH 12" LEAD, #10 AWG

#### Ordering information

#### EM 3956-10S12R

Short U-shaped BSW shield connector with 12 inches of #10 AWG flexible lead wire, ring terminal.



### CONNECTOR WITH 18" LEAD, #10 AWG

#### Ordering information

#### EM 3956-10S18R

Short U-shaped BSW shield connector with 18 inches of #10 AWG flexible lead wire, ring terminal.



### CONNECTOR WITH 6" LEAD, #6 AWG

#### Ordering information

#### EM 3956-6S

Short U-shaped BSW shield connector with 6 inches of #6 AWG flexible lead wire, ring terminal.



For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)

# U-Shaped BSW Shield Connectors

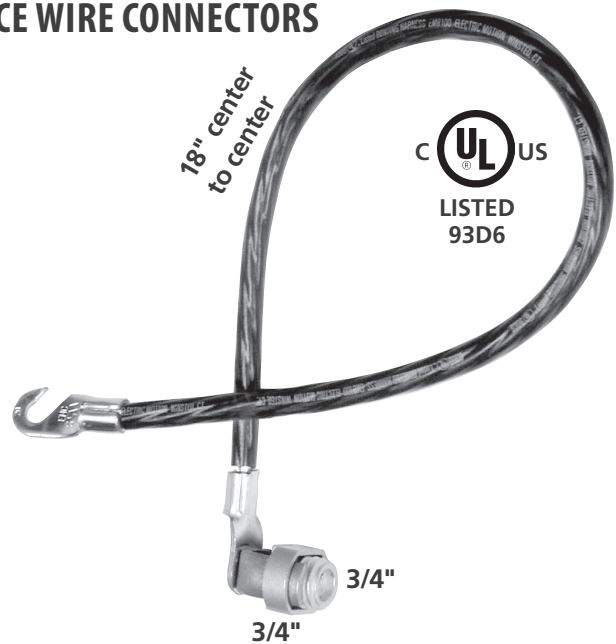
## EM 3956 SERIES – SHORT U-SHAPED BURIED SERVICE WIRE CONNECTORS WITH FLOATING BONDING HARNESSES

### CONNECTOR WITH 18" LEAD, #6 AWG

#### Ordering information

##### EM 3956-6S18RH

Short U-shaped BSW shield connector with 18 inches of #6 AWG flexible lead wire, hook terminal.



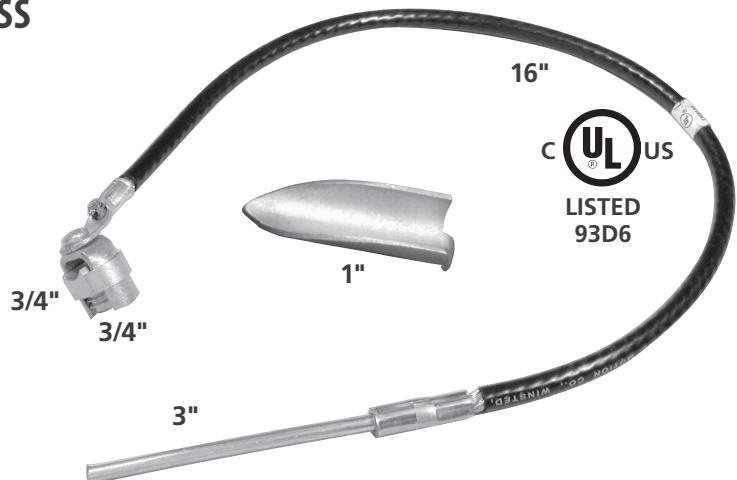
### CONNECTOR WITH FLEXIBLE/SOLID HARNESS

#### Ordering information

##### EM 3956-163SP

Short U-shaped BSW shield connector with 16 inches of #6 AWG flexible lead wire, 3 inches of solid #6 AWG, pair protector.

Standard packaging: 1 kit/bg, 25 kits/bx, 14 lb/bx.



### CONNECTOR WITH SCREW

#### Ordering information

##### EM 3956-S

Short U-shaped BSW connector with a screw for use with your own harness or mounting bracket.

Standard packaging: 25/bg, 100/bx, 5 lb/bx.

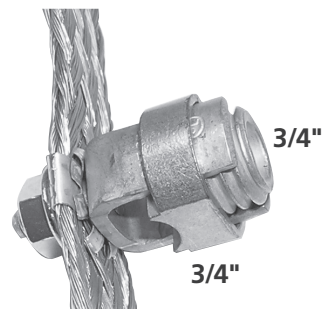


### CONNECTOR WITH STUD AND NUT

#### Ordering information

##### EM 3956-SWZ

Short U-shaped BSW connector with a screw and a whiz nut for use with your own bonding braid with eyelets



For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)

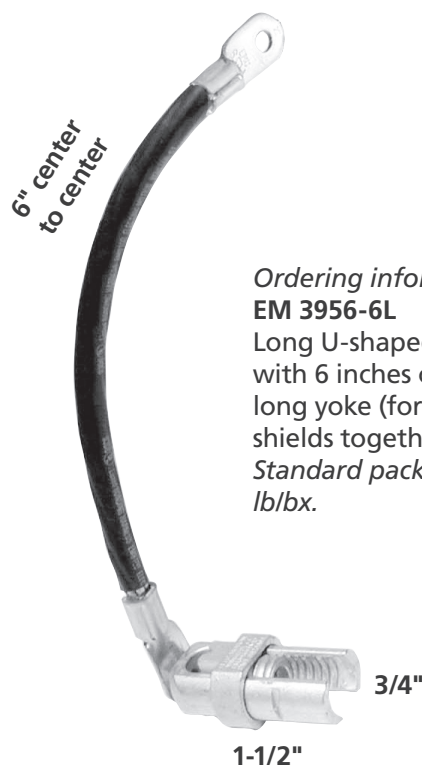
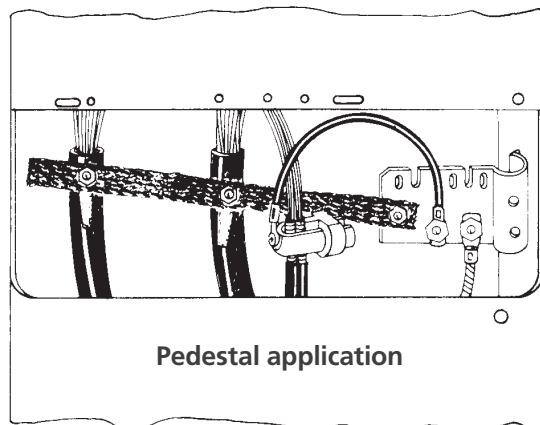


# U-Shaped BSW Shield Connectors

## EM 3956 SERIES – LONG U-SHAPED BURIED SERVICE WIRE CONNECTORS WITH FLOATING BONDING HARNESSSES



### CONNECTOR WITH 6" LEAD, #6 AWG



#### Ordering information

##### EM 3956-6L

Long U-shaped BSW shield connector with 6 inches of #6 AWG lead wire and long yoke (for one or multiple BSW shields together).

Standard packaging: 10/lbg, 100/lbx, 14 lb/bx.

#### Order the connector above, or customize your own connectors:

- Wire gauge can be changed with the first number suffix: **EM 3956-  S** (#10, #6), e.g., *EM 3956-10S*.
- Yoke length can be changed with the first letter suffix: **EM 3956-10-** (S = short, L = long), e.g., *EM 3956-10S*.
- Wire length can be changed by adding a number suffix: **EM 3956-10S-** (inches), e.g., *EM 3956-10S-18*.
- Terminal type can be changed by adding a letter suffix: **EM 3956-10S-18-** (R = ring, F = fork, H = hook), e.g., *EM 3956-10S-18-F*.



F = fork



H = hook



R = ring



FL = flag

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)

# U-Shaped BSW Shield Connectors

## EM 3956 SERIES – SHORT U-SHAPED BURIED SERVICE WIRE SHIELD CONNECTORS WITH RIGID MOUNTING BARS

Tin-plated brass clamp designed to make a low-resistance connection between a service wire shield and ground point.



### Features

- Fits compactly in most NIDs
- Can be used on 2 pair–6 pair buried service wire
- Open-ended design allows the installation of this clamp onto a wire already in service. Also, it can be taken apart to isolate the ground

Ordering information :

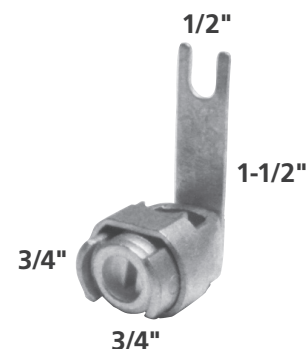
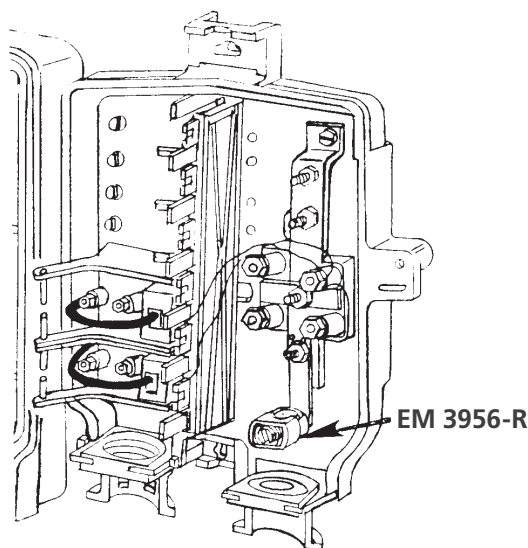
### CONNECTOR WITH RIGID MOUNTING BAR

#### Ordering information

##### EM 3956-R

Short U-shaped BSW shield connector with tin-plated brass mounting bar (for single BSW).

Standard packaging:  
25/bg, 100/bx, 6 lb/bx



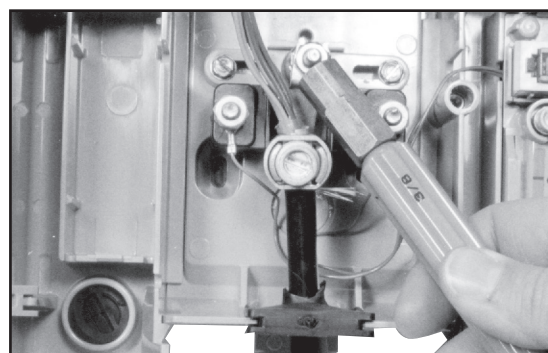
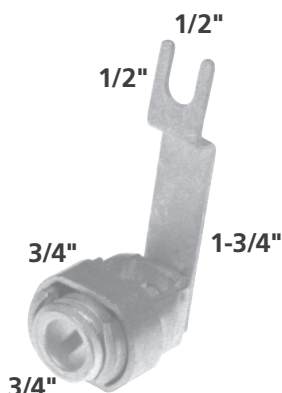
### CONNECTOR WITH OFFSET RIGID MOUNTING BAR

#### Ordering information

##### EM 3956-RO

Short U-shaped BSW shield connector with offset bar

Standard packaging:  
25/bg, 100/bx, 5 lb/bx



BONDING &  
GROUNDING

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)

# U-Shaped BSW Shield Connectors

## EM 3956 SERIES – SHORT U-SHAPED BURIED SERVICE WIRE SHIELD CONNECTORS WITH RIGID MOUNTING BARS

### CONNECTOR WITH 45° OFFSET RIGID MOUNTING BAR

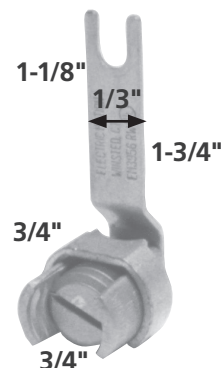
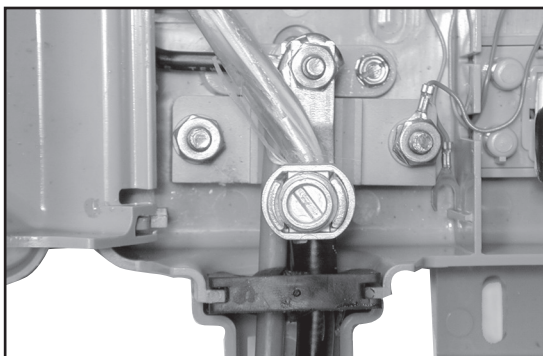
#### Ordering information

##### EM 3956-RW

Short U-shaped BSW connector with 45° unplated offset bar.

#### Standard packaging:

10/lb, 100/lb, 6 lb/lb



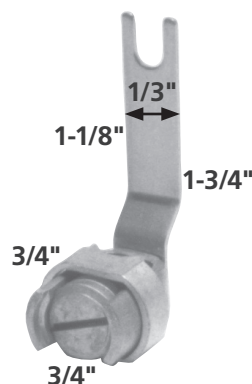
### CONNECTOR WITH REVERSED 45° OFFSET RIGID MOUNTING BAR

#### Ordering information

##### EM 3956-RR

Short U-shaped BSW connector with 45° unplated offset reversed bar.

Standard packaging: 25/lb, 100/lb, 6 lb/lb.



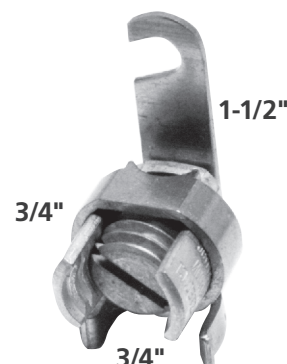
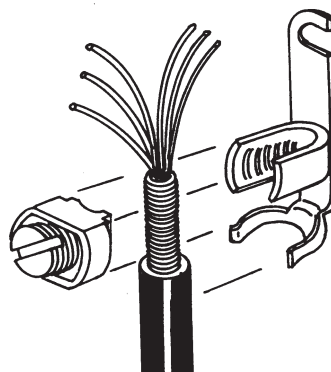
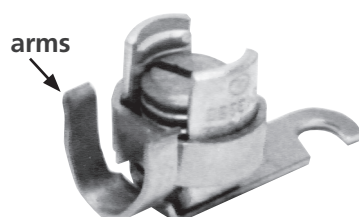
### CONNECTOR WITH HOOK-SHAPED RIGID MOUNTING BAR

#### Ordering information

##### EM 3956-H

Short U-shaped BSW connector with hook-shaped ground bar. Wraparound arms provide a strain relief.

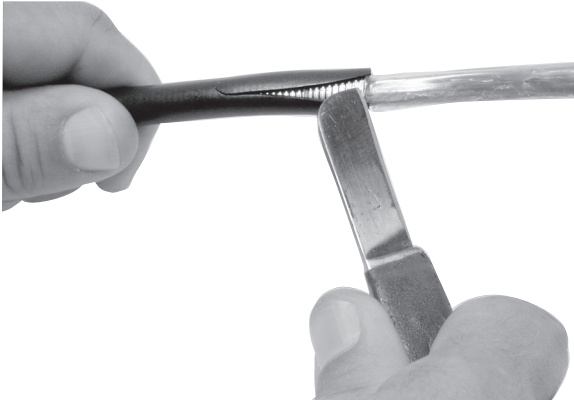
Standard packaging: 25/lb, 100/lb, 6 lb/lb.



For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)

# U-Shaped BSW Shield Connectors

## EM 3956M SERIES – MEDIUM U-SHAPED BURIED SERVICE WIRE SHIELD CONNECTORS FOR USE WITH DOUBLE-TAB PAIR PROTECTOR FOR BUILT-IN STRAIN RELIEF



Remove the appropriate amount of sheath necessary for wire termination. Make a lengthwise slit in the jacket 1" from the end.



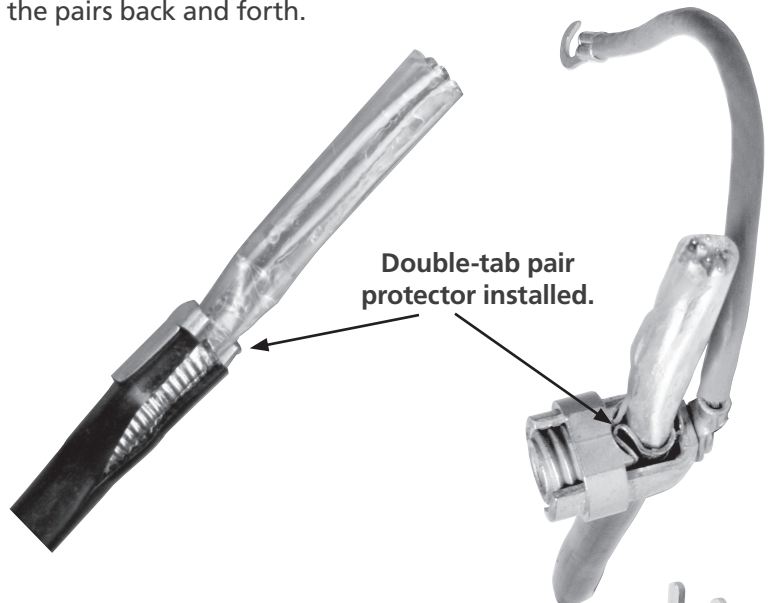
Make room for the pair protector by moving the pairs back and forth.



EM 3900-2

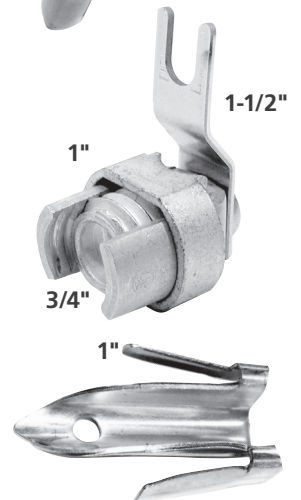
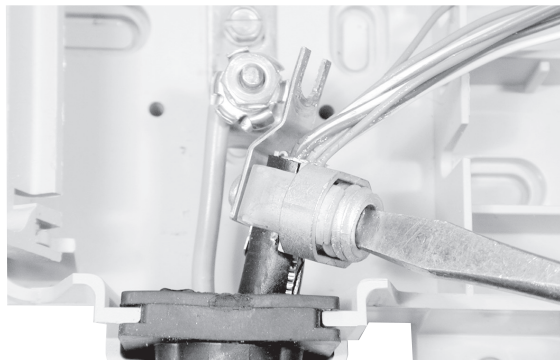


Insert pair protector between shield and pairs. This serves as a strain relief and protects the pairs from crushing.



## CONNECTOR WITH 40° OFFSET RIGID MOUNTING BAR

*Ordering information*  
**EM 3956M-RW1.5P**  
NIU Connector for 2-pair through 6-pair service wire..  
*Standard packaging: 50/bx,  
5 lb/bx.*



BONDING &  
GROUNDING

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)



# U-Shaped BSW Shield Connectors

## EM 3956M SERIES – MEDIUM U-SHAPED BURIED SERVICE WIRE SHIELD CONNECTORS FOR USE WITH DOUBLE-TAB PAIR PROTECTOR FOR BUILT-IN STRAIN RELIEF



EM 3900-2

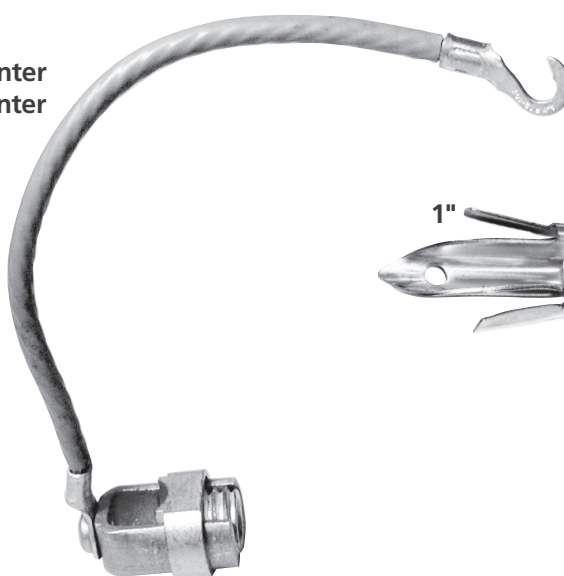
### CONNECTOR WITH 6" LEAD, #10 AWG

#### Ordering information

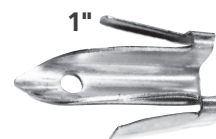
##### EM 3956M-10SP

Medium U-shaped BSW connector for single wire with flexible 6" lead, hook terminal.

6" center  
to center



1"



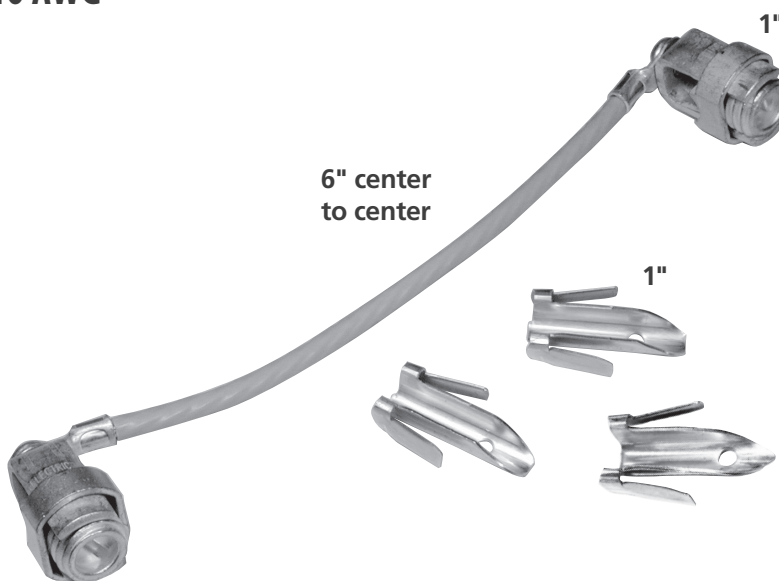
### DOUBLE CONNECTOR WITH 6" LEAD, #10 AWG

#### Ordering information

##### EM 3956-PM

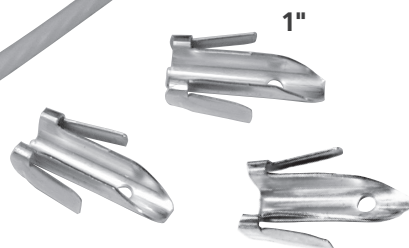
Two U-shaped BSW shield connectors with medium yokes, connected by a 6" #10 AWG flexible lead, and packaged with two double-tab pair protectors, for use with Kold-n-Klose, for in-line splicing of buried service wires. Permits straight splice configuration without creating a second joint.

6" center  
to center



1"

1"



For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)



# U-Shaped BSW Shield Connectors

## EM 3956M SERIES – MEDIUM U-SHAPED BURIED SERVICE WIRE SHIELD CONNECTORS FOR USE WITH BONDED ALUMINUM SHIELD



EM 3900-04

### CONNECTOR WITH 6" LEAD, #10 AWG

#### Ordering information

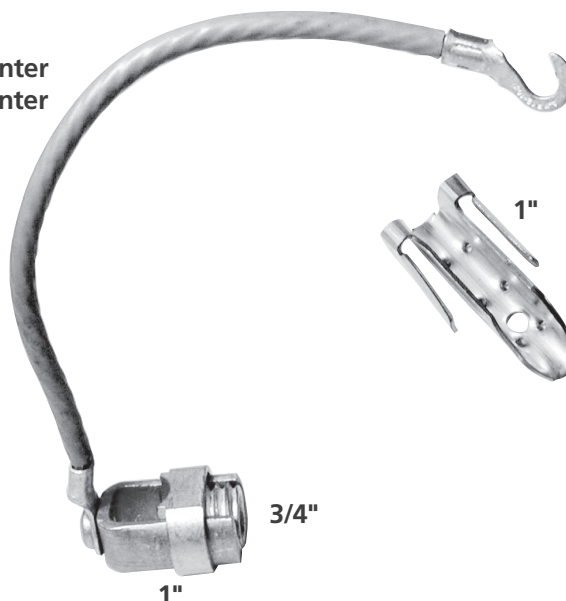
##### EM 3956M-10SP-04

Medium U-shaped BSW connector with 6" of #10 AWG lead wire, for 2-pair through 6-pair BSW. Pair protector has perforations to penetrate protective coating on shield, for better continuity.

##### EM 3956M-10SP10-04

Same as above, with 10" lead.

6" center  
to center

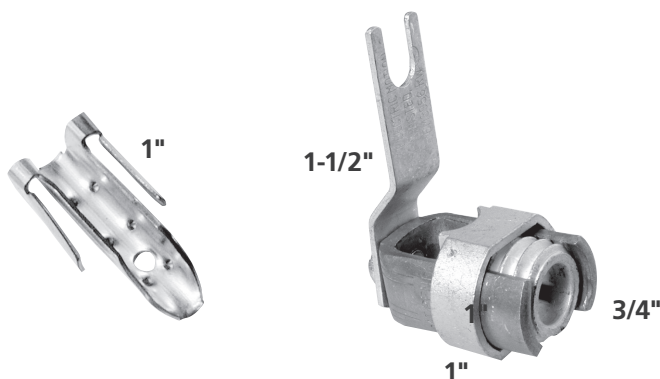


### CONNECTOR WITH 40° OFFSET MOUNTING BAR

#### Ordering information

##### EM 3956M-RW1.5-04

Medium U-shaped BSW connector with 40° offset, 1 1/2" long mounting bar, for 2-pair through 6-pair BSW. Pair protector has perforations to penetrate protective coating on shield, for better continuity.



### PAIR PROTECTOR WITH PERFORATIONS

#### Ordering information

##### EM 3900-04



BONDING &  
GROUNDING

# U-Shaped BSW Shield Connectors

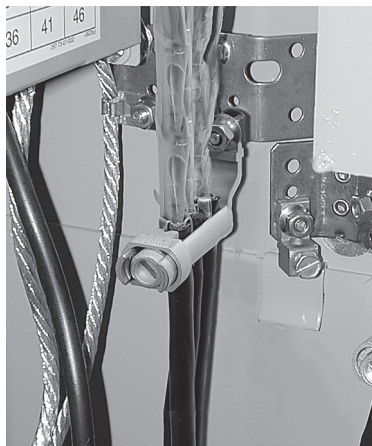
## EM 3954 SERIES – LONG U-SHAPED BURIED SERVICE WIRE SHIELD CONNECTORS FOR PEDESTALS FOR USE WITH DOUBLE-TAB PAIR PROTECTOR FOR BUILT-IN STRAIN RELIEF

### CONNECTOR WITH 45° OFFSET MOUNTING BAR

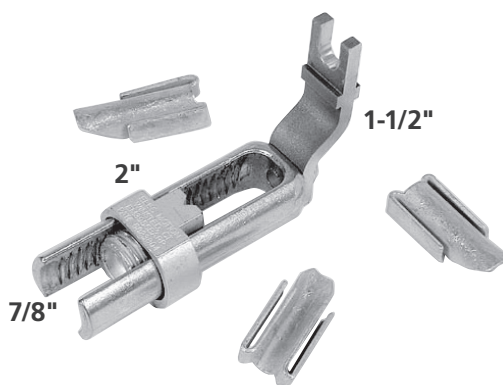
#### Ordering information

##### EM 3954-ROP

Long U-shaped BSW connector with 45° offset bar. Accommodates 1 to 3 service wires, 2 pair through 6 pair. Standard packaging: 50/lbx, 6 lb/lbx.



EM 3900-2

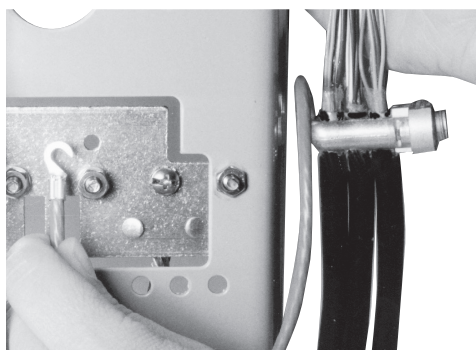


### CONNECTOR WITH 10" LEAD, #10 AWG

#### Ordering information

##### EM 3954-10SP/10

Long U-shaped BSW connector with #10 AWG ground lead, 10" long, hook terminal. Accommodates 1 to 3 service wires, 2 pair through 6 pair.

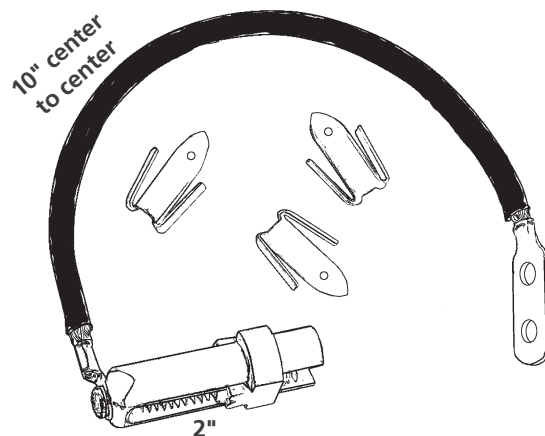


### CONNECTOR WITH 10" LEAD, #6 AWG, DOUBLE RING TERMINAL

#### Ordering information

##### EM 3954-6L/8100-10-DHP

Long U-shaped BSW connector with #6 AWG ground lead, 10" long, double-hole ring terminal. Accommodates 1 to 3 service wires, 2 pair through 6 pair.



For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)

# U-Shaped BSW Shield Connectors

## EM 3958 SERIES – LARGER DIAMETER U-SHAPED BURIED SERVICE WIRE SHIELD CONNECTORS

Shield connector for 12-pair buried service wire. Available with anti-crush devices for three different shield sizes: .41", .48", .52". Also available with flexible insulated harness, or with tapped fork and loose 10/32 screw.

### 12-PAIR CONNECTOR

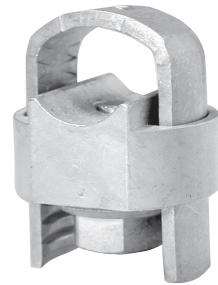
#### Ordering information

**EM 3958-S** – Connector with no anti-crush device

Standard packaging: 10/lbg, 100/lbx, 14 lb/lbx.

Anti-crush devices: add suffix to part number to indicate shield diameter: .41, .48, .52.

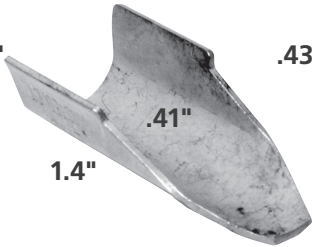
7/8"



.39"

.41"

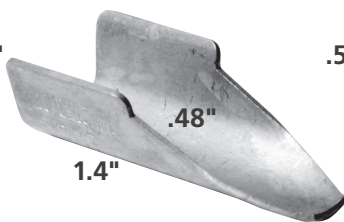
1.4"



.43"

.48"

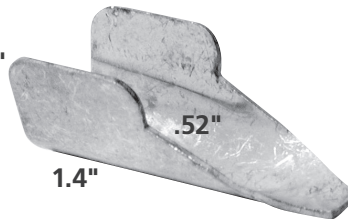
1.4"



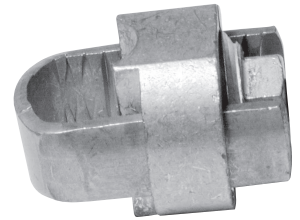
.53"

.52"

1.4"



1-1/4"

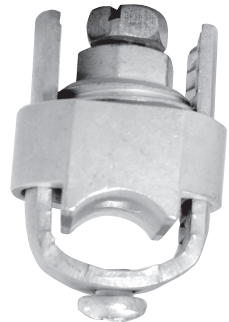


**EM 3958-SS** – Connector with no anti-crush device, with tapped fork and loose 10/32 screw

Standard packaging: 100/lbx, 13 lb/lbx.

Anti-crush devices: add suffix to part number to indicate shield diameter: .41, .48, .52.

7/8"

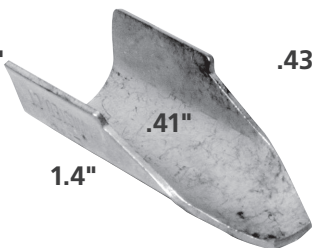


1-1/4"

.39"

.41"

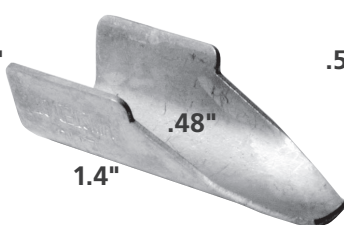
1.4"



.43"

.48"

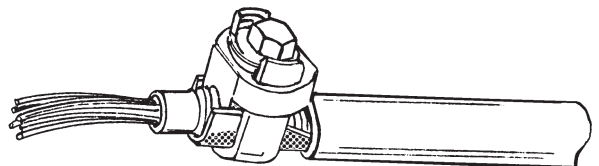
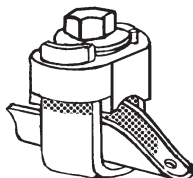
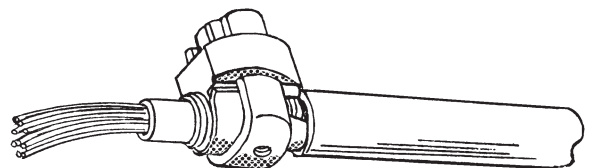
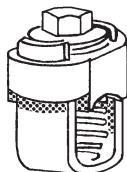
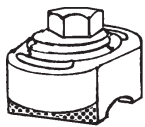
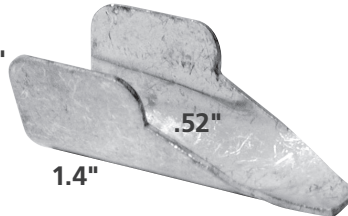
1.4"



.53"

.52"

1.4"



For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# U-Shaped BSW Shield Connectors

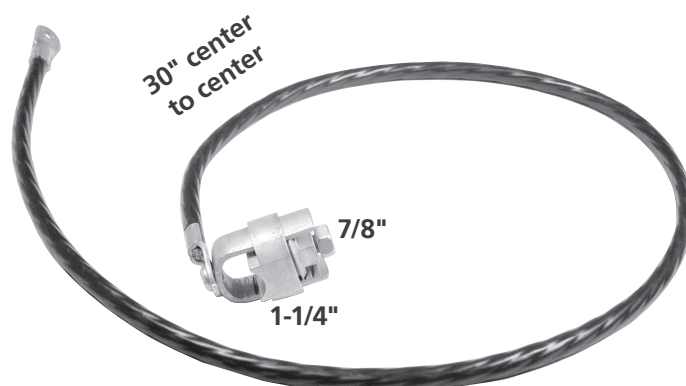
## EM 3958 SERIES – LARGER DIAMETER U-SHAPED BURIED SERVICE WIRE SHIELD CONNECTORS

### CONNECTOR WITH 30" LEAD, #6 AWG FOR PEDESTALS

#### Ordering information

**EM 3958-S/30** – Large U-shaped BSW connector with no anti-crush device, with 30" flexible insulated harness, #6 AWG, with ring terminal, #10 size mounting hole.

Standard packaging: 100/bx, 44 lb/bx.



### CONNECTOR WITH 20" LEAD AND ANTI-CRUSH DEVICES

#### Ordering information

**EM 3958-S/20 P3** – Large U-shaped BSW connector with 20" flexible insulated harness, #6 AWG, with ring terminal, #10 size mounting hole, and all three of the anti-crush devices on p. 476 Use the one that fits; discard the other two.

Standard packaging: 100/bx.



### CONNECTOR WITH 10" LEAD FOR NIDS

Designed for the large-diameter 6-pair 19 AWG buried service wire or 12-pair buried service wire. Also available with #12 or #6 AWG ground wire lead.

#### Features

- Opens like a book to allow ease of installation
- Can be disassembled quickly to isolate the ground

#### Applications

Can be used on network interface devices, protectors, and terminals.

#### Ordering information

**EM 3958-S1010** – Large U-shaped BSW Shield Connector with 10" of #10 AWG wire and a hook terminal.

Standard packaging: 100/bx, 16 lb/bx.





# U-Shaped BSW Shield Connectors

## BARP SERIES – SPARK GAP SHIELD TERMINATION

### Description

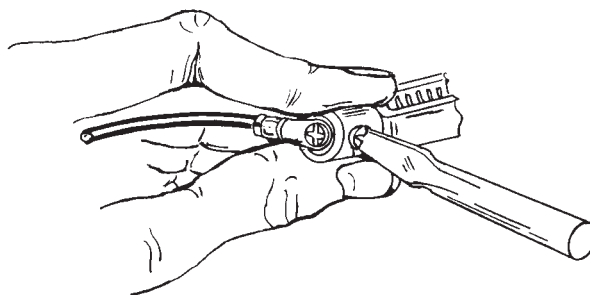
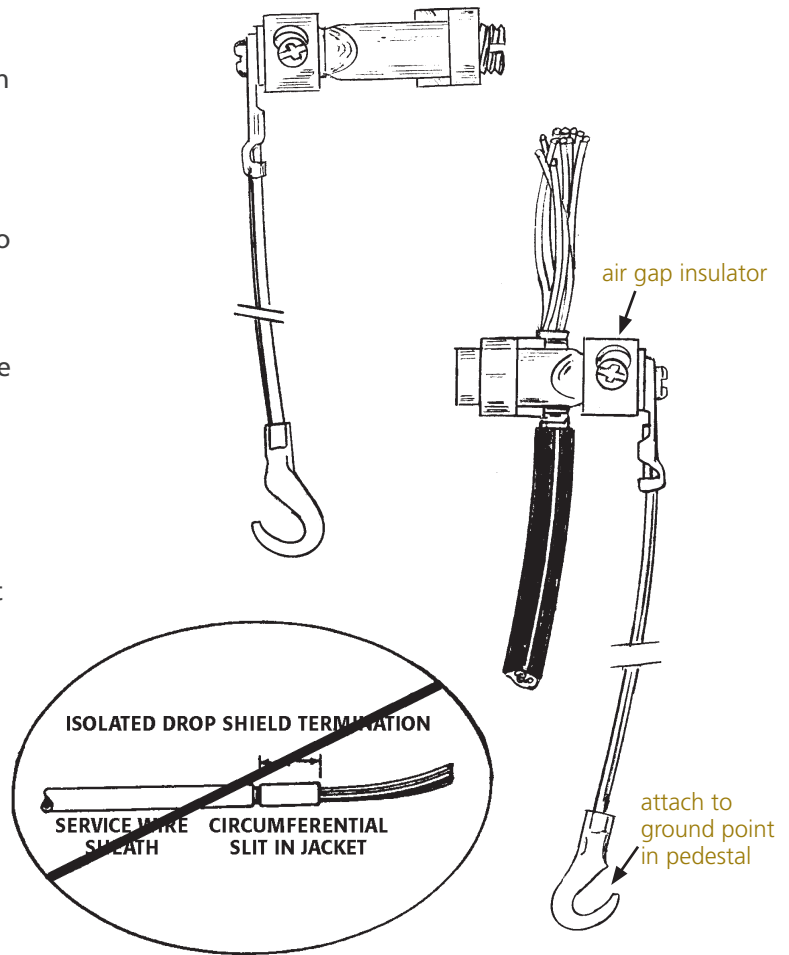
These clamps are designed for use in the distribution pedestal where an indirect or isolated type of connection is desired. This method of termination prevents the shield of the buried service wire from becoming a conductor of unwanted stray voltages, yet allowing higher voltages, such as lightning, to go safely to ground.

### Applications

Works with 2 pair–6 pair shielded buried service wire if the jacket can be stripped from the shield. Works with all of the major pedestals.

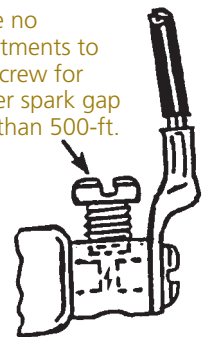
### Features

- The spark gap is built into the clamp itself, eliminating the craft-sensitive methods of termination, such as a circumferential knife cut in the jacket, or a buildup of electrical tape.
- Available with an insulator boot.
- Minimum spark-over voltage is 1–3 KV.
- Meets Bellcore criteria for lightning surge per spec #TR-NWT-001001.
- Spark gap electrodes can be easily bypassed, if desired, by tightening the side screw in the insulator. This bridges across the electrodes, making a direct connection to ground.

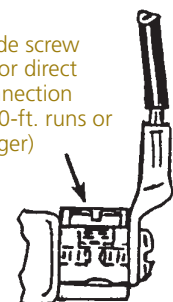


Loosen side screw, rotate plastic collar to the larger portion of the slot, and re-tighten.

Make no adjustments to this screw for proper spark gap (less than 500-ft. runs)



\*Side screw in for direct connection (500-ft. runs or longer)



See next page for ordering information.

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com



# U-Shaped BSW Shield Connectors

## BARP SERIES – SPARK GAP SHIELD TERMINATION

### CONNECTOR WITH 10" LEAD, #10 AWG

#### Ordering information

##### EM 3955-BARP

Spark Gap U-Shaped BSW Shield Connector with 10" #10 AWG flexible lead and hook terminal.

Standard packaging: 10/lb, 100/bx, 14 lb/bx.



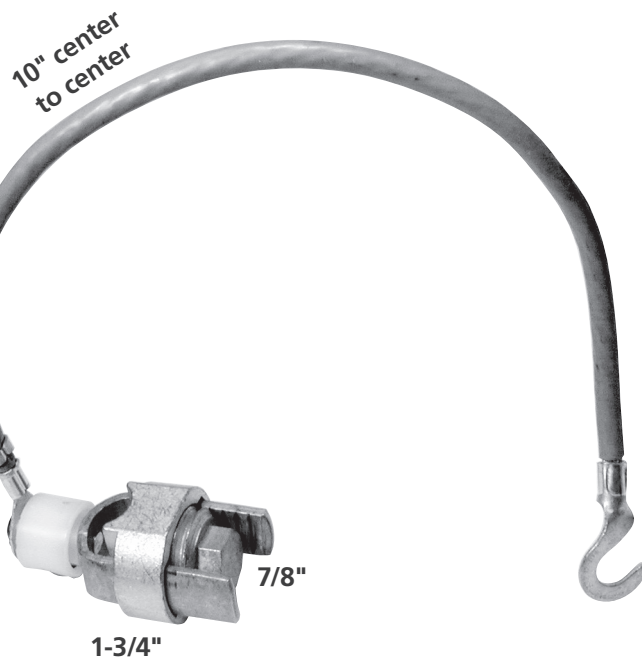
### LARGER DIAMETER CONNECTOR WITH 10" LEAD, #10 AWG

#### Ordering information

##### EM 3958-S1010BARP

Spark Gap U-Shaped BSW Shield Connector works with large diameter 6 pair/19 AWG shielded buried service wire.

Standard packaging: 100/bx, 17 lb/bx.



For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)

# U-Shaped BSW Shield Connectors

## BARP SERIES – SPARK GAP SHIELD TERMINATION

### CONNECTOR WITH 15" OR 36" LEAD, #6 AWG

RUS Listed

#### Ordering information

##### EM 3955-6S/8100-15 BARP

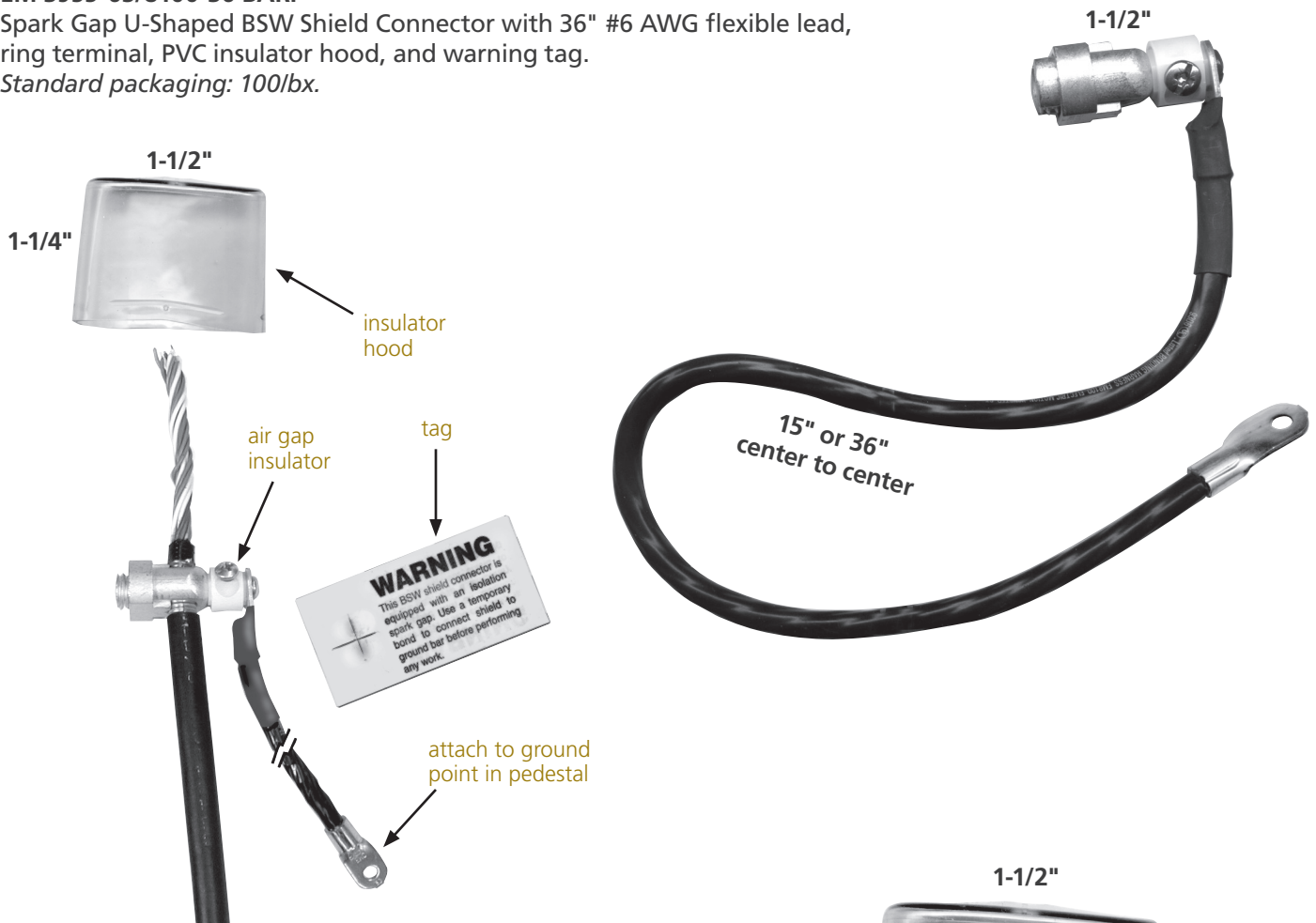
Spark Gap U-Shaped BSW Shield Connector with 15" #6 AWG flexible lead, ring terminal, PVC insulator hood, and warning tag.

Standard packaging: 100/bx, 27 lb/bx.

##### EM 3955-6S/8100-36 BARP

Spark Gap U-Shaped BSW Shield Connector with 36" #6 AWG flexible lead, ring terminal, PVC insulator hood, and warning tag.

Standard packaging: 100/bx.

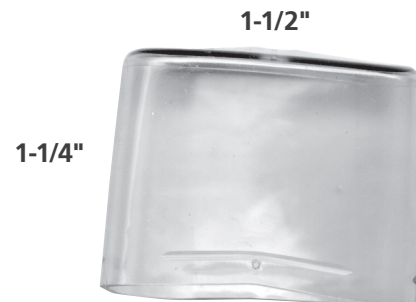


### CLEAR PVC INSULATOR HOOD

#### Ordering information

##### EM 3902

Can be ordered separately.



BONDING &  
GROUNDING

# U-Shaped BSW Shield Connectors

## OPTIONAL ACCESSORIES

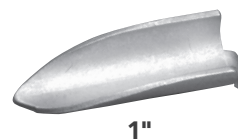
### PAIR PROTECTOR

Ordering information

EM 3905

Standard packaging: 100/bg, 1000/bx, 6 lb/bx.

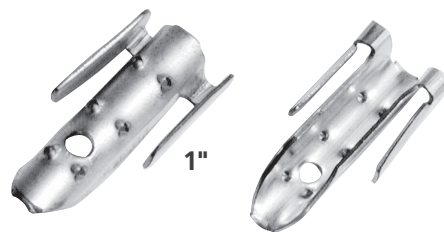
Also available singly with BSW shield connector by adding suffix -P to the part number.



### DOUBLE-TAB PAIR PROTECTOR WITH BLOSSOMS

Ordering information

EM 3900-04

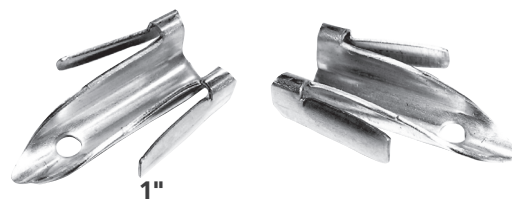


### PAIR PROTECTOR WITH TWO TABS

Ordering information

EM 3900-2

For use in single or multiple BSW applications, for built-in strain relief.



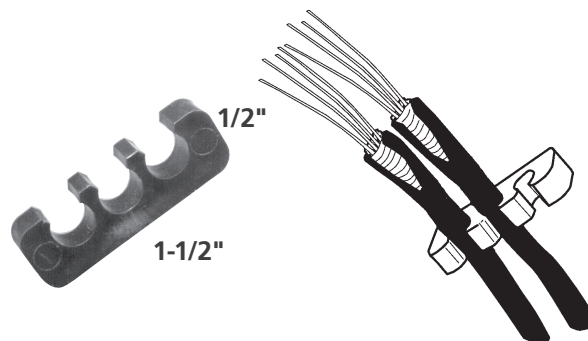
### BURIED SERVICE WIRE HOLDER

Ordering information

EM 3906 – BSW holder for 3-pair BSWs

EM 3904 – BSW holder for 2-pair BSWs

For positioning and holding BSW in long yoke BSW connectors.



### VINYL BOOT INSULATOR

Ordering information

EM 3901 – 1" long, 7/8" dia.

EM 3901-M – 1" long, 1" dia.

EM 3901-L – 1-1/2" long, 7/8" dia.

Standard packaging: 25/bg, 100/bx, 2 lb/bx.

Also available singly with corresponding BSW connector by adding suffix -B to the part number.



For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# BSW Shield Connectors

## BURIED SERVICE WIRE FLOATING BOND

The EM FB series of buried service wire bonds are designed for a fast, easy, foolproof installation from the shield of a buried service wire to the ground point of a network interface device, protector, terminal, or pedestal.

### Features

- The connector opens like a book so the installer doesn't have to thread the pairs through the connector.
- The conductor pairs emerge from the top of the connector, eliminating the danger of pinching the pairs between the two halves of the clamp.
- Works with 2-pair through 6-pair buried service wire.
- Wire lead allows the bond to "float" so that frost, vibration, ground shrinkage, and settling won't contribute to shield breakage.
- Connector wraps completely around the shield for greater surface area contact.
- Compact design fits in many of today's crowded enclosures.
- Available with #10, #12, or #14 AWG wire lead, in any length.
- Available with a hook, fork, ring, or flag terminal.

### Ordering information

Standard part number: **EM FB-1406F** – Connector with a #14 AWG wire, 6 inches long, fork terminal.

cULus Listed, 93D6: #10 AWG wire, any length, any terminal.

### Variations:

- Wire gauge can be changed with the first two numbers: **EM FB-\_\_06F** (#10, #12, #14 AWG)
- Wire length can be changed with the last two numbers: **EM FB-14\_\_F** (2"–36")
- Terminal can be changed with the last letter: **EM FB-1406\_** (F, H, R, FL)



F = fork



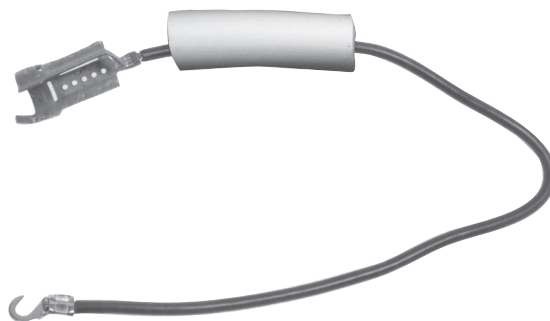
H = hook



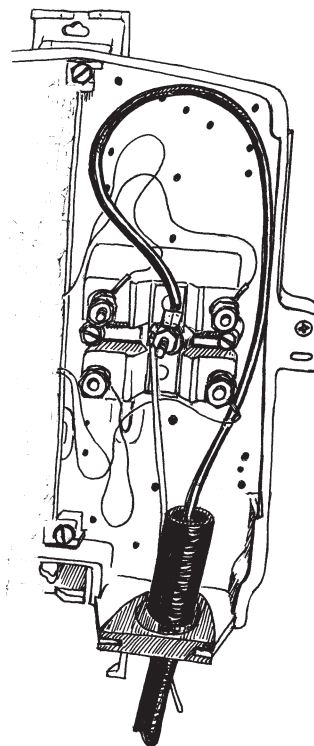
R = ring



FL = flag



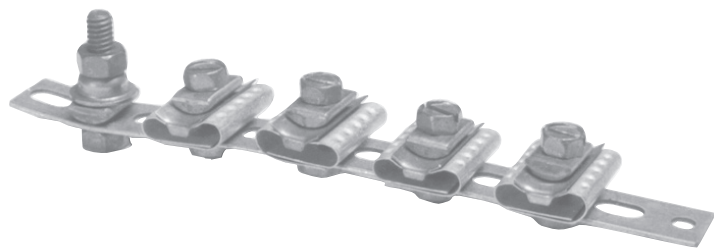
Closeup, after attaching to buried service wire



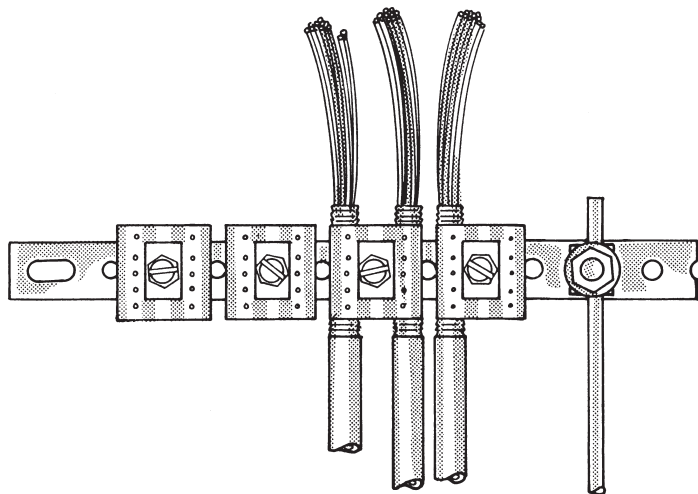
Installation in a NID

# BSW Shield Connectors

## MULTIPLE BOW TIE BURIED SERVICE WIRE CONNECTORS



An assembly of four soft brass bow-tie shaped connectors mounted on a #6 AWG bar of soft tin-plated copper. After buried service wire is prepared, either one or two may be inserted into either side of the bow-tie. Soft brass bow tie is then wrapped around each shield by the action of a shoe-shaped washer, which is run down by a set screw using a terminal wrench. If desired, a proper connector exists on the bar for a ground wire. Any size from solid or stranded #6–#14 AWG grounding wire can be used.



### Features

- Soft brass bow ties form around copper shield for maximum contact, yet won't damage pairs.
- Indents in bow ties interlock into the corrugations of the copper shield to provide excellent pull-out strength.
- Flat mounting bar is made of soft copper with a tin plate which can be easily bent, cut, or extended.
- All components are either copper or brass for corrosion resistance, in addition to being tin plated.

### Applications

- The multiple buried service wire assembly can be used in pedestals to expand the pedestals' ability to connect additional service wires. It is made of soft copper and can be cut or re-formed to fit, or daisy chained to increase size. Bow ties can also be stacked to fit many service wires in a small space.
- It can also be used in buried splices, either as a complete assembly, or the individual bow ties can be mounted on Ultrabond with eyelets or braid with eyelets used to bond across a splice.
- The multiple buried service wire connector can also be used in hand holes. The mounting tabs on either end can connect to shield connector studs and the assembly can be bent to fit the available space.

Ordering information (please use new part numbers)

Ordering Information		
OLD PART NUMBER	DESCRIPTION	NEW PART NUMBER
(EM 8890) 	2-pair version; .22" diameter, .59" spacings	EM B2259GB
(EM 8894) 	3-pair version; .22" diameter, .74" spacings	EM B2274GB
(EM 8898) 	5-pair version; .32" diameter, .70" spacings	EM B3270GB

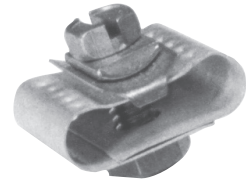


# BSW Shield Connectors

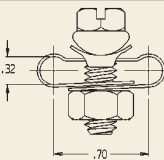
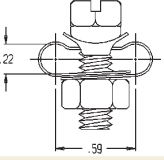
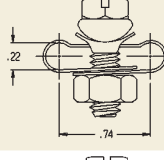
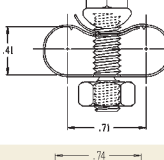
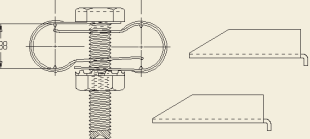
## INDIVIDUAL BOW TIES

Can be mounted on braid with eyelets or Ultrabond, or used on bond bar to connect buried service wires.

Ordering information (please use new part numbers)



### Ordering Information

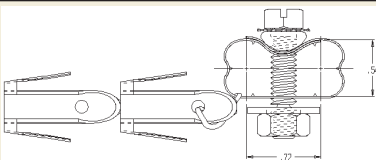
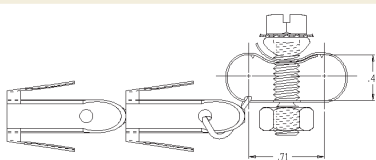
OLD PART NUMBER	DESCRIPTION	NEW PART NUMBER
(EM 8899)	 <p>5-pair version; .32" diameter, .70" spacings</p>	EM B3270
(EM 8891)	 <p>2-pair version; .22" diameter, .59" spacings</p>	EM B2259
(EM 8895)	 <p>3-pair version; .22" diameter, .74" spacings</p>	EM B2274
(EM 8882)	 <p>6-pair version; .41" diameter, .71" spacings</p>	EM B4171
(EM 8883)	 <p>5-pair version; .38" diameter, .74" spacings; two half-bowties, two pair protectors</p>	EM BH3874

## BOW TIE SHIELD CONNECTORS FOR BURIED SPLICES AND AERIAL TERMINALS

Bowtie connectors for one to two 2- or 3-pair shielded BSWs, with 2 pair protectors, for use at all buried splice locations, i.e., KNK, Xaga, PLP.

Ordering information (please use new part numbers)

### Ordering Information

OLD PART NUMBER	DESCRIPTION	NEW PART NUMBER
(EM 8882-PS2)	 <p>2- or 3-pair version; .54" diameter, .72" spacings; two pair protectors</p>	EM B5472-P2B
(EM 8882-PS2-1)	 <p>2- or 3-pair version; .41" diameter, .71" spacings; two pair protectors</p>	EM B4171-P2B

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Rocket 88 Shield Connectors

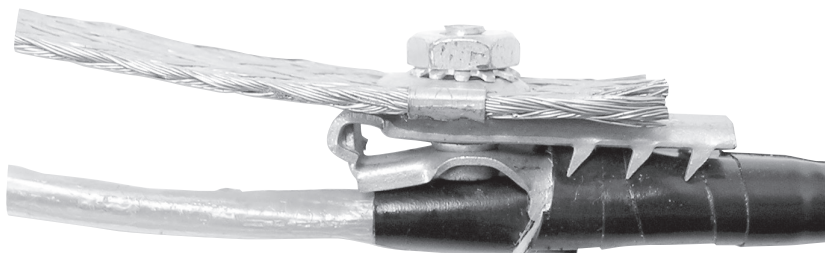
## ROCKET 88 – BURIED SERVICE WIRE SHIELD CONNECTORS

### Description

A small radius shield connector.

### Features

- Brass for strength and conductivity
- Tin plated for corrosion compatibility with aluminum, copper, and steel
- Shaped bottom plate facilitates insertion into small cables and buried service wires
- Teeth on top plate give high pull-out strength.
- Standard size stud accommodates all bonding and grounding harnesses.
- Meets Bellcore electrical specifications
- Circular, rounded bottom plate electrically isolates shield from cable pairs to prevent shorts and grounds.
- Designed to work with corrugated or flat/bonded shields
- Provides excellent pullout strength without punching a stud hole
- Universal design



### Applications

- Bonding and grounding buried service wires (2–12 pairs)
- Bonding and grounding small cables up to 25 pair

### Ordering information

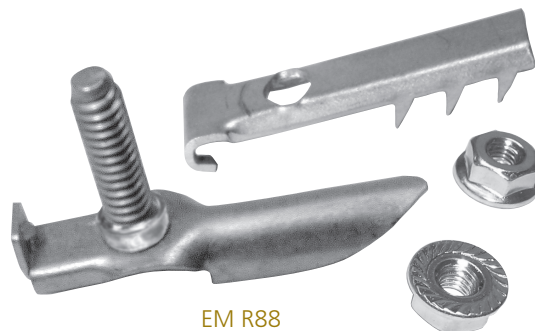
**EM R88** – Small radius shield connector: bottom plate with stud, top plate, two star washer nuts, used to bond and ground 2- to 4-pair buried service wires. See suffix -E for larger count buried service wire and cables.

Add suffix **-TSH** for torque shear nut.

Add suffix **-B** for blossoms on bottom plate.

Add suffix **-S** for short stud.

Add suffix **-E** for expanded radius, to accommodate 5- to 12-pair cables.



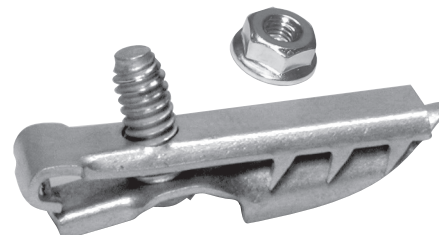
EM R88



EM R88-TSH  
torque shear nut



EM R88-B  
blossoms



EM R88-S  
short stud

# Rocket 88 Shield Connectors

## ROCKET 88 – SHIELD CONNECTORS WITH ATTACHED LEADS

### Cat 3-7 Shield Connectors

#### Description

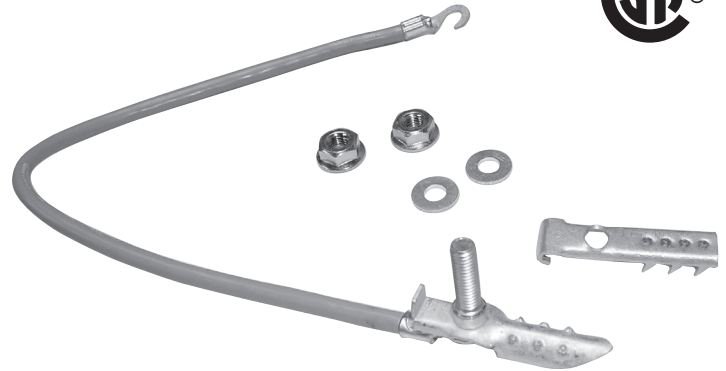
This all-inclusive shield connector can be used to terminate both buried and aerial service wires manufactured with a metallic shield, as well as inside wiring for equipment grounds. Comes with a factory-mounted #10 flexible lead that provides a simple way for the technician to bond and ground the shield of the service wire where the ground post or point is distanced from the wire terminal or protector block. Also works well in situations where access to the station equipment is tight or wire rework is expected.

#### Options

- #10 lead is available in any length specified.
- Lead can be provided as loose piece (separate from connector).
- Available with ring or hook terminals

#### Features

- Designed to work with corrugated or flat/bonded shields
- Provides excellent pullout strength without punching a stud hole
- Universal design



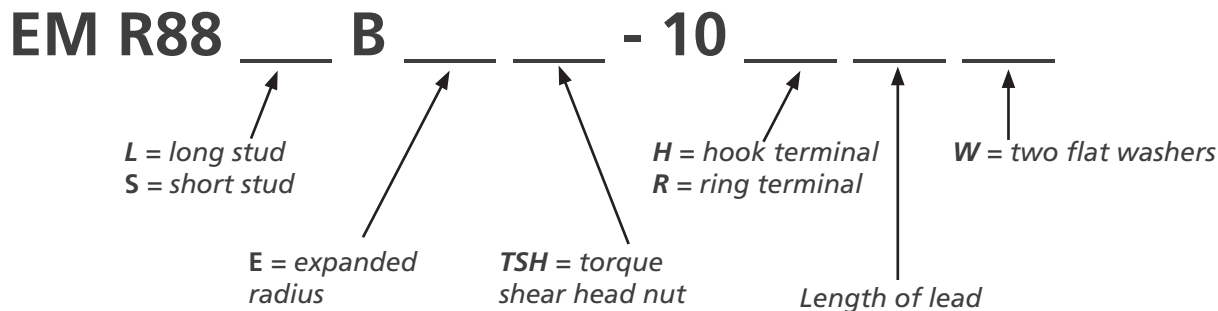
#### Ordering information

**EM R88LB10H10** – Small radius shield connector for 2–4 pairs, with 10" #10 lead

**EM R88LBE10H10** – Expanded radius shield connector for 5–12 pairs, and cables up to 25 pairs, with 10" #10 lead

**EM R88LB10P24** – Cat. 5 25-pair shield connector with expanded radius and blossoms. #10 AWG stranded wire, green insulation, with plain end (no terminal), 24" long, with two flat washers, one whiz nut

### Part Numbering Variations Matrix



#### Example:

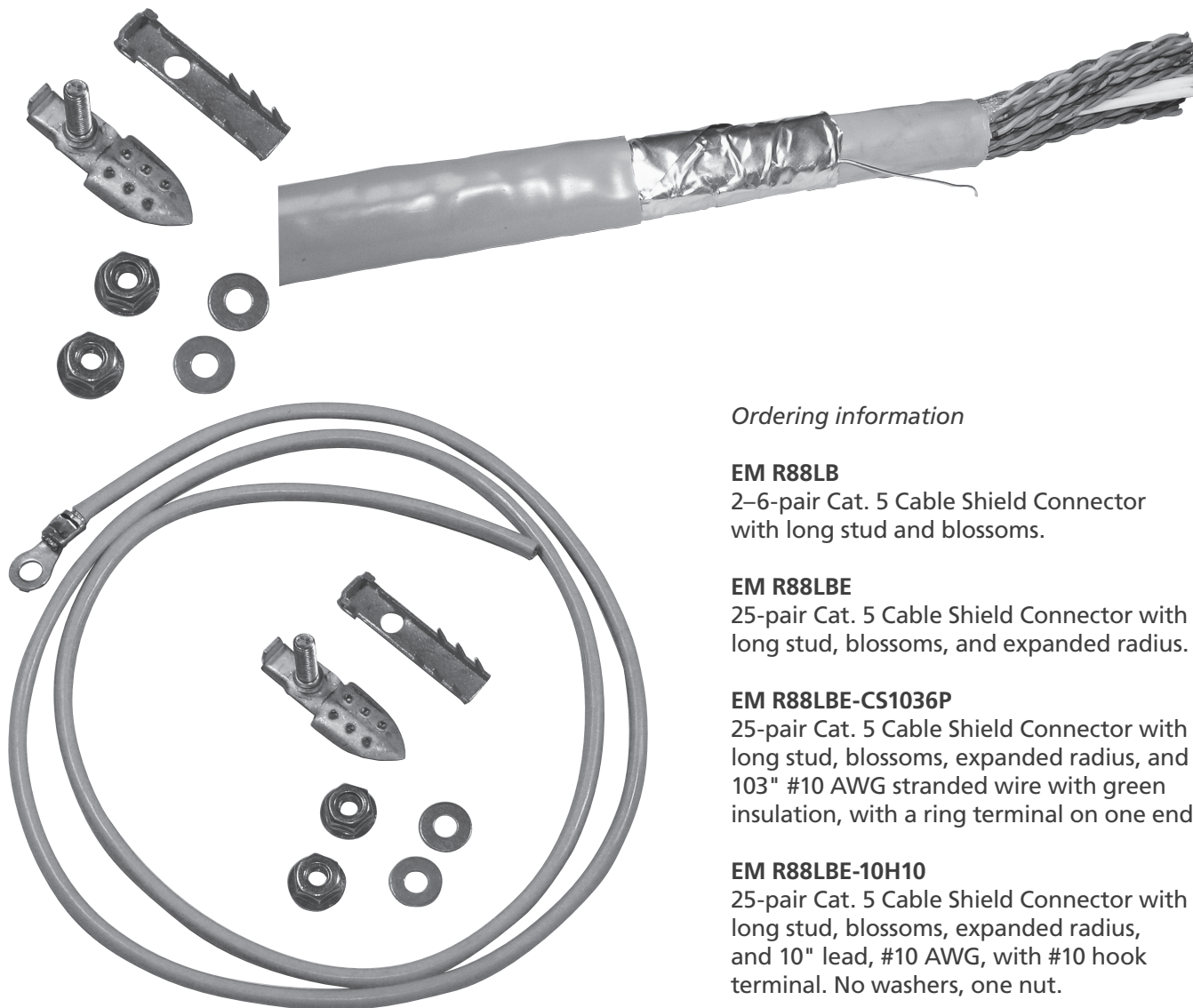
**EM R88LBE-10R12 =**

Shield connector with long stud, expanded radius, 12" #10 lead with a ring terminal.

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Rocket 88 Cat 5 Cable Shield Connectors

## SHIELD CONNECTORS FOR CAT 5 CABLES



### Ordering information

#### **EM R88LB**

2–6-pair Cat. 5 Cable Shield Connector with long stud and blossoms.

#### **EM R88LBE**

25-pair Cat. 5 Cable Shield Connector with long stud, blossoms, and expanded radius.

#### **EM R88LBE-CS1036P**

25-pair Cat. 5 Cable Shield Connector with long stud, blossoms, expanded radius, and 103" #10 AWG stranded wire with green insulation, with a ring terminal on one end.

#### **EM R88LBE-10H10**

25-pair Cat. 5 Cable Shield Connector with long stud, blossoms, expanded radius, and 10" lead, #10 AWG, with #10 hook terminal. No washers, one nut.

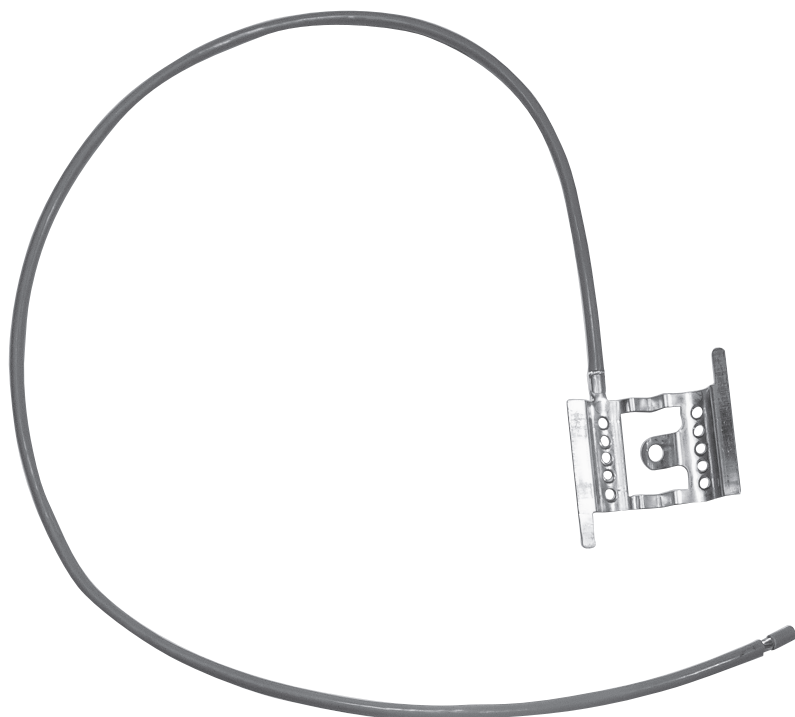


For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)



# Shield Connectors

## 25-PAIR CAT 5 CABLE SHIELD CONNECTOR



Extra-large shield connector for 25-pair Cat. 5 cable, with #10 AWG stranded wire with green insulation crimped to connector 36" long and plain end (no terminal).

### Features

- Connector surrounds the shield almost 360°
- Crimps with standard 9" pliers
- Lead wire provides maximum float
- Blossoms on inside make contact through blue coating

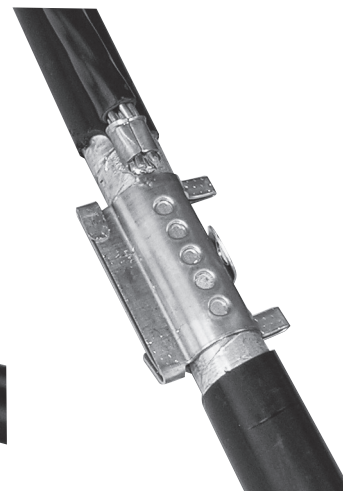
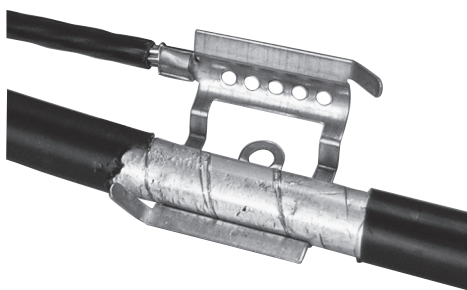
*Ordering information*  
**EM FBXL25**

## 25-PAIR CAT 5 CABLE SHIELD CONNECTOR

Extra-large shield connector for 500 coaxial cable, attached to 30"-long #6 AWG 7-strand wire with black insulation and plain end (no terminal).

Packaged with two-hole copper compression terminal lug and tie wrap.

*Ordering information*  
**EM FBXL-500-7S-30**



**BONDING &  
GROUNDING**

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)



# Rocket 88 Shield Connectors

## SHIELD CONNECTOR FOR 12-PAIR STUB CABLE, #10 LEAD

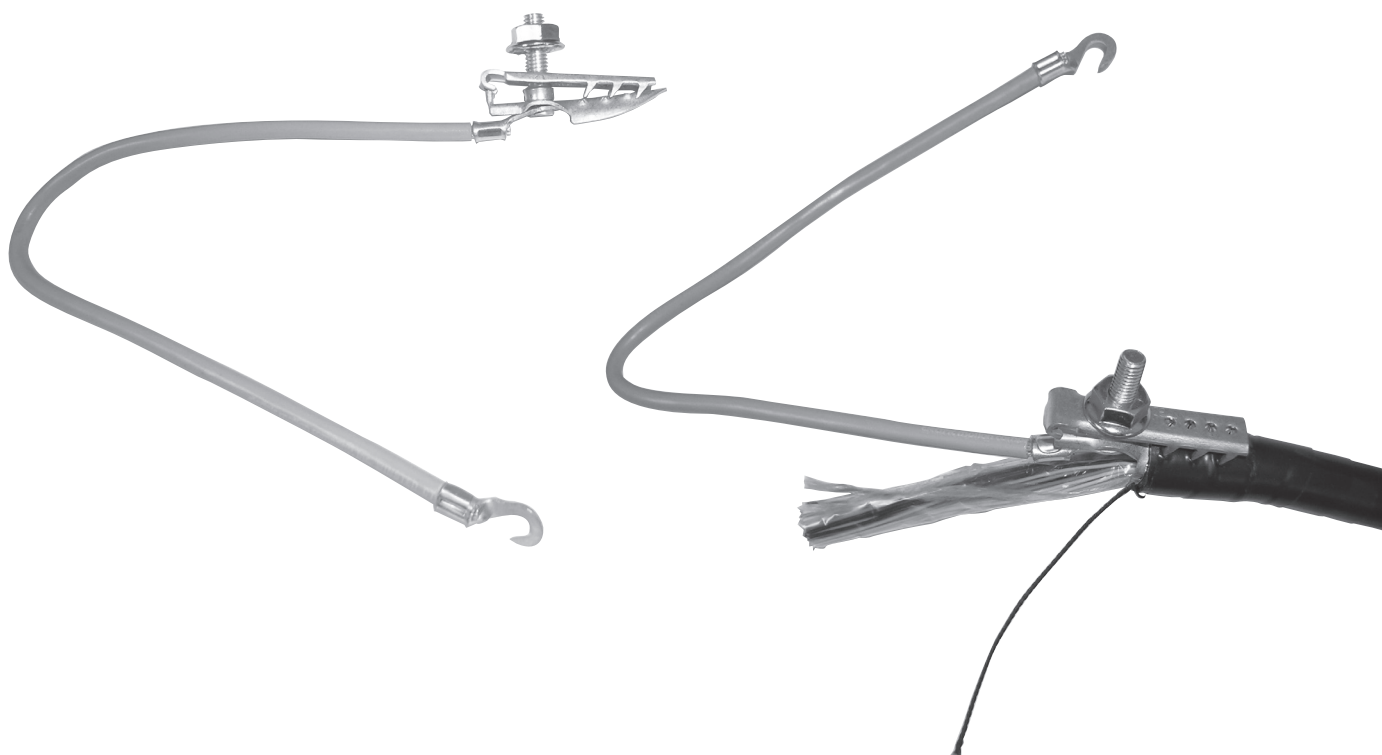
### Description

EM R88 shield connector with a .350" radius and blossoms on the bottom plate. 10" lead, #10 AWG, with #10 hook terminal. No washers, one nut.



### Ordering information

**EM R88LB.350-10H10** – Shield connector for 12-pair stub cable



## SHIELD CONNECTOR FOR 12-PAIR STUB CABLE

### Description

EM R88 shield connector with a .350" radius and blossoms on the bottom plate, same as above, with no lead. No washers, one nut.

### Ordering information

**EM R88LB.350** – Shield connector for 12-pair stub cable



For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)

# Rocket 88 Shield Connectors

## ROCKET 88 SHIELD CONNECTORS WITH RIGID BARS

### Shield Connectors with Rigid Bars



Rocket 88 shield connector with blossoms, with attached rigid, forked bar. Available in any length. Used to ground buried service wire and small diameter cables where a ground post or stud is provided. **EM R88BE-R** and **EM R88BE-RXT** may also be used to ground the shield of small cables up to 25 pairs. Custom fork length are available.

#### Ordering information

**EM R88B-R** – With short fork, accommodates 2- to 4-pair buried service wire

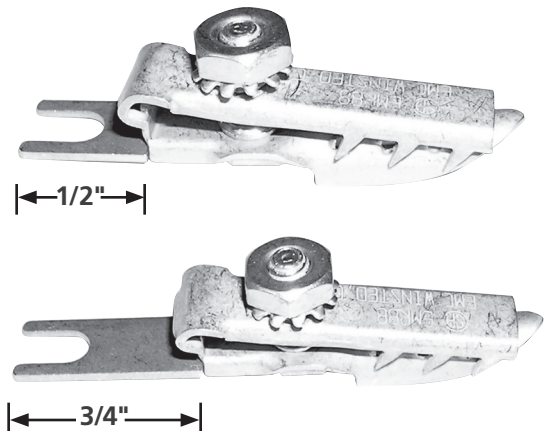
**EM R88BE-R** – With short fork, for 5- to 12-pair BSW

**EM R88B-RXT** – With long fork, for 2- to 4-pair BSW

**EM R88BE-RXT** – With long fork, for 5- to 12-pair BSW

Add suffix **-TSH** for torque shear nut.

Add suffix **-S** for short stud (shown at right).



### At a glance ...

PART NUMBER	ACCOMMODATES	DISTINGUISHING FEATURES	LISTING
EM R88	2–4 pair BSW		CSA
EM R88-TSH	(same)	Torque shear head nut	CSA
EM R88-B	(same)	Blossoms on bottom plate	CSA
EM R88-S	(same)	Short stud	CSA
EM R88-E	5–12 pair BSW	Expanded radius	CSA
EM R88LB10H10	2–4 pair BSW	10" #10 flexible harness	CSA
EM R88LBE10H10	5–12 pair BSW	10" #10 flexible harness, expanded radius	CSA
EM R88B-R	2–4 pair BSW	Blossoms, attached 1/2" fork	CSA
EM R88BE-R	5–12 pair BSW	Blossoms, attached 1/2" fork, expanded radius	CSA
EM R88B-RXT	2–4 pair BSW	Blossoms, attached 3/4" fork	CSA
EM R88BE-RXT	5–12 pair BSW	Blossoms, attached 3/4" fork, expanded radius	CSA
EM R88B ____ -TAB	2–4 pair BSW	Blossoms, removable fork	CSA
EM R88LB.350-10H10	12-pair stub cable	Blossoms, 10" #10 flexible harness, .350" radius	CSA
EM R88LB.350	12-pair stub cable	Blossoms, .350" radius	CSA

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Rocket 88 Shield Connectors

## ROCKET 88 SHIELD CONNECTORS WITH RIGID BARS

### Shield Connectors with Removable Fork Tab

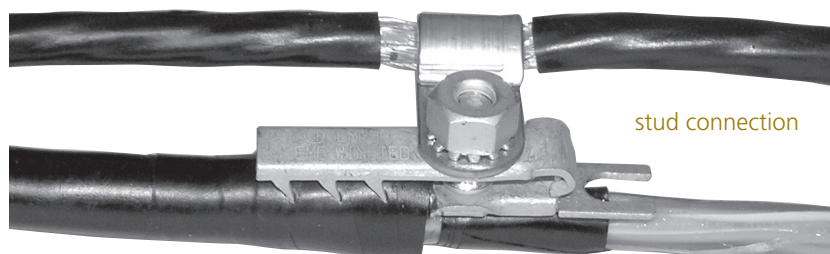
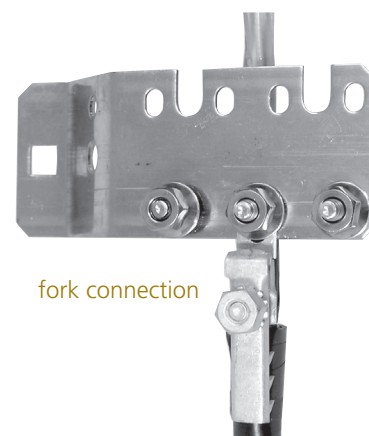
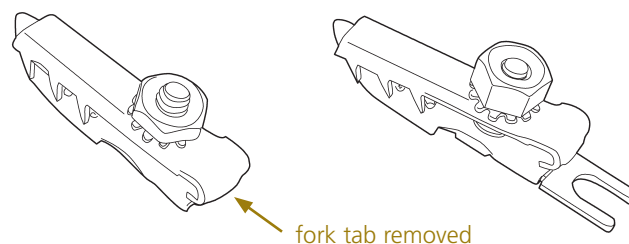
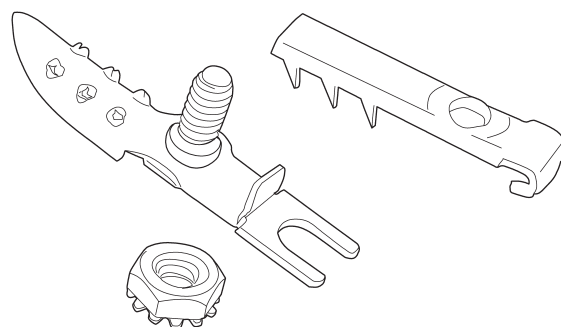
Rocket 88 shield connector with breakaway rigid, forked lead. Lead (or tab) is 1/2" long. Used for bonding and grounding buried service wire and small diameter cables at pedestals, terminals, NIDs, station protectors, or buried splices. May also be used to ground the drain wire and/or metallic foil shield of new generation aerial service wires.

#### Applications

- Bonding and grounding buried service wires (2–12 pairs)
- Bonding and grounding small cables up to 25 pair

#### Features

- Universal design reduces the number of parts carried on service vehicle.
- Can be connected to a ground post (with fork) or to an eyelet or ground bar with holes (with stud).
- Designed to ground either corrugated or flat bonded shields.
- Fork length can be manufactured to suit specific applications.
- Simple to install, significantly reduces installation time.



#### Ordering information

##### EM R88-B\_\_\_-TAB –

Two- to four-pair shield connector with breakaway rigid lead. See suffix **-E** for larger count buried service wire and cables up to 25 pairs.

Add suffix **-S f** or short stud (shown at right).

Add suffix **-E** for expanded radius to accommodate 5–25 pairs.

Add suffix **-TSH** for torque shear nut.

Add suffix **-XT** for long tab (3/4").

# Rocket 88 Shield Connectors

## ROCKET 88 ACCESSORIES

### Grounding Harness

This versatile harness is perfect for grounding the shield of buried service wires within pedestals and terminals where wire management is important. Hook or ring terminal permits easy connection to standard ground bar or post. Permits the technician to freely install the R88 bond clamp and then make the connection to ground. Available in custom configurations, #6 or #10 stranded AWG, green or black insulation. Comes assembled with five high-quality flag terminals and one hook or ring terminal.

#### Ordering information

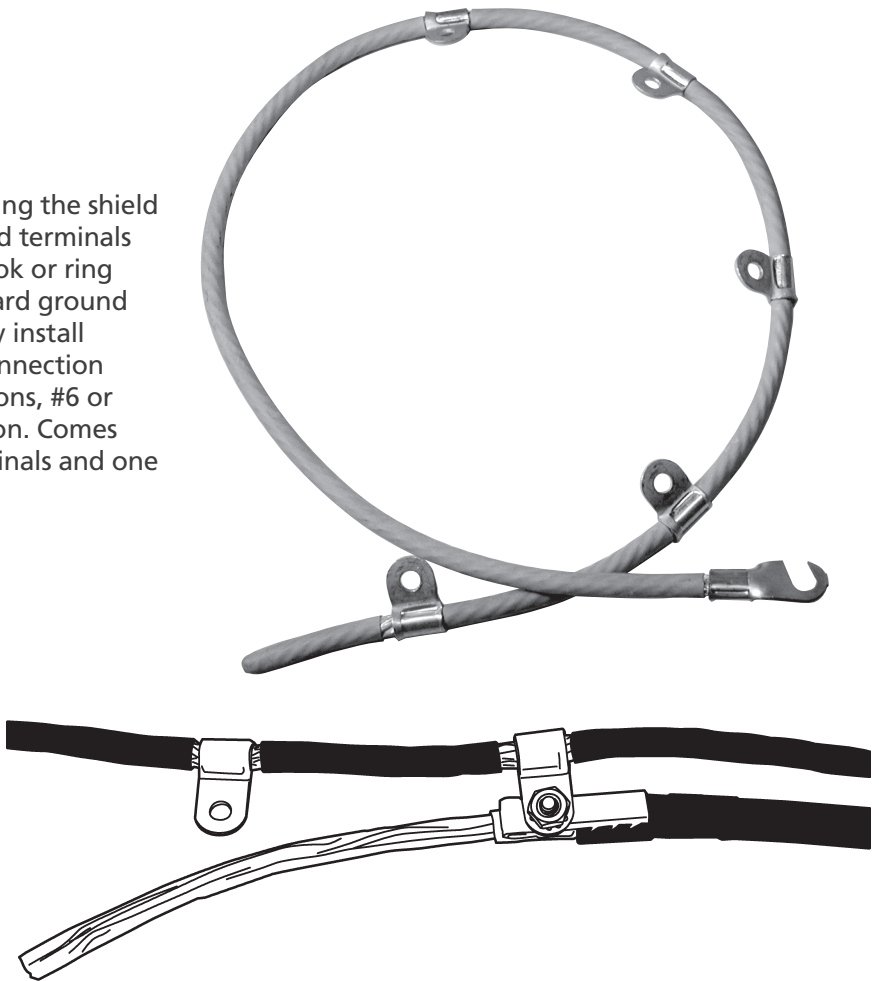
##### EM R88H-XX

Add suffix **-G** for green insulation.

Add suffix **-B** for black insulation

Add suffix **-10** for #10 AWG

Add suffix **-6** for #6 AWG

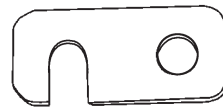
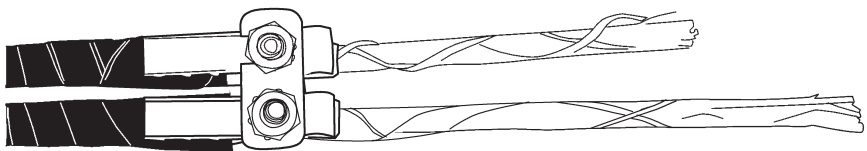
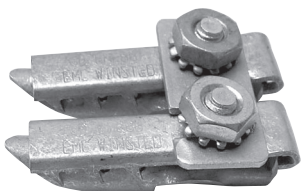


### Bridge Connector

Ideal for bonding the shields of buried service wire at splice locations. Small size works well with standard repair and closure systems. Equivalent to #6 AWG, tin plated.

#### Ordering information

##### EM R88-BC – Bridge Connector



# Shield Connectors

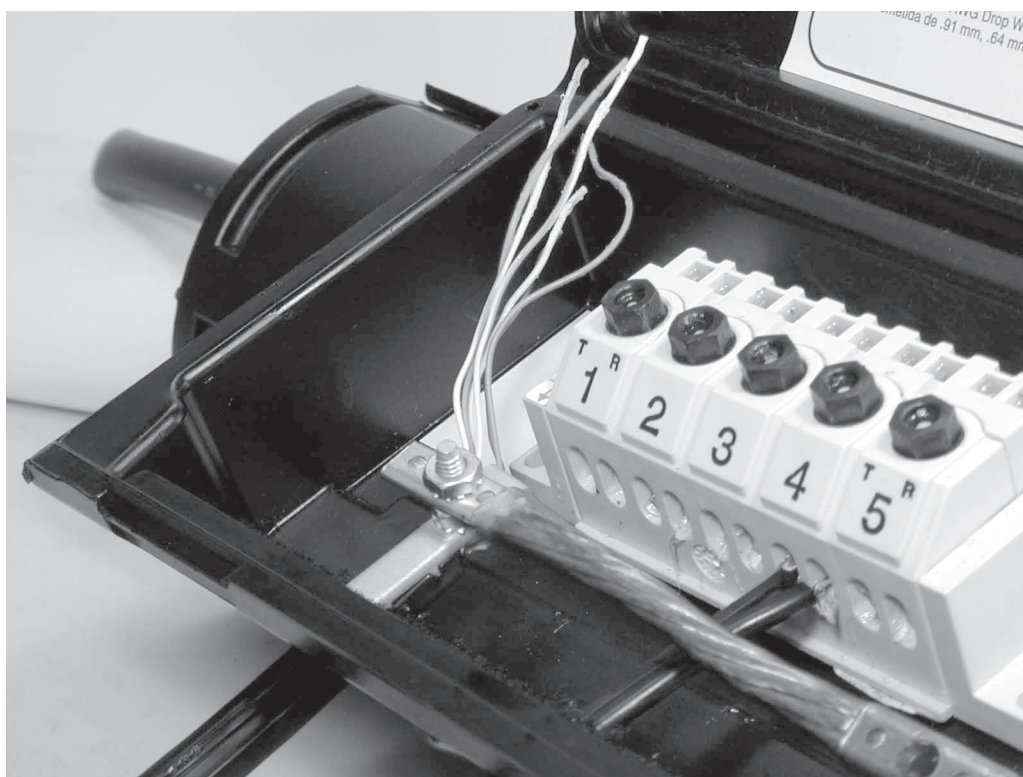
## SHIELDED AERIAL SERVICE WIRE BOND KIT



This kit consists of one shield connector for shielded aerial service wire, and one 32"-long piece of clear green Microbond.

### Application

Bonding multiple shielded drop wires at aerial terminals.



### Ordering information

**EM 3923 KIT** – Shielded Aerial Service Wire Bond Kit

**EM 3923** – Connector only: top plate, bottom plate, two nuts



# Shield Connectors

## SHIELDED AERIAL SERVICE WIRE BOND KIT FOR NIDS

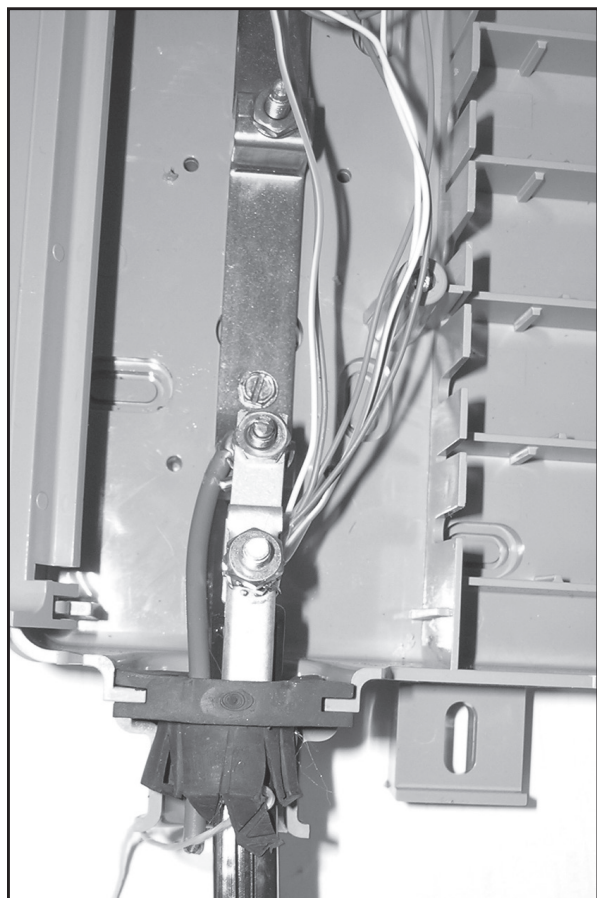
Shield connector with bottom and top plates and one star washer nut, and 6" #10 AWG harness with #10 ring terminal on one end, #10 hook terminal on the other.



### Ordering information

**EM 3925** – Shielded Service Wire Bond Kit for NIDs

**EM 3925R** – Shielded Service Wire Bond Kit for NIDs, with #10 ring terminal on each end.



# Shield Connectors

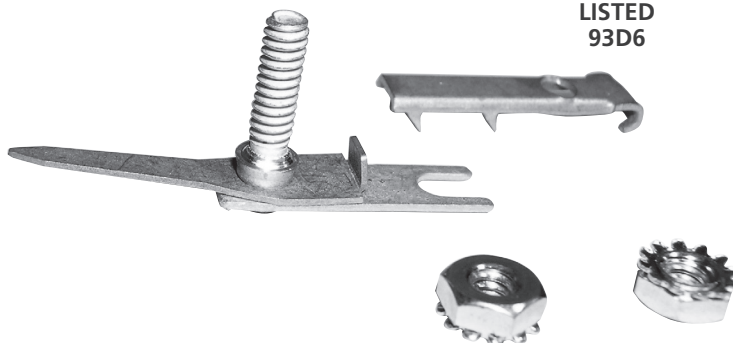
## SHIELDED AERIAL SERVICE WIRE CONNECTOR



Shield connector with long stud, short breakaway rigid lead fork, and two nuts.

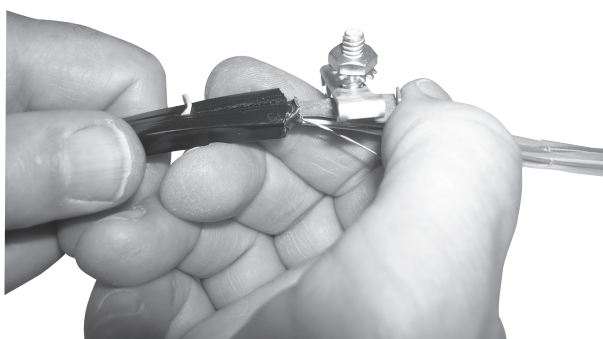
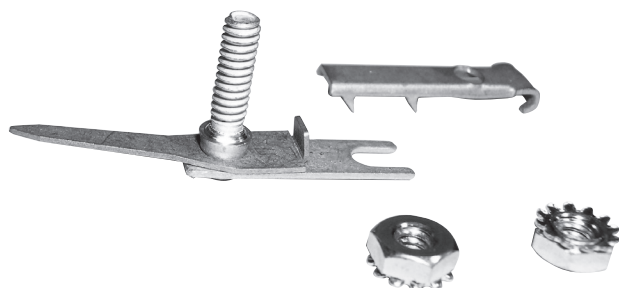
### Ordering information

**EM 3928** – Shielded Aerial Service Wire Connector



## SHIELDED AERIAL SERVICE WIRE BOND KIT FOR NIDS

Shielded aerial service wire kit includes 32" of Microbond with green insulation (see page G16), with one end stripped, and one EM 3928 shield connector with long stud, short breakaway rigid lead fork, and two nuts.



### Ordering information

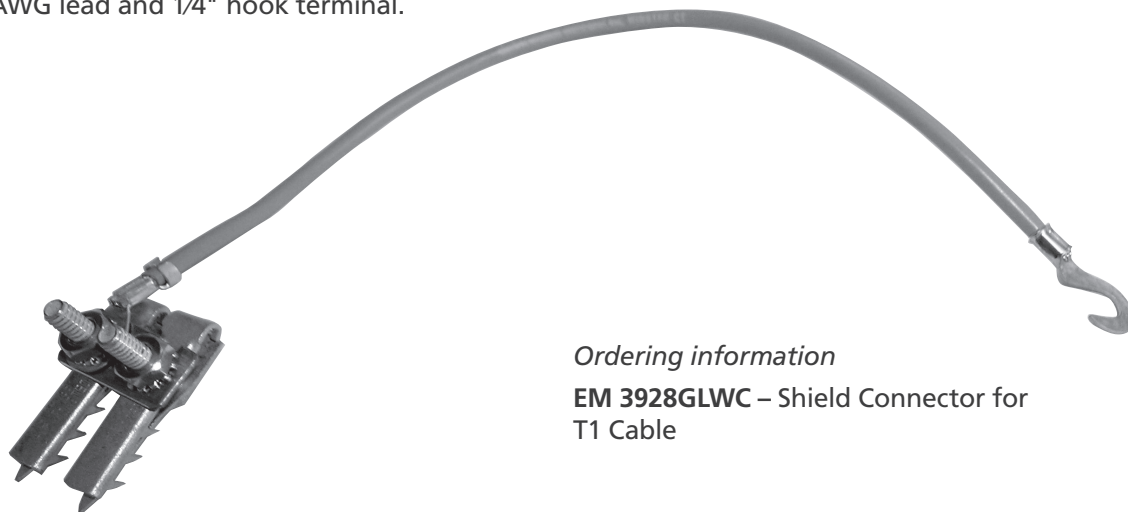
**EM 3928 KIT** – Shielded Aerial Service Wire Ground Kit

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)

# Shield Connectors

## SHIELD CONNECTOR FOR T1 CABLE

Two shield connectors attached with a bridge connector, with 10" #10 AWG lead and 1/4" hook terminal.



*Ordering information*

**EM 3928GLWC** – Shield Connector for T1 Cable

## BONDING COIN

*Ordering information*

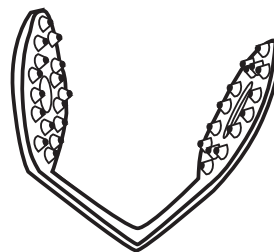
**EM 0055**

Bonding coin with protrusions on each side, and two flat washers. 1-5/16" center to center

*Standard packaging: 100/bx, 2 lb/bx.*

**EM 0056**

13/16" center to center



## BONDING STUD COIN

*Ordering information*

**EM 0057**

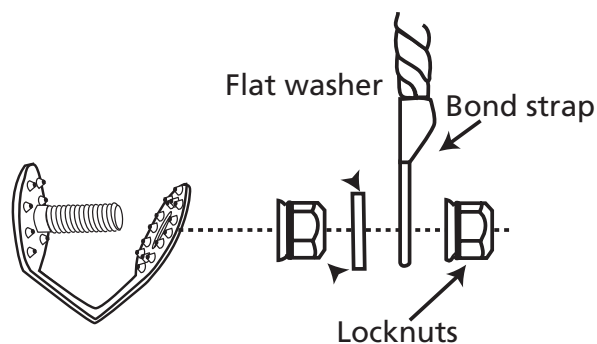
Bonding coin with protrusions on each side, attached bolt, one flat washer, and one nut with compression washer.

*Standard packaging: 100/bx, 3 lb/bx.*

**EM 0058**

Bonding coin with 8 protrusions on each side, attached bolt, one flat washer, and two nuts with compression washers.

*Standard packaging: 1000*



# Fiber Optic Cable Shield Connectors

This tool is designed to punch through the shield and sheath of a cable. The spring-loaded handles allow easy, convenient operation. The reach is controlled by an adjustable gauge.

## Ordering information

### EM HPT

**EM HPT(S)** - To make it easy to punch holes in cable sheath/shield to accommodate either single- or double-stud B-bond, TS, or RS shield connectors, this version of the hole punch tool is marked at the three appropriate positions.



## HOLE PUNCH TOOL

The compact jaw design of this tool allows the installer to use it in confined spaces. Spring-loaded handles for convenient operation. For use on aluminum shielded cable, lead sheath, etc.

## Ordering information

### EM 4039

**EM 4039-10** - with .196 pin for a #10 stud hole.



## DOUBLE HOLE PUNCH TOOL

The compact jaw design of this tool allows the installer to use it in confined spaces. Spring-loaded handles for convenient operation. For use on aluminum shielded cable, lead sheath, etc. with the double-studded B-bond clamps on page G100.

## Ordering information

### EM DHPT



For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)



# Fiber Optic Cable Shield Connectors

A fiber optic shield connector for both shielded fiber and shielded with strength members (LXE). Available with anti-crush devices for three different shield sizes: .41", .48", .52". Also available with flexible insulated harness, or with tapped fork and loose 10/32 screw.

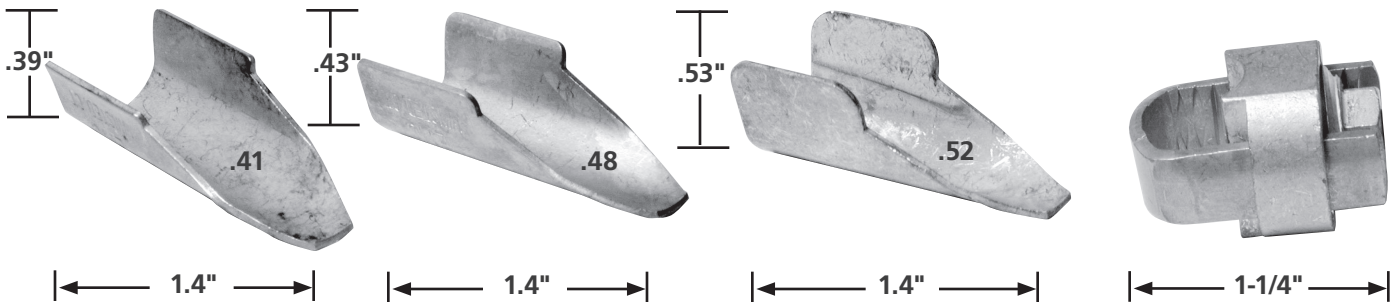
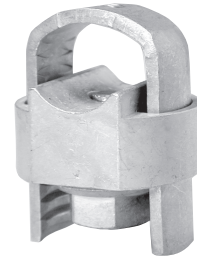
## Ordering information

**EM 3958-S** – Connector with no anti-crush device

Standard packaging: 10/bg, 100/bx, 14 lb/bx.

**Anti-crush devices:** add suffix to part number to indicate shield diameter: .41, .48, .52.

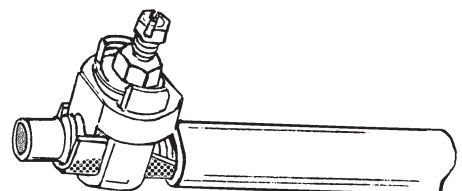
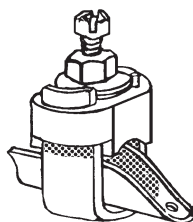
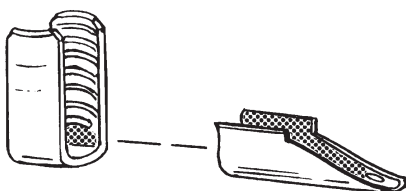
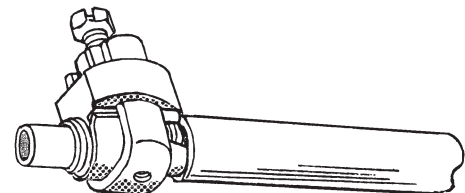
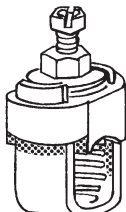
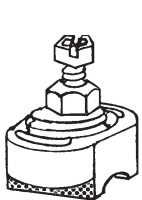
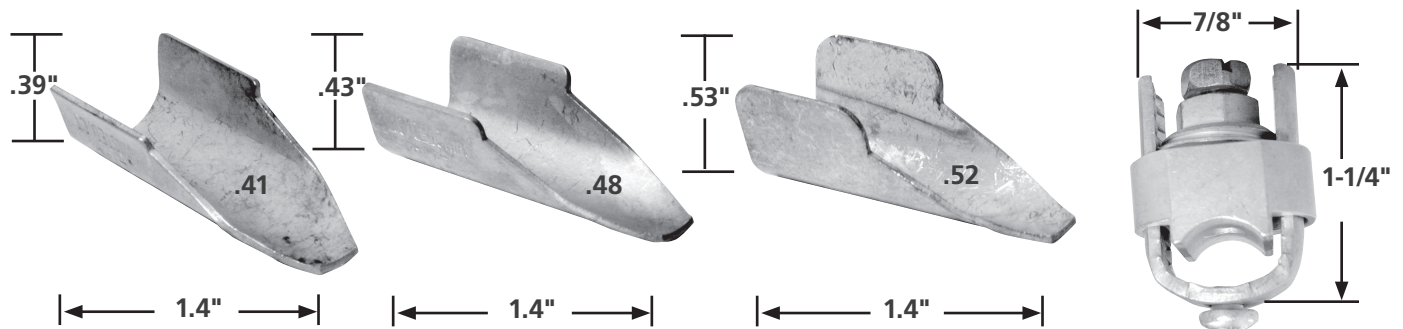
← 7/8" →



**EM 3958-SS** – Connector with no anti-crush device, with tapped fork and loose 10/32 screw

Standard packaging: 100/bx, 13 lb/bx.

**Anti-crush devices:** add suffix to part number to indicate shield diameter: .41, .48, .52.



For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)



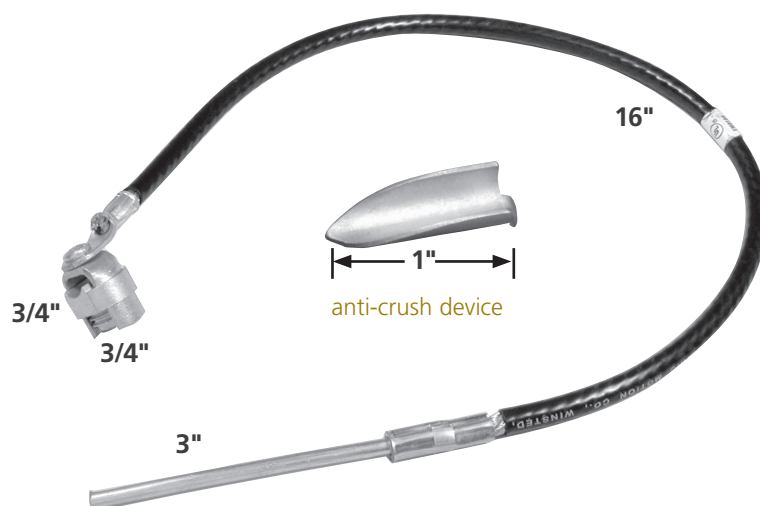
# Fiber Optic Cable Shield Connectors

With combination flexible (16") and solid (3") harness, and anti-crush device.

*Ordering information*

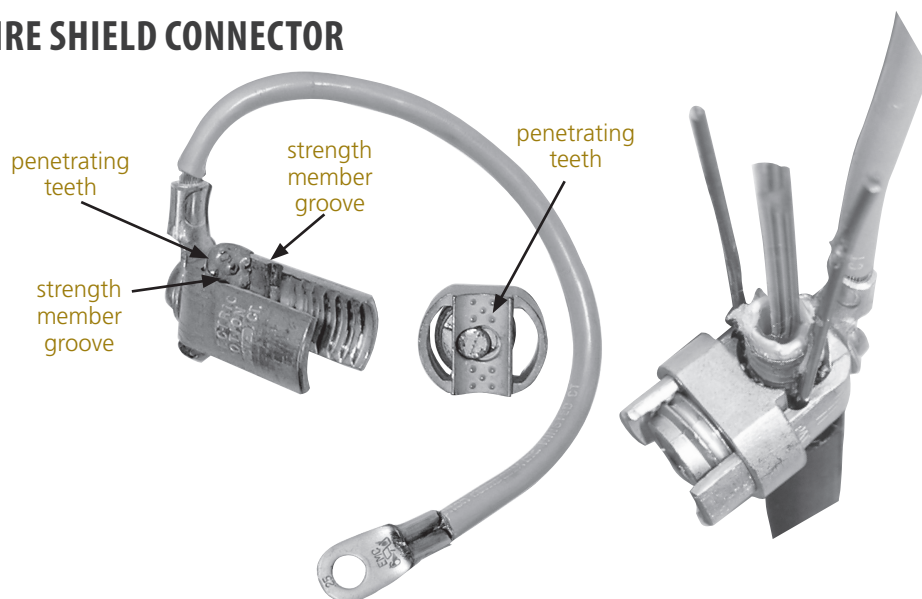
**EM 3956-163SP**

*Standard packaging: 1 kit/lbg, 25 kits/bx, 14 lb/bx.*



## SHIELDED FIBER OPTIC DROP WIRE SHIELD CONNECTOR

Used for 6- or 12-fiber cable with a metallic shield (or armor). Inside of both yoke and pusher ring have tiny penetrating teeth to make electrical contact through the coating of the shield. The legs of the connector yoke have grooves to fit the strength members of a 12-fiber cable.



*Ordering information*

**EM 3956-DD**

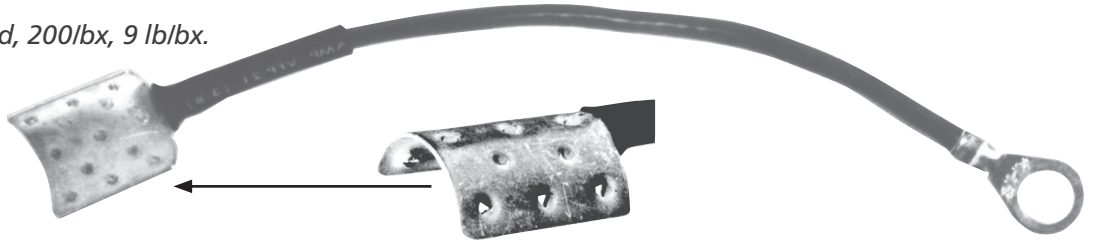
# Fiber Optic Cable Shield Connectors

6" insulated bonding harness (#10 AWG) with 3/8" ring terminal at one end, and fiber optic cable shield connector with blossoms at the other end.

## Ordering information

**EM 6111**

Standard packaging: 20/bd, 200/bx, 9 lb/bx.



Insulated bonding harness with 1/4" ring terminal at one end, and 3/4" x 3/4" fiber optic cable shield connector with 9 blossoms at the other end. Crimp termination and harness formed up at 45° angle from top surface of connector. Utilizes #6 AWG bonding harness.

## Ordering information

**EM 6116-6** – 6" harness

**EM 6116-8** – 8" harness

Standard packaging:

500/bx, 46 lb/bx.

**EM 6116-12** – 12" harness

Standard packaging: 300/bx, 41 lb/bx.

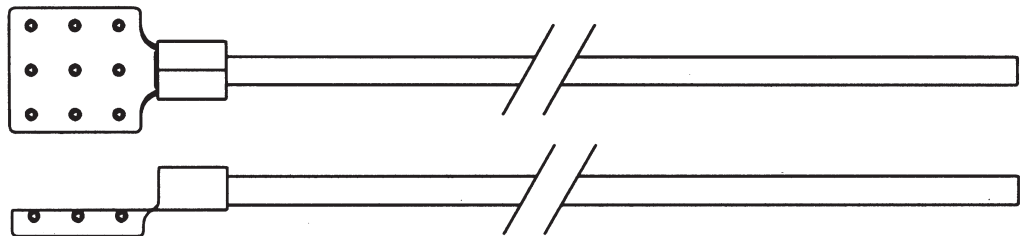


**EM 6116-15** – 15" harness

Cable shield connector, straight with a crimp sleeve and 26" of solid #6 tinned.

## Ordering information

**EM 6116-26T**



## HOSE CLAMP

### Ordering information

**EM 6112**

Standard packaging: 20/bg, 100/bx, 3 lb/bx. No minimum order.



For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)

# Fiber Optic Cable Shield Connectors



## FIBER OPTIC LOCATING WIRE HAND HOLE CLOSURE

### Description

Hand hole with removable cover with five studs.

### Application

A flush-to-grade closure for sidewalks, etc. Locate wire is terminated on the center post and tied to the north, south, east, and west positions with contained tabs.

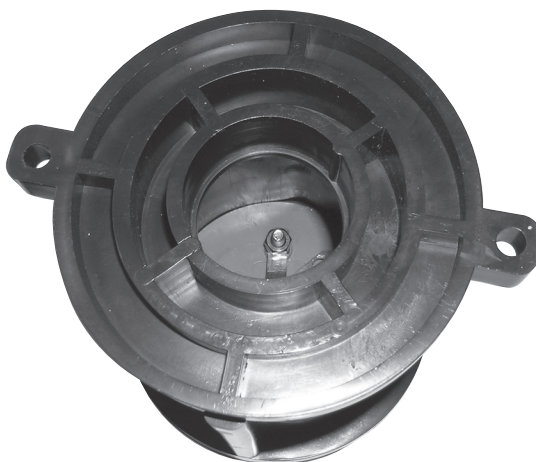
### Features

Provides a quick and easy way to isolate multiple locate wires.

### Ordering information:

**EM 6700**

Hand Hole Closure



# Miscellaneous

## CROSS CONNECT/FRAME & JUMPER WIRE

A twisted pair of #22 or #24 AWG tinned, solid copper conductor with a semi-rigid PVC insulation. Used on distributing frames and cross-connecting racks, and for wiring various central office equipment. Standard lengths are 250, 400, 800, 1000 feet/spool. Standard color combinations are: red/white, violet/white, blue/white, green/white, orange/white, black/white, brown/white. A twisted pair of #22 or #24 AWG tinned, solid copper conductor with a semi-rigid PVC insulation. Used on distributing frames and cross-connecting racks, and for wiring various central office equipment. Standard lengths are 250, 400, 800, 1000 feet/spool. Standard color combinations are: red/white, violet/white, blue/white, green/white, orange/white, black/white, brown/white.

*Ordering information*  
:

#22 AWG:

EM 0222 RW-XXX (length)  
EM 0222 GW-XXX  
EM 0222 VW-XXX  
EM 0222 BKW-XXX  
EM 0222 BW-XXX  
EM 0222 BR-XXX

#24 AWG:

EM 0224 GW-XXX  
EM 0224 OW-XXX  
EM 0224 RW-XXX

*Shipping information—  
standard packaging*

#22 AWG:

250' sp, 24 sp/bx  
400' sp, 20 sp/bx  
800' sp, 12 sp/bx  
1000' sp, 12 sp/bx

#24 AWG:

250' sp, 24 sp/bx  
400' sp, 20 sp/bx  
800' sp, 24 sp/bx  
1000' sp, 12 sp/bx

EM 0224 BR-800 CT5 – 1 pr #24 AWG blue/red, 800 ft spool, Cat. 5 twist.



## 5-CONDUCTOR TWISTED WIRE, #22 OR #24 AWG



Tinned conductor, PVC insulation. For T1 lines. Fifth conductor can be used for tracing. Colors: red/green/white/black/blue or any other combination.

*Ordering information:*

EM 0522 RGWBKBL-XXX (length) #22 AWG  
EM 0524 RGWBKBL-XXX (length) #24 AWG

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Miscellaneous

## FOAM TAPE

Open cell plastic tape for centering wire works in a closure.

*Ordering information :*

**EM 4800** – 2-1/2" x 1/4" x 72"

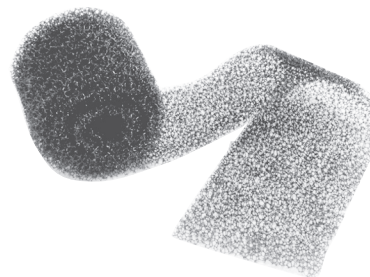
*Standard packaging: 100 rl/bx, 8 lb/bx*

**EM 4804** – 4" x 1/4" x 72"

*Standard packaging: 50 rl/bx, 7 lb/bx*

**EM 4808** – 18" x 1/4" x 72"

*Standard packaging: 20 rl/bx, 12 lb/bx*



## WARNING TAGS

*Ordering information*



**EM 3040-TAG** Round "INTERNAL GROUND DO NOT REMOVE" tag. Plastic, UV resistant.

*Standard packaging: 500/bx, 25/bg, 2 lb/bx.*

**EM 5050-TAG** Rectangular "WARNING" tag. Plastic, UV-resistant.

*Standard packaging: 2 lb/ 200 pcs.*





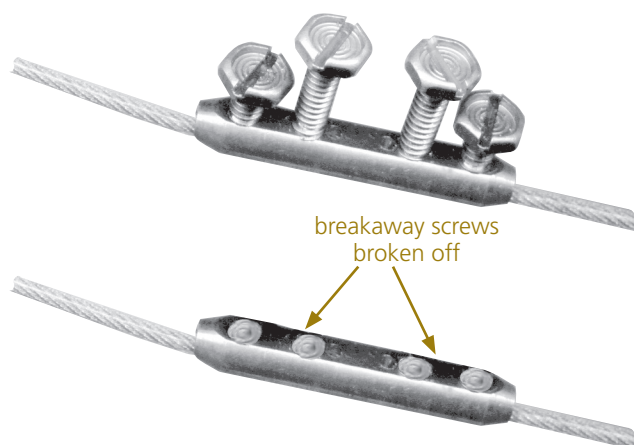
# Miscellaneous

## TONING WIRE CONNECTOR

*Ordering information*

**EM 4543**

*Standard packaging: 2/lbg, 50/lbx, 5 lb/bx.*



## TONING WIRE

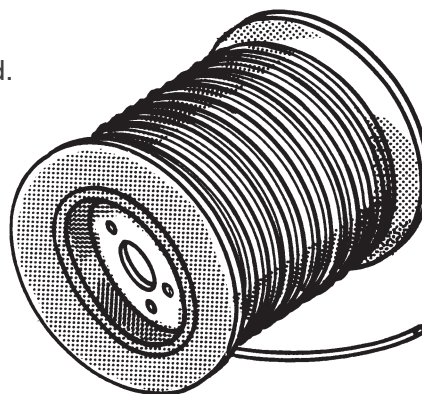
1/16" diameter, stainless steel cable, 7 x 7 construction, vinyl coated.

*Ordering information :*

**EM 4545 2.5** – 2,500-ft. spool, 29 lb

**EM 4545 5.0** – 5,000-ft. spool, 52 lb

**EM 4545-XXXX** – XXXX = any requested length



BONDING &  
GROUNDING

# Miscellaneous – Ground Bars

## GROUND BARS

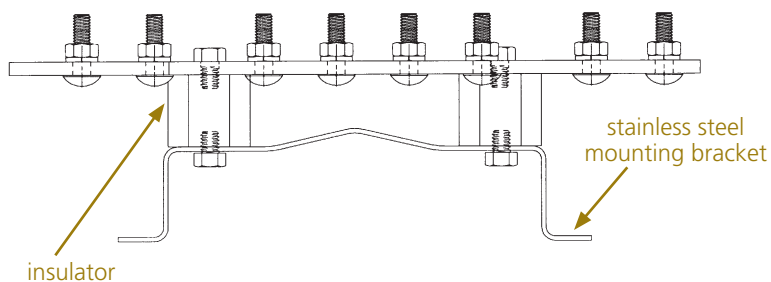
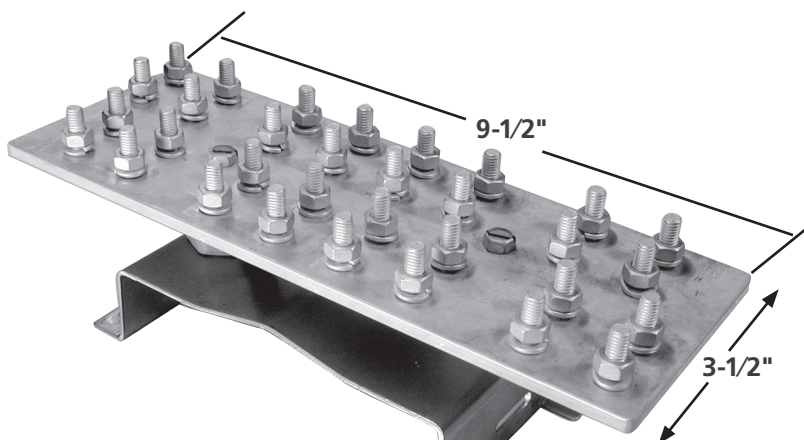
### 16 Position Ground Bar with Bracket

3/4" spacing, 8 positions on top, 8 on bottom. 9-1/2" long, 3-1/2" wide. Tin plated. Two insulators, 1" thick. 6mm studs. Stainless steel mounting bracket for mounting on pole or on side of building.

Ordering information:

**EM 4116.75ISM6**

Standard packaging: 2/bx, 9 lb/bx.



### 6 Position Ground Bar

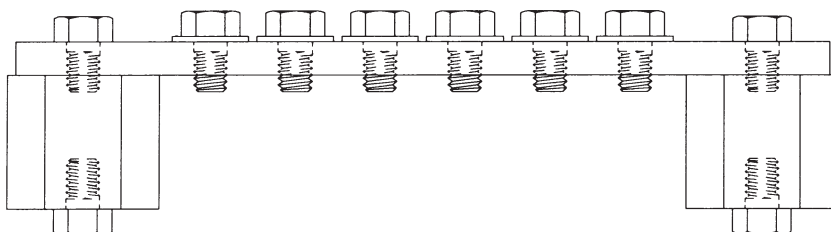
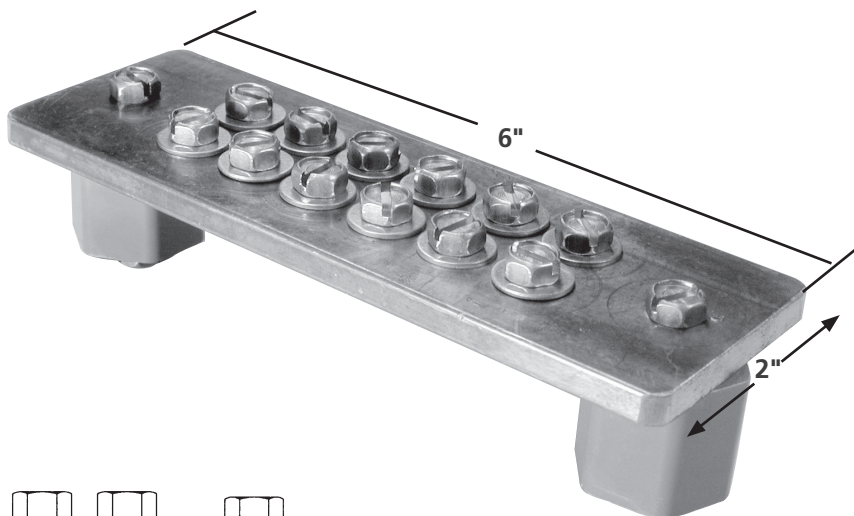
6" long, 5/8" spacing, two 5/16" diameter mounting holes. Six sets of 1/4 x 20 tapped holes, 8 sets brass hex screws, 6 sets flat washers, and two 1" long plastic insulators.

Ordering information:

**EM 4120**

Standard packaging: 10/bx, 14 lb/bx.

Add suffix -T for tin plating.



# Miscellaneous – Ground Bars

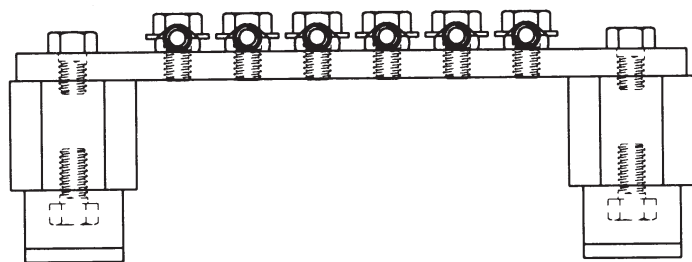
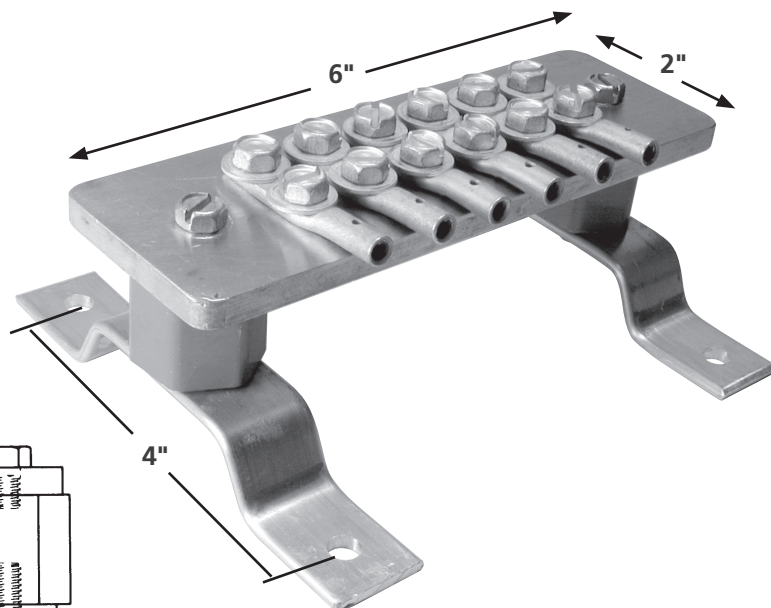
## 6 Position Ground Bar with Screw-on Terminals

6" long, 2" wide, 5/8" spacing, six mounting positions across. Mounting brackets attached, as well as six double-holed screw-on terminals.

*Ordering information:*

**EM 4120-1**

Add suffix -T for tin plating.



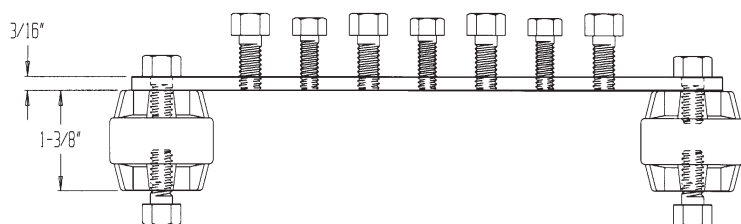
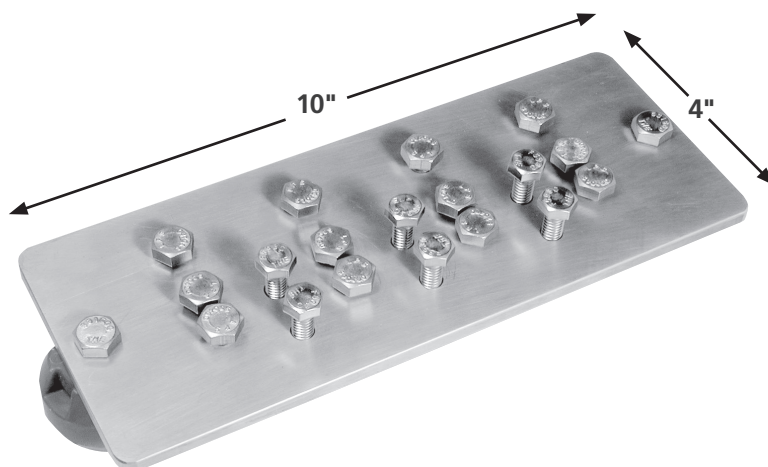
## 7 Position Copper Ground Bar

10" long, 4" wide, 5/8" spacing, 7 mounting positions across, and two isolator mounting holes, 3/8" thru. Pattern from left: 3 holes 3/8 x 16; 2 holes 5/16 x 18; repeat. Stainless steel hex head screws, Glastic isolators.

*Ordering information:*

**EM 4121**

Standard packaging: 2/bx, 9 lb/bx.



BONDING &  
GROUNDING

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)

# Miscellaneous – Ground Bars

## GROUND BARS, CONTINUED

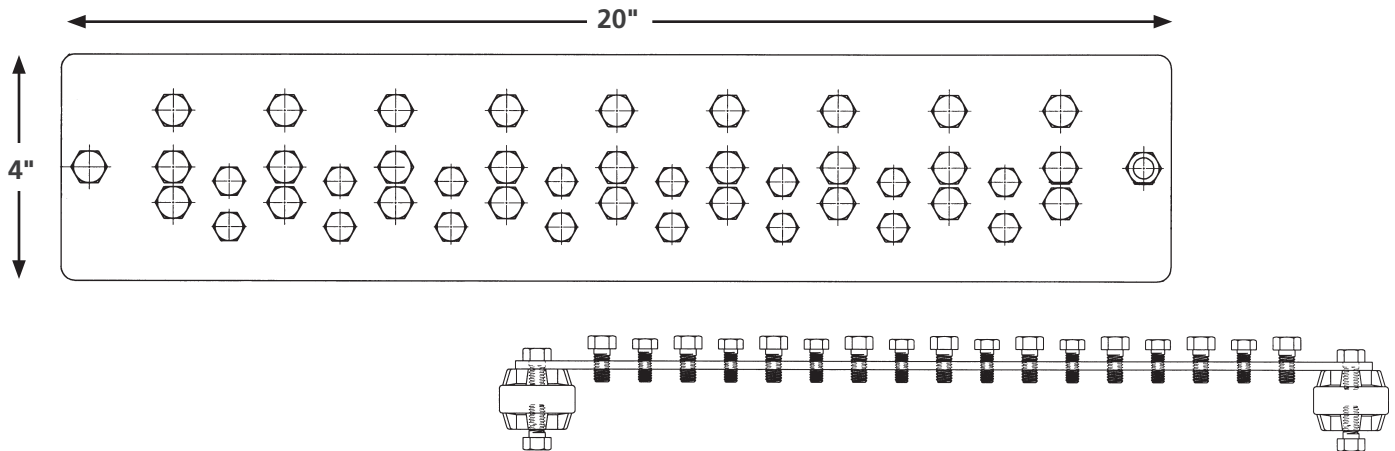
### 17 Position Copper Ground Bar

20" long, 4" wide, 5/8" spacing, 17 mounting positions across with hex head screws, and two insulators.

Ordering information:

**EM 4122**

Standard packaging: 28 lb/4 pcs.



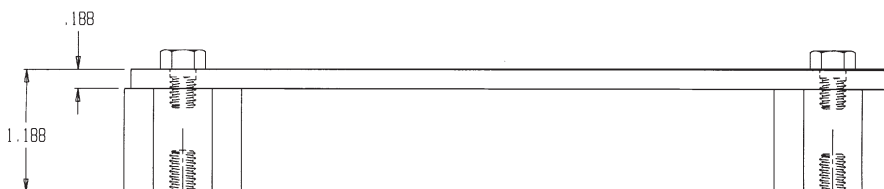
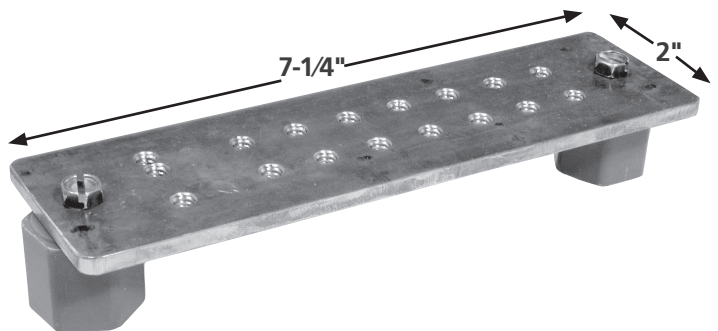
### 8 Position Ground Bar with Isolators

7-1/4" long, 2" wide, 5/8" spacing, two 5/16" diameter mounting holes.

Ordering information:

**EM 4123**

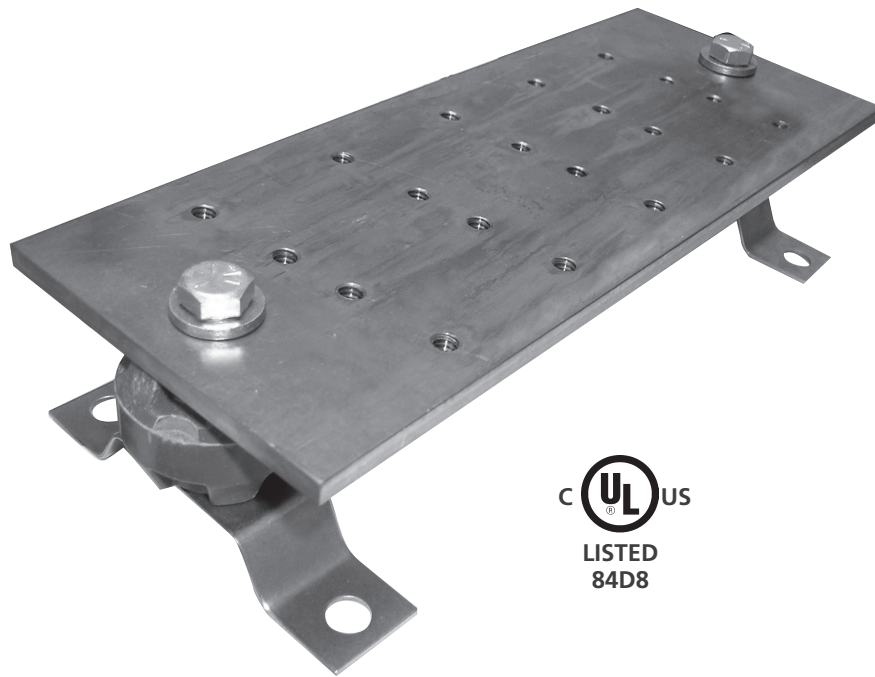
Standard packaging: 15/lbx, 16 lb.bx.



For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

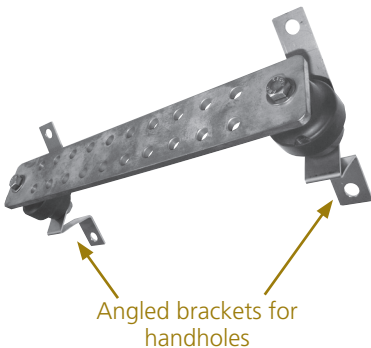
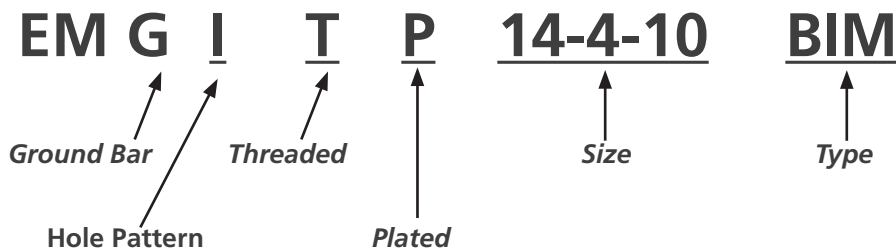
# Miscellaneous – Ground Bars

## SPECIFYING GROUND BARS



### Ground Bar Numbering System

Follow the three steps below to specify the type and size of ground bar you need. The example pictured above is a ground bar with wall mounting brackets and insulators. The ground bar is 1/4" thick, 4" wide, and 10" long. It has a hole pattern "I" with tapped holes.



1. **HOLE PATTERN:** See page G153 to specify hole pattern. Add suffix -T after hole pattern for 1/4 x 20 threaded holes.
2. **SIZE:** Thickness, width, length in inches.
3. **TYPE:**
  - B - Plain ground bar
  - BI - Ground bar with insulators
  - BIM - Ground bar with wall mounting brackets and insulators.

Add suffix -P after type designation for tin plating.  
Add suffix -A after type designation for wall mounting brackets angled for handholes.

See next page for ground bar types.

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com



# Miscellaneous – Ground Bars

## GROUND BAR TYPES

See previous page to build a part number.

### Ground Bar Type B

Plain ground bar



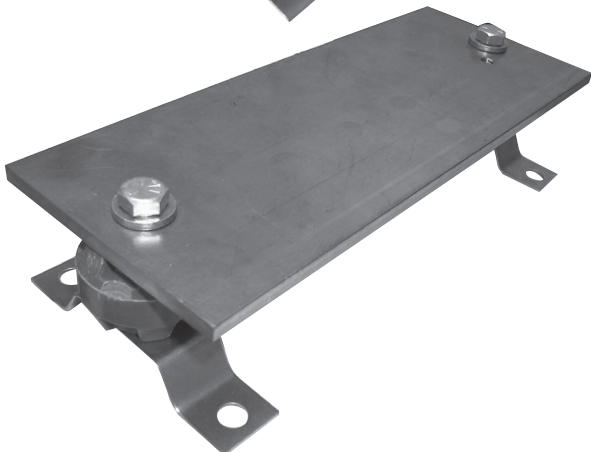
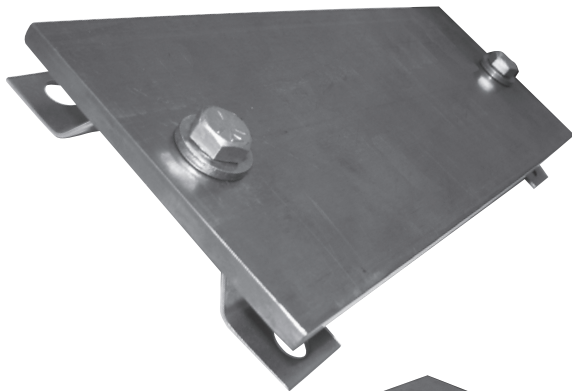
### Ground Bar Type BI

Ground bar with insulators



### Ground Bar Type BM

Ground bar with 1" high mounting brackets

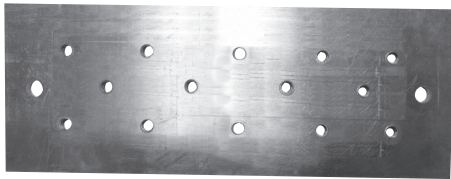


For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)

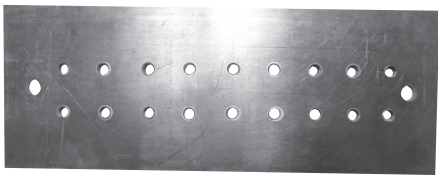
# Miscellaneous – Ground Bars

## GROUND BAR HOLE PATTERNS

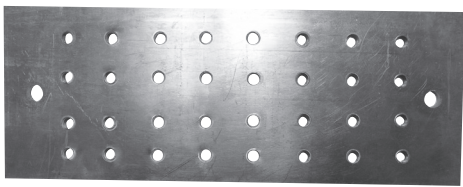
See page G151 to build a part number.



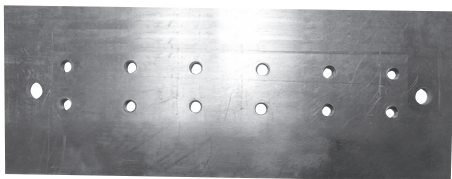
**Pattern A**



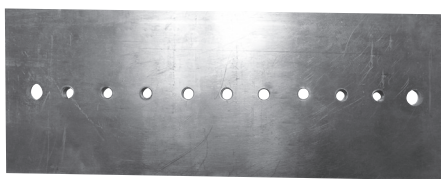
**Pattern G**



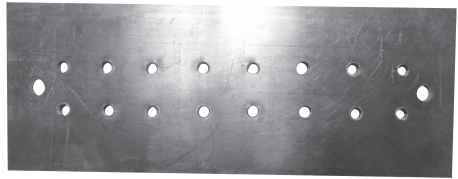
**Pattern Q**



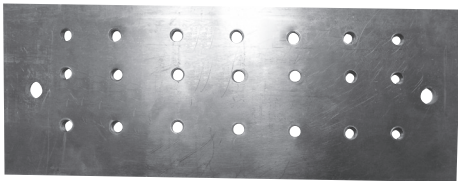
**Pattern B**



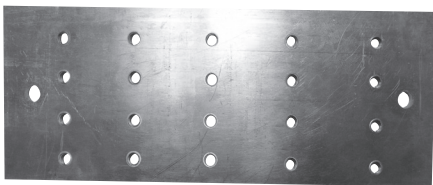
**Pattern H**



**Pattern X**



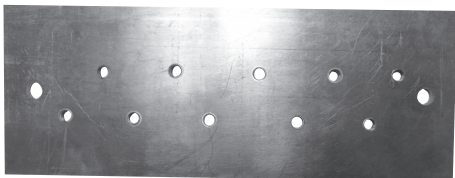
**Pattern C**



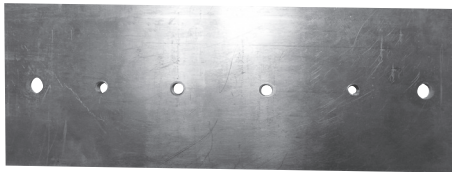
**Pattern I**



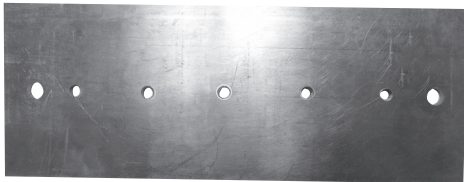
**Pattern N**



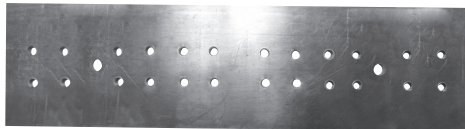
**Pattern D**



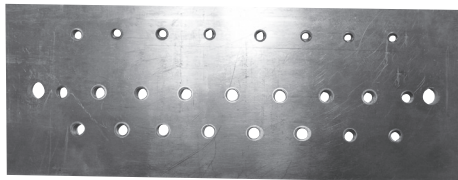
**Pattern J**



**Pattern E**



**Pattern K**



**Pattern F**

BONDING &  
GROUNDING

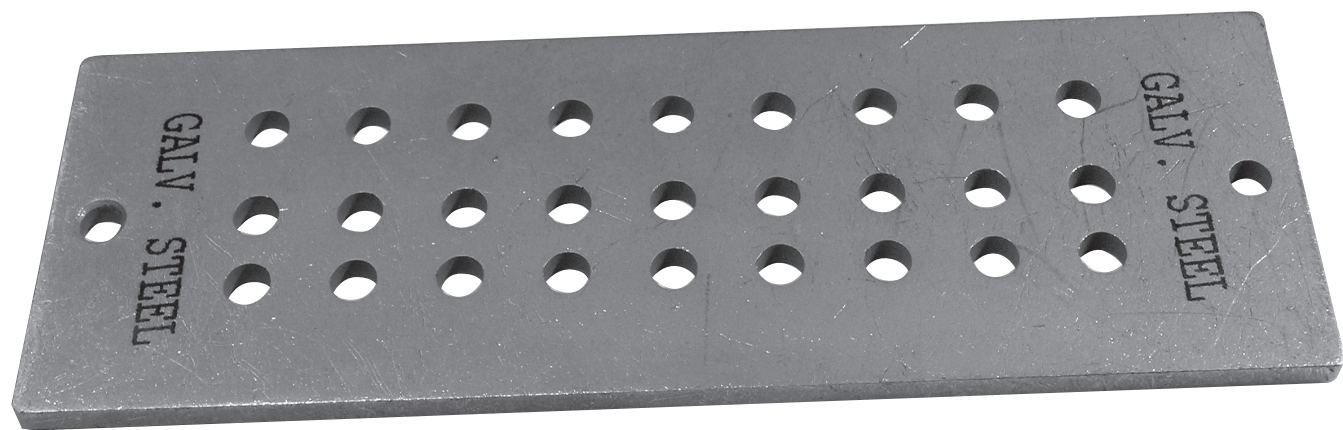
**Maximum conductor size is 2/0.**

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)

# Miscellaneous – Ground Bars

## GALVANIZED STEEL GROUND BARS

### BAR ONLY – Verizon Wireless Galvanized Steel Ground Bar Replacement



*Ordering information:*

<b>EM SGC 49-VZW</b>	<i>Galvanized ground bar, 1/4" x 4" x 9" with 7/16" mounting holes (bar only).</i>
<b>EM SGC 412-VZW</b>	<i>Galvanized ground bar, 1/4" x 4" x 12" with 7/16" mounting holes (bar only).</i>
<b>EM SGC 418-VZW</b>	<i>Galvanized ground bar, 1/4" x 4" x 18" with 7/16" mounting holes (bar only).</i>
<b>EM SGC 420-VZW</b>	<i>Galvanized ground bar, 1/4" x 4" x 20" with 7/16" mounting holes (bar only).</i>
<b>EM SGC 424-VZW</b>	<i>Galvanized ground bar, 1/4" x 4" x 24" with 7/16" mounting holes (bar only).</i>



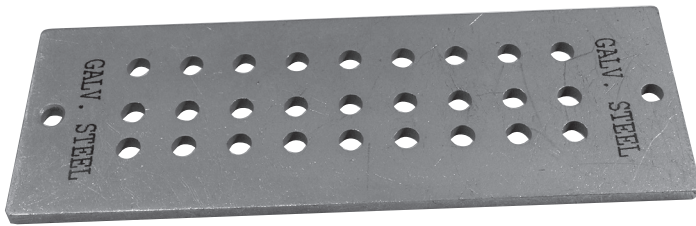
# Miscellaneous – Ground Bars

## GALVANIZED STEEL GROUND BARS CONTINUED

### BAR ONLY, WITH ANTI-THEFT HARDWARE

### Verizon Wireless Galvanized Steel Ground Bar Replacement

## NONREMOVABLE



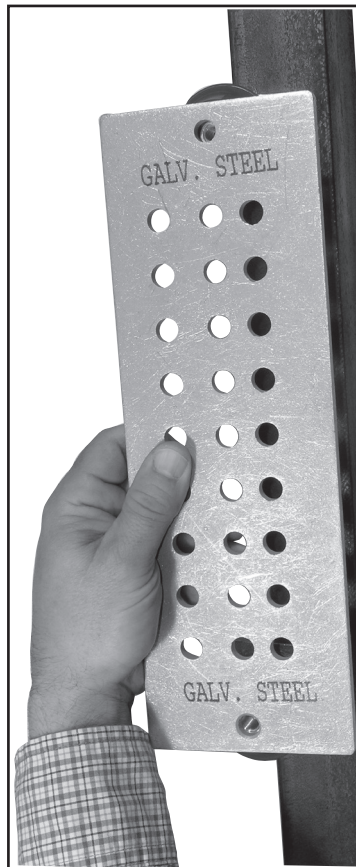
Galvanized steel ground bar



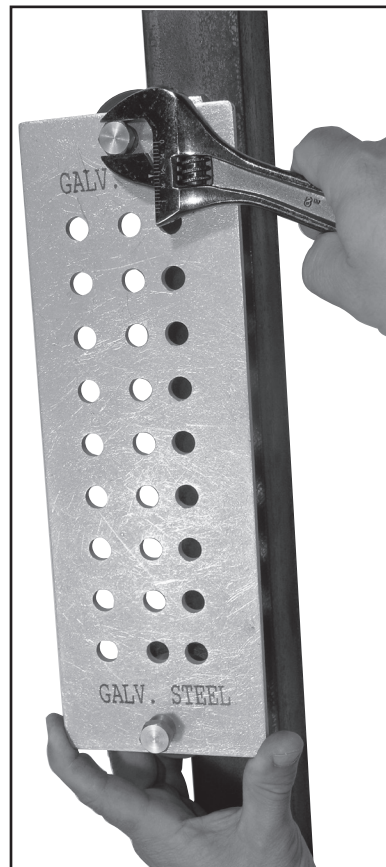
Two 3/8" torque shear head stainless steel bolts (nonremovable) with anti-loosening compound in threads



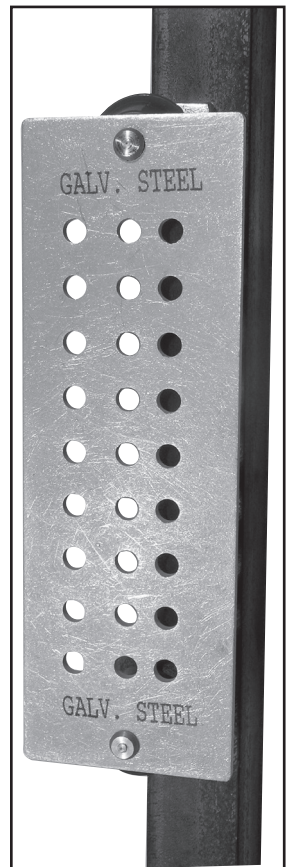
Isolators and mounting hardware remaining after ground bar has been stolen.



Align replacement ground bar with isolators.



Insert torque shear head bolts. Tighten bolts until heads shear off.



Heads broken off.

BONDING &  
GROUNDING

# Miscellaneous – Ground Bars

## GALVANIZED STEEL GROUND BARS (CONTINUED)

## NONREMOVABLE

### BAR ONLY, WITH ANTI-THEFT HARDWARE

### Verizon Wireless Galvanized Steel Ground Bar Replacement

Ordering information:

EM SGC 49-VZW-NR	Galvanized ground bar, 1/4" x 4" x 9" with 7/16" mounting holes and two stainless steel torque shear head bolts. With anti-loosening compound. Nonremovable.
EM SGC 412-VZW-NR	Galvanized ground bar, 1/4" x 4" x 12" with 7/16" mounting holes and two stainless steel torque shear head bolts. With anti-loosening compound. Nonremovable.
EM SGC 418-VZW-NR	Galvanized ground bar, 1/4" x 4" x 18" with 7/16" mounting holes and two stainless steel torque shear head bolts. With anti-loosening compound. Nonremovable.
EM SGC 420-VZW-NR	Galvanized ground bar, 1/4" x 4" x 20" with 7/16" mounting holes and two stainless steel torque shear head bolts. With anti-loosening compound. Nonremovable.
EM SGC 424-VZW-NR	Galvanized ground bar, 1/4" x 4" x 24" with 7/16" mounting holes and two stainless steel torque shear head bolts. With anti-loosening compound. Nonremovable.

For a 1/2" bolt, add suffix .5.

BONDING &  
GROUNDING



# Miscellaneous – Ground Bars

## GALVANIZED STEEL GROUND BARS (CONTINUED)

### WITH ISOLATORS AND WALL MOUNTING BRACKET

#### Verizon Wireless Galvanized Steel Ground Bar



#### Ordering information:

- |                           |   |
|---------------------------|---|
| <b>EM SGC 49-VZW-BIM</b>  | Galvanized ground bar, 1/4" x 4" x 9" with 7/16" mounting holes, isolators, and wall mounting bracket.  |
| <b>EM SGC 412-VZW-BIM</b> | Galvanized ground bar, 1/4" x 4" x 12" with 7/16" mounting holes, isolators, and wall mounting bracket. |
| <b>EM SGC 418-VZW-BIM</b> | Galvanized ground bar, 1/4" x 4" x 18" with 7/16" mounting holes, isolators, and wall mounting bracket. |
| <b>EM SGC 420-VZW-BIM</b> | Galvanized ground bar, 1/4" x 4" x 20" with 7/16" mounting holes, isolators, and wall mounting bracket. |
| <b>EM SGC 424-VZW-BIM</b> | Galvanized ground bar, 1/4" x 4" x 24" with 7/16" mounting holes, isolators, and wall mounting bracket. |

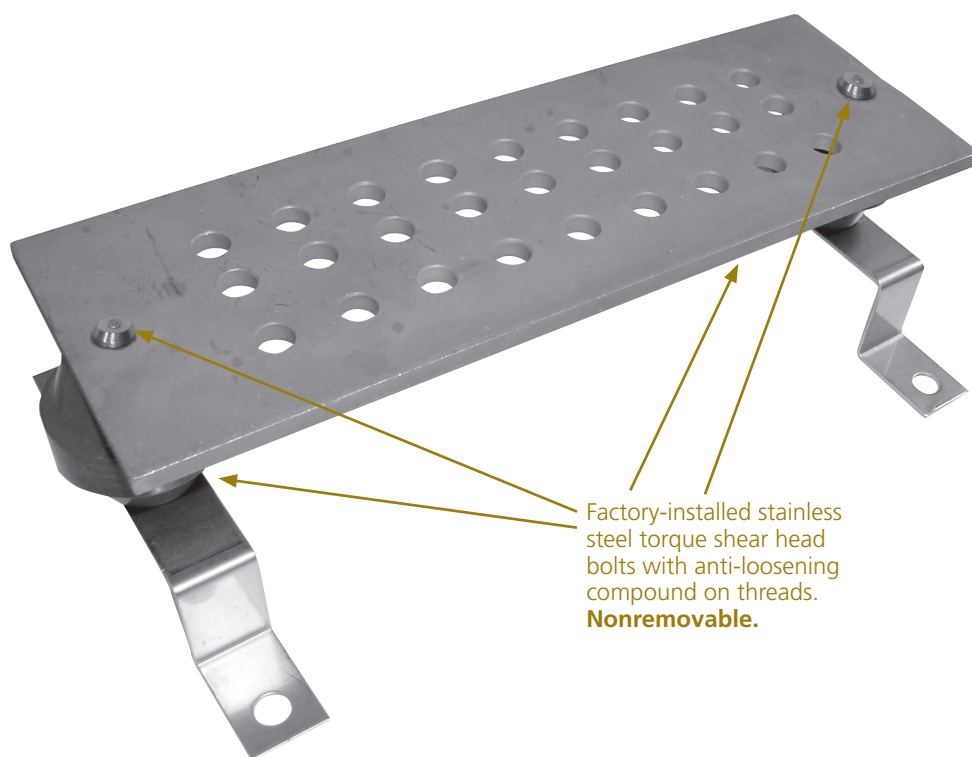
# Miscellaneous – Ground Bars

## GALVANIZED STEEL GROUND BARS (CONTINUED)

### WITH ISOLATORS AND WALL MOUNTING BRACKET

#### Verizon Wireless Galvanized Steel Ground Bar

**NONREMOVABLE**



Factory-installed stainless steel torque shear head bolts with anti-loosening compound on threads.  
**Nonremovable.**

#### Ordering information:

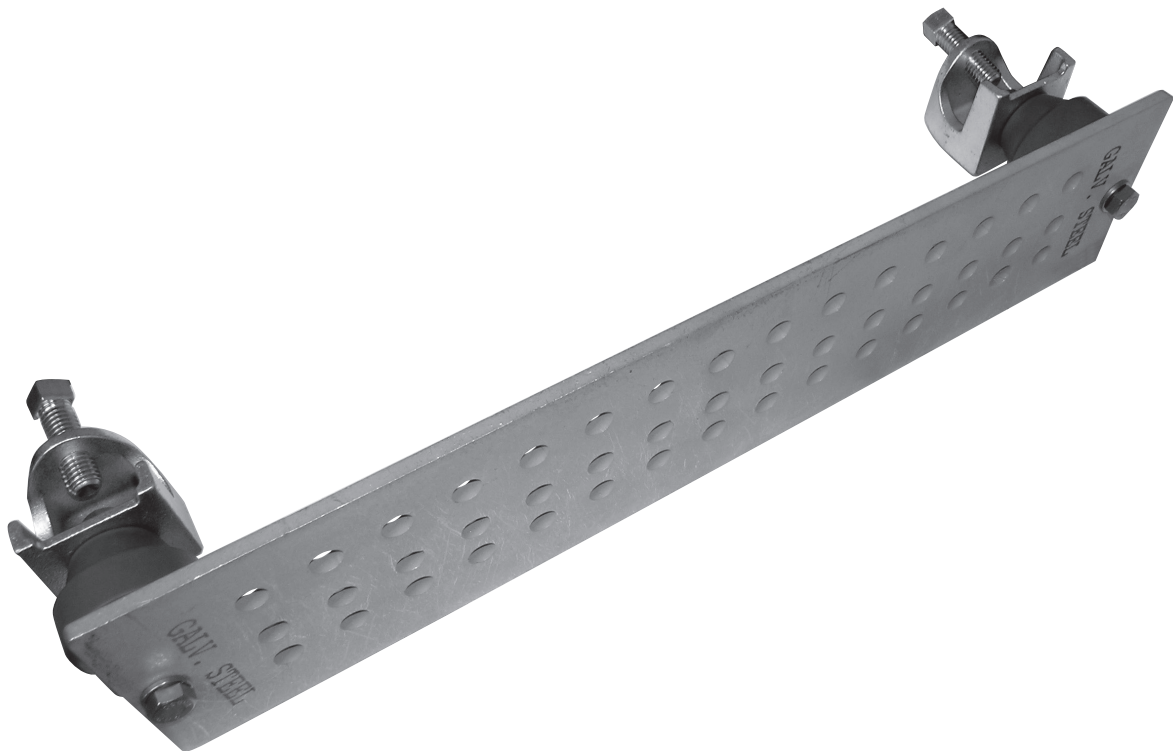
- |                            |   |
|----------------------------|---|
| <b>EM SG 9-VZW-BIM-NR</b>  | Galvanized ground bar, 1/4" x 4" x 9" with 7/16" mounting holes, isolators, and wall mounting bracket. Nonremovable.  |
| <b>EM SG 12-VZW-BIM-NR</b> | Galvanized ground bar, 1/4" x 4" x 12" with 7/16" mounting holes, isolators, and wall mounting bracket. Nonremovable. |
| <b>EM SG 18-VZW-BIM-NR</b> | Galvanized ground bar, 1/4" x 4" x 18" with 7/16" mounting holes, isolators, and wall mounting bracket. Nonremovable. |
| <b>EM SG 20-VZW-BIM-NR</b> | Galvanized ground bar, 1/4" x 4" x 20" with 7/16" mounting holes, isolators, and wall mounting bracket. Nonremovable. |
| <b>EM SG 24-VZW-BIM-NR</b> | Galvanized ground bar, 1/4" x 4" x 24" with 7/16" mounting holes, isolators, and wall mounting bracket. Nonremovable. |

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Miscellaneous – Ground Bars

## GALVANIZED STEEL GROUND BARS (CONTINUED)

### WITH ISOLATORS AND I-BEAM SUPPORT CLAMP Verizon Wireless Galvanized Steel Ground Bar



Ordering information:

EM SGC 49-VZW-BIIB	Galvanized ground bar, 1/4" x 4" x 9" with 7/16" mounting holes, isolators, and I-beam support clamp.
EM SGC 412-VZW-BIIB	Galvanized ground bar, 1/4" x 4" x 12" with 7/16" mounting holes, isolators, and I-beam support clamp.
EM SGC 418-VZW-BIIB	Galvanized ground bar, 1/4" x 4" x 18" with 7/16" mounting holes, isolators, and I-beam support clamp.
EM SGC 420-VZW-BIIB	Galvanized ground bar, 1/4" x 4" x 20" with 7/16" mounting holes, isolators, and I-beam support clamp.
EM SGC 424-VZW-BIIB	Galvanized ground bar, 1/4" x 4" x 24" with 7/16" mounting holes, isolators, and I-beam support clamp.

# Miscellaneous – Ground Bars

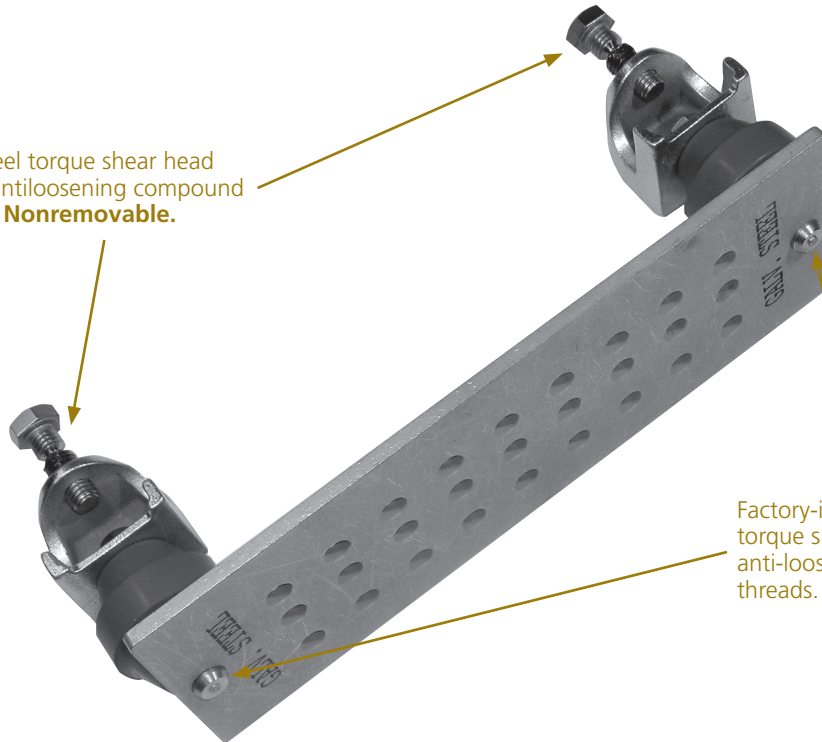
## GALVANIZED STEEL GROUND BARS (CONTINUED)

### WITH ISOLATORS AND I-BEAM SUPPORT CLAMP

#### Verizon Wireless Galvanized Steel Ground Bar

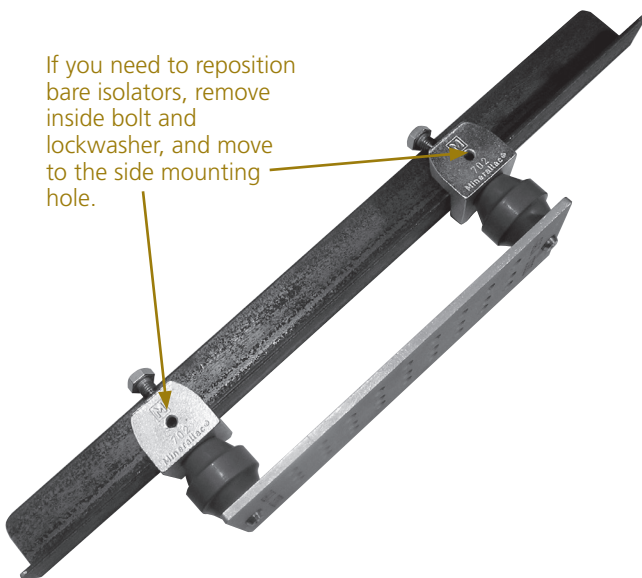
**NONREMOVABLE**

Stainless steel torque shear head bolts with antiloosening compound on threads. **Nonremovable.**



Factory-installed stainless steel torque shear head bolts with anti-loosening compound on threads. **Nonremovable.**

If you need to reposition bare isolators, remove inside bolt and lockwasher, and move to the side mounting hole.



Re-align ground bar to proper position. Tighten bolts until the heads shear off.

Align ground bar on structure or tower where needed.

*Please see next page for ordering information.*

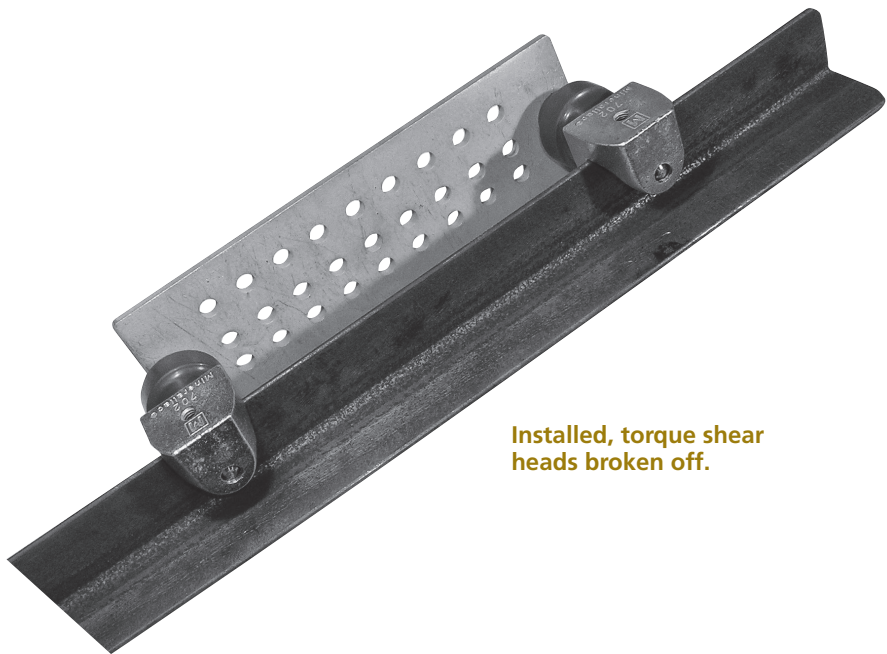
For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Miscellaneous – Ground Bars

## GALVANIZED STEEL GROUND BARS (CONTINUED)

WITH ISOLATORS AND i-BEAM SUPPORT BRACKET  
Verizon Wireless Galvanized Steel Ground Bar

NONREMOVABLE



Installed, torque shear  
heads broken off.

Ordering information:

EM SG 9-VZ-BIIB-NR	Galvanized ground bar (nonremovable), 1/4" x 4" x 9" with 7/16" mounting holes, isolators, and I-beam support clamp.
EM SG 12-VZ-BIIB-NR	Galvanized ground bar (nonremovable), 1/4" x 4" x 12" with 7/16" mounting holes, isolators, and I-beam support clamp.
EM SG 18-VZ-BIIB-NR	Galvanized ground bar (nonremovable), 1/4" x 4" x 18" with 7/16" mounting holes, isolators, and I-beam support clamp.
EM SG 20-VZ-BIIB-NR	Galvanized ground bar (nonremovable), 1/4" x 4" x 20" with 7/16" mounting holes, isolators, and I-beam support clamp.
EM SG 24-VZ-BIIB-NR	Galvanized ground bar (nonremovable), 1/4" x 4" x 24" with 7/16" mounting holes, isolators, and I-beam support clamp.



# Miscellaneous – Ground Bars

## GALVANIZED STEEL GROUND BARS (CONTINUED)

### WITH ISOLATORS AND POLE SUPPORT CLAMP Verizon Wireless Galvanized Steel Ground Bar



#### Ordering information:

<b>EM SGC 49-VZW-BIPS</b>	<i>Galvanized ground bar, 1/4" x 4" x 9" with 7/16" mounting holes, isolators, and pole support clamp.</i>
<b>EM SGC 412-VZW-BIPS</b>	<i>Galvanized ground bar, 1/4" x 4" x 12" with 7/16" mounting holes, isolators, and pole support clamp.</i>
<b>EM SGC 418-VZW-BIPS</b>	<i>Galvanized ground bar, 1/4" x 4" x 18" with 7/16" mounting holes, isolators, and pole support clamp.</i>
<b>EM SGC 420-VZW-BIPS</b>	<i>Galvanized ground bar, 1/4" x 4" x 20" with 7/16" mounting holes, isolators, and pole support clamp.</i>
<b>EM SGC 424-VZW-BIPS</b>	<i>Galvanized ground bar, 1/4" x 4" x 24" with 7/16" mounting holes, isolators, and pole support clamp.</i>

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or [cs110@hubbell.com](mailto:cs110@hubbell.com)

# Miscellaneous – Ground Bars

## GALVANIZED STEEL GROUND BARS (CONTINUED)

### WITH ISOLATORS AND POLE SUPPORT CLAMP Verizon Wireless Galvanized Steel Ground Bar

NONREMOVABLE



Ordering information:

EM SG 9-VZ-BIIB-NR	Galvanized ground bar, 1/4" x 4" x 9" with 7/16" mounting holes, isolators, and pole support clamp. <b>Nonremovable.</b>
EM SG 12-VZ-BIPS-NR	Galvanized ground bar, 1/4" x 4" x 12" with 7/16" mounting holes, isolators, and pole support clamp. <b>Nonremovable.</b>
EM SG 18-VZ-BIPS-NR	Galvanized ground bar, 1/4" x 4" x 18" with 7/16" mounting holes, isolators, and pole support clamp. <b>Nonremovable.</b>
EM SG 20-VZ-BIPS-NR	Galvanized ground bar, 1/4" x 4" x 20" with 7/16" mounting holes, isolators, and pole support clamp. <b>Nonremovable.</b>
EM SG 24-VZ-BIPS-NR	Galvanized ground bar, 1/4" x 4" x 24" with 7/16" mounting holes, isolators, and pole support clamp. <b>Nonremovable.</b>

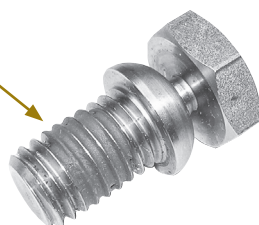
For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Miscellaneous – Ground Bars

## GALVANIZED STEEL GROUND BAR ACCESSORIES

### NONREMOVABLE Replacement Bolt for Galvanized Steel Ground Bars with 1/2" mounting hole, 1/2" isolator mounting hole

Fits 1/2" isolator  
mounting hole



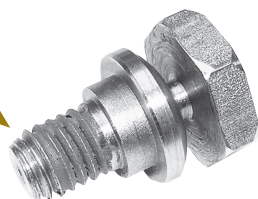
Ordering information:

EM 12TSHB-SS

*Stainless Steel Bolt, 1/2–13. Torque-shear head with anti-loosening compound on threads. **Nonremovable***

### NONREMOVABLE Replacement Bolt for Galvanized Steel Ground Bars with 1/2" mounting hole, 3/8" isolator mounting hole

Fits 3/8" isolator  
mounting hole



Ordering information:

EM 38TSHB-SS.5

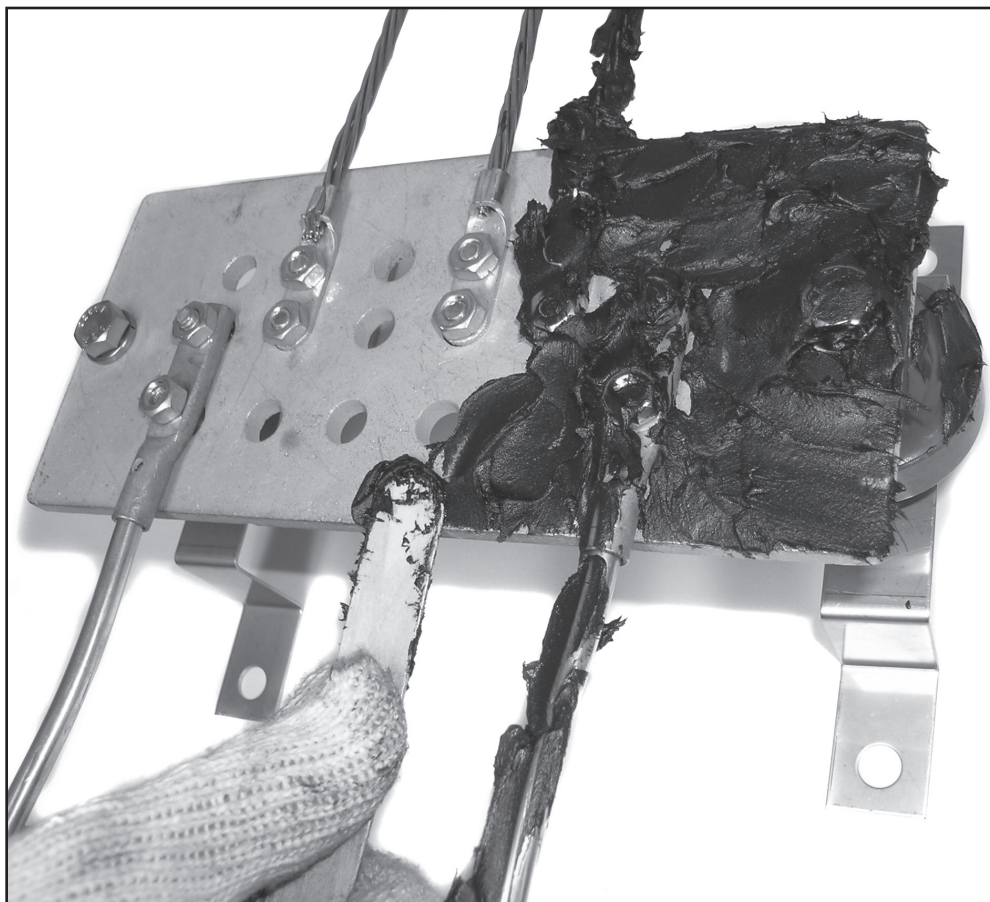
*Stainless Steel Bolt, 3/8–16, with 1/2" shoulder. Torque-shear head with anti-loosening compound on threads. **Nonremovable***



# Miscellaneous

## GALVANIZED STEEL GROUND BAR ACCESSORIES (CONTINUED)

### Anti-Theft Compound



A highly conductive compound, nasty to touch, and very difficult to clean off your clothing. To be used on master ground bars, copper conductors, or any copper that is exposed to theft.

*Ordering information:*

- EM 5101**    *Anti-theft compound, 1 quart*
- EM 5102**    *Anti-theft compound, 1 gallon*

# Miscellaneous

## HOME RUN CONNECTOR FOR INSIDE WIRING

### Description

An insulated brass bunching connector used for gathering the ends of inside wiring at one common point.

### Features

- Brass construction for strength, conductivity, and corrosion resistance
- Insulated and color-coded for “tip & ring”—red, green, black, yellow
- Compact design can tuck neatly in the bottom of most network interface devices.
- Available in a gel-filled version for moisture resistance
- Works with #22, #24, or #26 AWG wire, for as many as eight extensions

### Applications

- For homes with an inaccessible basement or no basement for mounting a “punch down block” type wiring junction.
- For upstairs apartments, the NID can be mounted in the rafter area and run directly in.

### Ordering information ( )

#### EM 9210-RG

A pair of home run connectors  
(1 red, 1 green)

Standard packaging: 50/bx, 3 lb/bx.

#### EM 9210-BY

A pair of home run connectors (1 black, 1 yellow)

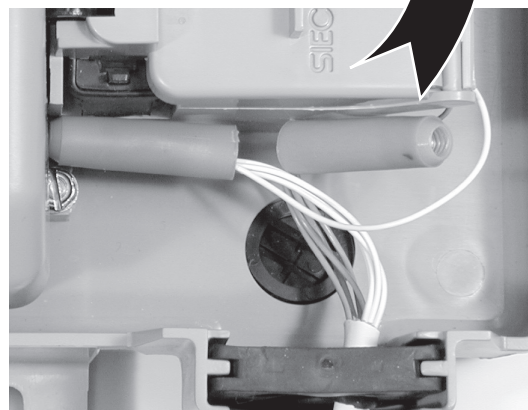
Standard packaging: 50/bx, 3 lb/bx.

#### EM 9210-RGBY

A set of 4 home run connectors (1 red, 1 green, 1 black, 1 yellow)

#### EM 9210-S

A pair of home run connectors (slate). For gel-filled connectors, add suffix -F.





# Miscellaneous

## DRY BOX SPLICE CONNECTOR HOUSING

### Description

An impact-resistant plastic housing for containing service wire splice connectors or home run connectors.

### Features/ Applications

- Lightweight
- Inexpensive
- Mounts easily to the side of a house, under the rafter eaves, in the basement
- Available with two gel dispenser paks, 15 grams each



### Ordering information ( )

**EM 9215** – Gray plastic dry box  
*Standard packaging: 50/bx, 5 lb/bx.*

**EM 9215DP** – Gray plastic dry box with two dispenser paks of gel  
*Standard packaging: 50/bx, 8 lb/bx.*

**EM 9215HR** – Gray dry box with a pair of home run connectors

**EM 9215HRF** – Gray dry box with a pair of gel-filled home run connectors  
*Standard packaging: 25 kits/bx, 3 lb/bx.*

**EM 9215DPHRF** – Gray dry box with a pair of gel-filled home run connectors and two dispenser paks of gel  
*Standard packaging: 25 kits/bx, 6 lb/bx.*

**EM DP30** – Two replacement paks of gel (30 grams total)



BONDING &  
GROUNDING

# Miscellaneous

## LO-OHM GROUNDING CEMENT

Lo-Ohm Grounding Cement is a fine powder packaged in 55-lb. bags which provides an environmentally safe, long-term solution to many grounding problems. Lo-Ohm Grounding Cement grounding electrodes are easily installed by spreading the dry powder in a strip over and around a conductor in a horizontal trench. When the trench is refilled, Lo-Ohm Grounding Cement absorbs moisture from the surrounding soil and hardens to become part of the grounding electrode. The surface area of the electrode is thus dramatically increased, and resistance to ground is substantially reduced. In addition, surge impedance is also lowered significantly.

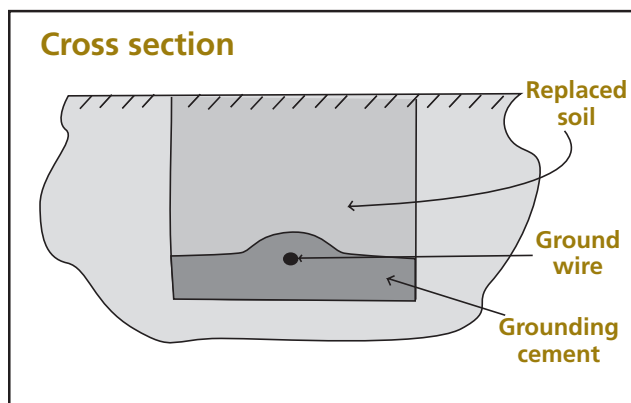
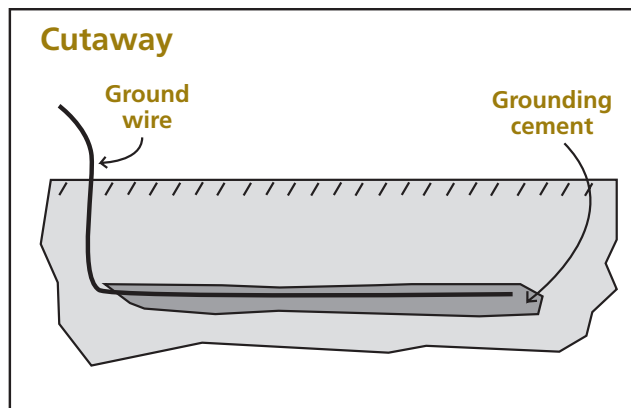
Lo-Ohm Grounding Cement was developed in the 1970s to aid in the grounding of electric power transmission lines in mountainous areas where construction is difficult and soil resistivities tend to be high. Since then, it has proven effective in a wide variety of other applications, including power

station grids, telecommunication switches, radio transmission towers, and cathodic protection systems. The consistent performance of Lo-Ohm Grounding Cement grounding systems has been confirmed through long-term monitoring of installed electrodes. Independent testing has shown that Lo-Ohm Grounding Cement is environmentally safe, and has proven that Lo-Ohm Grounding Cement-covered copper electrodes last ten times longer than bare copper ground wires.

### Features

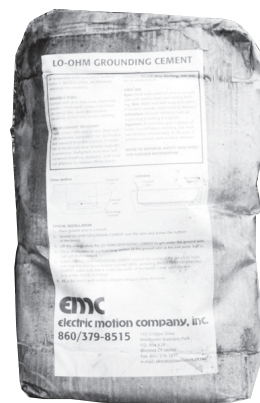
- Reduces resistance to ground
- Lowers surge impedance significantly
- Environmentally safe
- Provides ideal contact with the surrounding soil
- Reduces corrosion in grounding conductors
- Cost-efficient and maintenance-free

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com



### Applications

- Electric transmission and distribution towers
- Power plant grounding grids
- Substation ground systems
- Cathodic protective systems
- Central office switches
- Cellular systems
- Remote digital switches
- Radio transmission towers
- Central office DC power



### Ordering information

**EM-M5C – Standard packaging: 55 lb. bag.**

# Miscellaneous

## BURIED SERVICE WIRE REEL DISPENSER AND CADDY

A combination buried service wire dispenser, stand and reel caddy. Provides technicians with a sturdy, all-in-one stand designed to facilitate safe lifting and handling of heavy BSW reels

**Features**

- All-steel construction for durability.
- Collapsible to permit compact storage.
- Maximum spool width 11"; maximum diameter 18".
- The handle provides a useful means to steer and roll the BSW reel from the utility vehicle to the work site.
- Converts into a stable reel stand/dispenser in seconds.
- Provides technicians with a safe way to handle full or partial reels during storage/removal from the service vehicle.



*Converts into a reel caddy.*

*Ordering information*

Part number	Description	Ordering unit
EM 0070	BSW dispenser and spool caddy	1 unit



BONDING &  
GROUNDING

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com



# Miscellaneous

## SHIELD CONNECTOR FOR CAT 5 CABLES

The EM 9556BW S(.218) C(.31) is a small cable shield connector that can be installed on a small cable that is already placed.

The take-apart design fits around cables proximately .3–.45 diameter, but each diameter or style of cable should be submitted to the factory. After basic installation (1), insulation displacement screws are run down (2) to contact the shield with no loss or attenuation.

Connector can be used for both bonding and grounding or locating. No need to open sheath and shield. Comes as a standard with 36"-long #10 AWG green lead.

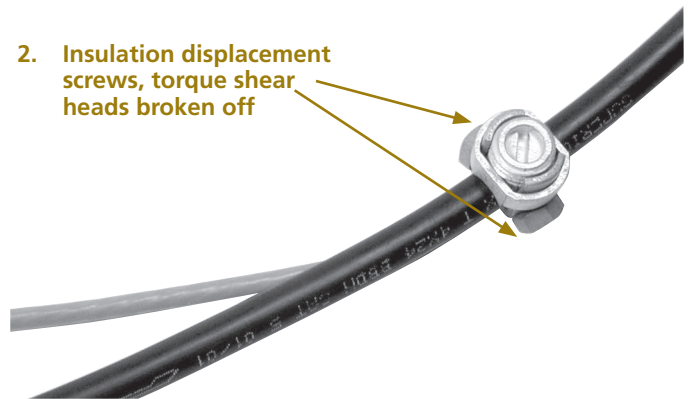
*Ordering information*

**EM 9556-BW S(.218) C(.31)** – Small cable shield connector

### 1. Basic installation



### 2. Insulation displacement screws, torque shear heads broken off



Insulation displacement screws

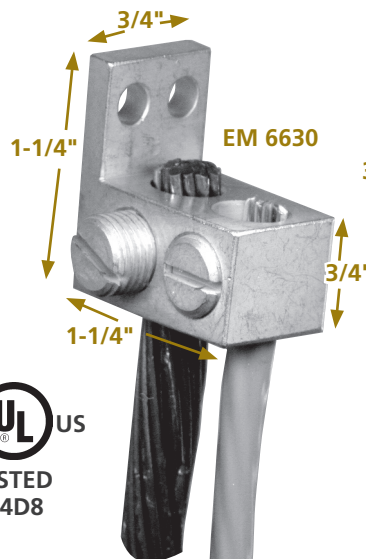
## DOUBLE-HOLE GROUND LUGS

Accommodate #6–#2 AWG ground wires, solid or stranded.

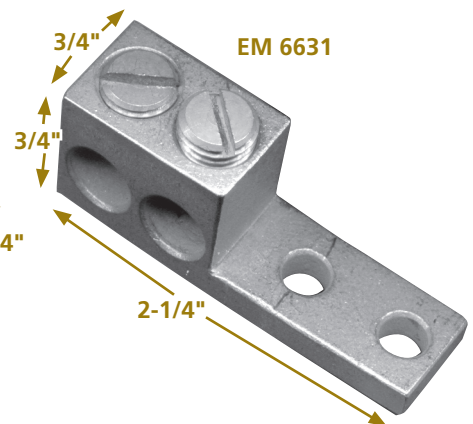
*Ordering information*

**EM 6630** Double-Hole Ground Lug

**EM 6631** Double-Hole Ground Bar Lug with parallel mounting tang



EM 6630



EM 6631



# Miscellaneous

## CORROSION-RESISTANT HARDWARE

EMC hardware is available for use in new construction, maintenance, and retrofitting in OSP and central office. It is available in copper alloy (brass or bronze), stainless steel, or galvanized steel.



### Hex Head Screws – Coarse Thread

Length Diameter-Thread	1/2	3/4	1	1-1/4	1-1/2	1-3/4	2
10 - 24	EM 10C12B	EM 10C34B	EM 10C1B	EM 10C114B	EM 10C112B	EM 10C134B	EM 10C2B
1/4 - 20	EM 14C12B	EM 14C34B	EM 14C1B	EM 14C114B	EM 14C112B	EM 14C134B	EM 14C2B
5/16 - 18	EM 516C12B	EM 516C34B	EM 516C1B	EM 516C114B	EM 516C112B	EM 516C134B	EM 516C2B
3/8 - 16	EM 38C12B	EM 38C34B	EM 38C1B	EM 38C114B	EM 38C112B	EM 38C134B	EM 38C2B
1/2 - 13	EM 12C12B	EM 12C34B	EM 12C1B	EM 12C114B	EM 12C112B	EM 12C134B	EM 12C2B



### Hex Head Screws – Fine Thread

Length Diameter-Thread	1/2	3/4	1	1-1/4	1-1/2	1-3/4	2
10 - 32	EM 10F12B	EM 10F34B	EM 10F1B	EM 10F114B	EM 10F112B	EM 10F134B	EM 10F2B
1/4 - 28	EM 14F12B	EM 14F34B	EM 14F1B	EM 14F114B	EM 14F112B	EM 14F134B	EM 14F2B
5/16 - 24	EM 516F12B	EM 516F34B	EM 516F1B	EM 516F114B	EM 516F112B	EM 516F134B	EM 516F2B
3/8 - 24	EM 38F12B	EM 38F34B	EM 38F1B	EM 38F114B	EM 38F112B	EM 38F134B	EM 38F2B
1/2 - 20	EM 12F12B	EM 12F34B	EM 12F1B	EM 12F114B	EM 12F112B	EM 12F134B	EM 12F2B

### Ordering information

To order, find the part number of the hardware you need in the above charts, and add a material suffix as follows:

**SB** = silicon bronze or brass

**SS** = stainless steel

**GS** = galvanized steel



# Miscellaneous

## CORROSION-RESISTANT HARDWARE (CONTINUED)



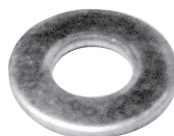
Nuts – Coarse Thread	
Length Diameter-Thread	P/N
10 - 24	EM 10CN
1/4 - 20	EM 14CN
5/16 - 18	EM 516CN
3/8 - 16	EM 38CN
1/2 - 13	EM 12CN



Nuts – Fine Thread	
Length Diameter-Thread	P/N
10 - 32	EM 10FN
1/4 - 28	EM 14FN
5/16 - 24	EM 516FN
3/8 - 24	EM 38FN
1/2 - 20	EM 12FN



Lock Washers	
Diameter	P/N
10	EM 10L
1/4	EM 14L
5/16	EM 516L
3/8	EM 38L
1/2	EM 12L



Flat Washers	
Diameter	P/N
10	EM 10F
1/4	EM 14F
5/16	EM 516F
3/8	EM 38F
1/2	EM 12F

### Ordering information

To order, find the part number of the hardware you need in the above charts, and add a material suffix as follows:

**SB** = silicon bronze or brass

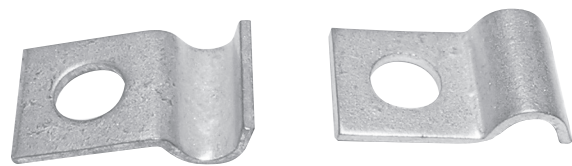
**SS** = stainless steel

**GS** = galvanized steel

All the hardware on these two pages is also available packaged as kits: screw, nut, and washer. Please call 860-379-8515 or e-mail [customerservice@electricmotioncompany.com](mailto:customerservice@electricmotioncompany.com) for details.

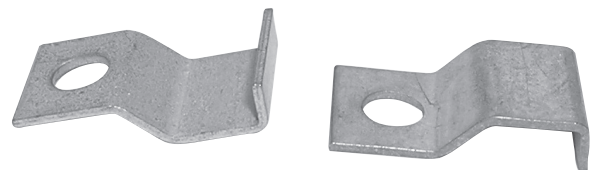
# Dropwire Installation Hardware

## ONE-HOLE CLAMPS



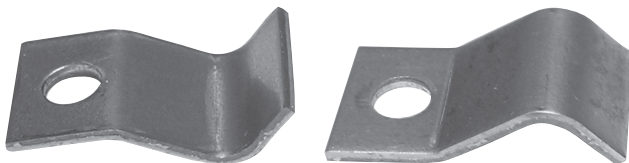
Used to hold #10 AWG insulated station ground wire.

*Ordering information*  
**EM 8490**



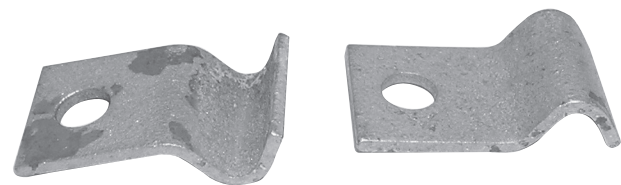
Used to hold flat rectangular two-pair drop wire.

*Ordering information*  
**EM 8491**



Used to hold some insulated #6 AWG, or some two-pair-six-pair inside wire.

*Ordering information*  
**EM 8496**



Used to hold two-pair-six-pair inside wire.

*Ordering information*  
**EM 8497**



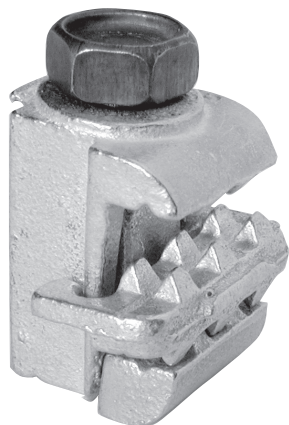
Used to hold inside wire or #6 AWG bare.

*Ordering information*  
**EM 8498**

BONDING &  
GROUNDING

# Pole Line Hardware

## C CONNECTOR

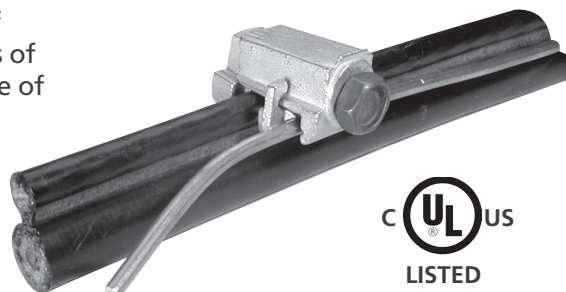


Tin-plated bronze connector with teeth for piercing the messenger insulation of Figure 8 cable. For messenger diameters of .146"–.312" and ground conductor range of .146"–.312".

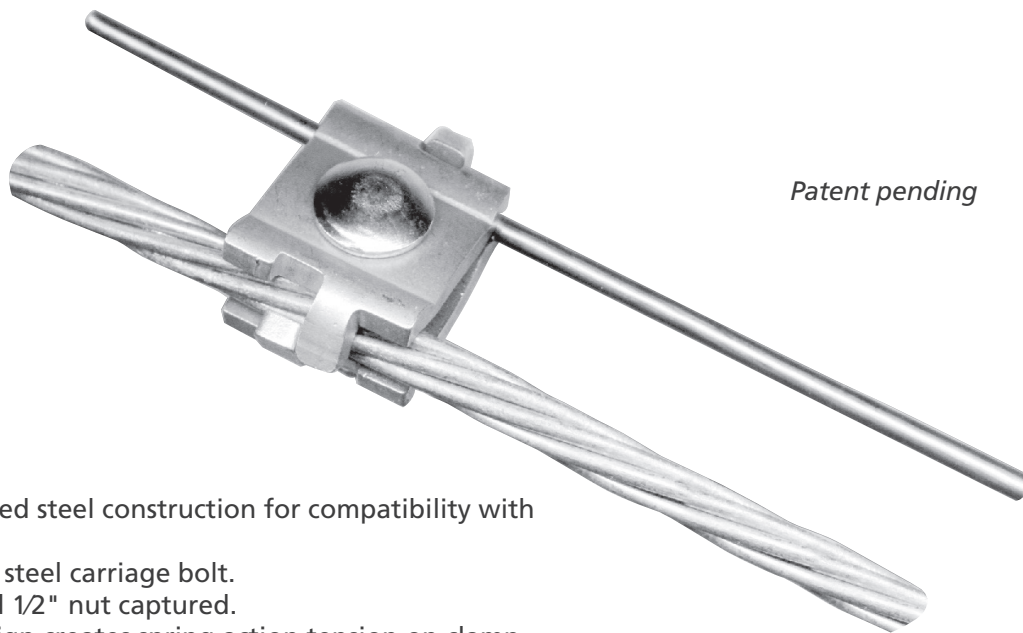
### Ordering information

**EM 0167**

Standard packaging: 100/lbx, 23 lb/lbx.



## STRAND BOND CLAMP



*Patent pending*

### Features

- Galvanized steel construction for compatibility with strand.
- Stainless steel carriage bolt.
- Standard 1/2" nut captured.
- Bow design creates spring action tension on clamp.
- Single clamping action connects strand/ground wire.
- Wraparound design grips strand more securely

### Applications

- Connecting #6 AWG solid to #6 AWG solid ground wire
- Connecting strand to strand (1/4" [6.6M]–7/16" [16M])
- Connecting #6 AWG to strand

### Ordering information

**EM 4811**

Standard packaging: 10/bg, 100/bx, 21 lb/bx.

**EM 4811SS**

Strand bond clamp, all stainless steel body and hardware

For Electric Motion Company (EMC) part numbers starting with "EM" please contact EMC customer service at 860-379-8515 or cs110@hubbell.com

# Pole Line Hardware

## JUMPER CLAMP

A tin-plated bronze clamp with interlocking jaws.

### Features

- Tin plated for corrosion protection
- High strength copper alloy
- UL listed for public safety
- Half-inch hex head silicon bronze bolt

### Applications

- 1/4"-7/16" strand
- #8-#2/0 copper wire



*Ordering information*

**EM 0800**

*Standard packaging: 100/lbx.*

BONDING &  
GROUNDING

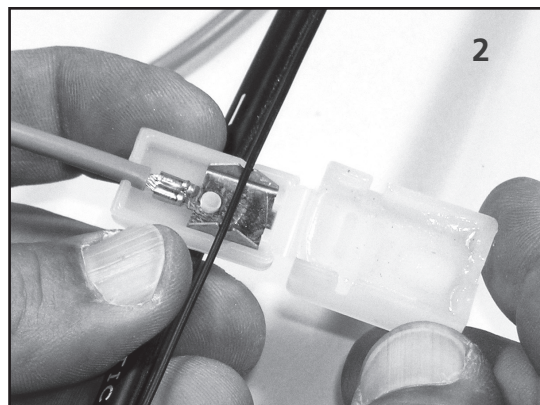


# Fiber to the Premise – FTTP

## FIBER-TO-THE-HOME DROP LOCATE WIRE GROUND HARNESS

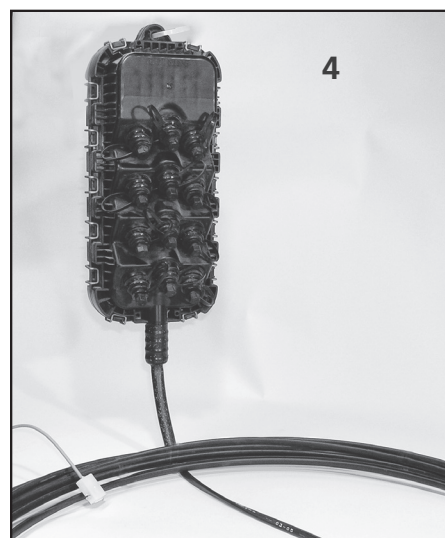
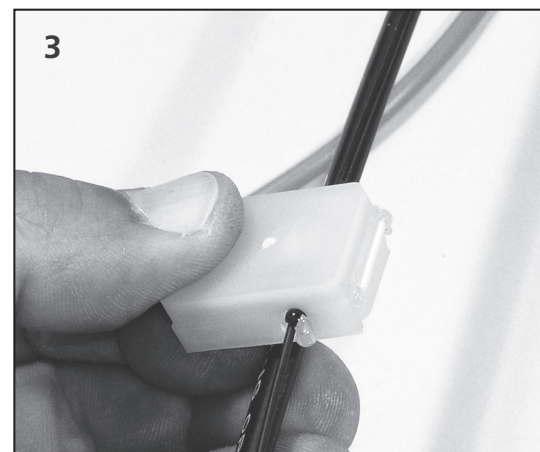
### Description

A gel-filled insulation-displacement connector to ground #24 AWG locate wires in the handhole or the pedestal, or at the residence.



### Handhole Installation

1. Carefully make an 8" slit in the web of the fiber drop, generally in the first slack coil in the bottom of the handhole.
2. Remove the release paper from the gel on connector EM 9181. Slide the connector into the slit area under the locate wire.
3. Position the locate wire at the entrance to the brass IDC terminal, then close the cover.
4. Attach the green ground wire to one of the studs on the grounding location.



### Benefits

- Allows locate wire to be grounded in the handhole and not bring lightning into the ONT or ONU.
- No stripping of locate wire
- Flexible lead allows "float"
- Waterproof for underground
- Low-cost
- Allows extending a broken locate wire

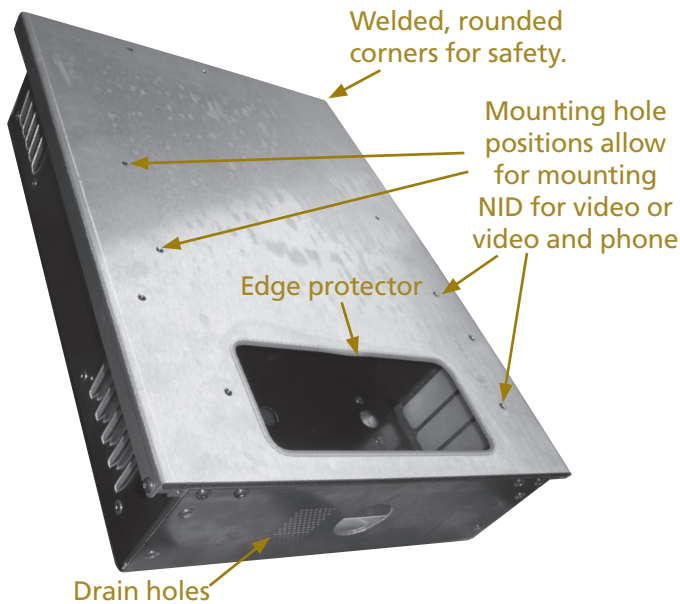
### Ordering information :

**EM 9181-XX-X** – Toneable Fiber Flat Drop Cable Connector with attached grounding harness. Specify length of #14 AWG green harness (XX), and either .10 or .25 diameter mounting hole on ring terminal on free end (X). Connects to #24 AWG without stripping.



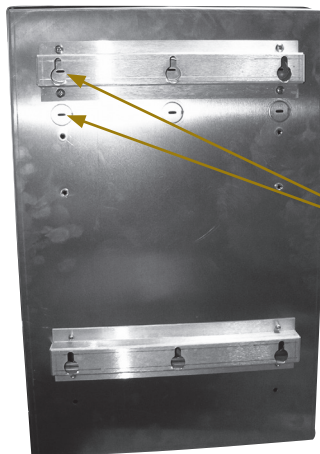
# Fiber to the Premise – FTTP

## CUSTOM ENCLOSURES



### Other Features

- Aluminum or painted steel
- Opens with a standard terminal wrench



Cable shield available for either type of NID



BONDING &  
GROUNDING









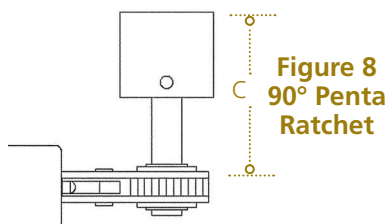
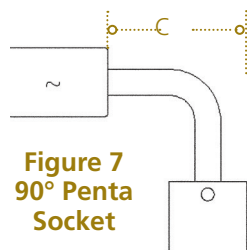
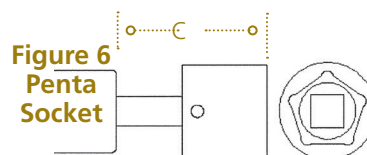
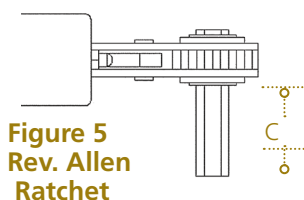
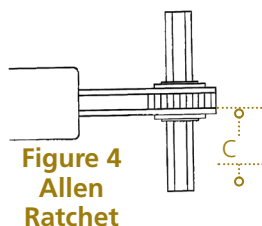
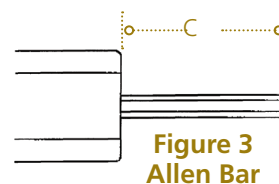
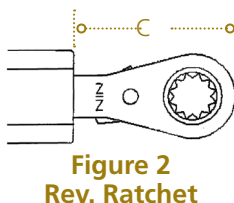
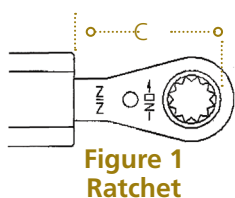
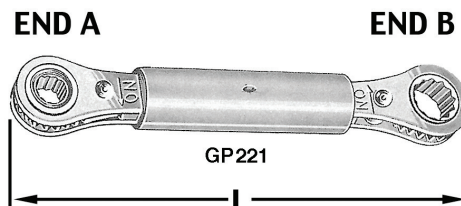
# Series GP Wrenches

The sturdy polypropylene handle provides protection from incidental end-to-end or energized line contact (all models except as noted). Nine wrench heads are available.

- Design is optimized for lineman use – handle separates both ends.
- GP201, GP203, GP2031, GP204 and GP216 are 1-piece products.

## TOOLS

### GP WRENCHES



## Wrench Combinations

Catalog Number	"A" End Description	Figure Number	C Inches (mm)	"B" End Description	Figure Number	C Inches (mm)	L Approx Inches (mm)	Weight lb (kg)
GP201 <sup>(1)</sup>	3/8" Ratchet	1	One Piece	5/16" Ratchet	1	One Piece	6.75 (171.5)	0.75 (0.34)
GP203 <sup>(1)</sup>	9/16" Ratchet	1	One Piece	3/4" Ratchet	1	One Piece	6.25 (158.8)	0.75 (0.34)
GP2031 <sup>(1)</sup>	1/2" Ratchet	1	One Piece	5/16" Ratchet	1	One Piece	6.75 (171.5)	0.75 (0.34)
GP204 <sup>(1)</sup>	3/4" Ratchet	1	One Piece	7/8" Ratchet	1	One Piece	9.25 (235.0)	0.75 (0.34)
GP209	3/8" Allen Ratchet	4	1.21 (30.7)	Eye Loop	9	1.00 (25.4)	7.50 (190.5)	0.75 (0.34)
GP2090P	3/8" Allen Ratchet	4	1.21 (30.7)	Penta Socket	6	2.00 (50.8)	8.75 (222.3)	1.00 (0.45)
GP2090P4	3/8" Allen Ratchet	4	1.71 (43.4)	Penta Socket	6	2.00 (50.8)	8.75 (222.3)	1.00 (0.45)
GP2090P90	3/8" Allen Ratchet	4	1.21 (30.7)	90° Penta Socket	7	2.50 (63.5)	9.25 (235.0)	1.00 (0.45)
GP2091P	Penta Socket	6	1.91 (48.5)	Eye Loop	9	1.00 (25.4)	7.50 (190.5)	0.75 (0.34)
GP2091P90	90° Penta Socket	7	2.37 (60.2)	Eye Loop	9	1.00 (25.4)	8.00 (203.2)	0.75 (0.34)
GP2092M	3/8" Allen Ratchet	4	1.21 (30.7)	3/8" Allen Bar	3	1.25 (31.8)	8.00 (203.2)	0.75 (0.34)
GP2093	5/16" Allen Ratchet	4	1.46 (37.1)	Eye Loop	9	1.00 (25.4)	7.75 (196.9)	0.75 (0.34)
GP2093P	5/16" Allen Ratchet	4	1.46 (37.1)	Penta Socket	6	2.00 (50.8)	9.00 (228.6)	1.00 (0.45)
GP2093P90	5/16" Allen Ratchet	4	1.46 (37.1)	90° Penta Socket	7	2.50 (63.5)	9.25 (235.0)	1.00 (0.45)
GP209375P90	5/16" Allen Ratchet	4	0.75 (19.1)	90° Penta Socket	7	2.50 (63.5)	9.25 (235.0)	1.00 (0.45)

(1) These wrenches do not have polypropylene handle.

# Series GP Wrenches *(continued)*

Wrench Combinations								
Catalog Number	"A" End Description	Figure Number	C Inches (mm)	"B" End Description	Figure Number	C Inches (mm)	L Approx Inches (mm)	Weight lb (kg)
GP210	3/16" Allen Bar	3	1.25 (31.8)	Eye Loop	9	1.00 (25.4)	6.75 (171.5)	0.50 (0.23)
GP2101	1/4" Allen Bar	3	1.88 (47.9)	Eye Loop	9	1.00 (25.4)	7.38 (187.5)	0.50 (0.23)
GP211	3/8" Allen Bar	3	1.25 (31.8)	Eye Loop	9	1.00 (25.4)	6.75 (171.5)	0.50 (0.23)
GP212	5/16" Allen Bar	3	1.25 (31.8)	Eye Loop	9	1.00 (25.4)	6.75 (171.5)	0.50 (0.23)
GP216 <sup>(1)</sup>	1 1/16" Ratchet	1	One Piece	1 5/16" Ratchet	1	One Piece	9.25 (235.0)	0.75 (0.34)
GP221	3/8" Ratchet	1	2.25 (57.2)	9/16" Ratchet	1	2.25 (57.2)	9.00 (228.6)	0.75 (0.34)
GP2210	3/8" Ratchet	1	2.25 (57.2)	7/16" Ratchet	1	2.25 (57.2)	9.00 (228.6)	0.75 (0.34)
GP2212	1/2" Ratchet	1	2.25 (57.2)	9/16" Ratchet	1	2.25 (57.2)	9.00 (228.6)	0.75 (0.34)
GP2213	5/16" Ratchet	1	2.00 (50.8)	3/8" Ratchet	1	2.00 (50.8)	8.50 (215.9)	0.75 (0.34)
GP2213AR	3/8" Allen Ratchet	4	1.21 (30.7)	5/16" Allen Ratchet	4	1.21 (30.7)	9.00 (228.6)	0.75 (0.34)
GP2214	3/8" Ratchet	1	2.00 (50.8)	1/2" Ratchet	1	2.00 (50.8)	8.50 (215.9)	0.75 (0.34)
GP2215P	3/8" Rev. Ratchet	2	2.25 (57.2)	Penta Socket	6	2.00 (50.8)	8.75 (222.3)	1.00 (0.45)
GP223	9/16" Ratchet	1	2.25 (57.2)	3/4" Ratchet	1	2.25 (57.2)	9.00 (228.6)	0.75 (0.34)
GP2231	9/16" Ratchet	1	2.25 (57.2)	1 1/16" Ratchet	1	2.25 (57.2)	9.00 (228.6)	0.75 (0.34)
GP2232	3/4" Ratchet	1	2.25 (57.2)	1 1/16" Ratchet	1	2.25 (57.2)	9.00 (228.6)	0.75 (0.34)
GP2233	9/16" Ratchet	1	2.25 (57.2)	5/8" Ratchet	1	2.25 (57.2)	9.00 (228.6)	0.75 (0.34)
GP2234	1/2" Ratchet	1	2.25 (57.2)	5/8" Ratchet	1	2.25 (57.2)	9.00 (228.6)	0.75 (0.34)
GP2235	5/8" Ratchet	1	2.25 (57.2)	1 1/16" Ratchet	1	2.25 (57.2)	9.00 (228.6)	0.75 (0.34)
GP2236	5/8" Ratchet	1	2.25 (57.2)	1 3/16" Ratchet	1	2.75 (69.9)	9.50 (241.3)	0.75 (0.34)
GP2237	5/8" Ratchet	1	2.25 (57.2)	3/4" Ratchet	1	2.25 (57.2)	9.00 (228.6)	0.75 (0.34)
GP2238	3/4" Ratchet	1	2.25 (57.2)	1 3/16" Ratchet	1	2.75 (69.9)	9.50 (241.3)	0.75 (0.34)
GP2239	3/4" Rev. Ratchet	2	2.25 (57.2)	5/16" Rev. Allen Ratchet	5	1.00 (25.4)	9.00 (228.6)	1.00 (0.45)
GP224	3/4" Ratchet	1	2.25 (57.2)	7/8" Ratchet	1	2.75 (69.9)	9.50 (241.3)	1.00 (0.45)
GP2240	1 3/16" Ratchet	1	2.75 (69.9)	7/8" Ratchet	1	2.75 (69.9)	10.00 (254.0)	1.00 (0.45)
GP2241P90	1 3/16" Ratchet	1	2.75 (69.9)	90° Penta Socket	7	2.50 (63.5)	9.75 (247.7)	1.00 (0.45)
GP2242	1 1/16" Ratchet	1	2.25 (57.2)	1 5/16" Ratchet	1	2.75 (69.9)	9.50 (241.3)	1.00 (0.45)
GP2243	1 3/16" Ratchet	1	2.75 (69.9)	1 5/16" Ratchet	1	2.75 (69.9)	10.00 (254.0)	1.00 (0.45)
GP2245	7/8" Ratchet	1	2.75 (69.9)	1 5/16" Ratchet	1	2.75 (69.9)	10.00 (254.0)	1.00 (0.45)
GP239	5/16" Rev. Allen Ratchet	5	1.00 (25.4)	5/16" Rev. Allen Ratchet	5	1.00 (25.4)	9.00 (228.6)	1.00 (0.45)
GP240	5/16" Rev. Allen Ratchet	5	1.50 (38.1)	3/8" Rev. Allen Ratchet	5	1.38 (35.1)	9.00 (228.6)	1.00 (0.45)
GP240P1	3/8" Rev. Allen Ratchet	5	1.00 (25.4)	Penta Socket	6	2.00 (50.8)	8.75 (222.3)	1.00 (0.45)
GP241P	5/16" Rev. Allen Ratchet	5	1.50 (38.1)	Penta Socket	6	2.00 (50.8)	8.75 (222.3)	1.00 (0.45)
GP241P1	5/16" Rev. Allen Ratchet	5	2.00 (50.8)	Penta Socket	6	2.00 (50.8)	8.75 (222.3)	1.00 (0.45)
GP241P2	5/16" Rev. Allen Ratchet	5	1.00 (25.4)	Penta Socket	6	2.00 (50.8)	8.75 (222.3)	1.00 (0.45)
GP241P3	5/16" Rev. Allen Ratchet	5	2.50 (63.5)	Penta Socket	6	2.00 (50.8)	8.75 (222.3)	1.00 (0.45)
GP241P90	5/16" Rev. Allen Ratchet	5	1.50 (38.1)	90° Penta Socket	7	2.50 (63.5)	9.25 (235.0)	1.00 (0.45)
GP241PS58	5/16" Rev. Allen Ratchet	5	0.63 (16.0)	Penta Socket	6	2.00 (50.8)	8.75 (222.3)	1.00 (0.45)
GP241S	5/16" Rev. Allen Ratchet	5	1.50 (38.1)	Eye Loop	9	1.00 (25.4)	7.75 (196.9)	0.75 (0.34)
GP241S2	5/16" Rev. Allen Ratchet	5	1.00 (25.4)	Eye Loop	9	1.00 (25.4)	9.00 (228.6)	0.75 (0.34)
GP241S3GP	3/8" Rev. Allen Ratchet	5	1.00 (25.4)	Eye Loop	9	1.00 (25.4)	9.00 (228.6)	0.75 (0.34)
GP241S58	5/16" Rev. Allen Ratchet	5	0.63 (16.0)	Eye Loop	9	1.00 (25.4)	7.75 (196.9)	0.75 (0.34)
GP242P	5/16" Rev. Allen Ratchet	5	1.75 (44.5)	90° Penta Rev. Ratchet	8	2.75 (69.9)	9.00 (228.6)	1.00 (0.45)
GP242P1	3/8" Rev. Allen Ratchet	5	1.38 (35.1)	90° Penta Rev. Ratchet	8	2.75 (69.9)	9.00 (228.6)	1.00 (0.45)
GP242P2	5/16" Rev. Allen Ratchet	5	2.00 (50.8)	90° Penta Rev. Ratchet	8	2.75 (69.9)	9.00 (228.6)	1.00 (0.45)
GP243P	5/16" Rev. Allen Ratchet	5	1.00 (25.4)	90° Penta Socket	7	2.50 (63.5)	9.25 (235.0)	1.00 (0.45)

(1) These wrenches do not have polypropylene handle.



# The Nut Runner Ratchet Wrench

**TOOLS**

**GP3458 "Nut Runner"**

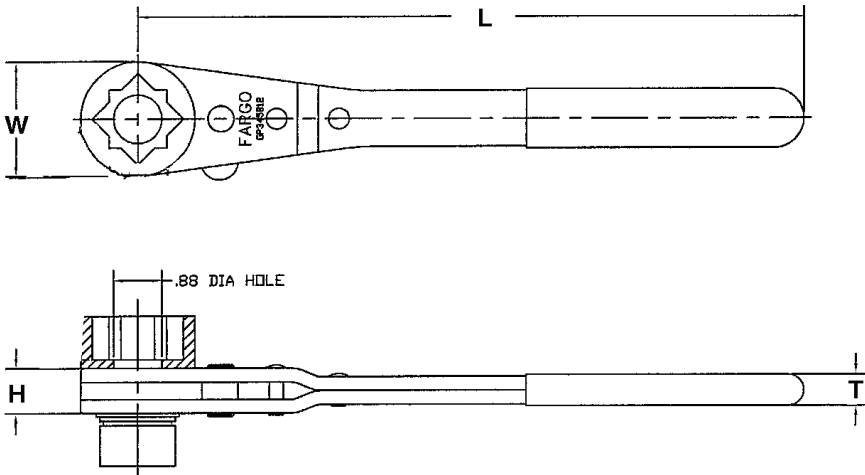
**Features:**

- Unique bolt through socket.
- 2-in-1 combination square socket (GP3458).
- 3-in-1 combination square socket (GP345812 & GP345812C).
- Reversible ratchet.
- Heavy duty construction.

**Benefits:**

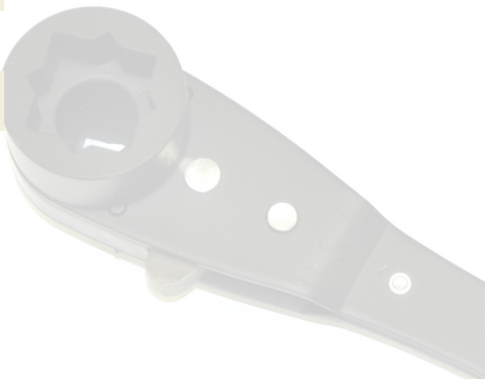
- Eliminates the need to use slower open-end wrenches.
- Fits nuts for both 5/8" & 3/4" machine bolts, and eliminates the need for multiple wrenches, or 1/2", 5/8" and 3/4" bolts.
- Quick and easy to use; no more inconvenient re-positioning.
- Ensures a dependable and long field life.

The Fargo® "Nut Runner" Lineman's Ratchet Wrench provides a safe and easier way to tighten long machine bolts. Developed to install equipment mounting bolts on utility poles, this tool makes slower, non-mechanical openend wrenches antiquated.



## Wrench Combinations

Catalog Number	Dimensions Inches (mm)				Weight lb (kg)
	L	W	H	T	
GP3458	12.00 (304.8)	2.06 (52.3)	.81 (20.6)	.56 (14.2)	2.45 (1.11)
GP345812	12.00 (304.8)	2.06 (52.3)	.81 (20.6)	.56 (14.2)	2.53 (1.15)
GP345812C	9.36 (237.7)	2.06 (52.3)	.78 (19.8)	1.0 (25.4)	1.53 (0.69)



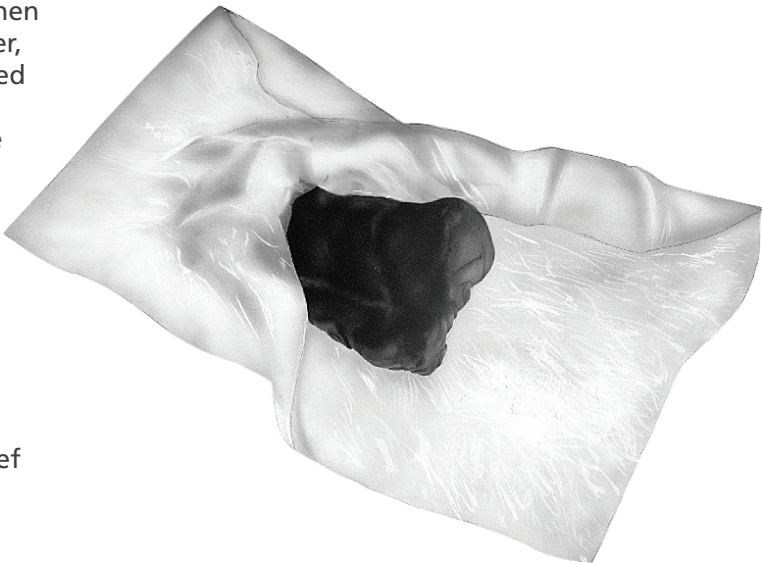
# Electrical Joint Compound/Inhibitor/Sealants

SEALING

DSC

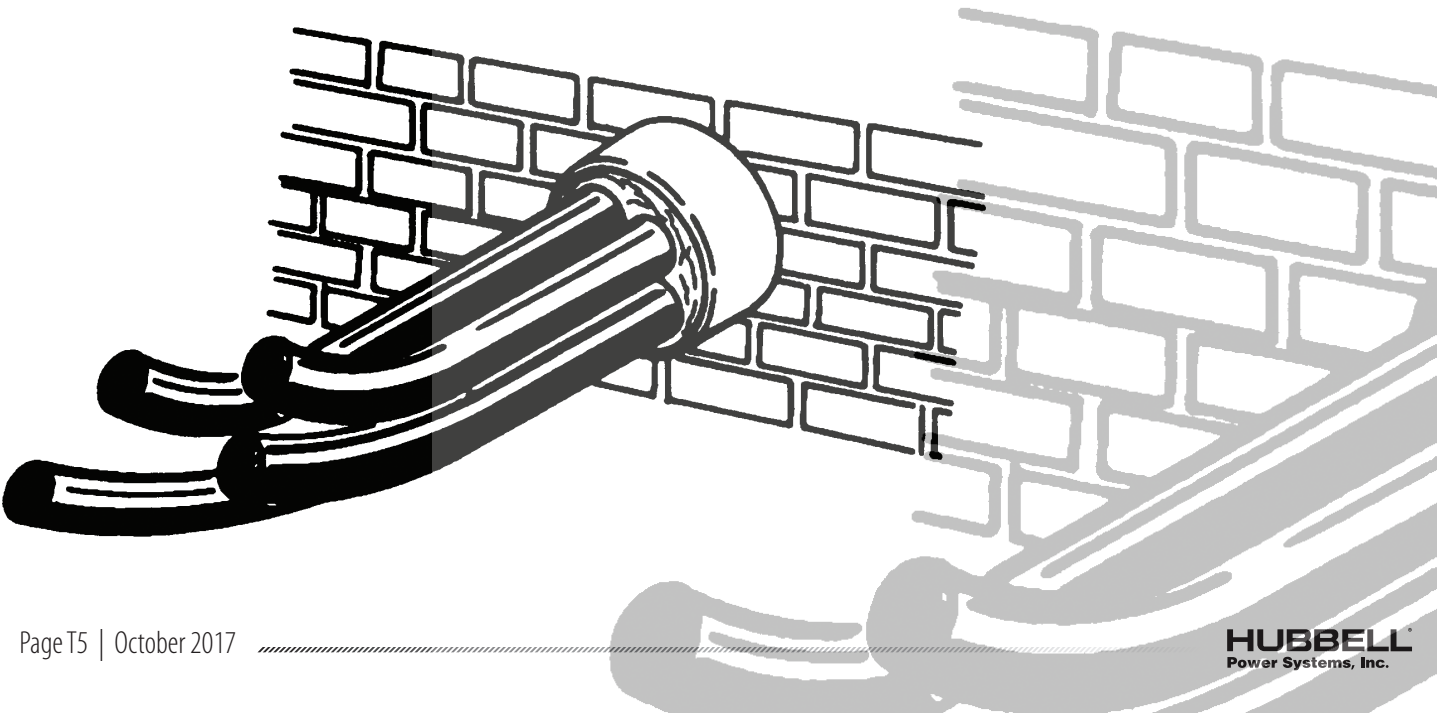
## DUCT SEALING COMPOUND

- Permanently pliable, non-cracking, caulking especially formulated for sealing cable and conduit entries, around junction boxes, service masts, etc. (A "must" material when sealing vault entries.) It can be easily shaped and worked by hand and when pressed in place, will cling to metal, plastic, rubber, painted surfaces, masonry, wood, etc. It is supplied in a convenient block shape overwrapped with release paper and bagged in a clear re-entry type PVC bag with application data.
- Dielectric strength approximately 110V/mil using ASTM D149-64
- 100% non-volatile solids including non-drying synthetic polymers with inert mineral fibers
- Asbestos free, non-toxic and non-irritating
- Recommended working range when applying is 25° F to 120° F (-4° C to 49° C), tolerance range is -30° F to 175° F, (-34° C to 79° C). Will not sag at 275° F (135° C) when under such exposure for brief periods.
- Permanently pliable and non-cracking. May be painted immediately.



### Ordering Information

Catalog Number	Block Size	Carton Quantity	Weight each lb (kg)
DSC1	1 lb	50 lb	100 (45))
DSC5	5 lb	50 lb	500 (226.8)



TOOLS &  
SAFETY

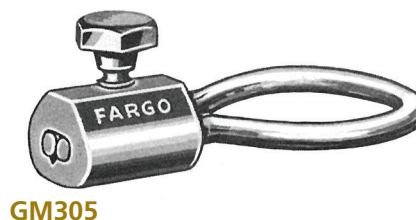
# Tamperproof Equipment Locks

## LOCKS

GM 300

- Designed for semi-permanent, single-use locking of pedestals, equipment housings, truck/trailer doors, etc.
- Locks available in torque screw and pressed pin design.
- Locks provide over 600 lb (272 kg) pull strength.
- Locks may be removed with bolt cutters or hacksaw.

**Material:** Body – extruded aluminum alloy  
 Ring – Alumoweld®  
 Bolt – aluminum – (shears @ 60 in-lb torque)  
 Pin – spring steel



GM305

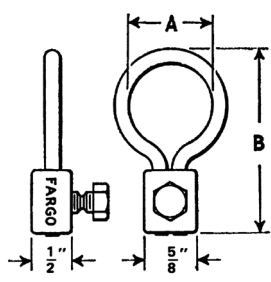


Figure 1

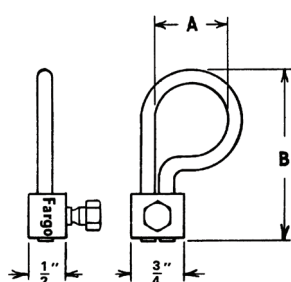


Figure 2

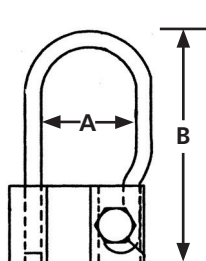


Figure 3

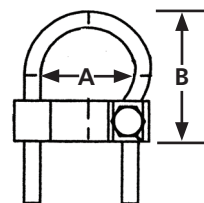


Figure 4

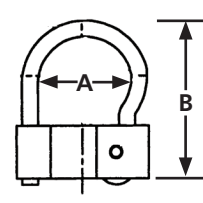


Figure 5

## Ordering Information

Catalog Number	Figure Number	Inches (mm)			Ring Wire Size [in] (mm)	Fastener Type	Weight lb (kg)
		A	B	C			
GM305	1	1 (25.4)	2 1/4 (57.2)	1/2 (12.7)	#6 [.162] (4.1)	Torque Screw	.06 (.03)
GM306	1	2 (50.8)	3 1/4 (82.6)	1/2 (12.7)	#6 [.162] (4.1)	Torque Screw	.07 (.03)
GM307	2	1 (25.4)	2 1/4 (57.2)	1/2 (12.7)	#6 [.162] (4.1)	Torque Screw	.06 (.03)
GM320	3	1 (25.4)	2 1/2 (63.5)	3/4 (19.1)	#4 [.204] (5.2)	Torque Screw	.12 (.05)
GM3203	3	1 (25.4)	3 1/4 (82.6)	3/4 (19.1)	#4 [.204] (5.2)	Torque Screw	.12 (.05)
GM321	4	1 (25.4)	2 1/2 (63.5)	3/4 (19.1)	#4 [.204] (5.2)	Torque Screw	.07 (.03)
GM322	5	1 (25.4)	2 1/2 (63.5)	3/4 (19.1)	#4 [.204] (5.2)	Pressed Pin	.11 (.05)
GM3223	5	1 (25.4)	3 1/4 (82.6)	3/4 (19.1)	#4 [.204] (5.2)	Pressed Pin	.12 (.05)

# Ratchet Chain Hoists for Guys, Strand, and ADSS

**CHANCE**

## LINK-CHAIN STYLE

*A strong link to reliable performance.*

### Construction

- Proof-tested and factory operated at 150% of capacity rating.
- Lightweight, high-strength handle and sheave housings are heat-treated aluminum.
- All working parts are fully enclosed in the housing unit for operator safety.
- High-strength alloy steel chain is polished for smooth action and low wear.
- Load hooks are forged steel with automatic spring-loaded latches.
- Two-way handle allows for easy access and operation overhead or below chest level.
- Rounded stop on handle end helps to ensure firm operator grip.

### Operation

- Easy hook-up and chain release to freewheel, under no-load conditions.
- Controls automatically lock when hoist is pulling load.
- Two simple levers – Shift Key for up and down on top of housing, and Release Key in handle recess – are easy to switch, even wearing gloves.
- Easily ratchets one or two clicks per stroke in up or down mode.
- Choose quick speed, or full- or half-link rate for added accuracy.
- Ratchet handle swings to either side for cramped quarters and push or pull stroke operation.
- Top and bottom hooks swivel 360° for rope unwinding or stranded cable under tension.

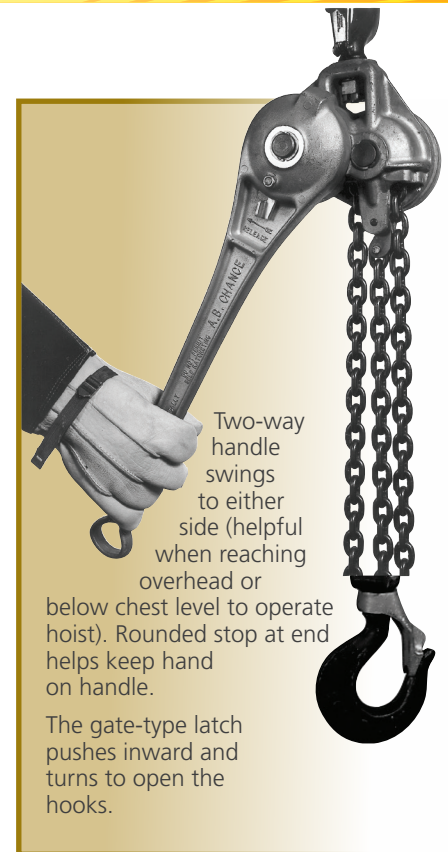
### Do not:

- × Lift more than rated load
- × Operate with twisted or damaged chain
- × Use if damaged or malfunctioning
- × Lift people or loads over people
- × Use a handle extender (cheater bar)
- × Obscure this label

### Do:

- ✓ See operating instructions
- ✓ Operate and maintain per ANSI B30.21

Hubbell Power Systems, Inc.  
Centralia, MO 65240



See page A40 for anchor pulling eye for guy tensioning.

### Specifications

- Each unit comes with illustrated operating manual, including complete parts list.
- Lifetime oil-impregnated bronze-sleeve bearings require no additional lubrication.
- Pliers and screwdriver are only tools needed for maintenance.
- For infrequent repairs, kit C3090349 contains minor service parts common to all ratings.

Catalog Number	Rating	Handle Pull at Rating lb	Hook-to-Hook Minimum Inches (mm)	Weight lb (kg)
C3090438	¾-Ton	65	11 (279.4)	14 (6.35)
3011S	1-Ton	90	11 (279.4)	14 (6.35)
C3090439	1½-Ton	60	16 (406.4)	22 (10)
4012	2-Ton	90	11 (279.4)	28.5 (12.7)
C3090440	3-Ton	60	19.75 (501.7)	30.5 (13.8)
C3090441	4½-Ton	70	24.5 (622.3)	47 (21.2)
C3090442	6-Ton	70	24.5 (622.3)	50 (22.5)

TOOLS &  
SAFETY



# Series 90 Capstan Hoists

**CHANCE**

*One of the fastest and quietest in the Industry, lightweight and powerful to move heavyweight and difficult-access tasks.*

*For lifting radio heads, antennas, and equipment in cell tower construction and maintenance.*

*Rugged design handles tough jobs, extends service life, and reduces maintenance*

Catalog Number	Weight Each lb (kg)	Load Rating (lbs)	Drive
C3081170	49 (22.23)	1,000	115 V-AC Electric
C3081190	46 lb. (20.9 kg.)	1,000	Gasoline
C3081370	58 lb. (26 kg.)	3,000	115 V-AC Electric

Four  $\frac{3}{8}$ " mounting bolts furnished with each unit. Mounting flange provides eight  $\frac{3}{8}$ " tapped holes  $5\frac{5}{8}$ " bolt circle.



**C3081190**  
**1,000 lb Load Rating**  
**Gasoline Drive**

Includes Power Hoist and  
Foot Throttle Control Only



**C3081170**  
**1,000 lb Load Rating**  
**115 V-AC Electric Drive**

Includes power hoist and foot  
control only.



**C3081370**  
**3,000 lb Load Rating**  
**115-V-AC Electric Drive**

Includes Power Hoist and Foot  
Control Only



## BRACKETS AND ACCESSORIES FOR SERIES 90 CHANCE CAPSTAN HOISTS

- Includes two chain clamps for poles, angles and beams.

**All-Purpose Bracket  
C3081335  
for 1,000 lb series 90  
Capstan Hoists**

Includes two chain  
clamps for poles,  
angles and beams.



Wheel handles on  
chain binders make  
tightening easy.

To fit angle steel and beams, furnished bolts pin  
the clamps to form a 90° attachment shoulder.

**All-Purpose Bracket  
C3081443  
for 3,000 lb Series 90  
Capstan Hoists**

Includes two chain  
clamps for poles,  
angles and beams.



**Chain Clamp  
C4170346  
(Chains are 85" long.)**



**Universal Bracket  
C3080925  
Recommended  
for Gasoline hoist**

Bolts down or uses  
two C4170346 Chain  
Clamps for mounting

Catalog Number	Weight Each lb (kg)	Description
C3081335	26.5 (12.02)	All-Purpose Bracket for 1,000 lb series 90 Capstan Hoists
C3080925	13 (5.9)	Universal bracket recommended for gasoline hoists
C3081443	32 (14.5)	All-Purpose Bracket for 3,000 lb series 90 Capstan Hoists
C3080856	2 (0.9)	Rope Locking Device
C4170346	7.125 (3.2)	Chain Clamp



To fit poles to 23" in diameter, chain clamps  
pivot to automatically adjust.



**Rope Lock Device C3080856**

Includes mounting bolts and washers

# Series 90 Capstan Hoists

**CHANCE**

## 1,000 lb Load Rating

### HITCH RECEIVER MOUNT FOR SWIVEL BASE TRUCK MOUNT

**Quick and convenient. Fits 2"-square towing receivers.**

Faster than any other method, this job-ready mount puts a Capstan Hoist in the right position for pulling, stringing and lifting jobs. With the hoist stored on it, the mount's square tube simply inserts and pins in any 2"-square receiver of a Class III or IV towing hitch. Now Capstan Hoists can be as universal as this type trailer hitch is to most service vehicles.

#### **Specially designed for swivel-base mount.**

The swivel mount's turntable design permits proper alignment without repositioning service vehicle. The swivel mount permits pinning the bracket at every 15° interval around the circular base for stringing, tensioning; pulling in cable; hoisting equipment, radio heads, and antennas; setting poles; pulling vehicles.

#### **Rated for truck as portable power source.**

The Hitch Receiver Mount is rated at 1,000 lb to correspond with the ratings of Capstan Hoists for which it is intended. Only 12 V, 115 V and hydraulic 1,000 lb-rated hoists are recommended for truck mounting.

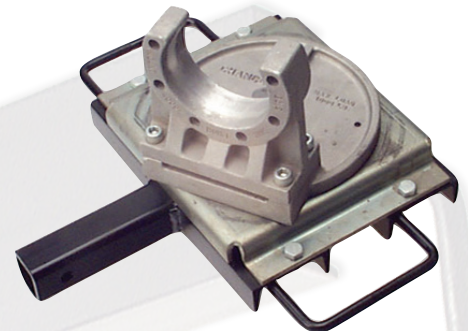
All-steel construction features hole pattern to fit Chance® Swivel Base Mount.

For transport and storage, simply remove the Hitch Receiver Mount from the receiver with mounting brackets and hoist attached.

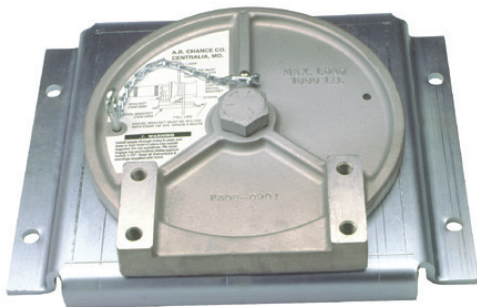
Catalog Number	Description	Weight lb (kg)
PSC3081563	Hitch mount with Swivel Base	62 (28.1)
T3080999	Hitch Mount for Capstan Hoist	21 (9.53)
C3080903	Swivel Bracket Only	18 (8.1)
C3080890	C-Bracket Only	5 (2.25)



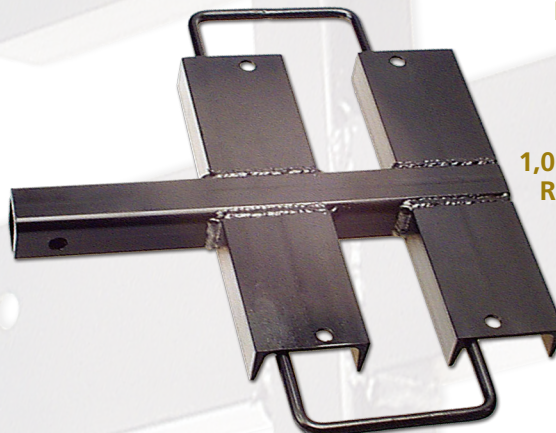
**C-Bracket only  
C3080890**



**Hitch Mount  
Bracket with  
Swivel Base  
PSC3081563**



**Swivel Bracket Only  
C3080903**



**1,000 lb. rating Hitch  
Receiver Mount  
T3080999 as  
furnished.**



# Series 90 Capstan Hoists

**CHANCE**

## POLY-DACRON ROPE

Chance Poly-Dacron (PD) Rope is a three-strand flexible combination of synthetic fibers. Its excellent dielectric properties, and high resistance to mildew, rot and chemical damage make it an excellent handline rope.

### Features and Applications

- While PD can be used on capstans, it should have one or two more wraps than manila
- PD works well in sliding hitches
- Although PD offers greater tensile strength than manila, it is recommended that natural fiber rope be replaced with same-size synthetic rope for workman handling ease
- A wider cross-section proves better for accidental transverse cutting or severe spot abrasion
- Size-for-size substitution makes it possible to benefit from the strength and economy of synthetic ropes

NOTE: While fibers are moisture absorption resistant, water can be tapped between strands as with any braided rope.

Catalog Number	Description	Size (in)	Tensile Strength, (lbs)	Max. Load, (lbs)	Approx. Wt. Per 100 Feet (lbs)
M18962	Handline	.375	2,650	294	4
M18963	Handline	.5	4,200	500	8
M18964	Bull Line	.625	6,700	800	10.5

## POLYPROPYLENE ROPE

### Features and Applications

- Strong, lightweight and moisture-resistant
- Water accumulation on surface can be removed by shaking and wiping with absorbent cloth
- As with any rope, polypropylene should be stored in a dry place
- Also, Polypropylene Rope should not be used in running hitches or any friction heating environments
- Not for use on capstans

NOTE: While Polypropylene Rope has excellent dielectric strength, water accumulation between strands is a definite hazard.

Catalog Number	Description	Size (in)	Tensile Strength, (lbs)	Max. Load, (lbs)	Approx. Wt. Per 100 Feet (lbs)
†M18951	Handline	.25	1,130	113	1.25
*M18952	Handline	.375	2,440	244	3
*M18953	Handline	.5	3,780	420	5
*M18954	Stringing Line	.625	5,600	700	8
*M18955	Stringing Line	.75	7,650	1,090	10.75

## COMPOSITE FIBER BRAIDED ROPE

### Features and Applications

- Made of polyester fibers plied over polyolefin fibers in each of the 12 strands
- Composite strands are braided together to create rope with excellent strength-to-weight ratio
- Low stretch, firm, round construction gives excellent gripping power on capstans

Catalog Number	Size (in)	Tensile Strength, (lbs)	Max. Load, (lbs)	Approx. Wt. Per 100 Feet (lbs)
C4000798	.375	3,880	775	3.5
C4000799	.5	6,700	1,340	6.25
C4170586	.625	11,600	2,320	11
C4000800	.75	14,500	2,900	14



Standard 600 feet coils on wooden reel.



\*Standard 600 feet coils on wooden reel.  
† Standard 1200 feet coils on wooden reel.



Standard 600 feet coils on wooden reel.

TOOLS &  
SAFETY

## GLASS FIBER FILLED NYLON ROPE BLOCKS

### Features and Applications

- Shells and sheaves are made of high dielectric, fiber-filled natural nylon
- Shaft is silicon bronze and sheave bearings are oil-impregnated bronze
- Blocks available with Polypropylene or Poly-Dacron rope for minimum stretch and long life
- For working-load considerations, blocks are rated as follows:
  - Double Sheave Blocks, max. 3,500 lb.
  - Triple Sheave Blocks, max. 3,500 lb.
- Dielectric Strength: Dielectric rating in dry weather is 30,000 Volts between bearing and mounting bolt nut
- Maximum rope size is 1/2"



C4000918

C4000919



Catalog Number	Description	Weight (lbs)
C4000919	Double Block with Becket	3.25
C4000918	Triple Block without Becket	3.5
C4000914	Two Double Blocks with 120' of 1/2" 3-Str. Polypropylene Rope	12.5
C4000924	Two Double Blocks with 120' of 1/2" 3-Str. Polydacron Rope	16.25
C4000915	Double and Triple Blocks with 150' of 1/2", 3-Str. Polypropylene Rope	16
C4000925	Double and Triple Blocks with 150' of 1/2", 3-Str. Polydacron Rope	20.5
T4001257	Two Double Blocks with 120' of 1/2", Composite Fiber Braided Rope	14.25
T4001258	Double and Triple Blocks with 150' of 1/2", Composite Fiber Braided Rope	16.5

## HAND LINE BLOCK, SAFETY ORANGE

- 1,000 lb. working load
- Safety orange color
- Fiberglass reinforced nylon body & sheave
- Side-opening body design for easy rigging

### Features and Applications

- 3"-diameter sheave accepts up to 5/8"-diameter rope
- Plated-steel swivel eye allows 360\* orientation
- Plated-forged-steel hook has 3/4 throat opening, plus spring-loaded safety latch
- Side-opening design includes high-strength detent-ball pin that is easy to remove and is secured to body with a lanyard



Catalog No. PSC4033478

Weight: 11/4 lb. (0.57 kg.)

Rated working load: 1,000 lb. (454 kg.)

## HAND LINE BLOCK, SAFETY ORANGE

### Features and Applications

- Hook can be attached any place along the hand line by two large holes
- The long point accommodates most items to be raised and lowered at the pole
- Maximum load of hook is 500 lbs. with load seated at bottom of hook

Catalog Number	Description	Weight lbs (kg)
PSC4033479	Lanyard and Pin Kit	.25 (.11)
PSC4033480	Spring Latch Kit	.125 (.05)

## HAND LINE BLOCK, SAFETY ORANGE

### Features and Applications

- Lightweight, cast-aluminum housing and sheave with hinged, cotter-lock yoke and either forged steel or steel meat hook makes for quick, easy rigging in various applications
- Hand line and block and tackle efficiency is increased with forged-steel, swivel-eye suspension ring, plus three-inch sheave operating on bronze oilite bearings
- Maximum rope size is 5/8"
- Maximum load capacity is 1,250 lbs. on 2230 Series only



C4176067  
or 22301

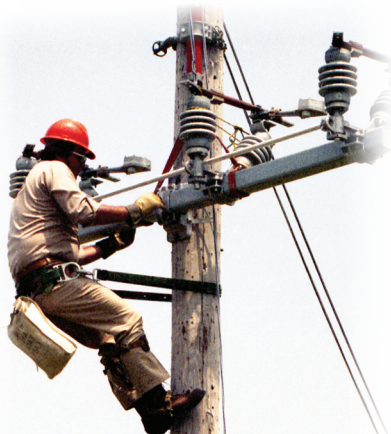
22302



M1849

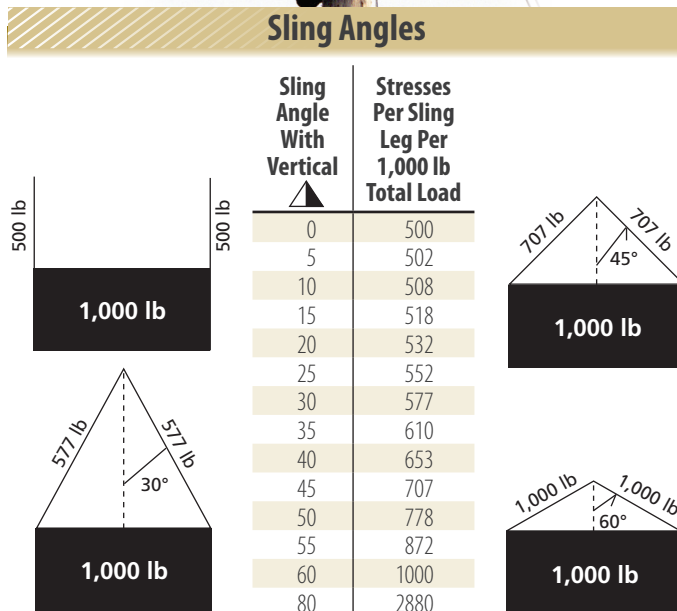
Catalog Number	Description w/ Retainer Latch	Weight lbs (kg)
22301	1250 lb. Block with forged steel hook	2 (.9)
22302	1250 lb. Block with steel meat hook	2 (.9)
C4176067	2500 lb. Block with forged steel hook	6 (2.7)
PS400006	Ball Lok Pin Chain for 22301 or 22302	.25 (.11)

## WEBBING SLINGS



### How To Carry Two Full Buckets

- These illustrations depict the stresses imposed on slings when legs are attached to the load at various angles.
- While rated capacities are shown in this catalog, these tables were inserted primarily to show the severe reduction in capacity when a sling is operated at a wide angle.
- Whenever head room permits, it is recommended that the angle with the vertical not exceed 45°.
- Where head room is small and sling must be spread at an excessive angle, special care must be used in selecting a sling. In such cases, consult your distributor or Hubbell Power Systems, Inc.



### Rated Lifting Capacities

Catalog Number	Width Inches	Length ft	Maximum Capacities <sup>(1)</sup> lb			Type
			Basket	Choke	Vertical	
C4170133	2	6	7,200	2,900	3,600	Return Eye (Eye Length: Approx 4")
C4170134	1	3	4,800	1,900	2,400	Endless
C4170135	1	4	4,800	1,900	2,400	Endless
C4170136	1	5	4,800	1,900	2,400	Endless
C4170137	1	6	4,800	1,900	2,400	Endless
C4170138	1	8	4,800	1,900	2,400	Endless
C4170139	1¾	3	6,400	2,500	3,200	Endless
C4170140	1¾	4	6,400	2,500	3,200	Endless
C4170141	1¾	5	6,400	2,500	3,200	Endless
C4170142	1¾	6	6,400	2,500	3,200	Endless
C4170143	1¾	8	6,400	2,500	3,200	Endless
C4170588	1	3	12,800	5,000	6,400	Endless
C4170589	1¾	5	17,200	6,900	8,600	Endless

NOTE: Do not use slings beyond rated capacity. (1) Maximum working load in pounds.



# Cable Grips

## Pulling Grip for Loose Tube Fiber Optic Cable, Galvanized Steel

Kellems offers a wire mesh specifically designed to pull loose tube fiber optic cable and meet the special pulling requirements recommended by fiber optic cable manufacturers.

Many fiber optic cable manufacturers require special cable preparation prior to pulling where a short section of the outer jacket is stripped off exposing the aramid strength member. This creates two cable diameters, one including the jacket and a second smaller diameter at the strength member. Kellems fiber grip with its special weave will accommodate and securely grab both diameters, at the outside jacket and the internal aramid strength member.

Additionally, this galvanized steel mesh grip has longer leads at the pulling eye to facilitate pulling the cable up through the top, a very low profile lug and eye to slip through tight areas, and short shoulders to protect the cable while maintaining the slim profile.

The grip can be used to pull cable overhead as well as underground through conduit and duct. It easily mates with a swivel and has the necessary strength to securely make pulls.

### Application

- Prior to pulling cable, follow cable manufacturers' cable preparation recommendations
- Never exceed cable manufacturers' pulling tension recommendations
- Never use grips to approximate breaking strength safety factor of 5 recommended



Pulling Grip for Loose Tube Fiber Optic Cable, Galvanized Steel						
Diameter Range Inches (cm)	Mesh Length Inches (cm)	Eye Length Inches (cm)	Eye Diameter Inches (cm)	Lug Diameter Inches (cm)	Maximum Breaking Strength Lbs. (N)	Catalog Number
.312"-.625" (.79-1.59)	22.5" (57.15)	6.3" (16.00)	.20" (.51)	.51" (1.30)	3,000 (13,344)	PFOLT312

# Cable Grips

## Pulling Grips for Other Outside Plant Cables, Swivel Eye, Flexible Eye, Split Style, Low Profile

Kellems Pulling Grips for fiber optic cable are made of high strength galvanized steel strand. They feature a multiweave mesh, with one-half the mesh length double weave, and the second half single weave. This special weave provides positive holding power while allowing the grip to remain flexible with no damage to the cable jacket. Added features include a steel nose cone which protects the cable end and allows the grip to pass easily through conduit and enclosures. The eye connects easily to a swivel or a pulling line. Several grip sizes are available to accommodate all diameters of fiber optic cable.

### IMPORTANT:

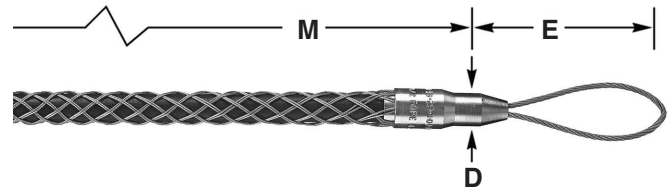
Read all breaking strength, safety and technical data relating to this product.

### Application

Kellems Flexible Eye Pulling Grips for fiber optic cable are used for the installation of fiber optic communication lines either underground, overhead, through conduit or through enclosures. They will fit single cables or cable bundles, are easily installed on the cable and are reusable.

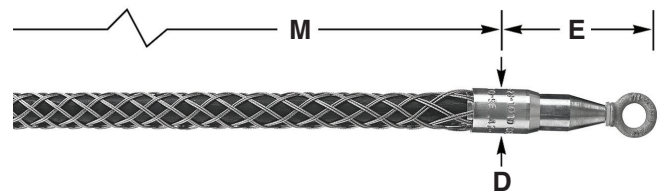
### Benefits

- High strength multiweave mesh for positive holding power
- Highly flexible mesh to follow the pulling path of the cable
- Steel nose cone reduces snags and hang-ups and protects cable end
- Easily installed and removed
- A dependable, reusable pulling tool



### Fiber Optic Pulling Grip, Flexible Eye

Cable Diameter Range Inches (cm)	Approx. Breaking Strength Lbs. (N)	E Approx. Inches (cm)	M Approx. Inches (cm)	D Approx. Inches (cm)	Catalog Number
.10"-.22" (.25-.56)	1,000 (4,448)	5.5" (14)	9" (23)	0.8" (2)	033291000
.21"-.35" (.53-.89)	1,500 (6,672)	5.5" (14)	14" (36)	0.8" (2)	033291001
.32"-.48" (.81-1.22)	2,200 (9,786)	6.0" (15)	18" (46)	0.9" (2.29)	033291002
.42"-.61" (1.07-1.55)	2,800 (12,454)	6.0" (15)	21" (53)	0.9" (2.29)	033291003
.53"-.74" (1.35-1.88)	3,300 (14,678)	6.5" (17)	24" (61)	1.3" (3.30)	033291004
.64"-.87" (1.63-2.21)	4,700 (20,906)	6.5" (17)	27" (69)	1.3" (3.30)	033291005



### Fiber Optic Pulling Grip, Swivel Eye

Cable Diameter Range Inches (cm)	Approx. Breaking Strength Lbs. (N)	E Approx. Inches (cm)	M Approx. Inches (cm)	D Approx. Inches (cm)	Catalog Number
.21"-.35" (.53-.89)	1,500 (6,672)	4.0" (10.16)	14" (35.56)	0.9" (2.29)	033291008
.32"-.48" (.81-1.22)	2,200 (9,786)	4.0" (10.16)	18" (45.72)	0.9" (2.29)	033291009
.42"-.61" (1.07-1.55)	2,800 (12,454)	4.0" (10.16)	21" (53.34)	0.9" (2.29)	033291010
.53"-.74" (1.35-1.88)	3,250 (14,457)	4.8" (12.19)	24" (60.96)	1.3" (3.30)	033291011
.64"-.87" (1.63-2.21)	4,700 (20,906)	4.8" (12.19)	27" (68.58)	1.3" (3.30)	033291012

Note: E-Eye length. M-Mesh length at nominal diameter.

# Cable Grips

## Pulling Grips for Other Outside Plant Cables, Swivel Eye, Flexible Eye, Split Style, Low Profile

Kellems Pulling Grips for fiber optic cable are made of high strength galvanized steel strand. They feature a multiweave mesh, with one-half the mesh length double weave, and the second half single weave. This special weave provides positive holding power while allowing the grip to remain flexible with no damage to the cable jacket. Added features include a steel nose cone which protects the cable end and allows the grip to pass easily through conduit and enclosures. The eye connects easily to a swivel or a pulling line. Several grip sizes are available to accommodate all diameters of fiber optic cable.

### IMPORTANT:

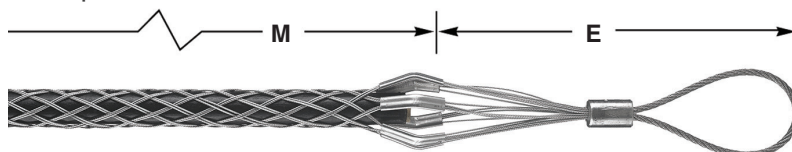
Read all breaking strength, safety and technical data relating to this product.

### Application

Kellems Flexible Eye Pulling Grips for fiber optic cable are used for the installation of fiber optic communication lines either underground, overhead, through conduit or through enclosures. They will fit single cables or cable bundles, are easily installed on the cable and are reusable.

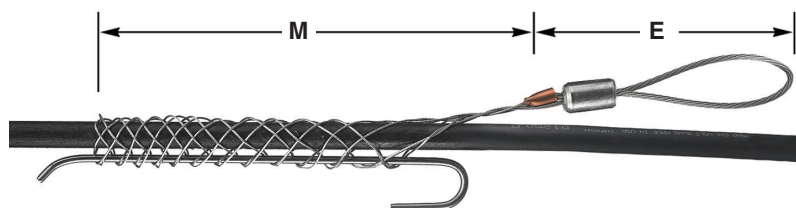
### Benefits

- High strength multiweave mesh for positive holding power
- Highly flexible mesh to follow the pulling path of the cable
- Steel nose cone reduces snags and hang-ups and protects cable end
- Easily installed and removed
- A dependable, reusable pulling tool



### Fiber Optic Pulling Grip, Flexible Eye, Low Profile, Double/Single Weave Mesh

Cable Diameter Range Inches (cm)	Approx. Breaking Strength Lbs. (N)	E Approx. Inches (cm)	M Approx. Inches (cm)	Catalog Number
.10"- .22" (.25-.56)	900 (4,003)	7.5" (19)	10" (25)	033291193
.21"- .35" (.53-.89)	1,400 (6,227)	7.5" (19)	14" (36)	033291194
.32"- .48" (.81-1.22)	2,000 (8,896)	8.5" (22)	19" (48)	033291195
.42"- .61" (1.07-1.55)	2,500 (11,120)	8.5" (22)	21" (53)	033291196
.53"- .74" (1.35-1.88)	3,000 (13,344)	8.5" (22)	23" (58)	033291197
.64"- .87" (1.63-2.21)	4,200 (18,682)	8.5" (22)	25" (64)	033291198
.75"-1.00" (1.90-2.54)	4,200 (18,682)	8.5" (22)	28" (71)	033291199



### Fiber Optic Slack Pulling Grip, Split Mesh Rod Closing, Single Weave

Cable Diameter Range Inches (cm)	Approx. Breaking Strength Lbs. (N)	E Approx. Inches (cm)	M Approx. Inches (cm)	Catalog Number
.25"- .37" (.63-.94)	300 (1,334)	3" (7.6)	4.7" (12)	033291015
.38"- .49" (.97-1.24)	800 (3,558)	3" (7.6)	5" (13)	033291016
.50"- .61" (1.27-1.55)	800 (3,558)	3" (7.6)	7.5" (19)	033291017
.62"- .74" (1.57-1.88)	1,200 (5,338)	3" (7.6)	8" (20)	033291018

Note: E-Eye length. M-Mesh length at nominal diameter.

## TELESCOPING DISCONNECT TOOL

### Features and Applications

- OSHA compliant and tested per ASTM F711.
- Allow linemen to perform many routine jobs from ground level.
- Universal end fitting on insulated top section accepts a wide variety of attachments.
- Allows lineman to remove pole covers, prune trees, plus other overhead tasks.
- Stick retracts to approximately 5' for easy truck transport (even in most cab sections).
- Heavy-duty, spring-loaded plastic buttons keep extended tool sections locked in place.
- As each section extends and slightly twists, buttons also pop securely into place.
- Tip section features Chance® Epoxiglas® A unicellular foam-core material where the reinforced fiberglass wall is built around the foam core to prevent moisture trapping voids that could build up between the foam and the wall.



Disconnect Head included with each tool.

### Standard Duty (1 $\frac{1}{16}$ " Diameter Tip)

Catalog Number	Extended Length <sup>(1)</sup> ft	Dimensions Inches		Number of Sections	Weight lb (kg)
		Storage Retracted Length	Base Diameter		
C4031022	22 – 26 – 30½ – 35	67	2½	8	11 (4.99)
C4031023	8 ft.	56	1¾	2	2 (.9)
C4031017	8 – 12 ft.	57	1½	3	2¾ (1.2)
C4031018	12 – 16 ft.	59	1 $\frac{11}{16}$	4	4 (1.8)
C4031019	12½ – 16½ – 20 ft.	61	1⅞	5	5¼ (2.4)
C4031020	16½ – 20½ – 25 ft.	63	2⅛	6	7 (3.2)
C4031021	17½ – 21½ – 25½ – 30 ft.	65	2¼	7	8¾ (3.9)
C4031739	14 – 17 – 20 – 23 ft.	48	2½	8	9 (4.1)

(1) Tool can be locked at each length shown.

Standard Duty



## TELESCOPING MEASURING TOOL

*One tool does it all. English and metric scales.*

### Features and Applications

- OSHA compliant and tested per ASTM F711.
- English and metric scales for measuring pole heights and cable clearances from ground.
- Easy-to-read scales feature large black characters on Chance® orange fiberglass sections.
- English scales are marked with 1' increments.
- Each inch is marked in bold numbers and half inches are indicated with intermediate bars.
- End fitting on insulated top section accepts other Universal Tool Accessories (T20)
- Positive spring-load locking-button mechanism and plug feature prevent tool separation.
- Once snapped into place, buttons securely lock into position – no unexpected tool retractions.

### Operation

- To extend tool to desired length, pull out top section and rotate it until button engages in next section.
- For measuring aerial distances, continue this process until tip reaches desired height.
- Next, set butt of tool on ground and read scale at eye level for exact distance of tip above ground.
- To retract, depress button of largest section first, then rotate it to disengage and collapse section.
- Continue this process by taking each next smaller section in turn.



Both scales are marked: (on the right) English feet, inches, half inches; and (on the left) Metric meters, decimeters, centimeters.



Tool's top end section is insulated for maximum protection. There are no moisture-trapping voids between foam and tool wall because the tool wall is built around the foam.

Catalog Number	Number of Sections	Length		Weight lb (kg)
		Minimum (Storage)	Maximum (Extended)	
C4031022EM	8	5'7" (1.70 mm)	34'9.3" (10.6 mm)	11 (4.99)



## TROUBLE SHOOTER TOOL KIT



### Insulated Pole Tested per ASTM F711

#### Features and Applications

- Includes six 4'-sections of field-proven 1 1/4" Epoxiglas® Pole that snap together.
- Spring-loaded locking buttons for use at 4', 8', 12', 16', 20' and 24' lengths.
- Butt section has end cap.
- Fitting on top section with thumbscrew accepts Universal Accessories in kit.

#### Kit Universal Accessories

- Aluminum Disconnect Head for opening and closing switches, and opening enclosed cutouts, has built-in hanger hook.
- Non-Metallic Disconnect Head provides additional insulation for indoor substations where buswork and switches are in close proximity. Plastisol cap at top; 19" overall length with 15" long Epoxiglas section.
- Clamp Stick Head for use with 6" long eyescrew ground clamps has locking ring with detent ball for on-off operation. Aluminum alloy.

- Tree Trimmer adds 1 1/2' to reach with 3-to-1 mechanical advantage pulley and 25' of furnished rope. Offset universal fitting on trimmer accepts pruning saw.
- Pruning Saw with fine-tooth blade for smooth action attaches directly to top pole, tree trimmer or pistol grip.
- Pistol Grip Saw Handle of aluminum alloy is for use when limbs can be reached and insulation is not needed.
- Storage Case of yellow heavy-duty vinyl-impregnated fabric has separate pockets for individual tools and Velcro® flap closures.



Kit forms compact 4' x 9" unit secured by two straps and plated buckles. At 24 lb, kit easily totes by center carrying handle.

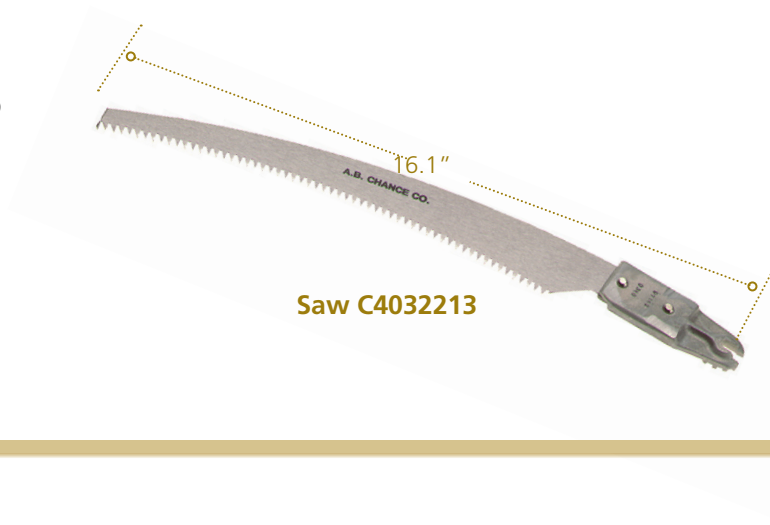
Catalog Number	Description	Weight lb (kg)
C4031612	Complete Trouble Shooter Tool Kit	24 (10.89)

Catalog Number	Separate or Replacement Components	Weight lb (kg)
C4032046	Top Section Epoxiglas Pole	2 1/4 (1.02)
C4032062	Mid Section Epoxiglas Pole	2 1/4 (1.02)
M44559	Aluminum Disconnect Head	1/8 (.06)
E4031614P	Non-Metallic Disconnect Head	1 1/4 (0.79)
M445529B	Clamp Stick Head	1 1/4 (0.79)
H21064	Tree Trimmer	3 1/2 (1.59)
C4032213	Pruning Saw	1/2 (0.23)
M445566	Pistol Grip Saw Handle	1/2 (0.23)
P4032996	Storage Case	3 1/4 (1.47)

## Universal Tool Accessories

### PRUNING SAW

- These saws can be used with Chance® Pistol-Grip Handle, Tree Trimmers, Universal or Telescoping Tools.
- Saw C4032213 has fine-toothed blade for smooth action.
- Weighs 8 oz.



Saw C4032213



Part No M445580

### TREE & ROPE HOOK

- The Universal Tree and Rope Hook is made of aluminum alloy and is attached to a Universal Pole to push tree limbs out of the way of hot-stick work and to clear rope if it becomes tangled.
- Weighs 1 lb.

## *Chance® Rubber Insulating Gloves are Made Using Environmentally-Responsible Processes*

### **Aqueous Dip Process**

- Water-based method avoids Volatile Organic Compounds (VOCs).
- VOCs are flammable, harmful to the environment and low quality.
- Aqueous Dip Process helps rubber products retain elasticity, flexibility and great insulation inherent to natural rubber.

### **Biomass Boilers**

- Steam for Chance® Rubber Insulating Glove production is generated by Biomass boilers.
- No oil or natural gas is burned in the glove making process.
- The process burns environmentally friendly waste-fiber by-products from the palm oil industry.
- This bio-fuel makes the boiler emissions effectively carbon neutral.

### **Waste Water High-Tech Treatment**

- A state-of-the-art water treatment system makes all of the waste water used in the glove-making process safe for reuse or discharge.

### **ISO 14001 Certified For Environmental Management**

- Designed for high achievement and low impact on environment.
- The manufacturing plant in Malaysia that produces Chance Rubber Insulating Gloves has earned ISO 14001 certification.
- The plant has also won an environmental responsibility award from the Malaysian government.



## *Critical Measures Taken To Ensure Worker Safety*

### **Top-Quality Assurance**

- Chance Rubber Insulating Gloves are manufactured in an ISO9001-certified facility using industry-leading technological innovations.
- Promotes product safety.
- Reduces environmental impact.

### **100% Visually and Electrically Tested**

- Every pair of gloves is visually inspected inside and outside.
- Electrically proof tested for 3 minutes per ASTM D120.

### **Full Product Traceability**

- Every glove is marked with electrical-testing/born-on date.
- The lot code is included on the outside of the glove.
- Safety stamp is included on the inside of the glove.
- These three markings indicate manufacturing location and process.

### **Certified Chemical and Physical Laboratory**

- Rubber compounds and finished gloves are closely analyzed and inspected.
- This is completed using the ISO 17025 certified laboratory in the factory.

### **Incoming Quality Assurance Inspections**

- QA visual and electrical checks are performed on all gloves.
- Every glove shipment is inspected at our distribution center in Centralia, Missouri.





## Rubber Glove Inspection Tips

### Do!

- ✓ Follow company work procedures and safety rules
- ✓ Inspect gloves and sleeves daily for damage
- ✓ Wear proper leather protectors over rubber gloves
- ✓ Wash gloves or sleeves with mild soap and rinse thoroughly with water
- ✓ Let gloves or sleeves air dry at room temperature or less than 120° F (49° C)
- ✓ Store gloves and sleeves in a protective bag

### Don't!

- ✗ Wear jewelry or sharp objects when using rubber gloves or sleeves
- ✗ Wear damaged gloves or sleeves
- ✗ Store gloves or sleeves inside out, folded, or in ways that cause stretching or compression
- ✗ Store gloves or sleeves near sources of UV, Ozone or heat
- ✗ Allow gloves or sleeves to contact petroleum-based products (oil, gas, solvent, hand creams)

## Reduce Hand Fatigue with Chance® Rubber Gloves

Straight fingers relative to palm help prevent fatigue of tendons in back of hands.

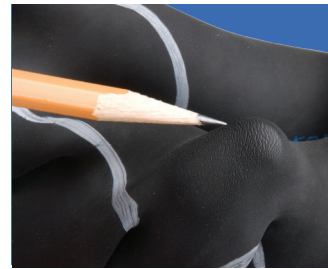
Oval-shaped fingers help provide "No-Dead-Spots" feel and better dexterity.

Natural rubber formula provides excellent flexibility and electrical insulation.

Straight wrist in natural rest position helps avoid fatiguing forearms and hands.

Wide cuff for improved comfort and air-flow.

ASTM label assures every glove has been made & tested to ASTM D120.



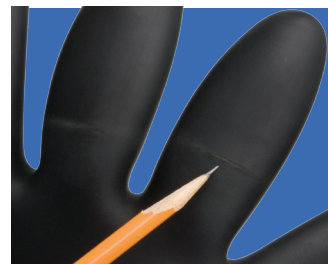
Checking for cracks due to UV or Ozone



Splits, cuts or holes from snags and punctures



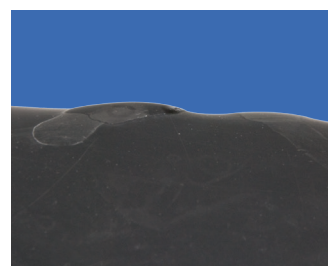
Grooves worn due to rope burns or heat exposure



Weak creases resulting from being left too long inside out or folded



Electrical puncture



"Blooms" or "swells" from chemicals or oils

## Manual Inflation Per ASTM F 1238



**1** Grasp glove



**2** Stretch to seal closed



**3** Press and roll tightly



**4** Twirl glove, rotating on rolled ends



**5** Entrap air by holding in one hand

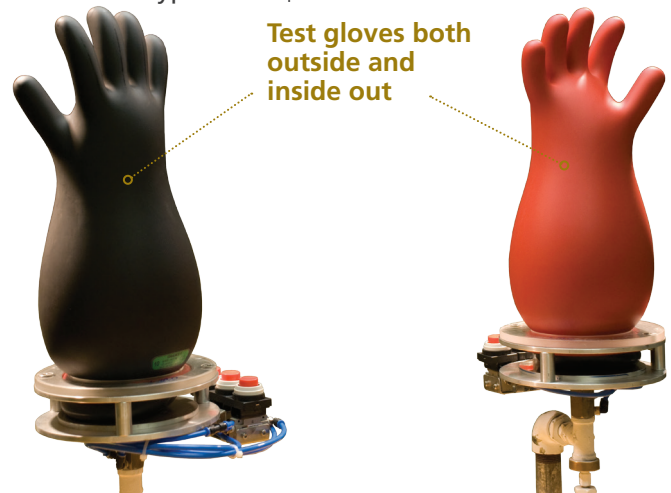
## Perform Daily and Periodic Tests

See Industry Reference: ASTM F 1236  
Standard Guide for Visual Inspection of  
Electrical Protective Rubber Products

### Mechanical Inflators

ASTM F 1236 maximum inflation limits:

- Type I 2 times normal size
- Type II 1¼ times normal size



**6** Hold close to ear, squeeze to add air pressure, listen and feel for pinhole leaks

**7** Turn glove inside out and repeat process





## GENERAL REFERENCE

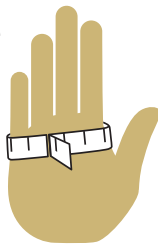
### Ratings and Labels

- Insulating gloves should be used by properly trained personnel.
- Must Comply with ASTM D120 standards for rubber insulating gloves for each voltage rating
- Table below summarizes Chance® Rubber Insulating Gloves ratings and labels per ASTM.

*To those who climb™*

### Selecting the right size for you

- Selecting the right size ensures a comfortable wear without sacrificing dexterity.
- Allow approximately an additional 0.5" if liners will be used.



### We're taking responsibility

- Gloves are manufactured using environmentally conscious processes
- Processes make the most efficient use of raw materials and natural resources
- When workers wear our gloves they are also helping limit VOC and CO2 emissions

Class	Max Use Voltage AC/DC	Proof Test Voltage AC/DC	Label Color
00 Gloves Only	500 / 750	2,500 / 10,000	<b>10 CHANCE®</b> ASTM D120 EN 60903 CLASS 00 TYPE I MAX USE VOLT 500V AC Beige
0	1,000 / 1,500	5,000 / 20,000	<b>10 CHANCE®</b> ASTM D120 EN 60903 CLASS 0 TYPE I MAX USE VOLT 1000V AC Red
1	7,500 / 11,250	10,000 / 40,000	<b>10 CHANCE®</b> ASTM D120 EN 60903 CLASS 1 TYPE I MAX USE VOLT 7500V AC White
2	17,000 / 25,500	20,000 / 50,000	<b>10 CHANCE®</b> ASTM D120 EN 60903 CLASS 2 TYPE I MAX USE VOLT 17000V AC Yellow
3	26,500 / 39,750	30,000 / 60,000	<b>10 CHANCE®</b> ASTM D120 EN 60903 CLASS 3 TYPE I MAX USE VOLT 26500V AC Green
4	36,000 / 54,000	40,000 / 70,000	<b>10 CHANCE®</b> ASTM D120 EN 60903 CLASS 4 TYPE I MAX USE VOLT 36000V AC Orange

### Clearance for Leather Protectors Per ASTM F496

Glove Class	Minimum Distance Between Protectors and Rubber Gloves Inches (mm)
00,0	½ (12.7)
1	1 (25.4)
2	2 (50.8)
3	3 (76.2)
4	4 (101.6)

### Leather Protector Considerations

- Protector must meet ASTM specification F696
- Protector should always be worn over Rubber Insulating Gloves.
- This prevents mechanical damage to the Rubber Insulating Gloves, except for those conditions detailed in ASTM F496.
- Protector must be properly sized and shaped to avoid deformation or damage.
- Minimum distances between gauntlet and cuff are listed in the table shown.

For more details on leather protectors or rubber gloves, please refer to ASTM D120, F496 and F696.

# Lineman-Grade Gloves

**CHANCE**

## STRAIGHT CUFF – ASTM CLASS 00, 0

### Features and Applications

- The ultimate source of protection expected from the Chance® name
- Offers a new level of comfort and flexibility
- Constructed for high dielectric and physical strength.
- Exceeds ASTM D120.
- Available in straight cuff lengths of 11" and 14"
- Type I Chance Gloves come in black or yellow

*Ergonomic innovation. Superior products. Timely solutions.*

Just a few of the reasons the industry turns to Hubbell Power Systems and the Chance brand.

### Color Black Under Yellow

Size	Class 0
	14"
7	PSC014BY7
8	PSC014BY8
8.5	PSC014BY8H
9	PSC014BY9
9.5	PSC014BY9H
10	PSC014BY10
10.5	PSC014BY10H
11	PSC014BY11
12	PSC014BY12



### Color Red

Size	Class 00	Class 0	
	11"	11"	14"
7	PSC0011R7	PSC011R7	PSC014R7
8	PSC0011R8	PSC011R8	PSC014R8
8.5	PSC0011R8H	PSC011R8H	PSC014R8H
9	PSC0011R9	PSC011R9	PSC014R9
9.5	PSC0011R9H	PSC011R9H	PSC014R9H
10	PSC0011R10	PSC011R10	PSC014R10
10.5	PSC0011R10H	PSC011R10H	PSC014R10H
11	PSC0011R11	PSC011R11	PSC014R11
12	PSC0011R12	PSC011R12	PSC014R12



### Color Yellow

Size	Class 00		Class 0	
	11"	14"	11"	14"
7	PSC0011Y7	PSC0014Y7	PSC011Y7	PSC014Y7
8	PSC0011Y8	PSC0014Y8	PSC011Y8	PSC014Y8
8.5	PSC0011Y8H	PSC0014Y8H	PSC011Y8H	PSC014Y8H
9	PSC0011Y9	PSC0014Y9	PSC011Y9	PSC014Y9
9.5	PSC0011Y9H	PSC0014Y9H	PSC011Y9H	PSC014Y9H
10	PSC0011Y10	PSC0014Y10	PSC011Y10	PSC014Y10
10.5	PSC0011Y10H	PSC0014Y10H	PSC011Y10H	PSC014Y10H
11	PSC0011Y11	PSC0014Y11	PSC011Y11	PSC014Y11
12	PSC0011Y12	PSC0014Y12	PSC011Y12	PSC014Y12



### Color Black

Size	Class 00		Class 0	
	11"	14"	11"	14"
7	PSC0011B7	PSC0014B7	PSC011B7	PSC014B7
8	PSC0011B8	PSC0014B8	PSC011B8	PSC014B8
8.5	PSC0011B8H	PSC0014B8H	PSC011B8H	PSC014B8H
9	PSC0011B9	PSC0014B9	PSC011B9	PSC014B9
9.5	PSC0011B9H	PSC0014B9H	PSC011B9H	PSC014B9H
10	PSC0011B10	PSC0014B10	PSC011B10	PSC014B10
10.5	PSC0011B10H	PSC0014B10H	PSC011B10H	PSC014B10H
11	PSC0011B11	PSC0014B11	PSC011B11	PSC014B11
12	PSC0011B12	PSC0014B12	PSC011B12	PSC014B12



TOOLS &  
SAFETY

# Lineman-Grade Gloves

**CHANCE®**

## STRAIGHT CUFF – ASTM CLASS 1, 2, 3, 4

### Features and Applications

- The ultimate source of protection expected from the Chance® name.
- Offers a new level of comfort and flexibility.
- Constructed for high dielectric and physical strength.
- Exceeds ASTM D120.
- Available in straight cuff lengths of 14", 16" and 18".
- Type I Chance Gloves come in black or two contrasting colors.

### Color Black

Size	Class 1		Class 2	
	14"	16"	14"	16"
8	PSC114B8	PSC116B8	PSC214B8	PSC216B8
8.5	PSC114B8H	PSC116B8H	PSC214B8H	PSC216B8H
9	PSC114B9	PSC116B9	PSC214B9	PSC216B9
9.5	PSC114B9H	PSC116B9H	PSC214B9H	PSC216B9H
10	PSC114B10	PSC116B10	PSC214B10	PSC216B10
10.5	PSC114B10H	PSC116B10H	PSC214B10H	PSC216B10H
11	PSC114B11	PSC116B11	PSC214B11	PSC216B11
12	PSC114B12	PSC116B12	PSC214B12	PSC216B12



### Color Red Under Black

Size	Class 1		Class 2			Class 3		Class 4	
	14"	16"	14"	16"	18"	16"	18"	16"	18"
8	PSC114RB8	PSC116RB8	PSC214RB8	PSC216RB8	PSC218RB8	PSC316RB8	PSC318RB8	—	—
8.5	PSC114RB8H	PSC116RB8H	PSC214RB8H	PSC216RB8H	PSC218RB8H	PSC316RB8H	PSC318RB8H	—	—
9	PSC114RB9	PSC116RB9	PSC214RB9	PSC216RB9	PSC218RB9	PSC316RB9	PSC318RB9	PSC416RB9	PSC418RB9
9.5	PSC114RB9H	PSC116RB9H	PSC214RB9H	PSC216RB9H	PSC218RB9H	PSC316RB9H	PSC318RB9H	PSC416RB9H	PSC418RB9H
10	PSC114RB10	PSC116RB10	PSC214RB10	PSC216RB10	PSC218RB10	PSC316RB10	PSC318RB10	PSC416RB10	PSC418RB10
10.5	PSC114RB10H	PSC116RB10H	PSC214RB10H	PSC216RB10H	PSC218RB10H	PSC316RB10H	PSC318RB10H	PSC416RB10H	PSC418RB10H
11	PSC114RB11	PSC116RB11	PSC214RB11	PSC216RB11	PSC218RB11	PSC316RB11	PSC318RB11	PSC416RB11	PSC418RB11
12	PSC114RB12	PSC116RB12	PSC214RB12	PSC216RB12	PSC218RB12	PSC316RB12	PSC318RB12	PSC416RB12	PSC418RB12

### Color Yellow Under Black

Size	Class 1		Class 2			Class 3		Class 4	
	14"	16"	14"	16"	18"	16"	18"	16"	18"
8	PSC114YB8	PSC116YB8	PSC214YB8	PSC216YB8	PSC218YB8	PSC316YB8	PSC318YB8	—	—
8.5	PSC114YB8H	PSC116YB8H	PSC214YB8H	PSC216YB8H	PSC218YB8H	PSC316YB8H	PSC318YB8H	—	—
9	PSC114YB9	PSC116YB9	PSC214YB9	PSC216YB9	PSC218YB9	PSC316YB9	PSC318YB9	PSC416YB9	PSC418YB9
9.5	PSC114YB9H	PSC116YB9H	PSC214YB9H	PSC216YB9H	PSC218YB9H	PSC316YB9H	PSC318YB9H	PSC416YB9H	PSC418YB9H
10	PSC114YB10	PSC116YB10	PSC214YB10	PSC216YB10	PSC218YB10	PSC316YB10	PSC318YB10	PSC416YB10	PSC418YB10
10.5	PSC114YB10H	PSC116YB10H	PSC214YB10H	PSC216YB10H	PSC218YB10H	PSC316YB10H	PSC318YB10H	PSC416YB10H	PSC418YB10H
11	PSC114YB11	PSC116YB11	PSC214YB11	PSC216YB11	PSC218YB11	PSC316YB11	PSC318YB11	PSC416YB11	PSC418YB11
12	PSC114YB12	PSC116YB12	PSC214YB12	PSC216YB12	PSC218YB12	PSC316YB12	PSC318YB12	PSC416YB12	PSC418YB12

## BELL CUFF – ASTM CLASS 1, 2, 3, 4

### Features and Applications

- The ultimate source of protection expected from the Chance® name.
- Offers a new level of comfort and flexibility.
- Constructed for high dielectric and physical strength.
- Exceed ASTM D120.
- Available in bell cuff lengths of 14", 16" and 18".
- Type I Chance Gloves come in two contrasting colors.

TOOLS



### Color Red Under Black

Size	Class 1		Class 2			Class 3		Class 4	
	14"	16"	14"	16"	18"	16"	18"	16"	18"
9	PSC114BCRB9	PSC116BCRB9	PSC214BCRB9	PSC216BCRB9	PSC218BCRB9	PSC316BCRB9	PSC318BCRB9	PSC416BCRB9	PSC418BCRB9
9.5	PSC114BCRB9H	PSC116BCRB9H	PSC214BCRB9H	PSC216BCRB9H	PSC218BCRB9H	PSC316BCRB9H	PSC318BCRB9H	PSC416BCRB9H	PSC418BCRB9H
10	PSC114BCRB10	PSC116BCRB10	PSC214BCRB10	PSC216BCRB10	PSC218BCRB10	PSC316BCRB10	PSC318BCRB10	PSC416BCRB10	PSC418BCRB10
10.5	PSC114BCRB10H	PSC116BCRB10H	PSC214BCRB10H	PSC216BCRB10H	PSC218BCRB10H	PSC316BCRB10H	PSC318BCRB10H	PSC416BCRB10H	PSC418BCRB10H
11	PSC114BCRB11	PSC116BCRB11	PSC214BCRB11	PSC216BCRB11	PSC218BCRB11	PSC316BCRB11	PSC318BCRB11	PSC416BCRB11	PSC418BCRB11
12	PSC114BCRB12	PSC116BCRB12	PSC214BCRB12	PSC216BCRB12	PSC218BCRB12	PSC316BCRB12	PSC318BCRB12	PSC416BCRB12	PSC418BCRB12

### Color Yellow Under Black

Size	Class 1		Class 2			Class 3		Class 4	
	14"	16"	14"	16"	18"	16"	18"	16"	18"
9	PSC114BCYB9	PSC116BCYB9	PSC214BCYB9	PSC216BCYB9	PSC218BCYB9	PSC316BCYB9	PSC318BCYB9	PSC416BCYB9	PSC418BCYB9
9.5	PSC114BCYB9H	PSC116BCYB9H	PSC214BCYB9H	PSC216BCYB9H	PSC218BCYB9H	PSC316BCYB9H	PSC318BCYB9H	PSC416BCYB9H	PSC418BCYB9H
10	PSC114BCYB10	PSC116BCYB10	PSC214BCYB10	PSC216BCYB10	PSC218BCYB10	PSC316BCYB10	PSC318BCYB10	PSC416BCYB10	PSC418BCYB10
10.5	PSC114BCYB10H	PSC116BCYB10H	PSC214BCYB10H	PSC216BCYB10H	PSC218BCYB10H	PSC316BCYB10H	PSC318BCYB10H	PSC416BCYB10H	PSC418BCYB10H
11	PSC114BCYB11	PSC116BCYB11	PSC214BCYB11	PSC216BCYB11	PSC218BCYB11	PSC316BCYB11	PSC318BCYB11	PSC416BCYB11	PSC418BCYB11
12	PSC114BCYB12	PSC116BCYB12	PSC214BCYB12	PSC216BCYB12	PSC218BCYB12	PSC316BCYB12	PSC318BCYB12	PSC416BCYB12	PSC418BCYB12



# Lineman-Grade Gloves

**CHANCE®**

## CONTOUR CUFF – ASTM CLASS 2, 3, 4

### Features and Applications

- The ultimate source of protection expected from the Chance® name.
- Offers a new level of comfort and flexibility.
- Constructed for high dielectric and physical strength.
- Exceed ASTM D120.
- Available in contour cuff lengths of 18".
- Type I Chance Gloves come in two contrasting colors.



### Color Red Under Black

Size	Class 2 18"	Class 3 18"	Class 4 18"
8	PSC218CRB8	—	—
8.5	PSC218CRB8H	—	—
9	PSC218CRB9	PSC318CRB9	PSC418CRB9
9.5	PSC218CRB9H	PSC318CRB9H	PSC418CRB9H
10	PSC218CRB10	PSC318CRB10	PSC418CRB10
10.5	PSC218CRB10H	PSC318CRB10H	PSC418CRB10H
11	PSC218CRB11	PSC318CRB11	PSC418CRB11
12	PSC218CRB12	PSC318CRB12	PSC418CRB12

### Color Yellow Under Black

Size	Class 2 18"	Class 3 18"	Class 4 18"
8	PSC218CYB8	—	—
8.5	PSC218CYB8H	—	—
9	PSC218CYB9	PSC318CYB9	PSC418CYB9
9.5	PSC218CYB9H	PSC318CYB9H	PSC418CYB9H
10	PSC218CYB10	PSC318CYB10	PSC418CYB10
10.5	PSC218CYB10H	PSC318CYB10H	PSC418CYB10H
11	PSC218CYB11	PSC318CYB11	PSC418CYB11
12	PSC218CYB12	PSC318CYB12	PSC418CYB12

safe



# Leather Protector Gloves

**CHANCE**

- Crafted to fit properly over all industry-standard rubber insulating gloves
- Full compliance with ASTM F696 Standard Specification for Leather Protectors for Rubber Insulating Gloves and Mittens

## Low-Voltage Leather Protectors

- Goatskin – soft, flexible, strong
- Nylon strap with non-metallic buckle

10-inch Length		13-inch Length
Size	Catalog Number	Catalog Number
7	PSCGLP10GN7	PSCGLP10GN7
8 - 8½	PSCGLP10GN8	PSCGLP10GN8
9 - 9½	PSCGLP10GN9	PSCGLP10GN9
10 - 10½	PSCGLP10GN10	PSCGLP10GN10
11	PSCGLP10GN11	PSCGLP10GN11
12	PSCGLP10GN12	PSCGLP10GN12

\*13" have high-visibility polymeric/leather cuff

## High-Voltage Leather Protectors

- Cowhide – durable and flexible
- Hi-visibility polymeric/leather cuff
- Nylon strap with non-metallic buckle

12-inch Length		14-inch Length
Size	Catalog Number	Catalog Number
8 - 8½	PSCGLP12CN8	PSCGLP14CN8
9 - 9½	PSCGLP12CN9	PSCGLP14CN9
10 - 10½	PSCGLP12CN10	PSCGLP14CN10
11	PSCGLP12CN11	PSCGLP14CN11
12	PSCGLP12CN12	PSCGLP14CN12

15-inch Length		16-inch Length
Size	Catalog Number	Catalog Number
8 - 8½	PSCGLP15CN8	PSCGLP16CN8
9 - 9½	PSCGLP15CN9	PSCGLP16CN9
10 - 10½	PSCGLP15CN10	PSCGLP16CN10
11	PSCGLP15CN11	PSCGLP16CN11
12	PSCGLP15CN12	PSCGLP16CN12

\*16" fit straight and contour-cuff rubber gloves

## Glove Liners

- 100% cotton for warmth and comfort under rubber
- insulating gloves
- One size to fit most
- Two weight/length choices
- Reversible to fit either hand



**PSCGLP10GN9**



**PSCGLP13GN10**

### CLEARANCE TABLE FOR LEATHER PROTECTORS PER ASTM F496

Glove Class	Minimum Distance Between Protectors and Rubber Gloves	
	in.	mm
00, 0	1/2	13
1	1	25
2	2	51
3	3	76
4	4	102



**PSCGLP15CN9**



**PSCGLP16CN9**



**PSCGLLWCLU**  
Lightweight  
Wrist length  
10" Length



**PSCGLLECMU**  
Medium Duty  
Extended cuff  
12" Length

# Lineman-Grade Gloves

**CHANCE<sup>®</sup>**

- Durable cotton canvas with self-hemmed seams
- Snap-button closures
- Brass grommet drain holes on the bottom to aid ventilation and drying

## Canvas

### SLEEVE BAG

- 30" L x 13" Top
- For flat storage of rubber sleeves
- Specially designed for extra-curved sleeves
- Velcro<sup>®</sup> strap inside at top to hang sleeves in place



PSCGLB30CCS

### Snaphook on each bag

- For suspending from belt or in storage
- Leather reinforced tab is stitched to the back of each bag



### Canvas High Voltage GLOVE BAG

- 18" L x 8" Top
- For flat storage of rubber gloves



PSCGLB18CCG

### Canvas Low Voltage GLOVE BAG

- 12" L x 7" Top
- For 11" low voltage gloves



PSCGLB12CCG

# Lineman-Grade Gloves

**CHANCE**

## GLOVE BAG

### Features & Applications

- 18" L x 8" Top
- One-piece front and back, bar-tacked at all corners
- Double-nylon stitching, Velcro flap fasteners
- Gusset has 4-inch top tapering to 2-inch bottom
- Gloves not included



C4170148



## Snaphook on each bag

For suspending from belt or in storage  
Leather reinforced tab is stitched to the back of each bag



## COMBINATION GLOVE and SLEEVE BAG

### Features & Applications

- 18" L x 8" Top
- Separate storage for rubber gloves and sleeves
- Single flap, double nylon stitching, Velcro fasteners
- Gloves and Sleeves not included



C4170150



## SLEEVE BAG

### Features & Applications

- 27" L x 12" Top – 7" Bottom
- For flat storage of rubber sleeves
- Bar-tacked corners
- Velcro flap fasteners
- Double-nylon stitching
- Sleeves not included



C4170149



TOOLS &  
SAFETY





GEP5:  $1\frac{1}{16}$ " Dia  
GEPSA:  $1\frac{3}{16}$ " Dia

$1\frac{1}{16}$ " Dia

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